

**NAME**

wireshark-filter – Wireshark filter syntax and reference

**SYNOPSIS**

**wireshark** [other options] [ **-R** “filter expression” ]

**tshark** [other options] [ **-R** “filter expression” ]

**DESCRIPTION**

**Wireshark** and **TShark** share a powerful filter engine that helps remove the noise from a packet trace and lets you see only the packets that interest you. If a packet meets the requirements expressed in your filter, then it is displayed in the list of packets. Display filters let you compare the fields within a protocol against a specific value, compare fields against fields, and check the existence of specified fields or protocols.

Filters are also used by other features such as statistics generation and packet list colorization (the latter is only available to **Wireshark**). This manual page describes their syntax and provides a comprehensive reference of filter fields.

**FILTER SYNTAX****Check whether a field or protocol exists**

The simplest filter allows you to check for the existence of a protocol or field. If you want to see all packets which contain the IP protocol, the filter would be “ip” (without the quotation marks). To see all packets that contain a Token-Ring RIF field, use “tr.rif”.

Think of a protocol or field in a filter as implicitly having the “exists” operator.

Note: all protocol and field names that are available in **Wireshark** and **TShark** filters are listed in the comprehensive **FILTER PROTOCOL REFERENCE** (see below).

**Comparison operators**

Fields can also be compared against values. The comparison operators can be expressed either through English-like abbreviations or through C-like symbols:

```
eq, ==      Equal
ne, !=      Not Equal
gt, >       Greater Than
lt, <       Less Than
ge, >=      Greater than or Equal to
le, <=      Less than or Equal to
```

**Search and match operators**

Additional operators exist expressed only in English, not C-like syntax:

```
contains    Does the protocol, field or slice contain a value
matches     Does the protocol or text string match the given Perl
            regular expression
```

The “contains” operator allows a filter to search for a sequence of characters, expressed as a string (quoted or unquoted), or bytes, expressed as a byte array. For example, to search for a given HTTP URL in a capture, the following filter can be used:

```
http contains "http://www.wireshark.org"
```

The “contains” operator cannot be used on atomic fields, such as numbers or IP addresses.

The “matches” operator allows a filter to apply to a specified Perl-compatible regular expression (PCRE). The “matches” operator is only implemented for protocols and for protocol fields with a text string representation. For example, to search for a given WAP WSP User-Agent, you can write:

```
wsp.user_agent matches "(?i)cldc"
```

This example shows an interesting PCRE feature: pattern match options have to be specified with the

(*?option*) construct. For instance, (*?i*) performs a case-insensitive pattern match. More information on PCRE can be found in the *pcrpattern*(3) man page (Perl Regular Expressions are explained in <<http://www.perl-doc.com/perl5.8.0/pod/perlre.html>>).

Note: the “matches” operator is only available if **Wireshark** or **TShark** have been compiled with the PCRE library. This can be checked by running:

```
wireshark -v
tshark -v
```

or selecting the “About Wireshark” item from the “Help” menu in **Wireshark**.

## Functions

The filter language has the following functions:

```
upper(string-field) - converts a string field to uppercase
lower(string-field) - converts a string field to lowercase
```

*upper()* and *lower()* are useful for performing case-insensitive string comparisons. For example:

```
upper(ncp.nds_stream_name) contains "MACRO"
lower(mount.dump.hostname) == "angel"
```

## Protocol field types

Each protocol field is typed. The types are:

```
Unsigned integer (8-bit, 16-bit, 24-bit, or 32-bit)
Signed integer (8-bit, 16-bit, 24-bit, or 32-bit)
Boolean
Ethernet address (6 bytes)
Byte array
IPv4 address
IPv6 address
IPX network number
Text string
Double-precision floating point number
```

An integer may be expressed in decimal, octal, or hexadecimal notation. The following three display filters are equivalent:

```
frame.pkt_len > 10
frame.pkt_len > 012
frame.pkt_len > 0xa
```

Boolean values are either true or false. In a display filter expression testing the value of a Boolean field, “true” is expressed as 1 or any other non-zero value, and “false” is expressed as zero. For example, a token-ring packet’s source route field is Boolean. To find any source-routed packets, a display filter would be:

```
tr.sr == 1
```

Non source-routed packets can be found with:

```
tr.sr == 0
```

Ethernet addresses and byte arrays are represented by hex digits. The hex digits may be separated by colons, periods, or hyphens:

```
eth.dst eq ff:ff:ff:ff:ff:ff
aim.data == 0.1.0.d
fddi.src == aa-aa-aa-aa-aa-aa
echo.data == 7a
```

IPv4 addresses can be represented in either dotted decimal notation or by using the hostname:

```
ip.dst eq www.mit.edu
ip.src == 192.168.1.1
```

IPv4 addresses can be compared with the same logical relations as numbers: eq, ne, gt, ge, lt, and le. The IPv4 address is stored in host order, so you do not have to worry about the endianness of an IPv4 address when using it in a display filter.

Classless InterDomain Routing (CIDR) notation can be used to test if an IPv4 address is in a certain subnet. For example, this display filter will find all packets in the 129.111 Class-B network:

```
ip.addr == 129.111.0.0/16
```

Remember, the number after the slash represents the number of bits used to represent the network. CIDR notation can also be used with hostnames, as in this example of finding IP addresses on the same Class C network as 'sneezy':

```
ip.addr eq sneezy/24
```

The CIDR notation can only be used on IP addresses or hostnames, not in variable names. So, a display filter like "ip.src/24 == ip.dst/24" is not valid (yet).

IPX networks are represented by unsigned 32-bit integers. Most likely you will be using hexadecimal when testing IPX network values:

```
ipx.src.net == 0xc0a82c00
```

Strings are enclosed in double quotes:

```
http.request.method == "POST"
```

Inside double quotes, you may use a backslash to embed a double quote or an arbitrary byte represented in either octal or hexadecimal.

```
browser.comment == "An embedded \" double-quote"
```

Use of hexadecimal to look for "HEAD":

```
http.request.method == "\x48EAD"
```

Use of octal to look for "HEAD":

```
http.request.method == "\110EAD"
```

This means that you must escape backslashes with backslashes inside double quotes.

```
smb.path contains "\\\"SERVER\"SHARE"
```

looks for \\SERVER\SHARE in "smb.path".

### The slice operator

You can take a slice of a field if the field is a text string or a byte array. For example, you can filter on the vendor portion of an ethernet address (the first three bytes) like this:

```
eth.src[0:3] == 00:00:83
```

Another example is:

```
http.content_type[0:4] == "text"
```

You can use the slice operator on a protocol name, too. The "frame" protocol can be useful, encompassing all the data captured by **Wireshark** or **TShark**.

```
token[0:5] ne 0.0.0.1.1
llc[0] eq aa
frame[100-199] contains "wireshark"
```

The following syntax governs slices:

```

[i:j]    i = start_offset, j = length
[i-j]    i = start_offset, j = end_offset, inclusive.
[i]      i = start_offset, length = 1
[:j]     start_offset = 0, length = j
[i:]     start_offset = i, end_offset = end_of_field

```

Offsets can be negative, in which case they indicate the offset from the **end** of the field. The last byte of the field is at offset  $-1$ , the last but one byte is at offset  $-2$ , and so on. Here's how to check the last four bytes of a frame:

```
frame[-4:4] == 0.1.2.3
```

or

```
frame[-4:] == 0.1.2.3
```

You can concatenate slices using the comma operator:

```
ftp[1,3-5,9:] == 01:03:04:05:09:0a:0b
```

This concatenates offset 1, offsets 3–5, and offset 9 to the end of the ftp data.

### Type conversions

If a field is a text string or a byte array, it can be expressed in whichever way is most convenient.

So, for instance, the following filters are equivalent:

```

http.request.method == "GET"
http.request.method == 47.45.54

```

A range can also be expressed in either way:

```

frame[60:2] gt 50.51
frame[60:2] gt "PQ"

```

### Bit field operations

It is also possible to define tests with bit field operations. Currently the following bit field operation is supported:

```
bitwise_and, &      Bitwise AND
```

The bitwise AND operation allows testing to see if one or more bits are set. Bitwise AND operates on integer protocol fields and slices.

When testing for TCP SYN packets, you can write:

```
tcp.flags & 0x02
```

That expression will match all packets that contain a “tcp.flags” field with the 0x02 bit, i.e. the SYN bit, set.

Similarly, filtering for all WSP GET and extended GET methods is achieved with:

```
wsp.pdu_type & 0x40
```

When using slices, the bit mask must be specified as a byte string, and it must have the same number of bytes as the slice itself, as in:

```
ip[42:2] & 40:ff
```

### Logical expressions

Tests can be combined using logical expressions. These too are expressible in C-like syntax or with English-like abbreviations:

```

and, &&   Logical AND
or,  ||   Logical OR
not, !    Logical NOT

```

Expressions can be grouped by parentheses as well. The following are all valid display filter expressions:

```

tcp.port == 80 and ip.src == 192.168.2.1
not llc
http and frame[100-199] contains "wireshark"
(ipx.src.net == 0xbad && ipx.src.node == 0.0.0.0.0.1) || ip

```

Remember that whenever a protocol or field name occurs in an expression, the “exists” operator is implicitly called. The “exists” operator has the highest priority. This means that the first filter expression must be read as “show me the packets for which tcp.port exists and equals 80, and ip.src exists and equals 192.168.2.1”. The second filter expression means “show me the packets where not (llc exists)”, or in other words “where llc does not exist” and hence will match all packets that do not contain the llc protocol. The third filter expression includes the constraint that offset 199 in the frame exists, in other words the length of the frame is at least 200.

A special caveat must be given regarding fields that occur more than once per packet. “ip.addr” occurs twice per IP packet, once for the source address, and once for the destination address. Likewise, “tr.rif.ring” fields can occur more than once per packet. The following two expressions are not equivalent:

```

ip.addr ne 192.168.4.1
not ip.addr eq 192.168.4.1

```

The first filter says “show me packets where an ip.addr exists that does not equal 192.168.4.1”. That is, as long as one ip.addr in the packet does not equal 192.168.4.1, the packet passes the display filter. The other ip.addr could equal 192.168.4.1 and the packet would still be displayed. The second filter says “don’t show me any packets that have an ip.addr field equal to 192.168.4.1”. If one ip.addr is 192.168.4.1, the packet does not pass. If **neither** ip.addr field is 192.168.4.1, then the packet is displayed.

It is easy to think of the ‘ne’ and ‘eq’ operators as having an implicit “exists” modifier when dealing with multiply-recurring fields. “ip.addr ne 192.168.4.1” can be thought of as “there exists an ip.addr that does not equal 192.168.4.1”. “not ip.addr eq 192.168.4.1” can be thought of as “there does not exist an ip.addr equal to 192.168.4.1”.

Be careful with multiply-recurring fields; they can be confusing.

Care must also be taken when using the display filter to remove noise from the packet trace. If, for example, you want to filter out all IP multicast packets to address 224.1.2.3, then using:

```
ip.dst ne 224.1.2.3
```

may be too restrictive. Filtering with “ip.dst” selects only those **IP** packets that satisfy the rule. Any other packets, including all non-IP packets, will not be displayed. To display the non-IP packets as well, you can use one of the following two expressions:

```

not ip or ip.dst ne 224.1.2.3
not ip.addr eq 224.1.2.3

```

The first filter uses “not ip” to include all non-IP packets and then lets “ip.dst ne 224.1.2.3” filter out the unwanted IP packets. The second filter has already been explained above where filtering with multiply occurring fields was discussed.

## FILTER PROTOCOL REFERENCE

Each entry below provides an abbreviated protocol or field name. Every one of these fields can be used in a display filter. The type of the field is also given.

**3Com XNS Encapsulation (3comxns)**

3comxns.type Type  
Unsigned 16-bit integer

**3GPP2 A11 (a11)**

a11.ackstat Reply Status  
Unsigned 8-bit integer  
All Registration Ack Status.

a11.auth.auth Authenticator  
Byte array  
Authenticator.

a11.auth.spi SPI  
Unsigned 32-bit integer  
Authentication Header Security Parameter Index.

a11.b Broadcast Datagrams  
Boolean  
Broadcast Datagrams requested

a11.coa Care of Address  
IPv4 address  
Care of Address.

a11.code Reply Code  
Unsigned 8-bit integer  
All Registration Reply code.

a11.d Co-located Care-of Address  
Boolean  
MN using Co-located Care-of address

a11.ext.apptype Application Type  
Unsigned 8-bit integer  
Application Type.

a11.ext.ase.key GRE Key  
Unsigned 32-bit integer  
GRE Key.

a11.ext.ase.len Entry Length  
Unsigned 8-bit integer  
Entry Length.

a11.ext.ase.pcfip PCF IP Address  
IPv4 address  
PCF IP Address.

a11.ext.ase.ptype GRE Protocol Type  
Unsigned 16-bit integer  
GRE Protocol Type.

a11.ext.ase.srid Service Reference ID (SRID)  
Unsigned 8-bit integer  
Service Reference ID (SRID).

a11.ext.ase.srvopt Service Option  
Unsigned 16-bit integer  
Service Option.

all.ext.auth.subtype Gen Auth Ext SubType  
Unsigned 8-bit integer  
Mobile IP Auth Extension Sub Type.

all.ext.canid CANID  
Byte array  
CANID

all.ext.code Reply Code  
Unsigned 8-bit integer  
PDSN Code.

all.ext.dormant All Dormant Indicator  
Unsigned 16-bit integer  
All Dormant Indicator.

all.ext.fqi.dscp Forward DSCP  
Unsigned 8-bit integer  
Forward Flow DSCP.

all.ext.fqi.entrylen Entry Length  
Unsigned 8-bit integer  
Forward Entry Length.

all.ext.fqi.flags Flags  
Unsigned 8-bit integer  
Forward Flow Entry Flags.

all.ext.fqi.flowcount Forward Flow Count  
Unsigned 8-bit integer  
Forward Flow Count.

all.ext.fqi.flowid Forward Flow Id  
Unsigned 8-bit integer  
Forward Flow Id.

all.ext.fqi.flowstate Forward Flow State  
Unsigned 8-bit integer  
Forward Flow State.

all.ext.fqi.graqos Granted QoS  
Byte array  
Forward Granted QoS.

all.ext.fqi.graqoslen Granted QoS Length  
Unsigned 8-bit integer  
Forward Granted QoS Length.

all.ext.fqi.length Length  
Unsigned 16-bit integer

all.ext.fqi.reqqos Requested QoS  
Byte array  
Forward Requested QoS.

all.ext.fqi.reqqoslen Requested QoS Length  
Unsigned 8-bit integer  
Forward Requested QoS Length.

all.ext.fqi.srid SRID  
Unsigned 8-bit integer  
Forward Flow Entry SRID.

all.ext.fqui.flowcount Forward QoS Update Flow Count  
Unsigned 8-bit integer  
Forward QoS Update Flow Count.

all.ext.fqui.updatedqos Foward Updated QoS Sub-Blob  
Byte array  
Foward Updated QoS Sub-Blob.

all.ext.fqui.updatedqoslen Foward Updated QoS Sub-Blob Length  
Unsigned 8-bit integer  
Foward Updated QoS Sub-Blob Length.

all.ext.key Key  
Unsigned 32-bit integer  
Session Key.

all.ext.len Extension Length  
Unsigned 16-bit integer  
Mobile IP Extension Length.

all.ext.mnsrid MNSR-ID  
Unsigned 16-bit integer  
MNSR-ID

all.ext.msids MSID(BCD)  
String  
MSID(BCD).

all.ext.msidslen MSID Length  
Unsigned 8-bit integer  
MSID Length.

all.ext.msids\_type MSID Type  
Unsigned 16-bit integer  
MSID Type.

all.ext.panid PANID  
Byte array  
PANID

all.ext.ppaddr Anchor P-P Address  
IPv4 address  
Anchor P-P Address.

all.ext.ptype Protocol Type  
Unsigned 16-bit integer  
Protocol Type.

all.ext.qosmode QoS Mode  
Unsigned 8-bit integer  
QoS Mode.

all.ext.rqi.entrylen Entry Length  
Unsigned 8-bit integer  
Reverse Flow Entry Length.

all.ext.rqi.flowcount Reverse Flow Count  
Unsigned 8-bit integer  
Reverse Flow Count.

all.ext.rqi.flowid Reverse Flow Id  
Unsigned 8-bit integer  
Reverse Flow Id.



all.ext.rqi.flowstate Flow State  
Unsigned 8-bit integer  
Reverse Flow State.

all.ext.rqi.graqos Granted QoS  
Byte array  
Reverse Granted QoS.

all.ext.rqi.graqoslen Granted QoS Length  
Unsigned 8-bit integer  
Reverse Granted QoS Length.

all.ext.rqi.length Length  
Unsigned 16-bit integer

all.ext.rqi.reqqos Requested QoS  
Byte array  
Reverse Requested QoS.

all.ext.rqi.reqqoslen Requested QoS Length  
Unsigned 8-bit integer  
Reverse Requested QoS Length.

all.ext.rqi.srid SRID  
Unsigned 8-bit integer  
Reverse Flow Entry SRID.

all.ext.rqui.flowcount Reverse QoS Update Flow Count  
Unsigned 8-bit integer  
Reverse QoS Update Flow Count.

all.ext.rqui.updatedqos Reverse Updated QoS Sub-Blob  
Byte array  
Reverse Updated QoS Sub-Blob.

all.ext.rqui.updatedqoslen Reverse Updated QoS Sub-Blob Length  
Unsigned 8-bit integer  
Reverse Updated QoS Sub-Blob Length.

all.ext.sidver Session ID Version  
Unsigned 8-bit integer  
Session ID Version

all.ext.sqp.profile Subscriber QoS Profile  
Byte array  
Subscriber QoS Profile.

all.ext.sqp.profilelen Subscriber QoS Profile Length  
Byte array  
Subscriber QoS Profile Length.

all.ext.srvopt Service Option  
Unsigned 16-bit integer  
Service Option.

all.ext.type Extension Type  
Unsigned 8-bit integer  
Mobile IP Extension Type.

all.ext.vid Vendor ID  
Unsigned 32-bit integer  
Vendor ID.

all.extension Extension  
Byte array  
Extension

all.flags Flags  
Unsigned 8-bit integer

all.g GRE  
Boolean  
MN wants GRE encapsulation

all.haaddr Home Agent  
IPv4 address  
Home agent IP Address.

all.homeaddr Home Address  
IPv4 address  
Mobile Node's home address.

all.ident Identification  
Byte array  
MN Identification.

all.life Lifetime  
Unsigned 16-bit integer  
All Registration Lifetime.

all.m Minimal Encapsulation  
Boolean  
MN wants Minimal encapsulation

all.nai NAI  
String  
NAI

all.s Simultaneous Bindings  
Boolean  
Simultaneous Bindings Allowed

all.t Reverse Tunneling  
Boolean  
Reverse tunneling requested

all.type Message Type  
Unsigned 8-bit integer  
All Message type.

all.v Van Jacobson  
Boolean  
Van Jacobson

### **3com Network Jack (njack)**

njack.getresp.unknown1 Unknown1  
Unsigned 8-bit integer

njack.magic Magic  
String

njack.set.length SetLength  
Unsigned 16-bit integer

```
njack.set.salt    Salt
                  Unsigned 32-bit integer
njack.setresult  SetResult
                  Unsigned 8-bit integer
njack.tlv.addtagscheme  TlvAddTagScheme
                  Unsigned 8-bit integer
njack.tlv.authdata  Authdata
                  Byte array
njack.tlv.contermode  TlvTypeCountermode
                  Unsigned 8-bit integer
njack.tlv.data      TlvData
                  Byte array
njack.tlv.devicemac  TlvTypeDeviceMAC
                  6-byte Hardware (MAC) Address
njack.tlv.dhcpcontrol  TlvTypeDhcpControl
                  Unsigned 8-bit integer
njack.tlv.length    TlvLength
                  Unsigned 8-bit integer
njack.tlv.maxframesize  TlvTypeMaxframesize
                  Unsigned 8-bit integer
njack.tlv.portingressmode  TlvTypePortingressmode
                  Unsigned 8-bit integer
njack.tlv.powerforwarding  TlvTypePowerforwarding
                  Unsigned 8-bit integer
njack.tlv.scheduling  TlvTypeScheduling
                  Unsigned 8-bit integer
njack.tlv.snmpwrite  TlvTypeSnmpwrite
                  Unsigned 8-bit integer
njack.tlv.type      TlvType
                  Unsigned 8-bit integer
njack.tlv.typeip    TlvTypeIP
                  IPv4 address
njack.tlv.typestring  TlvTypeString
                  String
njack.tlv.version   TlvFwVersion
                  IPv4 address
njack.type          Type
                  Unsigned 8-bit integer
```

### **802.11 radio information (radio)**

#### **802.1Q Virtual LAN (vlan)**

```
vlan.cfi  CFI
          Unsigned 16-bit integer
          Canonical Format Identifier
```

```
vlan.etype  Type
            Unsigned 16-bit integer
            Ethertype

vlan.id     ID
            Unsigned 16-bit integer
            VLAN ID

vlan.len    Length
            Unsigned 16-bit integer

vlan.priority  Priority
            Unsigned 16-bit integer
            User Priority

vlan.trailer  Trailer
            Byte array
            VLAN Trailer
```

### 802.1X Authentication (eapol)

```
eapol.keydes.data  WPA Key
                  Byte array
                  WPA Key Data

eapol.keydes.dataLen  WPA Key Length
                     Unsigned 16-bit integer
                     WPA Key Data Length

eapol.keydes.id  WPA Key ID
                 Byte array
                 WPA Key ID(RSN Reserved)

eapol.keydes.index.indexnum  Index Number
                             Unsigned 8-bit integer
                             Key Index number

eapol.keydes.index.keytype  Key Type
                            Boolean
                            Key Type (unicast/broadcast)

eapol.keydes.key  Key
                  Byte array
                  Key

eapol.keydes.key_info  Key Information
                       Unsigned 16-bit integer
                       WPA key info

eapol.keydes.key_info.encr_key_data  Encrypted Key Data flag
                                      Boolean
                                      Encrypted Key Data flag

eapol.keydes.key_info.error  Error flag
                              Boolean
                              Error flag

eapol.keydes.key_info.install  Install flag
                                Boolean
                                Install flag
```

```
eapol.keydes.key_info.key_ack  Key Ack flag
    Boolean
    Key Ack flag

eapol.keydes.key_info.key_index  Key Index
    Unsigned 16-bit integer
    Key Index (0-3) (RSN: Reserved)

eapol.keydes.key_info.key_mic  Key MIC flag
    Boolean
    Key MIC flag

eapol.keydes.key_info.key_type  Key Type
    Boolean
    Key Type (Pairwise or Group)

eapol.keydes.key_info.keydes_ver  Key Descriptor Version
    Unsigned 16-bit integer
    Key Descriptor Version Type

eapol.keydes.key_info.request  Request flag
    Boolean
    Request flag

eapol.keydes.key_info.secure  Secure flag
    Boolean
    Secure flag

eapol.keydes.key_iv  Key IV
    Byte array
    Key Initialization Vector

eapol.keydes.key_signature  Key Signature
    Byte array
    Key Signature

eapol.keydes.keylen  Key Length
    Unsigned 16-bit integer
    Key Length

eapol.keydes.mic  WPA Key MIC
    Byte array
    WPA Key Message Integrity Check

eapol.keydes.nonce  Nonce
    Byte array
    WPA Key Nonce

eapol.keydes.replay_counter  Replay Counter
    Unsigned 64-bit integer
    Replay Counter

eapol.keydes.rsc  WPA Key RSC
    Byte array
    WPA Key Receive Sequence Counter

eapol.keydes.type  Descriptor Type
    Unsigned 8-bit integer
    Key Descriptor Type

eapol.len  Length
    Unsigned 16-bit integer
    Length
```

eapol.type Type  
Unsigned 8-bit integer

eapol.version Version  
Unsigned 8-bit integer

#### **AAL type 2 signalling protocol (Q.2630) (alcap)**

alcap.acc.level Congestion Level  
Unsigned 8-bit integer

alcap.alc.bitrate.avg.bw Average Backwards Bit Rate  
Unsigned 16-bit integer

alcap.alc.bitrate.avg.fw Average Forward Bit Rate  
Unsigned 16-bit integer

alcap.alc.bitrate.max.bw Maximum Backwards Bit Rate  
Unsigned 16-bit integer

alcap.alc.bitrate.max.fw Maximum Forward Bit Rate  
Unsigned 16-bit integer

alcap.alc.sdusize.avg.bw Average Backwards CPS SDU Size  
Unsigned 8-bit integer

alcap.alc.sdusize.avg.fw Average Forward CPS SDU Size  
Unsigned 8-bit integer

alcap.alc.sdusize.max.bw Maximum Backwards CPS SDU Size  
Unsigned 8-bit integer

alcap.alc.sdusize.max.fw Maximum Forward CPS SDU Size  
Unsigned 8-bit integer

alcap.cau.coding Cause Coding  
Unsigned 8-bit integer

alcap.cau.diag Diagnostic  
Byte array

alcap.cau.diag.field\_num Field Number  
Unsigned 8-bit integer

alcap.cau.diag.len Length  
Unsigned 8-bit integer  
Diagnostics Length

alcap.cau.diag.msg Message Identifier  
Unsigned 8-bit integer

alcap.cau.diag.param Parameter Identifier  
Unsigned 8-bit integer

alcap.cau.value Cause Value (ITU)  
Unsigned 8-bit integer

alcap.ceid.cid CID  
Unsigned 8-bit integer

alcap.ceid.pathid Path ID  
Unsigned 32-bit integer

alcap.compat Message Compatibility  
Byte array

```
alcap.compat.general.ii  General II
    Unsigned 8-bit integer
    Instruction Indicator

alcap.compat.general.sni  General SNI
    Unsigned 8-bit integer
    Send Notificaaation Indicator

alcap.compat.pass.ii  Pass-On II
    Unsigned 8-bit integer
    Instruction Indicator

alcap.compat.pass.sni  Pass-On SNI
    Unsigned 8-bit integer
    Send Notificaaation Indicator

alcap.cp.level  Level
    Unsigned 8-bit integer

alcap.dnsea.addr  Address
    Byte array

alcap.dsaid  DSAID
    Unsigned 32-bit integer
    Destination Service Association ID

alcap.fbw.bitrate.bw  CPS Backwards Bitrate
    Unsigned 24-bit integer

alcap.fbw.bitrate.fw  CPS Forward Bitrate
    Unsigned 24-bit integer

alcap.fbw.bucket_size.bw  Backwards CPS Bucket Size
    Unsigned 16-bit integer

alcap.fbw.bucket_size.fw  Forward CPS Bucket Size
    Unsigned 16-bit integer

alcap.fbw.max_size.bw  Backwards CPS Packet Size
    Unsigned 8-bit integer

alcap.fbw.max_size.fw  Forward CPS Packet Size
    Unsigned 8-bit integer

alcap.hc.codepoint  Codepoint
    Unsigned 8-bit integer

alcap.leg.cause  Leg's cause value in REL
    Unsigned 8-bit integer

alcap.leg.cid  Leg's channel id
    Unsigned 32-bit integer

alcap.leg.dnsea  Leg's destination NSAP
    String

alcap.leg.dsaid  Leg's ECF OSA id
    Unsigned 32-bit integer

alcap.leg.msg  a message of this leg
    Frame number

alcap.leg.onsea  Leg's originating NSAP
    String
```

```
alcap.leg.osaid  Leg's ERQ OSA id
    Unsigned 32-bit integer
alcap.leg.pathid  Leg's path id
    Unsigned 32-bit integer
alcap.leg.sugr  Leg's SUGR
    Unsigned 32-bit integer
alcap.msg_type  Message Type
    Unsigned 8-bit integer
alcap.onsea.addr  Address
    Byte array
alcap.osaid  OSAID
    Unsigned 32-bit integer
    Originating Service Association ID
alcap.param  Parameter
    Unsigned 8-bit integer
    Parameter Id
alcap.param.len  Length
    Unsigned 8-bit integer
    Parameter Length
alcap.pfbw.bitrate.bw  CPS Backwards Bitrate
    Unsigned 24-bit integer
alcap.pfbw.bitrate.fw  CPS Forward Bitrate
    Unsigned 24-bit integer
alcap.pfbw.bucket_size.bw  Backwards CPS Bucket Size
    Unsigned 16-bit integer
alcap.pfbw.bucket_size.fw  Forward CPS Bucket Size
    Unsigned 16-bit integer
alcap.pfbw.max_size.bw  Backwards CPS Packet Size
    Unsigned 8-bit integer
alcap.pfbw.max_size.fw  Forward CPS Packet Size
    Unsigned 8-bit integer
alcap.plc.bitrate.avg.bw  Average Backwards Bit Rate
    Unsigned 16-bit integer
alcap.plc.bitrate.avg.fw  Average Forward Bit Rate
    Unsigned 16-bit integer
alcap.plc.bitrate.max.bw  Maximum Backwards Bit Rate
    Unsigned 16-bit integer
alcap.plc.bitrate.max.fw  Maximum Forward Bit Rate
    Unsigned 16-bit integer
alcap.plc.sdusize.max.bw  Maximum Backwards CPS SDU Size
    Unsigned 8-bit integer
alcap.plc.sdusize.max.fw  Maximum Forward CPS SDU Size
    Unsigned 8-bit integer
alcap.pssiaec.cas  CAS
    Unsigned 8-bit integer
    Channel Associated Signalling
```



```
alcap.pssiae.cmd  Circuit Mode
    Unsigned 8-bit integer
alcap.pssiae.dtmf  DTMF
    Unsigned 8-bit integer
alcap.pssiae.fax  Fax
    Unsigned 8-bit integer
    Facsimile
alcap.pssiae.frm  Frame Mode
    Unsigned 8-bit integer
alcap.pssiae.lb  Loopback
    Unsigned 8-bit integer
alcap.pssiae.max_fmdata_len  Max Len of FM Data
    Unsigned 16-bit integer
alcap.pssiae.mfr1  Multi-Frequency R1
    Unsigned 8-bit integer
alcap.pssiae.mfr2  Multi-Frequency R2
    Unsigned 8-bit integer
alcap.pssiae.oui  OUI
    Byte array
    Organizational Unique Identifier
alcap.pssiae.pcm  PCM Mode
    Unsigned 8-bit integer
alcap.pssiae.profile.id  Profile Id
    Unsigned 8-bit integer
alcap.pssiae.profile.type  Profile Type
    Unsigned 8-bit integer
    I.366.2 Profile Type
alcap.pssiae.rc  Rate Control
    Unsigned 8-bit integer
alcap.pssiae.syn  Synchronization
    Unsigned 8-bit integer
    Transport of synchronization of change in SSCS operation
alcap.pssime.frm  Frame Mode
    Unsigned 8-bit integer
alcap.pssime.lb  Loopback
    Unsigned 8-bit integer
alcap.pssime.max  Max Len
    Unsigned 16-bit integer
alcap.pssime.mult  Multiplier
    Unsigned 8-bit integer
alcap.pt.codepoint  QoS Codepoint
    Unsigned 8-bit integer
alcap.pvbws.bitrate.bw  Peak CPS Backwards Bitrate
    Unsigned 24-bit integer
alcap.pvbws.bitrate.fw  Peak CPS Forward Bitrate
    Unsigned 24-bit integer
```

```
alcap.pvbws.bucket_size.bw  Peak Backwards CPS Bucket Size
    Unsigned 16-bit integer
alcap.pvbws.bucket_size.fw  Peak Forward CPS Bucket Size
    Unsigned 16-bit integer
alcap.pvbws.max_size.bw    Backwards CPS Packet Size
    Unsigned 8-bit integer
alcap.pvbws.max_size.fw    Forward CPS Packet Size
    Unsigned 8-bit integer
alcap.pvbws.stt            Source Traffic Type
    Unsigned 8-bit integer
alcap.pvbwt.bitrate.bw     Peak CPS Backwards Bitrate
    Unsigned 24-bit integer
alcap.pvbwt.bitrate.fw     Peak CPS Forward Bitrate
    Unsigned 24-bit integer
alcap.pvbwt.bucket_size.bw Peak Backwards CPS Bucket Size
    Unsigned 16-bit integer
alcap.pvbwt.bucket_size.fw Peak Forward CPS Bucket Size
    Unsigned 16-bit integer
alcap.pvbwt.max_size.bw    Backwards CPS Packet Size
    Unsigned 8-bit integer
alcap.pvbwt.max_size.fw    Forward CPS Packet Size
    Unsigned 8-bit integer
alcap.ssia.cas             CAS
    Unsigned 8-bit integer
    Channel Associated Signalling
alcap.ssia.cmd             Circuit Mode
    Unsigned 8-bit integer
alcap.ssia.dtmf           DTMF
    Unsigned 8-bit integer
alcap.ssia.fax            Fax
    Unsigned 8-bit integer
    Facsimile
alcap.ssia.frm            Frame Mode
    Unsigned 8-bit integer
alcap.ssia.max_fmdata_len  Max Len of FM Data
    Unsigned 16-bit integer
alcap.ssia.mfr1           Multi-Frequency R1
    Unsigned 8-bit integer
alcap.ssia.mfr2           Multi-Frequency R2
    Unsigned 8-bit integer
alcap.ssia.oui            OUI
    Byte array
    Organizational Unique Identifier
alcap.ssia.pcm            PCM Mode
    Unsigned 8-bit integer
```

```
alcap.ssia.profile.id  Profile Id
    Unsigned 8-bit integer
alcap.ssia.profile.type  Profile Type
    Unsigned 8-bit integer
    I.366.2 Profile Type
alcap.ssiae.cas  CAS
    Unsigned 8-bit integer
    Channel Associated Signalling
alcap.ssiae.cmd  Circuit Mode
    Unsigned 8-bit integer
alcap.ssiae.dtmf  DTMF
    Unsigned 8-bit integer
alcap.ssiae.fax  Fax
    Unsigned 8-bit integer
    Facsimile
alcap.ssiae.frm  Frame Mode
    Unsigned 8-bit integer
alcap.ssiae.lb  Loopback
    Unsigned 8-bit integer
alcap.ssiae.max_fmdata_len  Max Len of FM Data
    Unsigned 16-bit integer
alcap.ssiae.mfr1  Multi-Frequency R1
    Unsigned 8-bit integer
alcap.ssiae.mfr2  Multi-Frequency R2
    Unsigned 8-bit integer
alcap.ssiae.oui  OUI
    Byte array
    Organizational Unique Identifier
alcap.ssiae.pcm  PCM Mode
    Unsigned 8-bit integer
alcap.ssiae.profile.id  Profile Id
    Unsigned 8-bit integer
alcap.ssiae.profile.type  Profile Type
    Unsigned 8-bit integer
    I.366.2 Profile Type
alcap.ssiae.rc  Rate Conctrol
    Unsigned 8-bit integer
alcap.ssiae.syn  Synchronization
    Unsigned 8-bit integer
    Transport of synchronization of change in SSCS operation
alcap.ssim.frm  Frame Mode
    Unsigned 8-bit integer
alcap.ssim.max  Max Len
    Unsigned 16-bit integer
alcap.ssim.mult  Multiplier
    Unsigned 8-bit integer
```

```
alcap.ssime.frm  Frame Mode
                 Unsigned 8-bit integer
alcap.ssime.lb   Loopback
                 Unsigned 8-bit integer
alcap.ssime.max  Max Len
                 Unsigned 16-bit integer
alcap.ssime.mult Multiplier
                 Unsigned 8-bit integer
alcap.ssisa.sscop.max_sdu_len.bw  Maximum Len of SSSAR-SDU Backwards
                                    Unsigned 16-bit integer
alcap.ssisa.sscop.max_sdu_len.fw  Maximum Len of SSSAR-SDU Forward
                                    Unsigned 16-bit integer
alcap.ssisa.sscop.max_uu_len.bw   Maximum Len of SSSAR-SDU Backwards
                                    Unsigned 16-bit integer
alcap.ssisa.sscop.max_uu_len.fw   Maximum Len of SSSAR-SDU Forward
                                    Unsigned 16-bit integer
alcap.ssisa.sssar.max_len.fw      Maximum Len of SSSAR-SDU Forward
                                    Unsigned 24-bit integer
alcap.ssisu.sssar.max_len.fw      Maximum Len of SSSAR-SDU Forward
                                    Unsigned 24-bit integer
alcap.ssisu.ted  Transmission Error Detection
                 Unsigned 8-bit integer
alcap.suci       SUCI
                 Unsigned 8-bit integer
                 Served User Correlation Id
alcap.sugr       SUGR
                 Byte array
                 Served User Generated Reference
alcap.sut.sut_len  SUT Length
                  Unsigned 8-bit integer
alcap.sut.transport  SUT
                    Byte array
                    Served User Transport
alcap.unknown.field  Unknown Field Data
                    Byte array
alcap.vbws.bitrate.bw  CPS Backwards Bitrate
                      Unsigned 24-bit integer
alcap.vbws.bitrate.fw  CPS Forward Bitrate
                      Unsigned 24-bit integer
alcap.vbws.bucket_size.bw  Backwards CPS Bucket Size
                            Unsigned 16-bit integer
alcap.vbws.bucket_size.fw  Forward CPS Bucket Size
                            Unsigned 16-bit integer
alcap.vbws.max_size.bw    Backwards CPS Packet Size
                          Unsigned 8-bit integer
```

```

alcap.vbws.max_size.fw  Forward CPS Packet Size
                        Unsigned 8-bit integer
alcap.vbws.stt          Source Traffic Type
                        Unsigned 8-bit integer
alcap.vbwt.bitrate.bw   Peak CPS Backwards Bitrate
                        Unsigned 24-bit integer
alcap.vbwt.bitrate.fw   Peak CPS Forward Bitrate
                        Unsigned 24-bit integer
alcap.vbwt.bucket_size.bw Peak Backwards CPS Bucket Size
                        Unsigned 16-bit integer
alcap.vbwt.bucket_size.fw Peak Forward CPS Bucket Size
                        Unsigned 16-bit integer
alcap.vbwt.max_size.bw  Backwards CPS Packet Size
                        Unsigned 8-bit integer
alcap.vbwt.max_size.fw  Forward CPS Packet Size
                        Unsigned 8-bit integer

```

### ACP133 Attribute Syntaxes (acp133)

```

acp133.ACPLegacyFormat ACPLegacyFormat
                        Signed 32-bit integer
                        acp133.ACPLegacyFormat
acp133.ACPPreferredDelivery ACPPreferredDelivery
                        Unsigned 32-bit integer
                        acp133.ACPPreferredDelivery
acp133.ALType ALType
                        Signed 32-bit integer
                        acp133.ALType
acp133.AddressCapabilities AddressCapabilities
                        No value
                        acp133.AddressCapabilities
acp133.Addressees Addressees
                        Unsigned 32-bit integer
                        acp133.Addressees
acp133.Addressees_item Item
                        String
                        acp133.PrintableString_SIZE_1_55
acp133.Capability Capability
                        No value
                        acp133.Capability
acp133.Classification Classification
                        Unsigned 32-bit integer
                        acp133.Classification
acp133.Community Community
                        Unsigned 32-bit integer
                        acp133.Community

```

```
acp133.DLPolicy DLPolicy
  No value
  acp133.DLPolicy
acp133.DLSubmitPermission DLSubmitPermission
  Unsigned 32-bit integer
  acp133.DLSubmitPermission
acp133.DistributionCode DistributionCode
  String
  acp133.DistributionCode
acp133.JPEG JPEG
  Byte array
  acp133.JPEG
acp133.Kmid Kmid
  Byte array
  acp133.Kmid
acp133.MLReceiptPolicy MLReceiptPolicy
  Unsigned 32-bit integer
  acp133.MLReceiptPolicy
acp133.MonthlyUKMs MonthlyUKMs
  No value
  acp133.MonthlyUKMs
acp133.OnSupported OnSupported
  Byte array
  acp133.OnSupported
acp133.RIPParameters RIPParameters
  No value
  acp133.RIPParameters
acp133.Remarks Remarks
  Unsigned 32-bit integer
  acp133.Remarks
acp133.Remarks_item Item
  String
  acp133.PrintableString
acp133.acp127-mn acp127-mn
  Boolean
acp133.acp127-pn acp127-pn
  Boolean
acp133.acp127-tn acp127-tn
  Boolean
acp133.address address
  No value
  x411.ORAddress
acp133.algorithm_identifier algorithm-identifier
  No value
  x509af.AlgorithmIdentifier
```

```
acp133.capabilities capabilities
    Unsigned 32-bit integer
    acp133.SET_OF_Capability

acp133.capabilities_item Item
    No value
    acp133.Capability

acp133.classification classification
    Unsigned 32-bit integer
    acp133.Classification

acp133.content_types content-types
    Unsigned 32-bit integer
    acp133.SET_OF_ExtendedContentType

acp133.content_types_item Item
    x411.ExtendedContentType

acp133.conversion_with_loss_prohibited conversion-with-loss-prohibited
    Unsigned 32-bit integer
    acp133.T_conversion_with_loss_prohibited

acp133.date date
    String
    acp133.UTCTime

acp133.description description
    String
    acp133.GeneralString

acp133.disclosure_of_other_recipients disclosure-of-other-recipients
    Unsigned 32-bit integer
    acp133.T_disclosure_of_other_recipients

acp133.edition edition
    Signed 32-bit integer
    acp133.INTEGER

acp133.encoded_information_types_constraints encoded-information-types-constrai
    No value
    x411.EncodedInformationTypesConstraints

acp133.encrypted encrypted
    Byte array
    acp133.BIT_STRING

acp133.further_dl_expansion_allowed further-dl-expansion-allowed
    Boolean
    acp133.BOOLEAN

acp133.implicit_conversion_prohibited implicit-conversion-prohibited
    Unsigned 32-bit integer
    acp133.T_implicit_conversion_prohibited

acp133.inAdditionTo inAdditionTo
    Unsigned 32-bit integer
    acp133.SEQUENCE_OF_GeneralNames

acp133.inAdditionTo_item Item
    Unsigned 32-bit integer
    x509ce.GeneralNames
```

```

acp133.individual individual
    No value
    x411.ORName

acp133.insteadOf insteadOf
    Unsigned 32-bit integer
    acp133.SEQUENCE_OF_GeneralNames

acp133.insteadOf_item Item
    Unsigned 32-bit integer
    x509ce.GeneralNames

acp133.kmid kmid
    Byte array
    acp133.Kmid

acp133.maximum_content_length maximum-content-length
    Unsigned 32-bit integer
    x411.ContentLength

acp133.member_of_dl member-of-dl
    No value
    x411.ORName

acp133.member_of_group member-of-group
    Unsigned 32-bit integer
    x509if.Name

acp133.minimize minimize
    Boolean
    acp133.BOOLEAN

acp133.none none
    No value
    acp133.NULL

acp133.Originating_MTA_report originating-MTA-report
    Signed 32-bit integer
    acp133.T_originating_MTA_report

acp133.Originator_certificate_selector originator-certificate-selector
    No value
    x509ce.CertificateAssertion

acp133.Originator_report originator-report
    Signed 32-bit integer
    acp133.T_Originator_report

acp133.Originator_requested_alternate_recipient_removed originator-requested-al
    Boolean
    acp133.BOOLEAN

acp133.pattern_match pattern-match
    No value
    acp133.ORNamePattern

acp133.priority priority
    Signed 32-bit integer
    acp133.T_priority

acp133.proof_of_delivery proof-of-delivery
    Signed 32-bit integer
    acp133.T_proof_of_delivery

```



```

acp133.rI  rI
    String
    acp133.PrintableString
acp133.rIType  rIType
    Unsigned 32-bit integer
    acp133.T_rIType
acp133.recipient_certificate_selector  recipient-certificate-selector
    No value
    x509ce.CertificateAssertion
acp133.removed  removed
    No value
    acp133.NULL
acp133.replaced  replaced
    Unsigned 32-bit integer
    x411.RequestedDeliveryMethod
acp133.report_from_dl  report-from-dl
    Signed 32-bit integer
    acp133.T_report_from_dl
acp133.report_propagation  report-propagation
    Signed 32-bit integer
    acp133.T_report_propagation
acp133.requested_delivery_method  requested-delivery-method
    Unsigned 32-bit integer
    acp133.T_requested_delivery_method
acp133.return_of_content  return-of-content
    Unsigned 32-bit integer
    acp133.T_return_of_content
acp133.sHD  sHD
    String
    acp133.PrintableString
acp133.security_labels  security-labels
    Unsigned 32-bit integer
    x411.SecurityContext
acp133.tag  tag
    No value
    acp133.PairwiseTag
acp133.token_encryption_algorithm_preference  token-encryption-algorithm-preference
    Unsigned 32-bit integer
    acp133.SEQUENCE_OF_AlgorithmInformation
acp133.token_encryption_algorithm_preference_item  Item
    No value
    acp133.AlgorithmInformation
acp133.token_signature_algorithm_preference  token-signature-algorithm-preference
    Unsigned 32-bit integer
    acp133.SEQUENCE_OF_AlgorithmInformation
acp133.token_signature_algorithm_preference_item  Item
    No value
    acp133.AlgorithmInformation

```

```
acp133.ukm ukm
  Byte array
  acp133.OCTET_STRING

acp133.ukm_entries ukm-entries
  Unsigned 32-bit integer
  acp133.SEQUENCE_OF_UKMEntry

acp133.ukm_entries_item Item
  No value
  acp133.UKMEntry

acp133.unchanged unchanged
  No value
  acp133.NULL
```

**AIM Administrative (aim\_admin)**

```
aim_admin.acctinfo.code Account Information Request Code
  Unsigned 16-bit integer

aim_admin.acctinfo.permissions Account Permissions
  Unsigned 16-bit integer

aim_admin.confirm_status Confirmation status
  Unsigned 16-bit integer
```

**AIM Advertisements (aim\_adverts)****AIM Buddylist Service (aim\_buddylist)**

```
aim_buddylist.userinfo.warninglevel Warning Level
  Unsigned 16-bit integer
```

**AIM Chat Navigation (aim\_chatnav)****AIM Chat Service (aim\_chat)****AIM Directory Search (aim\_dir)****AIM E-mail (aim\_email)****AIM Generic Service (aim\_generic)**

```
aim_generic.client_verification.hash Client Verification MD5 Hash
  Byte array

aim_generic.client_verification.length Client Verification Request Length
  Unsigned 32-bit integer

aim_generic.client_verification.offset Client Verification Request Offset
  Unsigned 32-bit integer

aim_generic.evil.new_warn_level New warning level
  Unsigned 16-bit integer

aim_generic.ext_status.data Extended Status Data
  Byte array
```

```
aim_generic.ext_status.flags  Extended Status Flags
    Unsigned 8-bit integer
aim_generic.ext_status.length  Extended Status Length
    Unsigned 8-bit integer
aim_generic.ext_status.type    Extended Status Type
    Unsigned 16-bit integer
aim_generic.idle_time          Idle time (seconds)
    Unsigned 32-bit integer
aim_generic.migrate.numfams    Number of families to migrate
    Unsigned 16-bit integer
aim_generic.motd.motdtype      MOTD Type
    Unsigned 16-bit integer
aim_generic.privilege_flags    Privilege flags
    Unsigned 32-bit integer
aim_generic.privilege_flags.allow_idle  Allow other users to see idle time
    Boolean
aim_generic.privilege_flags.allow_member  Allow other users to see how long acco
    Boolean
aim_generic.ratechange.msg      Rate Change Message
    Unsigned 16-bit integer
aim_generic.rateinfo.class.alertlevel  Alert Level
    Unsigned 32-bit integer
aim_generic.rateinfo.class.clearlevel  Clear Level
    Unsigned 32-bit integer
aim_generic.rateinfo.class.currentlevel  Current Level
    Unsigned 32-bit integer
aim_generic.rateinfo.class.curstate    Current State
    Unsigned 8-bit integer
aim_generic.rateinfo.class.disconnectlevel  Disconnect Level
    Unsigned 32-bit integer
aim_generic.rateinfo.class.id          Class ID
    Unsigned 16-bit integer
aim_generic.rateinfo.class.lasttime    Last Time
    Unsigned 32-bit integer
aim_generic.rateinfo.class.limitlevel  Limit Level
    Unsigned 32-bit integer
aim_generic.rateinfo.class.maxlevel    Max Level
    Unsigned 32-bit integer
aim_generic.rateinfo.class.numpairs    Number of Family/Subtype pairs
    Unsigned 16-bit integer
aim_generic.rateinfo.class.window_size  Window Size
    Unsigned 32-bit integer
aim_generic.rateinfo.numclasses  Number of Rateinfo Classes
    Unsigned 16-bit integer
```

```
aim_generic.rateinfoack.class  Acknowledged Rate Class
    Unsigned 16-bit integer
aim_generic.selfinfo.warn_level  Warning level
    Unsigned 16-bit integer
aim_generic.servicereq.service  Requested Service
    Unsigned 16-bit integer
```

**AIM ICQ (aim\_icq)**

```
aim_icq.chunk_size  Data chunk size
    Unsigned 16-bit integer
aim_icq.offline_msgs.dropped_flag  Dropped messages flag
    Unsigned 8-bit integer
aim_icq.owner_uid  Owner UID
    Unsigned 32-bit integer
aim_icq.request_seq_number  Request Sequence Number
    Unsigned 16-bit integer
aim_icq.request_type  Request Type
    Unsigned 16-bit integer
aim_icq.subtype  Meta Request Subtype
    Unsigned 16-bit integer
```

**AIM Invitation Service (aim\_invitation)****AIM Location (aim\_location)**

```
aim_location.buddyname  Buddy Name
    String
aim_location.buddynamelen  Buddynamelen
    Unsigned 8-bit integer
aim_location.snac.request_user_info.infotype  Infotype
    Unsigned 16-bit integer
aim_location.userinfo.warninglevel  Warning Level
    Unsigned 16-bit integer
```

**AIM Messaging (aim\_messaging)**

```
aim_messaging.channelid  Message Channel ID
    Unsigned 16-bit integer
aim_messaging.clientautoresp.client_caps_flags  Client Capabilities Flags
    Unsigned 32-bit integer
aim_messaging.clientautoresp.protocol_version  Version
    Unsigned 16-bit integer
aim_messaging.clientautoresp.reason  Reason
    Unsigned 16-bit integer
aim_messaging.evil.new_warn_level  New warning level
    Unsigned 16-bit integer
aim_messaging.evil.warn_level  Old warning level
    Unsigned 16-bit integer
```

```
aim_messaging.evilmreq.origin  Send Evil Bit As
    Unsigned 16-bit integer
aim_messaging.icbm.channel  Channel to setup
    Unsigned 16-bit integer
aim_messaging.icbm.extended_data.message.flags  Message Flags
    Unsigned 8-bit integer
aim_messaging.icbm.extended_data.message.flags.auto  Auto Message
    Boolean
aim_messaging.icbm.extended_data.message.flags.normal  Normal Message
    Boolean
aim_messaging.icbm.extended_data.message.priority_code  Priority Code
    Unsigned 16-bit integer
aim_messaging.icbm.extended_data.message.status_code  Status Code
    Unsigned 16-bit integer
aim_messaging.icbm.extended_data.message.text  Text
    String
aim_messaging.icbm.extended_data.message.text_length  Text Length
    Unsigned 16-bit integer
aim_messaging.icbm.extended_data.message.type  Message Type
    Unsigned 8-bit integer
aim_messaging.icbm.flags  Message Flags
    Unsigned 32-bit integer
aim_messaging.icbm.max_receiver_warnlevel  max receiver warn level
    Unsigned 16-bit integer
aim_messaging.icbm.max_sender_warn-level  Max sender warn level
    Unsigned 16-bit integer
aim_messaging.icbm.max_snac  Max SNAC Size
    Unsigned 16-bit integer
aim_messaging.icbm.min_msg_interval  Minimum message interval (seconds)
    Unsigned 16-bit integer
aim_messaging.icbm.rendezvous.extended_data.message.flags.multi  Multiple Recipi
    Boolean
aim_messaging.icbm.unknown  Unknown parameter
    Unsigned 16-bit integer
aim_messaging.icbmcookie  ICBM Cookie
    Byte array
aim_messaging.notification.channel  Notification Channel
    Unsigned 16-bit integer
aim_messaging.notification.cookie  Notification Cookie
    Byte array
aim_messaging.notification.type  Notification Type
    Unsigned 16-bit integer
aim_messaging.rendezvous.msg_type  Message Type
    Unsigned 16-bit integer
```

**AIM OFT (aim\_oft)****AIM Popup (aim\_popup)****AIM Privacy Management Service (aim\_bos)**

```
aim_bos.data    Data
                Byte array
aim_bos.userclass  User class
                Unsigned 32-bit integer
```

**AIM Server Side Info (aim\_ssi)**

```
aim_ssi.fnac.bid  SSI Buddy ID
                Unsigned 16-bit integer
aim_ssi.fnac.buddyname  Buddy Name
                String
aim_ssi.fnac.buddyname_len  SSI Buddy Name length
                Unsigned 16-bit integer
aim_ssi.fnac.data  SSI Buddy Data
                Unsigned 16-bit integer
aim_ssi.fnac.gid  SSI Buddy Group ID
                Unsigned 16-bit integer
aim_ssi.fnac.last_change_time  SSI Last Change Time
                Unsigned 32-bit integer
aim_ssi.fnac.numitems  SSI Object count
                Unsigned 16-bit integer
aim_ssi.fnac.tlvlen  SSI TLV Len
                Unsigned 16-bit integer
aim_ssi.fnac.type  SSI Buddy type
                Unsigned 16-bit integer
aim_ssi.fnac.version  SSI Version
                Unsigned 8-bit integer
```

**AIM Server Side Themes (aim\_sst)**

```
aim_sst.icon  Icon
                Byte array
aim_sst.icon_size  Icon Size
                Unsigned 16-bit integer
aim_sst.md5  MD5 Hash
                Byte array
aim_sst.md5.size  MD5 Hash Size
                Unsigned 8-bit integer
aim_sst.ref_num  Reference Number
                Unsigned 16-bit integer
aim_sst.unknown  Unknown Data
                Byte array
```

**AIM Signon (aim\_signon)**

```
aim_signon.challenge  Signon challenge
String
aim_signon.challengelen  Signon challenge length
Unsigned 16-bit integer
aim_signon.infotype  Infotype
Unsigned 16-bit integer
```

**AIM Statistics (aim\_stats)****AIM Translate (aim\_translate)****AIM User Lookup (aim\_lookup)**

```
aim_lookup.email  Email address looked for
String
Email address
```

**AMS (ams)**

```
ams.ads_adddn_req  ADS Add Device Notification Request
No value
ams.ads_adddn_res  ADS Add Device Notification Response
No value
ams.ads_cblength  CbLength
Unsigned 32-bit integer
ams.ads_cbreadlength  CBReadLength
Unsigned 32-bit integer
ams.ads_cbwritelength  CBWriteLength
Unsigned 32-bit integer
ams.ads_cmpmax  Cmp Mad
No value
ams.ads_cmpmin  Cmp Min
No value
ams.ads_cycletime  Cycle Time
Unsigned 32-bit integer
ams.ads_data  Data
No value
ams.ads_deldn_req  ADS Delete Device Notification Request
No value
ams.ads_deldn_res  ADS Delete Device Notification Response
No value
ams.ads_devicename  Device Name
String
ams.ads_devicestate  DeviceState
Unsigned 16-bit integer
ams.ads_dn_req  ADS Device Notification Request
No value
```

```
ams.ads_dn_res    ADS Device Notification Response
                 No value
ams.ads_indexgroup  IndexGroup
                 Unsigned 32-bit integer
ams.ads_indexoffset IndexOffset
                 Unsigned 32-bit integer
ams.ads_invokeid   InvokeId
                 Unsigned 32-bit integer
ams.ads_maxdelay   Max Delay
                 Unsigned 32-bit integer
ams.ads_noteattrib InvokeId
                 No value
ams.ads_noteblocks InvokeId
                 No value
ams.ads_noteblockssample Notification Sample
                 No value
ams.ads_noteblocksstamp Notification Stamp
                 No value
ams.ads_noteblocksstamps Count of Stamps
                 Unsigned 32-bit integer
ams.ads_notificationhandle NotificationHandle
                 Unsigned 32-bit integer
ams.ads_read_req   ADS Read Request
                 No value
ams.ads_read_res   ADS Read Response
                 No value
ams.ads_readdinfo_req ADS Read Device Info Request
                 No value
ams.ads_readdinfo_res ADS Read Device Info Response
                 No value
ams.ads_readstate_req ADS Read State Request
                 No value
ams.ads_readstate_res ADS Read State Response
                 No value
ams.ads_readwrite_req ADS ReadWrite Request
                 No value
ams.ads_readwrite_res ADS ReadWrite Response
                 No value
ams.ads_samplecnt  Count of Stamps
                 Unsigned 32-bit integer
ams.ads_state      AdsState
                 Unsigned 16-bit integer
ams.ads_timestamp  Time Stamp
                 Unsigned 64-bit integer
```



```
ams.ads_transmode  Trans Mode
    Unsigned 32-bit integer
ams.ads_version    ADS Version
    Unsigned 32-bit integer
ams.ads_versionbuild  ADS Version Build
    Unsigned 16-bit integer
ams.ads_versionrevision  ADS Minor Version
    Unsigned 8-bit integer
ams.ads_versionversion  ADS Major Version
    Unsigned 8-bit integer
ams.ads_write_req   ADS Write Request
    No value
ams.ads_write_res   ADS Write Response
    No value
ams.ads_writectl_req  ADS Write Ctrl Request
    No value
ams.ads_writectl_res  ADS Write Ctrl Response
    No value
ams.adsresult       Result
    Unsigned 32-bit integer
ams.cbdata          cbData
    Unsigned 32-bit integer
ams.cmdid           CmdId
    Unsigned 16-bit integer
ams.data            Data
    No value
ams.errorcode       ErrorCode
    Unsigned 32-bit integer
ams.invokeid        InvokeId
    Unsigned 32-bit integer
ams.sendernetid     AMS Sender Net Id
    String
ams.senderport      AMS Sender port
    Unsigned 16-bit integer
ams.state_adscmd    ADS COMMAND
    Boolean
ams.state_broadcast  BROADCAST
    Boolean
ams.state_highprio  HIGH PRIORITY COMMAND
    Boolean
ams.state_initcmd   INIT COMMAND
    Boolean
ams.state_noreturn  NO RETURN
    Boolean
```

```

ams.state_response  RESPONSE
    Boolean

ams.state_syscmd   SYSTEM COMMAND
    Boolean

ams.state_timestampadded  TIMESTAMP ADDED
    Boolean

ams.state_udp     UDP COMMAND
    Boolean

ams.stateflags    StateFlags
    Unsigned 16-bit integer

ams.targetnetid   AMS Target Net Id
    String

ams.targetport    AMS Target port
    Unsigned 16-bit integer

```

**ANSI A-I/F BSMAP (ansi\_a\_bsmap)**

```

ansi_a_bsmap.a2p_bearer_ipv4_addr  A2p Bearer IP Address
    IPv4 address

ansi_a_bsmap.a2p_bearer_ipv6_addr  A2p Bearer IP Address
    IPv6 address

ansi_a_bsmap.a2p_bearer_udp_port   A2p Bearer UDP Port
    Unsigned 16-bit integer

ansi_a_bsmap.anchor_pdsn_ip_addr   Anchor PDSN Address
    IPv4 address
    IP Address

ansi_a_bsmap.anchor_pp_ip_addr     Anchor P-P Address
    IPv4 address
    IP Address

ansi_a_bsmap.cell_ci               Cell CI
    Unsigned 16-bit integer

ansi_a_bsmap.cell_lac              Cell LAC
    Unsigned 16-bit integer

ansi_a_bsmap.cell_mscid            Cell MSCID
    Unsigned 24-bit integer

ansi_a_bsmap.cld_party_ascii_num    Called Party ASCII Number
    String

ansi_a_bsmap.cld_party_bcd_num      Called Party BCD Number
    String

ansi_a_bsmap.clg_party_ascii_num    Calling Party ASCII Number
    String

ansi_a_bsmap.clg_party_bcd_num      Calling Party BCD Number
    String

ansi_a_bsmap.dtap_msgtype           DTAP Message Type
    Unsigned 8-bit integer

ansi_a_bsmap.elem_id                Element ID
    Unsigned 8-bit integer

```

```
ansi_a_bsmmap.esn  ESN
    Unsigned 32-bit integer
ansi_a_bsmmap.imsi  IMSI
    String
ansi_a_bsmmap.len  Length
    Unsigned 8-bit integer
ansi_a_bsmmap.meid  MEID
    String
ansi_a_bsmmap.min  MIN
    String
ansi_a_bsmmap.msgtype  BSMAP Message Type
    Unsigned 8-bit integer
ansi_a_bsmmap.none  Sub tree
    No value
ansi_a_bsmmap.pdsn_ip_addr  PDSN IP Address
    IPv4 address
    IP Address
ansi_a_bsmmap.s_pdsn_ip_addr  Source PDSN Address
    IPv4 address
    IP Address
```

#### **ANSI A-I/F DTAP (ansi\_a\_dtap)**

##### **ANSI IS-637-A (SMS) Teleservice Layer (ansi\_637\_tele)**

```
ansi_637_tele.len  Length
    Unsigned 8-bit integer
ansi_637_tele.msg_id  Message ID
    Unsigned 24-bit integer
ansi_637_tele.msg_rsvd  Reserved
    Unsigned 24-bit integer
ansi_637_tele.msg_type  Message Type
    Unsigned 24-bit integer
ansi_637_tele.subparam_id  Teleservice Subparam ID
    Unsigned 8-bit integer
```

##### **ANSI IS-637-A (SMS) Transport Layer (ansi\_637\_trans)**

```
ansi_637_trans.bin_addr  Binary Address
    Byte array
ansi_637_trans.len  Length
    Unsigned 8-bit integer
ansi_637_trans.msg_type  Message Type
    Unsigned 24-bit integer
ansi_637_trans.param_id  Transport Param ID
    Unsigned 8-bit integer
```

**ANSI IS-683-A (OTA (Mobile)) (ansi\_683)**

```
ansi_683.for_msg_type  Forward Link Message Type
                      Unsigned 8-bit integer
ansi_683.len          Length
                      Unsigned 8-bit integer
ansi_683.none         Sub tree
                      No value
ansi_683.rev_msg_type Reverse Link Message Type
                      Unsigned 8-bit integer
```

**ANSI IS-801 (Location Services (PLD)) (ansi\_801)**

```
ansi_801.for_req_type Forward Request Type
                      Unsigned 8-bit integer
ansi_801.for_rsp_type Forward Response Type
                      Unsigned 8-bit integer
ansi_801.for_sess_tag Forward Session Tag
                      Unsigned 8-bit integer
ansi_801.rev_req_type Reverse Request Type
                      Unsigned 8-bit integer
ansi_801.rev_rsp_type Reverse Response Type
                      Unsigned 8-bit integer
ansi_801.rev_sess_tag Reverse Session Tag
                      Unsigned 8-bit integer
ansi_801.sess_tag     Session Tag
                      Unsigned 8-bit integer
```

**ANSI Mobile Application Part (ansi\_map)**

```
ansi_map.CDMABandClassList_item  Item
                                  No value
                                  ansi_map.CDMABandClassInformation
ansi_map.CDMAChannelNumberList_item  Item
                                  No value
                                  ansi_map.CDMAChannelNumberList_item
ansi_map.CDMACodeChannelList_item  Item
                                  No value
                                  ansi_map.CDMACodeChannelInformation
ansi_map.CDMAConnectionReferenceList_item  Item
                                  No value
                                  ansi_map.CDMAConnectionReferenceList_item
ansi_map.CDMAPSMMLList_item  Item
                                  No value
                                  ansi_map.CDMAPSMMLList_item
ansi_map.CDMAServiceOptionList_item  Item
                                  Byte array
                                  ansi_map.CDMAServiceOption
```

```
ansi_map.CDMATargetMAHOList_item  Item
    No value
    ansi_map.CDMATargetMAHOInformation
ansi_map.CDMATargetMeasurementList_item  Item
    No value
    ansi_map.CDMATargetMeasurementInformation
ansi_map.CallRecoveryIDList_item  Item
    No value
    ansi_map.CallRecoveryID
ansi_map.DataAccessElementList_item  Item
    No value
    ansi_map.DataAccessElementList_item
ansi_map.DataUpdateResultList_item  Item
    No value
    ansi_map.DataUpdateResult
ansi_map.ModificationRequestList_item  Item
    No value
    ansi_map.ModificationRequest
ansi_map.ModificationResultList_item  Item
    Unsigned 32-bit integer
    ansi_map.ModificationResult
ansi_map.PACA_Level  PACA Level
    Unsigned 8-bit integer
    PACA Level
ansi_map.ServiceDataAccessElementList_item  Item
    No value
    ansi_map.ServiceDataAccessElement
ansi_map.ServiceDataResultList_item  Item
    No value
    ansi_map.ServiceDataResult
ansi_map.TargetMeasurementList_item  Item
    No value
    ansi_map.TargetMeasurementInformation
ansi_map.TerminationList_item  Item
    Unsigned 32-bit integer
    ansi_map.TerminationList_item
ansi_map.aCGDirective  aCGDirective
    No value
    ansi_map.ACGDirective
ansi_map.aKeyProtocolVersion  aKeyProtocolVersion
    Byte array
    ansi_map.AKeyProtocolVersion
ansi_map.accessDeniedReason  accessDeniedReason
    Unsigned 32-bit integer
    ansi_map.AccessDeniedReason
ansi_map.acgencountered  acgencountered
    Byte array
    ansi_map.ACGEncountered
```

```
ansi_map.actionCode  actionCode
    Unsigned 8-bit integer
    ansi_map.ActionCode

ansi_map.addService  addService
    No value
    ansi_map.AddService

ansi_map.addServiceRes  addServiceRes
    No value
    ansi_map.AddServiceRes

ansi_map.alertCode  alertCode
    Byte array
    ansi_map.AlertCode

ansi_map.alertResult  alertResult
    Unsigned 8-bit integer
    ansi_map.AlertResult

ansi_map.alertcode.alertaction  Alert Action
    Unsigned 8-bit integer
    Alert Action

ansi_map.alertcode.cadence  Cadence
    Unsigned 8-bit integer
    Cadence

ansi_map.alertcode.pitch  Pitch
    Unsigned 8-bit integer
    Pitch

ansi_map.allOrNone  allOrNone
    Unsigned 32-bit integer
    ansi_map.AllOrNone

ansi_map.analogRedirectInfo  analogRedirectInfo
    Byte array
    ansi_map.AnalogRedirectInfo

ansi_map.analogRedirectRecord  analogRedirectRecord
    No value
    ansi_map.AnalogRedirectRecord

ansi_map.analyzedInformation  analyzedInformation
    No value
    ansi_map.AnalyzedInformation

ansi_map.analyzedInformationRes  analyzedInformationRes
    No value
    ansi_map.AnalyzedInformationRes

ansi_map.announcementCode1  announcementCode1
    Byte array
    ansi_map.AnnouncementCode

ansi_map.announcementCode2  announcementCode2
    Byte array
    ansi_map.AnnouncementCode

ansi_map.announcementList  announcementList
    No value
    ansi_map.AnnouncementList
```

```
ansi_map.announcementcode.class Tone
    Unsigned 8-bit integer
    Tone

ansi_map.announcementcode.cust_ann Custom Announcement
    Unsigned 8-bit integer
    Custom Announcement

ansi_map.announcementcode.std_ann Standard Announcement
    Unsigned 8-bit integer
    Standard Announcement

ansi_map.announcementcode.tone Tone
    Unsigned 8-bit integer
    Tone

ansi_map.authenticationAlgorithmVersion authenticationAlgorithmVersion
    Byte array
    ansi_map.AuthenticationAlgorithmVersion

ansi_map.authenticationCapability authenticationCapability
    Unsigned 8-bit integer
    ansi_map.AuthenticationCapability

ansi_map.authenticationData authenticationData
    Byte array
    ansi_map.AuthenticationData

ansi_map.authenticationDirective authenticationDirective
    No value
    ansi_map.AuthenticationDirective

ansi_map.authenticationDirectiveForward authenticationDirectiveForward
    No value
    ansi_map.AuthenticationDirectiveForward

ansi_map.authenticationDirectiveForwardRes authenticationDirectiveForwardRes
    No value
    ansi_map.AuthenticationDirectiveForwardRes

ansi_map.authenticationDirectiveRes authenticationDirectiveRes
    No value
    ansi_map.AuthenticationDirectiveRes

ansi_map.authenticationFailureReport authenticationFailureReport
    No value
    ansi_map.AuthenticationFailureReport

ansi_map.authenticationFailureReportRes authenticationFailureReportRes
    No value
    ansi_map.AuthenticationFailureReportRes

ansi_map.authenticationRequest authenticationRequest
    No value
    ansi_map.AuthenticationRequest

ansi_map.authenticationRequestRes authenticationRequestRes
    No value
    ansi_map.AuthenticationRequestRes

ansi_map.authenticationResponse authenticationResponse
    Byte array
    ansi_map.AuthenticationResponse
```

```
ansi_map.authenticationResponseBaseStation authenticationResponseBaseStation
    Byte array
    ansi_map.AuthenticationResponseBaseStation
ansi_map.authenticationResponseReauthentication authenticationResponseReauthent
    Byte array
    ansi_map.AuthenticationResponseReauthentication
ansi_map.authenticationResponseUniqueChallenge authenticationResponseUniqueChal
    Byte array
    ansi_map.AuthenticationResponseUniqueChallenge
ansi_map.authenticationStatusReport authenticationStatusReport
    No value
    ansi_map.AuthenticationStatusReport
ansi_map.authenticationStatusReportRes authenticationStatusReportRes
    No value
    ansi_map.AuthenticationStatusReportRes
ansi_map.authorizationDenied authorizationDenied
    Unsigned 32-bit integer
    ansi_map.AuthorizationDenied
ansi_map.authorizationPeriod authorizationPeriod
    Byte array
    ansi_map.AuthorizationPeriod
ansi_map.authorizationperiod.period Period
    Unsigned 8-bit integer
    Period
ansi_map.availabilityType availabilityType
    Unsigned 8-bit integer
    ansi_map.AvailabilityType
ansi_map.baseStationChallenge baseStationChallenge
    No value
    ansi_map.BaseStationChallenge
ansi_map.baseStationChallengeRes baseStationChallengeRes
    No value
    ansi_map.BaseStationChallengeRes
ansi_map.baseStationManufacturerCode baseStationManufacturerCode
    Byte array
    ansi_map.BaseStationManufacturerCode
ansi_map.baseStationPartialKey baseStationPartialKey
    Byte array
    ansi_map.BaseStationPartialKey
ansi_map.bcd_digits BCD digits
    String
    BCD digits
ansi_map.billingID billingID
    Byte array
    ansi_map.BillingID
ansi_map.blocking blocking
    No value
    ansi_map.Blocking
```



```
ansi_map.borderCellAccess borderCellAccess
    Unsigned 32-bit integer
    ansi_map.BorderCellAccess

ansi_map.bsmcstatus bsmcstatus
    Unsigned 8-bit integer
    ansi_map.BSMCStatus

ansi_map.bulkDeregistration bulkDeregistration
    No value
    ansi_map.BulkDeregistration

ansi_map.bulkDisconnection bulkDisconnection
    No value
    ansi_map.BulkDisconnection

ansi_map.callControlDirective callControlDirective
    No value
    ansi_map.CallControlDirective

ansi_map.callControlDirectiveRes callControlDirectiveRes
    No value
    ansi_map.CallControlDirectiveRes

ansi_map.callHistoryCount callHistoryCount
    Unsigned 32-bit integer
    ansi_map.CallHistoryCount

ansi_map.callHistoryCountExpected callHistoryCountExpected
    Unsigned 32-bit integer
    ansi_map.CallHistoryCountExpected

ansi_map.callRecoveryIDList callRecoveryIDList
    Unsigned 32-bit integer
    ansi_map.CallRecoveryIDList

ansi_map.callRecoveryReport callRecoveryReport
    No value
    ansi_map.CallRecoveryReport

ansi_map.callStatus callStatus
    Unsigned 32-bit integer
    ansi_map.CallStatus

ansi_map.callTerminationReport callTerminationReport
    No value
    ansi_map.CallTerminationReport

ansi_map.callingFeaturesIndicator callingFeaturesIndicator
    Byte array
    ansi_map.CallingFeaturesIndicator

ansi_map.callingPartyCategory callingPartyCategory
    Byte array
    ansi_map.CallingPartyCategory

ansi_map.callingPartyName callingPartyName
    Byte array
    ansi_map.CallingPartyName

ansi_map.callingPartyNumberDigits1 callingPartyNumberDigits1
    Byte array
    ansi_map.CallingPartyNumberDigits1
```

```

ansi_map.callingPartyNumberDigits2  callingPartyNumberDigits2
    Byte array
    ansi_map.CallingPartyNumberDigits2
ansi_map.callingPartyNumberString1  callingPartyNumberString1
    No value
    ansi_map.CallingPartyNumberString1
ansi_map.callingPartyNumberString2  callingPartyNumberString2
    No value
    ansi_map.CallingPartyNumberString2
ansi_map.callingPartySubaddress  callingPartySubaddress
    Byte array
    ansi_map.CallingPartySubaddress
ansi_map.callingfeaturesindicator.3wcfa  Three-Way Calling FeatureActivity, 3WC-
    Unsigned 8-bit integer
    Three-Way Calling FeatureActivity, 3WC-FA
ansi_map.callingfeaturesindicator.ahfa  Answer Hold: FeatureActivity AH-FA
    Unsigned 8-bit integer
    Answer Hold: FeatureActivity AH-FA
ansi_map.callingfeaturesindicator.ccsfa  CDMA-Concurrent Service:FeatureActivity
    Unsigned 8-bit integer
    CDMA-Concurrent Service:FeatureActivity. CCS-FA
ansi_map.callingfeaturesindicator.cdafa  Call Delivery: FeatureActivity, CD-FA
    Unsigned 8-bit integer
    Call Delivery: FeatureActivity, CD-FA
ansi_map.callingfeaturesindicator.cfbafa  Call Forwarding Busy FeatureActivity,
    Unsigned 8-bit integer
    Call Forwarding Busy FeatureActivity, CFB-FA
ansi_map.callingfeaturesindicator.cfnafa  Call Forwarding No Answer FeatureActivi
    Unsigned 8-bit integer
    Call Forwarding No Answer FeatureActivity, CFNA-FA
ansi_map.callingfeaturesindicator.cfufa  Call Forwarding Unconditional FeatureAc
    Unsigned 8-bit integer
    Call Forwarding Unconditional FeatureActivity, CFU-FA
ansi_map.callingfeaturesindicator.cniplfa  One number (network-provided only) Ca
    Unsigned 8-bit integer
    One number (network-provided only) Calling Number Identification Presentatio
ansi_map.callingfeaturesindicator.cnip2fa  Two number (network-provided and user
    Unsigned 8-bit integer
    Two number (network-provided and user-provided) Calling Number Identificatio
ansi_map.callingfeaturesindicator.cnirfa  Calling Number Identification Restrict
    Unsigned 8-bit integer
    Calling Number Identification Restriction: FeatureActivity CNIR-FA
ansi_map.callingfeaturesindicator.cniroverfa  Calling Number Identification Rest
    Unsigned 8-bit integer
ansi_map.callingfeaturesindicator.cpdfa  CDMA-Packet Data Service: FeatureActivi
    Unsigned 8-bit integer
    CDMA-Packet Data Service: FeatureActivity. CPDS-FA

```

```

ansi_map.callingfeaturesindicator.ctfa  Call Transfer: FeatureActivity, CT-FA
    Unsigned 8-bit integer
    Call Transfer: FeatureActivity, CT-FA
ansi_map.callingfeaturesindicator.cwfa  Call Waiting: FeatureActivity, CW-FA
    Unsigned 8-bit integer
    Call Waiting: FeatureActivity, CW-FA
ansi_map.callingfeaturesindicator.dpfa  Data Privacy Feature Activity DP-FA
    Unsigned 8-bit integer
    Data Privacy Feature Activity DP-FA
ansi_map.callingfeaturesindicator.epefa  TDMA Enhanced Privacy and Encryption:Fe
    Unsigned 8-bit integer
    TDMA Enhanced Privacy and Encryption:FeatureActivity.TDMA EPE-FA
ansi_map.callingfeaturesindicator.pcwfa  Priority Call Waiting FeatureActivity P
    Unsigned 8-bit integer
    Priority Call Waiting FeatureActivity PCW-FA
ansi_map.callingfeaturesindicator.uscfmsfa  USCF divert to mobile station provid
    Unsigned 8-bit integer
    USCF divert to mobile station provided DN:FeatureActivity.USCFms-FA
ansi_map.callingfeaturesindicator.uscfvmfa  USCF divert to voice mail: FeatureAc
    Unsigned 8-bit integer
    USCF divert to voice mail: FeatureActivity USCFvm-FA
ansi_map.callingfeaturesindicator.vpfa  Voice Privacy FeatureActivity, VP-FA
    Unsigned 8-bit integer
    Voice Privacy FeatureActivity, VP-FA
ansi_map.cancellationDenied  cancellationDenied
    Unsigned 32-bit integer
    ansi_map.CancellationDenied
ansi_map.cancellationType  cancellationType
    Unsigned 8-bit integer
    ansi_map.CancellationType
ansi_map.carrierDigits  carrierDigits
    Byte array
    ansi_map.CarrierDigits
ansi_map.cdma2000HandoffInvokeIOSData  cdma2000HandoffInvokeIOSData
    Byte array
    ansi_map.CDMA2000HandoffInvokeIOSData
ansi_map.cdma2000HandoffResponseIOSData  cdma2000HandoffResponseIOSData
    Byte array
    ansi_map.CDMA2000HandoffResponseIOSData
ansi_map.cdmaBandClass  cdmaBandClass
    Byte array
    ansi_map.CDMABandClass
ansi_map.cdmaBandClassList  cdmaBandClassList
    Unsigned 32-bit integer
    ansi_map.CDMABandClassList
ansi_map.cdmaCallMode  cdmaCallMode
    Byte array
    ansi_map.CDMACallMode

```

```
ansi_map.cdmaChannelData    cdmaChannelData
    Byte array
    ansi_map.CDMAChannelData

ansi_map.cdmaChannelNumber  cdmaChannelNumber
    Byte array
    ansi_map.CDMAChannelNumber

ansi_map.cdmaChannelNumber2 cdmaChannelNumber2
    Byte array
    ansi_map.CDMAChannelNumber

ansi_map.cdmaChannelNumberList cdmaChannelNumberList
    Unsigned 32-bit integer
    ansi_map.CDMAChannelNumberList

ansi_map.cdmaCodeChannel    cdmaCodeChannel
    Byte array
    ansi_map.CDMACodeChannel

ansi_map.cdmaCodeChannelList cdmaCodeChannelList
    Unsigned 32-bit integer
    ansi_map.CDMACodeChannelList

ansi_map.cdmaConnectionReference cdmaConnectionReference
    Byte array
    ansi_map.CDMAConnectionReference

ansi_map.cdmaConnectionReferenceInformation cdmaConnectionReferenceInformation
    No value
    ansi_map.CDMAConnectionReferenceInformation

ansi_map.cdmaConnectionReferenceInformation2 cdmaConnectionReferenceInformation
    No value
    ansi_map.CDMAConnectionReferenceInformation

ansi_map.cdmaConnectionReferenceList cdmaConnectionReferenceList
    Unsigned 32-bit integer
    ansi_map.CDMAConnectionReferenceList

ansi_map.cdmaMSMeasuredChannelIdentity cdmaMSMeasuredChannelIdentity
    Byte array
    ansi_map.CDMAMSMeasuredChannelIdentity

ansi_map.cdmaMobileCapabilities cdmaMobileCapabilities
    Byte array
    ansi_map.CDMAMobileCapabilities

ansi_map.cdmaMobileProtocolRevision cdmaMobileProtocolRevision
    Byte array
    ansi_map.CDMAMobileProtocolRevision

ansi_map.cdmaNetworkIdentification cdmaNetworkIdentification
    Byte array
    ansi_map.CDMANetworkIdentification

ansi_map.cdmaPSMMCount    cdmaPSMMCount
    Byte array
    ansi_map.CDMAPSMMCount

ansi_map.cdmaPSMMList    cdmaPSMMList
    Unsigned 32-bit integer
    ansi_map.CDMAPSMMList
```

```
ansi_map.cdmaPilotPN    cdmaPilotPN
    Byte array
    ansi_map.CDMAPilotPN

ansi_map.cdmaPilotStrength    cdmaPilotStrength
    Byte array
    ansi_map.CDMAPilotStrength

ansi_map.cdmaPowerCombinedIndicator    cdmaPowerCombinedIndicator
    Byte array
    ansi_map.CDMAPowerCombinedIndicator

ansi_map.cdmaPrivateLongCodeMask    cdmaPrivateLongCodeMask
    Byte array
    ansi_map.CDMAPrivateLongCodeMask

ansi_map.cdmaRedirectRecord    cdmaRedirectRecord
    No value
    ansi_map.CDMARedirectRecord

ansi_map.cdmaSearchParameters    cdmaSearchParameters
    Byte array
    ansi_map.CDMASearchParameters

ansi_map.cdmaSearchWindow    cdmaSearchWindow
    Byte array
    ansi_map.CDMASearchWindow

ansi_map.cdmaServiceConfigurationRecord    cdmaServiceConfigurationRecord
    Byte array
    ansi_map.CDMAServiceConfigurationRecord

ansi_map.cdmaServiceOption    cdmaServiceOption
    Byte array
    ansi_map.CDMAServiceOption

ansi_map.cdmaServiceOptionConnectionIdentifier    cdmaServiceOptionConnectionIdent
    Byte array
    ansi_map.CDMAServiceOptionConnectionIdentifier

ansi_map.cdmaServiceOptionList    cdmaServiceOptionList
    Unsigned 32-bit integer
    ansi_map.CDMAServiceOptionList

ansi_map.cdmaServingOneWayDelay    cdmaServingOneWayDelay
    Byte array
    ansi_map.CDMA_ServingOneWayDelay

ansi_map.cdmaServingOneWayDelay2    cdmaServingOneWayDelay2
    Byte array
    ansi_map.CDMA_ServingOneWayDelay2

ansi_map.cdmaSignalQuality    cdmaSignalQuality
    Byte array
    ansi_map.CDMA_SignalQuality

ansi_map.cdmaSlotCycleIndex    cdmaSlotCycleIndex
    Byte array
    ansi_map.CDMA_SlotCycleIndex

ansi_map.cdmaState    cdmaState
    Byte array
    ansi_map.CDMAState
```

```
ansi_map.cdmaStationClassMark  cdmaStationClassMark
    Byte array
    ansi_map.CDMAStationClassMark
ansi_map.cdmaStationClassMark2  cdmaStationClassMark2
    Byte array
    ansi_map.CDMAStationClassMark2
ansi_map.cdmaTargetMAHOList  cdmaTargetMAHOList
    Unsigned 32-bit integer
    ansi_map.CDMATargetMAHOList
ansi_map.cdmaTargetMAHOList2  cdmaTargetMAHOList2
    Unsigned 32-bit integer
    ansi_map.CDMATargetMAHOList
ansi_map.cdmaTargetMeasurementList  cdmaTargetMeasurementList
    Unsigned 32-bit integer
    ansi_map.CDMATargetMeasurementList
ansi_map.cdmaTargetOneWayDelay  cdmaTargetOneWayDelay
    Byte array
    ansi_map.CDMATargetOneWayDelay
ansi_map.cdmacallmode.cdma  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls1  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls10  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls2  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls3  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls4  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls5  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls6  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls7  Call Mode
    Boolean
    Call Mode
ansi_map.cdmacallmode.cls8  Call Mode
    Boolean
    Call Mode
```

```

ansi_map.cdmacallmode.cls9  Call Mode
    Boolean
    Call Mode

ansi_map.cdmacallmode.namps  Call Mode
    Boolean
    Call Mode

ansi_map.cdmachanneldata.band_cls  Band Class
    Unsigned 8-bit integer
    Band Class

ansi_map.cdmachanneldata.cdma_ch_no  CDMA Channel Number
    Unsigned 16-bit integer
    CDMA Channel Number

ansi_map.cdmachanneldata.frameoffset  Frame Offset
    Unsigned 8-bit integer
    Frame Offset

ansi_map.cdmachanneldata.lc_mask_b1  Long Code Mask LSB(byte 1)
    Unsigned 8-bit integer
    Long Code Mask (byte 1)LSB

ansi_map.cdmachanneldata.lc_mask_b2  Long Code Mask (byte 2)
    Unsigned 8-bit integer
    Long Code Mask (byte 2)

ansi_map.cdmachanneldata.lc_mask_b3  Long Code Mask (byte 3)
    Unsigned 8-bit integer
    Long Code Mask (byte 3)

ansi_map.cdmachanneldata.lc_mask_b4  Long Code Mask (byte 4)
    Unsigned 8-bit integer
    Long Code Mask (byte 4)

ansi_map.cdmachanneldata.lc_mask_b5  Long Code Mask (byte 5)
    Unsigned 8-bit integer
    Long Code Mask (byte 5)

ansi_map.cdmachanneldata.lc_mask_b6  Long Code Mask (byte 6) MSB
    Unsigned 8-bit integer
    Long Code Mask MSB (byte 6)

ansi_map.cdmachanneldata.nominal_pwr  Nominal Power
    Unsigned 8-bit integer
    Nominal Power

ansi_map.cdmachanneldata.np_ext  NP EXT
    Boolean
    NP EXT

ansi_map.cdmachanneldata.nr_preamble  Number Preamble
    Unsigned 8-bit integer
    Number Preamble

ansi_map.cdmaserviceoption  CDMAServiceOption
    Unsigned 16-bit integer
    CDMAServiceOption

ansi_map.cdmastationclassmark.dmi  Dual-mode Indicator(DMI)
    Boolean
    Dual-mode Indicator(DMI)

```

```
ansi_map.cdmastationclassmark.dtx  Analog Transmission: (DTX)
    Boolean
    Analog Transmission: (DTX)
ansi_map.cdmastationclassmark.pc  Power Class(PC)
    Unsigned 8-bit integer
    Power Class(PC)
ansi_map.cdmastationclassmark.smi  Slotted Mode Indicator: (SMI)
    Boolean
    Slotted Mode Indicator: (SMI)
ansi_map.change  change
    Unsigned 32-bit integer
    ansi_map.Change
ansi_map.changeFacilities  changeFacilities
    No value
    ansi_map.ChangeFacilities
ansi_map.changeFacilitiesRes  changeFacilitiesRes
    No value
    ansi_map.ChangeFacilitiesRes
ansi_map.changeService  changeService
    No value
    ansi_map.ChangeService
ansi_map.changeServiceAttributes  changeServiceAttributes
    Byte array
    ansi_map.ChangeServiceAttributes
ansi_map.changeServiceRes  changeServiceRes
    No value
    ansi_map.ChangeServiceRes
ansi_map.channelData  channelData
    Byte array
    ansi_map.ChannelData
ansi_map.channeldata.chno  Channel Number (CHNO)
    Unsigned 16-bit integer
    Channel Number (CHNO)
ansi_map.channeldata.dtx  Discontinuous Transmission Mode (DTX)
    Unsigned 8-bit integer
    Discontinuous Transmission Mode (DTX)
ansi_map.channeldata.scc  SAT Color Code (SCC)
    Unsigned 8-bit integer
    SAT Color Code (SCC)
ansi_map.channeldata.vmac  Voice Mobile Attenuation Code (VMAC)
    Unsigned 8-bit integer
    Voice Mobile Attenuation Code (VMAC)
ansi_map.checkMEID  checkMEID
    No value
    ansi_map.CheckMEID
ansi_map.checkMEIDRes  checkMEIDRes
    No value
    ansi_map.CheckMEIDRes
```



```
ansi_map.conditionallyDeniedReason  conditionallyDeniedReason
    Unsigned 32-bit integer
    ansi_map.ConditionallyDeniedReason

ansi_map.conferenceCallingIndicator  conferenceCallingIndicator
    Byte array
    ansi_map.ConferenceCallingIndicator

ansi_map.confidentialityModes  confidentialityModes
    Byte array
    ansi_map.ConfidentialityModes

ansi_map.confidentialitymodes.dp  DataPrivacy (DP) Confidentiality Status
    Boolean
    DataPrivacy (DP) Confidentiality Status

ansi_map.confidentialitymodes.se  Signaling Message Encryption (SE) Confidential
    Boolean
    Signaling Message Encryption (SE) Confidentiality Status

ansi_map.confidentialitymodes.vp  Voice Privacy (VP) Confidentiality Status
    Boolean
    Voice Privacy (VP) Confidentiality Status

ansi_map.connectResource  connectResource
    No value
    ansi_map.ConnectResource

ansi_map.connectionFailureReport  connectionFailureReport
    No value
    ansi_map.ConnectionFailureReport

ansi_map.controlChannelData  controlChannelData
    Byte array
    ansi_map.ControlChannelData

ansi_map.controlChannelMode  controlChannelMode
    Unsigned 8-bit integer
    ansi_map.ControlChannelMode

ansi_map.controlNetworkID  controlNetworkID
    Byte array
    ansi_map.ControlNetworkID

ansi_map.controlType  controlType
    Byte array
    ansi_map.ControlType

ansi_map.controlchanneldata.cmac  Control Mobile Attenuation Code (CMAC)
    Unsigned 8-bit integer
    Control Mobile Attenuation Code (CMAC)

ansi_map.controlchanneldata.dcc  Digital Color Code (DCC)
    Unsigned 8-bit integer
    Digital Color Code (DCC)

ansi_map.controlchanneldata.ssdcl  Supplementary Digital Color Codes (SDCC1)
    Unsigned 8-bit integer
    Supplementary Digital Color Codes (SDCC1)

ansi_map.controlchanneldata.ssdcl2  Supplementary Digital Color Codes (SDCC2)
    Unsigned 8-bit integer
    Supplementary Digital Color Codes (SDCC2)
```

```
ansi_map.countRequest  countRequest
    No value
    ansi_map.CountRequest

ansi_map.countRequestRes  countRequestRes
    No value
    ansi_map.CountRequestRes

ansi_map.countUpdateReport  countUpdateReport
    Unsigned 8-bit integer
    ansi_map.CountUpdateReport

ansi_map.dataAccessElement1  dataAccessElement1
    No value
    ansi_map.DataAccessElement

ansi_map.dataAccessElement2  dataAccessElement2
    No value
    ansi_map.DataAccessElement

ansi_map.dataAccessElementList  dataAccessElementList
    Unsigned 32-bit integer
    ansi_map.DataAccessElementList

ansi_map.dataID  dataID
    Byte array
    ansi_map.DataID

ansi_map.dataKey  dataKey
    Byte array
    ansi_map.DataKey

ansi_map.dataPrivacyParameters  dataPrivacyParameters
    Byte array
    ansi_map.DataPrivacyParameters

ansi_map.dataResult  dataResult
    Unsigned 32-bit integer
    ansi_map.DataResult

ansi_map.dataUpdateResultList  dataUpdateResultList
    Unsigned 32-bit integer
    ansi_map.DataUpdateResultList

ansi_map.dataValue  dataValue
    Byte array
    ansi_map.DataValue

ansi_map.databaseKey  databaseKey
    Byte array
    ansi_map.DatabaseKey

ansi_map.deniedAuthorizationPeriod  deniedAuthorizationPeriod
    Byte array
    ansi_map.DeniedAuthorizationPeriod

ansi_map.deniedauthorizationperiod.period  Period
    Unsigned 8-bit integer
    Period

ansi_map.denyAccess  denyAccess
    Unsigned 32-bit integer
    ansi_map.DenyAccess
```

```
ansi_map.deregistrationType  deregistrationType
    Unsigned 32-bit integer
    ansi_map.DeregistrationType

ansi_map.destinationAddress  destinationAddress
    Unsigned 32-bit integer
    ansi_map.DestinationAddress

ansi_map.destinationDigits  destinationDigits
    Byte array
    ansi_map.DestinationDigits

ansi_map.digitCollectionControl  digitCollectionControl
    Byte array
    ansi_map.DigitCollectionControl

ansi_map.digits  digits
    No value
    ansi_map.Digits

ansi_map.digits_Carrier  digits-Carrier
    No value
    ansi_map.Digits

ansi_map.digits_Destination  digits-Destination
    No value
    ansi_map.Digits

ansi_map.digits_carrier  digits-carrier
    No value
    ansi_map.Digits

ansi_map.digits_dest  digits-dest
    No value
    ansi_map.Digits

ansi_map.displayText  displayText
    Byte array
    ansi_map.DisplayText

ansi_map.displayText2  displayText2
    Byte array
    ansi_map.DisplayText2

ansi_map.dmd_BillingIndicator  dmd-BillingIndicator
    Unsigned 32-bit integer
    ansi_map.DMH_BillingIndicator

ansi_map.dmh_AccountCodeDigits  dmh-AccountCodeDigits
    Byte array
    ansi_map.DMH_AccountCodeDigits

ansi_map.dmh_AlternateBillingDigits  dmh-AlternateBillingDigits
    Byte array
    ansi_map.DMH_AlternateBillingDigits

ansi_map.dmh_BillingDigits  dmh-BillingDigits
    Byte array
    ansi_map.DMH_BillingDigits

ansi_map.dmh_ChargeInformation  dmh-ChargeInformation
    Byte array
    ansi_map.DMH_ChargeInformation
```

```
ansi_map.dmh_RedirectionIndicator  dmh-RedirectionIndicator
    Unsigned 32-bit integer
    ansi_map.DMH_RedirectionIndicator
ansi_map.dmh_ServiceID  dmh-ServiceID
    Byte array
    ansi_map.DMH_ServiceID
ansi_map.dropService  dropService
    No value
    ansi_map.DropService
ansi_map.dropServiceRes  dropServiceRes
    No value
    ansi_map.DropServiceRes
ansi_map.dtxIndication  dtxIndication
    Byte array
    ansi_map.DTXIndication
ansi_map.edirectingSubaddress  edirectingSubaddress
    Byte array
    ansi_map.RedirectingSubaddress
ansi_map.electronicSerialNumber  electronicSerialNumber
    Byte array
    ansi_map.ElectronicSerialNumber
ansi_map.emergencyServicesRoutingDigits  emergencyServicesRoutingDigits
    Byte array
    ansi_map.EmergencyServicesRoutingDigits
ansi_map.enc  Encoding
    Unsigned 8-bit integer
    Encoding
ansi_map.executeScript  executeScript
    No value
    ansi_map.ExecuteScript
ansi_map.extendedMSCID  extendedMSCID
    Byte array
    ansi_map.ExtendedMSCID
ansi_map.extendedSystemMyTypeCode  extendedSystemMyTypeCode
    Byte array
    ansi_map.ExtendedSystemMyTypeCode
ansi_map.extendedmscid.type  Type
    Unsigned 8-bit integer
    Type
ansi_map.facilitiesDirective  facilitiesDirective
    No value
    ansi_map.FacilitiesDirective
ansi_map.facilitiesDirective2  facilitiesDirective2
    No value
    ansi_map.FacilitiesDirective2
ansi_map.facilitiesDirective2Res  facilitiesDirective2Res
    No value
    ansi_map.FacilitiesDirective2Res
```

```
ansi_map.facilitiesDirectiveRes facilitiesDirectiveRes
    No value
    ansi_map.FacilitiesDirectiveRes
ansi_map.facilitiesRelease facilitiesRelease
    No value
    ansi_map.FacilitiesRelease
ansi_map.facilitiesReleaseRes facilitiesReleaseRes
    No value
    ansi_map.FacilitiesReleaseRes
ansi_map.facilitySelectedAndAvailable facilitySelectedAndAvailable
    No value
    ansi_map.FacilitySelectedAndAvailable
ansi_map.facilitySelectedAndAvailableRes facilitySelectedAndAvailableRes
    No value
    ansi_map.FacilitySelectedAndAvailableRes
ansi_map.failureCause failureCause
    Byte array
    ansi_map.FailureCause
ansi_map.failureType failureType
    Unsigned 32-bit integer
    ansi_map.FailureType
ansi_map.featureIndicator featureIndicator
    Unsigned 32-bit integer
    ansi_map.FeatureIndicator
ansi_map.featureRequest featureRequest
    No value
    ansi_map.FeatureRequest
ansi_map.featureRequestRes featureRequestRes
    No value
    ansi_map.FeatureRequestRes
ansi_map.featureResult featureResult
    Unsigned 32-bit integer
    ansi_map.FeatureResult
ansi_map.flashRequest flashRequest
    No value
    ansi_map.FlashRequest
ansi_map.gapDuration gapDuration
    Unsigned 32-bit integer
    ansi_map.GapDuration
ansi_map.gapInterval gapInterval
    Unsigned 32-bit integer
    ansi_map.GapInterval
ansi_map.generalizedTime generalizedTime
    String
    ansi_map.GeneralizedTime
ansi_map.geoPositionRequest geoPositionRequest
    No value
    ansi_map.GeoPositionRequest
```

```
ansi_map.geographicAuthorization geographicAuthorization
    Unsigned 8-bit integer
    ansi_map.GeographicAuthorization
ansi_map.geographicPosition geographicPosition
    Byte array
    ansi_map.GeographicPosition
ansi_map.globalTitle globalTitle
    Byte array
    ansi_map.GlobalTitle
ansi_map.groupInformation groupInformation
    Byte array
    ansi_map.GroupInformation
ansi_map.handoffBack handoffBack
    No value
    ansi_map.HandoffBack
ansi_map.handoffBack2 handoffBack2
    No value
    ansi_map.HandoffBack2
ansi_map.handoffBack2Res handoffBack2Res
    No value
    ansi_map.HandoffBack2Res
ansi_map.handoffBackRes handoffBackRes
    No value
    ansi_map.HandoffBackRes
ansi_map.handoffMeasurementRequest handoffMeasurementRequest
    No value
    ansi_map.HandoffMeasurementRequest
ansi_map.handoffMeasurementRequest2 handoffMeasurementRequest2
    No value
    ansi_map.HandoffMeasurementRequest2
ansi_map.handoffMeasurementRequest2Res handoffMeasurementRequest2Res
    No value
    ansi_map.HandoffMeasurementRequest2Res
ansi_map.handoffMeasurementRequestRes handoffMeasurementRequestRes
    No value
    ansi_map.HandoffMeasurementRequestRes
ansi_map.handoffReason handoffReason
    Unsigned 32-bit integer
    ansi_map.HandoffReason
ansi_map.handoffState handoffState
    Byte array
    ansi_map.HandoffState
ansi_map.handoffToThird handoffToThird
    No value
    ansi_map.HandoffToThird
ansi_map.handoffToThird2 handoffToThird2
    No value
    ansi_map.HandoffToThird2
```

```
ansi_map.handoffToThird2Res  handoffToThird2Res
    No value
    ansi_map.HandoffToThird2Res
ansi_map.handoffToThirdRes  handoffToThirdRes
    No value
    ansi_map.HandoffToThirdRes
ansi_map.handoffstate.pi  Party Involved (PI)
    Boolean
    Party Involved (PI)
ansi_map.horizontal_Velocity  horizontal-Velocity
    Byte array
    ansi_map.Horizontal_Velocity
ansi_map.ia5_digits  IA5 digits
    String
    IA5 digits
ansi_map.idno  ID Number
    Unsigned 32-bit integer
    ID Number
ansi_map.ilspInformation  ilspInformation
    Unsigned 8-bit integer
    ansi_map.ISLPInformation
ansi_map.imsi  imsi
    Byte array
    gsm_map.IMSI
ansi_map.informationDirective  informationDirective
    No value
    ansi_map.InformationDirective
ansi_map.informationDirectiveRes  informationDirectiveRes
    No value
    ansi_map.InformationDirectiveRes
ansi_map.informationForward  informationForward
    No value
    ansi_map.InformationForward
ansi_map.informationForwardRes  informationForwardRes
    No value
    ansi_map.InformationForwardRes
ansi_map.information_Record  information-Record
    Byte array
    ansi_map.Information_Record
ansi_map.interMSCCircuitID  interMSCCircuitID
    No value
    ansi_map.InterMSCCircuitID
ansi_map.interMessageTime  interMessageTime
    Byte array
    ansi_map.InterMessageTime
ansi_map.interSwitchCount  interSwitchCount
    Unsigned 32-bit integer
    ansi_map.InterSwitchCount
```

```
ansi_map.interSystemAnswer  interSystemAnswer
    No value
    ansi_map.InterSystemAnswer
ansi_map.interSystemPage  interSystemPage
    No value
    ansi_map.InterSystemPage
ansi_map.interSystemPage2  interSystemPage2
    No value
    ansi_map.InterSystemPage2
ansi_map.interSystemPage2Res  interSystemPage2Res
    No value
    ansi_map.InterSystemPage2Res
ansi_map.interSystemPageRes  interSystemPageRes
    No value
    ansi_map.InterSystemPageRes
ansi_map.interSystemPositionRequest  interSystemPositionRequest
    No value
    ansi_map.InterSystemPositionRequest
ansi_map.interSystemPositionRequestForward  interSystemPositionRequestForward
    No value
    ansi_map.InterSystemPositionRequestForward
ansi_map.interSystemPositionRequestForwardRes  interSystemPositionRequestForwardRes
    No value
    ansi_map.InterSystemPositionRequestForwardRes
ansi_map.interSystemPositionRequestRes  interSystemPositionRequestRes
    No value
    ansi_map.InterSystemPositionRequestRes
ansi_map.interSystemSetup  interSystemSetup
    No value
    ansi_map.InterSystemSetup
ansi_map.interSystemSetupRes  interSystemSetupRes
    No value
    ansi_map.InterSystemSetupRes
ansi_map.intersystemTermination  intersystemTermination
    No value
    ansi_map.IntersystemTermination
ansi_map.invokingNEType  invokingNEType
    Signed 32-bit integer
    ansi_map.InvokingNEType
ansi_map.lcsBillingID  lcsBillingID
    Byte array
    ansi_map.LCSBillingID
ansi_map.lcsParameterRequest  lcsParameterRequest
    No value
    ansi_map.LCSParameterRequest
ansi_map.lcsParameterRequestRes  lcsParameterRequestRes
    No value
    ansi_map.LCSParameterRequestRes
```



```
ansi_map.lcs_Client_ID  lcs-Client-ID
    Byte array
    ansi_map.LCS_Client_ID
ansi_map.lectronicSerialNumber  lectronicSerialNumber
    Byte array
    ansi_map.ElectronicSerialNumber
ansi_map.legInformation  legInformation
    Byte array
    ansi_map.LegInformation
ansi_map.lirAuthorization  lirAuthorization
    Unsigned 32-bit integer
    ansi_map.LIRAuthorization
ansi_map.lirMode  lirMode
    Unsigned 32-bit integer
    ansi_map.LIRMode
ansi_map.localTermination  localTermination
    No value
    ansi_map.LocalTermination
ansi_map.locationAreaID  locationAreaID
    Byte array
    ansi_map.LocationAreaID
ansi_map.locationRequest  locationRequest
    No value
    ansi_map.LocationRequest
ansi_map.locationRequestRes  locationRequestRes
    No value
    ansi_map.LocationRequestRes
ansi_map.mSCIdentificationNumber  mSCIdentificationNumber
    No value
    ansi_map.MSCIdentificationNumber
ansi_map.mSIDUsage  mSIDUsage
    Unsigned 8-bit integer
    ansi_map.MSIDUsage
ansi_map.mSInactive  mSInactive
    No value
    ansi_map.MSInactive
ansi_map.mSStatus  mSStatus
    Byte array
    ansi_map.MSStatus
ansi_map.marketid  MarketID
    Unsigned 16-bit integer
    MarketID
ansi_map.meid  meid
    Byte array
    ansi_map.MEID
ansi_map.meidStatus  meidStatus
    Byte array
    ansi_map.MEIDStatus
```

```
ansi_map.meidValidated  meidValidated
    No value
    ansi_map.MEIDValidated
ansi_map.messageDirective  messageDirective
    No value
    ansi_map.MessageDirective
ansi_map.messageWaitingNotificationCount  messageWaitingNotificationCount
    Byte array
    ansi_map.MessageWaitingNotificationCount
ansi_map.messageWaitingNotificationType  messageWaitingNotificationType
    Byte array
    ansi_map.MessageWaitingNotificationType
ansi_map.messagewaitingnotificationcount.mwi  Message Waiting Indication (MWI)
    Unsigned 8-bit integer
    Message Waiting Indication (MWI)
ansi_map.messagewaitingnotificationcount.nomw  Number of Messages Waiting
    Unsigned 8-bit integer
    Number of Messages Waiting
ansi_map.messagewaitingnotificationcount.tom  Type of messages
    Unsigned 8-bit integer
    Type of messages
ansi_map.messagewaitingnotificationtype.apt  Alert Pip Tone (APT)
    Boolean
    Alert Pip Tone (APT)
ansi_map.messagewaitingnotificationtype.pt  Pip Tone (PT)
    Unsigned 8-bit integer
    Pip Tone (PT)
ansi_map.mobileDirectoryNumber  mobileDirectoryNumber
    No value
    ansi_map.MobileDirectoryNumber
ansi_map.mobileIdentificationNumber  mobileIdentificationNumber
    No value
    ansi_map.MobileIdentificationNumber
ansi_map.mobilePositionCapability  mobilePositionCapability
    Byte array
    ansi_map.MobilePositionCapability
ansi_map.mobileStationIMSI  mobileStationIMSI
    Byte array
    ansi_map.MobileStationIMSI
ansi_map.mobileStationMIN  mobileStationMIN
    No value
    ansi_map.MobileStationMIN
ansi_map.mobileStationMSID  mobileStationMSID
    Unsigned 32-bit integer
    ansi_map.MobileStationMSID
ansi_map.mobileStationPartialKey  mobileStationPartialKey
    Byte array
    ansi_map.MobileStationPartialKey
```

```
ansi_map.modificationRequestList  modificationRequestList
    Unsigned 32-bit integer
    ansi_map.ModificationRequestList
ansi_map.modificationResultList  modificationResultList
    Unsigned 32-bit integer
    ansi_map.ModificationResultList
ansi_map.modify  modify
    No value
    ansi_map.Modify
ansi_map.modifyRes  modifyRes
    No value
    ansi_map.ModifyRes
ansi_map.modulusValue  modulusValue
    Byte array
    ansi_map.ModulusValue
ansi_map.mpcAddress  mpcAddress
    Byte array
    ansi_map.MPCAddress
ansi_map.mpcAddress2  mpcAddress2
    Byte array
    ansi_map.MPCAddress
ansi_map.mpcAddressList  mpcAddressList
    No value
    ansi_map.MPCAddressList
ansi_map.mpcid  mpcid
    Byte array
    ansi_map.MPCID
ansi_map.msLocation  msLocation
    Byte array
    ansi_map.MSLocation
ansi_map.msc_Address  msc-Address
    Byte array
    ansi_map.MSC_Address
ansi_map.msCID  msCID
    Byte array
    ansi_map.MSCID
ansi_map.msID  msID
    Unsigned 32-bit integer
    ansi_map.MSID
ansi_map.mslocation.lat  Latitude in tenths of a second
    Unsigned 8-bit integer
    Latitude in tenths of a second
ansi_map.mslocation.long  Longitude in tenths of a second
    Unsigned 8-bit integer
    Switch Number (SWNO)
ansi_map.mslocation.res  Resolution in units of 1 foot
    Unsigned 8-bit integer
    Resolution in units of 1 foot
```

```
ansi_map.na Nature of Number
  Boolean
  Nature of Number
ansi_map.nampsCallMode nampsCallMode
  Byte array
  ansi_map.NAMPSCallMode
ansi_map.nampsChannelData nampsChannelData
  Byte array
  ansi_map.NAMPSCChannelData
ansi_map.nampscallmode.amps Call Mode
  Boolean
  Call Mode
ansi_map.nampscallmode.namps Call Mode
  Boolean
  Call Mode
ansi_map.nampschanneldata.ccindicator Color Code Indicator (CCIndicator)
  Unsigned 8-bit integer
  Color Code Indicator (CCIndicator)
ansi_map.nampschanneldata.navca Narrow Analog Voice Channel Assignment (NAVCA)
  Unsigned 8-bit integer
  Narrow Analog Voice Channel Assignment (NAVCA)
ansi_map.navail Numer available indication
  Boolean
  Numer available indication
ansi_map.networkTMSI networkTMSI
  Byte array
  ansi_map.NetworkTMSI
ansi_map.networkTMSIExpirationTime networkTMSIExpirationTime
  Byte array
  ansi_map.NetworkTMSIExpirationTime
ansi_map.newMINExtension newMINExtension
  Byte array
  ansi_map.NewMINExtension
ansi_map.newNetworkTMSI newNetworkTMSI
  Byte array
  ansi_map.NewNetworkTMSI
ansi_map.newlyAssignedIMSI newlyAssignedIMSI
  Byte array
  ansi_map.NewlyAssignedIMSI
ansi_map.newlyAssignedMIN newlyAssignedMIN
  No value
  ansi_map.NewlyAssignedMIN
ansi_map.newlyAssignedMSID newlyAssignedMSID
  Unsigned 32-bit integer
  ansi_map.NewlyAssignedMSID
ansi_map.noAnswerTime noAnswerTime
  Byte array
  ansi_map.NoAnswerTime
```

```
ansi_map.nonPublicData  nonPublicData
    Byte array
    ansi_map.NonPublicData
ansi_map.np  Numbering Plan
    Unsigned 8-bit integer
    Numbering Plan
ansi_map.nr_digits  Number of Digits
    Unsigned 8-bit integer
    Number of Digits
ansi_map.numberPortabilityRequest  numberPortabilityRequest
    No value
    ansi_map.NumberPortabilityRequest
ansi_map.oAnswer  oAnswer
    No value
    ansi_map.OAnswer
ansi_map.oCalledPartyBusy  oCalledPartyBusy
    No value
    ansi_map.OCalledPartyBusy
ansi_map.oCalledPartyBusyRes  oCalledPartyBusyRes
    No value
    ansi_map.OCalledPartyBusyRes
ansi_map.oDisconnect  oDisconnect
    No value
    ansi_map.ODisconnect
ansi_map.oDisconnectRes  oDisconnectRes
    No value
    ansi_map.ODisconnectRes
ansi_map.oNoAnswer  oNoAnswer
    No value
    ansi_map.ONoAnswer
ansi_map.oNoAnswerRes  oNoAnswerRes
    No value
    ansi_map.ONoAnswerRes
ansi_map.oTASPSRequest  oTASPSRequest
    No value
    ansi_map.OTASPSRequest
ansi_map.oTASPSRequestRes  oTASPSRequestRes
    No value
    ansi_map.OTASPSRequestRes
ansi_map.ocdmaCallMode.amps  Call Mode
    Boolean
    Call Mode
ansi_map.oneTimeFeatureIndicator  oneTimeFeatureIndicator
    Byte array
    ansi_map.OneTimeFeatureIndicator
ansi_map.op_code  Operation Code
    Unsigned 8-bit integer
    Operation Code
```

```
ansi_map.op_code_fam  Operation Code Family
    Unsigned 8-bit integer
    Operation Code Family

ansi_map.originationIndicator  originationIndicator
    Unsigned 32-bit integer
    ansi_map.OriginationIndicator

ansi_map.originationRequest  originationRequest
    No value
    ansi_map.OriginationRequest

ansi_map.originationRequestRes  originationRequestRes
    No value
    ansi_map.OriginationRequestRes

ansi_map.originationTriggers  originationTriggers
    Byte array
    ansi_map.OriginationTriggers

ansi_map.originationrestrictions.default  DEFAULT
    Unsigned 8-bit integer
    DEFAULT

ansi_map.originationrestrictions.direct  DIRECT
    Boolean
    DIRECT

ansi_map.originationrestrictions.fmc  Force Message Center (FMC)
    Boolean
    Force Message Center (FMC)

ansi_map.originationtriggers.all  All Origination (All)
    Boolean
    All Origination (All)

ansi_map.originationtriggers.dp  Double Pound (DP)
    Boolean
    Double Pound (DP)

ansi_map.originationtriggers.ds  Double Star (DS)
    Boolean
    Double Star (DS)

ansi_map.originationtriggers.eight  8 digits
    Boolean
    8 digits

ansi_map.originationtriggers.eleven  11 digits
    Boolean
    11 digits

ansi_map.originationtriggers.fifteen  15 digits
    Boolean
    15 digits

ansi_map.originationtriggers.fivedig  5 digits
    Boolean
    5 digits

ansi_map.originationtriggers.fourdig  4 digits
    Boolean
    4 digits
```

```
ansi_map.originationtriggers.fourteen  14 digits
    Boolean
    14 digits
ansi_map.originationtriggers.ilata      Intra-LATA Toll (ILATA)
    Boolean
    Intra-LATA Toll (ILATA)
ansi_map.originationtriggers.int        International (Int'l )
    Boolean
    International (Int'l )
ansi_map.originationtriggers.nine       9 digits
    Boolean
    9 digits
ansi_map.originationtriggers.nodig      No digits
    Boolean
    No digits
ansi_map.originationtriggers.olata      Inter-LATA Toll (OLATA)
    Boolean
    Inter-LATA Toll (OLATA)
ansi_map.originationtriggers.onedig     1 digit
    Boolean
    1 digit
ansi_map.originationtriggers.pa         Prior Agreement (PA)
    Boolean
    Prior Agreement (PA)
ansi_map.originationtriggers.pound      Pound
    Boolean
    Pound
ansi_map.originationtriggers.rvtc       Revertive Call (RvtC)
    Boolean
    Revertive Call (RvtC)
ansi_map.originationtriggers.sevendig   7 digits
    Boolean
    7 digits
ansi_map.originationtriggers.sixdig     6 digits
    Boolean
    6 digits
ansi_map.originationtriggers.star       Star
    Boolean
    Star
ansi_map.originationtriggers.ten        10 digits
    Boolean
    10 digits
ansi_map.originationtriggers.thirteen  13 digits
    Boolean
    13 digits
ansi_map.originationtriggers.threedig   3 digits
    Boolean
    3 digits
```

```
ansi_map.originationtriggers.thwelv  12 digits
    Boolean
    12 digits
ansi_map.originationtriggers.twodig  2 digits
    Boolean
    2 digits
ansi_map.originationtriggers.unrec  Unrecognized Number (Unrec)
    Boolean
    Unrecognized Number (Unrec)
ansi_map.originationtriggers.wz  World Zone (WZ)
    Boolean
    World Zone (WZ)
ansi_map.otasp_ResultCode  otasp-ResultCode
    Unsigned 8-bit integer
    ansi_map.OTASP_ResultCode
ansi_map.outingDigits  outingDigits
    Byte array
    ansi_map.RoutingDigits
ansi_map.pACAIIndicator  pACAIIndicator
    Byte array
    ansi_map.PACAIIndicator
ansi_map.pC_SSN  pC-SSN
    Byte array
    ansi_map.PC_SSN
ansi_map.pSID_RSIDInformation  pSID-RSIDInformation
    Byte array
    ansi_map.PSID_RSIDInformation
ansi_map.pSID_RSIDInformation1  pSID-RSIDInformation1
    Byte array
    ansi_map.PSID_RSIDInformation
ansi_map.pSID_RSIDList  pSID-RSIDList
    No value
    ansi_map.PSID_RSIDList
ansi_map.pacaindicator_pa  Permanent Activation (PA)
    Boolean
    Permanent Activation (PA)
ansi_map.pageCount  pageCount
    Byte array
    ansi_map.PageCount
ansi_map.pageIndicator  pageIndicator
    Unsigned 8-bit integer
    ansi_map.PageIndicator
ansi_map.pageResponseTime  pageResponseTime
    Byte array
    ansi_map.PageResponseTime
ansi_map.pagingFrameClass  pagingFrameClass
    Unsigned 8-bit integer
    ansi_map.PagingFrameClass
```



```
ansi_map.parameterRequest parameterRequest
    No value
    ansi_map.ParameterRequest
ansi_map.parameterRequestRes parameterRequestRes
    No value
    ansi_map.ParameterRequestRes
ansi_map.pc_ssn pc-ssn
    Byte array
    ansi_map.PC_SSN
ansi_map.pdsnAddress pdsnAddress
    Byte array
    ansi_map.PDSNAddress
ansi_map.pdsnProtocolType pdsnProtocolType
    Byte array
    ansi_map.PDSNProtocolType
ansi_map.pilotBillingID pilotBillingID
    Byte array
    ansi_map.PilotBillingID
ansi_map.pilotNumber pilotNumber
    Byte array
    ansi_map.PilotNumber
ansi_map.positionEventNotification positionEventNotification
    No value
    ansi_map.PositionEventNotification
ansi_map.positionInformation positionInformation
    No value
    ansi_map.PositionInformation
ansi_map.positionInformationCode positionInformationCode
    Byte array
    ansi_map.PositionInformationCode
ansi_map.positionRequest positionRequest
    No value
    ansi_map.PositionRequest
ansi_map.positionRequestForward positionRequestForward
    No value
    ansi_map.PositionRequestForward
ansi_map.positionRequestForwardRes positionRequestForwardRes
    No value
    ansi_map.PositionRequestForwardRes
ansi_map.positionRequestRes positionRequestRes
    No value
    ansi_map.PositionRequestRes
ansi_map.positionRequestType positionRequestType
    Byte array
    ansi_map.PositionRequestType
ansi_map.positionResult positionResult
    Byte array
    ansi_map.PositionResult
```

```
ansi_map.positionSource    positionSource
    Byte array
    ansi_map.PositionSource

ansi_map.pqos_HorizontalPosition  pqos-HorizontalPosition
    Byte array
    ansi_map.PQOS_HorizontalPosition

ansi_map.pqos_HorizontalVelocity  pqos-HorizontalVelocity
    Byte array
    ansi_map.PQOS_HorizontalVelocity

ansi_map.pqos_MaximumPositionAge  pqos-MaximumPositionAge
    Byte array
    ansi_map.PQOS_MaximumPositionAge

ansi_map.pqos_PositionPriority  pqos-PositionPriority
    Byte array
    ansi_map.PQOS_PositionPriority

ansi_map.pqos_ResponseTime  pqos-ResponseTime
    Unsigned 32-bit integer
    ansi_map.PQOS_ResponseTime

ansi_map.pqos_VerticalPosition  pqos-VerticalPosition
    Byte array
    ansi_map.PQOS_VerticalPosition

ansi_map.pqos_VerticalVelocity  pqos-VerticalVelocity
    Byte array
    ansi_map.PQOS_VerticalVelocity

ansi_map.preferredLanguageIndicator  preferredLanguageIndicator
    Unsigned 8-bit integer
    ansi_map.PreferredLanguageIndicator

ansi_map.primitiveValue  primitiveValue
    Byte array
    ansi_map.PrimitiveValue

ansi_map.privateSpecializedResource  privateSpecializedResource
    Byte array
    ansi_map.PrivateSpecializedResource

ansi_map.pstnTermination  pstnTermination
    No value
    ansi_map.PSTNTermination

ansi_map.qosPriority  qosPriority
    Byte array
    ansi_map.QoSPriority

ansi_map.qualificationDirective  qualificationDirective
    No value
    ansi_map.QualificationDirective

ansi_map.qualificationInformationCode  qualificationInformationCode
    Unsigned 32-bit integer
    ansi_map.QualificationInformationCode

ansi_map.qualificationRequest  qualificationRequest
    No value
    ansi_map.QualificationRequest
```

```
ansi_map.qualificationRequestRes  qualificationRequestRes
    No value
    ansi_map.QualificationRequestRes
ansi_map.randValidTime  randValidTime
    Byte array
    ansi_map.RANDValidTime
ansi_map.randc  randc
    Byte array
    ansi_map.RANDC
ansi_map.randomVariable  randomVariable
    Byte array
    ansi_map.RandomVariable
ansi_map.randomVariableBaseStation  randomVariableBaseStation
    Byte array
    ansi_map.RandomVariableBaseStation
ansi_map.randomVariableReauthentication  randomVariableReauthentication
    Byte array
    ansi_map.RandomVariableReauthentication
ansi_map.randomVariableRequest  randomVariableRequest
    No value
    ansi_map.RandomVariableRequest
ansi_map.randomVariableRequestRes  randomVariableRequestRes
    No value
    ansi_map.RandomVariableRequestRes
ansi_map.randomVariableSSD  randomVariableSSD
    Byte array
    ansi_map.RandomVariableSSD
ansi_map.randomVariableUniqueChallenge  randomVariableUniqueChallenge
    Byte array
    ansi_map.RandomVariableUniqueChallenge
ansi_map.range  range
    Signed 32-bit integer
    ansi_map.Range
ansi_map.reasonList  reasonList
    Unsigned 32-bit integer
    ansi_map.ReasonList
ansi_map.reauthenticationReport  reauthenticationReport
    Unsigned 8-bit integer
    ansi_map.ReauthenticationReport
ansi_map.receivedSignalQuality  receivedSignalQuality
    Unsigned 32-bit integer
    ansi_map.ReceivedSignalQuality
ansi_map.record_Type  record-Type
    Byte array
    ansi_map.Record_Type
ansi_map.redirectingNumberDigits  redirectingNumberDigits
    Byte array
    ansi_map.RedirectingNumberDigits
```

```
ansi_map.redirectingNumberString  redirectingNumberString
    Byte array
    ansi_map.RedirectingNumberString
ansi_map.redirectingPartyName  redirectingPartyName
    Byte array
    ansi_map.RedirectingPartyName
ansi_map.redirectingSubaddress  redirectingSubaddress
    Byte array
    ansi_map.RedirectingSubaddress
ansi_map.redirectionDirective  redirectionDirective
    No value
    ansi_map.RedirectionDirective
ansi_map.redirectionReason  redirectionReason
    Unsigned 32-bit integer
    ansi_map.RedirectionReason
ansi_map.redirectionRequest  redirectionRequest
    No value
    ansi_map.RedirectionRequest
ansi_map.registrationCancellation  registrationCancellation
    No value
    ansi_map.RegistrationCancellation
ansi_map.registrationCancellationRes  registrationCancellationRes
    No value
    ansi_map.RegistrationCancellationRes
ansi_map.registrationNotification  registrationNotification
    No value
    ansi_map.RegistrationNotification
ansi_map.registrationNotificationRes  registrationNotificationRes
    No value
    ansi_map.RegistrationNotificationRes
ansi_map.releaseCause  releaseCause
    Unsigned 32-bit integer
    ansi_map.ReleaseCause
ansi_map.releaseReason  releaseReason
    Unsigned 32-bit integer
    ansi_map.ReleaseReason
ansi_map.remoteUserInteractionDirective  remoteUserInteractionDirective
    No value
    ansi_map.RemoteUserInteractionDirective
ansi_map.remoteUserInteractionDirectiveRes  remoteUserInteractionDirectiveRes
    No value
    ansi_map.RemoteUserInteractionDirectiveRes
ansi_map.reportType  reportType
    Unsigned 32-bit integer
    ansi_map.ReportType
ansi_map.reportType2  reportType2
    Unsigned 32-bit integer
    ansi_map.ReportType
```

```
ansi_map.requiredParametersMask  requiredParametersMask
    Byte array
    ansi_map.RequiredParametersMask

ansi_map.reserved_bitED  Reserved
    Unsigned 8-bit integer
    Reserved

ansi_map.reserved_bitFED  Reserved
    Unsigned 8-bit integer
    Reserved

ansi_map.reserved_bitH  Reserved
    Boolean
    Reserved

ansi_map.reserved_bitHG  Reserved
    Unsigned 8-bit integer
    Reserved

ansi_map.reserved_bitHGFE  Reserved
    Unsigned 8-bit integer
    Reserved

ansi_map.resetCircuit  resetCircuit
    No value
    ansi_map.ResetCircuit

ansi_map.resetCircuitRes  resetCircuitRes
    No value
    ansi_map.ResetCircuitRes

ansi_map.restrictionDigits  restrictionDigits
    Byte array
    ansi_map.RestrictionDigits

ansi_map.resumePIC  resumePIC
    Unsigned 32-bit integer
    ansi_map.ResumePIC

ansi_map.roamerDatabaseVerificationRequest  roamerDatabaseVerificationRequest
    No value
    ansi_map.RoamerDatabaseVerificationRequest

ansi_map.roamerDatabaseVerificationRequestRes  roamerDatabaseVerificationRequestRes
    No value
    ansi_map.RoamerDatabaseVerificationRequestRes

ansi_map.roamingIndication  roamingIndication
    Byte array
    ansi_map.RoamingIndication

ansi_map.routingDigits  routingDigits
    Byte array
    ansi_map.RoutingDigits

ansi_map.routingRequest  routingRequest
    No value
    ansi_map.RoutingRequest

ansi_map.routingRequestRes  routingRequestRes
    No value
    ansi_map.RoutingRequestRes
```

```
ansi_map.sCFOverloadGapInterval  sCFOverloadGapInterval
    Unsigned 32-bit integer
    ansi_map.sCFOverloadGapInterval
ansi_map.SMSDeliveryBackward  SMSDeliveryBackward
    No value
    ansi_map.SMSDeliveryBackward
ansi_map.sMSDeliveryBackwardRes  sMSDeliveryBackwardRes
    No value
    ansi_map.sMSDeliveryBackwardRes
ansi_map.sMSDeliveryForward  sMSDeliveryForward
    No value
    ansi_map.sMSDeliveryForward
ansi_map.sMSDeliveryForwardRes  sMSDeliveryForwardRes
    No value
    ansi_map.sMSDeliveryForwardRes
ansi_map.sMSDeliveryPointToPoint  sMSDeliveryPointToPoint
    No value
    ansi_map.sMSDeliveryPointToPoint
ansi_map.sMSDeliveryPointToPointRes  sMSDeliveryPointToPointRes
    No value
    ansi_map.sMSDeliveryPointToPointRes
ansi_map.sMSNotification  sMSNotification
    No value
    ansi_map.sMSNotification
ansi_map.sMSNotificationRes  sMSNotificationRes
    No value
    ansi_map.sMSNotificationRes
ansi_map.sMSRequest  sMSRequest
    No value
    ansi_map.sMSRequest
ansi_map.sMSRequestRes  sMSRequestRes
    No value
    ansi_map.sMSRequestRes
ansi_map.sOCStatus  sOCStatus
    Unsigned 8-bit integer
    ansi_map.sOCStatus
ansi_map.sRFDirective  sRFDirective
    No value
    ansi_map.sRFDirective
ansi_map.sRFDirectiveRes  sRFDirectiveRes
    No value
    ansi_map.sRFDirectiveRes
ansi_map.scriptArgument  scriptArgument
    Byte array
    ansi_map.ScriptArgument
ansi_map.scriptName  scriptName
    Byte array
    ansi_map.ScriptName
```

```
ansi_map.scriptResult  scriptResult
    Byte array
    ansi_map.ScriptResult
ansi_map.search  search
    No value
    ansi_map.Search
ansi_map.searchRes  searchRes
    No value
    ansi_map.SearchRes
ansi_map.segcount  Segment Counter
    Unsigned 8-bit integer
    Segment Counter
ansi_map.seizeResource  seizeResource
    No value
    ansi_map.SeizeResource
ansi_map.seizeResourceRes  seizeResourceRes
    No value
    ansi_map.SeizeResourceRes
ansi_map.seizureType  seizureType
    Unsigned 32-bit integer
    ansi_map.SeizureType
ansi_map.senderIdentificationNumber  senderIdentificationNumber
    No value
    ansi_map.SenderIdentificationNumber
ansi_map.serviceDataAccessElementList  serviceDataAccessElementList
    Unsigned 32-bit integer
    ansi_map.ServiceDataAccessElementList
ansi_map.serviceDataResultList  serviceDataResultList
    Unsigned 32-bit integer
    ansi_map.ServiceDataResultList
ansi_map.serviceID  serviceID
    Byte array
    ansi_map.ServiceID
ansi_map.serviceIndicator  serviceIndicator
    Unsigned 8-bit integer
    ansi_map.ServiceIndicator
ansi_map.serviceManagementSystemGapInterval  serviceManagementSystemGapInterval
    Unsigned 32-bit integer
    ansi_map.ServiceManagementSystemGapInterval
ansi_map.serviceRedirectionCause  serviceRedirectionCause
    Unsigned 8-bit integer
    ansi_map.ServiceRedirectionCause
ansi_map.serviceRedirectionInfo  serviceRedirectionInfo
    Byte array
    ansi_map.ServiceRedirectionInfo
ansi_map.serviceRequest  serviceRequest
    No value
    ansi_map.ServiceRequest
```

```
ansi_map.serviceRequestRes  serviceRequestRes
    No value
    ansi_map.ServiceRequestRes
ansi_map.servicesResult  servicesResult
    Unsigned 8-bit integer
    ansi_map.ServicesResult
ansi_map.servingCellID  servingCellID
    Byte array
    ansi_map.ServingCellID
ansi_map.setupResult  setupResult
    Unsigned 8-bit integer
    ansi_map.SetupResult
ansi_map.sharedSecretData  sharedSecretData
    Byte array
    ansi_map.SharedSecretData
ansi_map.si  Screening indication
    Unsigned 8-bit integer
    Screening indication
ansi_map.signalQuality  signalQuality
    Unsigned 32-bit integer
    ansi_map.SignalQuality
ansi_map.signalingMessageEncryptionKey  signalingMessageEncryptionKey
    Byte array
    ansi_map.SignalingMessageEncryptionKey
ansi_map.signalingMessageEncryptionReport  signalingMessageEncryptionReport
    Unsigned 8-bit integer
    ansi_map.SignalingMessageEncryptionReport
ansi_map.sms_AccessDeniedReason  sms-AccessDeniedReason
    Unsigned 8-bit integer
    ansi_map.SMS_AccessDeniedReason
ansi_map.sms_Address  sms-Address
    No value
    ansi_map.SMS_Address
ansi_map.sms_BearerData  sms-BearerData
    Byte array
    ansi_map.SMS_BearerData
ansi_map.sms_CauseCode  sms-CauseCode
    Unsigned 8-bit integer
    ansi_map.SMS_CauseCode
ansi_map.sms_ChargeIndicator  sms-ChargeIndicator
    Unsigned 8-bit integer
    ansi_map.SMS_ChargeIndicator
ansi_map.sms_DestinationAddress  sms-DestinationAddress
    No value
    ansi_map.SMS_DestinationAddress
ansi_map.sms_MessageCount  sms-MessageCount
    Byte array
    ansi_map.SMS_MessageCount
```



```
ansi_map.sms_MessageWaitingIndicator sms-MessageWaitingIndicator
  No value
  ansi_map.SMS_MessageWaitingIndicator
ansi_map.sms_NotificationIndicator sms-NotificationIndicator
  Unsigned 8-bit integer
  ansi_map.SMS_NotificationIndicator
ansi_map.sms_OriginalDestinationAddress sms-OriginalDestinationAddress
  No value
  ansi_map.SMS_OriginalDestinationAddress
ansi_map.sms_OriginalDestinationSubaddress sms-OriginalDestinationSubaddress
  Byte array
  ansi_map.SMS_OriginalDestinationSubaddress
ansi_map.sms_OriginalOriginatingAddress sms-OriginalOriginatingAddress
  No value
  ansi_map.SMS_OriginalOriginatingAddress
ansi_map.sms_OriginalOriginatingSubaddress sms-OriginalOriginatingSubaddress
  Byte array
  ansi_map.SMS_OriginalOriginatingSubaddress
ansi_map.sms_OriginatingAddress sms-OriginatingAddress
  No value
  ansi_map.SMS_OriginatingAddress
ansi_map.sms_OriginationRestrictions sms-OriginationRestrictions
  Byte array
  ansi_map.SMS_OriginationRestrictions
ansi_map.sms_TeleserviceIdentifier sms-TeleserviceIdentifier
  Byte array
  ansi_map.SMS_TeleserviceIdentifier
ansi_map.sms_TerminationRestrictions sms-TerminationRestrictions
  Byte array
  ansi_map.SMS_TerminationRestrictions
ansi_map.specializedResource specializedResource
  Byte array
  ansi_map.SpecializedResource
ansi_map.spiniTriggers spiniTriggers
  Byte array
  ansi_map.SPINITriggers
ansi_map.spinipin spinipin
  Byte array
  ansi_map.SPINIPIN
ansi_map.ssdUpdateReport ssdUpdateReport
  Unsigned 16-bit integer
  ansi_map.SSDUpdateReport
ansi_map.ssdnotShared ssdnotShared
  Unsigned 32-bit integer
  ansi_map.SSDNotShared
ansi_map.stationClassMark stationClassMark
  Byte array
  ansi_map.StationClassMark
```

```
ansi_map.statusRequest  statusRequest
    No value
    ansi_map.StatusRequest

ansi_map.statusRequestRes  statusRequestRes
    No value
    ansi_map.StatusRequestRes

ansi_map.subaddr_odd_even  Odd/Even Indicator
    Boolean
    Odd/Even Indicator

ansi_map.subaddr_type  Type of Subaddress
    Unsigned 8-bit integer
    Type of Subaddress

ansi_map.suspiciousAccess  suspiciousAccess
    Unsigned 32-bit integer
    ansi_map.SuspiciousAccess

ansi_map.swno  Switch Number (SWNO)
    Unsigned 8-bit integer
    Switch Number (SWNO)

ansi_map.systemAccessData  systemAccessData
    Byte array
    ansi_map.SystemAccessData

ansi_map.systemAccessType  systemAccessType
    Unsigned 32-bit integer
    ansi_map.SystemAccessType

ansi_map.systemCapabilities  systemCapabilities
    Byte array
    ansi_map.SystemCapabilities

ansi_map.systemMyTypeCode  systemMyTypeCode
    Unsigned 32-bit integer
    ansi_map.SystemMyTypeCode

ansi_map.systemOperatorCode  systemOperatorCode
    Byte array
    ansi_map.SystemOperatorCode

ansi_map.systemcapabilities.auth  Authentication Parameters Requested (AUTH)
    Boolean
    Authentication Parameters Requested (AUTH)

ansi_map.systemcapabilities.cave  CAVE Algorithm Capable (CAVE)
    Boolean
    CAVE Algorithm Capable (CAVE)

ansi_map.systemcapabilities.dp  Data Privacy (DP)
    Boolean
    Data Privacy (DP)

ansi_map.systemcapabilities.se  Signaling Message Encryption Capable (SE )
    Boolean
    Signaling Message Encryption Capable (SE )

ansi_map.systemcapabilities.ssd  Shared SSD (SSD)
    Boolean
    Shared SSD (SSD)
```

```
ansi_map.systemcapabilities.vp  Voice Privacy Capable (VP )
    Boolean
    Voice Privacy Capable (VP )
ansi_map.tAnswer  tAnswer
    No value
    ansi_map.TAnswer
ansi_map.tBusy  tBusy
    No value
    ansi_map.TBusy
ansi_map.tBusyRes  tBusyRes
    No value
    ansi_map.TBusyRes
ansi_map.tDisconnect  tDisconnect
    No value
    ansi_map.TDisconnect
ansi_map.tDisconnectRes  tDisconnectRes
    No value
    ansi_map.TDisconnectRes
ansi_map.tMSIDirective  tMSIDirective
    No value
    ansi_map.TMSIDirective
ansi_map.tMSIDirectiveRes  tMSIDirectiveRes
    No value
    ansi_map.TMSIDirectiveRes
ansi_map.tNoAnswer  tNoAnswer
    No value
    ansi_map.TNoAnswer
ansi_map.tNoAnswerRes  tNoAnswerRes
    No value
    ansi_map.TNoAnswerRes
ansi_map.targetCellID  targetCellID
    Byte array
    ansi_map.TargetCellID
ansi_map.targetCellID1  targetCellID1
    Byte array
    ansi_map.TargetCellID
ansi_map.targetCellIDList  targetCellIDList
    No value
    ansi_map.TargetCellIDList
ansi_map.targetMeasurementList  targetMeasurementList
    Unsigned 32-bit integer
    ansi_map.TargetMeasurementList
ansi_map.tdmaBandwidth  tdmaBandwidth
    Unsigned 8-bit integer
    ansi_map.TDMABandwidth
ansi_map.tdmaBurstIndicator  tdmaBurstIndicator
    Byte array
    ansi_map.TDMABurstIndicator
```

```
ansi_map.tdmaCallMode    tdmaCallMode
    Byte array
    ansi_map.TDMACallMode

ansi_map.tdmaChannelData  tdmaChannelData
    Byte array
    ansi_map.TDMAChannelData

ansi_map.tdmaDataFeaturesIndicator  tdmaDataFeaturesIndicator
    Byte array
    ansi_map.TDMADataFeaturesIndicator

ansi_map.tdmaDataMode    tdmaDataMode
    Byte array
    ansi_map.TDMADataMode

ansi_map.tdmaServiceCode  tdmaServiceCode
    Unsigned 8-bit integer
    ansi_map.TDMAServiceCode

ansi_map.tdmaTerminalCapability  tdmaTerminalCapability
    Byte array
    ansi_map.TDMATerminalCapability

ansi_map.tdmaVoiceCoder    tdmaVoiceCoder
    Byte array
    ansi_map.TDMAVoiceCoder

ansi_map.tdmaVoiceMode    tdmaVoiceMode
    Byte array
    ansi_map.TDMAVoiceMode

ansi_map.tdma_MAHOResult    tdma-MAHOResult
    Byte array
    ansi_map.TDMA_MAHOResult

ansi_map.tdma_MAHO_CELLID    tdma-MAHO-CELLID
    Byte array
    ansi_map.TDMA_MAHO_CELLID

ansi_map.tdma_MAHO_CHANNEL    tdma-MAHO-CHANNEL
    Byte array
    ansi_map.TDMA_MAHO_CHANNEL

ansi_map.tdma_TimeAlignment  tdma-TimeAlignment
    Byte array
    ansi_map.TDMA_TimeAlignment

ansi_map.teleservice_Priority  teleservice-Priority
    Byte array
    ansi_map.Teleservice_Priority

ansi_map.temporaryReferenceNumber  temporaryReferenceNumber
    Byte array
    ansi_map.TemporaryReferenceNumber

ansi_map.terminalType    terminalType
    Unsigned 32-bit integer
    ansi_map.TerminalType

ansi_map.terminationAccessType  terminationAccessType
    Unsigned 8-bit integer
    ansi_map.TerminationAccessType
```

```
ansi_map.terminationList  terminationList
    Unsigned 32-bit integer
    ansi_map.TerminationList

ansi_map.terminationRestrictionCode  terminationRestrictionCode
    Unsigned 32-bit integer
    ansi_map.TerminationRestrictionCode

ansi_map.terminationTreatment  terminationTreatment
    Unsigned 8-bit integer
    ansi_map.TerminationTreatment

ansi_map.terminationTriggers  terminationTriggers
    Byte array
    ansi_map.TerminationTriggers

ansi_map.terminationtriggers.busy  Busy
    Unsigned 8-bit integer
    Busy

ansi_map.terminationtriggers.na  No Answer (NA)
    Unsigned 8-bit integer
    No Answer (NA)

ansi_map.terminationtriggers.npr  No Page Response (NPR)
    Unsigned 8-bit integer
    No Page Response (NPR)

ansi_map.terminationtriggers.nr  None Reachable (NR)
    Unsigned 8-bit integer
    None Reachable (NR)

ansi_map.terminationtriggers.rf  Routing Failure (RF)
    Unsigned 8-bit integer
    Routing Failure (RF)

ansi_map.tgn  Trunk Group Number (G)
    Unsigned 8-bit integer
    Trunk Group Number (G)

ansi_map.timeDateOffset  timeDateOffset
    Byte array
    ansi_map.TimeDateOffset

ansi_map.timeOfDay  timeOfDay
    Signed 32-bit integer
    ansi_map.TimeOfDay

ansi_map.trans_cap_ann  Announcements (ANN)
    Boolean
    Announcements (ANN)

ansi_map.trans_cap_busy  Busy Detection (BUSY)
    Boolean
    Busy Detection (BUSY)

ansi_map.trans_cap_multerm  Multiple Terminations
    Unsigned 8-bit integer
    Multiple Terminations

ansi_map.trans_cap_nami  NAME Capability Indicator (NAMI)
    Boolean
    NAME Capability Indicator (NAMI)
```

```
ansi_map.trans_cap_ndss  NDSS Capability (NDSS)
  Boolean
  NDSS Capability (NDSS)
ansi_map.trans_cap_prof  Profile (PROF)
  Boolean
  Profile (PROF)
ansi_map.trans_cap_rui   Remote User Interaction (RUI)
  Boolean
  Remote User Interaction (RUI)
ansi_map.trans_cap_spini Subscriber PIN Intercept (SPINI)
  Boolean
  Subscriber PIN Intercept (SPINI)
ansi_map.trans_cap_tl    TerminationList (TL)
  Boolean
  TerminationList (TL)
ansi_map.trans_cap_uzci  UZ Capability Indicator (UZCI)
  Boolean
  UZ Capability Indicator (UZCI)
ansi_map.trans_cap_waddr WIN Addressing (WADDR)
  Boolean
  WIN Addressing (WADDR)
ansi_map.transactionCapability transactionCapability
  Byte array
  ansi_map.TransactionCapability
ansi_map.transferToNumberRequest transferToNumberRequest
  No value
  ansi_map.TransferToNumberRequest
ansi_map.transferToNumberRequestRes transferToNumberRequestRes
  No value
  ansi_map.TransferToNumberRequestRes
ansi_map.triggerAddressList triggerAddressList
  No value
  ansi_map.TriggerAddressList
ansi_map.triggerCapability triggerCapability
  Byte array
  ansi_map.TriggerCapability
ansi_map.triggerList     triggerList
  No value
  ansi_map.TriggerList
ansi_map.triggerListOpt  triggerListOpt
  No value
  ansi_map.TriggerList
ansi_map.triggerType     triggerType
  Unsigned 32-bit integer
  ansi_map.TriggerType
ansi_map.triggercapability.all All_Calls (All)
  Boolean
  All_Calls (All)
```

```
ansi_map.triggercapability.at    Advanced_Termination (AT)
    Boolean
    Advanced_Termination (AT)
ansi_map.triggercapability.cdrea  Called_Routing_Address_Available (CdRAA)
    Boolean
    Called_Routing_Address_Available (CdRAA)
ansi_map.triggercapability.cgraa  Calling_Routing_Address_Available (CgRAA)
    Boolean
    Calling_Routing_Address_Available (CgRAA)
ansi_map.triggercapability.init   Introducing_Star/Pound (INIT)
    Boolean
    Introducing_Star/Pound (INIT)
ansi_map.triggercapability.it     Initial_Termination (IT)
    Boolean
    Initial_Termination (IT)
ansi_map.triggercapability.kdigit K-digit (K-digit)
    Boolean
    K-digit (K-digit)
ansi_map.triggercapability.oaa    Origination_Attempt_Authorized (OAA)
    Boolean
    Origination_Attempt_Authorized (OAA)
ansi_map.triggercapability.oans   O_Answer (OANS)
    Boolean
    O_Answer (OANS)
ansi_map.triggercapability.odisc  O_Disconnect (ODISC)
    Boolean
    O_Disconnect (ODISC)
ansi_map.triggercapability.ona    O_No_Answer (ONA)
    Boolean
    O_No_Answer (ONA)
ansi_map.triggercapability.pa     Prior_Agreement (PA)
    Boolean
    Prior_Agreement (PA)
ansi_map.triggercapability.rvtc   Revertive_Call (RvtC)
    Boolean
    Revertive_Call (RvtC)
ansi_map.triggercapability.tans   T_Answer (TANS)
    Boolean
    T_Answer (TANS)
ansi_map.triggercapability.tbusy  T_Busy (TBusy)
    Boolean
    T_Busy (TBusy)
ansi_map.triggercapability.tdisc  T_Disconnect (TDISC)
    Boolean
    T_Disconnect (TDISC)
ansi_map.triggercapability.tna    T_No_Answer (TNA)
    Boolean
    T_No_Answer (TNA)
```

```
ansi_map.triggercapability.tra  Terminating_Resource_Available (TRA)
    Boolean
    Terminating_Resource_Available (TRA)
ansi_map.triggercapability.unrec  Unrecognized_Number (Unrec)
    Boolean
    Unrecognized_Number (Unrec)
ansi_map.trunkStatus  trunkStatus
    Unsigned 32-bit integer
    ansi_map.TrunkStatus
ansi_map.trunkTest  trunkTest
    No value
    ansi_map.TrunkTest
ansi_map.trunkTestDisconnect  trunkTestDisconnect
    No value
    ansi_map.TrunkTestDisconnect
ansi_map.type_of_digits  Type of Digits
    Unsigned 8-bit integer
    Type of Digits
ansi_map.type_of_pi  Presentation Indication
    Boolean
    Presentation Indication
ansi_map.unblocking  unblocking
    No value
    ansi_map.Unblocking
ansi_map.uniqueChallengeReport  uniqueChallengeReport
    Unsigned 8-bit integer
    ansi_map.UniqueChallengeReport
ansi_map.unreliableCallData  unreliableCallData
    No value
    ansi_map.UnreliableCallData
ansi_map.unreliableRoamerDataDirective  unreliableRoamerDataDirective
    No value
    ansi_map.UnreliableRoamerDataDirective
ansi_map.unsolicitedResponse  unsolicitedResponse
    No value
    ansi_map.UnsolicitedResponse
ansi_map.unsolicitedResponseRes  unsolicitedResponseRes
    No value
    ansi_map.UnsolicitedResponseRes
ansi_map.updateCount  updateCount
    Unsigned 32-bit integer
    ansi_map.UpdateCount
ansi_map.userGroup  userGroup
    Byte array
    ansi_map.UserGroup
ansi_map.userZoneData  userZoneData
    Byte array
    ansi_map.UserZoneData
```



```

ansi_map.value      Value
    Unsigned 8-bit integer
    Value

ansi_map.vertical_Velocity  vertical-Velocity
    Byte array
    ansi_map.Vertical_Velocity

ansi_map.voiceMailboxNumber  voiceMailboxNumber
    Byte array
    ansi_map.VoiceMailboxNumber

ansi_map.voiceMailboxPIN  voiceMailboxPIN
    Byte array
    ansi_map.VoiceMailboxPIN

ansi_map.voicePrivacyMask  voicePrivacyMask
    Byte array
    ansi_map.VoicePrivacyMask

ansi_map.voicePrivacyReport  voicePrivacyReport
    Unsigned 8-bit integer
    ansi_map.VoicePrivacyReport

ansi_map.wINOperationsCapability  wINOperationsCapability
    Byte array
    ansi_map.WINOperationsCapability

ansi_map.wIN_TriggerList  wIN-TriggerList
    Byte array
    ansi_map.WIN_TriggerList

ansi_map.winCapability  winCapability
    No value
    ansi_map.WINCapability

ansi_map.winoperationscapability.ccdir  CallControlDirective(CCDIR)
    Boolean
    CallControlDirective(CCDIR)

ansi_map.winoperationscapability.conn  ConnectResource (CONN)
    Boolean
    ConnectResource (CONN)

ansi_map.winoperationscapability.pos  PositionRequest (POS)
    Boolean
    PositionRequest (POS)

```

#### **ANSI Transaction Capabilities Application Part (ansi\_tcap)**

```

ansi_tcap._untag_item  Item
    No value
    ansi_tcap.EXTERNAL

ansi_tcap.abort  abort
    No value
    ansi_tcap.T_abort

ansi_tcap.abortCause  abortCause
    Signed 32-bit integer
    ansi_tcap.P_Abort_cause

```

```
ansi_tcap.applicationContext  applicationContext
    Unsigned 32-bit integer
    ansi_tcap.T_applicationContext

ansi_tcap.causeInformation  causeInformation
    Unsigned 32-bit integer
    ansi_tcap.T_causeInformation

ansi_tcap.componentID  componentID
    Byte array
    ansi_tcap.T_componentID

ansi_tcap.componentIDs  componentIDs
    Byte array
    ansi_tcap.T_componentIDs

ansi_tcap.componentPortion  componentPortion
    Unsigned 32-bit integer
    ansi_tcap.ComponentSequence

ansi_tcap.confidentiality  confidentiality
    No value
    ansi_tcap.Confidentiality

ansi_tcap.confidentialityId  confidentialityId
    Unsigned 32-bit integer
    ansi_tcap.T_confidentialityId

ansi_tcap.conversationWithPerm  conversationWithPerm
    No value
    ansi_tcap.T_conversationWithPerm

ansi_tcap.conversationWithoutPerm  conversationWithoutPerm
    No value
    ansi_tcap.T_conversationWithoutPerm

ansi_tcap.dialogPortion  dialogPortion
    No value
    ansi_tcap.DialoguePortion

ansi_tcap.dialoguePortion  dialoguePortion
    No value
    ansi_tcap.DialoguePortion

ansi_tcap.errorCode  errorCode
    Unsigned 32-bit integer
    ansi_tcap.ErrorCode

ansi_tcap.identifier  identifier
    Byte array
    ansi_tcap.TransactionID

ansi_tcap.integerApplicationId  integerApplicationId
    Signed 32-bit integer
    ansi_tcap.IntegerApplicationContext

ansi_tcap.integerConfidentialityId  integerConfidentialityId
    Signed 32-bit integer
    ansi_tcap.INTEGER

ansi_tcap.integerSecurityId  integerSecurityId
    Signed 32-bit integer
    ansi_tcap.INTEGER
```

```
ansi_tcap.invokeLast  invokeLast
    No value
    ansi_tcap.Invoke
ansi_tcap.invokeNotLast  invokeNotLast
    No value
    ansi_tcap.Invoke
ansi_tcap.national  national
    Signed 32-bit integer
    ansi_tcap.T_national
ansi_tcap.objectApplicationId  objectApplicationId
    ansi_tcap.ObjectIDApplicationContext
ansi_tcap.objectConfidentialityId  objectConfidentialityId
    ansi_tcap.OBJECT_IDENTIFIER
ansi_tcap.objectSecurityId  objectSecurityId
    ansi_tcap.OBJECT_IDENTIFIER
ansi_tcap.operationCode  operationCode
    Unsigned 32-bit integer
    ansi_tcap.OperationCode
ansi_tcap.paramSequence  paramSequence
    No value
    ansi_tcap.T_paramSequence
ansi_tcap.paramSet  paramSet
    No value
    ansi_tcap.T_paramSet
ansi_tcap.parameter  parameter
    Byte array
    ansi_tcap.T_parameter
ansi_tcap.private  private
    Signed 32-bit integer
    ansi_tcap.T_private
ansi_tcap.queryWithPerm  queryWithPerm
    No value
    ansi_tcap.T_queryWithPerm
ansi_tcap.queryWithoutPerm  queryWithoutPerm
    No value
    ansi_tcap.T_queryWithoutPerm
ansi_tcap.reject  reject
    No value
    ansi_tcap.Reject
ansi_tcap.rejectProblem  rejectProblem
    Signed 32-bit integer
    ansi_tcap.Problem
ansi_tcap.response  response
    No value
    ansi_tcap.T_response
```

```

ansi_tcap.returnError  returnError
    No value
    ansi_tcap.ReturnError

ansi_tcap.returnResultLast  returnResultLast
    No value
    ansi_tcap.ReturnResult

ansi_tcap.returnResultNotLast  returnResultNotLast
    No value
    ansi_tcap.ReturnResult

ansi_tcap.securityContext  securityContext
    Unsigned 32-bit integer
    ansi_tcap.T_securityContext

ansi_tcap.srt.begin  Begin Session
    Frame number
    SRT Begin of Session

ansi_tcap.srt.duplicate  Request Duplicate
    Unsigned 32-bit integer

ansi_tcap.srt.end  End Session
    Frame number
    SRT End of Session

ansi_tcap.srt.session_id  Session Id
    Unsigned 32-bit integer

ansi_tcap.srt.sessiontime  Session duration
    Time duration
    Duration of the TCAP session

ansi_tcap.unidirectional  unidirectional
    No value
    ansi_tcap.T_unidirectional

ansi_tcap.userInfo  userInformation
    No value
    ansi_tcap.UserAbortInformation

ansi_tcap.version  version
    Byte array
    ansi_tcap.ProtocolVersion

```

**AOL Instant Messenger (aim)**

```

aim.buddyname  Buddy Name
    String

aim.buddynamelen  Buddynamelen
    Unsigned 8-bit integer

aim.channel  Channel ID
    Unsigned 8-bit integer

aim.cmd_start  Command Start
    Unsigned 8-bit integer

aim.data  Data
    Byte array

```

```
aim.dataalen  Data Field Length
               Unsigned 16-bit integer

aim.dcinfo.addr  Internal IP address
                 IPv4 address

aim.dcinfo.auth_cookie  Authorization Cookie
                         Byte array

aim.dcinfo.client_futures  Client Futures
                             Unsigned 32-bit integer

aim.dcinfo.last_ext_info_update  Last Extended Info Update
                                   Unsigned 32-bit integer

aim.dcinfo.last_ext_status_update  Last Extended Status Update
                                       Unsigned 32-bit integer

aim.dcinfo.last_info_update  Last Info Update
                               Unsigned 32-bit integer

aim.dcinfo.proto_version  Protocol Version
                           Unsigned 16-bit integer

aim.dcinfo.tcpport  TCP Port
                    Unsigned 32-bit integer

aim.dcinfo.type  Type
                 Unsigned 8-bit integer

aim.dcinfo.unknown  Unknown
                    Unsigned 16-bit integer

aim.dcinfo.webport  Web Front Port
                    Unsigned 32-bit integer

aim.fnac.family  FNAC Family ID
                 Unsigned 16-bit integer

aim.fnac.flags  FNAC Flags
                Unsigned 16-bit integer

aim.fnac.flags.contains_version  Contains Version of Family this SNAC is in
                                   Boolean

aim.fnac.flags.next_is_related  Followed By SNAC with related information
                                   Boolean

aim.fnac.id  FNAC ID
             Unsigned 32-bit integer

aim.fnac.subtype  FNAC Subtype ID
                  Unsigned 16-bit integer

aim.infotype  Infotype
              Unsigned 16-bit integer

aim.messageblock.charset  Block Character set
                           Unsigned 16-bit integer

aim.messageblock.charsubset  Block Character subset
                               Unsigned 16-bit integer

aim.messageblock.features  Features
                            Byte array
```

```
aim.messageblock.featuresdes  Features
    Unsigned 16-bit integer
aim.messageblock.featureslen  Features Length
    Unsigned 16-bit integer
aim.messageblock.info        Block info
    Unsigned 16-bit integer
aim.messageblock.length     Block length
    Unsigned 16-bit integer
aim.messageblock.message    Message
    String
aim.seqno                    Sequence Number
    Unsigned 16-bit integer
aim.signon.challenge        Signon challenge
    String
aim.signon.challengelen     Signon challenge length
    Unsigned 16-bit integer
aim.snac.error              SNAC Error
    Unsigned 16-bit integer
aim.tlvcount                TLV Count
    Unsigned 16-bit integer
aim.userclass.administrator AOL Administrator flag
    Boolean
aim.userclass.away          AOL away status flag
    Boolean
aim.userclass.commercial    AOL commercial account flag
    Boolean
aim.userclass.icq           ICQ user sign
    Boolean
aim.userclass.noncommercial ICQ non-commercial account flag
    Boolean
aim.userclass.staff         AOL Staff User Flag
    Boolean
aim.userclass.unconfirmed   AOL Unconfirmed user flag
    Boolean
aim.userclass.unknown100    Unknown bit
    Boolean
aim.userclass.unknown200    Unknown bit
    Boolean
aim.userclass.unknown400    Unknown bit
    Boolean
aim.userclass.unknown800    Unknown bit
    Boolean
aim.userclass.wireless      AOL wireless user
    Boolean
```

```
aim.userinfo.warninglevel  Warning Level
                          Unsigned 16-bit integer
aim.version  Protocol Version
             Byte array
```

**ARCNET (arcnet)**

```
arcnet.dst  Dest
           Unsigned 8-bit integer
           Dest ID
arcnet.exception_flag  Exception Flag
                     Unsigned 8-bit integer
                     Exception flag
arcnet.offset  Offset
              Byte array
              Offset
arcnet.protID  Protocol ID
              Unsigned 8-bit integer
              Proto type
arcnet.sequence  Sequence
                Unsigned 16-bit integer
                Sequence number
arcnet.split_flag  Split Flag
                  Unsigned 8-bit integer
                  Split flag
arcnet.src  Source
           Unsigned 8-bit integer
           Source ID
```

**ASN.1 decoding (asn1)****ATAoverEthernet (aoe)**

```
aoe.aflags.a  A
             Boolean
             Whether this is an asynchronous write or not
aoe.aflags.d  D
             Boolean
aoe.aflags.e  E
             Boolean
             Whether this is a normal or LBA48 command
aoe.aflags.w  W
             Boolean
             Is this a command writing data to the device or not
aoe.ata.cmd  ATA Cmd
            Unsigned 8-bit integer
            ATA command opcode
aoe.ata.status  ATA Status
              Unsigned 8-bit integer
              ATA status bits
```

```
aoe.cmd    Command
           Unsigned 8-bit integer
           AOE Command

aoe.err_feature  Err/Feature
           Unsigned 8-bit integer
           Err/Feature

aoe.error    Error
           Unsigned 8-bit integer
           Error code

aoe.lba    Lba
           Unsigned 64-bit integer
           Lba address

aoe.major    Major
           Unsigned 16-bit integer
           Major address

aoe.minor    Minor
           Unsigned 8-bit integer
           Minor address

aoe.response  Response flag
           Boolean
           Whether this is a response PDU or not

aoe.response_in  Response In
           Frame number
           The response to this packet is in this frame

aoe.response_to  Response To
           Frame number
           This is a response to the ATA command in this frame

aoe.sector_count  Sector Count
           Unsigned 8-bit integer
           Sector Count

aoe.tag    Tag
           Unsigned 32-bit integer
           Command Tag

aoe.time    Time from request
           Time duration
           Time between Request and Reply for ATA calls

aoe.version  Version
           Unsigned 8-bit integer
           Version of the AOE protocol
```

**ATM (atm)**

```
atm.aal    AAL
           Unsigned 8-bit integer

atm.cid    CID
           Unsigned 8-bit integer

atm.vci    VCI
           Unsigned 16-bit integer
```



atm.vpi VPI  
Unsigned 8-bit integer

**ATM AAL1 (aal1)****ATM AAL3/4 (aal3\_4)****ATM LAN Emulation (lane)****ATM OAM AAL (oamaal)****AVS WLAN Capture header (wlancap)**

wlan.phytype PHY type  
Unsigned 32-bit integer

wlancap.drops Known Dropped Frames  
Unsigned 32-bit integer

wlancap.encoding Encoding Type  
Unsigned 32-bit integer

wlancap.length Header length  
Unsigned 32-bit integer

wlancap.magic Header magic  
Unsigned 32-bit integer

wlancap.padding Padding  
Byte array

wlancap.preamble Preamble  
Unsigned 32-bit integer

wlancap.priority Priority  
Unsigned 32-bit integer

wlancap.receiver\_addr Receiver Address  
6-byte Hardware (MAC) Address  
Receiver Hardware Address

wlancap.sequence Receive sequence  
Unsigned 32-bit integer

wlancap.ssi\_noise SSI Noise  
Signed 32-bit integer

wlancap.ssi\_signal SSI Signal  
Signed 32-bit integer

wlancap.ssi\_type SSI Type  
Unsigned 32-bit integer

wlancap.version Header revision  
Unsigned 32-bit integer

**AX/4000 Test Block (ax4000)**

ax4000.chassis Chassis Number  
Unsigned 8-bit integer

```

ax4000.crc    CRC (unchecked)
              Unsigned 16-bit integer
ax4000.fill  Fill Type
              Unsigned 8-bit integer
ax4000.index  Index
              Unsigned 16-bit integer
ax4000.port  Port Number
              Unsigned 8-bit integer
ax4000.seq   Sequence Number
              Unsigned 32-bit integer
ax4000.timestamp  Timestamp
              Unsigned 32-bit integer

```

#### Active Directory Setup (dssetup)

```

dssetup.dssetup_DsRoleFlags.DS_ROLE_PRIMARY_DOMAIN_GUID_PRESENT  Ds Role Primary
                                                                    Boolean
dssetup.dssetup_DsRoleFlags.DS_ROLE_PRIMARY_DS_MIXED_MODE      Ds Role Primary Ds Mi
                                                                    Boolean
dssetup.dssetup_DsRoleFlags.DS_ROLE_PRIMARY_DS_RUNNING        Ds Role Primary Ds Runni
                                                                    Boolean
dssetup.dssetup_DsRoleFlags.DS_ROLE_UPGRADE_IN_PROGRESS        Ds Role Upgrade In Prog
                                                                    Boolean
dssetup.dssetup_DsRoleGetPrimaryDomainInformation.info          Info
                                                                    No value
dssetup.dssetup_DsRoleGetPrimaryDomainInformation.level         Level
                                                                    Unsigned 16-bit integer
dssetup.dssetup_DsRoleInfo.basic                                Basic
                                                                    No value
dssetup.dssetup_DsRoleInfo.opstatus                             Opstatus
                                                                    No value
dssetup.dssetup_DsRoleInfo.upgrade                             Upgrade
                                                                    No value
dssetup.dssetup_DsRoleOpStatus.status                           Status
                                                                    Unsigned 16-bit integer
dssetup.dssetup_DsRolePrimaryDomInfoBasic.dns_domain           Dns Domain
                                                                    String
dssetup.dssetup_DsRolePrimaryDomInfoBasic.domain               Domain
                                                                    String
dssetup.dssetup_DsRolePrimaryDomInfoBasic.domain_guid          Domain Guid
dssetup.dssetup_DsRolePrimaryDomInfoBasic.flags                Flags
                                                                    Unsigned 32-bit integer
dssetup.dssetup_DsRolePrimaryDomInfoBasic.forest               Forest
                                                                    String
dssetup.dssetup_DsRolePrimaryDomInfoBasic.role                  Role
                                                                    Unsigned 16-bit integer

```

```
dssetup.dssetup_DsRoleUpgradeStatus.previous_role  Previous Role
    Unsigned 16-bit integer
dssetup.dssetup_DsRoleUpgradeStatus.upgrading  Upgrading
    Unsigned 32-bit integer
dssetup.opnum  Operation
    Unsigned 16-bit integer
dssetup.werror  Windows Error
    Unsigned 32-bit integer
```

#### **Ad hoc On-demand Distance Vector Routing Protocol (aodv)**

```
aodv.dest_ip  Destination IP
    IPv4 address
    Destination IP Address
aodv.dest_ipv6  Destination IPv6
    IPv6 address
    Destination IPv6 Address
aodv.dest_seqno  Destination Sequence Number
    Unsigned 32-bit integer
    Destination Sequence Number
aodv.destcount  Destination Count
    Unsigned 8-bit integer
    Unreachable Destinations Count
aodv.ext_length  Extension Length
    Unsigned 8-bit integer
    Extension Data Length
aodv.ext_type  Extension Type
    Unsigned 8-bit integer
    Extension Format Type
aodv.flags  Flags
    Unsigned 16-bit integer
    Flags
aodv.flags.rerr_nodelete  RERR No Delete
    Boolean
aodv.flags.rrep_ack  RREP Acknowledgement
    Boolean
aodv.flags.rrep_repair  RREP Repair
    Boolean
aodv.flags.rreq_destinationonly  RREQ Destination only
    Boolean
aodv.flags.rreq_gratuitous  RREQ Gratuitous RREP
    Boolean
aodv.flags.rreq_join  RREQ Join
    Boolean
aodv.flags.rreq_repair  RREQ Repair
    Boolean
```

```
aodv.flags.rreq_unknown  RREQ Unknown Sequence Number
                          Boolean

aodv.hello_interval      Hello Interval
                          Unsigned 32-bit integer
                          Hello Interval Extension

aodv.hopcount            Hop Count
                          Unsigned 8-bit integer
                          Hop Count

aodv.lifetime            Lifetime
                          Unsigned 32-bit integer
                          Lifetime

aodv.orig_ip             Originator IP
                          IPv4 address
                          Originator IP Address

aodv.orig_ipv6           Originator IPv6
                          IPv6 address
                          Originator IPv6 Address

aodv.orig_seqno          Originator Sequence Number
                          Unsigned 32-bit integer
                          Originator Sequence Number

aodv.prefix_sz           Prefix Size
                          Unsigned 8-bit integer
                          Prefix Size

aodv.rreq_id             RREQ Id
                          Unsigned 32-bit integer
                          RREQ Id

aodv.timestamp           Timestamp
                          Unsigned 64-bit integer
                          Timestamp Extension

aodv.type                Type
                          Unsigned 8-bit integer
                          AODV packet type

aodv.unreach_dest_ip     Unreachable Destination IP
                          IPv4 address
                          Unreachable Destination IP Address

aodv.unreach_dest_ipv6   Unreachable Destination IPv6
                          IPv6 address
                          Unreachable Destination IPv6 Address

aodv.unreach_dest_seqno  Unreachable Destination Sequence Number
                          Unsigned 32-bit integer
                          Unreachable Destination Sequence Number
```

**Adaptive Multi-Rate (amr)**

```
amr.fqi                  FQI
                          Boolean
                          Frame quality indicator bit
```

```
amr.if1.sti  SID Type Indicator
             Boolean
             SID Type Indicator
amr.if2.sti  SID Type Indicator
             Boolean
             SID Type Indicator
amr.nb.cmr   CMR
             Unsigned 8-bit integer
             codec mode request
amr.nb.if1.ft  Frame Type
             Unsigned 8-bit integer
             Frame Type
amr.nb.if1.modeind  Mode Type indication
             Unsigned 8-bit integer
             Mode Type indication
amr.nb.if1.modereq  Mode Type request
             Unsigned 8-bit integer
             Mode Type request
amr.nb.if1.stimodeind  Mode Type indication
             Unsigned 8-bit integer
             Mode Type indication
amr.nb.if2.ft  Frame Type
             Unsigned 8-bit integer
             Frame Type
amr.nb.if2.stimodeind  Mode Type indication
             Unsigned 8-bit integer
             Mode Type indication
amr.nb.toc.ft  FT bits
             Unsigned 8-bit integer
             Frame type index
amr.reserved  Reserved
             Unsigned 8-bit integer
             Reserved bits
amr.toc.f  F bit
          Boolean
          F bit
amr.toc.q  Q bit
          Boolean
          Frame quality indicator bit
amr.wb.cmr   CMR
             Unsigned 8-bit integer
             codec mode request
amr.wb.if1.ft  Frame Type
             Unsigned 8-bit integer
             Frame Type
amr.wb.if1.modeind  Mode Type indication
             Unsigned 8-bit integer
             Mode Type indication
```

```
amr.wb.if1.modereq  Mode Type request
                   Unsigned 8-bit integer
                   Mode Type request

amr.wb.if1.stimodeind  Mode Type indication
                     Unsigned 8-bit integer
                     Mode Type indication

amr.wb.if2.ft  Frame Type
              Unsigned 8-bit integer
              Frame Type

amr.wb.if2.stimodeind  Mode Type indication
                     Unsigned 8-bit integer
                     Mode Type indication

amr.wb.toc.ft  FT bits
              Unsigned 8-bit integer
              Frame type index
```

### **Address Resolution Protocol (arp)**

```
arp.dst.atm_num_e164  Target ATM number (E.164)
                     String

arp.dst.atm_num_nsap  Target ATM number (NSAP)
                     Byte array

arp.dst.atm_subaddr  Target ATM subaddress
                    Byte array

arp.dst.hlen  Target ATM number length
             Unsigned 8-bit integer

arp.dst.htype  Target ATM number type
             Boolean

arp.dst.hw  Target hardware address
           Byte array

arp.dst.hw_mac  Target MAC address
              6-byte Hardware (MAC) Address

arp.dst.pln  Target protocol size
            Unsigned 8-bit integer

arp.dst.proto  Target protocol address
             Byte array

arp.dst.proto_ipv4  Target IP address
                  IPv4 address

arp.dst.slen  Target ATM subaddress length
            Unsigned 8-bit integer

arp.dst.stype  Target ATM subaddress type
            Boolean

arp.duplicate-address-detected  Duplicate IP address detected
                               No value

arp.duplicate-address-frame  Frame showing earlier use of IP address
                             Frame number
```

```
arp.hw.size    Hardware size
               Unsigned 8-bit integer
arp.hw.type    Hardware type
               Unsigned 16-bit integer
arp.opcode     Opcode
               Unsigned 16-bit integer
arp.packet-storm-detected  Packet storm detected
               No value
arp.proto.size Protocol size
               Unsigned 8-bit integer
arp.proto.type Protocol type
               Unsigned 16-bit integer
arp.seconds-since-duplicate-address-frame  Seconds since earlier frame seen
               Unsigned 32-bit integer
arp.src.atm_num_e164  Sender ATM number (E.164)
               String
arp.src.atm_num_nsap  Sender ATM number (NSAP)
               Byte array
arp.src.atm_subaddr  Sender ATM subaddress
               Byte array
arp.src.hlen  Sender ATM number length
               Unsigned 8-bit integer
arp.src.htype  Sender ATM number type
               Boolean
arp.src.hw  Sender hardware address
               Byte array
arp.src.hw_mac  Sender MAC address
               6-byte Hardware (MAC) Address
arp.src.pln  Sender protocol size
               Unsigned 8-bit integer
arp.src.proto  Sender protocol address
               Byte array
arp.src.proto_ipv4  Sender IP address
               IPv4 address
arp.src.slen  Sender ATM subaddress length
               Unsigned 8-bit integer
arp.src.stype  Sender ATM subaddress type
               Boolean
```

#### **Advanced Message Queueing Protocol (amqp)**

```
amqp.channel  Channel
               Unsigned 16-bit integer
               Channel ID
amqp.header.body-size  Body size
               Unsigned 64-bit integer
               Body size
```

```
amqp.header.class      Class ID
                        Unsigned 16-bit integer
                        Class ID

amqp.header.properties Properties
                        No value
                        Message properties

amqp.header.property-flags Property flags
                        Unsigned 16-bit integer
                        Property flags

amqp.header.weight     Weight
                        Unsigned 16-bit integer
                        Weight

amqp.init.id_major     Protocol ID Major
                        Unsigned 8-bit integer
                        Protocol ID major

amqp.init.id_minor     Protocol ID Minor
                        Unsigned 8-bit integer
                        Protocol ID minor

amqp.init.protocol     Protocol
                        String
                        Protocol name

amqp.init.version_major Version Major
                        Unsigned 8-bit integer
                        Protocol version major

amqp.init.version_minor Version Minor
                        Unsigned 8-bit integer
                        Protocol version minor

amqp.length            Length
                        Unsigned 32-bit integer
                        Length of the frame

amqp.method.arguments  Arguments
                        No value
                        Method arguments

amqp.method.arguments.active Active
                        Boolean
                        active

amqp.method.arguments.arguments Arguments
                        No value
                        arguments

amqp.method.arguments.auto_delete Auto-Delete
                        Boolean
                        auto-delete

amqp.method.arguments.capabilities Capabilities
                        String
                        capabilities

amqp.method.arguments.challenge Challenge
                        Byte array
                        challenge
```



```
amqp.method.arguments.channel_id  Channel-Id
    Byte array
    channel-id

amqp.method.arguments.channel_max  Channel-Max
    Unsigned 16-bit integer
    channel-max

amqp.method.arguments.class_id    Class-Id
    Unsigned 16-bit integer
    class-id

amqp.method.arguments.client_properties  Client-Properties
    No value
    client-properties

amqp.method.arguments.cluster_id  Cluster-Id
    String
    cluster-id

amqp.method.arguments.consume_rate  Consume-Rate
    Unsigned 32-bit integer
    consume-rate

amqp.method.arguments.consumer_count  Consumer-Count
    Unsigned 32-bit integer
    consumer-count

amqp.method.arguments.consumer_tag  Consumer-Tag
    String
    consumer-tag

amqp.method.arguments.content_size  Content-Size
    Unsigned 64-bit integer
    content-size

amqp.method.arguments.delivery_tag  Delivery-Tag
    Unsigned 64-bit integer
    delivery-tag

amqp.method.arguments.dtx_identifier  Dtx-Identifier
    String
    dtx-identifier

amqp.method.arguments.durable  Durable
    Boolean
    durable

amqp.method.arguments.exchange  Exchange
    String
    exchange

amqp.method.arguments.exclusive  Exclusive
    Boolean
    exclusive

amqp.method.arguments.filter  Filter
    No value
    filter

amqp.method.arguments.frame_max  Frame-Max
    Unsigned 32-bit integer
    frame-max
```

```
amqp.method.arguments.global    Global
    Boolean
    global

amqp.method.arguments.heartbeat Heartbeat
    Unsigned 16-bit integer
    heartbeat

amqp.method.arguments.host      Host
    String
    host

amqp.method.arguments.identifier Identifier
    String
    identifier

amqp.method.arguments.if_empty  If-Empty
    Boolean
    if-empty

amqp.method.arguments.if_unused If-Unused
    Boolean
    if-unused

amqp.method.arguments.immediate Immediate
    Boolean
    immediate

amqp.method.arguments.insist    Insist
    Boolean
    insist

amqp.method.arguments.internal  Internal
    Boolean
    internal

amqp.method.arguments.known_hosts Known-Hosts
    String
    known-hosts

amqp.method.arguments.locale    Locale
    String
    locale

amqp.method.arguments.locales   Locales
    Byte array
    locales

amqp.method.arguments.mandatory Mandatory
    Boolean
    mandatory

amqp.method.arguments.mechanism Mechanism
    String
    mechanism

amqp.method.arguments.mechanisms Mechanisms
    Byte array
    mechanisms

amqp.method.arguments.message_count Message-Count
    Unsigned 32-bit integer
    message-count
```

```
amqp.method.arguments.meta_data  Meta-Data
    No value
    meta-data

amqp.method.arguments.method_id  Method-Id
    Unsigned 16-bit integer
    method-id

amqp.method.arguments.multiple  Multiple
    Boolean
    multiple

amqp.method.arguments.no_ack    No-Ack
    Boolean
    no-ack

amqp.method.arguments.no_local  No-Local
    Boolean
    no-local

amqp.method.arguments.nowait    Nowait
    Boolean
    nowait

amqp.method.arguments.out_of_band  Out-Of-Band
    String
    out-of-band

amqp.method.arguments.passive  Passive
    Boolean
    passive

amqp.method.arguments.prefetch_count  Prefetch-Count
    Unsigned 16-bit integer
    prefetch-count

amqp.method.arguments.prefetch_size  Prefetch-Size
    Unsigned 32-bit integer
    prefetch-size

amqp.method.arguments.queue  Queue
    String
    queue

amqp.method.arguments.read  Read
    Boolean
    read

amqp.method.arguments.realm  Realm
    String
    realm

amqp.method.arguments.redelivered  Redelivered
    Boolean
    redelivered

amqp.method.arguments.reply_code  Reply-Code
    Unsigned 16-bit integer
    reply-code

amqp.method.arguments.reply_text  Reply-Text
    String
    reply-text
```

```
amqp.method.arguments.requeue    Requeue
    Boolean
    requeue

amqp.method.arguments.response    Response
    Byte array
    response

amqp.method.arguments.routing_key Routing-Key
    String
    routing-key

amqp.method.arguments.server_properties Server-Properties
    No value
    server-properties

amqp.method.arguments.staged_size Staged-Size
    Unsigned 64-bit integer
    staged-size

amqp.method.arguments.ticket      Ticket
    Unsigned 16-bit integer
    ticket

amqp.method.arguments.type        Type
    String
    type

amqp.method.arguments.version_major Version-Major
    Unsigned 8-bit integer
    version-major

amqp.method.arguments.version_minor Version-Minor
    Unsigned 8-bit integer
    version-minor

amqp.method.arguments.virtual_host Virtual-Host
    String
    virtual-host

amqp.method.arguments.write       Write
    Boolean
    write

amqp.method.class                 Class
    Unsigned 16-bit integer
    Class ID

amqp.method.method                 Method
    Unsigned 16-bit integer
    Method ID

amqp.method.properties.app_id     App-Id
    String
    app-id

amqp.method.properties.broadcast Broadcast
    Unsigned 8-bit integer
    broadcast

amqp.method.properties.cluster_id Cluster-Id
    String
    cluster-id
```

```
amqp.method.properties.content_encoding  Content-Encoding
String
content-encoding

amqp.method.properties.content_type      Content-Type
String
content-type

amqp.method.properties.correlation_id    Correlation-Id
String
correlation-id

amqp.method.properties.data_name         Data-Name
String
data-name

amqp.method.properties.delivery_mode     Delivery-Mode
Unsigned 8-bit integer
delivery-mode

amqp.method.properties.durable           Durable
Unsigned 8-bit integer
durable

amqp.method.properties.expiration        Expiration
String
expiration

amqp.method.properties.filename           Filename
String
filename

amqp.method.properties.headers            Headers
No value
headers

amqp.method.properties.message_id        Message-Id
String
message-id

amqp.method.properties.priority           Priority
Unsigned 8-bit integer
priority

amqp.method.properties.proxy_name         Proxy-Name
String
proxy-name

amqp.method.properties.reply_to           Reply-To
String
reply-to

amqp.method.properties.timestamp          Timestamp
Unsigned 64-bit integer
timestamp

amqp.method.properties.type              Type
String
type

amqp.method.properties.user_id            User-Id
String
user-id
```

```
amqp.payload  Payload
  Byte array
  Message payload

amqp.type  Type
  Unsigned 8-bit integer
  Frame type
```

**AgentX (agentx)**

```
agentx.c.reason  Reason
  Unsigned 8-bit integer
  close reason

agentx.flags  Flags
  Unsigned 8-bit integer
  header type

agentx.gb.mrepeat  Max Repetition
  Unsigned 16-bit integer
  getBulk Max repetition

agentx.gb.nrepeat  Repeaters
  Unsigned 16-bit integer
  getBulk Num. repeaters

agentx.n_subid  Number subids
  Unsigned 8-bit integer
  Number subids

agentx.o.timeout  Timeout
  Unsigned 8-bit integer
  open timeout

agentx.oid  OID
  String
  OID

agentx.oid_include  OID include
  Unsigned 8-bit integer
  OID include

agentx.oid_prefix  OID prefix
  Unsigned 8-bit integer
  OID prefix

agentx.ostring  Octet String
  String
  Octet String

agentx.ostring_len  OString len
  Unsigned 32-bit integer
  Octet String Length

agentx.packet_id  PacketID
  Unsigned 32-bit integer
  Packet ID

agentx.payload_len  Payload length
  Unsigned 32-bit integer
  Payload length
```

```
agentx.r.error Resp. error
    Unsigned 16-bit integer
    response error

agentx.r.index Resp. index
    Unsigned 16-bit integer
    response index

agentx.r.priority Priority
    Unsigned 8-bit integer
    Register Priority

agentx.r.range_subid Range_subid
    Unsigned 8-bit integer
    Register range_subid

agentx.r.timeout Timeout
    Unsigned 8-bit integer
    Register timeout

agentx.r.upper_bound Upper bound
    Unsigned 32-bit integer
    Register upper bound

agentx.r.uptime sysUpTime
    Unsigned 32-bit integer
    sysUpTime

agentx.session_id sessionID
    Unsigned 32-bit integer
    Session ID

agentx.transaction_id TransactionID
    Unsigned 32-bit integer
    Transaction ID

agentx.type Type
    Unsigned 8-bit integer
    header type

agentx.u.priority Priority
    Unsigned 8-bit integer
    Unegister Priority

agentx.u.range_subid Range_subid
    Unsigned 8-bit integer
    Unegister range_subid

agentx.u.timeout Timeout
    Unsigned 8-bit integer
    Unregister timeout

agentx.u.upper_bound Upper bound
    Unsigned 32-bit integer
    Register upper bound

agentx.v.tag Variable type
    Unsigned 16-bit integer
    vtag

agentx.v.val32 Value(32)
    Unsigned 32-bit integer
    val32
```

agentx.v.val64 Value(64)  
Unsigned 64-bit integer  
val64

agentx.version Version  
Unsigned 8-bit integer  
header version

### **Aggregate Server Access Protocol (asap)**

asap.cause\_code Cause code  
Unsigned 16-bit integer

asap.cause\_info Cause info  
Byte array

asap.cause\_length Cause length  
Unsigned 16-bit integer

asap.cause\_padding Padding  
Byte array

asap.cookie Cookie  
Byte array

asap.h\_bit H bit  
Boolean

asap.ipv4\_address IP Version 4 address  
IPv4 address

asap.ipv6\_address IP Version 6 address  
IPv6 address

asap.message\_flags Flags  
Unsigned 8-bit integer

asap.message\_length Length  
Unsigned 16-bit integer

asap.message\_type Type  
Unsigned 8-bit integer

asap.parameter\_length Parameter length  
Unsigned 16-bit integer

asap.parameter\_padding Padding  
Byte array

asap.parameter\_type Parameter Type  
Unsigned 16-bit integer

asap.parameter\_value Parameter value  
Byte array

asap.pe\_checksum PE checksum  
Unsigned 32-bit integer

asap.pe\_identifier PE identifier  
Unsigned 32-bit integer

asap.pool\_element\_home\_enrp\_server\_identifier Home ENRP server identifier  
Unsigned 32-bit integer

asap.pool\_element\_pe\_identifier PE identifier  
Unsigned 32-bit integer



```
asap.pool_element_registration_life  Registration life
    Signed 32-bit integer
asap.pool_handle_pool_handle  Pool handle
    Byte array
asap.pool_member_slection_policy_degradation  Policy degradation
    Unsigned 32-bit integer
asap.pool_member_slection_policy_load  Policy load
    Unsigned 32-bit integer
asap.pool_member_slection_policy_priority  Policy priority
    Unsigned 32-bit integer
asap.pool_member_slection_policy_type  Policy type
    Unsigned 32-bit integer
asap.pool_member_slection_policy_value  Policy value
    Byte array
asap.pool_member_slection_policy_weight  Policy weight
    Unsigned 32-bit integer
asap.r_bit  R bit
    Boolean
asap.sctp_transport_port  Port
    Unsigned 16-bit integer
asap.server_identifier  Server identifier
    Unsigned 32-bit integer
asap.tcp_transport_port  Port
    Unsigned 16-bit integer
asap.transport_use  Transport use
    Unsigned 16-bit integer
asap.udp_transport_port  Port
    Unsigned 16-bit integer
asap.udp_transport_reserved  Reserved
    Unsigned 16-bit integer
enrp.dccp_transport_port  Port
    Unsigned 16-bit integer
enrp.dccp_transport_reserved  Reserved
    Unsigned 16-bit integer
enrp.dccp_transport_service_code  Service code
    Unsigned 16-bit integer
enrp.udp_lite_transport_port  Port
    Unsigned 16-bit integer
enrp.udp_lite_transport_reserved  Reserved
    Unsigned 16-bit integer
```

**Airopeek encapsulated IEEE 802.11 (airopeek)**

```
airopeek.unknown1  Unknown1
    Byte array
```

airopeek.unknown2 caplength1  
Unsigned 16-bit integer

airopeek.unknown3 caplength2  
Unsigned 16-bit integer

airopeek.unknown4 Unknown4  
Byte array

**Alert Standard Forum (asf)**

asf.iana IANA Enterprise Number  
Unsigned 32-bit integer  
ASF IANA Enterprise Number

asf.len Data Length  
Unsigned 8-bit integer  
ASF Data Length

asf.tag Message Tag  
Unsigned 8-bit integer  
ASF Message Tag

asf.type Message Type  
Unsigned 8-bit integer  
ASF Message Type

**Alteon – Transparent Proxy Cache Protocol (tcp)**

tcp.caddr Client Source IP address  
IPv4 address

tcp.cid Client indent  
Unsigned 16-bit integer

tcp.cport Client Source Port  
Unsigned 16-bit integer

tcp.flags.redir No Redirect  
Boolean  
Don't redirect client

tcp.flags.tcp UDP/TCP  
Boolean  
Protocol type

tcp.flags.xoff XOFF  
Boolean

tcp.flags.xon XON  
Boolean

tcp.rasaddr RAS server IP address  
IPv4 address

tcp.saddr Server IP address  
IPv4 address

tcp.type Type  
Unsigned 8-bit integer  
PDU type

tcp.vaddr Virtual Server IP address  
IPv4 address

tpcp.version Version  
Unsigned 8-bit integer  
TCP version

**Andrew File System (AFS) (afs)**

afs.backup Backup  
Boolean  
Backup Server

afs.backup.errcode Error Code  
Unsigned 32-bit integer  
Error Code

afs.backup.opcode Operation  
Unsigned 32-bit integer  
Operation

afs.bos BOS  
Boolean  
Basic Overseer Server

afs.bos.baktime Backup Time  
Date/Time stamp  
Backup Time

afs.bos.cell Cell  
String  
Cell

afs.bos.cmd Command  
String  
Command

afs.bos.content Content  
String  
Content

afs.bos.data Data  
Byte array  
Data

afs.bos.date Date  
Unsigned 32-bit integer  
Date

afs.bos.errcode Error Code  
Unsigned 32-bit integer  
Error Code

afs.bos.error Error  
String  
Error

afs.bos.file File  
String  
File

afs.bos.flags Flags  
Unsigned 32-bit integer  
Flags

```
afs.bos.host    Host
                String
                Host

afs.bos.instance Instance
                String
                Instance

afs.bos.key     Key
                Byte array
                key

afs.bos.keychecksum Key Checksum
                Unsigned 32-bit integer
                Key Checksum

afs.bos.keymodtime Key Modification Time
                Date/Time stamp
                Key Modification Time

afs.bos.keyspare2 Key Spare 2
                Unsigned 32-bit integer
                Key Spare 2

afs.bos.kvno    Key Version Number
                Unsigned 32-bit integer
                Key Version Number

afs.bos.newtime New Time
                Date/Time stamp
                New Time

afs.bos.number  Number
                Unsigned 32-bit integer
                Number

afs.bos.oldtime Old Time
                Date/Time stamp
                Old Time

afs.bos.opcode  Operation
                Unsigned 32-bit integer
                Operation

afs.bos.parm    Parm
                String
                Parm

afs.bos.path    Path
                String
                Path

afs.bos.size    Size
                Unsigned 32-bit integer
                Size

afs.bos.spare1  Spare1
                String
                Spare1

afs.bos.spare2  Spare2
                String
                Spare2
```

```
afs.bos.spare3  Spare3
  String
  Spare3

afs.bos.status  Status
  Signed 32-bit integer
  Status

afs.bos.statusdesc  Status Description
  String
  Status Description

afs.bos.type  Type
  String
  Type

afs.bos.user  User
  String
  User

afs.cb  Callback
  Boolean
  Callback

afs.cb.callback.expires  Expires
  Date/Time stamp
  Expires

afs.cb.callback.type  Type
  Unsigned 32-bit integer
  Type

afs.cb.callback.version  Version
  Unsigned 32-bit integer
  Version

afs.cb.errcode  Error Code
  Unsigned 32-bit integer
  Error Code

afs.cb.fid.uniq  FileID (Uniqifier)
  Unsigned 32-bit integer
  File ID (Uniqifier)

afs.cb.fid.vnode  FileID (VNode)
  Unsigned 32-bit integer
  File ID (VNode)

afs.cb.fid.volume  FileID (Volume)
  Unsigned 32-bit integer
  File ID (Volume)

afs.cb.opcode  Operation
  Unsigned 32-bit integer
  Operation

afs.error  Error
  Boolean
  Error

afs.error.opcode  Operation
  Unsigned 32-bit integer
  Operation
```

```
afs.fs File Server
  Boolean
  File Server
afs.fs.acl.a _A_dminister
  Boolean
  Administer
afs.fs.acl.count.negative ACL Count (Negative)
  Unsigned 32-bit integer
  Number of Negative ACLs
afs.fs.acl.count.positive ACL Count (Positive)
  Unsigned 32-bit integer
  Number of Positive ACLs
afs.fs.acl.d _D_etele
  Boolean
  Delete
afs.fs.acl.datasize ACL Size
  Unsigned 32-bit integer
  ACL Data Size
afs.fs.acl.entity Entity (User/Group)
  String
  ACL Entity (User/Group)
afs.fs.acl.i _I_nsert
  Boolean
  Insert
afs.fs.acl.k _L_ock
  Boolean
  Lock
afs.fs.acl.l _L_ookup
  Boolean
  Lookup
afs.fs.acl.r _R_ead
  Boolean
  Read
afs.fs.acl.w _W_rite
  Boolean
  Write
afs.fs.callback.expires Expires
  Time duration
  Expires
afs.fs.callback.type Type
  Unsigned 32-bit integer
  Type
afs.fs.callback.version Version
  Unsigned 32-bit integer
  Version
afs.fs.cps.spare1 CPS Spare1
  Unsigned 32-bit integer
  CPS Spare1
```

```
afs.fs.cps.spare2  CPS Spare2
  Unsigned 32-bit integer
  CPS Spare2

afs.fs.cps.spare3  CPS Spare3
  Unsigned 32-bit integer
  CPS Spare3

afs.fs.data  Data
  Byte array
  Data

afs.fs.errcode  Error Code
  Unsigned 32-bit integer
  Error Code

afs.fs.fid.uniq  FileID (Uniqifier)
  Unsigned 32-bit integer
  File ID (Uniqifier)

afs.fs.fid.vnode  FileID (VNode)
  Unsigned 32-bit integer
  File ID (VNode)

afs.fs.fid.volume  FileID (Volume)
  Unsigned 32-bit integer
  File ID (Volume)

afs.fs.flength  FLength
  Unsigned 32-bit integer
  FLength

afs.fs.flength64  FLength64
  Unsigned 64-bit integer
  FLength64

afs.fs.ipaddr  IP Addr
  IPv4 address
  IP Addr

afs.fs.length  Length
  Unsigned 32-bit integer
  Length

afs.fs.length64  Length64
  Unsigned 64-bit integer
  Length64

afs.fs.motd  Message of the Day
  String
  Message of the Day

afs.fs.name  Name
  String
  Name

afs.fs.newname  New Name
  String
  New Name

afs.fs.offlinemsg  Offline Message
  String
  Volume Name
```

```
afs.fs.offset  Offset
  Unsigned 32-bit integer
  Offset

afs.fs.offset64  Offset64
  Unsigned 64-bit integer
  Offset64

afs.fs.oldname  Old Name
  String
  Old Name

afs.fs.opcode  Operation
  Unsigned 32-bit integer
  Operation

afs.fs.status.anonymousaccess  Anonymous Access
  Unsigned 32-bit integer
  Anonymous Access

afs.fs.status.author  Author
  Unsigned 32-bit integer
  Author

afs.fs.status.calleraccess  Caller Access
  Unsigned 32-bit integer
  Caller Access

afs.fs.status.clientmodtime  Client Modification Time
  Date/Time stamp
  Client Modification Time

afs.fs.status.dataversion  Data Version
  Unsigned 32-bit integer
  Data Version

afs.fs.status.dataversionhigh  Data Version (High)
  Unsigned 32-bit integer
  Data Version (High)

afs.fs.status.filetype  File Type
  Unsigned 32-bit integer
  File Type

afs.fs.status.group  Group
  Unsigned 32-bit integer
  Group

afs.fs.status.interfaceversion  Interface Version
  Unsigned 32-bit integer
  Interface Version

afs.fs.status.length  Length
  Unsigned 32-bit integer
  Length

afs.fs.status.linkcount  Link Count
  Unsigned 32-bit integer
  Link Count

afs.fs.status.mask  Mask
  Unsigned 32-bit integer
  Mask
```



```
afs.fs.status.mask.fsync  FSync
    Boolean
    FSync

afs.fs.status.mask.setgroup  Set Group
    Boolean
    Set Group

afs.fs.status.mask.setmode  Set Mode
    Boolean
    Set Mode

afs.fs.status.mask.setmodtime  Set Modification Time
    Boolean
    Set Modification Time

afs.fs.status.mask.setowner  Set Owner
    Boolean
    Set Owner

afs.fs.status.mask.setsegsz  Set Segment Size
    Boolean
    Set Segment Size

afs.fs.status.mode  Unix Mode
    Unsigned 32-bit integer
    Unix Mode

afs.fs.status.owner  Owner
    Unsigned 32-bit integer
    Owner

afs.fs.status.parentunique  Parent Unique
    Unsigned 32-bit integer
    Parent Unique

afs.fs.status.parentvnode  Parent VNode
    Unsigned 32-bit integer
    Parent VNode

afs.fs.status.segsz  Segment Size
    Unsigned 32-bit integer
    Segment Size

afs.fs.status.servermodtime  Server Modification Time
    Date/Time stamp
    Server Modification Time

afs.fs.status.spare2  Spare 2
    Unsigned 32-bit integer
    Spare 2

afs.fs.status.spare3  Spare 3
    Unsigned 32-bit integer
    Spare 3

afs.fs.status.spare4  Spare 4
    Unsigned 32-bit integer
    Spare 4

afs.fs.status.synccounter  Sync Counter
    Unsigned 32-bit integer
    Sync Counter
```

```
afs.fs.symlink.content  Symlink Content
    String
    Symlink Content
afs.fs.symlink.name    Symlink Name
    String
    Symlink Name
afs.fs.timestamp       Timestamp
    Date/Time stamp
    Timestamp
afs.fs.token           Token
    Byte array
    Token
afs.fs.viceid          Vice ID
    Unsigned 32-bit integer
    Vice ID
afs.fs.vicelocktype    Vice Lock Type
    Unsigned 32-bit integer
    Vice Lock Type
afs.fs.volid           Volume ID
    Unsigned 32-bit integer
    Volume ID
afs.fs.volname         Volume Name
    String
    Volume Name
afs.fs.volsync.spare1  Volume Creation Timestamp
    Date/Time stamp
    Volume Creation Timestamp
afs.fs.volsync.spare2  Spare 2
    Unsigned 32-bit integer
    Spare 2
afs.fs.volsync.spare3  Spare 3
    Unsigned 32-bit integer
    Spare 3
afs.fs.volsync.spare4  Spare 4
    Unsigned 32-bit integer
    Spare 4
afs.fs.volsync.spare5  Spare 5
    Unsigned 32-bit integer
    Spare 5
afs.fs.volsync.spare6  Spare 6
    Unsigned 32-bit integer
    Spare 6
afs.fs.xstats.clientversion  Client Version
    Unsigned 32-bit integer
    Client Version
afs.fs.xstats.collnumber    Collection Number
    Unsigned 32-bit integer
    Collection Number
```

```
afs.fs.xstats.timestamp  XStats Timestamp
    Unsigned 32-bit integer
    XStats Timestamp

afs.fs.xstats.version    XStats Version
    Unsigned 32-bit integer
    XStats Version

afs.kauth                KAuth
    Boolean
    Kerberos Auth Server

afs.kauth.data           Data
    Byte array
    Data

afs.kauth.domain        Domain
    String
    Domain

afs.kauth.errcode       Error Code
    Unsigned 32-bit integer
    Error Code

afs.kauth.kvno          Key Version Number
    Unsigned 32-bit integer
    Key Version Number

afs.kauth.name          Name
    String
    Name

afs.kauth.opcode        Operation
    Unsigned 32-bit integer
    Operation

afs.kauth.princ         Principal
    String
    Principal

afs.kauth.realm         Realm
    String
    Realm

afs.prot                Protection
    Boolean
    Protection Server

afs.prot.count          Count
    Unsigned 32-bit integer
    Count

afs.prot.errcode        Error Code
    Unsigned 32-bit integer
    Error Code

afs.prot.flag           Flag
    Unsigned 32-bit integer
    Flag

afs.prot.gid            Group ID
    Unsigned 32-bit integer
    Group ID
```

```
afs.prot.id ID
  Unsigned 32-bit integer
  ID

afs.prot.maxgid Maximum Group ID
  Unsigned 32-bit integer
  Maximum Group ID

afs.prot.maxuid Maximum User ID
  Unsigned 32-bit integer
  Maximum User ID

afs.prot.name Name
  String
  Name

afs.prot.newid New ID
  Unsigned 32-bit integer
  New ID

afs.prot.oldid Old ID
  Unsigned 32-bit integer
  Old ID

afs.prot.opcode Operation
  Unsigned 32-bit integer
  Operation

afs.prot.pos Position
  Unsigned 32-bit integer
  Position

afs.prot.uid User ID
  Unsigned 32-bit integer
  User ID

afs.repframe Reply Frame
  Frame number
  Reply Frame

afs.reqframe Request Frame
  Frame number
  Request Frame

afs.rmtsys Rmtsys
  Boolean
  Rmtsys

afs.rmtsys.opcode Operation
  Unsigned 32-bit integer
  Operation

afs.time Time from request
  Time duration
  Time between Request and Reply for AFS calls

afs.ubik Ubik
  Boolean
  Ubik

afs.ubik.activewrite Active Write
  Unsigned 32-bit integer
  Active Write
```

```
afs.ubik.addr    Address
  IPv4 address
  Address

afs.ubik.amsyncsite  Am Sync Site
  Unsigned 32-bit integer
  Am Sync Site

afs.ubik.anyreadlocks  Any Read Locks
  Unsigned 32-bit integer
  Any Read Locks

afs.ubik.anywritelocks  Any Write Locks
  Unsigned 32-bit integer
  Any Write Locks

afs.ubik.beaconsincdown  Beacon Since Down
  Unsigned 32-bit integer
  Beacon Since Down

afs.ubik.currentdb  Current DB
  Unsigned 32-bit integer
  Current DB

afs.ubik.currenttran  Current Transaction
  Unsigned 32-bit integer
  Current Transaction

afs.ubik.epochtime  Epoch Time
  Date/Time stamp
  Epoch Time

afs.ubik.errcode  Error Code
  Unsigned 32-bit integer
  Error Code

afs.ubik.file  File
  Unsigned 32-bit integer
  File

afs.ubik.interface  Interface Address
  IPv4 address
  Interface Address

afs.ubik.isclone  Is Clone
  Unsigned 32-bit integer
  Is Clone

afs.ubik.lastbeaconsent  Last Beacon Sent
  Date/Time stamp
  Last Beacon Sent

afs.ubik.lastvote  Last Vote
  Unsigned 32-bit integer
  Last Vote

afs.ubik.lastvotetime  Last Vote Time
  Date/Time stamp
  Last Vote Time

afs.ubik.lastyesclaim  Last Yes Claim
  Date/Time stamp
  Last Yes Claim
```

```
afs.ubik.lastyeshost  Last Yes Host
    IPv4 address
    Last Yes Host

afs.ubik.lastyesstate  Last Yes State
    Unsigned 32-bit integer
    Last Yes State

afs.ubik.lastyesttime  Last Yes Time
    Date/Time stamp
    Last Yes Time

afs.ubik.length  Length
    Unsigned 32-bit integer
    Length

afs.ubik.lockedpages  Locked Pages
    Unsigned 32-bit integer
    Locked Pages

afs.ubik.locktype  Lock Type
    Unsigned 32-bit integer
    Lock Type

afs.ubik.lowesthost  Lowest Host
    IPv4 address
    Lowest Host

afs.ubik.lowesttime  Lowest Time
    Date/Time stamp
    Lowest Time

afs.ubik.now  Now
    Date/Time stamp
    Now

afs.ubik.nservers  Number of Servers
    Unsigned 32-bit integer
    Number of Servers

afs.ubik.opcode  Operation
    Unsigned 32-bit integer
    Operation

afs.ubik.position  Position
    Unsigned 32-bit integer
    Position

afs.ubik.recoverystate  Recovery State
    Unsigned 32-bit integer
    Recovery State

afs.ubik.site  Site
    IPv4 address
    Site

afs.ubik.state  State
    Unsigned 32-bit integer
    State

afs.ubik.synchost  Sync Host
    IPv4 address
    Sync Host
```

```
afs.ubik.syncsiteuntil  Sync Site Until
    Date/Time stamp
    Sync Site Until

afs.ubik.synctime  Sync Time
    Date/Time stamp
    Sync Time

afs.ubik.tidcounter  TID Counter
    Unsigned 32-bit integer
    TID Counter

afs.ubik.up  Up
    Unsigned 32-bit integer
    Up

afs.ubik.version.counter  Counter
    Unsigned 32-bit integer
    Counter

afs.ubik.version.epoch  Epoch
    Date/Time stamp
    Epoch

afs.ubik.voteend  Vote Ends
    Date/Time stamp
    Vote Ends

afs.ubik.votestart  Vote Started
    Date/Time stamp
    Vote Started

afs.ubik.votetype  Vote Type
    Unsigned 32-bit integer
    Vote Type

afs.ubik.writelockedpages  Write Locked Pages
    Unsigned 32-bit integer
    Write Locked Pages

afs.ubik.writetran  Write Transaction
    Unsigned 32-bit integer
    Write Transaction

afs.update  Update
    Boolean
    Update Server

afs.update.opcode  Operation
    Unsigned 32-bit integer
    Operation

afs.vldb  VLDB
    Boolean
    Volume Location Database Server

afs.vldb.bkvol  Backup Volume ID
    Unsigned 32-bit integer
    Read-Only Volume ID

afs.vldb.bump  Bumped Volume ID
    Unsigned 32-bit integer
    Bumped Volume ID
```

```
afs.vldb.clonevol  Clone Volume ID
    Unsigned 32-bit integer
    Clone Volume ID

afs.vldb.count  Volume Count
    Unsigned 32-bit integer
    Volume Count

afs.vldb.errcode  Error Code
    Unsigned 32-bit integer
    Error Code

afs.vldb.flags  Flags
    Unsigned 32-bit integer
    Flags

afs.vldb.flags.bkexists  Backup Exists
    Boolean
    Backup Exists

afs.vldb.flags.dfsfileset  DFS Fileset
    Boolean
    DFS Fileset

afs.vldb.flags.roexists  Read-Only Exists
    Boolean
    Read-Only Exists

afs.vldb.flags.rwexists  Read/Write Exists
    Boolean
    Read/Write Exists

afs.vldb.id  Volume ID
    Unsigned 32-bit integer
    Volume ID

afs.vldb.index  Volume Index
    Unsigned 32-bit integer
    Volume Index

afs.vldb.name  Volume Name
    String
    Volume Name

afs.vldb.nextindex  Next Volume Index
    Unsigned 32-bit integer
    Next Volume Index

afs.vldb.numservers  Number of Servers
    Unsigned 32-bit integer
    Number of Servers

afs.vldb.opcode  Operation
    Unsigned 32-bit integer
    Operation

afs.vldb.partition  Partition
    String
    Partition

afs.vldb.rovol  Read-Only Volume ID
    Unsigned 32-bit integer
    Read-Only Volume ID
```



```
afs.vldb.rwvol  Read-Write Volume ID
  Unsigned 32-bit integer
  Read-Only Volume ID

afs.vldb.server  Server
  IPv4 address
  Server

afs.vldb.serverflags  Server Flags
  Unsigned 32-bit integer
  Server Flags

afs.vldb.serverip  Server IP
  IPv4 address
  Server IP

afs.vldb.serveruniq  Server Unique Address
  Unsigned 32-bit integer
  Server Unique Address

afs.vldb.serveruuid  Server UUID
  Byte array
  Server UUID

afs.vldb.spare1  Spare 1
  Unsigned 32-bit integer
  Spare 1

afs.vldb.spare2  Spare 2
  Unsigned 32-bit integer
  Spare 2

afs.vldb.spare3  Spare 3
  Unsigned 32-bit integer
  Spare 3

afs.vldb.spare4  Spare 4
  Unsigned 32-bit integer
  Spare 4

afs.vldb.spare5  Spare 5
  Unsigned 32-bit integer
  Spare 5

afs.vldb.spare6  Spare 6
  Unsigned 32-bit integer
  Spare 6

afs.vldb.spare7  Spare 7
  Unsigned 32-bit integer
  Spare 7

afs.vldb.spare8  Spare 8
  Unsigned 32-bit integer
  Spare 8

afs.vldb.spare9  Spare 9
  Unsigned 32-bit integer
  Spare 9

afs.vldb.type  Volume Type
  Unsigned 32-bit integer
  Volume Type
```

```
afs.vol Volume Server
  Boolean
  Volume Server

afs.vol.count Volume Count
  Unsigned 32-bit integer
  Volume Count

afs.vol.errcode Error Code
  Unsigned 32-bit integer
  Error Code

afs.vol.id Volume ID
  Unsigned 32-bit integer
  Volume ID

afs.vol.name Volume Name
  String
  Volume Name

afs.vol.opcode Operation
  Unsigned 32-bit integer
  Operation
```

#### **Apache JServ Protocol v1.3 (ajp13)**

```
ajp13.code Code
  String
  Type Code

ajp13.data Data
  String
  Data

ajp13.hname HNAME
  String
  Header Name

ajp13.hval HVAL
  String
  Header Value

ajp13.len Length
  Unsigned 16-bit integer
  Data Length

ajp13.magic Magic
  Byte array
  Magic Number

ajp13.method Method
  String
  HTTP Method

ajp13.nhdr NHDR
  Unsigned 16-bit integer
  Num Headers

ajp13.port PORT
  Unsigned 16-bit integer
  Port
```

```
ajp13.raddr  RADDR
             String
             Remote Address

ajp13.reusep  REUSEP
             Unsigned 8-bit integer
             Reuse Connection?

ajp13.rhost  RHOST
             String
             Remote Host

ajp13.rlen   RLEN
             Unsigned 16-bit integer
             Requested Length

ajp13.rmsg   RMSG
             String
             HTTP Status Message

ajp13.rstatus RSTATUS
             Unsigned 16-bit integer
             HTTP Status Code

ajp13.srv    SRV
             String
             Server

ajp13.sslp   SSLP
             Unsigned 8-bit integer
             Is SSL?

ajp13.uri    URI
             String
             HTTP URI

ajp13.ver    Version
             String
             HTTP Version
```

**Apple Filing Protocol (afp)**

```
afp.AFPVersion  AFP Version
                String
                Client AFP version

afp.UAM  UAM
         String
         User Authentication Method

afp.access  Access mode
           Unsigned 8-bit integer
           Fork access mode

afp.access.deny_read  Deny read
                     Boolean
                     Deny read

afp.access.deny_write  Deny write
                      Boolean
                      Deny write
```

```
afp.access.read    Read
                  Boolean
                  Open for reading
afp.access.write  Write
                  Boolean
                  Open for writing
afp.access_bitmap Bitmap
                  Unsigned 16-bit integer
                  Bitmap (reserved)
afp.ace_applicable ACE
                  Byte array
                  ACE applicable
afp.ace_flags     Flags
                  Unsigned 32-bit integer
                  ACE flags
afp.ace_flags.allow Allow
                  Boolean
                  Allow rule
afp.ace_flags.deny Deny
                  Boolean
                  Deny rule
afp.ace_flags.directory_inherit Dir inherit
                  Boolean
                  Dir inherit
afp.ace_flags.file_inherit      File inherit
                  Boolean
                  File inherit
afp.ace_flags.inherited        Inherited
                  Boolean
                  Inherited
afp.ace_flags.limit_inherit     Limit inherit
                  Boolean
                  Limit inherit
afp.ace_flags.only_inherit      Only inherit
                  Boolean
                  Only inherit
afp.ace_rights                  Rights
                  Unsigned 32-bit integer
                  ACE flags
afp.acl_access_bitmap           Bitmap
                  Unsigned 32-bit integer
                  ACL access bitmap
afp.acl_access_bitmap.append_data Append data/create subdir
                  Boolean
                  Append data to a file / create a subdirectory
afp.acl_access_bitmap.change_owner Change owner
                  Boolean
                  Change owner
```

```
afp.acl_access_bitmap.delete    Delete
    Boolean
    Delete

afp.acl_access_bitmap.delete_child  Delete dir
    Boolean
    Delete directory

afp.acl_access_bitmap.execute    Execute/Search
    Boolean
    Execute a program

afp.acl_access_bitmap.generic_all  Generic all
    Boolean
    Generic all

afp.acl_access_bitmap.generic_execute  Generic execute
    Boolean
    Generic execute

afp.acl_access_bitmap.generic_read  Generic read
    Boolean
    Generic read

afp.acl_access_bitmap.generic_write  Generic write
    Boolean
    Generic write

afp.acl_access_bitmap.read_attrs  Read attributes
    Boolean
    Read attributes

afp.acl_access_bitmap.read_data  Read/List
    Boolean
    Read data / list directory

afp.acl_access_bitmap.read_extattrs  Read extended attributes
    Boolean
    Read extended attributes

afp.acl_access_bitmap.read_security  Read security
    Boolean
    Read access rights

afp.acl_access_bitmap.synchronize  Synchronize
    Boolean
    Synchronize

afp.acl_access_bitmap.write_attrs  Write attributes
    Boolean
    Write attributes

afp.acl_access_bitmap.write_data  Write/Add file
    Boolean
    Write data to a file / add a file to a directory

afp.acl_access_bitmap.write_extattrs  Write extended attributes
    Boolean
    Write extended attributes

afp.acl_access_bitmap.write_security  Write security
    Boolean
    Write access rights
```

```
afp.acl_entrycount  Count
    Unsigned 32-bit integer
    Number of ACL entries

afp.acl_flags  ACL flags
    Unsigned 32-bit integer
    ACL flags

afp.acl_list_bitmap  ACL bitmap
    Unsigned 16-bit integer
    ACL control list bitmap

afp.acl_list_bitmap.ACL  ACL
    Boolean
    ACL

afp.acl_list_bitmap.GRPUUID  GRPUUID
    Boolean
    Group UUID

afp.acl_list_bitmap.Inherit  Inherit
    Boolean
    Inherit ACL

afp.acl_list_bitmap.REMOVEACL  Remove ACL
    Boolean
    Remove ACL

afp.acl_list_bitmap.UUID  UUID
    Boolean
    User UUID

afp.actual_count  Count
    Signed 32-bit integer
    Number of bytes returned by read/write

afp.afp_login_flags  Flags
    Unsigned 16-bit integer
    Login flags

afp.appl_index  Index
    Unsigned 16-bit integer
    Application index

afp.appl_tag  Tag
    Unsigned 32-bit integer
    Application tag

afp.backup_date  Backup date
    Date/Time stamp
    Backup date

afp.cat_count  Cat count
    Unsigned 32-bit integer
    Number of structures returned

afp.cat_position  Position
    Byte array
    Reserved

afp.cat_req_matches  Max answers
    Signed 32-bit integer
    Maximum number of matches to return.
```

```
afp.command    Command
               Unsigned 8-bit integer
               AFP function

afp.comment    Comment
               String
               File/folder comment

afp.create_flag  Hard create
               Boolean
               Soft/hard create file

afp.creation_date  Creation date
                 Date/Time stamp
                 Creation date

afp.data_fork_len  Data fork size
                 Unsigned 32-bit integer
                 Data fork size

afp.did         DID
               Unsigned 32-bit integer
               Parent directory ID

afp.dir_ar      Access rights
               Unsigned 32-bit integer
               Directory access rights

afp.dir_ar.blank  Blank access right
                 Boolean
                 Blank access right

afp.dir_ar.e_read  Everyone has read access
                 Boolean
                 Everyone has read access

afp.dir_ar.e_search  Everyone has search access
                   Boolean
                   Everyone has search access

afp.dir_ar.e_write  Everyone has write access
                   Boolean
                   Everyone has write access

afp.dir_ar.g_read  Group has read access
                   Boolean
                   Group has read access

afp.dir_ar.g_search  Group has search access
                    Boolean
                    Group has search access

afp.dir_ar.g_write  Group has write access
                    Boolean
                    Group has write access

afp.dir_ar.o_read  Owner has read access
                   Boolean
                   Owner has read access

afp.dir_ar.o_search  Owner has search access
                    Boolean
                    Owner has search access
```

```
afp.dir_ar.o_write  Owner has write access
  Boolean
  Gwner has write access

afp.dir_ar.u_owner  User is the owner
  Boolean
  Current user is the directory owner

afp.dir_ar.u_read   User has read access
  Boolean
  User has read access

afp.dir_ar.u_search User has search access
  Boolean
  User has search access

afp.dir_ar.u_write  User has write access
  Boolean
  User has write access

afp.dir_attribute.backup_needed  Backup needed
  Boolean
  Directory needs to be backed up

afp.dir_attribute.delete_inhibit  Delete inhibit
  Boolean
  Delete inhibit

afp.dir_attribute.in_exported_folder  Shared area
  Boolean
  Directory is in a shared area

afp.dir_attribute.invisible  Invisible
  Boolean
  Directory is not visible

afp.dir_attribute.mounted  Mounted
  Boolean
  Directory is mounted

afp.dir_attribute.rename_inhibit  Rename inhibit
  Boolean
  Rename inhibit

afp.dir_attribute.set_clear  Set
  Boolean
  Clear/set attribute

afp.dir_attribute.share  Share point
  Boolean
  Directory is a share point

afp.dir_attribute.system  System
  Boolean
  Directory is a system directory

afp.dir_bitmap  Directory bitmap
  Unsigned 16-bit integer
  Directory bitmap

afp.dir_bitmap.UTF8_name  UTF-8 name
  Boolean
  Return UTF-8 name if directory
```



```
afp.dir_bitmap.access_rights  Access rights
    Boolean
    Return access rights if directory
afp.dir_bitmap.attributes    Attributes
    Boolean
    Return attributes if directory
afp.dir_bitmap.backup_date   Backup date
    Boolean
    Return backup date if directory
afp.dir_bitmap.create_date   Creation date
    Boolean
    Return creation date if directory
afp.dir_bitmap.did          DID
    Boolean
    Return parent directory ID if directory
afp.dir_bitmap.fid         File ID
    Boolean
    Return file ID if directory
afp.dir_bitmap.finder_info   Finder info
    Boolean
    Return finder info if directory
afp.dir_bitmap.group_id     Group id
    Boolean
    Return group id if directory
afp.dir_bitmap.long_name    Long name
    Boolean
    Return long name if directory
afp.dir_bitmap.mod_date     Modification date
    Boolean
    Return modification date if directory
afp.dir_bitmap.offspring_count  Offspring count
    Boolean
    Return offspring count if directory
afp.dir_bitmap.owner_id     Owner id
    Boolean
    Return owner id if directory
afp.dir_bitmap.short_name   Short name
    Boolean
    Return short name if directory
afp.dir_bitmap.unix_privs   UNIX privileges
    Boolean
    Return UNIX privileges if directory
afp.dir_group_id           Group ID
    Signed 32-bit integer
    Directory group ID
afp.dir_offspring         Offspring
    Unsigned 16-bit integer
    Directory offspring
```

```
afp.dir_owner_id  Owner ID
Signed 32-bit integer
Directory owner ID

afp.dt_ref  DT ref
Unsigned 16-bit integer
Desktop database reference num

afp.ext_data_fork_len  Extended data fork size
Unsigned 64-bit integer
Extended (>2GB) data fork length

afp.ext_resource_fork_len  Extended resource fork size
Unsigned 64-bit integer
Extended (>2GB) resource fork length

afp.extattr.data  Data
Byte array
Extendend attribute data

afp.extattr.len  Length
Unsigned 32-bit integer
Extended attribute length

afp.extattr.name  Name
String
Extended attribute name

afp.extattr.namelen  Length
Unsigned 16-bit integer
Extended attribute name length

afp.extattr.reply_size  Reply size
Unsigned 32-bit integer
Reply size

afp.extattr.req_count  Request Count
Unsigned 16-bit integer
Request Count.

afp.extattr.start_index  Index
Unsigned 32-bit integer
Start index

afp.extattr_bitmap  Bitmap
Unsigned 16-bit integer
Extended attributes bitmap

afp.extattr_bitmap.create  Create
Boolean
Create extended attribute

afp.extattr_bitmap.nofollow  No follow symlinks
Boolean
Do not follow symlink

afp.extattr_bitmap.replace  Replace
Boolean
Replace extended attribute

afp.file_attribute.backup_needed  Backup needed
Boolean
File needs to be backed up
```

```
afp.file_attribute.copy_protect  Copy protect
  Boolean
  copy protect

afp.file_attribute.delete_inhibit  Delete inhibit
  Boolean
  delete inhibit

afp.file_attribute.df_open  Data fork open
  Boolean
  Data fork already open

afp.file_attribute.invisible  Invisible
  Boolean
  File is not visible

afp.file_attribute.multi_user  Multi user
  Boolean
  multi user

afp.file_attribute.rename_inhibit  Rename inhibit
  Boolean
  rename inhibit

afp.file_attribute.rf_open  Resource fork open
  Boolean
  Resource fork already open

afp.file_attribute.set_clear  Set
  Boolean
  Clear/set attribute

afp.file_attribute.system  System
  Boolean
  File is a system file

afp.file_attribute.write_inhibit  Write inhibit
  Boolean
  Write inhibit

afp.file_bitmap  File bitmap
  Unsigned 16-bit integer
  File bitmap

afp.file_bitmap.UTF8_name  UTF-8 name
  Boolean
  Return UTF-8 name if file

afp.file_bitmap.attributes  Attributes
  Boolean
  Return attributes if file

afp.file_bitmap.backup_date  Backup date
  Boolean
  Return backup date if file

afp.file_bitmap.create_date  Creation date
  Boolean
  Return creation date if file

afp.file_bitmap.data_fork_len  Data fork size
  Boolean
  Return data fork size if file
```

```
afp.file_bitmap.did  DID
  Boolean
  Return parent directory ID if file
afp.file_bitmap.ex_data_fork_len  Extended data fork size
  Boolean
  Return extended (>2GB) data fork size if file
afp.file_bitmap.ex_resource_fork_len  Extended resource fork size
  Boolean
  Return extended (>2GB) resource fork size if file
afp.file_bitmap.fid  File ID
  Boolean
  Return file ID if file
afp.file_bitmap.finder_info  Finder info
  Boolean
  Return finder info if file
afp.file_bitmap.launch_limit  Launch limit
  Boolean
  Return launch limit if file
afp.file_bitmap.long_name  Long name
  Boolean
  Return long name if file
afp.file_bitmap.mod_date  Modification date
  Boolean
  Return modification date if file
afp.file_bitmap.resource_fork_len  Resource fork size
  Boolean
  Return resource fork size if file
afp.file_bitmap.short_name  Short name
  Boolean
  Return short name if file
afp.file_bitmap.unix_privs  UNIX privileges
  Boolean
  Return UNIX privileges if file
afp.file_creator  File creator
  String
  File creator
afp.file_flag  Dir
  Boolean
  Is a dir
afp.file_id  File ID
  Unsigned 32-bit integer
  File/directory ID
afp.file_type  File type
  String
  File type
afp.finder_info  Finder info
  Byte array
  Finder info
```

```
afp.flag From
  Unsigned 8-bit integer
  Offset is relative to start/end of the fork

afp.fork_type Resource fork
  Boolean
  Data/resource fork

afp.group_ID Group ID
  Unsigned 32-bit integer
  Group ID

afp.grpuuid GRPUUID
  Byte array
  Group UUID

afp.icon_index Index
  Unsigned 16-bit integer
  Icon index in desktop database

afp.icon_length Size
  Unsigned 16-bit integer
  Size for icon bitmap

afp.icon_tag Tag
  Unsigned 32-bit integer
  Icon tag

afp.icon_type Icon type
  Unsigned 8-bit integer
  Icon type

afp.last_written Last written
  Unsigned 32-bit integer
  Offset of the last byte written

afp.last_written64 Last written
  Unsigned 64-bit integer
  Offset of the last byte written (64 bits)

afp.lock_from End
  Boolean
  Offset is relative to the end of the fork

afp.lock_len Length
  Signed 32-bit integer
  Number of bytes to be locked/unlocked

afp.lock_len64 Length
  Signed 64-bit integer
  Number of bytes to be locked/unlocked (64 bits)

afp.lock_offset Offset
  Signed 32-bit integer
  First byte to be locked

afp.lock_offset64 Offset
  Signed 64-bit integer
  First byte to be locked (64 bits)

afp.lock_op unlock
  Boolean
  Lock/unlock op
```

```
afp.lock_range_start  Start
    Signed 32-bit integer
    First byte locked/unlocked

afp.lock_range_start64  Start
    Signed 64-bit integer
    First byte locked/unlocked (64 bits)

afp.long_name_offset  Long name offset
    Unsigned 16-bit integer
    Long name offset in packet

afp.map_id  ID
    Unsigned 32-bit integer
    User/Group ID

afp.map_id_type  Type
    Unsigned 8-bit integer
    Map ID type

afp.map_name  Name
    String
    User/Group name

afp.map_name_type  Type
    Unsigned 8-bit integer
    Map name type

afp.message  Message
    String
    Message

afp.message_bitmap  Bitmap
    Unsigned 16-bit integer
    Message bitmap

afp.message_bitmap.requested  Request message
    Boolean
    Message Requested

afp.message_bitmap.utf8  Message is UTF8
    Boolean
    Message is UTF8

afp.message_length  Len
    Unsigned 32-bit integer
    Message length

afp.message_type  Type
    Unsigned 16-bit integer
    Type of server message

afp.modification_date  Modification date
    Date/Time stamp
    Modification date

afp.newline_char  Newline char
    Unsigned 8-bit integer
    Value to compare ANDed bytes with when looking for newline

afp.newline_mask  Newline mask
    Unsigned 8-bit integer
    Value to AND bytes with when looking for newline
```

```
afp.offset  Offset
           Signed 32-bit integer
           Offset

afp.offset64  Offset
           Signed 64-bit integer
           Offset (64 bits)

afp.ofork  Fork
           Unsigned 16-bit integer
           Open fork reference number

afp.ofork_len  New length
           Signed 32-bit integer
           New length

afp.ofork_len64  New length
           Signed 64-bit integer
           New length (64 bits)

afp.pad  Pad
           No value
           Pad Byte

afp.passwd  Password
           String
           Password

afp.path_len  Len
           Unsigned 8-bit integer
           Path length

afp.path_name  Name
           String
           Path name

afp.path_type  Type
           Unsigned 8-bit integer
           Type of names

afp.path_unicode_hint  Unicode hint
           Unsigned 32-bit integer
           Unicode hint

afp.path_unicode_len  Len
           Unsigned 16-bit integer
           Path length (unicode)

afp.random  Random number
           Byte array
           UAM random number

afp.reply_size  Reply size
           Unsigned 16-bit integer
           Reply size

afp.reply_size32  Reply size
           Unsigned 32-bit integer
           Reply size

afp.req_count  Req count
           Unsigned 16-bit integer
           Maximum number of structures returned
```

```
afp.reqcount64    Count
                  Signed 64-bit integer
                  Request Count (64 bits)

afp.request_bitmap    Request bitmap
                      Unsigned 32-bit integer
                      Request bitmap

afp.request_bitmap.UTF8_name    UTF-8 name
                                Boolean
                                Search UTF-8 name

afp.request_bitmap.attributes    Attributes
                                Boolean
                                Search attributes

afp.request_bitmap.backup_date    Backup date
                                Boolean
                                Search backup date

afp.request_bitmap.create_date    Creation date
                                Boolean
                                Search creation date

afp.request_bitmap.data_fork_len    Data fork size
                                Boolean
                                Search data fork size

afp.request_bitmap.did    DID
                            Boolean
                            Search parent directory ID

afp.request_bitmap.ex_data_fork_len    Extended data fork size
                                Boolean
                                Search extended (>2GB) data fork size

afp.request_bitmap.ex_resource_fork_len    Extended resource fork size
                                Boolean
                                Search extended (>2GB) resource fork size

afp.request_bitmap.finder_info    Finder info
                                Boolean
                                Search finder info

afp.request_bitmap.long_name    Long name
                                Boolean
                                Search long name

afp.request_bitmap.mod_date    Modification date
                                Boolean
                                Search modification date

afp.request_bitmap.offspring_count    Offspring count
                                Boolean
                                Search offspring count

afp.request_bitmap.partial_names    Match on partial names
                                Boolean
                                Match on partial names

afp.request_bitmap.resource_fork_len    Resource fork size
                                Boolean
                                Search resource fork size
```



afp.reserved Reserved  
Byte array  
Reserved

afp.resource\_fork\_len Resource fork size  
Unsigned 32-bit integer  
Resource fork size

afp.response\_in Response in  
Frame number  
The response to this packet is in this packet

afp.response\_to Response to  
Frame number  
This packet is a response to the packet in this frame

afp.rw\_count Count  
Signed 32-bit integer  
Number of bytes to be read/written

afp.rw\_count64 Count  
Signed 64-bit integer  
Number of bytes to be read/written (64 bits)

afp.server\_time Server time  
Date/Time stamp  
Server time

afp.session\_token Token  
Byte array  
Session token

afp.session\_token\_len Len  
Unsigned 32-bit integer  
Session token length

afp.session\_token\_timestamp Time stamp  
Unsigned 32-bit integer  
Session time stamp

afp.session\_token\_type Type  
Unsigned 16-bit integer  
Session token type

afp.short\_name\_offset Short name offset  
Unsigned 16-bit integer  
Short name offset in packet

afp.start\_index Start index  
Unsigned 16-bit integer  
First structure returned

afp.start\_index32 Start index  
Unsigned 32-bit integer  
First structure returned

afp.struct\_size Struct size  
Unsigned 8-bit integer  
Sizeof of struct

afp.struct\_size16 Struct size  
Unsigned 16-bit integer  
Sizeof of struct

```
afp.time      Time from request
              Time duration
              Time between Request and Response for AFP cmds

afp.unicode_name_offset  Unicode name offset
                          Unsigned 16-bit integer
                          Unicode name offset in packet

afp.unix_privs.gid      GID
                          Unsigned 32-bit integer
                          Group ID

afp.unix_privs.permissions  Permissions
                          Unsigned 32-bit integer
                          Permissions

afp.unix_privs.ua_permissions  User's access rights
                          Unsigned 32-bit integer
                          User's access rights

afp.unix_privs.uid      UID
                          Unsigned 32-bit integer
                          User ID

afp.user      User
              String
              User

afp.user_ID    User ID
               Unsigned 32-bit integer
               User ID

afp.user_bitmap  Bitmap
                 Unsigned 16-bit integer
                 User Info bitmap

afp.user_bitmap.GID  Primary group ID
                     Boolean
                     Primary group ID

afp.user_bitmap.UID  User ID
                     Boolean
                     User ID

afp.user_bitmap.UUID  UUID
                      Boolean
                      UUID

afp.user_flag  Flag
               Unsigned 8-bit integer
               User Info flag

afp.user_len  Len
              Unsigned 16-bit integer
              User name length (unicode)

afp.user_name  User
               String
               User name (unicode)

afp.user_type  Type
               Unsigned 8-bit integer
               Type of user name
```

```
afp.uuid    UUID
            Byte array
            UUID

afp.vol_attribute.acls    ACLs
            Boolean
            Supports access control lists

afp.vol_attribute.blank_access_privs    Blank access privileges
            Boolean
            Supports blank access privileges

afp.vol_attribute.cat_search    Catalog search
            Boolean
            Supports catalog search operations

afp.vol_attribute.extended_attributes    Extended Attributes
            Boolean
            Supports Extended Attributes

afp.vol_attribute.fileIDs    File IDs
            Boolean
            Supports file IDs

afp.vol_attribute.inherit_parent_privs    Inherit parent privileges
            Boolean
            Inherit parent privileges

afp.vol_attribute.network_user_id    No Network User ID
            Boolean
            No Network User ID

afp.vol_attribute.no_exchange_files    No exchange files
            Boolean
            Exchange files not supported

afp.vol_attribute.passwd    Volume password
            Boolean
            Has a volume password

afp.vol_attribute.read_only    Read only
            Boolean
            Read only volume

afp.vol_attribute.unix_privs    UNIX access privileges
            Boolean
            Supports UNIX access privileges

afp.vol_attribute.utf8_names    UTF-8 names
            Boolean
            Supports UTF-8 names

afp.vol_attributes    Attributes
            Unsigned 16-bit integer
            Volume attributes

afp.vol_backup_date    Backup date
            Date/Time stamp
            Volume backup date

afp.vol_bitmap    Bitmap
            Unsigned 16-bit integer
            Volume bitmap
```

```
afp.vol_bitmap.attributes  Attributes
    Boolean
    Volume attributes

afp.vol_bitmap.backup_date  Backup date
    Boolean
    Volume backup date

afp.vol_bitmap.block_size  Block size
    Boolean
    Volume block size

afp.vol_bitmap.bytes_free  Bytes free
    Boolean
    Volume free bytes

afp.vol_bitmap.bytes_total  Bytes total
    Boolean
    Volume total bytes

afp.vol_bitmap.create_date  Creation date
    Boolean
    Volume creation date

afp.vol_bitmap.ex_bytes_free  Extended bytes free
    Boolean
    Volume extended (>2GB) free bytes

afp.vol_bitmap.ex_bytes_total  Extended bytes total
    Boolean
    Volume extended (>2GB) total bytes

afp.vol_bitmap.id  ID
    Boolean
    Volume ID

afp.vol_bitmap.mod_date  Modification date
    Boolean
    Volume modification date

afp.vol_bitmap.name  Name
    Boolean
    Volume name

afp.vol_bitmap.signature  Signature
    Boolean
    Volume signature

afp.vol_block_size  Block size
    Unsigned 32-bit integer
    Volume block size

afp.vol_bytes_free  Bytes free
    Unsigned 32-bit integer
    Free space

afp.vol_bytes_total  Bytes total
    Unsigned 32-bit integer
    Volume size

afp.vol_creation_date  Creation date
    Date/Time stamp
    Volume creation date
```

```
afp.vol_ex_bytes_free  Extended bytes free
    Unsigned 64-bit integer
    Extended (>2GB) free space

afp.vol_ex_bytes_total  Extended bytes total
    Unsigned 64-bit integer
    Extended (>2GB) volume size

afp.vol_flag_passwd    Password
    Boolean
    Volume is password-protected

afp.vol_flag_unix_priv  Unix privs
    Boolean
    Volume has unix privileges

afp.vol_id             Volume id
    Unsigned 16-bit integer
    Volume id

afp.vol_modification_date  Modification date
    Date/Time stamp
    Volume modification date

afp.vol_name           Volume
    String
    Volume name

afp.vol_name_offset     Volume name offset
    Unsigned 16-bit integer
    Volume name offset in packet

afp.vol_signature       Signature
    Unsigned 16-bit integer
    Volume signature
```

#### **Apple IP-over-IEEE 1394 (ap1394)**

```
ap1394.dst             Destination
    Byte array
    Destination address

ap1394.src             Source
    Byte array
    Source address

ap1394.type            Type
    Unsigned 16-bit integer
```

#### **AppleTalk Session Protocol (asp)**

```
asp.attn_code          Attn code
    Unsigned 16-bit integer
    asp attention code

asp.error              asp error
    Signed 32-bit integer
    return error code

asp.function           asp function
    Unsigned 8-bit integer
    asp function
```

```
asp.init_error  Error
  Unsigned 16-bit integer
  asp init error

asp.seq  Sequence
  Unsigned 16-bit integer
  asp sequence number

asp.server_addr.len  Length
  Unsigned 8-bit integer
  Address length.

asp.server_addr.type  Type
  Unsigned 8-bit integer
  Address type.

asp.server_addr.value  Value
  Byte array
  Address value

asp.server_directory  Directory service
  String
  Server directory service

asp.server_flag  Flag
  Unsigned 16-bit integer
  Server capabilities flag

asp.server_flag.copyfile  Support copyfile
  Boolean
  Server support copyfile

asp.server_flag.directory  Support directory services
  Boolean
  Server support directory services

asp.server_flag.fast_copy  Support fast copy
  Boolean
  Server support fast copy

asp.server_flag.no_save_passwd  Don't allow save password
  Boolean
  Don't allow save password

asp.server_flag.notify  Support server notifications
  Boolean
  Server support notifications

asp.server_flag.passwd  Support change password
  Boolean
  Server support change password

asp.server_flag.reconnect  Support server reconnect
  Boolean
  Server support reconnect

asp.server_flag.srv_msg  Support server message
  Boolean
  Support server message

asp.server_flag.srv_sig  Support server signature
  Boolean
  Support server signature
```

```
asp.server_flag.tcpip  Support TCP/IP
  Boolean
  Server support TCP/IP

asp.server_flag.utf8_name  Support UTF8 server name
  Boolean
  Server support UTF8 server name

asp.server_icon  Icon bitmap
  Byte array
  Server icon bitmap

asp.server_name  Server name
  String
  Server name

asp.server_signature  Server signature
  Byte array
  Server signature

asp.server_type  Server type
  String
  Server type

asp.server_uams  UAM
  String
  UAM

asp.server_utf8_name  Server name (UTF8)
  String
  Server name (UTF8)

asp.server_utf8_name_len  Server name length
  Unsigned 16-bit integer
  UTF8 server name length

asp.server_vers  AFP version
  String
  AFP version

asp.session_id  Session ID
  Unsigned 8-bit integer
  asp session id

asp.size  size
  Unsigned 16-bit integer
  asp available size for reply

asp.socket  Socket
  Unsigned 8-bit integer
  asp socket

asp.version  Version
  Unsigned 16-bit integer
  asp version

asp.zero_value  Pad (0)
  Byte array
  Pad
```

**AppleTalk Transaction Protocol packet (atp)**

```
atp.bitmap Bitmap
    Unsigned 8-bit integer
    Bitmap or sequence number

atp.ctrlinfo Control info
    Unsigned 8-bit integer
    control info

atp.eom EOM
    Boolean
    End-of-message

atp.fragment ATP Fragment
    Frame number
    ATP Fragment

atp.fragments ATP Fragments
    No value
    ATP Fragments

atp.function Function
    Unsigned 8-bit integer
    function code

atp.reassembled_in Reassembled ATP in frame
    Frame number
    This ATP packet is reassembled in this frame

atp.segment.error Desegmentation error
    Frame number
    Desegmentation error due to illegal segments

atp.segment.multipletails Multiple tail segments found
    Boolean
    Several tails were found when desegmenting the packet

atp.segment.overlap Segment overlap
    Boolean
    Segment overlaps with other segments

atp.segment.overlap.conflict Conflicting data in segment overlap
    Boolean
    Overlapping segments contained conflicting data

atp.segment.toolongsegment Segment too long
    Boolean
    Segment contained data past end of packet

atp.sts STS
    Boolean
    Send transaction status

atp.tid TID
    Unsigned 16-bit integer
    Transaction id

atp.treltimer TRel timer
    Unsigned 8-bit integer
    TRel timer
```



```
atp.user_bytes  User bytes
                Unsigned 32-bit integer
                User bytes

atp.xo         X0
                Boolean
                Exactly-once flag
```

#### **Appletalk Address Resolution Protocol (arp)**

```
arp.dst.hw     Target hardware address
                Byte array

arp.dst.hw_mac Target MAC address
                6-byte Hardware (MAC) Address

arp.dst.proto  Target protocol address
                Byte array

arp.dst.proto_id Target ID
                Byte array

arp.hard.size  Hardware size
                Unsigned 8-bit integer

arp.hard.type  Hardware type
                Unsigned 16-bit integer

arp.opcode     Opcode
                Unsigned 16-bit integer

arp.proto.size Protocol size
                Unsigned 8-bit integer

arp.proto.type Protocol type
                Unsigned 16-bit integer

arp.src.hw     Sender hardware address
                Byte array

arp.src.hw_mac Sender MAC address
                6-byte Hardware (MAC) Address

arp.src.proto  Sender protocol address
                Byte array

arp.src.proto_id Sender ID
                Byte array
```

#### **Application Configuration Access Protocol (acap)**

```
acap.request   Request
                Boolean
                TRUE if ACAP request

acap.response  Response
                Boolean
                TRUE if ACAP response
```

#### **Architecture for Control Networks (acn)**

```
acn.acn_reciprocal_channel Reciprocal Channel Number
                Unsigned 16-bit integer
                Reciprocal Channel
```

```
acn.acn_refuse_code  Refuse Code
    Unsigned 8-bit integer
acn.association      Association
    Unsigned 16-bit integer
acn.channel_number   Channel Number
    Unsigned 16-bit integer
acn.cid              CID
acn.client_protocol_id  Client Protocol ID
    Unsigned 32-bit integer
acn.dmp_address      Address
    Unsigned 8-bit integer
acn.dmp_address_data_pairs  Address-Data Pairs
    Byte array
    More address-data pairs
acn.dmp_adt          Address and Data Type
    Unsigned 8-bit integer
acn.dmp_adt_a        Size
    Unsigned 8-bit integer
acn.dmp_adt_d        Data Type
    Unsigned 8-bit integer
acn.dmp_adt_r        Relative
    Unsigned 8-bit integer
acn.dmp_adt_v        Virtual
    Unsigned 8-bit integer
acn.dmp_adt_x        Reserved
    Unsigned 8-bit integer
acn.dmp_data         Data
    Byte array
acn.dmp_data16       Addr
    Unsigned 16-bit integer
    Data16
acn.dmp_data24       Addr
    Unsigned 24-bit integer
    Data24
acn.dmp_data32       Addr
    Unsigned 32-bit integer
    Data32
acn.dmp_data8        Addr
    Unsigned 8-bit integer
    Data8
acn.dmp_reason_code  Reason Code
    Unsigned 8-bit integer
acn.dmp_vector       DMP Vector
    Unsigned 8-bit integer
```

```
acn.dmx.count    Count
                 Unsigned 16-bit integer
                 DMX Count

acn.dmx.increment Increment
                 Unsigned 16-bit integer
                 DMX Increment

acn.dmx.priority Priority
                 Unsigned 8-bit integer
                 DMX Priority

acn.dmx.seq_number Seq No
                 Unsigned 8-bit integer
                 DMX Sequence Number

acn.dmx.source_name Source
                 String
                 DMX Source Name

acn.dmx.start_code Start Code
                 Unsigned 16-bit integer
                 DMX Start Code

acn.dmx.universe Universe
                 Unsigned 16-bit integer
                 DMX Universe

acn.dmx_vector  Vector
                 Unsigned 32-bit integer
                 DMX Vector

acn.expiry      Expiry
                 Unsigned 16-bit integer

acn.first_member_to_ack First Member to ACK
                 Unsigned 16-bit integer

acn.first_missed_sequence First Missed Sequence
                 Unsigned 32-bit integer

acn.ip_address_type Addr Type
                 Unsigned 8-bit integer

acn.ipv4        IPV4
                 IPv4 address

acn.ipv6        IPV6
                 IPv6 address

acn.last_member_to_ack Last Member to ACK
                 Unsigned 16-bit integer

acn.last_missed_sequence Last Missed Sequence
                 Unsigned 32-bit integer

acn.mak_threshold MAK Threshold
                 Unsigned 16-bit integer

acn.member_id   Member ID
                 Unsigned 16-bit integer

acn.nak_holdoff NAK holdoff (ms)
                 Unsigned 16-bit integer
```

```
acn.nak_max_wait  NAK Max Wait (ms)
    Unsigned 16-bit integer
acn.nak_modulus  NAK Modulus
    Unsigned 16-bit integer
acn.nak_outbound_flag  NAK Outbound Flag
    Boolean
acn.oldest_available_wrapper  Oldest Available Wrapper
    Unsigned 32-bit integer
acn.packet_identifier  Packet Identifier
    String
acn.pdu  PDU
    No value
acn.pdu.flag_d  Data
    Boolean
    Data flag
acn.pdu.flag_h  Header
    Boolean
    Header flag
acn.pdu.flag_l  Length
    Boolean
    Length flag
acn.pdu.flag_v  Vector
    Boolean
    Vector flag
acn.pdu.flags  Flags
    Unsigned 8-bit integer
    PDU Flags
acn.port  Port
    Unsigned 16-bit integer
acn.postamble_size  Size of postamble
    Unsigned 16-bit integer
    Postamble size in bytes
acn.preamble_size  Size of preamble
    Unsigned 16-bit integer
    Preamble size in bytes
acn.protocol_id  Protocol ID
    Unsigned 32-bit integer
acn.reason_code  Reason Code
    Unsigned 8-bit integer
acn.reliable_sequence_number  Reliable Sequence Number
    Unsigned 32-bit integer
acn.sdt_vector  STD Vector
    Unsigned 8-bit integer
acn.session_count  Session Count
    Unsigned 16-bit integer
```

acn.total\_sequence\_number Total Sequence Number  
Unsigned 32-bit integer

### Art-Net (artnet)

artnet.tod\_control ArtTodControl packet  
No value  
Art-Net ArtTodControl packet

artnet.address ArtAddress packet  
No value  
Art-Net ArtAddress packet

artnet.address.command Command  
Unsigned 8-bit integer  
Command

artnet.address.long\_name Long Name  
String  
Long Name

artnet.address.short\_name Short Name  
String  
Short Name

artnet.address.subswitch Subswitch  
Unsigned 8-bit integer  
Subswitch

artnet.address.swin Input Subswitch  
No value  
Input Subswitch

artnet.address.swin\_1 Input Subswitch of Port 1  
Unsigned 8-bit integer  
Input Subswitch of Port 1

artnet.address.swin\_2 Input Subswitch of Port 2  
Unsigned 8-bit integer  
Input Subswitch of Port 2

artnet.address.swin\_3 Input Subswitch of Port 3  
Unsigned 8-bit integer  
Input Subswitch of Port 3

artnet.address.swin\_4 Input Subswitch of Port 4  
Unsigned 8-bit integer  
Input Subswitch of Port 4

artnet.address.swout Output Subswitch  
No value  
Output Subswitch

artnet.address.swout\_1 Output Subswitch of Port 1  
Unsigned 8-bit integer  
Output Subswitch of Port 1

artnet.address.swout\_2 Output Subswitch of Port 2  
Unsigned 8-bit integer  
Output Subswitch of Port 2

```
artnet.address.swout_3  Output Subswitch of Port 3
    Unsigned 8-bit integer
    Output Subswitch of Port 3
artnet.address.swout_4  Output Subswitch of Port 4
    Unsigned 8-bit integer
    Output Subswitch of Port 4
artnet.address.swvideo  SwVideo
    Unsigned 8-bit integer
    SwVideo
artnet.filler  filler
    Byte array
    filler
artnet.firmware_master  ArtFirmwareMaster packet
    No value
    Art-Net ArtFirmwareMaster packet
artnet.firmware_master.block_id  Block ID
    Unsigned 8-bit integer
    Block ID
artnet.firmware_master.data  data
    Byte array
    data
artnet.firmware_master.length  Length
    Unsigned 32-bit integer
    Length
artnet.firmware_master.type  Type
    Unsigned 8-bit integer
    Number of Ports
artnet.firmware_reply  ArtFirmwareReply packet
    No value
    Art-Net ArtFirmwareReply packet
artnet.firmware_reply.type  Type
    Unsigned 8-bit integer
    Number of Ports
artnet.header  Descriptor Header
    No value
    Art-Net Descriptor Header
artnet.header.id  ID
    String
    ArtNET ID
artnet.header.opcode  Opcode
    Unsigned 16-bit integer
    Art-Net message type
artnet.header.protver  ProVer
    Unsigned 16-bit integer
    Protocol revision number
artnet.input  ArtInput packet
    No value
    Art-Net ArtInput packet
```

```
artnet.input.input  Port Status
    No value
    Port Status

artnet.input.input_1  Status of Port 1
    Unsigned 8-bit integer
    Status of Port 1

artnet.input.input_2  Status of Port 2
    Unsigned 8-bit integer
    Status of Port 2

artnet.input.input_3  Status of Port 3
    Unsigned 8-bit integer
    Status of Port 3

artnet.input.input_4  Status of Port 4
    Unsigned 8-bit integer
    Status of Port 4

artnet.input.num_ports  Number of Ports
    Unsigned 16-bit integer
    Number of Ports

artnet.ip_prog  ArtIpProg packet
    No value
    ArtNET ArtIpProg packet

artnet.ip_prog.command  Command
    Unsigned 8-bit integer
    Command

artnet.ip_prog.command_prog_enable  Enable Programming
    Unsigned 8-bit integer
    Enable Programming

artnet.ip_prog.command_prog_ip  Program IP
    Unsigned 8-bit integer
    Program IP

artnet.ip_prog.command_prog_port  Program Port
    Unsigned 8-bit integer
    Program Port

artnet.ip_prog.command_prog_sm  Program Subnet Mask
    Unsigned 8-bit integer
    Program Subnet Mask

artnet.ip_prog.command_reset  Reset parameters
    Unsigned 8-bit integer
    Reset parameters

artnet.ip_prog.command_unused  Unused
    Unsigned 8-bit integer
    Unused

artnet.ip_prog.ip  IP Address
    IPv4 address
    IP Address

artnet.ip_prog.port  Port
    Unsigned 16-bit integer
    Port
```

```
artnet.ip_prog.sm Subnet mask
    IPv4 address
    IP Subnet mask

artnet.ip_prog_reply ArtIpProgReply packet
    No value
    Art-Net ArtIpProgReply packet

artnet.ip_prog_reply.ip IP Address
    IPv4 address
    IP Address

artnet.ip_prog_reply.port Port
    Unsigned 16-bit integer
    Port

artnet.ip_prog_reply.sm Subnet mask
    IPv4 address
    IP Subnet mask

artnet.output ArtDMX packet
    No value
    Art-Net ArtDMX packet

artnet.output.data DMX data
    No value
    DMX Data

artnet.output.data_filter DMX data filter
    Byte array
    DMX Data Filter

artnet.output.dmx_data DMX data
    No value
    DMX Data

artnet.output.length Length
    Unsigned 16-bit integer
    Length

artnet.output.physical Physical
    Unsigned 8-bit integer
    Physical

artnet.output.sequence Sequence
    Unsigned 8-bit integer
    Sequence

artnet.output.universe Universe
    Unsigned 16-bit integer
    Universe

artnet.poll ArtPoll packet
    No value
    Art-Net ArtPoll packet

artnet.poll.talktome TalkToMe
    Unsigned 8-bit integer
    TalkToMe

artnet.poll.talktome_reply_dest Reply destination
    Unsigned 8-bit integer
    Reply destination
```



```
artnet.poll.talktome_reply_type  Reply type
    Unsigned 8-bit integer
    Reply type

artnet.poll.talktome_unused      unused
    Unsigned 8-bit integer
    unused

artnet.poll_reply               ArtPollReply packet
    No value
    Art-Net ArtPollReply packet

artnet.poll_reply.esta_man       ESTA Code
    Unsigned 16-bit integer
    ESTA Code

artnet.poll_reply.good_input     Input Status
    No value
    Input Status

artnet.poll_reply.good_input_1   Input status of Port 1
    Unsigned 8-bit integer
    Input status of Port 1

artnet.poll_reply.good_input_2   Input status of Port 2
    Unsigned 8-bit integer
    Input status of Port 2

artnet.poll_reply.good_input_3   Input status of Port 3
    Unsigned 8-bit integer
    Input status of Port 3

artnet.poll_reply.good_input_4   Input status of Port 4
    Unsigned 8-bit integer
    Input status of Port 4

artnet.poll_reply.good_output    Output Status
    No value
    Port output status

artnet.poll_reply.good_output_1  Output status of Port 1
    Unsigned 8-bit integer
    Output status of Port 1

artnet.poll_reply.good_output_2  Output status of Port 2
    Unsigned 8-bit integer
    Output status of Port 2

artnet.poll_reply.good_output_3  Output status of Port 3
    Unsigned 8-bit integer
    Output status of Port 3

artnet.poll_reply.good_output_4  Output status of Port 4
    Unsigned 8-bit integer
    Outpus status of Port 4

artnet.poll_reply.ip_address     IP Address
    IPv4 address
    IP Address

artnet.poll_reply.long_name      Long Name
    String
    Long Name
```

```
artnet.poll_reply.mac    MAC
    6-byte Hardware (MAC) Address
    MAC

artnet.poll_reply.node_report  Node Report
    String
    Node Report

artnet.poll_reply.num_ports  Number of Ports
    Unsigned 16-bit integer
    Number of Ports

artnet.poll_reply.oem    Oem
    Unsigned 16-bit integer
    OEM

artnet.poll_reply.port_info  Port Info
    No value
    Port Info

artnet.poll_reply.port_nr    Port number
    Unsigned 16-bit integer
    Port Number

artnet.poll_reply.port_types  Port Types
    No value
    Port Types

artnet.poll_reply.port_types_1  Type of Port 1
    Unsigned 8-bit integer
    Type of Port 1

artnet.poll_reply.port_types_2  Type of Port 2
    Unsigned 8-bit integer
    Type of Port 2

artnet.poll_reply.port_types_3  Type of Port 3
    Unsigned 8-bit integer
    Type of Port 3

artnet.poll_reply.port_types_4  Type of Port 4
    Unsigned 8-bit integer
    Type of Port 4

artnet.poll_reply.short_name  Short Name
    String
    Short Name

artnet.poll_reply.status    Status
    Unsigned 8-bit integer
    Status

artnet.poll_reply.subswitch  SubSwitch
    Unsigned 16-bit integer
    Subswitch version

artnet.poll_reply.swin    Input Subswitch
    No value
    Input Subswitch

artnet.poll_reply.swin_1    Input Subswitch of Port 1
    Unsigned 8-bit integer
    Input Subswitch of Port 1
```

```
artnet.poll_reply.swin_2  Input Subswitch of Port 2
    Unsigned 8-bit integer
    Input Subswitch of Port 2
artnet.poll_reply.swin_3  Input Subswitch of Port 3
    Unsigned 8-bit integer
    Input Subswitch of Port 3
artnet.poll_reply.swin_4  Input Subswitch of Port 4
    Unsigned 8-bit integer
    Input Subswitch of Port 4
artnet.poll_reply.swmacro  SwMacro
    Unsigned 8-bit integer
    SwMacro
artnet.poll_reply.swout  Output Subswitch
    No value
    Output Subswitch
artnet.poll_reply.swout_1  Output Subswitch of Port 1
    Unsigned 8-bit integer
    Output Subswitch of Port 1
artnet.poll_reply.swout_2  Output Subswitch of Port 2
    Unsigned 8-bit integer
    Output Subswitch of Port 2
artnet.poll_reply.swout_3  Output Subswitch of Port 3
    Unsigned 8-bit integer
    Output Subswitch of Port 3
artnet.poll_reply.swout_4  Output Subswitch of Port 4
    Unsigned 8-bit integer
    Output Subswitch of Port 4
artnet.poll_reply.swremote  SwRemote
    Unsigned 8-bit integer
    SwRemote
artnet.poll_reply.swvideo  SwVideo
    Unsigned 8-bit integer
    SwVideo
artnet.poll_reply.ubea_version  UBEA Version
    Unsigned 8-bit integer
    UBEA version number
artnet.poll_reply.versinfo  Version Info
    Unsigned 16-bit integer
    Version info
artnet.poll_server_reply  ArtPollServerReply packet
    No value
    Art-Net ArtPollServerReply packet
artnet.rdm  ArtRdm packet
    No value
    Art-Net ArtRdm packet
artnet.rdm.address  Address
    Unsigned 8-bit integer
    Address
```

```
artnet.rdm.command  Command
    Unsigned 8-bit integer
    Command

artnet.spare  spare
    Byte array
    spare

artnet.tod_control.command  Command
    Unsigned 8-bit integer
    Command

artnet.tod_data  ArtTodData packet
    No value
    Art-Net ArtTodData packet

artnet.tod_data.address  Address
    Unsigned 8-bit integer
    Address

artnet.tod_data.block_count  Block Count
    Unsigned 8-bit integer
    Block Count

artnet.tod_data.command_response  Command Response
    Unsigned 8-bit integer
    Command Response

artnet.tod_data.port  Port
    Unsigned 8-bit integer
    Port

artnet.tod_data.tod  TOD
    Byte array
    TOD

artnet.tod_data.uid_count  UID Count
    Unsigned 8-bit integer
    UID Count

artnet.tod_data.uid_total  UID Total
    Unsigned 16-bit integer
    UID Total

artnet.tod_request  ArtTodRequest packet
    No value
    Art-Net ArtTodRequest packet

artnet.tod_request.ad_count  Address Count
    Unsigned 8-bit integer
    Address Count

artnet.tod_request.address  Address
    Byte array
    Address

artnet.tod_request.command  Command
    Unsigned 8-bit integer
    Command

artnet.video_data  ArtVideoData packet
    No value
    Art-Net ArtVideoData packet
```

```
artnet.video_data.data  Video Data
    Byte array
    Video Data

artnet.video_data.len_x  LenX
    Unsigned 8-bit integer
    LenX

artnet.video_data.len_y  LenY
    Unsigned 8-bit integer
    LenY

artnet.video_data.pos_x  PosX
    Unsigned 8-bit integer
    PosX

artnet.video_data.pos_y  PosY
    Unsigned 8-bit integer
    PosY

artnet.video_palette  ArtVideoPalette packet
    No value
    Art-Net ArtVideoPalette packet

artnet.video_palette.colour_blue  Colour Blue
    Byte array
    Colour Blue

artnet.video_palette.colour_green  Colour Green
    Byte array
    Colour Green

artnet.video_palette.colour_red  Colour Red
    Byte array
    Colour Red

artnet.video_setup  ArtVideoSetup packet
    No value
    ArtNET ArtVideoSetup packet

artnet.video_setup.control  control
    Unsigned 8-bit integer
    control

artnet.video_setup.first_font  First Font
    Unsigned 8-bit integer
    First Font

artnet.video_setup.font_data  Font data
    Byte array
    Font Date

artnet.video_setup.font_height  Font Height
    Unsigned 8-bit integer
    Font Height

artnet.video_setup.last_font  Last Font
    Unsigned 8-bit integer
    Last Font

artnet.video_setup.win_font_name  Windows Font Name
    String
    Windows Font Name
```

**Aruba – Aruba Discovery Protocol (adp)**

adp.id Transaction ID  
Unsigned 16-bit integer  
ADP transaction ID

adp.mac MAC address  
6-byte Hardware (MAC) Address  
MAC address

adp.switch Switch IP  
IPv4 address  
Switch IP address

adp.type Type  
Unsigned 16-bit integer  
ADP type

adp.version Version  
Unsigned 16-bit integer  
ADP version

**Async data over ISDN (V.120) (v120)**

v120.address Link Address  
Unsigned 16-bit integer

v120.control Control Field  
Unsigned 16-bit integer

v120.control.f Final  
Boolean

v120.control.ftype Frame type  
Unsigned 16-bit integer

v120.control.n\_r N(R)  
Unsigned 16-bit integer

v120.control.n\_s N(S)  
Unsigned 16-bit integer

v120.control.p Poll  
Boolean

v120.control.s\_ftype Supervisory frame type  
Unsigned 16-bit integer

v120.control.u\_modifier\_cmd Command  
Unsigned 8-bit integer

v120.control.u\_modifier\_resp Response  
Unsigned 8-bit integer

v120.header Header Field  
String

**Asynchronous Layered Coding (alc)**

alc.fec Forward Error Correction (FEC) header  
No value

alc.fec.encoding\_id FEC Encoding ID  
Unsigned 8-bit integer

```
alc.fec.esi   Encoding Symbol ID
              Unsigned 32-bit integer
alc.fec.fti   FEC Object Transmission Information
              No value
alc.fec.fti.encoding_symbol_length Encoding Symbol Length
              Unsigned 32-bit integer
alc.fec.fti.max_number_encoding_symbols Maximum Number of Encoding Symbols
              Unsigned 32-bit integer
alc.fec.fti.max_source_block_length Maximum Source Block Length
              Unsigned 32-bit integer
alc.fec.fti.transfer_length Transfer Length
              Unsigned 64-bit integer
alc.fec.instance_id FEC Instance ID
              Unsigned 8-bit integer
alc.fec.sbl   Source Block Length
              Unsigned 32-bit integer
alc.fec.sbn   Source Block Number
              Unsigned 32-bit integer
alc.lct       Layered Coding Transport (LCT) header
              No value
alc.lct.cci   Congestion Control Information
              Byte array
alc.lct.codepoint Codepoint
              Unsigned 8-bit integer
alc.lct.ert   Expected Residual Time
              Time duration
alc.lct.ext   Extension count
              Unsigned 8-bit integer
alc.lct.flags Flags
              No value
alc.lct.flags.close_object Close Object flag
              Boolean
alc.lct.flags.close_session Close Session flag
              Boolean
alc.lct.flags.ert_present Expected Residual Time present flag
              Boolean
alc.lct.flags.sct_present Sender Current Time present flag
              Boolean
alc.lct.fsize Field sizes (bytes)
              No value
alc.lct.fsize.cci Congestion Control Information field size
              Unsigned 8-bit integer
alc.lct.fsize.toi Transport Object Identifier field size
              Unsigned 8-bit integer
```

```

alc.lct.fsize.tsi  Transport Session Identifier field size
                   Unsigned 8-bit integer
alc.lct.hlen      Header length
                   Unsigned 16-bit integer
alc.lct.sct       Sender Current Time
                   Time duration
alc.lct.toi       Transport Object Identifier (up to 64 bites)
                   Unsigned 64-bit integer
alc.lct.toi_extended  Transport Object Identifier (up to 112 bits)
                   Byte array
alc.lct.tsi       Transport Session Identifier
                   Unsigned 64-bit integer
alc.lct.version   Version
                   Unsigned 8-bit integer
alc.payload       Payload
                   No value
alc.version       Version
                   Unsigned 8-bit integer

```

#### **AudioCodes TPNC (TrunkPack Network Control Protocol) (tpncp)**

```

tpncp.aal2_protocol_type  tpncp.aal2_protocol_type
                           Unsigned 8-bit integer
tpncp.aal2_rx_cid         tpncp.aal2_rx_cid
                           Unsigned 8-bit integer
tpncp.aal2_tx_cid         tpncp.aal2_tx_cid
                           Unsigned 8-bit integer
tpncp.aal2cid             tpncp.aal2cid
                           Unsigned 8-bit integer
tpncp.aal_type            tpncp.aal_type
                           Signed 32-bit integer
tpncp.abtsc               tpncp.abtsc
                           Unsigned 16-bit integer
tpncp.ac_isdn_info_elements_buffer  tpncp.ac_isdn_info_elements_buffer
                                       String
tpncp.ac_isdn_info_elements_buffer_length  tpncp.ac_isdn_info_elements_buffer_length
                                       Signed 32-bit integer
tpncp.ack1                tpncp.ack1
                           Signed 32-bit integer
tpncp.ack2                tpncp.ack2
                           Signed 32-bit integer
tpncp.ack3                tpncp.ack3
                           Signed 32-bit integer
tpncp.ack4                tpncp.ack4
                           Signed 32-bit integer

```



```
tpncp.ack_param1  tpncp.ack_param1
    Signed 32-bit integer
tpncp.ack_param2  tpncp.ack_param2
    Signed 32-bit integer
tpncp.ack_param3  tpncp.ack_param3
    Signed 32-bit integer
tpncp.ack_param4  tpncp.ack_param4
    Signed 32-bit integer
tpncp.ack_req_ind  tpncp.ack_req_ind
    Signed 32-bit integer
tpncp.acknowledge_error_code  tpncp.acknowledge_error_code
    Signed 32-bit integer
tpncp.acknowledge_status  tpncp.acknowledge_status
    Signed 32-bit integer
tpncp.acknowledge_table_index1  tpncp.acknowledge_table_index1
    String
tpncp.acknowledge_table_index2  tpncp.acknowledge_table_index2
    String
tpncp.acknowledge_table_index3  tpncp.acknowledge_table_index3
    String
tpncp.acknowledge_table_index4  tpncp.acknowledge_table_index4
    String
tpncp.acknowledge_table_name  tpncp.acknowledge_table_name
    String
tpncp.acknowledge_type  tpncp.acknowledge_type
    Signed 32-bit integer
tpncp.action  tpncp.action
    Signed 32-bit integer
tpncp.activate  tpncp.activate
    Signed 32-bit integer
tpncp.activation_direction  tpncp.activation_direction
    Signed 32-bit integer
tpncp.activation_option  tpncp.activation_option
    Unsigned 8-bit integer
tpncp.active  tpncp.active
    Signed 32-bit integer
tpncp.active_fiber_link  tpncp.active_fiber_link
    Signed 32-bit integer
tpncp.active_links_no  tpncp.active_links_no
    Signed 32-bit integer
tpncp.active_on_board  tpncp.active_on_board
    Signed 32-bit integer
tpncp.active_port_id  tpncp.active_port_id
    Unsigned 32-bit integer
```

```
tpncp.active_redundant_ter  tpncp.active_redundant_ter
    Signed 32-bit integer
tpncp.active_speaker_energy_threshold  tpncp.active_speaker_energy_threshold
    Signed 32-bit integer
tpncp.active_speaker_list_0  tpncp.active_speaker_list_0
    Signed 32-bit integer
tpncp.active_speaker_list_1  tpncp.active_speaker_list_1
    Signed 32-bit integer
tpncp.active_speaker_list_2  tpncp.active_speaker_list_2
    Signed 32-bit integer
tpncp.active_speaker_notification_enable  tpncp.active_speaker_notification_enab
    Signed 32-bit integer
tpncp.active_speaker_notification_min_interval  tpncp.active_speaker_notificatio
    Signed 32-bit integer
tpncp.active_speakers_energy_level_0  tpncp.active_speakers_energy_level_0
    Signed 32-bit integer
tpncp.active_speakers_energy_level_1  tpncp.active_speakers_energy_level_1
    Signed 32-bit integer
tpncp.active_speakers_energy_level_2  tpncp.active_speakers_energy_level_2
    Signed 32-bit integer
tpncp.active_voice_prompt_repository_index  tpncp.active_voice_prompt_repository
    Signed 32-bit integer
tpncp.activity_status  tpncp.activity_status
    Signed 32-bit integer
tpncp.actual_routes_configured  tpncp.actual_routes_configured
    Signed 32-bit integer
tpncp.add  tpncp.add
    Signed 32-bit integer
tpncp.additional_info_0_0  tpncp.additional_info_0_0
    Signed 32-bit integer
tpncp.additional_info_0_1  tpncp.additional_info_0_1
    Signed 32-bit integer
tpncp.additional_info_0_10  tpncp.additional_info_0_10
    Signed 32-bit integer
tpncp.additional_info_0_11  tpncp.additional_info_0_11
    Signed 32-bit integer
tpncp.additional_info_0_12  tpncp.additional_info_0_12
    Signed 32-bit integer
tpncp.additional_info_0_13  tpncp.additional_info_0_13
    Signed 32-bit integer
tpncp.additional_info_0_14  tpncp.additional_info_0_14
    Signed 32-bit integer
tpncp.additional_info_0_15  tpncp.additional_info_0_15
    Signed 32-bit integer
```

tpncp.additional_info_0_16 Signed 32-bit integer	tpncp.additional_info_0_16
tpncp.additional_info_0_17 Signed 32-bit integer	tpncp.additional_info_0_17
tpncp.additional_info_0_18 Signed 32-bit integer	tpncp.additional_info_0_18
tpncp.additional_info_0_19 Signed 32-bit integer	tpncp.additional_info_0_19
tpncp.additional_info_0_2 Signed 32-bit integer	tpncp.additional_info_0_2
tpncp.additional_info_0_3 Signed 32-bit integer	tpncp.additional_info_0_3
tpncp.additional_info_0_4 Signed 32-bit integer	tpncp.additional_info_0_4
tpncp.additional_info_0_5 Signed 32-bit integer	tpncp.additional_info_0_5
tpncp.additional_info_0_6 Signed 32-bit integer	tpncp.additional_info_0_6
tpncp.additional_info_0_7 Signed 32-bit integer	tpncp.additional_info_0_7
tpncp.additional_info_0_8 Signed 32-bit integer	tpncp.additional_info_0_8
tpncp.additional_info_0_9 Signed 32-bit integer	tpncp.additional_info_0_9
tpncp.additional_info_1_0 Signed 32-bit integer	tpncp.additional_info_1_0
tpncp.additional_info_1_1 Signed 32-bit integer	tpncp.additional_info_1_1
tpncp.additional_info_1_10 Signed 32-bit integer	tpncp.additional_info_1_10
tpncp.additional_info_1_11 Signed 32-bit integer	tpncp.additional_info_1_11
tpncp.additional_info_1_12 Signed 32-bit integer	tpncp.additional_info_1_12
tpncp.additional_info_1_13 Signed 32-bit integer	tpncp.additional_info_1_13
tpncp.additional_info_1_14 Signed 32-bit integer	tpncp.additional_info_1_14
tpncp.additional_info_1_15 Signed 32-bit integer	tpncp.additional_info_1_15
tpncp.additional_info_1_16 Signed 32-bit integer	tpncp.additional_info_1_16
tpncp.additional_info_1_17 Signed 32-bit integer	tpncp.additional_info_1_17

```

tpncp.additional_info_1_18  tpncp.additional_info_1_18
    Signed 32-bit integer
tpncp.additional_info_1_19  tpncp.additional_info_1_19
    Signed 32-bit integer
tpncp.additional_info_1_2   tpncp.additional_info_1_2
    Signed 32-bit integer
tpncp.additional_info_1_3   tpncp.additional_info_1_3
    Signed 32-bit integer
tpncp.additional_info_1_4   tpncp.additional_info_1_4
    Signed 32-bit integer
tpncp.additional_info_1_5   tpncp.additional_info_1_5
    Signed 32-bit integer
tpncp.additional_info_1_6   tpncp.additional_info_1_6
    Signed 32-bit integer
tpncp.additional_info_1_7   tpncp.additional_info_1_7
    Signed 32-bit integer
tpncp.additional_info_1_8   tpncp.additional_info_1_8
    Signed 32-bit integer
tpncp.additional_info_1_9   tpncp.additional_info_1_9
    Signed 32-bit integer
tpncp.additional_information  tpncp.additional_information
    Signed 32-bit integer
tpncp.addr  tpncp.addr
    Signed 32-bit integer
tpncp.address_family  tpncp.address_family
    Signed 32-bit integer
tpncp.admin_state  tpncp.admin_state
    Signed 32-bit integer
tpncp.administrative_state  tpncp.administrative_state
    Signed 32-bit integer
tpncp.agc_cmd  tpncp.agc_cmd
    Signed 32-bit integer
tpncp.agc_enable  tpncp.agc_enable
    Signed 32-bit integer
tpncp.ais  tpncp.ais
    Signed 32-bit integer
tpncp.alarm_bit_map  tpncp.alarm_bit_map
    Signed 32-bit integer
tpncp.alarm_cause_a_line_far_end_loop_alarm  tpncp.alarm_cause_a_line_far_end_lo
    Unsigned 8-bit integer
tpncp.alarm_cause_a_shelf_alarm  tpncp.alarm_cause_a_shelf_alarm
    Unsigned 8-bit integer
tpncp.alarm_cause_b_line_far_end_loop_alarm  tpncp.alarm_cause_b_line_far_end_lo
    Unsigned 8-bit integer

```

```

tpncp.alarm_cause_b_shelf_alarm tpncp.alarm_cause_b_shelf_alarm
    Unsigned 8-bit integer
tpncp.alarm_cause_c_line_far_end_loop_alarm tpncp.alarm_cause_c_line_far_end_lo
    Unsigned 8-bit integer
tpncp.alarm_cause_c_shelf_alarm tpncp.alarm_cause_c_shelf_alarm
    Unsigned 8-bit integer
tpncp.alarm_cause_d_line_far_end_loop_alarm tpncp.alarm_cause_d_line_far_end_lo
    Unsigned 8-bit integer
tpncp.alarm_cause_d_shelf_alarm tpncp.alarm_cause_d_shelf_alarm
    Unsigned 8-bit integer
tpncp.alarm_cause_framing tpncp.alarm_cause_framing
    Unsigned 8-bit integer
tpncp.alarm_cause_major_alarm tpncp.alarm_cause_major_alarm
    Unsigned 8-bit integer
tpncp.alarm_cause_minor_alarm tpncp.alarm_cause_minor_alarm
    Unsigned 8-bit integer
tpncp.alarm_cause_p_line_far_end_loop_alarm tpncp.alarm_cause_p_line_far_end_lo
    Unsigned 8-bit integer
tpncp.alarm_cause_power_miscellaneous_alarm tpncp.alarm_cause_power_miscellaneo
    Unsigned 8-bit integer
tpncp.alarm_code tpncp.alarm_code
    Signed 32-bit integer
tpncp.alarm_indication_signal tpncp.alarm_indication_signal
    Signed 32-bit integer
tpncp.alarm_insertion_signal tpncp.alarm_insertion_signal
    Signed 32-bit integer
tpncp.alarm_report_cause tpncp.alarm_report_cause
    Signed 32-bit integer
tpncp.alarm_type tpncp.alarm_type
    Signed 32-bit integer
tpncp.alcap_instance_id tpncp.alcap_instance_id
    Unsigned 32-bit integer
tpncp.alcap_reset_cause tpncp.alcap_reset_cause
    Signed 32-bit integer
tpncp.alcap_status tpncp.alcap_status
    Signed 32-bit integer
tpncp.alert_state tpncp.alert_state
    Signed 32-bit integer
tpncp.alert_type tpncp.alert_type
    Signed 32-bit integer
tpncp.align tpncp.align
    String
tpncp.alignment tpncp.alignment
    String

```

```
tpncp.alignment2  tpncp.alignment2
    String
tpncp.alignment3  tpncp.alignment3
    String
tpncp.alignment_1  tpncp.alignment_1
    String
tpncp.alignment_2  tpncp.alignment_2
    String
tpncp.all_trunks  tpncp.all_trunks
    Unsigned 8-bit integer
tpncp.allowed_call_types  tpncp.allowed_call_types
    Unsigned 8-bit integer
tpncp.amd_activation_mode  tpncp.amd_activation_mode
    Signed 32-bit integer
tpncp.amd_decision  tpncp.amd_decision
    Signed 32-bit integer
tpncp.amr_coder_header_format  tpncp.amr_coder_header_format
    Signed 32-bit integer
tpncp.amr_coders_enable  tpncp.amr_coders_enable
    String
tpncp.amr_delay_hysteresis  tpncp.amr_delay_hysteresis
    Unsigned 16-bit integer
tpncp.amr_delay_threshold  tpncp.amr_delay_threshold
    Unsigned 16-bit integer
tpncp.amr_frame_loss_ratio_hysteresis  tpncp.amr_frame_loss_ratio_hysteresis
    String
tpncp.amr_frame_loss_ratio_threshold  tpncp.amr_frame_loss_ratio_threshold
    String
tpncp.amr_hand_out_state  tpncp.amr_hand_out_state
    Signed 32-bit integer
tpncp.amr_number_of_codec_modes  tpncp.amr_number_of_codec_modes
    Unsigned 8-bit integer
tpncp.amr_rate  tpncp.amr_rate
    String
tpncp.amr_redundancy_depth  tpncp.amr_redundancy_depth
    Signed 32-bit integer
tpncp.amr_redundancy_level  tpncp.amr_redundancy_level
    String
tpncp.analog_board_type  tpncp.analog_board_type
    Signed 32-bit integer
tpncp.analog_device_version_return_code  tpncp.analog_device_version_return_code
    Signed 32-bit integer
tpncp.analog_if_disconnect_state  tpncp.analog_if_disconnect_state
    Signed 32-bit integer
```

```

tpncp.analog_if_flash_duration  tpncp.analog_if_flash_duration
    Signed 32-bit integer
tpncp.analog_if_polarity_state  tpncp.analog_if_polarity_state
    Signed 32-bit integer
tpncp.analog_if_set_loop_back  tpncp.analog_if_set_loop_back
    Signed 32-bit integer
tpncp.analog_line_voltage_reading  tpncp.analog_line_voltage_reading
    Signed 32-bit integer
tpncp.analog_ring_voltage_reading  tpncp.analog_ring_voltage_reading
    Signed 32-bit integer
tpncp.analog_voltage_reading  tpncp.analog_voltage_reading
    Signed 32-bit integer
tpncp.anic_internal_state  tpncp.anic_internal_state
    Signed 32-bit integer
tpncp.announcement_buffer  tpncp.announcement_buffer
    String
tpncp.announcement_sequence_status  tpncp.announcement_sequence_status
    Signed 32-bit integer
tpncp.announcement_string  tpncp.announcement_string
    String
tpncp.announcement_type_0  tpncp.announcement_type_0
    Signed 32-bit integer
tpncp.answer_detector_cmd  tpncp.answer_detector_cmd
    Signed 32-bit integer
tpncp.answer_tone_detection_direction  tpncp.answer_tone_detection_direction
    Signed 32-bit integer
tpncp.answer_tone_detection_origin  tpncp.answer_tone_detection_origin
    Signed 32-bit integer
tpncp.answering_machine_detection_direction  tpncp.answering_machine_detection_d
    Signed 32-bit integer
tpncp.answering_machine_detector_decision_param1  tpncp.answering_machine_detect
    Unsigned 32-bit integer
tpncp.answering_machine_detector_decision_param2  tpncp.answering_machine_detect
    Unsigned 32-bit integer
tpncp.answering_machine_detector_decision_param3  tpncp.answering_machine_detect
    Unsigned 32-bit integer
tpncp.answering_machine_detector_decision_param4  tpncp.answering_machine_detect
    Unsigned 32-bit integer
tpncp.answering_machine_detector_decision_param5  tpncp.answering_machine_detect
    Unsigned 32-bit integer
tpncp.answering_machine_detector_decision_param8  tpncp.answering_machine_detect
    Unsigned 32-bit integer
tpncp.answering_machine_detector_sensitivity  tpncp.answering_machine_detector_s
    Unsigned 8-bit integer

```

```

tpncp.apb_timing_clock_alarm_0  tpncp.apb_timing_clock_alarm_0
    Unsigned 16-bit integer
tpncp.apb_timing_clock_alarm_1  tpncp.apb_timing_clock_alarm_1
    Unsigned 16-bit integer
tpncp.apb_timing_clock_alarm_2  tpncp.apb_timing_clock_alarm_2
    Unsigned 16-bit integer
tpncp.apb_timing_clock_alarm_3  tpncp.apb_timing_clock_alarm_3
    Unsigned 16-bit integer
tpncp.apb_timing_clock_enable_0  tpncp.apb_timing_clock_enable_0
    Unsigned 16-bit integer
tpncp.apb_timing_clock_enable_1  tpncp.apb_timing_clock_enable_1
    Unsigned 16-bit integer
tpncp.apb_timing_clock_enable_2  tpncp.apb_timing_clock_enable_2
    Unsigned 16-bit integer
tpncp.apb_timing_clock_enable_3  tpncp.apb_timing_clock_enable_3
    Unsigned 16-bit integer
tpncp.apb_timing_clock_source_0  tpncp.apb_timing_clock_source_0
    Signed 32-bit integer
tpncp.apb_timing_clock_source_1  tpncp.apb_timing_clock_source_1
    Signed 32-bit integer
tpncp.apb_timing_clock_source_2  tpncp.apb_timing_clock_source_2
    Signed 32-bit integer
tpncp.apb_timing_clock_source_3  tpncp.apb_timing_clock_source_3
    Signed 32-bit integer
tpncp.app_layer  tpncp.app_layer
    Signed 32-bit integer
tpncp.append  tpncp.append
    Signed 32-bit integer
tpncp.append_ch_rec_points  tpncp.append_ch_rec_points
    Signed 32-bit integer
tpncp.asrtts_speech_recognition_error  tpncp.asrtts_speech_recognition_error
    Signed 32-bit integer
tpncp.asrtts_speech_status  tpncp.asrtts_speech_status
    Signed 32-bit integer
tpncp.assessed_seconds  tpncp.assessed_seconds
    Signed 32-bit integer
tpncp.associated_cid  tpncp.associated_cid
    Signed 32-bit integer
tpncp.atm_network_cid  tpncp.atm_network_cid
    Signed 32-bit integer
tpncp.atm_port  tpncp.atm_port
    Signed 32-bit integer
tpncp.atmg711_default_law_select  tpncp.atmg711_default_law_select
    Unsigned 8-bit integer

```



```
tpncp.attenuation_value  tpncp.attenuation_value
    Signed 32-bit integer

tpncp.au3_number  tpncp.au3_number
    Unsigned 32-bit integer

tpncp.au3_number_0  tpncp.au3_number_0
    Unsigned 32-bit integer

tpncp.au3_number_1  tpncp.au3_number_1
    Unsigned 32-bit integer

tpncp.au3_number_10  tpncp.au3_number_10
    Unsigned 32-bit integer

tpncp.au3_number_11  tpncp.au3_number_11
    Unsigned 32-bit integer

tpncp.au3_number_12  tpncp.au3_number_12
    Unsigned 32-bit integer

tpncp.au3_number_13  tpncp.au3_number_13
    Unsigned 32-bit integer

tpncp.au3_number_14  tpncp.au3_number_14
    Unsigned 32-bit integer

tpncp.au3_number_15  tpncp.au3_number_15
    Unsigned 32-bit integer

tpncp.au3_number_16  tpncp.au3_number_16
    Unsigned 32-bit integer

tpncp.au3_number_17  tpncp.au3_number_17
    Unsigned 32-bit integer

tpncp.au3_number_18  tpncp.au3_number_18
    Unsigned 32-bit integer

tpncp.au3_number_19  tpncp.au3_number_19
    Unsigned 32-bit integer

tpncp.au3_number_2  tpncp.au3_number_2
    Unsigned 32-bit integer

tpncp.au3_number_20  tpncp.au3_number_20
    Unsigned 32-bit integer

tpncp.au3_number_21  tpncp.au3_number_21
    Unsigned 32-bit integer

tpncp.au3_number_22  tpncp.au3_number_22
    Unsigned 32-bit integer

tpncp.au3_number_23  tpncp.au3_number_23
    Unsigned 32-bit integer

tpncp.au3_number_24  tpncp.au3_number_24
    Unsigned 32-bit integer

tpncp.au3_number_25  tpncp.au3_number_25
    Unsigned 32-bit integer

tpncp.au3_number_26  tpncp.au3_number_26
    Unsigned 32-bit integer
```

```
tpncp.au3_number_27  tpncp.au3_number_27
    Unsigned 32-bit integer
tpncp.au3_number_28  tpncp.au3_number_28
    Unsigned 32-bit integer
tpncp.au3_number_29  tpncp.au3_number_29
    Unsigned 32-bit integer
tpncp.au3_number_3   tpncp.au3_number_3
    Unsigned 32-bit integer
tpncp.au3_number_30  tpncp.au3_number_30
    Unsigned 32-bit integer
tpncp.au3_number_31  tpncp.au3_number_31
    Unsigned 32-bit integer
tpncp.au3_number_32  tpncp.au3_number_32
    Unsigned 32-bit integer
tpncp.au3_number_33  tpncp.au3_number_33
    Unsigned 32-bit integer
tpncp.au3_number_34  tpncp.au3_number_34
    Unsigned 32-bit integer
tpncp.au3_number_35  tpncp.au3_number_35
    Unsigned 32-bit integer
tpncp.au3_number_36  tpncp.au3_number_36
    Unsigned 32-bit integer
tpncp.au3_number_37  tpncp.au3_number_37
    Unsigned 32-bit integer
tpncp.au3_number_38  tpncp.au3_number_38
    Unsigned 32-bit integer
tpncp.au3_number_39  tpncp.au3_number_39
    Unsigned 32-bit integer
tpncp.au3_number_4   tpncp.au3_number_4
    Unsigned 32-bit integer
tpncp.au3_number_40  tpncp.au3_number_40
    Unsigned 32-bit integer
tpncp.au3_number_41  tpncp.au3_number_41
    Unsigned 32-bit integer
tpncp.au3_number_42  tpncp.au3_number_42
    Unsigned 32-bit integer
tpncp.au3_number_43  tpncp.au3_number_43
    Unsigned 32-bit integer
tpncp.au3_number_44  tpncp.au3_number_44
    Unsigned 32-bit integer
tpncp.au3_number_45  tpncp.au3_number_45
    Unsigned 32-bit integer
tpncp.au3_number_46  tpncp.au3_number_46
    Unsigned 32-bit integer
```

```
tpncp.au3_number_47  tpncp.au3_number_47
    Unsigned 32-bit integer
tpncp.au3_number_48  tpncp.au3_number_48
    Unsigned 32-bit integer
tpncp.au3_number_49  tpncp.au3_number_49
    Unsigned 32-bit integer
tpncp.au3_number_5   tpncp.au3_number_5
    Unsigned 32-bit integer
tpncp.au3_number_50  tpncp.au3_number_50
    Unsigned 32-bit integer
tpncp.au3_number_51  tpncp.au3_number_51
    Unsigned 32-bit integer
tpncp.au3_number_52  tpncp.au3_number_52
    Unsigned 32-bit integer
tpncp.au3_number_53  tpncp.au3_number_53
    Unsigned 32-bit integer
tpncp.au3_number_54  tpncp.au3_number_54
    Unsigned 32-bit integer
tpncp.au3_number_55  tpncp.au3_number_55
    Unsigned 32-bit integer
tpncp.au3_number_56  tpncp.au3_number_56
    Unsigned 32-bit integer
tpncp.au3_number_57  tpncp.au3_number_57
    Unsigned 32-bit integer
tpncp.au3_number_58  tpncp.au3_number_58
    Unsigned 32-bit integer
tpncp.au3_number_59  tpncp.au3_number_59
    Unsigned 32-bit integer
tpncp.au3_number_6   tpncp.au3_number_6
    Unsigned 32-bit integer
tpncp.au3_number_60  tpncp.au3_number_60
    Unsigned 32-bit integer
tpncp.au3_number_61  tpncp.au3_number_61
    Unsigned 32-bit integer
tpncp.au3_number_62  tpncp.au3_number_62
    Unsigned 32-bit integer
tpncp.au3_number_63  tpncp.au3_number_63
    Unsigned 32-bit integer
tpncp.au3_number_64  tpncp.au3_number_64
    Unsigned 32-bit integer
tpncp.au3_number_65  tpncp.au3_number_65
    Unsigned 32-bit integer
tpncp.au3_number_66  tpncp.au3_number_66
    Unsigned 32-bit integer
```

```
tpncp.au3_number_67  tpncp.au3_number_67
    Unsigned 32-bit integer
tpncp.au3_number_68  tpncp.au3_number_68
    Unsigned 32-bit integer
tpncp.au3_number_69  tpncp.au3_number_69
    Unsigned 32-bit integer
tpncp.au3_number_7   tpncp.au3_number_7
    Unsigned 32-bit integer
tpncp.au3_number_70  tpncp.au3_number_70
    Unsigned 32-bit integer
tpncp.au3_number_71  tpncp.au3_number_71
    Unsigned 32-bit integer
tpncp.au3_number_72  tpncp.au3_number_72
    Unsigned 32-bit integer
tpncp.au3_number_73  tpncp.au3_number_73
    Unsigned 32-bit integer
tpncp.au3_number_74  tpncp.au3_number_74
    Unsigned 32-bit integer
tpncp.au3_number_75  tpncp.au3_number_75
    Unsigned 32-bit integer
tpncp.au3_number_76  tpncp.au3_number_76
    Unsigned 32-bit integer
tpncp.au3_number_77  tpncp.au3_number_77
    Unsigned 32-bit integer
tpncp.au3_number_78  tpncp.au3_number_78
    Unsigned 32-bit integer
tpncp.au3_number_79  tpncp.au3_number_79
    Unsigned 32-bit integer
tpncp.au3_number_8   tpncp.au3_number_8
    Unsigned 32-bit integer
tpncp.au3_number_80  tpncp.au3_number_80
    Unsigned 32-bit integer
tpncp.au3_number_81  tpncp.au3_number_81
    Unsigned 32-bit integer
tpncp.au3_number_82  tpncp.au3_number_82
    Unsigned 32-bit integer
tpncp.au3_number_83  tpncp.au3_number_83
    Unsigned 32-bit integer
tpncp.au3_number_9   tpncp.au3_number_9
    Unsigned 32-bit integer
tpncp.au_number      tpncp.au_number
    Unsigned 8-bit integer
tpncp.auto_est       tpncp.auto_est
    Signed 32-bit integer
```

```
tpncp.autonomous_signalling_sequence_type  tpncp.autonomous_signalling_sequence_
Signed 32-bit integer
tpncp.auxiliary_call_state  tpncp.auxiliary_call_state
Signed 32-bit integer
tpncp.available  tpncp.available
Signed 32-bit integer
tpncp.average  tpncp.average
Signed 32-bit integer
tpncp.average_burst_density  tpncp.average_burst_density
Unsigned 8-bit integer
tpncp.average_burst_duration  tpncp.average_burst_duration
Unsigned 16-bit integer
tpncp.average_gap_density  tpncp.average_gap_density
Unsigned 8-bit integer
tpncp.average_gap_duration  tpncp.average_gap_duration
Unsigned 16-bit integer
tpncp.average_round_trip  tpncp.average_round_trip
Unsigned 32-bit integer
tpncp.avg_rtt  tpncp.avg_rtt
Unsigned 32-bit integer
tpncp.b_channel  tpncp.b_channel
Signed 32-bit integer
tpncp.backward_key_sequence  tpncp.backward_key_sequence
String
tpncp.barge_in  tpncp.barge_in
Signed 16-bit integer
tpncp.base_board_firm_ware_ver  tpncp.base_board_firm_ware_ver
Signed 32-bit integer
tpncp.bcc_protocol_data_link_error  tpncp.bcc_protocol_data_link_error
Signed 32-bit integer
tpncp.bchannel  tpncp.bchannel
Signed 32-bit integer
tpncp.bearer_establish_fail_cause  tpncp.bearer_establish_fail_cause
Signed 32-bit integer
tpncp.bearer_release_indication_cause  tpncp.bearer_release_indication_cause
Signed 32-bit integer
tpncp.bell_modem_transport_type  tpncp.bell_modem_transport_type
Signed 32-bit integer
tpncp.bind_id  tpncp.bind_id
Unsigned 32-bit integer
tpncp.bit_error  tpncp.bit_error
Signed 32-bit integer
tpncp.bit_error_counter  tpncp.bit_error_counter
Unsigned 16-bit integer
```

```
tpncp.bit_result tpncp.bit_result
    Signed 32-bit integer

tpncp.bit_type tpncp.bit_type
    Signed 32-bit integer

tpncp.bit_value tpncp.bit_value
    Signed 32-bit integer

tpncp.bits_clock_reference tpncp.bits_clock_reference
    Signed 32-bit integer

tpncp.blast_image_file tpncp.blast_image_file
    Signed 32-bit integer

tpncp.blind_participant_id tpncp.blind_participant_id
    Signed 32-bit integer

tpncp.block tpncp.block
    Signed 32-bit integer

tpncp.block_origin tpncp.block_origin
    Signed 32-bit integer

tpncp.blocking_status tpncp.blocking_status
    Signed 32-bit integer

tpncp.board_analog_voltages tpncp.board_analog_voltages
    Signed 32-bit integer

tpncp.board_flash_size tpncp.board_flash_size
    Signed 32-bit integer

tpncp.board_handle tpncp.board_handle
    Signed 32-bit integer

tpncp.board_hardware_revision tpncp.board_hardware_revision
    Signed 32-bit integer

tpncp.board_id_switch tpncp.board_id_switch
    Signed 32-bit integer

tpncp.board_ip_addr tpncp.board_ip_addr
    Unsigned 32-bit integer

tpncp.board_ip_address tpncp.board_ip_address
    Unsigned 32-bit integer

tpncp.board_params_tdm_bus_clock_source tpncp.board_params_tdm_bus_clock_source
    Signed 32-bit integer

tpncp.board_params_tdm_bus_fallback_clock tpncp.board_params_tdm_bus_fallback_c
    Signed 32-bit integer

tpncp.board_ram_size tpncp.board_ram_size
    Signed 32-bit integer

tpncp.board_sub_net_address tpncp.board_sub_net_address
    Unsigned 32-bit integer

tpncp.board_temp tpncp.board_temp
    Signed 32-bit integer

tpncp.board_temp_bit_return_code tpncp.board_temp_bit_return_code
    Signed 32-bit integer
```

```
tpncp.board_type tpncp.board_type
    Signed 32-bit integer

tpncp.boot_file tpncp.boot_file
    String

tpncp.boot_file_length tpncp.boot_file_length
    Signed 32-bit integer

tpncp.bootp_delay tpncp.bootp_delay
    Signed 32-bit integer

tpncp.bootp_retries tpncp.bootp_retries
    Signed 32-bit integer

tpncp.broken_connection_event_activation_mode tpncp.broken_connection_event_act
    Signed 32-bit integer

tpncp.broken_connection_event_timeout tpncp.broken_connection_event_timeout
    Unsigned 32-bit integer

tpncp.broken_connection_period tpncp.broken_connection_period
    Unsigned 32-bit integer

tpncp.buffer tpncp.buffer
    String

tpncp.buffer_length tpncp.buffer_length
    Signed 32-bit integer

tpncp.bursty_errored_seconds tpncp.bursty_errored_seconds
    Signed 32-bit integer

tpncp.bus tpncp.bus
    Signed 32-bit integer

tpncp.bytes_processed tpncp.bytes_processed
    Unsigned 32-bit integer

tpncp.bytes_received tpncp.bytes_received
    Signed 32-bit integer

tpncp.c_bit_parity tpncp.c_bit_parity
    Signed 32-bit integer

tpncp.c_dummy tpncp.c_dummy
    String

tpncp.c_message_filter_enable tpncp.c_message_filter_enable
    Unsigned 8-bit integer

tpncp.c_notch_filter_enable tpncp.c_notch_filter_enable
    Unsigned 8-bit integer

tpncp.c_pci_geographical_address tpncp.c_pci_geographical_address
    Signed 32-bit integer

tpncp.c_pci_shelf_geographical_address tpncp.c_pci_shelf_geographical_address
    Signed 32-bit integer

tpncp.cadenced_ringing_type tpncp.cadenced_ringing_type
    Signed 32-bit integer

tpncp.call_direction tpncp.call_direction
    Signed 32-bit integer
```

```
tpncp.call_handle tpncp.call_handle
    Signed 32-bit integer
tpncp.call_identity tpncp.call_identity
    String
tpncp.call_progress_tone_generation_interface tpncp.call_progress_tone_generati
    Unsigned 8-bit integer
tpncp.call_progress_tone_index tpncp.call_progress_tone_index
    Signed 16-bit integer
tpncp.call_state tpncp.call_state
    Signed 32-bit integer
tpncp.call_type tpncp.call_type
    Unsigned 8-bit integer
tpncp.called_line_identity tpncp.called_line_identity
    String
tpncp.caller_id_detection_result tpncp.caller_id_detection_result
    Signed 32-bit integer
tpncp.caller_id_generation_status tpncp.caller_id_generation_status
    Signed 32-bit integer
tpncp.caller_id_standard tpncp.caller_id_standard
    Signed 32-bit integer
tpncp.caller_id_transport_type tpncp.caller_id_transport_type
    Signed 32-bit integer
tpncp.caller_id_type tpncp.caller_id_type
    Signed 32-bit integer
tpncp.calling_answering tpncp.calling_answering
    Signed 32-bit integer
tpncp.cas_relay_mode tpncp.cas_relay_mode
    Unsigned 8-bit integer
tpncp.cas_relay_transport_mode tpncp.cas_relay_transport_mode
    Signed 32-bit integer
tpncp.cas_table_index tpncp.cas_table_index
    Signed 32-bit integer
tpncp.cas_table_name tpncp.cas_table_name
    String
tpncp.cas_table_name_length tpncp.cas_table_name_length
    Signed 32-bit integer
tpncp.cas_value tpncp.cas_value
    Signed 32-bit integer
tpncp.cas_value_0 tpncp.cas_value_0
    Signed 32-bit integer
tpncp.cas_value_1 tpncp.cas_value_1
    Signed 32-bit integer
tpncp.cas_value_10 tpncp.cas_value_10
    Signed 32-bit integer
```



```
tpncp.cas_value_11  tpncp.cas_value_11
    Signed 32-bit integer
tpncp.cas_value_12  tpncp.cas_value_12
    Signed 32-bit integer
tpncp.cas_value_13  tpncp.cas_value_13
    Signed 32-bit integer
tpncp.cas_value_14  tpncp.cas_value_14
    Signed 32-bit integer
tpncp.cas_value_15  tpncp.cas_value_15
    Signed 32-bit integer
tpncp.cas_value_16  tpncp.cas_value_16
    Signed 32-bit integer
tpncp.cas_value_17  tpncp.cas_value_17
    Signed 32-bit integer
tpncp.cas_value_18  tpncp.cas_value_18
    Signed 32-bit integer
tpncp.cas_value_19  tpncp.cas_value_19
    Signed 32-bit integer
tpncp.cas_value_2   tpncp.cas_value_2
    Signed 32-bit integer
tpncp.cas_value_20  tpncp.cas_value_20
    Signed 32-bit integer
tpncp.cas_value_21  tpncp.cas_value_21
    Signed 32-bit integer
tpncp.cas_value_22  tpncp.cas_value_22
    Signed 32-bit integer
tpncp.cas_value_23  tpncp.cas_value_23
    Signed 32-bit integer
tpncp.cas_value_24  tpncp.cas_value_24
    Signed 32-bit integer
tpncp.cas_value_25  tpncp.cas_value_25
    Signed 32-bit integer
tpncp.cas_value_26  tpncp.cas_value_26
    Signed 32-bit integer
tpncp.cas_value_27  tpncp.cas_value_27
    Signed 32-bit integer
tpncp.cas_value_28  tpncp.cas_value_28
    Signed 32-bit integer
tpncp.cas_value_29  tpncp.cas_value_29
    Signed 32-bit integer
tpncp.cas_value_3   tpncp.cas_value_3
    Signed 32-bit integer
tpncp.cas_value_30  tpncp.cas_value_30
    Signed 32-bit integer
```

```
tpncp.cas_value_31  tpncp.cas_value_31
    Signed 32-bit integer
tpncp.cas_value_32  tpncp.cas_value_32
    Signed 32-bit integer
tpncp.cas_value_33  tpncp.cas_value_33
    Signed 32-bit integer
tpncp.cas_value_34  tpncp.cas_value_34
    Signed 32-bit integer
tpncp.cas_value_35  tpncp.cas_value_35
    Signed 32-bit integer
tpncp.cas_value_36  tpncp.cas_value_36
    Signed 32-bit integer
tpncp.cas_value_37  tpncp.cas_value_37
    Signed 32-bit integer
tpncp.cas_value_38  tpncp.cas_value_38
    Signed 32-bit integer
tpncp.cas_value_39  tpncp.cas_value_39
    Signed 32-bit integer
tpncp.cas_value_4   tpncp.cas_value_4
    Signed 32-bit integer
tpncp.cas_value_40  tpncp.cas_value_40
    Signed 32-bit integer
tpncp.cas_value_41  tpncp.cas_value_41
    Signed 32-bit integer
tpncp.cas_value_42  tpncp.cas_value_42
    Signed 32-bit integer
tpncp.cas_value_43  tpncp.cas_value_43
    Signed 32-bit integer
tpncp.cas_value_44  tpncp.cas_value_44
    Signed 32-bit integer
tpncp.cas_value_45  tpncp.cas_value_45
    Signed 32-bit integer
tpncp.cas_value_46  tpncp.cas_value_46
    Signed 32-bit integer
tpncp.cas_value_47  tpncp.cas_value_47
    Signed 32-bit integer
tpncp.cas_value_48  tpncp.cas_value_48
    Signed 32-bit integer
tpncp.cas_value_49  tpncp.cas_value_49
    Signed 32-bit integer
tpncp.cas_value_5   tpncp.cas_value_5
    Signed 32-bit integer
tpncp.cas_value_6   tpncp.cas_value_6
    Signed 32-bit integer
```

```
tpncp.cas_value_7  tpncp.cas_value_7
    Signed 32-bit integer
tpncp.cas_value_8  tpncp.cas_value_8
    Signed 32-bit integer
tpncp.cas_value_9  tpncp.cas_value_9
    Signed 32-bit integer
tpncp.cause        tpncp.cause
    Signed 32-bit integer
tpncp.ch_id        tpncp.ch_id
    Signed 32-bit integer
tpncp.ch_number_0  tpncp.ch_number_0
    Signed 32-bit integer
tpncp.ch_number_1  tpncp.ch_number_1
    Signed 32-bit integer
tpncp.ch_number_10 tpncp.ch_number_10
    Signed 32-bit integer
tpncp.ch_number_11 tpncp.ch_number_11
    Signed 32-bit integer
tpncp.ch_number_12 tpncp.ch_number_12
    Signed 32-bit integer
tpncp.ch_number_13 tpncp.ch_number_13
    Signed 32-bit integer
tpncp.ch_number_14 tpncp.ch_number_14
    Signed 32-bit integer
tpncp.ch_number_15 tpncp.ch_number_15
    Signed 32-bit integer
tpncp.ch_number_16 tpncp.ch_number_16
    Signed 32-bit integer
tpncp.ch_number_17 tpncp.ch_number_17
    Signed 32-bit integer
tpncp.ch_number_18 tpncp.ch_number_18
    Signed 32-bit integer
tpncp.ch_number_19 tpncp.ch_number_19
    Signed 32-bit integer
tpncp.ch_number_2  tpncp.ch_number_2
    Signed 32-bit integer
tpncp.ch_number_20 tpncp.ch_number_20
    Signed 32-bit integer
tpncp.ch_number_21 tpncp.ch_number_21
    Signed 32-bit integer
tpncp.ch_number_22 tpncp.ch_number_22
    Signed 32-bit integer
tpncp.ch_number_23 tpncp.ch_number_23
    Signed 32-bit integer
```

```
tpncp.ch_number_24  tpncp.ch_number_24
    Signed 32-bit integer
tpncp.ch_number_25  tpncp.ch_number_25
    Signed 32-bit integer
tpncp.ch_number_26  tpncp.ch_number_26
    Signed 32-bit integer
tpncp.ch_number_27  tpncp.ch_number_27
    Signed 32-bit integer
tpncp.ch_number_28  tpncp.ch_number_28
    Signed 32-bit integer
tpncp.ch_number_29  tpncp.ch_number_29
    Signed 32-bit integer
tpncp.ch_number_3   tpncp.ch_number_3
    Signed 32-bit integer
tpncp.ch_number_30  tpncp.ch_number_30
    Signed 32-bit integer
tpncp.ch_number_31  tpncp.ch_number_31
    Signed 32-bit integer
tpncp.ch_number_4   tpncp.ch_number_4
    Signed 32-bit integer
tpncp.ch_number_5   tpncp.ch_number_5
    Signed 32-bit integer
tpncp.ch_number_6   tpncp.ch_number_6
    Signed 32-bit integer
tpncp.ch_number_7   tpncp.ch_number_7
    Signed 32-bit integer
tpncp.ch_number_8   tpncp.ch_number_8
    Signed 32-bit integer
tpncp.ch_number_9   tpncp.ch_number_9
    Signed 32-bit integer
tpncp.ch_status_0   tpncp.ch_status_0
    Signed 32-bit integer
tpncp.ch_status_1   tpncp.ch_status_1
    Signed 32-bit integer
tpncp.ch_status_10  tpncp.ch_status_10
    Signed 32-bit integer
tpncp.ch_status_11  tpncp.ch_status_11
    Signed 32-bit integer
tpncp.ch_status_12  tpncp.ch_status_12
    Signed 32-bit integer
tpncp.ch_status_13  tpncp.ch_status_13
    Signed 32-bit integer
tpncp.ch_status_14  tpncp.ch_status_14
    Signed 32-bit integer
```

```
tpncp.ch_status_15  tpncp.ch_status_15
    Signed 32-bit integer
tpncp.ch_status_16  tpncp.ch_status_16
    Signed 32-bit integer
tpncp.ch_status_17  tpncp.ch_status_17
    Signed 32-bit integer
tpncp.ch_status_18  tpncp.ch_status_18
    Signed 32-bit integer
tpncp.ch_status_19  tpncp.ch_status_19
    Signed 32-bit integer
tpncp.ch_status_2   tpncp.ch_status_2
    Signed 32-bit integer
tpncp.ch_status_20  tpncp.ch_status_20
    Signed 32-bit integer
tpncp.ch_status_21  tpncp.ch_status_21
    Signed 32-bit integer
tpncp.ch_status_22  tpncp.ch_status_22
    Signed 32-bit integer
tpncp.ch_status_23  tpncp.ch_status_23
    Signed 32-bit integer
tpncp.ch_status_24  tpncp.ch_status_24
    Signed 32-bit integer
tpncp.ch_status_25  tpncp.ch_status_25
    Signed 32-bit integer
tpncp.ch_status_26  tpncp.ch_status_26
    Signed 32-bit integer
tpncp.ch_status_27  tpncp.ch_status_27
    Signed 32-bit integer
tpncp.ch_status_28  tpncp.ch_status_28
    Signed 32-bit integer
tpncp.ch_status_29  tpncp.ch_status_29
    Signed 32-bit integer
tpncp.ch_status_3   tpncp.ch_status_3
    Signed 32-bit integer
tpncp.ch_status_30  tpncp.ch_status_30
    Signed 32-bit integer
tpncp.ch_status_31  tpncp.ch_status_31
    Signed 32-bit integer
tpncp.ch_status_4   tpncp.ch_status_4
    Signed 32-bit integer
tpncp.ch_status_5   tpncp.ch_status_5
    Signed 32-bit integer
tpncp.ch_status_6   tpncp.ch_status_6
    Signed 32-bit integer
```

```
tpncp.ch_status_7  tpncp.ch_status_7
    Signed 32-bit integer
tpncp.ch_status_8  tpncp.ch_status_8
    Signed 32-bit integer
tpncp.ch_status_9  tpncp.ch_status_9
    Signed 32-bit integer
tpncp.channel_count  tpncp.channel_count
    Signed 32-bit integer
tpncp.channel_id  Channel ID
    Signed 32-bit integer
tpncp.check_sum_lsb  tpncp.check_sum_lsb
    Signed 32-bit integer
tpncp.check_sum_msb  tpncp.check_sum_msb
    Signed 32-bit integer
tpncp.chip_id1  tpncp.chip_id1
    Signed 32-bit integer
tpncp.chip_id2  tpncp.chip_id2
    Signed 32-bit integer
tpncp.chip_id3  tpncp.chip_id3
    Signed 32-bit integer
tpncp.cid  tpncp.cid
    Signed 32-bit integer
tpncp.cid_available  tpncp.cid_available
    Signed 32-bit integer
tpncp.cid_list_0  tpncp.cid_list_0
    Signed 16-bit integer
tpncp.cid_list_1  tpncp.cid_list_1
    Signed 16-bit integer
tpncp.cid_list_10  tpncp.cid_list_10
    Signed 16-bit integer
tpncp.cid_list_100  tpncp.cid_list_100
    Signed 16-bit integer
tpncp.cid_list_101  tpncp.cid_list_101
    Signed 16-bit integer
tpncp.cid_list_102  tpncp.cid_list_102
    Signed 16-bit integer
tpncp.cid_list_103  tpncp.cid_list_103
    Signed 16-bit integer
tpncp.cid_list_104  tpncp.cid_list_104
    Signed 16-bit integer
tpncp.cid_list_105  tpncp.cid_list_105
    Signed 16-bit integer
tpncp.cid_list_106  tpncp.cid_list_106
    Signed 16-bit integer
```

```
tpncp.cid_list_107  tpncp.cid_list_107
    Signed 16-bit integer
tpncp.cid_list_108  tpncp.cid_list_108
    Signed 16-bit integer
tpncp.cid_list_109  tpncp.cid_list_109
    Signed 16-bit integer
tpncp.cid_list_11   tpncp.cid_list_11
    Signed 16-bit integer
tpncp.cid_list_110  tpncp.cid_list_110
    Signed 16-bit integer
tpncp.cid_list_111  tpncp.cid_list_111
    Signed 16-bit integer
tpncp.cid_list_112  tpncp.cid_list_112
    Signed 16-bit integer
tpncp.cid_list_113  tpncp.cid_list_113
    Signed 16-bit integer
tpncp.cid_list_114  tpncp.cid_list_114
    Signed 16-bit integer
tpncp.cid_list_115  tpncp.cid_list_115
    Signed 16-bit integer
tpncp.cid_list_116  tpncp.cid_list_116
    Signed 16-bit integer
tpncp.cid_list_117  tpncp.cid_list_117
    Signed 16-bit integer
tpncp.cid_list_118  tpncp.cid_list_118
    Signed 16-bit integer
tpncp.cid_list_119  tpncp.cid_list_119
    Signed 16-bit integer
tpncp.cid_list_12   tpncp.cid_list_12
    Signed 16-bit integer
tpncp.cid_list_120  tpncp.cid_list_120
    Signed 16-bit integer
tpncp.cid_list_121  tpncp.cid_list_121
    Signed 16-bit integer
tpncp.cid_list_122  tpncp.cid_list_122
    Signed 16-bit integer
tpncp.cid_list_123  tpncp.cid_list_123
    Signed 16-bit integer
tpncp.cid_list_124  tpncp.cid_list_124
    Signed 16-bit integer
tpncp.cid_list_125  tpncp.cid_list_125
    Signed 16-bit integer
tpncp.cid_list_126  tpncp.cid_list_126
    Signed 16-bit integer
```

```
tpncp.cid_list_127  tpncp.cid_list_127
    Signed 16-bit integer
tpncp.cid_list_128  tpncp.cid_list_128
    Signed 16-bit integer
tpncp.cid_list_129  tpncp.cid_list_129
    Signed 16-bit integer
tpncp.cid_list_13  tpncp.cid_list_13
    Signed 16-bit integer
tpncp.cid_list_130  tpncp.cid_list_130
    Signed 16-bit integer
tpncp.cid_list_131  tpncp.cid_list_131
    Signed 16-bit integer
tpncp.cid_list_132  tpncp.cid_list_132
    Signed 16-bit integer
tpncp.cid_list_133  tpncp.cid_list_133
    Signed 16-bit integer
tpncp.cid_list_134  tpncp.cid_list_134
    Signed 16-bit integer
tpncp.cid_list_135  tpncp.cid_list_135
    Signed 16-bit integer
tpncp.cid_list_136  tpncp.cid_list_136
    Signed 16-bit integer
tpncp.cid_list_137  tpncp.cid_list_137
    Signed 16-bit integer
tpncp.cid_list_138  tpncp.cid_list_138
    Signed 16-bit integer
tpncp.cid_list_139  tpncp.cid_list_139
    Signed 16-bit integer
tpncp.cid_list_14  tpncp.cid_list_14
    Signed 16-bit integer
tpncp.cid_list_140  tpncp.cid_list_140
    Signed 16-bit integer
tpncp.cid_list_141  tpncp.cid_list_141
    Signed 16-bit integer
tpncp.cid_list_142  tpncp.cid_list_142
    Signed 16-bit integer
tpncp.cid_list_143  tpncp.cid_list_143
    Signed 16-bit integer
tpncp.cid_list_144  tpncp.cid_list_144
    Signed 16-bit integer
tpncp.cid_list_145  tpncp.cid_list_145
    Signed 16-bit integer
tpncp.cid_list_146  tpncp.cid_list_146
    Signed 16-bit integer
```



```
tpncp.cid_list_147  tpncp.cid_list_147
    Signed 16-bit integer
tpncp.cid_list_148  tpncp.cid_list_148
    Signed 16-bit integer
tpncp.cid_list_149  tpncp.cid_list_149
    Signed 16-bit integer
tpncp.cid_list_15   tpncp.cid_list_15
    Signed 16-bit integer
tpncp.cid_list_150  tpncp.cid_list_150
    Signed 16-bit integer
tpncp.cid_list_151  tpncp.cid_list_151
    Signed 16-bit integer
tpncp.cid_list_152  tpncp.cid_list_152
    Signed 16-bit integer
tpncp.cid_list_153  tpncp.cid_list_153
    Signed 16-bit integer
tpncp.cid_list_154  tpncp.cid_list_154
    Signed 16-bit integer
tpncp.cid_list_155  tpncp.cid_list_155
    Signed 16-bit integer
tpncp.cid_list_156  tpncp.cid_list_156
    Signed 16-bit integer
tpncp.cid_list_157  tpncp.cid_list_157
    Signed 16-bit integer
tpncp.cid_list_158  tpncp.cid_list_158
    Signed 16-bit integer
tpncp.cid_list_159  tpncp.cid_list_159
    Signed 16-bit integer
tpncp.cid_list_16   tpncp.cid_list_16
    Signed 16-bit integer
tpncp.cid_list_160  tpncp.cid_list_160
    Signed 16-bit integer
tpncp.cid_list_161  tpncp.cid_list_161
    Signed 16-bit integer
tpncp.cid_list_162  tpncp.cid_list_162
    Signed 16-bit integer
tpncp.cid_list_163  tpncp.cid_list_163
    Signed 16-bit integer
tpncp.cid_list_164  tpncp.cid_list_164
    Signed 16-bit integer
tpncp.cid_list_165  tpncp.cid_list_165
    Signed 16-bit integer
tpncp.cid_list_166  tpncp.cid_list_166
    Signed 16-bit integer
```

```
tpncp.cid_list_167  tpncp.cid_list_167
    Signed 16-bit integer
tpncp.cid_list_168  tpncp.cid_list_168
    Signed 16-bit integer
tpncp.cid_list_169  tpncp.cid_list_169
    Signed 16-bit integer
tpncp.cid_list_17  tpncp.cid_list_17
    Signed 16-bit integer
tpncp.cid_list_170  tpncp.cid_list_170
    Signed 16-bit integer
tpncp.cid_list_171  tpncp.cid_list_171
    Signed 16-bit integer
tpncp.cid_list_172  tpncp.cid_list_172
    Signed 16-bit integer
tpncp.cid_list_173  tpncp.cid_list_173
    Signed 16-bit integer
tpncp.cid_list_174  tpncp.cid_list_174
    Signed 16-bit integer
tpncp.cid_list_175  tpncp.cid_list_175
    Signed 16-bit integer
tpncp.cid_list_176  tpncp.cid_list_176
    Signed 16-bit integer
tpncp.cid_list_177  tpncp.cid_list_177
    Signed 16-bit integer
tpncp.cid_list_178  tpncp.cid_list_178
    Signed 16-bit integer
tpncp.cid_list_179  tpncp.cid_list_179
    Signed 16-bit integer
tpncp.cid_list_18  tpncp.cid_list_18
    Signed 16-bit integer
tpncp.cid_list_180  tpncp.cid_list_180
    Signed 16-bit integer
tpncp.cid_list_181  tpncp.cid_list_181
    Signed 16-bit integer
tpncp.cid_list_182  tpncp.cid_list_182
    Signed 16-bit integer
tpncp.cid_list_183  tpncp.cid_list_183
    Signed 16-bit integer
tpncp.cid_list_184  tpncp.cid_list_184
    Signed 16-bit integer
tpncp.cid_list_185  tpncp.cid_list_185
    Signed 16-bit integer
tpncp.cid_list_186  tpncp.cid_list_186
    Signed 16-bit integer
```

```
tpncp.cid_list_187  tpncp.cid_list_187
    Signed 16-bit integer
tpncp.cid_list_188  tpncp.cid_list_188
    Signed 16-bit integer
tpncp.cid_list_189  tpncp.cid_list_189
    Signed 16-bit integer
tpncp.cid_list_19  tpncp.cid_list_19
    Signed 16-bit integer
tpncp.cid_list_190  tpncp.cid_list_190
    Signed 16-bit integer
tpncp.cid_list_191  tpncp.cid_list_191
    Signed 16-bit integer
tpncp.cid_list_192  tpncp.cid_list_192
    Signed 16-bit integer
tpncp.cid_list_193  tpncp.cid_list_193
    Signed 16-bit integer
tpncp.cid_list_194  tpncp.cid_list_194
    Signed 16-bit integer
tpncp.cid_list_195  tpncp.cid_list_195
    Signed 16-bit integer
tpncp.cid_list_196  tpncp.cid_list_196
    Signed 16-bit integer
tpncp.cid_list_197  tpncp.cid_list_197
    Signed 16-bit integer
tpncp.cid_list_198  tpncp.cid_list_198
    Signed 16-bit integer
tpncp.cid_list_199  tpncp.cid_list_199
    Signed 16-bit integer
tpncp.cid_list_2    tpncp.cid_list_2
    Signed 16-bit integer
tpncp.cid_list_20  tpncp.cid_list_20
    Signed 16-bit integer
tpncp.cid_list_200  tpncp.cid_list_200
    Signed 16-bit integer
tpncp.cid_list_201  tpncp.cid_list_201
    Signed 16-bit integer
tpncp.cid_list_202  tpncp.cid_list_202
    Signed 16-bit integer
tpncp.cid_list_203  tpncp.cid_list_203
    Signed 16-bit integer
tpncp.cid_list_204  tpncp.cid_list_204
    Signed 16-bit integer
tpncp.cid_list_205  tpncp.cid_list_205
    Signed 16-bit integer
```

```
tpncp.cid_list_206  tpncp.cid_list_206
    Signed 16-bit integer
tpncp.cid_list_207  tpncp.cid_list_207
    Signed 16-bit integer
tpncp.cid_list_208  tpncp.cid_list_208
    Signed 16-bit integer
tpncp.cid_list_209  tpncp.cid_list_209
    Signed 16-bit integer
tpncp.cid_list_21  tpncp.cid_list_21
    Signed 16-bit integer
tpncp.cid_list_210  tpncp.cid_list_210
    Signed 16-bit integer
tpncp.cid_list_211  tpncp.cid_list_211
    Signed 16-bit integer
tpncp.cid_list_212  tpncp.cid_list_212
    Signed 16-bit integer
tpncp.cid_list_213  tpncp.cid_list_213
    Signed 16-bit integer
tpncp.cid_list_214  tpncp.cid_list_214
    Signed 16-bit integer
tpncp.cid_list_215  tpncp.cid_list_215
    Signed 16-bit integer
tpncp.cid_list_216  tpncp.cid_list_216
    Signed 16-bit integer
tpncp.cid_list_217  tpncp.cid_list_217
    Signed 16-bit integer
tpncp.cid_list_218  tpncp.cid_list_218
    Signed 16-bit integer
tpncp.cid_list_219  tpncp.cid_list_219
    Signed 16-bit integer
tpncp.cid_list_22  tpncp.cid_list_22
    Signed 16-bit integer
tpncp.cid_list_220  tpncp.cid_list_220
    Signed 16-bit integer
tpncp.cid_list_221  tpncp.cid_list_221
    Signed 16-bit integer
tpncp.cid_list_222  tpncp.cid_list_222
    Signed 16-bit integer
tpncp.cid_list_223  tpncp.cid_list_223
    Signed 16-bit integer
tpncp.cid_list_224  tpncp.cid_list_224
    Signed 16-bit integer
tpncp.cid_list_225  tpncp.cid_list_225
    Signed 16-bit integer
```

```
tpncp.cid_list_226  tpncp.cid_list_226
    Signed 16-bit integer
tpncp.cid_list_227  tpncp.cid_list_227
    Signed 16-bit integer
tpncp.cid_list_228  tpncp.cid_list_228
    Signed 16-bit integer
tpncp.cid_list_229  tpncp.cid_list_229
    Signed 16-bit integer
tpncp.cid_list_23  tpncp.cid_list_23
    Signed 16-bit integer
tpncp.cid_list_230  tpncp.cid_list_230
    Signed 16-bit integer
tpncp.cid_list_231  tpncp.cid_list_231
    Signed 16-bit integer
tpncp.cid_list_232  tpncp.cid_list_232
    Signed 16-bit integer
tpncp.cid_list_233  tpncp.cid_list_233
    Signed 16-bit integer
tpncp.cid_list_234  tpncp.cid_list_234
    Signed 16-bit integer
tpncp.cid_list_235  tpncp.cid_list_235
    Signed 16-bit integer
tpncp.cid_list_236  tpncp.cid_list_236
    Signed 16-bit integer
tpncp.cid_list_237  tpncp.cid_list_237
    Signed 16-bit integer
tpncp.cid_list_238  tpncp.cid_list_238
    Signed 16-bit integer
tpncp.cid_list_239  tpncp.cid_list_239
    Signed 16-bit integer
tpncp.cid_list_24  tpncp.cid_list_24
    Signed 16-bit integer
tpncp.cid_list_240  tpncp.cid_list_240
    Signed 16-bit integer
tpncp.cid_list_241  tpncp.cid_list_241
    Signed 16-bit integer
tpncp.cid_list_242  tpncp.cid_list_242
    Signed 16-bit integer
tpncp.cid_list_243  tpncp.cid_list_243
    Signed 16-bit integer
tpncp.cid_list_244  tpncp.cid_list_244
    Signed 16-bit integer
tpncp.cid_list_245  tpncp.cid_list_245
    Signed 16-bit integer
```

```
tpncp.cid_list_246  tpncp.cid_list_246
    Signed 16-bit integer
tpncp.cid_list_247  tpncp.cid_list_247
    Signed 16-bit integer
tpncp.cid_list_25   tpncp.cid_list_25
    Signed 16-bit integer
tpncp.cid_list_26   tpncp.cid_list_26
    Signed 16-bit integer
tpncp.cid_list_27   tpncp.cid_list_27
    Signed 16-bit integer
tpncp.cid_list_28   tpncp.cid_list_28
    Signed 16-bit integer
tpncp.cid_list_29   tpncp.cid_list_29
    Signed 16-bit integer
tpncp.cid_list_3    tpncp.cid_list_3
    Signed 16-bit integer
tpncp.cid_list_30   tpncp.cid_list_30
    Signed 16-bit integer
tpncp.cid_list_31   tpncp.cid_list_31
    Signed 16-bit integer
tpncp.cid_list_32   tpncp.cid_list_32
    Signed 16-bit integer
tpncp.cid_list_33   tpncp.cid_list_33
    Signed 16-bit integer
tpncp.cid_list_34   tpncp.cid_list_34
    Signed 16-bit integer
tpncp.cid_list_35   tpncp.cid_list_35
    Signed 16-bit integer
tpncp.cid_list_36   tpncp.cid_list_36
    Signed 16-bit integer
tpncp.cid_list_37   tpncp.cid_list_37
    Signed 16-bit integer
tpncp.cid_list_38   tpncp.cid_list_38
    Signed 16-bit integer
tpncp.cid_list_39   tpncp.cid_list_39
    Signed 16-bit integer
tpncp.cid_list_4    tpncp.cid_list_4
    Signed 16-bit integer
tpncp.cid_list_40   tpncp.cid_list_40
    Signed 16-bit integer
tpncp.cid_list_41   tpncp.cid_list_41
    Signed 16-bit integer
tpncp.cid_list_42   tpncp.cid_list_42
    Signed 16-bit integer
```

```
tpncp.cid_list_43  tpncp.cid_list_43
    Signed 16-bit integer
tpncp.cid_list_44  tpncp.cid_list_44
    Signed 16-bit integer
tpncp.cid_list_45  tpncp.cid_list_45
    Signed 16-bit integer
tpncp.cid_list_46  tpncp.cid_list_46
    Signed 16-bit integer
tpncp.cid_list_47  tpncp.cid_list_47
    Signed 16-bit integer
tpncp.cid_list_48  tpncp.cid_list_48
    Signed 16-bit integer
tpncp.cid_list_49  tpncp.cid_list_49
    Signed 16-bit integer
tpncp.cid_list_5   tpncp.cid_list_5
    Signed 16-bit integer
tpncp.cid_list_50  tpncp.cid_list_50
    Signed 16-bit integer
tpncp.cid_list_51  tpncp.cid_list_51
    Signed 16-bit integer
tpncp.cid_list_52  tpncp.cid_list_52
    Signed 16-bit integer
tpncp.cid_list_53  tpncp.cid_list_53
    Signed 16-bit integer
tpncp.cid_list_54  tpncp.cid_list_54
    Signed 16-bit integer
tpncp.cid_list_55  tpncp.cid_list_55
    Signed 16-bit integer
tpncp.cid_list_56  tpncp.cid_list_56
    Signed 16-bit integer
tpncp.cid_list_57  tpncp.cid_list_57
    Signed 16-bit integer
tpncp.cid_list_58  tpncp.cid_list_58
    Signed 16-bit integer
tpncp.cid_list_59  tpncp.cid_list_59
    Signed 16-bit integer
tpncp.cid_list_6   tpncp.cid_list_6
    Signed 16-bit integer
tpncp.cid_list_60  tpncp.cid_list_60
    Signed 16-bit integer
tpncp.cid_list_61  tpncp.cid_list_61
    Signed 16-bit integer
tpncp.cid_list_62  tpncp.cid_list_62
    Signed 16-bit integer
```

```
tpncp.cid_list_63  tpncp.cid_list_63
Signed 16-bit integer
tpncp.cid_list_64  tpncp.cid_list_64
Signed 16-bit integer
tpncp.cid_list_65  tpncp.cid_list_65
Signed 16-bit integer
tpncp.cid_list_66  tpncp.cid_list_66
Signed 16-bit integer
tpncp.cid_list_67  tpncp.cid_list_67
Signed 16-bit integer
tpncp.cid_list_68  tpncp.cid_list_68
Signed 16-bit integer
tpncp.cid_list_69  tpncp.cid_list_69
Signed 16-bit integer
tpncp.cid_list_7   tpncp.cid_list_7
Signed 16-bit integer
tpncp.cid_list_70  tpncp.cid_list_70
Signed 16-bit integer
tpncp.cid_list_71  tpncp.cid_list_71
Signed 16-bit integer
tpncp.cid_list_72  tpncp.cid_list_72
Signed 16-bit integer
tpncp.cid_list_73  tpncp.cid_list_73
Signed 16-bit integer
tpncp.cid_list_74  tpncp.cid_list_74
Signed 16-bit integer
tpncp.cid_list_75  tpncp.cid_list_75
Signed 16-bit integer
tpncp.cid_list_76  tpncp.cid_list_76
Signed 16-bit integer
tpncp.cid_list_77  tpncp.cid_list_77
Signed 16-bit integer
tpncp.cid_list_78  tpncp.cid_list_78
Signed 16-bit integer
tpncp.cid_list_79  tpncp.cid_list_79
Signed 16-bit integer
tpncp.cid_list_8   tpncp.cid_list_8
Signed 16-bit integer
tpncp.cid_list_80  tpncp.cid_list_80
Signed 16-bit integer
tpncp.cid_list_81  tpncp.cid_list_81
Signed 16-bit integer
tpncp.cid_list_82  tpncp.cid_list_82
Signed 16-bit integer
```



```
tpncp.cid_list_83  tpncp.cid_list_83
    Signed 16-bit integer
tpncp.cid_list_84  tpncp.cid_list_84
    Signed 16-bit integer
tpncp.cid_list_85  tpncp.cid_list_85
    Signed 16-bit integer
tpncp.cid_list_86  tpncp.cid_list_86
    Signed 16-bit integer
tpncp.cid_list_87  tpncp.cid_list_87
    Signed 16-bit integer
tpncp.cid_list_88  tpncp.cid_list_88
    Signed 16-bit integer
tpncp.cid_list_89  tpncp.cid_list_89
    Signed 16-bit integer
tpncp.cid_list_9   tpncp.cid_list_9
    Signed 16-bit integer
tpncp.cid_list_90  tpncp.cid_list_90
    Signed 16-bit integer
tpncp.cid_list_91  tpncp.cid_list_91
    Signed 16-bit integer
tpncp.cid_list_92  tpncp.cid_list_92
    Signed 16-bit integer
tpncp.cid_list_93  tpncp.cid_list_93
    Signed 16-bit integer
tpncp.cid_list_94  tpncp.cid_list_94
    Signed 16-bit integer
tpncp.cid_list_95  tpncp.cid_list_95
    Signed 16-bit integer
tpncp.cid_list_96  tpncp.cid_list_96
    Signed 16-bit integer
tpncp.cid_list_97  tpncp.cid_list_97
    Signed 16-bit integer
tpncp.cid_list_98  tpncp.cid_list_98
    Signed 16-bit integer
tpncp.cid_list_99  tpncp.cid_list_99
    Signed 16-bit integer
tpncp.clear_digit_buffer  tpncp.clear_digit_buffer
    Signed 32-bit integer
tpncp.clp  tpncp.clp
    Signed 32-bit integer
tpncp.cmd_id  tpncp.cmd_id
    Signed 32-bit integer
tpncp.cmd_reserved  tpncp.cmd_reserved
    Unsigned 16-bit integer
```

```
tpncp.cmd_rev_lsb  tpncp.cmd_rev_lsb
    Unsigned 8-bit integer
tpncp.cmd_rev_msb  tpncp.cmd_rev_msb
    Unsigned 8-bit integer
tpncp.cname        tpncp.cname
    String
tpncp.cname_length tpncp.cname_length
    Signed 32-bit integer
tpncp.cng_detector_mode  tpncp.cng_detector_mode
    Signed 32-bit integer
tpncp.co_ind        tpncp.co_ind
    Signed 32-bit integer
tpncp.coach_mode    tpncp.coach_mode
    Signed 32-bit integer
tpncp.code          tpncp.code
    Signed 32-bit integer
tpncp.code_violation_counter  tpncp.code_violation_counter
    Unsigned 16-bit integer
tpncp.codec_validation  tpncp.codec_validation
    Signed 32-bit integer
tpncp.coder         tpncp.coder
    Signed 32-bit integer
tpncp.command_id    Command ID
    Unsigned 32-bit integer
tpncp.command_line  tpncp.command_line
    String
tpncp.command_line_length  tpncp.command_line_length
    Signed 32-bit integer
tpncp.command_type  tpncp.command_type
    Signed 32-bit integer
tpncp.comment       tpncp.comment
    Signed 32-bit integer
tpncp.complementary_calling_line_identity  tpncp.complementary_calling_line_iden
    String
tpncp.completion_method  tpncp.completion_method
    String
tpncp.component_1_frequency  tpncp.component_1_frequency
    Signed 32-bit integer
tpncp.component_1_tone_component_reserved  tpncp.component_1_tone_component_rese
    String
tpncp.component_tag  tpncp.component_tag
    Signed 32-bit integer
tpncp.concentrator_field_c1  tpncp.concentrator_field_c1
    Unsigned 8-bit integer
```

```
tpncp.concentrator_field_c10  tpncp.concentrator_field_c10
    Unsigned 8-bit integer
tpncp.concentrator_field_c11  tpncp.concentrator_field_c11
    Unsigned 8-bit integer
tpncp.concentrator_field_c2   tpncp.concentrator_field_c2
    Unsigned 8-bit integer
tpncp.concentrator_field_c3   tpncp.concentrator_field_c3
    Unsigned 8-bit integer
tpncp.concentrator_field_c4   tpncp.concentrator_field_c4
    Unsigned 8-bit integer
tpncp.concentrator_field_c5   tpncp.concentrator_field_c5
    Unsigned 8-bit integer
tpncp.concentrator_field_c6   tpncp.concentrator_field_c6
    Unsigned 8-bit integer
tpncp.concentrator_field_c7   tpncp.concentrator_field_c7
    Unsigned 8-bit integer
tpncp.concentrator_field_c8   tpncp.concentrator_field_c8
    Unsigned 8-bit integer
tpncp.concentrator_field_c9   tpncp.concentrator_field_c9
    Unsigned 8-bit integer
tpncp.conference_handle      tpncp.conference_handle
    Signed 32-bit integer
tpncp.conference_id          tpncp.conference_id
    Signed 32-bit integer
tpncp.conference_media_types  tpncp.conference_media_types
    Signed 32-bit integer
tpncp.conference_participant_id  tpncp.conference_participant_id
    Signed 32-bit integer
tpncp.conference_participant_source  tpncp.conference_participant_source
    Signed 32-bit integer
tpncp.confidence_level       tpncp.confidence_level
    Unsigned 8-bit integer
tpncp.confidence_threshold   tpncp.confidence_threshold
    Signed 32-bit integer
tpncp.congestion             tpncp.congestion
    Signed 32-bit integer
tpncp.congestion_level       tpncp.congestion_level
    Signed 32-bit integer
tpncp.conn_id                tpncp.conn_id
    Signed 32-bit integer
tpncp.conn_id_usage          tpncp.conn_id_usage
    String
tpncp.connected              tpncp.connected
    Signed 32-bit integer
```

```

tpncp.connection_establishment_notification_mode tpncp.connection_establishment
Signed 32-bit integer
tpncp.control_gateway_address_0 tpncp.control_gateway_address_0
Unsigned 32-bit integer
tpncp.control_gateway_address_1 tpncp.control_gateway_address_1
Unsigned 32-bit integer
tpncp.control_gateway_address_2 tpncp.control_gateway_address_2
Unsigned 32-bit integer
tpncp.control_gateway_address_3 tpncp.control_gateway_address_3
Unsigned 32-bit integer
tpncp.control_gateway_address_4 tpncp.control_gateway_address_4
Unsigned 32-bit integer
tpncp.control_gateway_address_5 tpncp.control_gateway_address_5
Unsigned 32-bit integer
tpncp.control_ip_address_0 tpncp.control_ip_address_0
Unsigned 32-bit integer
tpncp.control_ip_address_1 tpncp.control_ip_address_1
Unsigned 32-bit integer
tpncp.control_ip_address_2 tpncp.control_ip_address_2
Unsigned 32-bit integer
tpncp.control_ip_address_3 tpncp.control_ip_address_3
Unsigned 32-bit integer
tpncp.control_ip_address_4 tpncp.control_ip_address_4
Unsigned 32-bit integer
tpncp.control_ip_address_5 tpncp.control_ip_address_5
Unsigned 32-bit integer
tpncp.control_packet_loss_counter tpncp.control_packet_loss_counter
Unsigned 32-bit integer
tpncp.control_packets_max_retransmits tpncp.control_packets_max_retransmits
Unsigned 32-bit integer
tpncp.control_protocol_data_link_error tpncp.control_protocol_data_link_error
Signed 32-bit integer
tpncp.control_subnet_mask_address_0 tpncp.control_subnet_mask_address_0
Unsigned 32-bit integer
tpncp.control_subnet_mask_address_1 tpncp.control_subnet_mask_address_1
Unsigned 32-bit integer
tpncp.control_subnet_mask_address_2 tpncp.control_subnet_mask_address_2
Unsigned 32-bit integer
tpncp.control_subnet_mask_address_3 tpncp.control_subnet_mask_address_3
Unsigned 32-bit integer
tpncp.control_subnet_mask_address_4 tpncp.control_subnet_mask_address_4
Unsigned 32-bit integer
tpncp.control_subnet_mask_address_5 tpncp.control_subnet_mask_address_5
Unsigned 32-bit integer

```

```
tpncp.control_type tpncp.control_type
    Signed 32-bit integer
tpncp.control_vlan_id_0 tpncp.control_vlan_id_0
    Unsigned 32-bit integer
tpncp.control_vlan_id_1 tpncp.control_vlan_id_1
    Unsigned 32-bit integer
tpncp.control_vlan_id_2 tpncp.control_vlan_id_2
    Unsigned 32-bit integer
tpncp.control_vlan_id_3 tpncp.control_vlan_id_3
    Unsigned 32-bit integer
tpncp.control_vlan_id_4 tpncp.control_vlan_id_4
    Unsigned 32-bit integer
tpncp.control_vlan_id_5 tpncp.control_vlan_id_5
    Unsigned 32-bit integer
tpncp.controlled_slip tpncp.controlled_slip
    Signed 32-bit integer
tpncp.controlled_slip_seconds tpncp.controlled_slip_seconds
    Signed 32-bit integer
tpncp.cps_timer_cu_duration tpncp.cps_timer_cu_duration
    Signed 32-bit integer
tpncp.cpspdu_threshold tpncp.cpspdu_threshold
    Signed 32-bit integer
tpncp.cpu_bus_speed tpncp.cpu_bus_speed
    Signed 32-bit integer
tpncp.cpu_speed tpncp.cpu_speed
    Signed 32-bit integer
tpncp.cpu_ver tpncp.cpu_ver
    Signed 32-bit integer
tpncp.crc_4_error tpncp.crc_4_error
    Unsigned 16-bit integer
tpncp.crc_error_counter tpncp.crc_error_counter
    Unsigned 32-bit integer
tpncp.crc_error_e_bit_counter tpncp.crc_error_e_bit_counter
    Unsigned 16-bit integer
tpncp.crc_error_received tpncp.crc_error_received
    Signed 32-bit integer
tpncp.crc_error_rx_counter tpncp.crc_error_rx_counter
    Unsigned 16-bit integer
tpncp.crcec tpncp.crcec
    Unsigned 16-bit integer
tpncp.cum_lost tpncp.cum_lost
    Unsigned 32-bit integer
tpncp.current_cas_value tpncp.current_cas_value
    Signed 32-bit integer
```

```
tpncp.current_chunk_len  tpncp.current_chunk_len
    Signed 32-bit integer

tpncp.customer_key  tpncp.customer_key
    Unsigned 32-bit integer

tpncp.customer_key_type  tpncp.customer_key_type
    Signed 32-bit integer

tpncp.cypher_type  tpncp.cypher_type
    Signed 32-bit integer

tpncp.data  tpncp.data
    String

tpncp.data_buff  tpncp.data_buff
    String

tpncp.data_length  tpncp.data_length
    Unsigned 16-bit integer

tpncp.data_size  tpncp.data_size
    Signed 32-bit integer

tpncp.data_tx_queue_size  tpncp.data_tx_queue_size
    Unsigned 16-bit integer

tpncp.date  tpncp.date
    String

tpncp.date_time_provider  tpncp.date_time_provider
    Signed 32-bit integer

tpncp.day  tpncp.day
    Signed 32-bit integer

tpncp.dbg_rec_filter_type_all  tpncp.dbg_rec_filter_type_all
    Unsigned 8-bit integer

tpncp.dbg_rec_filter_type_cas  tpncp.dbg_rec_filter_type_cas
    Unsigned 8-bit integer

tpncp.dbg_rec_filter_type_fax  tpncp.dbg_rec_filter_type_fax
    Unsigned 8-bit integer

tpncp.dbg_rec_filter_type_ibs  tpncp.dbg_rec_filter_type_ibs
    Unsigned 8-bit integer

tpncp.dbg_rec_filter_type_modem  tpncp.dbg_rec_filter_type_modem
    Unsigned 8-bit integer

tpncp.dbg_rec_filter_type_rtcp  tpncp.dbg_rec_filter_type_rtcp
    Unsigned 8-bit integer

tpncp.dbg_rec_filter_type_rtp  tpncp.dbg_rec_filter_type_rtp
    Unsigned 8-bit integer

tpncp.dbg_rec_filter_type_voice  tpncp.dbg_rec_filter_type_voice
    Unsigned 8-bit integer

tpncp.dbg_rec_trigger_type_cas  tpncp.dbg_rec_trigger_type_cas
    Unsigned 8-bit integer

tpncp.dbg_rec_trigger_type_err  tpncp.dbg_rec_trigger_type_err
    Unsigned 8-bit integer
```

```
tpncp.dbg_rec_trigger_type_fax  tpncp.dbg_rec_trigger_type_fax
    Unsigned 8-bit integer
tpncp.dbg_rec_trigger_type_ibs  tpncp.dbg_rec_trigger_type_ibs
    Unsigned 8-bit integer
tpncp.dbg_rec_trigger_type_modem tpncp.dbg_rec_trigger_type_modem
    Unsigned 8-bit integer
tpncp.dbg_rec_trigger_type_no_trigger tpncp.dbg_rec_trigger_type_no_trigger
    Unsigned 8-bit integer
tpncp.dbg_rec_trigger_type_padding tpncp.dbg_rec_trigger_type_padding
    Unsigned 8-bit integer
tpncp.dbg_rec_trigger_type_rtcp  tpncp.dbg_rec_trigger_type_rtcp
    Unsigned 8-bit integer
tpncp.dbg_rec_trigger_type_silence tpncp.dbg_rec_trigger_type_silence
    Unsigned 8-bit integer
tpncp.dbg_rec_trigger_type_stop  tpncp.dbg_rec_trigger_type_stop
    Unsigned 8-bit integer
tpncp.de_activation_option  tpncp.de_activation_option
    Unsigned 32-bit integer
tpncp.deaf_participant_id  tpncp.deaf_participant_id
    Signed 32-bit integer
tpncp.decoder_0  tpncp.decoder_0
    Signed 32-bit integer
tpncp.decoder_1  tpncp.decoder_1
    Signed 32-bit integer
tpncp.decoder_2  tpncp.decoder_2
    Signed 32-bit integer
tpncp.decoder_3  tpncp.decoder_3
    Signed 32-bit integer
tpncp.decoder_4  tpncp.decoder_4
    Signed 32-bit integer
tpncp.def_gtwy_ip  tpncp.def_gtwy_ip
    Unsigned 32-bit integer
tpncp.default_gateway_address  tpncp.default_gateway_address
    Unsigned 32-bit integer
tpncp.degraded_minutes  tpncp.degraded_minutes
    Signed 32-bit integer
tpncp.delivery_method  tpncp.delivery_method
    Signed 32-bit integer
tpncp.dest_cid  tpncp.dest_cid
    Signed 32-bit integer
tpncp.dest_end_point  tpncp.dest_end_point
    Signed 32-bit integer
tpncp.dest_number_plan  tpncp.dest_number_plan
    Signed 32-bit integer
```

```

tpncp.dest_number_type tpncp.dest_number_type
    Signed 32-bit integer
tpncp.dest_phone_num tpncp.dest_phone_num
    String
tpncp.dest_phone_sub_num tpncp.dest_phone_sub_num
    String
tpncp.dest_sub_address_format tpncp.dest_sub_address_format
    Signed 32-bit integer
tpncp.dest_sub_address_type tpncp.dest_sub_address_type
    Signed 32-bit integer
tpncp.destination_cid tpncp.destination_cid
    Signed 32-bit integer
tpncp.destination_direction tpncp.destination_direction
    Signed 32-bit integer
tpncp.destination_ip tpncp.destination_ip
    Unsigned 32-bit integer
tpncp.destination_seek_ip tpncp.destination_seek_ip
    Unsigned 32-bit integer
tpncp.detected_caller_id_standard tpncp.detected_caller_id_standard
    Signed 32-bit integer
tpncp.detected_caller_id_type tpncp.detected_caller_id_type
    Signed 32-bit integer
tpncp.detection_direction tpncp.detection_direction
    Signed 32-bit integer
tpncp.detection_direction_0 tpncp.detection_direction_0
    Signed 32-bit integer
tpncp.detection_direction_1 tpncp.detection_direction_1
    Signed 32-bit integer
tpncp.detection_direction_10 tpncp.detection_direction_10
    Signed 32-bit integer
tpncp.detection_direction_11 tpncp.detection_direction_11
    Signed 32-bit integer
tpncp.detection_direction_12 tpncp.detection_direction_12
    Signed 32-bit integer
tpncp.detection_direction_13 tpncp.detection_direction_13
    Signed 32-bit integer
tpncp.detection_direction_14 tpncp.detection_direction_14
    Signed 32-bit integer
tpncp.detection_direction_15 tpncp.detection_direction_15
    Signed 32-bit integer
tpncp.detection_direction_16 tpncp.detection_direction_16
    Signed 32-bit integer
tpncp.detection_direction_17 tpncp.detection_direction_17
    Signed 32-bit integer

```



tpncp.detection_direction_18 Signed 32-bit integer	tpncp.detection_direction_18
tpncp.detection_direction_19 Signed 32-bit integer	tpncp.detection_direction_19
tpncp.detection_direction_2 Signed 32-bit integer	tpncp.detection_direction_2
tpncp.detection_direction_20 Signed 32-bit integer	tpncp.detection_direction_20
tpncp.detection_direction_21 Signed 32-bit integer	tpncp.detection_direction_21
tpncp.detection_direction_22 Signed 32-bit integer	tpncp.detection_direction_22
tpncp.detection_direction_23 Signed 32-bit integer	tpncp.detection_direction_23
tpncp.detection_direction_24 Signed 32-bit integer	tpncp.detection_direction_24
tpncp.detection_direction_25 Signed 32-bit integer	tpncp.detection_direction_25
tpncp.detection_direction_26 Signed 32-bit integer	tpncp.detection_direction_26
tpncp.detection_direction_27 Signed 32-bit integer	tpncp.detection_direction_27
tpncp.detection_direction_28 Signed 32-bit integer	tpncp.detection_direction_28
tpncp.detection_direction_29 Signed 32-bit integer	tpncp.detection_direction_29
tpncp.detection_direction_3 Signed 32-bit integer	tpncp.detection_direction_3
tpncp.detection_direction_30 Signed 32-bit integer	tpncp.detection_direction_30
tpncp.detection_direction_31 Signed 32-bit integer	tpncp.detection_direction_31
tpncp.detection_direction_32 Signed 32-bit integer	tpncp.detection_direction_32
tpncp.detection_direction_33 Signed 32-bit integer	tpncp.detection_direction_33
tpncp.detection_direction_34 Signed 32-bit integer	tpncp.detection_direction_34
tpncp.detection_direction_35 Signed 32-bit integer	tpncp.detection_direction_35
tpncp.detection_direction_36 Signed 32-bit integer	tpncp.detection_direction_36
tpncp.detection_direction_37 Signed 32-bit integer	tpncp.detection_direction_37

```
tpncp.detection_direction_38  tpncp.detection_direction_38
    Signed 32-bit integer
tpncp.detection_direction_39  tpncp.detection_direction_39
    Signed 32-bit integer
tpncp.detection_direction_4   tpncp.detection_direction_4
    Signed 32-bit integer
tpncp.detection_direction_5   tpncp.detection_direction_5
    Signed 32-bit integer
tpncp.detection_direction_6   tpncp.detection_direction_6
    Signed 32-bit integer
tpncp.detection_direction_7   tpncp.detection_direction_7
    Signed 32-bit integer
tpncp.detection_direction_8   tpncp.detection_direction_8
    Signed 32-bit integer
tpncp.detection_direction_9   tpncp.detection_direction_9
    Signed 32-bit integer
tpncp.device_id               tpncp.device_id
    Signed 32-bit integer
tpncp.diagnostic               tpncp.diagnostic
    String
tpncp.dial_string              tpncp.dial_string
    String
tpncp.dial_timing              tpncp.dial_timing
    Unsigned 8-bit integer
tpncp.digit                    tpncp.digit
    Signed 32-bit integer
tpncp.digit_0                  tpncp.digit_0
    Signed 32-bit integer
tpncp.digit_1                  tpncp.digit_1
    Signed 32-bit integer
tpncp.digit_10                 tpncp.digit_10
    Signed 32-bit integer
tpncp.digit_11                 tpncp.digit_11
    Signed 32-bit integer
tpncp.digit_12                 tpncp.digit_12
    Signed 32-bit integer
tpncp.digit_13                 tpncp.digit_13
    Signed 32-bit integer
tpncp.digit_14                 tpncp.digit_14
    Signed 32-bit integer
tpncp.digit_15                 tpncp.digit_15
    Signed 32-bit integer
tpncp.digit_16                 tpncp.digit_16
    Signed 32-bit integer
```

```
tpncp.digit_17  tpncp.digit_17
    Signed 32-bit integer
tpncp.digit_18  tpncp.digit_18
    Signed 32-bit integer
tpncp.digit_19  tpncp.digit_19
    Signed 32-bit integer
tpncp.digit_2   tpncp.digit_2
    Signed 32-bit integer
tpncp.digit_20  tpncp.digit_20
    Signed 32-bit integer
tpncp.digit_21  tpncp.digit_21
    Signed 32-bit integer
tpncp.digit_22  tpncp.digit_22
    Signed 32-bit integer
tpncp.digit_23  tpncp.digit_23
    Signed 32-bit integer
tpncp.digit_24  tpncp.digit_24
    Signed 32-bit integer
tpncp.digit_25  tpncp.digit_25
    Signed 32-bit integer
tpncp.digit_26  tpncp.digit_26
    Signed 32-bit integer
tpncp.digit_27  tpncp.digit_27
    Signed 32-bit integer
tpncp.digit_28  tpncp.digit_28
    Signed 32-bit integer
tpncp.digit_29  tpncp.digit_29
    Signed 32-bit integer
tpncp.digit_3   tpncp.digit_3
    Signed 32-bit integer
tpncp.digit_30  tpncp.digit_30
    Signed 32-bit integer
tpncp.digit_31  tpncp.digit_31
    Signed 32-bit integer
tpncp.digit_32  tpncp.digit_32
    Signed 32-bit integer
tpncp.digit_33  tpncp.digit_33
    Signed 32-bit integer
tpncp.digit_34  tpncp.digit_34
    Signed 32-bit integer
tpncp.digit_35  tpncp.digit_35
    Signed 32-bit integer
tpncp.digit_36  tpncp.digit_36
    Signed 32-bit integer
```

```
tpncp.digit_37  tpncp.digit_37
    Signed 32-bit integer
tpncp.digit_38  tpncp.digit_38
    Signed 32-bit integer
tpncp.digit_39  tpncp.digit_39
    Signed 32-bit integer
tpncp.digit_4   tpncp.digit_4
    Signed 32-bit integer
tpncp.digit_5   tpncp.digit_5
    Signed 32-bit integer
tpncp.digit_6   tpncp.digit_6
    Signed 32-bit integer
tpncp.digit_7   tpncp.digit_7
    Signed 32-bit integer
tpncp.digit_8   tpncp.digit_8
    Signed 32-bit integer
tpncp.digit_9   tpncp.digit_9
    Signed 32-bit integer
tpncp.digit_map tpncp.digit_map
    String
tpncp.digit_map_style tpncp.digit_map_style
    Signed 32-bit integer
tpncp.digit_on_time_0 tpncp.digit_on_time_0
    Signed 32-bit integer
tpncp.digit_on_time_1 tpncp.digit_on_time_1
    Signed 32-bit integer
tpncp.digit_on_time_10 tpncp.digit_on_time_10
    Signed 32-bit integer
tpncp.digit_on_time_11 tpncp.digit_on_time_11
    Signed 32-bit integer
tpncp.digit_on_time_12 tpncp.digit_on_time_12
    Signed 32-bit integer
tpncp.digit_on_time_13 tpncp.digit_on_time_13
    Signed 32-bit integer
tpncp.digit_on_time_14 tpncp.digit_on_time_14
    Signed 32-bit integer
tpncp.digit_on_time_15 tpncp.digit_on_time_15
    Signed 32-bit integer
tpncp.digit_on_time_16 tpncp.digit_on_time_16
    Signed 32-bit integer
tpncp.digit_on_time_17 tpncp.digit_on_time_17
    Signed 32-bit integer
tpncp.digit_on_time_18 tpncp.digit_on_time_18
    Signed 32-bit integer
```

```
tpncp.digit_on_time_19  tpncp.digit_on_time_19
    Signed 32-bit integer
tpncp.digit_on_time_2   tpncp.digit_on_time_2
    Signed 32-bit integer
tpncp.digit_on_time_20  tpncp.digit_on_time_20
    Signed 32-bit integer
tpncp.digit_on_time_21  tpncp.digit_on_time_21
    Signed 32-bit integer
tpncp.digit_on_time_22  tpncp.digit_on_time_22
    Signed 32-bit integer
tpncp.digit_on_time_23  tpncp.digit_on_time_23
    Signed 32-bit integer
tpncp.digit_on_time_24  tpncp.digit_on_time_24
    Signed 32-bit integer
tpncp.digit_on_time_25  tpncp.digit_on_time_25
    Signed 32-bit integer
tpncp.digit_on_time_26  tpncp.digit_on_time_26
    Signed 32-bit integer
tpncp.digit_on_time_27  tpncp.digit_on_time_27
    Signed 32-bit integer
tpncp.digit_on_time_28  tpncp.digit_on_time_28
    Signed 32-bit integer
tpncp.digit_on_time_29  tpncp.digit_on_time_29
    Signed 32-bit integer
tpncp.digit_on_time_3   tpncp.digit_on_time_3
    Signed 32-bit integer
tpncp.digit_on_time_30  tpncp.digit_on_time_30
    Signed 32-bit integer
tpncp.digit_on_time_31  tpncp.digit_on_time_31
    Signed 32-bit integer
tpncp.digit_on_time_32  tpncp.digit_on_time_32
    Signed 32-bit integer
tpncp.digit_on_time_33  tpncp.digit_on_time_33
    Signed 32-bit integer
tpncp.digit_on_time_34  tpncp.digit_on_time_34
    Signed 32-bit integer
tpncp.digit_on_time_35  tpncp.digit_on_time_35
    Signed 32-bit integer
tpncp.digit_on_time_36  tpncp.digit_on_time_36
    Signed 32-bit integer
tpncp.digit_on_time_37  tpncp.digit_on_time_37
    Signed 32-bit integer
tpncp.digit_on_time_38  tpncp.digit_on_time_38
    Signed 32-bit integer
```

```
tpncp.digit_on_time_39  tpncp.digit_on_time_39
    Signed 32-bit integer
tpncp.digit_on_time_4   tpncp.digit_on_time_4
    Signed 32-bit integer
tpncp.digit_on_time_5   tpncp.digit_on_time_5
    Signed 32-bit integer
tpncp.digit_on_time_6   tpncp.digit_on_time_6
    Signed 32-bit integer
tpncp.digit_on_time_7   tpncp.digit_on_time_7
    Signed 32-bit integer
tpncp.digit_on_time_8   tpncp.digit_on_time_8
    Signed 32-bit integer
tpncp.digit_on_time_9   tpncp.digit_on_time_9
    Signed 32-bit integer
tpncp.digits_collected tpncp.digits_collected
    String
tpncp.direction         tpncp.direction
    Unsigned 8-bit integer
tpncp.disable_first_incoming_packet_detection tpncp.disable_first_incoming_packet_detection
    Signed 32-bit integer
tpncp.disable_rtcp_interval_randomization tpncp.disable_rtcp_interval_randomization
    Signed 32-bit integer
tpncp.disable_soft_ip_loopback tpncp.disable_soft_ip_loopback
    Signed 32-bit integer
tpncp.discard_rate      tpncp.discard_rate
    Unsigned 8-bit integer
tpncp.disfc             tpncp.disfc
    Unsigned 16-bit integer
tpncp.display_size      tpncp.display_size
    Signed 32-bit integer
tpncp.display_string    tpncp.display_string
    String
tpncp.dj_buf_min_delay  tpncp.dj_buf_min_delay
    Signed 32-bit integer
tpncp.dj_buf_opt_factor tpncp.dj_buf_opt_factor
    Signed 32-bit integer
tpncp.dns_resolved      tpncp.dns_resolved
    Signed 32-bit integer
tpncp.do_not_use_defaults_with_ini tpncp.do_not_use_defaults_with_ini
    Signed 32-bit integer
tpncp.dpc               tpncp.dpc
    Unsigned 32-bit integer
tpncp.dpnss_mode        tpncp.dpnss_mode
    Unsigned 8-bit integer
```

```
tpncp.dpnss_receive_timeout  tpncp.dpnss_receive_timeout
    Unsigned 8-bit integer

tpncp.dpr_bit_return_code  tpncp.dpr_bit_return_code
    Signed 32-bit integer

tpncp.ds3_admin_state  tpncp.ds3_admin_state
    Signed 32-bit integer

tpncp.ds3_clock_source  tpncp.ds3_clock_source
    Signed 32-bit integer

tpncp.ds3_framing_method  tpncp.ds3_framing_method
    Signed 32-bit integer

tpncp.ds3_id  tpncp.ds3_id
    Signed 32-bit integer

tpncp.ds3_interface  tpncp.ds3_interface
    Signed 32-bit integer

tpncp.ds3_line_built_out  tpncp.ds3_line_built_out
    Signed 32-bit integer

tpncp.ds3_line_status_bit_field  tpncp.ds3_line_status_bit_field
    Signed 32-bit integer

tpncp.ds3_performance_monitoring_state  tpncp.ds3_performance_monitoring_state
    Signed 32-bit integer

tpncp.ds3_section  tpncp.ds3_section
    Signed 32-bit integer

tpncp.ds3_tapping_enable  tpncp.ds3_tapping_enable
    Signed 32-bit integer

tpncp.dsp_bit_return_code_0  tpncp.dsp_bit_return_code_0
    Signed 32-bit integer

tpncp.dsp_bit_return_code_1  tpncp.dsp_bit_return_code_1
    Signed 32-bit integer

tpncp.dsp_boot_kernel_date  tpncp.dsp_boot_kernel_date
    Signed 32-bit integer

tpncp.dsp_boot_kernel_ver  tpncp.dsp_boot_kernel_ver
    Signed 32-bit integer

tpncp.dsp_count  tpncp.dsp_count
    Signed 32-bit integer

tpncp.dsp_resource_allocation  tpncp.dsp_resource_allocation
    Signed 32-bit integer

tpncp.dsp_software_date  tpncp.dsp_software_date
    Signed 32-bit integer

tpncp.dsp_software_name  tpncp.dsp_software_name
    String

tpncp.dsp_software_ver  tpncp.dsp_software_ver
    Signed 32-bit integer

tpncp.dsp_type  tpncp.dsp_type
    Signed 32-bit integer
```

```
tpncp.dsp_version_template_count  tpncp.dsp_version_template_count
    Signed 32-bit integer
tpncp.dtmf_barge_in_digit_mask  tpncp.dtmf_barge_in_digit_mask
    Unsigned 32-bit integer
tpncp.dtmf_transport_type  tpncp.dtmf_transport_type
    Signed 32-bit integer
tpncp.dtmf_volume  tpncp.dtmf_volume
    Signed 32-bit integer
tpncp.dual_use  tpncp.dual_use
    Signed 32-bit integer
tpncp.dummy  tpncp.dummy
    Signed 32-bit integer
tpncp.dummy_0  tpncp.dummy_0
    Signed 32-bit integer
tpncp.dummy_1  tpncp.dummy_1
    Signed 32-bit integer
tpncp.dummy_2  tpncp.dummy_2
    Signed 32-bit integer
tpncp.dummy_3  tpncp.dummy_3
    Signed 32-bit integer
tpncp.dummy_4  tpncp.dummy_4
    Signed 32-bit integer
tpncp.dummy_5  tpncp.dummy_5
    Signed 32-bit integer
tpncp.duplex_mode  tpncp.duplex_mode
    Signed 32-bit integer
tpncp.duplicated  tpncp.duplicated
    Unsigned 32-bit integer
tpncp.duration  tpncp.duration
    Signed 32-bit integer
tpncp.duration_0  tpncp.duration_0
    Signed 32-bit integer
tpncp.duration_1  tpncp.duration_1
    Signed 32-bit integer
tpncp.duration_10  tpncp.duration_10
    Signed 32-bit integer
tpncp.duration_11  tpncp.duration_11
    Signed 32-bit integer
tpncp.duration_12  tpncp.duration_12
    Signed 32-bit integer
tpncp.duration_13  tpncp.duration_13
    Signed 32-bit integer
tpncp.duration_14  tpncp.duration_14
    Signed 32-bit integer
```



```
tpncp.duration_15  tpncp.duration_15
Signed 32-bit integer
tpncp.duration_16  tpncp.duration_16
Signed 32-bit integer
tpncp.duration_17  tpncp.duration_17
Signed 32-bit integer
tpncp.duration_18  tpncp.duration_18
Signed 32-bit integer
tpncp.duration_19  tpncp.duration_19
Signed 32-bit integer
tpncp.duration_2   tpncp.duration_2
Signed 32-bit integer
tpncp.duration_20  tpncp.duration_20
Signed 32-bit integer
tpncp.duration_21  tpncp.duration_21
Signed 32-bit integer
tpncp.duration_22  tpncp.duration_22
Signed 32-bit integer
tpncp.duration_23  tpncp.duration_23
Signed 32-bit integer
tpncp.duration_24  tpncp.duration_24
Signed 32-bit integer
tpncp.duration_25  tpncp.duration_25
Signed 32-bit integer
tpncp.duration_26  tpncp.duration_26
Signed 32-bit integer
tpncp.duration_27  tpncp.duration_27
Signed 32-bit integer
tpncp.duration_28  tpncp.duration_28
Signed 32-bit integer
tpncp.duration_29  tpncp.duration_29
Signed 32-bit integer
tpncp.duration_3   tpncp.duration_3
Signed 32-bit integer
tpncp.duration_30  tpncp.duration_30
Signed 32-bit integer
tpncp.duration_31  tpncp.duration_31
Signed 32-bit integer
tpncp.duration_32  tpncp.duration_32
Signed 32-bit integer
tpncp.duration_33  tpncp.duration_33
Signed 32-bit integer
tpncp.duration_34  tpncp.duration_34
Signed 32-bit integer
```

```
tpncp.duration_35  tpncp.duration_35
    Signed 32-bit integer
tpncp.duration_4   tpncp.duration_4
    Signed 32-bit integer
tpncp.duration_5   tpncp.duration_5
    Signed 32-bit integer
tpncp.duration_6   tpncp.duration_6
    Signed 32-bit integer
tpncp.duration_7   tpncp.duration_7
    Signed 32-bit integer
tpncp.duration_8   tpncp.duration_8
    Signed 32-bit integer
tpncp.duration_9   tpncp.duration_9
    Signed 32-bit integer
tpncp.duration_type tpncp.duration_type
    Signed 32-bit integer
tpncp.e_bit_error_detected tpncp.e_bit_error_detected
    Signed 32-bit integer
tpncp.ec            tpncp.ec
    Signed 32-bit integer
tpncp.ec_freeze     tpncp.ec_freeze
    Signed 32-bit integer
tpncp.ec_hybrid_loss tpncp.ec_hybrid_loss
    Signed 32-bit integer
tpncp.ec_length     tpncp.ec_length
    Signed 32-bit integer
tpncp.ec_nlp_mode   tpncp.ec_nlp_mode
    Signed 32-bit integer
tpncp.ece           tpncp.ece
    Signed 32-bit integer
tpncp.element_id_0  tpncp.element_id_0
    Signed 32-bit integer
tpncp.element_id_1  tpncp.element_id_1
    Signed 32-bit integer
tpncp.element_id_10 tpncp.element_id_10
    Signed 32-bit integer
tpncp.element_id_11 tpncp.element_id_11
    Signed 32-bit integer
tpncp.element_id_12 tpncp.element_id_12
    Signed 32-bit integer
tpncp.element_id_13 tpncp.element_id_13
    Signed 32-bit integer
tpncp.element_id_14 tpncp.element_id_14
    Signed 32-bit integer
```

```
tpncp.element_id_15  tpncp.element_id_15
    Signed 32-bit integer
tpncp.element_id_16  tpncp.element_id_16
    Signed 32-bit integer
tpncp.element_id_17  tpncp.element_id_17
    Signed 32-bit integer
tpncp.element_id_18  tpncp.element_id_18
    Signed 32-bit integer
tpncp.element_id_19  tpncp.element_id_19
    Signed 32-bit integer
tpncp.element_id_2   tpncp.element_id_2
    Signed 32-bit integer
tpncp.element_id_3   tpncp.element_id_3
    Signed 32-bit integer
tpncp.element_id_4   tpncp.element_id_4
    Signed 32-bit integer
tpncp.element_id_5   tpncp.element_id_5
    Signed 32-bit integer
tpncp.element_id_6   tpncp.element_id_6
    Signed 32-bit integer
tpncp.element_id_7   tpncp.element_id_7
    Signed 32-bit integer
tpncp.element_id_8   tpncp.element_id_8
    Signed 32-bit integer
tpncp.element_id_9   tpncp.element_id_9
    Signed 32-bit integer
tpncp.element_status_0  tpncp.element_status_0
    Signed 32-bit integer
tpncp.element_status_1  tpncp.element_status_1
    Signed 32-bit integer
tpncp.element_status_10  tpncp.element_status_10
    Signed 32-bit integer
tpncp.element_status_11  tpncp.element_status_11
    Signed 32-bit integer
tpncp.element_status_12  tpncp.element_status_12
    Signed 32-bit integer
tpncp.element_status_13  tpncp.element_status_13
    Signed 32-bit integer
tpncp.element_status_14  tpncp.element_status_14
    Signed 32-bit integer
tpncp.element_status_15  tpncp.element_status_15
    Signed 32-bit integer
tpncp.element_status_16  tpncp.element_status_16
    Signed 32-bit integer
```

```

tpncp.element_status_17  tpncp.element_status_17
    Signed 32-bit integer
tpncp.element_status_18  tpncp.element_status_18
    Signed 32-bit integer
tpncp.element_status_19  tpncp.element_status_19
    Signed 32-bit integer
tpncp.element_status_2   tpncp.element_status_2
    Signed 32-bit integer
tpncp.element_status_3   tpncp.element_status_3
    Signed 32-bit integer
tpncp.element_status_4   tpncp.element_status_4
    Signed 32-bit integer
tpncp.element_status_5   tpncp.element_status_5
    Signed 32-bit integer
tpncp.element_status_6   tpncp.element_status_6
    Signed 32-bit integer
tpncp.element_status_7   tpncp.element_status_7
    Signed 32-bit integer
tpncp.element_status_8   tpncp.element_status_8
    Signed 32-bit integer
tpncp.element_status_9   tpncp.element_status_9
    Signed 32-bit integer
tpncp.emergency_call_calling_geodetic_location_information  tpncp.emergency_call
    String
tpncp.emergency_call_calling_geodetic_location_information_size  tpncp.emergency
    Signed 32-bit integer
tpncp.emergency_call_coding_standard  tpncp.emergency_call_coding_standard
    Signed 32-bit integer
tpncp.emergency_call_control_information_display  tpncp.emergency_call_control_i
    Signed 32-bit integer
tpncp.emergency_call_location_identification_number  tpncp.emergency_call_locati
    String
tpncp.emergency_call_location_identification_number_size  tpncp.emergency_call_l
    Signed 32-bit integer
tpncp.enable_call_progress  tpncp.enable_call_progress
    Signed 32-bit integer
tpncp.enable_dtmf_detection  tpncp.enable_dtmf_detection
    Signed 32-bit integer
tpncp.enable_ec_comfort_noise_generation  tpncp.enable_ec_comfort_noise_generati
    Signed 32-bit integer
tpncp.enable_ec_tone_detector  tpncp.enable_ec_tone_detector
    Signed 32-bit integer
tpncp.enable_evrc_smart_blanking  tpncp.enable_evrc_smart_blanking
    Unsigned 8-bit integer

```

```
tpncp.enable_fax_modem_inband_network_detection  tpncp.enable_fax_modem_inband_n
    Unsigned 8-bit integer
tpncp.enable_fiber_link  tpncp.enable_fiber_link
    Signed 32-bit integer
tpncp.enable_filter  tpncp.enable_filter
    Unsigned 8-bit integer
tpncp.enable_line_signaling  tpncp.enable_line_signaling
    Signed 32-bit integer
tpncp.enable_loop  tpncp.enable_loop
    Signed 32-bit integer
tpncp.enable_metering_duration_type  tpncp.enable_metering_duration_type
    Signed 32-bit integer
tpncp.enable_mfr1  tpncp.enable_mfr1
    Signed 32-bit integer
tpncp.enable_mfr2_backward  tpncp.enable_mfr2_backward
    Signed 32-bit integer
tpncp.enable_mfr2_forward  tpncp.enable_mfr2_forward
    Signed 32-bit integer
tpncp.enable_network_cas_event  tpncp.enable_network_cas_event
    Unsigned 8-bit integer
tpncp.enable_noise_reduction  tpncp.enable_noise_reduction
    Signed 32-bit integer
tpncp.enable_user_defined_tone_detector  tpncp.enable_user_defined_tone_detector
    Signed 32-bit integer
tpncp.enabled_features  tpncp.enabled_features
    String
tpncp.end_dial_key  tpncp.end_dial_key
    Unsigned 8-bit integer
tpncp.end_dial_with_hash_mark  tpncp.end_dial_with_hash_mark
    Signed 32-bit integer
tpncp.end_end_key  tpncp.end_end_key
    String
tpncp.end_event  tpncp.end_event
    Signed 32-bit integer
tpncp.end_system_delay  tpncp.end_system_delay
    Unsigned 16-bit integer
tpncp.energy_detector_cmd  tpncp.energy_detector_cmd
    Signed 32-bit integer
tpncp.enhanced_fax_relay_redundancy_depth  tpncp.enhanced_fax_relay_redundancy_d
    Signed 32-bit integer
tpncp.erroneous_block_counter  tpncp.erroneous_block_counter
    Unsigned 16-bit integer
tpncp.error_cause  tpncp.error_cause
    Signed 32-bit integer
```

```
tpncp.error_code  tpncp.error_code
    Signed 32-bit integer

tpncp.error_counter_0  tpncp.error_counter_0
    Unsigned 16-bit integer

tpncp.error_counter_1  tpncp.error_counter_1
    Unsigned 16-bit integer

tpncp.error_counter_10  tpncp.error_counter_10
    Unsigned 16-bit integer

tpncp.error_counter_11  tpncp.error_counter_11
    Unsigned 16-bit integer

tpncp.error_counter_12  tpncp.error_counter_12
    Unsigned 16-bit integer

tpncp.error_counter_13  tpncp.error_counter_13
    Unsigned 16-bit integer

tpncp.error_counter_14  tpncp.error_counter_14
    Unsigned 16-bit integer

tpncp.error_counter_15  tpncp.error_counter_15
    Unsigned 16-bit integer

tpncp.error_counter_16  tpncp.error_counter_16
    Unsigned 16-bit integer

tpncp.error_counter_17  tpncp.error_counter_17
    Unsigned 16-bit integer

tpncp.error_counter_18  tpncp.error_counter_18
    Unsigned 16-bit integer

tpncp.error_counter_19  tpncp.error_counter_19
    Unsigned 16-bit integer

tpncp.error_counter_2  tpncp.error_counter_2
    Unsigned 16-bit integer

tpncp.error_counter_20  tpncp.error_counter_20
    Unsigned 16-bit integer

tpncp.error_counter_21  tpncp.error_counter_21
    Unsigned 16-bit integer

tpncp.error_counter_22  tpncp.error_counter_22
    Unsigned 16-bit integer

tpncp.error_counter_23  tpncp.error_counter_23
    Unsigned 16-bit integer

tpncp.error_counter_24  tpncp.error_counter_24
    Unsigned 16-bit integer

tpncp.error_counter_25  tpncp.error_counter_25
    Unsigned 16-bit integer

tpncp.error_counter_3  tpncp.error_counter_3
    Unsigned 16-bit integer

tpncp.error_counter_4  tpncp.error_counter_4
    Unsigned 16-bit integer
```

```
tpncp.error_counter_5  tpncp.error_counter_5
    Unsigned 16-bit integer
tpncp.error_counter_6  tpncp.error_counter_6
    Unsigned 16-bit integer
tpncp.error_counter_7  tpncp.error_counter_7
    Unsigned 16-bit integer
tpncp.error_counter_8  tpncp.error_counter_8
    Unsigned 16-bit integer
tpncp.error_counter_9  tpncp.error_counter_9
    Unsigned 16-bit integer
tpncp.error_description_buffer  tpncp.error_description_buffer
    String
tpncp.error_description_buffer_len  tpncp.error_description_buffer_len
    Signed 32-bit integer
tpncp.error_string  tpncp.error_string
    String
tpncp.errored_seconds  tpncp.errored_seconds
    Signed 32-bit integer
tpncp.escape_key_sequence  tpncp.escape_key_sequence
    String
tpncp.ethernet_mode  tpncp.ethernet_mode
    Signed 32-bit integer
tpncp.etsi_type  tpncp.etsi_type
    Signed 32-bit integer
tpncp.ev_detect_caller_id_info_alignment  tpncp.ev_detect_caller_id_info_alignme
    Unsigned 8-bit integer
tpncp.event_id  Event ID
    Unsigned 32-bit integer
tpncp.event_trigger  tpncp.event_trigger
    Signed 32-bit integer
tpncp.evr_rate  tpncp.evr_rate
    Signed 32-bit integer
tpncp.evr_smart_blanking_max_sid_gap  tpncp.evr_smart_blanking_max_sid_gap
    Signed 16-bit integer
tpncp.evr_smart_blanking_min_sid_gap  tpncp.evr_smart_blanking_min_sid_gap
    Signed 16-bit integer
tpncp.evr_cb_avg_rate_control  tpncp.evr_cb_avg_rate_control
    Signed 32-bit integer
tpncp.evr_cb_avg_rate_target  tpncp.evr_cb_avg_rate_target
    Signed 32-bit integer
tpncp.evr_cb_operation_point  tpncp.evr_cb_operation_point
    Signed 32-bit integer
tpncp.exclusive  tpncp.exclusive
    Signed 32-bit integer
```

```
tpncp.exists tpncp.exists
    Signed 32-bit integer

tpncp.ext_high_seq tpncp.ext_high_seq
    Unsigned 32-bit integer

tpncp.ext_r_factor tpncp.ext_r_factor
    Unsigned 8-bit integer

tpncp.ext_uni_directional_rtp tpncp.ext_uni_directional_rtp
    Unsigned 8-bit integer

tpncp.extension tpncp.extension
    String

tpncp.extra_digit_timer tpncp.extra_digit_timer
    Signed 32-bit integer

tpncp.extra_info tpncp.extra_info
    String

tpncp.facility_action tpncp.facility_action
    Signed 32-bit integer

tpncp.facility_code tpncp.facility_code
    Signed 32-bit integer

tpncp.facility_net_cause tpncp.facility_net_cause
    Signed 32-bit integer

tpncp.facility_sequence_num tpncp.facility_sequence_num
    Signed 32-bit integer

tpncp.facility_sequence_number tpncp.facility_sequence_number
    Signed 32-bit integer

tpncp.failed_board_id tpncp.failed_board_id
    Signed 32-bit integer

tpncp.failed_clock tpncp.failed_clock
    Signed 32-bit integer

tpncp.failure_reason tpncp.failure_reason
    Signed 32-bit integer

tpncp.failure_status tpncp.failure_status
    Signed 32-bit integer

tpncp.fallback tpncp.fallback
    Signed 32-bit integer

tpncp.far_end_receive_failure tpncp.far_end_receive_failure
    Signed 32-bit integer

tpncp.fax_bypass_payload_type tpncp.fax_bypass_payload_type
    Signed 32-bit integer

tpncp.fax_detection_origin tpncp.fax_detection_origin
    Signed 32-bit integer

tpncp.fax_modem_bypass_basic_rtp_packet_interval tpncp.fax_modem_bypass_basic_r
    Signed 32-bit integer

tpncp.fax_modem_bypass_coder_type tpncp.fax_modem_bypass_coder_type
    Signed 32-bit integer
```



```
tpncp.fax_modem_bypass_dj_buf_min_delay  tpncp.fax_modem_bypass_dj_buf_min_delay
Signed 32-bit integer

tpncp.fax_modem_bypass_m  tpncp.fax_modem_bypass_m
Signed 32-bit integer

tpncp.fax_modem_relay_rate  tpncp.fax_modem_relay_rate
Signed 32-bit integer

tpncp.fax_modem_relay_volume  tpncp.fax_modem_relay_volume
Signed 32-bit integer

tpncp.fax_relay_ecm_enable  tpncp.fax_relay_ecm_enable
Signed 32-bit integer

tpncp.fax_relay_max_rate  tpncp.fax_relay_max_rate
Signed 32-bit integer

tpncp.fax_relay_redundancy_depth  tpncp.fax_relay_redundancy_depth
Signed 32-bit integer

tpncp.fax_session_result  tpncp.fax_session_result
Signed 32-bit integer

tpncp.fax_transport_type  tpncp.fax_transport_type
Signed 32-bit integer

tpncp.fiber_group  tpncp.fiber_group
Signed 32-bit integer

tpncp.fiber_group_link  tpncp.fiber_group_link
Signed 32-bit integer

tpncp.fiber_id  tpncp.fiber_id
Signed 32-bit integer

tpncp.file_name  tpncp.file_name
String

tpncp.fill_zero  tpncp.fill_zero
Unsigned 8-bit integer

tpncp.filling  tpncp.filling
String

tpncp.first_call_line_identity  tpncp.first_call_line_identity
String

tpncp.first_digit_country_code  tpncp.first_digit_country_code
Unsigned 8-bit integer

tpncp.first_digit_timer  tpncp.first_digit_timer
Signed 32-bit integer

tpncp.first_tone_duration  tpncp.first_tone_duration
Unsigned 32-bit integer

tpncp.first_voice_prompt_index  tpncp.first_voice_prompt_index
Signed 32-bit integer

tpncp.flash_bit_return_code  tpncp.flash_bit_return_code
Signed 32-bit integer

tpncp.flash_hook_transport_type  tpncp.flash_hook_transport_type
Signed 32-bit integer
```

```

tpncp.flash_ver    tpncp.flash_ver
    Signed 32-bit integer

tpncp.force_voice_prompt_repository_release  tpncp.force_voice_prompt_repository
    Signed 32-bit integer

tpncp.forward_key_sequence  tpncp.forward_key_sequence
    String

tpncp.fraction_lost  tpncp.fraction_lost
    Unsigned 32-bit integer

tpncp.fragmentation_needed_and_df_set  tpncp.fragmentation_needed_and_df_set
    Unsigned 32-bit integer

tpncp.frame_loss_ratio_hysteresis_0  tpncp.frame_loss_ratio_hysteresis_0
    Signed 32-bit integer

tpncp.frame_loss_ratio_hysteresis_1  tpncp.frame_loss_ratio_hysteresis_1
    Signed 32-bit integer

tpncp.frame_loss_ratio_hysteresis_2  tpncp.frame_loss_ratio_hysteresis_2
    Signed 32-bit integer

tpncp.frame_loss_ratio_hysteresis_3  tpncp.frame_loss_ratio_hysteresis_3
    Signed 32-bit integer

tpncp.frame_loss_ratio_hysteresis_4  tpncp.frame_loss_ratio_hysteresis_4
    Signed 32-bit integer

tpncp.frame_loss_ratio_hysteresis_5  tpncp.frame_loss_ratio_hysteresis_5
    Signed 32-bit integer

tpncp.frame_loss_ratio_hysteresis_6  tpncp.frame_loss_ratio_hysteresis_6
    Signed 32-bit integer

tpncp.frame_loss_ratio_hysteresis_7  tpncp.frame_loss_ratio_hysteresis_7
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_0  tpncp.frame_loss_ratio_threshold_0
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_1  tpncp.frame_loss_ratio_threshold_1
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_2  tpncp.frame_loss_ratio_threshold_2
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_3  tpncp.frame_loss_ratio_threshold_3
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_4  tpncp.frame_loss_ratio_threshold_4
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_5  tpncp.frame_loss_ratio_threshold_5
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_6  tpncp.frame_loss_ratio_threshold_6
    Signed 32-bit integer

tpncp.frame_loss_ratio_threshold_7  tpncp.frame_loss_ratio_threshold_7
    Signed 32-bit integer

tpncp.framers_bit_return_code  tpncp.framers_bit_return_code
    Signed 32-bit integer

```

```
tpncp.framing_bit_error_counter  tpncp.framing_bit_error_counter
    Unsigned 16-bit integer
tpncp.framing_error_counter  tpncp.framing_error_counter
    Unsigned 16-bit integer
tpncp.framing_error_received  tpncp.framing_error_received
    Signed 32-bit integer
tpncp.free_voice_prompt_buffer_space  tpncp.free_voice_prompt_buffer_space
    Signed 32-bit integer
tpncp.free_voice_prompt_indexes  tpncp.free_voice_prompt_indexes
    Signed 32-bit integer
tpncp.frequency  tpncp.frequency
    Signed 32-bit integer
tpncp.frequency_0  tpncp.frequency_0
    Signed 32-bit integer
tpncp.frequency_1  tpncp.frequency_1
    Signed 32-bit integer
tpncp.from_entity  tpncp.from_entity
    Signed 32-bit integer
tpncp.from_fiber_link  tpncp.from_fiber_link
    Signed 32-bit integer
tpncp.from_trunk  tpncp.from_trunk
    Signed 32-bit integer
tpncp.fulllday_average  tpncp.fulllday_average
    Signed 32-bit integer
tpncp.future_expansion_0  tpncp.future_expansion_0
    Signed 32-bit integer
tpncp.future_expansion_1  tpncp.future_expansion_1
    Signed 32-bit integer
tpncp.future_expansion_2  tpncp.future_expansion_2
    Signed 32-bit integer
tpncp.future_expansion_3  tpncp.future_expansion_3
    Signed 32-bit integer
tpncp.future_expansion_4  tpncp.future_expansion_4
    Signed 32-bit integer
tpncp.future_expansion_5  tpncp.future_expansion_5
    Signed 32-bit integer
tpncp.future_expansion_6  tpncp.future_expansion_6
    Signed 32-bit integer
tpncp.future_expansion_7  tpncp.future_expansion_7
    Signed 32-bit integer
tpncp.fxo_anic_version_return_code_0  tpncp.fxo_anic_version_return_code_0
    Signed 32-bit integer
tpncp.fxo_anic_version_return_code_1  tpncp.fxo_anic_version_return_code_1
    Signed 32-bit integer
```

tpncp.fxo_anic_version_return_code_10 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_10
tpncp.fxo_anic_version_return_code_11 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_11
tpncp.fxo_anic_version_return_code_12 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_12
tpncp.fxo_anic_version_return_code_13 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_13
tpncp.fxo_anic_version_return_code_14 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_14
tpncp.fxo_anic_version_return_code_15 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_15
tpncp.fxo_anic_version_return_code_16 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_16
tpncp.fxo_anic_version_return_code_17 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_17
tpncp.fxo_anic_version_return_code_18 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_18
tpncp.fxo_anic_version_return_code_19 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_19
tpncp.fxo_anic_version_return_code_2 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_2
tpncp.fxo_anic_version_return_code_20 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_20
tpncp.fxo_anic_version_return_code_21 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_21
tpncp.fxo_anic_version_return_code_22 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_22
tpncp.fxo_anic_version_return_code_23 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_23
tpncp.fxo_anic_version_return_code_3 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_3
tpncp.fxo_anic_version_return_code_4 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_4
tpncp.fxo_anic_version_return_code_5 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_5
tpncp.fxo_anic_version_return_code_6 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_6
tpncp.fxo_anic_version_return_code_7 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_7
tpncp.fxo_anic_version_return_code_8 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_8
tpncp.fxo_anic_version_return_code_9 Signed 32-bit integer	tpncp.fxo_anic_version_return_code_9

```

tpncp.fxs_analog_voltage_reading  tpncp.fxs_analog_voltage_reading
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_0  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_1  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_10  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_11  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_12  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_13  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_14  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_15  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_16  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_17  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_18  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_19  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_2  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_20  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_21  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_22  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_23  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_3  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_4  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_5  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer
tpncp.fxs_codec_validation_bit_return_code_6  tpncp.fxs_codec_validation_bit_re
    Signed 32-bit integer

```

tpncp.fxs_codec_validation_bit_return_code_7	tpncp.fxs_codec_validation_bit_return_code_7
Signed 32-bit integer	
tpncp.fxs_codec_validation_bit_return_code_8	tpncp.fxs_codec_validation_bit_return_code_8
Signed 32-bit integer	
tpncp.fxs_codec_validation_bit_return_code_9	tpncp.fxs_codec_validation_bit_return_code_9
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_0	tpncp.fxs_duslic_version_return_code_0
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_1	tpncp.fxs_duslic_version_return_code_1
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_10	tpncp.fxs_duslic_version_return_code_10
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_11	tpncp.fxs_duslic_version_return_code_11
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_12	tpncp.fxs_duslic_version_return_code_12
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_13	tpncp.fxs_duslic_version_return_code_13
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_14	tpncp.fxs_duslic_version_return_code_14
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_15	tpncp.fxs_duslic_version_return_code_15
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_16	tpncp.fxs_duslic_version_return_code_16
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_17	tpncp.fxs_duslic_version_return_code_17
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_18	tpncp.fxs_duslic_version_return_code_18
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_19	tpncp.fxs_duslic_version_return_code_19
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_2	tpncp.fxs_duslic_version_return_code_2
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_20	tpncp.fxs_duslic_version_return_code_20
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_21	tpncp.fxs_duslic_version_return_code_21
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_22	tpncp.fxs_duslic_version_return_code_22
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_23	tpncp.fxs_duslic_version_return_code_23
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_3	tpncp.fxs_duslic_version_return_code_3
Signed 32-bit integer	
tpncp.fxs_duslic_version_return_code_4	tpncp.fxs_duslic_version_return_code_4
Signed 32-bit integer	

tpncp.fxs_duslic_version_return_code_5 Signed 32-bit integer	tpncp.fxs_duslic_version_return_code_5
tpncp.fxs_duslic_version_return_code_6 Signed 32-bit integer	tpncp.fxs_duslic_version_return_code_6
tpncp.fxs_duslic_version_return_code_7 Signed 32-bit integer	tpncp.fxs_duslic_version_return_code_7
tpncp.fxs_duslic_version_return_code_8 Signed 32-bit integer	tpncp.fxs_duslic_version_return_code_8
tpncp.fxs_duslic_version_return_code_9 Signed 32-bit integer	tpncp.fxs_duslic_version_return_code_9
tpncp.fxs_line_current_reading Signed 32-bit integer	tpncp.fxs_line_current_reading
tpncp.fxs_line_voltage_reading Signed 32-bit integer	tpncp.fxs_line_voltage_reading
tpncp.fxs_ring_voltage_reading Signed 32-bit integer	tpncp.fxs_ring_voltage_reading
tpncp.fxscram_check_sum_bit_return_code_0 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_co
tpncp.fxscram_check_sum_bit_return_code_1 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_co
tpncp.fxscram_check_sum_bit_return_code_10 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_11 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_12 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_13 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_14 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_15 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_16 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_17 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_18 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_19 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c
tpncp.fxscram_check_sum_bit_return_code_2 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_co
tpncp.fxscram_check_sum_bit_return_code_20 Signed 32-bit integer	tpncp.fxscram_check_sum_bit_return_c

```

tpncp.fxscram_check_sum_bit_return_code_21  tpncp.fxscram_check_sum_bit_return_c
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_22  tpncp.fxscram_check_sum_bit_return_c
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_23  tpncp.fxscram_check_sum_bit_return_c
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_3    tpncp.fxscram_check_sum_bit_return_co
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_4    tpncp.fxscram_check_sum_bit_return_co
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_5    tpncp.fxscram_check_sum_bit_return_co
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_6    tpncp.fxscram_check_sum_bit_return_co
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_7    tpncp.fxscram_check_sum_bit_return_co
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_8    tpncp.fxscram_check_sum_bit_return_co
Signed 32-bit integer
tpncp.fxscram_check_sum_bit_return_code_9    tpncp.fxscram_check_sum_bit_return_co
Signed 32-bit integer
tpncp.g729ev_local_mbs  tpncp.g729ev_local_mbs
Signed 32-bit integer
tpncp.g729ev_max_bit_rate  tpncp.g729ev_max_bit_rate
Signed 32-bit integer
tpncp.g729ev_receive_mbs  tpncp.g729ev_receive_mbs
Signed 32-bit integer
tpncp.gain_slope  tpncp.gain_slope
Signed 32-bit integer
tpncp.gap_count  tpncp.gap_count
Unsigned 32-bit integer
tpncp.gateway_address_0  tpncp.gateway_address_0
Unsigned 32-bit integer
tpncp.gateway_address_1  tpncp.gateway_address_1
Unsigned 32-bit integer
tpncp.gateway_address_2  tpncp.gateway_address_2
Unsigned 32-bit integer
tpncp.gateway_address_3  tpncp.gateway_address_3
Unsigned 32-bit integer
tpncp.gateway_address_4  tpncp.gateway_address_4
Unsigned 32-bit integer
tpncp.gateway_address_5  tpncp.gateway_address_5
Unsigned 32-bit integer
tpncp.gauge_id  tpncp.gauge_id
Signed 32-bit integer

```



```
tpncp.generate_caller_id_message_extension_size  tpncp.generate_caller_id_messag
    Unsigned 8-bit integer
tpncp.generation_timing  tpncp.generation_timing
    Unsigned 8-bit integer
tpncp.generic_event_family  tpncp.generic_event_family
    Signed 32-bit integer
tpncp.geographical_address  tpncp.geographical_address
    Signed 32-bit integer
tpncp.graceful_shutdown_timeout  tpncp.graceful_shutdown_timeout
    Signed 32-bit integer
tpncp.ground_key_polarity  tpncp.ground_key_polarity
    Signed 32-bit integer
tpncp.header_only  tpncp.header_only
    Signed 32-bit integer
tpncp.hello_time_out  tpncp.hello_time_out
    Unsigned 32-bit integer
tpncp.hidden_participant_id  tpncp.hidden_participant_id
    Signed 32-bit integer
tpncp.hide_mode  tpncp.hide_mode
    Signed 32-bit integer
tpncp.high_threshold  tpncp.high_threshold
    Signed 32-bit integer
tpncp.ho_alarm_status_0  tpncp.ho_alarm_status_0
    Signed 32-bit integer
tpncp.ho_alarm_status_1  tpncp.ho_alarm_status_1
    Signed 32-bit integer
tpncp.ho_alarm_status_2  tpncp.ho_alarm_status_2
    Signed 32-bit integer
tpncp.hook  tpncp.hook
    Signed 32-bit integer
tpncp.hook_state  tpncp.hook_state
    Signed 32-bit integer
tpncp.host_unreachable  tpncp.host_unreachable
    Unsigned 32-bit integer
tpncp.hour  tpncp.hour
    Signed 32-bit integer
tpncp.hpfe  tpncp.hpfe
    Signed 32-bit integer
tpncp.http_client_error_code  tpncp.http_client_error_code
    Signed 32-bit integer
tpncp.hw_sw_version  tpncp.hw_sw_version
    Signed 32-bit integer
tpncp.i_dummy_0  tpncp.i_dummy_0
    Signed 32-bit integer
```

```
tpncp.i_dummy_1 tpncp.i_dummy_1
    Signed 32-bit integer
tpncp.i_dummy_2 tpncp.i_dummy_2
    Signed 32-bit integer
tpncp.i_pv6_address_0 tpncp.i_pv6_address_0
    Unsigned 32-bit integer
tpncp.i_pv6_address_1 tpncp.i_pv6_address_1
    Unsigned 32-bit integer
tpncp.i_pv6_address_2 tpncp.i_pv6_address_2
    Unsigned 32-bit integer
tpncp.i_pv6_address_3 tpncp.i_pv6_address_3
    Unsigned 32-bit integer
tpncp.ibs_tone_generation_interface tpncp.ibs_tone_generation_interface
    Unsigned 8-bit integer
tpncp.ibsd_redirection tpncp.ibsd_redirection
    Signed 32-bit integer
tpncp.icmp_code_fragmentation_needed_and_df_set tpncp.icmp_code_fragmentation_n
    Unsigned 32-bit integer
tpncp.icmp_code_host_unreachable tpncp.icmp_code_host_unreachable
    Unsigned 32-bit integer
tpncp.icmp_code_net_unreachable tpncp.icmp_code_net_unreachable
    Unsigned 32-bit integer
tpncp.icmp_code_port_unreachable tpncp.icmp_code_port_unreachable
    Unsigned 32-bit integer
tpncp.icmp_code_protocol_unreachable tpncp.icmp_code_protocol_unreachable
    Unsigned 32-bit integer
tpncp.icmp_code_source_route_failed tpncp.icmp_code_source_route_failed
    Unsigned 32-bit integer
tpncp.icmp_type tpncp.icmp_type
    Unsigned 8-bit integer
tpncp.icmp_unreachable_counter tpncp.icmp_unreachable_counter
    Unsigned 32-bit integer
tpncp.idle_alarm tpncp.idle_alarm
    Signed 32-bit integer
tpncp.idle_time_out tpncp.idle_time_out
    Unsigned 32-bit integer
tpncp.if_add_seq_required_avp tpncp.if_add_seq_required_avp
    Unsigned 8-bit integer
tpncp.include_return_key tpncp.include_return_key
    Signed 16-bit integer
tpncp.incoming_t38_port_option tpncp.incoming_t38_port_option
    Signed 32-bit integer
tpncp.index tpncp.index
    Signed 32-bit integer
```

```
tpncp.index_0  tpncp.index_0
    Signed 32-bit integer
tpncp.index_1  tpncp.index_1
    Signed 32-bit integer
tpncp.index_10 tpncp.index_10
    Signed 32-bit integer
tpncp.index_11 tpncp.index_11
    Signed 32-bit integer
tpncp.index_12 tpncp.index_12
    Signed 32-bit integer
tpncp.index_13 tpncp.index_13
    Signed 32-bit integer
tpncp.index_14 tpncp.index_14
    Signed 32-bit integer
tpncp.index_15 tpncp.index_15
    Signed 32-bit integer
tpncp.index_16 tpncp.index_16
    Signed 32-bit integer
tpncp.index_17 tpncp.index_17
    Signed 32-bit integer
tpncp.index_18 tpncp.index_18
    Signed 32-bit integer
tpncp.index_19 tpncp.index_19
    Signed 32-bit integer
tpncp.index_2  tpncp.index_2
    Signed 32-bit integer
tpncp.index_20 tpncp.index_20
    Signed 32-bit integer
tpncp.index_21 tpncp.index_21
    Signed 32-bit integer
tpncp.index_22 tpncp.index_22
    Signed 32-bit integer
tpncp.index_23 tpncp.index_23
    Signed 32-bit integer
tpncp.index_24 tpncp.index_24
    Signed 32-bit integer
tpncp.index_25 tpncp.index_25
    Signed 32-bit integer
tpncp.index_26 tpncp.index_26
    Signed 32-bit integer
tpncp.index_27 tpncp.index_27
    Signed 32-bit integer
tpncp.index_28 tpncp.index_28
    Signed 32-bit integer
```

```
tpncp.index_29  tpncp.index_29
    Signed 32-bit integer
tpncp.index_3  tpncp.index_3
    Signed 32-bit integer
tpncp.index_30  tpncp.index_30
    Signed 32-bit integer
tpncp.index_31  tpncp.index_31
    Signed 32-bit integer
tpncp.index_32  tpncp.index_32
    Signed 32-bit integer
tpncp.index_33  tpncp.index_33
    Signed 32-bit integer
tpncp.index_34  tpncp.index_34
    Signed 32-bit integer
tpncp.index_35  tpncp.index_35
    Signed 32-bit integer
tpncp.index_4   tpncp.index_4
    Signed 32-bit integer
tpncp.index_5   tpncp.index_5
    Signed 32-bit integer
tpncp.index_6   tpncp.index_6
    Signed 32-bit integer
tpncp.index_7   tpncp.index_7
    Signed 32-bit integer
tpncp.index_8   tpncp.index_8
    Signed 32-bit integer
tpncp.index_9   tpncp.index_9
    Signed 32-bit integer
tpncp.info0     tpncp.info0
    Signed 32-bit integer
tpncp.info1     tpncp.info1
    Signed 32-bit integer
tpncp.info2     tpncp.info2
    Signed 32-bit integer
tpncp.info3     tpncp.info3
    Signed 32-bit integer
tpncp.info4     tpncp.info4
    Signed 32-bit integer
tpncp.info5     tpncp.info5
    Signed 32-bit integer
tpncp.inhibition_status  tpncp.inhibition_status
    Signed 32-bit integer
tpncp.ini_file  tpncp.ini_file
    String
```

```
tpncp.ini_file_length tpncp.ini_file_length
    Signed 32-bit integer
tpncp.ini_file_ver tpncp.ini_file_ver
    Signed 32-bit integer
tpncp.input_gain tpncp.input_gain
    Signed 32-bit integer
tpncp.input_port_0 tpncp.input_port_0
    Unsigned 8-bit integer
tpncp.input_tdm_bus_0 tpncp.input_tdm_bus_0
    Unsigned 8-bit integer
tpncp.input_time_slot_0 tpncp.input_time_slot_0
    Unsigned 16-bit integer
tpncp.input_voice_signaling_mode_0 tpncp.input_voice_signaling_mode_0
    Unsigned 8-bit integer
tpncp.instance_type tpncp.instance_type
    Signed 32-bit integer
tpncp.inter_cas_time_0 tpncp.inter_cas_time_0
    Signed 32-bit integer
tpncp.inter_cas_time_1 tpncp.inter_cas_time_1
    Signed 32-bit integer
tpncp.inter_cas_time_10 tpncp.inter_cas_time_10
    Signed 32-bit integer
tpncp.inter_cas_time_11 tpncp.inter_cas_time_11
    Signed 32-bit integer
tpncp.inter_cas_time_12 tpncp.inter_cas_time_12
    Signed 32-bit integer
tpncp.inter_cas_time_13 tpncp.inter_cas_time_13
    Signed 32-bit integer
tpncp.inter_cas_time_14 tpncp.inter_cas_time_14
    Signed 32-bit integer
tpncp.inter_cas_time_15 tpncp.inter_cas_time_15
    Signed 32-bit integer
tpncp.inter_cas_time_16 tpncp.inter_cas_time_16
    Signed 32-bit integer
tpncp.inter_cas_time_17 tpncp.inter_cas_time_17
    Signed 32-bit integer
tpncp.inter_cas_time_18 tpncp.inter_cas_time_18
    Signed 32-bit integer
tpncp.inter_cas_time_19 tpncp.inter_cas_time_19
    Signed 32-bit integer
tpncp.inter_cas_time_2 tpncp.inter_cas_time_2
    Signed 32-bit integer
tpncp.inter_cas_time_20 tpncp.inter_cas_time_20
    Signed 32-bit integer
```

```
tpncp.inter_cas_time_21  tpncp.inter_cas_time_21
    Signed 32-bit integer
tpncp.inter_cas_time_22  tpncp.inter_cas_time_22
    Signed 32-bit integer
tpncp.inter_cas_time_23  tpncp.inter_cas_time_23
    Signed 32-bit integer
tpncp.inter_cas_time_24  tpncp.inter_cas_time_24
    Signed 32-bit integer
tpncp.inter_cas_time_25  tpncp.inter_cas_time_25
    Signed 32-bit integer
tpncp.inter_cas_time_26  tpncp.inter_cas_time_26
    Signed 32-bit integer
tpncp.inter_cas_time_27  tpncp.inter_cas_time_27
    Signed 32-bit integer
tpncp.inter_cas_time_28  tpncp.inter_cas_time_28
    Signed 32-bit integer
tpncp.inter_cas_time_29  tpncp.inter_cas_time_29
    Signed 32-bit integer
tpncp.inter_cas_time_3   tpncp.inter_cas_time_3
    Signed 32-bit integer
tpncp.inter_cas_time_30  tpncp.inter_cas_time_30
    Signed 32-bit integer
tpncp.inter_cas_time_31  tpncp.inter_cas_time_31
    Signed 32-bit integer
tpncp.inter_cas_time_32  tpncp.inter_cas_time_32
    Signed 32-bit integer
tpncp.inter_cas_time_33  tpncp.inter_cas_time_33
    Signed 32-bit integer
tpncp.inter_cas_time_34  tpncp.inter_cas_time_34
    Signed 32-bit integer
tpncp.inter_cas_time_35  tpncp.inter_cas_time_35
    Signed 32-bit integer
tpncp.inter_cas_time_36  tpncp.inter_cas_time_36
    Signed 32-bit integer
tpncp.inter_cas_time_37  tpncp.inter_cas_time_37
    Signed 32-bit integer
tpncp.inter_cas_time_38  tpncp.inter_cas_time_38
    Signed 32-bit integer
tpncp.inter_cas_time_39  tpncp.inter_cas_time_39
    Signed 32-bit integer
tpncp.inter_cas_time_4   tpncp.inter_cas_time_4
    Signed 32-bit integer
tpncp.inter_cas_time_40  tpncp.inter_cas_time_40
    Signed 32-bit integer
```

```
tpncp.inter_cas_time_41  tpncp.inter_cas_time_41
    Signed 32-bit integer
tpncp.inter_cas_time_42  tpncp.inter_cas_time_42
    Signed 32-bit integer
tpncp.inter_cas_time_43  tpncp.inter_cas_time_43
    Signed 32-bit integer
tpncp.inter_cas_time_44  tpncp.inter_cas_time_44
    Signed 32-bit integer
tpncp.inter_cas_time_45  tpncp.inter_cas_time_45
    Signed 32-bit integer
tpncp.inter_cas_time_46  tpncp.inter_cas_time_46
    Signed 32-bit integer
tpncp.inter_cas_time_47  tpncp.inter_cas_time_47
    Signed 32-bit integer
tpncp.inter_cas_time_48  tpncp.inter_cas_time_48
    Signed 32-bit integer
tpncp.inter_cas_time_49  tpncp.inter_cas_time_49
    Signed 32-bit integer
tpncp.inter_cas_time_5   tpncp.inter_cas_time_5
    Signed 32-bit integer
tpncp.inter_cas_time_6   tpncp.inter_cas_time_6
    Signed 32-bit integer
tpncp.inter_cas_time_7   tpncp.inter_cas_time_7
    Signed 32-bit integer
tpncp.inter_cas_time_8   tpncp.inter_cas_time_8
    Signed 32-bit integer
tpncp.inter_cas_time_9   tpncp.inter_cas_time_9
    Signed 32-bit integer
tpncp.inter_digit_critical_timer  tpncp.inter_digit_critical_timer
    Signed 32-bit integer
tpncp.inter_digit_time_0  tpncp.inter_digit_time_0
    Signed 32-bit integer
tpncp.inter_digit_time_1  tpncp.inter_digit_time_1
    Signed 32-bit integer
tpncp.inter_digit_time_10  tpncp.inter_digit_time_10
    Signed 32-bit integer
tpncp.inter_digit_time_11  tpncp.inter_digit_time_11
    Signed 32-bit integer
tpncp.inter_digit_time_12  tpncp.inter_digit_time_12
    Signed 32-bit integer
tpncp.inter_digit_time_13  tpncp.inter_digit_time_13
    Signed 32-bit integer
tpncp.inter_digit_time_14  tpncp.inter_digit_time_14
    Signed 32-bit integer
```

```
tpncp.inter_digit_time_15  tpncp.inter_digit_time_15
    Signed 32-bit integer
tpncp.inter_digit_time_16  tpncp.inter_digit_time_16
    Signed 32-bit integer
tpncp.inter_digit_time_17  tpncp.inter_digit_time_17
    Signed 32-bit integer
tpncp.inter_digit_time_18  tpncp.inter_digit_time_18
    Signed 32-bit integer
tpncp.inter_digit_time_19  tpncp.inter_digit_time_19
    Signed 32-bit integer
tpncp.inter_digit_time_2   tpncp.inter_digit_time_2
    Signed 32-bit integer
tpncp.inter_digit_time_20  tpncp.inter_digit_time_20
    Signed 32-bit integer
tpncp.inter_digit_time_21  tpncp.inter_digit_time_21
    Signed 32-bit integer
tpncp.inter_digit_time_22  tpncp.inter_digit_time_22
    Signed 32-bit integer
tpncp.inter_digit_time_23  tpncp.inter_digit_time_23
    Signed 32-bit integer
tpncp.inter_digit_time_24  tpncp.inter_digit_time_24
    Signed 32-bit integer
tpncp.inter_digit_time_25  tpncp.inter_digit_time_25
    Signed 32-bit integer
tpncp.inter_digit_time_26  tpncp.inter_digit_time_26
    Signed 32-bit integer
tpncp.inter_digit_time_27  tpncp.inter_digit_time_27
    Signed 32-bit integer
tpncp.inter_digit_time_28  tpncp.inter_digit_time_28
    Signed 32-bit integer
tpncp.inter_digit_time_29  tpncp.inter_digit_time_29
    Signed 32-bit integer
tpncp.inter_digit_time_3   tpncp.inter_digit_time_3
    Signed 32-bit integer
tpncp.inter_digit_time_30  tpncp.inter_digit_time_30
    Signed 32-bit integer
tpncp.inter_digit_time_31  tpncp.inter_digit_time_31
    Signed 32-bit integer
tpncp.inter_digit_time_32  tpncp.inter_digit_time_32
    Signed 32-bit integer
tpncp.inter_digit_time_33  tpncp.inter_digit_time_33
    Signed 32-bit integer
tpncp.inter_digit_time_34  tpncp.inter_digit_time_34
    Signed 32-bit integer
```



```

tpncp.inter_digit_time_35  tpncp.inter_digit_time_35
    Signed 32-bit integer
tpncp.inter_digit_time_36  tpncp.inter_digit_time_36
    Signed 32-bit integer
tpncp.inter_digit_time_37  tpncp.inter_digit_time_37
    Signed 32-bit integer
tpncp.inter_digit_time_38  tpncp.inter_digit_time_38
    Signed 32-bit integer
tpncp.inter_digit_time_39  tpncp.inter_digit_time_39
    Signed 32-bit integer
tpncp.inter_digit_time_4   tpncp.inter_digit_time_4
    Signed 32-bit integer
tpncp.inter_digit_time_5   tpncp.inter_digit_time_5
    Signed 32-bit integer
tpncp.inter_digit_time_6   tpncp.inter_digit_time_6
    Signed 32-bit integer
tpncp.inter_digit_time_7   tpncp.inter_digit_time_7
    Signed 32-bit integer
tpncp.inter_digit_time_8   tpncp.inter_digit_time_8
    Signed 32-bit integer
tpncp.inter_digit_time_9   tpncp.inter_digit_time_9
    Signed 32-bit integer
tpncp.inter_digit_timer    tpncp.inter_digit_timer
    Signed 32-bit integer
tpncp.inter_exchange_prefix_num  tpncp.inter_exchange_prefix_num
    String
tpncp.interaction_required  tpncp.interaction_required
    Unsigned 8-bit integer
tpncp.interface_type       tpncp.interface_type
    Signed 32-bit integer
tpncp.internal_vcc_handle   tpncp.internal_vcc_handle
    Signed 16-bit integer
tpncp.interval             tpncp.interval
    Signed 32-bit integer
tpncp.interval_length      tpncp.interval_length
    Signed 32-bit integer
tpncp.ip_address           tpncp.ip_address
    Unsigned 32-bit integer
tpncp.ip_address_0         tpncp.ip_address_0
    Unsigned 32-bit integer
tpncp.ip_address_1         tpncp.ip_address_1
    Unsigned 32-bit integer
tpncp.ip_address_2         tpncp.ip_address_2
    Unsigned 32-bit integer

```

```
tpncp.ip_address_3  tpncp.ip_address_3
    Unsigned 32-bit integer
tpncp.ip_address_4  tpncp.ip_address_4
    Unsigned 32-bit integer
tpncp.ip_address_5  tpncp.ip_address_5
    Unsigned 32-bit integer
tpncp.ip_dst_addr  tpncp.ip_dst_addr
    Unsigned 32-bit integer
tpncp.ip_precedence  tpncp.ip_precedence
    Signed 32-bit integer
tpncp.ip_tos_field_in_udp_packet  tpncp.ip_tos_field_in_udp_packet
    Unsigned 8-bit integer
tpncp.iptos  tpncp.iptos
    Signed 32-bit integer
tpncp.ipv6_addr_0  tpncp.ipv6_addr_0
    Unsigned 32-bit integer
tpncp.ipv6_addr_1  tpncp.ipv6_addr_1
    Unsigned 32-bit integer
tpncp.ipv6_addr_2  tpncp.ipv6_addr_2
    Unsigned 32-bit integer
tpncp.ipv6_addr_3  tpncp.ipv6_addr_3
    Unsigned 32-bit integer
tpncp.is_active  tpncp.is_active
    Unsigned 8-bit integer
tpncp.is_available  tpncp.is_available
    Unsigned 8-bit integer
tpncp.is_burn_success  tpncp.is_burn_success
    Unsigned 8-bit integer
tpncp.is_data_flow_control  tpncp.is_data_flow_control
    Unsigned 8-bit integer
tpncp.is_duplex_0  tpncp.is_duplex_0
    Signed 32-bit integer
tpncp.is_duplex_1  tpncp.is_duplex_1
    Signed 32-bit integer
tpncp.is_duplex_2  tpncp.is_duplex_2
    Signed 32-bit integer
tpncp.is_duplex_3  tpncp.is_duplex_3
    Signed 32-bit integer
tpncp.is_duplex_4  tpncp.is_duplex_4
    Signed 32-bit integer
tpncp.is_duplex_5  tpncp.is_duplex_5
    Signed 32-bit integer
tpncp.is_enable_listener_only_participants  tpncp.is_enable_listener_only_partic
    Signed 32-bit integer
```

```
tpncp.is_external_grammar  tpncp.is_external_grammar
    Unsigned 8-bit integer
tpncp.is_last  tpncp.is_last
    Signed 32-bit integer
tpncp.is_link_up_0  tpncp.is_link_up_0
    Signed 32-bit integer
tpncp.is_link_up_1  tpncp.is_link_up_1
    Signed 32-bit integer
tpncp.is_link_up_2  tpncp.is_link_up_2
    Signed 32-bit integer
tpncp.is_link_up_3  tpncp.is_link_up_3
    Signed 32-bit integer
tpncp.is_link_up_4  tpncp.is_link_up_4
    Signed 32-bit integer
tpncp.is_link_up_5  tpncp.is_link_up_5
    Signed 32-bit integer
tpncp.is_load_success  tpncp.is_load_success
    Unsigned 8-bit integer
tpncp.is_multiple_ip_addresses_enabled_0  tpncp.is_multiple_ip_addresses_enabled
    Signed 32-bit integer
tpncp.is_multiple_ip_addresses_enabled_1  tpncp.is_multiple_ip_addresses_enabled
    Signed 32-bit integer
tpncp.is_multiple_ip_addresses_enabled_2  tpncp.is_multiple_ip_addresses_enabled
    Signed 32-bit integer
tpncp.is_multiple_ip_addresses_enabled_3  tpncp.is_multiple_ip_addresses_enabled
    Signed 32-bit integer
tpncp.is_multiple_ip_addresses_enabled_4  tpncp.is_multiple_ip_addresses_enabled
    Signed 32-bit integer
tpncp.is_multiple_ip_addresses_enabled_5  tpncp.is_multiple_ip_addresses_enabled
    Signed 32-bit integer
tpncp.is_proxy_lcp_required  tpncp.is_proxy_lcp_required
    Unsigned 8-bit integer
tpncp.is_repeat_dial_string  tpncp.is_repeat_dial_string
    Signed 32-bit integer
tpncp.is_single_tunnel_required  tpncp.is_single_tunnel_required
    Unsigned 8-bit integer
tpncp.is_threshold_alarm_active  tpncp.is_threshold_alarm_active
    Unsigned 8-bit integer
tpncp.is_tunnel_auth_required  tpncp.is_tunnel_auth_required
    Unsigned 8-bit integer
tpncp.is_tunnel_security_required  tpncp.is_tunnel_security_required
    Unsigned 8-bit integer
tpncp.is_vlan_enabled_0  tpncp.is_vlan_enabled_0
    Signed 32-bit integer
```

```
tpncp.is_vlan_enabled_1  tpncp.is_vlan_enabled_1
    Signed 32-bit integer
tpncp.is_vlan_enabled_2  tpncp.is_vlan_enabled_2
    Signed 32-bit integer
tpncp.is_vlan_enabled_3  tpncp.is_vlan_enabled_3
    Signed 32-bit integer
tpncp.is_vlan_enabled_4  tpncp.is_vlan_enabled_4
    Signed 32-bit integer
tpncp.is_vlan_enabled_5  tpncp.is_vlan_enabled_5
    Signed 32-bit integer
tpncp.is_vmwi  tpncp.is_vmwi
    Unsigned 8-bit integer
tpncp.isdn_progress_ind_description  tpncp.isdn_progress_ind_description
    Signed 32-bit integer
tpncp.isdn_progress_ind_location  tpncp.isdn_progress_ind_location
    Signed 32-bit integer
tpncp.isup_msg_type  tpncp.isup_msg_type
    Signed 32-bit integer
tpncp.iterations  tpncp.iterations
    Unsigned 16-bit integer
tpncp.jb_abs_max_delay  tpncp.jb_abs_max_delay
    Unsigned 16-bit integer
tpncp.jb_max_delay  tpncp.jb_max_delay
    Unsigned 16-bit integer
tpncp.jb_nom_delay  tpncp.jb_nom_delay
    Unsigned 16-bit integer
tpncp.jitter  tpncp.jitter
    Unsigned 32-bit integer
tpncp.keep_digits  tpncp.keep_digits
    Signed 32-bit integer
tpncp.key  tpncp.key
    String
tpncp.key_length  tpncp.key_length
    Signed 32-bit integer
tpncp.keypad_size  tpncp.keypad_size
    Signed 32-bit integer
tpncp.keypad_string  tpncp.keypad_string
    String
tpncp.keys_patterns  tpncp.keys_patterns
    String
tpncp.l2_startup_not_ok  tpncp.l2_startup_not_ok
    Signed 32-bit integer
tpncp.l2tp_tunnel_id  tpncp.l2tp_tunnel_id
    Unsigned 16-bit integer
```

```
tpncp.l_ais tpncp.l_ais
    Signed 32-bit integer
tpncp.l_rdi tpncp.l_rdi
    Signed 32-bit integer
tpncp.largest_conference_enable tpncp.largest_conference_enable
    Signed 32-bit integer
tpncp.last_cas tpncp.last_cas
    Signed 32-bit integer
tpncp.last_current_disconnect_duration tpncp.last_current_disconnect_duration
    Unsigned 32-bit integer
tpncp.last_rtt tpncp.last_rtt
    Unsigned 32-bit integer
tpncp.last_value tpncp.last_value
    Signed 32-bit integer
tpncp.lcd tpncp.lcd
    Signed 32-bit integer
tpncp.length Length
    Unsigned 16-bit integer
tpncp.license_key tpncp.license_key
    String
tpncp.line_code_violation tpncp.line_code_violation
    Signed 32-bit integer
tpncp.line_errored_seconds tpncp.line_errored_seconds
    Signed 32-bit integer
tpncp.line_in_file tpncp.line_in_file
    Signed 32-bit integer
tpncp.line_number tpncp.line_number
    Signed 32-bit integer
tpncp.line_polarity tpncp.line_polarity
    Signed 32-bit integer
tpncp.line_polarity_state tpncp.line_polarity_state
    Signed 32-bit integer
tpncp.link tpncp.link
    Signed 32-bit integer
tpncp.link_control_protocol_data_link_error tpncp.link_control_protocol_data_li
    Signed 32-bit integer
tpncp.link_event_cause tpncp.link_event_cause
    Signed 32-bit integer
tpncp.link_id tpncp.link_id
    Signed 32-bit integer
tpncp.link_set tpncp.link_set
    Signed 32-bit integer
tpncp.link_set_event_cause tpncp.link_set_event_cause
    Signed 32-bit integer
```

```
tpncp.link_set_name  tpncp.link_set_name
    String
tpncp.link_set_no    tpncp.link_set_no
    Signed 32-bit integer
tpncp.links_configured_no  tpncp.links_configured_no
    Signed 32-bit integer
tpncp.links_no_0    tpncp.links_no_0
    Signed 32-bit integer
tpncp.links_no_1    tpncp.links_no_1
    Signed 32-bit integer
tpncp.links_no_10   tpncp.links_no_10
    Signed 32-bit integer
tpncp.links_no_11   tpncp.links_no_11
    Signed 32-bit integer
tpncp.links_no_12   tpncp.links_no_12
    Signed 32-bit integer
tpncp.links_no_13   tpncp.links_no_13
    Signed 32-bit integer
tpncp.links_no_14   tpncp.links_no_14
    Signed 32-bit integer
tpncp.links_no_15   tpncp.links_no_15
    Signed 32-bit integer
tpncp.links_no_2    tpncp.links_no_2
    Signed 32-bit integer
tpncp.links_no_3    tpncp.links_no_3
    Signed 32-bit integer
tpncp.links_no_4    tpncp.links_no_4
    Signed 32-bit integer
tpncp.links_no_5    tpncp.links_no_5
    Signed 32-bit integer
tpncp.links_no_6    tpncp.links_no_6
    Signed 32-bit integer
tpncp.links_no_7    tpncp.links_no_7
    Signed 32-bit integer
tpncp.links_no_8    tpncp.links_no_8
    Signed 32-bit integer
tpncp.links_no_9    tpncp.links_no_9
    Signed 32-bit integer
tpncp.links_per_card  tpncp.links_per_card
    Signed 32-bit integer
tpncp.links_per_linkset  tpncp.links_per_linkset
    Signed 32-bit integer
tpncp.links_slc_0    tpncp.links_slc_0
    Signed 32-bit integer
```

```
tpncp.links_slc_1  tpncp.links_slc_1
    Signed 32-bit integer
tpncp.links_slc_10 tpncp.links_slc_10
    Signed 32-bit integer
tpncp.links_slc_11 tpncp.links_slc_11
    Signed 32-bit integer
tpncp.links_slc_12 tpncp.links_slc_12
    Signed 32-bit integer
tpncp.links_slc_13 tpncp.links_slc_13
    Signed 32-bit integer
tpncp.links_slc_14 tpncp.links_slc_14
    Signed 32-bit integer
tpncp.links_slc_15 tpncp.links_slc_15
    Signed 32-bit integer
tpncp.links_slc_2  tpncp.links_slc_2
    Signed 32-bit integer
tpncp.links_slc_3  tpncp.links_slc_3
    Signed 32-bit integer
tpncp.links_slc_4  tpncp.links_slc_4
    Signed 32-bit integer
tpncp.links_slc_5  tpncp.links_slc_5
    Signed 32-bit integer
tpncp.links_slc_6  tpncp.links_slc_6
    Signed 32-bit integer
tpncp.links_slc_7  tpncp.links_slc_7
    Signed 32-bit integer
tpncp.links_slc_8  tpncp.links_slc_8
    Signed 32-bit integer
tpncp.links_slc_9  tpncp.links_slc_9
    Signed 32-bit integer
tpncp.linkset_timer_sets tpncp.linkset_timer_sets
    Signed 32-bit integer
tpncp.linksets_per_routeset tpncp.linksets_per_routeset
    Signed 32-bit integer
tpncp.linksets_per_sn tpncp.linksets_per_sn
    Signed 32-bit integer
tpncp.llid tpncp.llid
    String
tpncp.lo_alarm_status_0 tpncp.lo_alarm_status_0
    Signed 32-bit integer
tpncp.lo_alarm_status_1 tpncp.lo_alarm_status_1
    Signed 32-bit integer
tpncp.lo_alarm_status_10 tpncp.lo_alarm_status_10
    Signed 32-bit integer
```

```
tpncp.lo_alarm_status_11 tpncp.lo_alarm_status_11
    Signed 32-bit integer
tpncp.lo_alarm_status_12 tpncp.lo_alarm_status_12
    Signed 32-bit integer
tpncp.lo_alarm_status_13 tpncp.lo_alarm_status_13
    Signed 32-bit integer
tpncp.lo_alarm_status_14 tpncp.lo_alarm_status_14
    Signed 32-bit integer
tpncp.lo_alarm_status_15 tpncp.lo_alarm_status_15
    Signed 32-bit integer
tpncp.lo_alarm_status_16 tpncp.lo_alarm_status_16
    Signed 32-bit integer
tpncp.lo_alarm_status_17 tpncp.lo_alarm_status_17
    Signed 32-bit integer
tpncp.lo_alarm_status_18 tpncp.lo_alarm_status_18
    Signed 32-bit integer
tpncp.lo_alarm_status_19 tpncp.lo_alarm_status_19
    Signed 32-bit integer
tpncp.lo_alarm_status_2 tpncp.lo_alarm_status_2
    Signed 32-bit integer
tpncp.lo_alarm_status_20 tpncp.lo_alarm_status_20
    Signed 32-bit integer
tpncp.lo_alarm_status_21 tpncp.lo_alarm_status_21
    Signed 32-bit integer
tpncp.lo_alarm_status_22 tpncp.lo_alarm_status_22
    Signed 32-bit integer
tpncp.lo_alarm_status_23 tpncp.lo_alarm_status_23
    Signed 32-bit integer
tpncp.lo_alarm_status_24 tpncp.lo_alarm_status_24
    Signed 32-bit integer
tpncp.lo_alarm_status_25 tpncp.lo_alarm_status_25
    Signed 32-bit integer
tpncp.lo_alarm_status_26 tpncp.lo_alarm_status_26
    Signed 32-bit integer
tpncp.lo_alarm_status_27 tpncp.lo_alarm_status_27
    Signed 32-bit integer
tpncp.lo_alarm_status_28 tpncp.lo_alarm_status_28
    Signed 32-bit integer
tpncp.lo_alarm_status_29 tpncp.lo_alarm_status_29
    Signed 32-bit integer
tpncp.lo_alarm_status_3 tpncp.lo_alarm_status_3
    Signed 32-bit integer
tpncp.lo_alarm_status_30 tpncp.lo_alarm_status_30
    Signed 32-bit integer
```



```
tpncp.lo_alarm_status_31  tpncp.lo_alarm_status_31
    Signed 32-bit integer
tpncp.lo_alarm_status_32  tpncp.lo_alarm_status_32
    Signed 32-bit integer
tpncp.lo_alarm_status_33  tpncp.lo_alarm_status_33
    Signed 32-bit integer
tpncp.lo_alarm_status_34  tpncp.lo_alarm_status_34
    Signed 32-bit integer
tpncp.lo_alarm_status_35  tpncp.lo_alarm_status_35
    Signed 32-bit integer
tpncp.lo_alarm_status_36  tpncp.lo_alarm_status_36
    Signed 32-bit integer
tpncp.lo_alarm_status_37  tpncp.lo_alarm_status_37
    Signed 32-bit integer
tpncp.lo_alarm_status_38  tpncp.lo_alarm_status_38
    Signed 32-bit integer
tpncp.lo_alarm_status_39  tpncp.lo_alarm_status_39
    Signed 32-bit integer
tpncp.lo_alarm_status_4  tpncp.lo_alarm_status_4
    Signed 32-bit integer
tpncp.lo_alarm_status_40  tpncp.lo_alarm_status_40
    Signed 32-bit integer
tpncp.lo_alarm_status_41  tpncp.lo_alarm_status_41
    Signed 32-bit integer
tpncp.lo_alarm_status_42  tpncp.lo_alarm_status_42
    Signed 32-bit integer
tpncp.lo_alarm_status_43  tpncp.lo_alarm_status_43
    Signed 32-bit integer
tpncp.lo_alarm_status_44  tpncp.lo_alarm_status_44
    Signed 32-bit integer
tpncp.lo_alarm_status_45  tpncp.lo_alarm_status_45
    Signed 32-bit integer
tpncp.lo_alarm_status_46  tpncp.lo_alarm_status_46
    Signed 32-bit integer
tpncp.lo_alarm_status_47  tpncp.lo_alarm_status_47
    Signed 32-bit integer
tpncp.lo_alarm_status_48  tpncp.lo_alarm_status_48
    Signed 32-bit integer
tpncp.lo_alarm_status_49  tpncp.lo_alarm_status_49
    Signed 32-bit integer
tpncp.lo_alarm_status_5  tpncp.lo_alarm_status_5
    Signed 32-bit integer
tpncp.lo_alarm_status_50  tpncp.lo_alarm_status_50
    Signed 32-bit integer
```

```
tpncp.lo_alarm_status_51 tpncp.lo_alarm_status_51
    Signed 32-bit integer
tpncp.lo_alarm_status_52 tpncp.lo_alarm_status_52
    Signed 32-bit integer
tpncp.lo_alarm_status_53 tpncp.lo_alarm_status_53
    Signed 32-bit integer
tpncp.lo_alarm_status_54 tpncp.lo_alarm_status_54
    Signed 32-bit integer
tpncp.lo_alarm_status_55 tpncp.lo_alarm_status_55
    Signed 32-bit integer
tpncp.lo_alarm_status_56 tpncp.lo_alarm_status_56
    Signed 32-bit integer
tpncp.lo_alarm_status_57 tpncp.lo_alarm_status_57
    Signed 32-bit integer
tpncp.lo_alarm_status_58 tpncp.lo_alarm_status_58
    Signed 32-bit integer
tpncp.lo_alarm_status_59 tpncp.lo_alarm_status_59
    Signed 32-bit integer
tpncp.lo_alarm_status_6 tpncp.lo_alarm_status_6
    Signed 32-bit integer
tpncp.lo_alarm_status_60 tpncp.lo_alarm_status_60
    Signed 32-bit integer
tpncp.lo_alarm_status_61 tpncp.lo_alarm_status_61
    Signed 32-bit integer
tpncp.lo_alarm_status_62 tpncp.lo_alarm_status_62
    Signed 32-bit integer
tpncp.lo_alarm_status_63 tpncp.lo_alarm_status_63
    Signed 32-bit integer
tpncp.lo_alarm_status_64 tpncp.lo_alarm_status_64
    Signed 32-bit integer
tpncp.lo_alarm_status_65 tpncp.lo_alarm_status_65
    Signed 32-bit integer
tpncp.lo_alarm_status_66 tpncp.lo_alarm_status_66
    Signed 32-bit integer
tpncp.lo_alarm_status_67 tpncp.lo_alarm_status_67
    Signed 32-bit integer
tpncp.lo_alarm_status_68 tpncp.lo_alarm_status_68
    Signed 32-bit integer
tpncp.lo_alarm_status_69 tpncp.lo_alarm_status_69
    Signed 32-bit integer
tpncp.lo_alarm_status_7 tpncp.lo_alarm_status_7
    Signed 32-bit integer
tpncp.lo_alarm_status_70 tpncp.lo_alarm_status_70
    Signed 32-bit integer
```

```
tpncp.lo_alarm_status_71 tpncp.lo_alarm_status_71
    Signed 32-bit integer
tpncp.lo_alarm_status_72 tpncp.lo_alarm_status_72
    Signed 32-bit integer
tpncp.lo_alarm_status_73 tpncp.lo_alarm_status_73
    Signed 32-bit integer
tpncp.lo_alarm_status_74 tpncp.lo_alarm_status_74
    Signed 32-bit integer
tpncp.lo_alarm_status_75 tpncp.lo_alarm_status_75
    Signed 32-bit integer
tpncp.lo_alarm_status_76 tpncp.lo_alarm_status_76
    Signed 32-bit integer
tpncp.lo_alarm_status_77 tpncp.lo_alarm_status_77
    Signed 32-bit integer
tpncp.lo_alarm_status_78 tpncp.lo_alarm_status_78
    Signed 32-bit integer
tpncp.lo_alarm_status_79 tpncp.lo_alarm_status_79
    Signed 32-bit integer
tpncp.lo_alarm_status_8 tpncp.lo_alarm_status_8
    Signed 32-bit integer
tpncp.lo_alarm_status_80 tpncp.lo_alarm_status_80
    Signed 32-bit integer
tpncp.lo_alarm_status_81 tpncp.lo_alarm_status_81
    Signed 32-bit integer
tpncp.lo_alarm_status_82 tpncp.lo_alarm_status_82
    Signed 32-bit integer
tpncp.lo_alarm_status_83 tpncp.lo_alarm_status_83
    Signed 32-bit integer
tpncp.lo_alarm_status_9 tpncp.lo_alarm_status_9
    Signed 32-bit integer
tpncp.local_port_0 tpncp.local_port_0
    Signed 32-bit integer
tpncp.local_port_1 tpncp.local_port_1
    Signed 32-bit integer
tpncp.local_port_10 tpncp.local_port_10
    Signed 32-bit integer
tpncp.local_port_11 tpncp.local_port_11
    Signed 32-bit integer
tpncp.local_port_12 tpncp.local_port_12
    Signed 32-bit integer
tpncp.local_port_13 tpncp.local_port_13
    Signed 32-bit integer
tpncp.local_port_14 tpncp.local_port_14
    Signed 32-bit integer
```

```
tpncp.local_port_15  tpncp.local_port_15
    Signed 32-bit integer
tpncp.local_port_16  tpncp.local_port_16
    Signed 32-bit integer
tpncp.local_port_17  tpncp.local_port_17
    Signed 32-bit integer
tpncp.local_port_18  tpncp.local_port_18
    Signed 32-bit integer
tpncp.local_port_19  tpncp.local_port_19
    Signed 32-bit integer
tpncp.local_port_2   tpncp.local_port_2
    Signed 32-bit integer
tpncp.local_port_20  tpncp.local_port_20
    Signed 32-bit integer
tpncp.local_port_21  tpncp.local_port_21
    Signed 32-bit integer
tpncp.local_port_22  tpncp.local_port_22
    Signed 32-bit integer
tpncp.local_port_23  tpncp.local_port_23
    Signed 32-bit integer
tpncp.local_port_24  tpncp.local_port_24
    Signed 32-bit integer
tpncp.local_port_25  tpncp.local_port_25
    Signed 32-bit integer
tpncp.local_port_26  tpncp.local_port_26
    Signed 32-bit integer
tpncp.local_port_27  tpncp.local_port_27
    Signed 32-bit integer
tpncp.local_port_28  tpncp.local_port_28
    Signed 32-bit integer
tpncp.local_port_29  tpncp.local_port_29
    Signed 32-bit integer
tpncp.local_port_3   tpncp.local_port_3
    Signed 32-bit integer
tpncp.local_port_30  tpncp.local_port_30
    Signed 32-bit integer
tpncp.local_port_31  tpncp.local_port_31
    Signed 32-bit integer
tpncp.local_port_4   tpncp.local_port_4
    Signed 32-bit integer
tpncp.local_port_5   tpncp.local_port_5
    Signed 32-bit integer
tpncp.local_port_6   tpncp.local_port_6
    Signed 32-bit integer
```

```
tpncp.local_port_7  tpncp.local_port_7
    Signed 32-bit integer
tpncp.local_port_8  tpncp.local_port_8
    Signed 32-bit integer
tpncp.local_port_9  tpncp.local_port_9
    Signed 32-bit integer
tpncp.local_rtp_port  tpncp.local_rtp_port
    Unsigned 16-bit integer
tpncp.local_session_id  tpncp.local_session_id
    Signed 32-bit integer
tpncp.local_session_seq_num  tpncp.local_session_seq_num
    Signed 32-bit integer
tpncp.locally_inhibited  tpncp.locally_inhibited
    Signed 32-bit integer
tpncp.lof  tpncp.lof
    Signed 32-bit integer
tpncp.loop_back_port_state_0  tpncp.loop_back_port_state_0
    Signed 32-bit integer
tpncp.loop_back_port_state_1  tpncp.loop_back_port_state_1
    Signed 32-bit integer
tpncp.loop_back_port_state_2  tpncp.loop_back_port_state_2
    Signed 32-bit integer
tpncp.loop_back_port_state_3  tpncp.loop_back_port_state_3
    Signed 32-bit integer
tpncp.loop_back_port_state_4  tpncp.loop_back_port_state_4
    Signed 32-bit integer
tpncp.loop_back_port_state_5  tpncp.loop_back_port_state_5
    Signed 32-bit integer
tpncp.loop_back_port_state_6  tpncp.loop_back_port_state_6
    Signed 32-bit integer
tpncp.loop_back_port_state_7  tpncp.loop_back_port_state_7
    Signed 32-bit integer
tpncp.loop_back_port_state_8  tpncp.loop_back_port_state_8
    Signed 32-bit integer
tpncp.loop_back_port_state_9  tpncp.loop_back_port_state_9
    Signed 32-bit integer
tpncp.loop_back_status  tpncp.loop_back_status
    Signed 32-bit integer
tpncp.loop_code  tpncp.loop_code
    Signed 32-bit integer
tpncp.loop_direction  tpncp.loop_direction
    Signed 32-bit integer
tpncp.loop_type  tpncp.loop_type
    Signed 32-bit integer
```

```
tpncp.lop tpncp.lop
    Signed 32-bit integer
tpncp.los tpncp.los
    Signed 32-bit integer
tpncp.los_of_signal tpncp.los_of_signal
    Signed 32-bit integer
tpncp.los_port_state_0 tpncp.los_port_state_0
    Signed 32-bit integer
tpncp.los_port_state_1 tpncp.los_port_state_1
    Signed 32-bit integer
tpncp.los_port_state_2 tpncp.los_port_state_2
    Signed 32-bit integer
tpncp.los_port_state_3 tpncp.los_port_state_3
    Signed 32-bit integer
tpncp.los_port_state_4 tpncp.los_port_state_4
    Signed 32-bit integer
tpncp.los_port_state_5 tpncp.los_port_state_5
    Signed 32-bit integer
tpncp.los_port_state_6 tpncp.los_port_state_6
    Signed 32-bit integer
tpncp.los_port_state_7 tpncp.los_port_state_7
    Signed 32-bit integer
tpncp.los_port_state_8 tpncp.los_port_state_8
    Signed 32-bit integer
tpncp.los_port_state_9 tpncp.los_port_state_9
    Signed 32-bit integer
tpncp.loss_of_frame tpncp.loss_of_frame
    Signed 32-bit integer
tpncp.loss_of_signal tpncp.loss_of_signal
    Signed 32-bit integer
tpncp.loss_rate tpncp.loss_rate
    Unsigned 8-bit integer
tpncp.lost_crc4multiframe_sync tpncp.lost_crc4multiframe_sync
    Signed 32-bit integer
tpncp.low_threshold tpncp.low_threshold
    Signed 32-bit integer
tpncp.m tpncp.m
    Signed 32-bit integer
tpncp.maal_state tpncp.maal_state
    Unsigned 8-bit integer
tpncp.mac_addr_lsb tpncp.mac_addr_lsb
    Signed 32-bit integer
tpncp.mac_addr_lsb_0 tpncp.mac_addr_lsb_0
    Signed 32-bit integer
```

```
tpncp.mac_addr_lsb_1  tpncp.mac_addr_lsb_1
    Signed 32-bit integer
tpncp.mac_addr_lsb_2  tpncp.mac_addr_lsb_2
    Signed 32-bit integer
tpncp.mac_addr_lsb_3  tpncp.mac_addr_lsb_3
    Signed 32-bit integer
tpncp.mac_addr_lsb_4  tpncp.mac_addr_lsb_4
    Signed 32-bit integer
tpncp.mac_addr_lsb_5  tpncp.mac_addr_lsb_5
    Signed 32-bit integer
tpncp.mac_addr_msb  tpncp.mac_addr_msb
    Signed 32-bit integer
tpncp.mac_addr_msb_0  tpncp.mac_addr_msb_0
    Signed 32-bit integer
tpncp.mac_addr_msb_1  tpncp.mac_addr_msb_1
    Signed 32-bit integer
tpncp.mac_addr_msb_2  tpncp.mac_addr_msb_2
    Signed 32-bit integer
tpncp.mac_addr_msb_3  tpncp.mac_addr_msb_3
    Signed 32-bit integer
tpncp.mac_addr_msb_4  tpncp.mac_addr_msb_4
    Signed 32-bit integer
tpncp.mac_addr_msb_5  tpncp.mac_addr_msb_5
    Signed 32-bit integer
tpncp.maintenance_field_m1  tpncp.maintenance_field_m1
    Signed 32-bit integer
tpncp.maintenance_field_m2  tpncp.maintenance_field_m2
    Signed 32-bit integer
tpncp.maintenance_field_m3  tpncp.maintenance_field_m3
    Signed 32-bit integer
tpncp.master_temperature  tpncp.master_temperature
    Signed 32-bit integer
tpncp.match_grammar_name  tpncp.match_grammar_name
    String
tpncp.matched_map_index  tpncp.matched_map_index
    Signed 32-bit integer
tpncp.matched_map_num  tpncp.matched_map_num
    Signed 32-bit integer
tpncp.matched_value  tpncp.matched_value
    String
tpncp.max  tpncp.max
    Signed 32-bit integer
tpncp.max_ack_time_out  tpncp.max_ack_time_out
    Unsigned 32-bit integer
```

```
tpncp.max_attempts tpncp.max_attempts
    Signed 32-bit integer

tpncp.max_dial_string_length tpncp.max_dial_string_length
    Signed 32-bit integer

tpncp.max_dtmf_digits_in_caller_id_string tpncp.max_dtmf_digits_in_caller_id_string
    Unsigned 8-bit integer

tpncp.max_end_dial_timer tpncp.max_end_dial_timer
    Signed 32-bit integer

tpncp.max_long_inter_digit_timer tpncp.max_long_inter_digit_timer
    Signed 32-bit integer

tpncp.max_num_of_indexes tpncp.max_num_of_indexes
    Signed 32-bit integer

tpncp.max_participants tpncp.max_participants
    Signed 32-bit integer

tpncp.max_rtt tpncp.max_rtt
    Unsigned 32-bit integer

tpncp.max_short_inter_digit_timer tpncp.max_short_inter_digit_timer
    Signed 16-bit integer

tpncp.max_simultaneous_speakers tpncp.max_simultaneous_speakers
    Signed 32-bit integer

tpncp.max_start_timer tpncp.max_start_timer
    Signed 32-bit integer

tpncp.mbs tpncp.mbs
    Signed 32-bit integer

tpncp.measurement_error tpncp.measurement_error
    Signed 32-bit integer

tpncp.measurement_mode tpncp.measurement_mode
    Signed 32-bit integer

tpncp.measurement_trigger tpncp.measurement_trigger
    Signed 32-bit integer

tpncp.measurement_unit tpncp.measurement_unit
    Signed 32-bit integer

tpncp.media_gateway_address_0 tpncp.media_gateway_address_0
    Unsigned 32-bit integer

tpncp.media_gateway_address_1 tpncp.media_gateway_address_1
    Unsigned 32-bit integer

tpncp.media_gateway_address_2 tpncp.media_gateway_address_2
    Unsigned 32-bit integer

tpncp.media_gateway_address_3 tpncp.media_gateway_address_3
    Unsigned 32-bit integer

tpncp.media_gateway_address_4 tpncp.media_gateway_address_4
    Unsigned 32-bit integer

tpncp.media_gateway_address_5 tpncp.media_gateway_address_5
    Unsigned 32-bit integer
```



```
tpncp.media_ip_address_0  tpncp.media_ip_address_0
    Unsigned 32-bit integer
tpncp.media_ip_address_1  tpncp.media_ip_address_1
    Unsigned 32-bit integer
tpncp.media_ip_address_2  tpncp.media_ip_address_2
    Unsigned 32-bit integer
tpncp.media_ip_address_3  tpncp.media_ip_address_3
    Unsigned 32-bit integer
tpncp.media_ip_address_4  tpncp.media_ip_address_4
    Unsigned 32-bit integer
tpncp.media_ip_address_5  tpncp.media_ip_address_5
    Unsigned 32-bit integer
tpncp.media_subnet_mask_address_0  tpncp.media_subnet_mask_address_0
    Unsigned 32-bit integer
tpncp.media_subnet_mask_address_1  tpncp.media_subnet_mask_address_1
    Unsigned 32-bit integer
tpncp.media_subnet_mask_address_2  tpncp.media_subnet_mask_address_2
    Unsigned 32-bit integer
tpncp.media_subnet_mask_address_3  tpncp.media_subnet_mask_address_3
    Unsigned 32-bit integer
tpncp.media_subnet_mask_address_4  tpncp.media_subnet_mask_address_4
    Unsigned 32-bit integer
tpncp.media_subnet_mask_address_5  tpncp.media_subnet_mask_address_5
    Unsigned 32-bit integer
tpncp.media_type  tpncp.media_type
    Signed 32-bit integer
tpncp.media_types_enabled  tpncp.media_types_enabled
    Signed 32-bit integer
tpncp.media_vlan_id_0  tpncp.media_vlan_id_0
    Unsigned 32-bit integer
tpncp.media_vlan_id_1  tpncp.media_vlan_id_1
    Unsigned 32-bit integer
tpncp.media_vlan_id_2  tpncp.media_vlan_id_2
    Unsigned 32-bit integer
tpncp.media_vlan_id_3  tpncp.media_vlan_id_3
    Unsigned 32-bit integer
tpncp.media_vlan_id_4  tpncp.media_vlan_id_4
    Unsigned 32-bit integer
tpncp.media_vlan_id_5  tpncp.media_vlan_id_5
    Unsigned 32-bit integer
tpncp.mediation_level  tpncp.mediation_level
    Signed 32-bit integer
tpncp.mediation_packet_format  tpncp.mediation_packet_format
    Signed 32-bit integer
```

```
tpncp.message tpncp.message
    String

tpncp.message_id tpncp.message_id
    Signed 32-bit integer

tpncp.message_length tpncp.message_length
    Unsigned 8-bit integer

tpncp.message_type tpncp.message_type
    Signed 32-bit integer

tpncp.message_waiting_indication tpncp.message_waiting_indication
    Signed 32-bit integer

tpncp.method tpncp.method
    Unsigned 32-bit integer

tpncp.mf_transport_type tpncp.mf_transport_type
    Signed 32-bit integer

tpncp.mgci_paddr tpncp.mgci_paddr
    Unsigned 32-bit integer

tpncp.mgci_paddr_0 tpncp.mgci_paddr_0
    Unsigned 32-bit integer

tpncp.mgci_paddr_1 tpncp.mgci_paddr_1
    Unsigned 32-bit integer

tpncp.mgci_paddr_2 tpncp.mgci_paddr_2
    Unsigned 32-bit integer

tpncp.mgci_paddr_3 tpncp.mgci_paddr_3
    Unsigned 32-bit integer

tpncp.mgci_paddr_4 tpncp.mgci_paddr_4
    Unsigned 32-bit integer

tpncp.min tpncp.min
    Signed 32-bit integer

tpncp.min_digit_len tpncp.min_digit_len
    Signed 32-bit integer

tpncp.min_dtmf_digits_in_caller_id_string tpncp.min_dtmf_digits_in_caller_id_string
    Unsigned 8-bit integer

tpncp.min_gap_size tpncp.min_gap_size
    Unsigned 8-bit integer

tpncp.min_inter_digit_len tpncp.min_inter_digit_len
    Signed 32-bit integer

tpncp.min_long_event_timer tpncp.min_long_event_timer
    Signed 32-bit integer

tpncp.min_rtt tpncp.min_rtt
    Unsigned 32-bit integer

tpncp.minute tpncp.minute
    Signed 32-bit integer

tpncp.minutes tpncp.minutes
    Signed 32-bit integer
```

```
tpncp.mlpp_circuit_reserved  tpncp.mlpp_circuit_reserved
    Signed 32-bit integer
tpncp.mlpp_coding_standard  tpncp.mlpp_coding_standard
    Signed 32-bit integer
tpncp.mlpp_domain_0  tpncp.mlpp_domain_0
    Unsigned 8-bit integer
tpncp.mlpp_domain_1  tpncp.mlpp_domain_1
    Unsigned 8-bit integer
tpncp.mlpp_domain_2  tpncp.mlpp_domain_2
    Unsigned 8-bit integer
tpncp.mlpp_domain_3  tpncp.mlpp_domain_3
    Unsigned 8-bit integer
tpncp.mlpp_domain_4  tpncp.mlpp_domain_4
    Unsigned 8-bit integer
tpncp.mlpp_domain_size  tpncp.mlpp_domain_size
    Signed 32-bit integer
tpncp.mlpp_lfb_ind  tpncp.mlpp_lfb_ind
    Signed 32-bit integer
tpncp.mlpp_prec_level  tpncp.mlpp_prec_level
    Signed 32-bit integer
tpncp.mlpp_precedence_level_change_privilege  tpncp.mlpp_precedence_level_change
    Signed 32-bit integer
tpncp.mlpp_present  tpncp.mlpp_present
    Unsigned 32-bit integer
tpncp.mlpp_status_request  tpncp.mlpp_status_request
    Signed 32-bit integer
tpncp.mode  tpncp.mode
    Signed 32-bit integer
tpncp.modem_address_and_control_compression  tpncp.modem_address_and_control_com
    Unsigned 8-bit integer
tpncp.modem_compression  tpncp.modem_compression
    Unsigned 8-bit integer
tpncp.modem_data_mode  tpncp.modem_data_mode
    Unsigned 8-bit integer
tpncp.modem_data_protocol  tpncp.modem_data_protocol
    Unsigned 8-bit integer
tpncp.modem_debug_mode  tpncp.modem_debug_mode
    Unsigned 8-bit integer
tpncp.modem_disable_line_quality_monitoring  tpncp.modem_disable_line_quality_mo
    Unsigned 8-bit integer
tpncp.modem_max_rate  tpncp.modem_max_rate
    Unsigned 8-bit integer
tpncp.modem_on_hold_mode  tpncp.modem_on_hold_mode
    Unsigned 8-bit integer
```

```
tpncp.modem_on_hold_time_out  tpncp.modem_on_hold_time_out
    Unsigned 8-bit integer
tpncp.modem_pstn_access  tpncp.modem_pstn_access
    Unsigned 8-bit integer
tpncp.modem_ras_call_type  tpncp.modem_ras_call_type
    Unsigned 8-bit integer
tpncp.modem_relay_max_rate  tpncp.modem_relay_max_rate
    Signed 32-bit integer
tpncp.modem_relay_redundancy_depth  tpncp.modem_relay_redundancy_depth
    Signed 32-bit integer
tpncp.modem_rtp_bypass_payload_type  tpncp.modem_rtp_bypass_payload_type
    Signed 32-bit integer
tpncp.modem_standard  tpncp.modem_standard
    Unsigned 8-bit integer
tpncp.modify_tle1_span_code  tpncp.modify_tle1_span_code
    Signed 32-bit integer
tpncp.modulation_type  tpncp.modulation_type
    Signed 32-bit integer
tpncp.module  tpncp.module
    Signed 16-bit integer
tpncp.module_firm_ware  tpncp.module_firm_ware
    Signed 32-bit integer
tpncp.module_origin  tpncp.module_origin
    Signed 32-bit integer
tpncp.monitor_signaling_changes_only  tpncp.monitor_signaling_changes_only
    Unsigned 8-bit integer
tpncp.month  tpncp.month
    Signed 32-bit integer
tpncp.mos_cq  tpncp.mos_cq
    Unsigned 8-bit integer
tpncp.mos_lq  tpncp.mos_lq
    Unsigned 8-bit integer
tpncp.ms_alarms_status_0  tpncp.ms_alarms_status_0
    Signed 32-bit integer
tpncp.ms_alarms_status_1  tpncp.ms_alarms_status_1
    Signed 32-bit integer
tpncp.ms_alarms_status_2  tpncp.ms_alarms_status_2
    Signed 32-bit integer
tpncp.ms_alarms_status_3  tpncp.ms_alarms_status_3
    Signed 32-bit integer
tpncp.ms_alarms_status_4  tpncp.ms_alarms_status_4
    Signed 32-bit integer
tpncp.ms_alarms_status_5  tpncp.ms_alarms_status_5
    Signed 32-bit integer
```

```

tpncp.ms_alarms_status_6  tpncp.ms_alarms_status_6
    Signed 32-bit integer
tpncp.ms_alarms_status_7  tpncp.ms_alarms_status_7
    Signed 32-bit integer
tpncp.ms_alarms_status_8  tpncp.ms_alarms_status_8
    Signed 32-bit integer
tpncp.ms_alarms_status_9  tpncp.ms_alarms_status_9
    Signed 32-bit integer
tpncp.msec_duration  tpncp.msec_duration
    Signed 32-bit integer
tpncp.msg_type  tpncp.msg_type
    Signed 32-bit integer
tpncp.msu_error_cause  tpncp.msu_error_cause
    Signed 32-bit integer
tpncp.mute_mode  tpncp.mute_mode
    Signed 32-bit integer
tpncp.muted_participant_id  tpncp.muted_participant_id
    Signed 32-bit integer
tpncp.muted_participants_handle_list_0  tpncp.muted_participants_handle_list_0
    Signed 32-bit integer
tpncp.muted_participants_handle_list_1  tpncp.muted_participants_handle_list_1
    Signed 32-bit integer
tpncp.muted_participants_handle_list_10  tpncp.muted_participants_handle_list_10
    Signed 32-bit integer
tpncp.muted_participants_handle_list_100  tpncp.muted_participants_handle_list_100
    Signed 32-bit integer
tpncp.muted_participants_handle_list_101  tpncp.muted_participants_handle_list_101
    Signed 32-bit integer
tpncp.muted_participants_handle_list_102  tpncp.muted_participants_handle_list_102
    Signed 32-bit integer
tpncp.muted_participants_handle_list_103  tpncp.muted_participants_handle_list_103
    Signed 32-bit integer
tpncp.muted_participants_handle_list_104  tpncp.muted_participants_handle_list_104
    Signed 32-bit integer
tpncp.muted_participants_handle_list_105  tpncp.muted_participants_handle_list_105
    Signed 32-bit integer
tpncp.muted_participants_handle_list_106  tpncp.muted_participants_handle_list_106
    Signed 32-bit integer
tpncp.muted_participants_handle_list_107  tpncp.muted_participants_handle_list_107
    Signed 32-bit integer
tpncp.muted_participants_handle_list_108  tpncp.muted_participants_handle_list_108
    Signed 32-bit integer
tpncp.muted_participants_handle_list_109  tpncp.muted_participants_handle_list_109
    Signed 32-bit integer

```

tpncp.muted_participants_handle_list_11 Signed 32-bit integer	tpncp.muted_participants_handle_list_11
tpncp.muted_participants_handle_list_110 Signed 32-bit integer	tpncp.muted_participants_handle_list_110
tpncp.muted_participants_handle_list_111 Signed 32-bit integer	tpncp.muted_participants_handle_list_111
tpncp.muted_participants_handle_list_112 Signed 32-bit integer	tpncp.muted_participants_handle_list_112
tpncp.muted_participants_handle_list_113 Signed 32-bit integer	tpncp.muted_participants_handle_list_113
tpncp.muted_participants_handle_list_114 Signed 32-bit integer	tpncp.muted_participants_handle_list_114
tpncp.muted_participants_handle_list_115 Signed 32-bit integer	tpncp.muted_participants_handle_list_115
tpncp.muted_participants_handle_list_116 Signed 32-bit integer	tpncp.muted_participants_handle_list_116
tpncp.muted_participants_handle_list_117 Signed 32-bit integer	tpncp.muted_participants_handle_list_117
tpncp.muted_participants_handle_list_118 Signed 32-bit integer	tpncp.muted_participants_handle_list_118
tpncp.muted_participants_handle_list_119 Signed 32-bit integer	tpncp.muted_participants_handle_list_119
tpncp.muted_participants_handle_list_12 Signed 32-bit integer	tpncp.muted_participants_handle_list_12
tpncp.muted_participants_handle_list_120 Signed 32-bit integer	tpncp.muted_participants_handle_list_120
tpncp.muted_participants_handle_list_121 Signed 32-bit integer	tpncp.muted_participants_handle_list_121
tpncp.muted_participants_handle_list_122 Signed 32-bit integer	tpncp.muted_participants_handle_list_122
tpncp.muted_participants_handle_list_123 Signed 32-bit integer	tpncp.muted_participants_handle_list_123
tpncp.muted_participants_handle_list_124 Signed 32-bit integer	tpncp.muted_participants_handle_list_124
tpncp.muted_participants_handle_list_125 Signed 32-bit integer	tpncp.muted_participants_handle_list_125
tpncp.muted_participants_handle_list_126 Signed 32-bit integer	tpncp.muted_participants_handle_list_126
tpncp.muted_participants_handle_list_127 Signed 32-bit integer	tpncp.muted_participants_handle_list_127
tpncp.muted_participants_handle_list_128 Signed 32-bit integer	tpncp.muted_participants_handle_list_128
tpncp.muted_participants_handle_list_129 Signed 32-bit integer	tpncp.muted_participants_handle_list_129

tpncp.muted_participants_handle_list_13 Signed 32-bit integer	tpncp.muted_participants_handle_list_13
tpncp.muted_participants_handle_list_130 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_131 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_132 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_133 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_134 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_135 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_136 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_137 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_138 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_139 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_14 Signed 32-bit integer	tpncp.muted_participants_handle_list_14
tpncp.muted_participants_handle_list_140 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_141 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_142 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_143 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_144 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_145 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_146 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_147 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_148 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_149 Signed 32-bit integer	tpncp.muted_participants_handle_list_1

tpncp.muted_participants_handle_list_15 Signed 32-bit integer	tpncp.muted_participants_handle_list_15
tpncp.muted_participants_handle_list_150 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_151 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_152 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_153 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_154 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_155 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_156 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_157 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_158 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_159 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_16 Signed 32-bit integer	tpncp.muted_participants_handle_list_16
tpncp.muted_participants_handle_list_160 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_161 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_162 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_163 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_164 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_165 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_166 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_167 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_168 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_169 Signed 32-bit integer	tpncp.muted_participants_handle_list_1



tpncp.muted_participants_handle_list_17 Signed 32-bit integer	tpncp.muted_participants_handle_list_17
tpncp.muted_participants_handle_list_170 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_171 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_172 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_173 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_174 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_175 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_176 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_177 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_178 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_179 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_18 Signed 32-bit integer	tpncp.muted_participants_handle_list_18
tpncp.muted_participants_handle_list_180 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_181 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_182 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_183 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_184 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_185 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_186 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_187 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_188 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_189 Signed 32-bit integer	tpncp.muted_participants_handle_list_1

tpncp.muted_participants_handle_list_19 Signed 32-bit integer	tpncp.muted_participants_handle_list_19
tpncp.muted_participants_handle_list_190 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_191 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_192 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_193 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_194 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_195 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_196 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_197 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_198 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_199 Signed 32-bit integer	tpncp.muted_participants_handle_list_1
tpncp.muted_participants_handle_list_2 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_20 Signed 32-bit integer	tpncp.muted_participants_handle_list_20
tpncp.muted_participants_handle_list_200 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_201 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_202 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_203 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_204 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_205 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_206 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_207 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_208 Signed 32-bit integer	tpncp.muted_participants_handle_list_2

tpncp.muted_participants_handle_list_209 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_21 Signed 32-bit integer	tpncp.muted_participants_handle_list_21
tpncp.muted_participants_handle_list_210 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_211 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_212 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_213 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_214 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_215 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_216 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_217 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_218 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_219 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_22 Signed 32-bit integer	tpncp.muted_participants_handle_list_22
tpncp.muted_participants_handle_list_220 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_221 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_222 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_223 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_224 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_225 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_226 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_227 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_228 Signed 32-bit integer	tpncp.muted_participants_handle_list_2

tpncp.muted_participants_handle_list_229 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_23 Signed 32-bit integer	tpncp.muted_participants_handle_list_23
tpncp.muted_participants_handle_list_230 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_231 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_232 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_233 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_234 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_235 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_236 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_237 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_238 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_239 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_24 Signed 32-bit integer	tpncp.muted_participants_handle_list_24
tpncp.muted_participants_handle_list_240 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_241 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_242 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_243 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_244 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_245 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_246 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_247 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_248 Signed 32-bit integer	tpncp.muted_participants_handle_list_2

tpncp.muted_participants_handle_list_249 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_25 Signed 32-bit integer	tpncp.muted_participants_handle_list_25
tpncp.muted_participants_handle_list_250 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_251 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_252 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_253 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_254 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_255 Signed 32-bit integer	tpncp.muted_participants_handle_list_2
tpncp.muted_participants_handle_list_26 Signed 32-bit integer	tpncp.muted_participants_handle_list_26
tpncp.muted_participants_handle_list_27 Signed 32-bit integer	tpncp.muted_participants_handle_list_27
tpncp.muted_participants_handle_list_28 Signed 32-bit integer	tpncp.muted_participants_handle_list_28
tpncp.muted_participants_handle_list_29 Signed 32-bit integer	tpncp.muted_participants_handle_list_29
tpncp.muted_participants_handle_list_3 Signed 32-bit integer	tpncp.muted_participants_handle_list_3
tpncp.muted_participants_handle_list_30 Signed 32-bit integer	tpncp.muted_participants_handle_list_30
tpncp.muted_participants_handle_list_31 Signed 32-bit integer	tpncp.muted_participants_handle_list_31
tpncp.muted_participants_handle_list_32 Signed 32-bit integer	tpncp.muted_participants_handle_list_32
tpncp.muted_participants_handle_list_33 Signed 32-bit integer	tpncp.muted_participants_handle_list_33
tpncp.muted_participants_handle_list_34 Signed 32-bit integer	tpncp.muted_participants_handle_list_34
tpncp.muted_participants_handle_list_35 Signed 32-bit integer	tpncp.muted_participants_handle_list_35
tpncp.muted_participants_handle_list_36 Signed 32-bit integer	tpncp.muted_participants_handle_list_36
tpncp.muted_participants_handle_list_37 Signed 32-bit integer	tpncp.muted_participants_handle_list_37
tpncp.muted_participants_handle_list_38 Signed 32-bit integer	tpncp.muted_participants_handle_list_38

tpncp.muted_participants_handle_list_39 Signed 32-bit integer	tpncp.muted_participants_handle_list_39
tpncp.muted_participants_handle_list_4 Signed 32-bit integer	tpncp.muted_participants_handle_list_4
tpncp.muted_participants_handle_list_40 Signed 32-bit integer	tpncp.muted_participants_handle_list_40
tpncp.muted_participants_handle_list_41 Signed 32-bit integer	tpncp.muted_participants_handle_list_41
tpncp.muted_participants_handle_list_42 Signed 32-bit integer	tpncp.muted_participants_handle_list_42
tpncp.muted_participants_handle_list_43 Signed 32-bit integer	tpncp.muted_participants_handle_list_43
tpncp.muted_participants_handle_list_44 Signed 32-bit integer	tpncp.muted_participants_handle_list_44
tpncp.muted_participants_handle_list_45 Signed 32-bit integer	tpncp.muted_participants_handle_list_45
tpncp.muted_participants_handle_list_46 Signed 32-bit integer	tpncp.muted_participants_handle_list_46
tpncp.muted_participants_handle_list_47 Signed 32-bit integer	tpncp.muted_participants_handle_list_47
tpncp.muted_participants_handle_list_48 Signed 32-bit integer	tpncp.muted_participants_handle_list_48
tpncp.muted_participants_handle_list_49 Signed 32-bit integer	tpncp.muted_participants_handle_list_49
tpncp.muted_participants_handle_list_5 Signed 32-bit integer	tpncp.muted_participants_handle_list_5
tpncp.muted_participants_handle_list_50 Signed 32-bit integer	tpncp.muted_participants_handle_list_50
tpncp.muted_participants_handle_list_51 Signed 32-bit integer	tpncp.muted_participants_handle_list_51
tpncp.muted_participants_handle_list_52 Signed 32-bit integer	tpncp.muted_participants_handle_list_52
tpncp.muted_participants_handle_list_53 Signed 32-bit integer	tpncp.muted_participants_handle_list_53
tpncp.muted_participants_handle_list_54 Signed 32-bit integer	tpncp.muted_participants_handle_list_54
tpncp.muted_participants_handle_list_55 Signed 32-bit integer	tpncp.muted_participants_handle_list_55
tpncp.muted_participants_handle_list_56 Signed 32-bit integer	tpncp.muted_participants_handle_list_56
tpncp.muted_participants_handle_list_57 Signed 32-bit integer	tpncp.muted_participants_handle_list_57
tpncp.muted_participants_handle_list_58 Signed 32-bit integer	tpncp.muted_participants_handle_list_58

tpncp.muted_participants_handle_list_59 Signed 32-bit integer	tpncp.muted_participants_handle_list_59
tpncp.muted_participants_handle_list_6 Signed 32-bit integer	tpncp.muted_participants_handle_list_6
tpncp.muted_participants_handle_list_60 Signed 32-bit integer	tpncp.muted_participants_handle_list_60
tpncp.muted_participants_handle_list_61 Signed 32-bit integer	tpncp.muted_participants_handle_list_61
tpncp.muted_participants_handle_list_62 Signed 32-bit integer	tpncp.muted_participants_handle_list_62
tpncp.muted_participants_handle_list_63 Signed 32-bit integer	tpncp.muted_participants_handle_list_63
tpncp.muted_participants_handle_list_64 Signed 32-bit integer	tpncp.muted_participants_handle_list_64
tpncp.muted_participants_handle_list_65 Signed 32-bit integer	tpncp.muted_participants_handle_list_65
tpncp.muted_participants_handle_list_66 Signed 32-bit integer	tpncp.muted_participants_handle_list_66
tpncp.muted_participants_handle_list_67 Signed 32-bit integer	tpncp.muted_participants_handle_list_67
tpncp.muted_participants_handle_list_68 Signed 32-bit integer	tpncp.muted_participants_handle_list_68
tpncp.muted_participants_handle_list_69 Signed 32-bit integer	tpncp.muted_participants_handle_list_69
tpncp.muted_participants_handle_list_7 Signed 32-bit integer	tpncp.muted_participants_handle_list_7
tpncp.muted_participants_handle_list_70 Signed 32-bit integer	tpncp.muted_participants_handle_list_70
tpncp.muted_participants_handle_list_71 Signed 32-bit integer	tpncp.muted_participants_handle_list_71
tpncp.muted_participants_handle_list_72 Signed 32-bit integer	tpncp.muted_participants_handle_list_72
tpncp.muted_participants_handle_list_73 Signed 32-bit integer	tpncp.muted_participants_handle_list_73
tpncp.muted_participants_handle_list_74 Signed 32-bit integer	tpncp.muted_participants_handle_list_74
tpncp.muted_participants_handle_list_75 Signed 32-bit integer	tpncp.muted_participants_handle_list_75
tpncp.muted_participants_handle_list_76 Signed 32-bit integer	tpncp.muted_participants_handle_list_76
tpncp.muted_participants_handle_list_77 Signed 32-bit integer	tpncp.muted_participants_handle_list_77
tpncp.muted_participants_handle_list_78 Signed 32-bit integer	tpncp.muted_participants_handle_list_78

tpncp.muted_participants_handle_list_79 Signed 32-bit integer	tpncp.muted_participants_handle_list_79
tpncp.muted_participants_handle_list_8 Signed 32-bit integer	tpncp.muted_participants_handle_list_8
tpncp.muted_participants_handle_list_80 Signed 32-bit integer	tpncp.muted_participants_handle_list_80
tpncp.muted_participants_handle_list_81 Signed 32-bit integer	tpncp.muted_participants_handle_list_81
tpncp.muted_participants_handle_list_82 Signed 32-bit integer	tpncp.muted_participants_handle_list_82
tpncp.muted_participants_handle_list_83 Signed 32-bit integer	tpncp.muted_participants_handle_list_83
tpncp.muted_participants_handle_list_84 Signed 32-bit integer	tpncp.muted_participants_handle_list_84
tpncp.muted_participants_handle_list_85 Signed 32-bit integer	tpncp.muted_participants_handle_list_85
tpncp.muted_participants_handle_list_86 Signed 32-bit integer	tpncp.muted_participants_handle_list_86
tpncp.muted_participants_handle_list_87 Signed 32-bit integer	tpncp.muted_participants_handle_list_87
tpncp.muted_participants_handle_list_88 Signed 32-bit integer	tpncp.muted_participants_handle_list_88
tpncp.muted_participants_handle_list_89 Signed 32-bit integer	tpncp.muted_participants_handle_list_89
tpncp.muted_participants_handle_list_9 Signed 32-bit integer	tpncp.muted_participants_handle_list_9
tpncp.muted_participants_handle_list_90 Signed 32-bit integer	tpncp.muted_participants_handle_list_90
tpncp.muted_participants_handle_list_91 Signed 32-bit integer	tpncp.muted_participants_handle_list_91
tpncp.muted_participants_handle_list_92 Signed 32-bit integer	tpncp.muted_participants_handle_list_92
tpncp.muted_participants_handle_list_93 Signed 32-bit integer	tpncp.muted_participants_handle_list_93
tpncp.muted_participants_handle_list_94 Signed 32-bit integer	tpncp.muted_participants_handle_list_94
tpncp.muted_participants_handle_list_95 Signed 32-bit integer	tpncp.muted_participants_handle_list_95
tpncp.muted_participants_handle_list_96 Signed 32-bit integer	tpncp.muted_participants_handle_list_96
tpncp.muted_participants_handle_list_97 Signed 32-bit integer	tpncp.muted_participants_handle_list_97
tpncp.muted_participants_handle_list_98 Signed 32-bit integer	tpncp.muted_participants_handle_list_98



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tpncp.muted_participants_handle_list_99  tpncp.muted_participants_handle_list_99
    Signed 32-bit integer
tpncp.nai  tpncp.nai
    Signed 32-bit integer
tpncp.name  tpncp.name
    String
tpncp.name_availability  tpncp.name_availability
    Unsigned 8-bit integer
tpncp.net_cause  tpncp.net_cause
    Signed 32-bit integer
tpncp.net_unreachable  tpncp.net_unreachable
    Unsigned 32-bit integer
tpncp.network_code  tpncp.network_code
    String
tpncp.network_indicator  tpncp.network_indicator
    Signed 32-bit integer
tpncp.network_status  tpncp.network_status
    Signed 32-bit integer
tpncp.network_system_message_status  tpncp.network_system_message_status
    Unsigned 8-bit integer
tpncp.network_type  tpncp.network_type
    Unsigned 8-bit integer
tpncp.new_admin_state  tpncp.new_admin_state
    Signed 32-bit integer
tpncp.new_clock_source  tpncp.new_clock_source
    Signed 32-bit integer
tpncp.new_clock_state  tpncp.new_clock_state
    Signed 32-bit integer
tpncp.new_lock_clock_source  tpncp.new_lock_clock_source
    Signed 32-bit integer
tpncp.new_state  tpncp.new_state
    Signed 32-bit integer
tpncp.ni  tpncp.ni
    Signed 32-bit integer
tpncp.nmarc  tpncp.nmarc
    Unsigned 16-bit integer
tpncp.no_input_timeout  tpncp.no_input_timeout
    Signed 32-bit integer
tpncp.no_of_channels  tpncp.no_of_channels
    Signed 32-bit integer
tpncp.no_of_mgc  tpncp.no_of_mgc
    Signed 32-bit integer
tpncp.no_operation_interval  tpncp.no_operation_interval
    Signed 32-bit integer
```

```
tpncp.no_operation_sending_mode  tpncp.no_operation_sending_mode
    Signed 32-bit integer

tpncp.node_connection_info  tpncp.node_connection_info
    Signed 32-bit integer

tpncp.node_connection_status  tpncp.node_connection_status
    Signed 32-bit integer

tpncp.node_id  tpncp.node_id
    Signed 32-bit integer

tpncp.noise_level  tpncp.noise_level
    Unsigned 8-bit integer

tpncp.noise_reduction_activation_direction  tpncp.noise_reduction_activation_dir
    Unsigned 8-bit integer

tpncp.noise_reduction_intensity  tpncp.noise_reduction_intensity
    Unsigned 8-bit integer

tpncp.noise_suppression_enable  tpncp.noise_suppression_enable
    Signed 32-bit integer

tpncp.noisy_environment_mode  tpncp.noisy_environment_mode
    Signed 32-bit integer

tpncp.non_notification_reason  tpncp.non_notification_reason
    Signed 32-bit integer

tpncp.normal_cmd  tpncp.normal_cmd
    Signed 32-bit integer

tpncp.not_used  tpncp.not_used
    Signed 32-bit integer

tpncp.notify_indicator_description  tpncp.notify_indicator_description
    Signed 32-bit integer

tpncp.notify_indicator_ext_size  tpncp.notify_indicator_ext_size
    Signed 32-bit integer

tpncp.notify_indicator_present  tpncp.notify_indicator_present
    Signed 32-bit integer

tpncp.nsap_address  tpncp.nsap_address
    String

tpncp.nse_mode  tpncp.nse_mode
    Unsigned 8-bit integer

tpncp.nse_payload_type  tpncp.nse_payload_type
    Unsigned 8-bit integer

tpncp.nte_max_duration  tpncp.nte_max_duration
    Signed 32-bit integer

tpncp.ntt_called_numbering_plan_identifier  tpncp.ntt_called_numbering_plan_iden
    String

tpncp.ntt_called_type_of_number  tpncp.ntt_called_type_of_number
    Unsigned 8-bit integer

tpncp.ntt_direct_inward_dialing_signalling_form  tpncp.ntt_direct_inward_dialing
    Signed 32-bit integer
```

```
tpncp.num_active tpncp.num_active
    Signed 32-bit integer

tpncp.num_active_to_nw tpncp.num_active_to_nw
    Signed 32-bit integer

tpncp.num_attempts tpncp.num_attempts
    Unsigned 32-bit integer

tpncp.num_broken tpncp.num_broken
    Signed 32-bit integer

tpncp.num_changes tpncp.num_changes
    Signed 32-bit integer

tpncp.num_cmd_processed tpncp.num_cmd_processed
    Signed 32-bit integer

tpncp.num_data tpncp.num_data
    Signed 32-bit integer

tpncp.num_digits tpncp.num_digits
    Signed 32-bit integer

tpncp.num_djb_errors tpncp.num_djb_errors
    Signed 32-bit integer

tpncp.num_error_info_msg tpncp.num_error_info_msg
    Signed 32-bit integer

tpncp.num_fax tpncp.num_fax
    Signed 32-bit integer

tpncp.num_of_active_conferences tpncp.num_of_active_conferences
    Signed 32-bit integer

tpncp.num_of_active_participants tpncp.num_of_active_participants
    Signed 32-bit integer

tpncp.num_of_active_speakers tpncp.num_of_active_speakers
    Signed 32-bit integer

tpncp.num_of_added_voice_prompts tpncp.num_of_added_voice_prompts
    Signed 32-bit integer

tpncp.num_of_analog_channels tpncp.num_of_analog_channels
    Signed 32-bit integer

tpncp.num_of_announcements tpncp.num_of_announcements
    Signed 32-bit integer

tpncp.num_of_cid tpncp.num_of_cid
    Signed 16-bit integer

tpncp.num_of_components tpncp.num_of_components
    Signed 32-bit integer

tpncp.num_of_listener_only_participants tpncp.num_of_listener_only_participants
    Signed 32-bit integer

tpncp.num_of_muted_participants tpncp.num_of_muted_participants
    Signed 32-bit integer

tpncp.num_of_participants tpncp.num_of_participants
    Signed 32-bit integer
```

```
tpncp.num_of_pulses  tpncp.num_of_pulses
    Signed 32-bit integer

tpncp.num_ports  tpncp.num_ports
    Signed 32-bit integer

tpncp.num_rx_packet  tpncp.num_rx_packet
    Signed 32-bit integer

tpncp.num_status_sent  tpncp.num_status_sent
    Signed 32-bit integer

tpncp.num_tx_packet  tpncp.num_tx_packet
    Signed 32-bit integer

tpncp.num_voice_prompts  tpncp.num_voice_prompts
    Signed 32-bit integer

tpncp.number  tpncp.number
    String

tpncp.number_availability  tpncp.number_availability
    Unsigned 8-bit integer

tpncp.number_of_bit_reports  tpncp.number_of_bit_reports
    Signed 32-bit integer

tpncp.number_of_channels  tpncp.number_of_channels
    String

tpncp.number_of_connections  tpncp.number_of_connections
    Unsigned 32-bit integer

tpncp.number_of_errors  tpncp.number_of_errors
    Signed 32-bit integer

tpncp.number_of_fax_pages  tpncp.number_of_fax_pages
    Signed 32-bit integer

tpncp.number_of_fax_pages_so_far  tpncp.number_of_fax_pages_so_far
    Signed 32-bit integer

tpncp.number_of_rfc1  tpncp.number_of_rfc1
    Unsigned 8-bit integer

tpncp.number_of_trunks  tpncp.number_of_trunks
    Signed 32-bit integer

tpncp.numbering_plan_identifier  tpncp.numbering_plan_identifier
    String

tpncp.oam_type  tpncp.oam_type
    Signed 32-bit integer

tpncp.occupied  tpncp.occupied
    Signed 32-bit integer

tpncp.octet_count  tpncp.octet_count
    Unsigned 32-bit integer

tpncp.offset  tpncp.offset
    Signed 32-bit integer

tpncp.old_clock_state  tpncp.old_clock_state
    Signed 32-bit integer
```

```

tpncp.old_command_id  Command ID
    Unsigned 16-bit integer
tpncp.old_event_seq_number  Sequence number
    Unsigned 32-bit integer
tpncp.old_lock_clock_source  tpncp.old_lock_clock_source
    Signed 32-bit integer
tpncp.old_remote_rtcpip_add  tpncp.old_remote_rtcpip_add
    Unsigned 32-bit integer
tpncp.old_remote_rtpip_addr  tpncp.old_remote_rtpip_addr
    Signed 32-bit integer
tpncp.old_remote_t38ip_addr  tpncp.old_remote_t38ip_addr
    Signed 32-bit integer
tpncp.old_state  tpncp.old_state
    Signed 32-bit integer
tpncp.old_video_conference_switching_interval  tpncp.old_video_conference_switch
    Signed 32-bit integer
tpncp.old_video_enable_active_speaker_highlight  tpncp.old_video_enable_active_s
    Signed 32-bit integer
tpncp.old_voice_prompt_repository_id  tpncp.old_voice_prompt_repository_id
    Signed 32-bit integer
tpncp.opc  tpncp.opc
    Unsigned 32-bit integer
tpncp.open_channel_spare1  tpncp.open_channel_spare1
    Unsigned 8-bit integer
tpncp.open_channel_spare2  tpncp.open_channel_spare2
    Unsigned 8-bit integer
tpncp.open_channel_spare3  tpncp.open_channel_spare3
    Unsigned 8-bit integer
tpncp.open_channel_spare4  tpncp.open_channel_spare4
    Unsigned 8-bit integer
tpncp.open_channel_spare5  tpncp.open_channel_spare5
    Unsigned 8-bit integer
tpncp.open_channel_spare6  tpncp.open_channel_spare6
    Unsigned 8-bit integer
tpncp.open_channel_without_dsp  tpncp.open_channel_without_dsp
    Unsigned 8-bit integer
tpncp.oper_state  tpncp.oper_state
    Signed 32-bit integer
tpncp.operational_state  tpncp.operational_state
    Signed 32-bit integer
tpncp.origin  tpncp.origin
    Signed 32-bit integer
tpncp.originating_line_information  tpncp.originating_line_information
    Signed 32-bit integer

```

```
tpncp.osc_speed tpncp.osc_speed
    Signed 32-bit integer
tpncp.other_call_conn_id tpncp.other_call_conn_id
    Signed 32-bit integer
tpncp.other_call_handle tpncp.other_call_handle
    Signed 32-bit integer
tpncp.other_call_trunk_id tpncp.other_call_trunk_id
    Signed 32-bit integer
tpncp.out_of_farme tpncp.out_of_farme
    Signed 32-bit integer
tpncp.out_of_frame tpncp.out_of_frame
    Signed 32-bit integer
tpncp.out_of_frame_counter tpncp.out_of_frame_counter
    Unsigned 16-bit integer
tpncp.out_of_service tpncp.out_of_service
    Signed 32-bit integer
tpncp.output tpncp.output
    String
tpncp.output_gain tpncp.output_gain
    Signed 32-bit integer
tpncp.output_port_0 tpncp.output_port_0
    Unsigned 8-bit integer
tpncp.output_port_state_0 tpncp.output_port_state_0
    Signed 32-bit integer
tpncp.output_port_state_1 tpncp.output_port_state_1
    Signed 32-bit integer
tpncp.output_port_state_2 tpncp.output_port_state_2
    Signed 32-bit integer
tpncp.output_port_state_3 tpncp.output_port_state_3
    Signed 32-bit integer
tpncp.output_port_state_4 tpncp.output_port_state_4
    Signed 32-bit integer
tpncp.output_port_state_5 tpncp.output_port_state_5
    Signed 32-bit integer
tpncp.output_port_state_6 tpncp.output_port_state_6
    Signed 32-bit integer
tpncp.output_port_state_7 tpncp.output_port_state_7
    Signed 32-bit integer
tpncp.output_port_state_8 tpncp.output_port_state_8
    Signed 32-bit integer
tpncp.output_port_state_9 tpncp.output_port_state_9
    Signed 32-bit integer
tpncp.output_tdm_bus tpncp.output_tdm_bus
    Unsigned 16-bit integer
```

```
tpncp.output_time_slot_0  tpncp.output_time_slot_0
    Unsigned 16-bit integer

tpncp.overlap_digits  tpncp.overlap_digits
    String

tpncp.override_connections  tpncp.override_connections
    Signed 32-bit integer

tpncp.override  tpncp.override
    Signed 32-bit integer

tpncp.ovlp_digit_string  tpncp.ovlp_digit_string
    String

tpncp.p_ais  tpncp.p_ais
    Signed 32-bit integer

tpncp.p_rdi  tpncp.p_rdi
    Signed 32-bit integer

tpncp.packet_cable_call_content_connection_id  tpncp.packet_cable_call_content_c
    Signed 32-bit integer

tpncp.packet_count  tpncp.packet_count
    Unsigned 32-bit integer

tpncp.packet_counter  tpncp.packet_counter
    Unsigned 32-bit integer

tpncp.pad1  tpncp.pad1
    Unsigned 8-bit integer

tpncp.pad2  tpncp.pad2
    String

tpncp.pad3  tpncp.pad3
    Unsigned 8-bit integer

tpncp.pad4  tpncp.pad4
    String

tpncp.pad_key  tpncp.pad_key
    String

tpncp.padding  tpncp.padding
    String

tpncp.param1  tpncp.param1
    Signed 32-bit integer

tpncp.param2  tpncp.param2
    Signed 32-bit integer

tpncp.param3  tpncp.param3
    Signed 32-bit integer

tpncp.param4  tpncp.param4
    Signed 32-bit integer

tpncp.parameter_id  tpncp.parameter_id
    Signed 16-bit integer

tpncp.partial_response  tpncp.partial_response
    Unsigned 8-bit integer
```

```
tpncp.participant_handle tpncp.participant_handle
    Signed 32-bit integer
tpncp.participant_id tpncp.participant_id
    Signed 32-bit integer
tpncp.participant_source tpncp.participant_source
    Signed 32-bit integer
tpncp.participant_type tpncp.participant_type
    Signed 32-bit integer
tpncp.participants_handle_list_0 tpncp.participants_handle_list_0
    Signed 32-bit integer
tpncp.participants_handle_list_1 tpncp.participants_handle_list_1
    Signed 32-bit integer
tpncp.participants_handle_list_10 tpncp.participants_handle_list_10
    Signed 32-bit integer
tpncp.participants_handle_list_100 tpncp.participants_handle_list_100
    Signed 32-bit integer
tpncp.participants_handle_list_101 tpncp.participants_handle_list_101
    Signed 32-bit integer
tpncp.participants_handle_list_102 tpncp.participants_handle_list_102
    Signed 32-bit integer
tpncp.participants_handle_list_103 tpncp.participants_handle_list_103
    Signed 32-bit integer
tpncp.participants_handle_list_104 tpncp.participants_handle_list_104
    Signed 32-bit integer
tpncp.participants_handle_list_105 tpncp.participants_handle_list_105
    Signed 32-bit integer
tpncp.participants_handle_list_106 tpncp.participants_handle_list_106
    Signed 32-bit integer
tpncp.participants_handle_list_107 tpncp.participants_handle_list_107
    Signed 32-bit integer
tpncp.participants_handle_list_108 tpncp.participants_handle_list_108
    Signed 32-bit integer
tpncp.participants_handle_list_109 tpncp.participants_handle_list_109
    Signed 32-bit integer
tpncp.participants_handle_list_11 tpncp.participants_handle_list_11
    Signed 32-bit integer
tpncp.participants_handle_list_110 tpncp.participants_handle_list_110
    Signed 32-bit integer
tpncp.participants_handle_list_111 tpncp.participants_handle_list_111
    Signed 32-bit integer
tpncp.participants_handle_list_112 tpncp.participants_handle_list_112
    Signed 32-bit integer
tpncp.participants_handle_list_113 tpncp.participants_handle_list_113
    Signed 32-bit integer
```



tpncp.participants_handle_list_114 Signed 32-bit integer	tpncp.participants_handle_list_114
tpncp.participants_handle_list_115 Signed 32-bit integer	tpncp.participants_handle_list_115
tpncp.participants_handle_list_116 Signed 32-bit integer	tpncp.participants_handle_list_116
tpncp.participants_handle_list_117 Signed 32-bit integer	tpncp.participants_handle_list_117
tpncp.participants_handle_list_118 Signed 32-bit integer	tpncp.participants_handle_list_118
tpncp.participants_handle_list_119 Signed 32-bit integer	tpncp.participants_handle_list_119
tpncp.participants_handle_list_12 Signed 32-bit integer	tpncp.participants_handle_list_12
tpncp.participants_handle_list_120 Signed 32-bit integer	tpncp.participants_handle_list_120
tpncp.participants_handle_list_121 Signed 32-bit integer	tpncp.participants_handle_list_121
tpncp.participants_handle_list_122 Signed 32-bit integer	tpncp.participants_handle_list_122
tpncp.participants_handle_list_123 Signed 32-bit integer	tpncp.participants_handle_list_123
tpncp.participants_handle_list_124 Signed 32-bit integer	tpncp.participants_handle_list_124
tpncp.participants_handle_list_125 Signed 32-bit integer	tpncp.participants_handle_list_125
tpncp.participants_handle_list_126 Signed 32-bit integer	tpncp.participants_handle_list_126
tpncp.participants_handle_list_127 Signed 32-bit integer	tpncp.participants_handle_list_127
tpncp.participants_handle_list_128 Signed 32-bit integer	tpncp.participants_handle_list_128
tpncp.participants_handle_list_129 Signed 32-bit integer	tpncp.participants_handle_list_129
tpncp.participants_handle_list_13 Signed 32-bit integer	tpncp.participants_handle_list_13
tpncp.participants_handle_list_130 Signed 32-bit integer	tpncp.participants_handle_list_130
tpncp.participants_handle_list_131 Signed 32-bit integer	tpncp.participants_handle_list_131
tpncp.participants_handle_list_132 Signed 32-bit integer	tpncp.participants_handle_list_132
tpncp.participants_handle_list_133 Signed 32-bit integer	tpncp.participants_handle_list_133

tpncp.participants_handle_list_134 Signed 32-bit integer	tpncp.participants_handle_list_134
tpncp.participants_handle_list_135 Signed 32-bit integer	tpncp.participants_handle_list_135
tpncp.participants_handle_list_136 Signed 32-bit integer	tpncp.participants_handle_list_136
tpncp.participants_handle_list_137 Signed 32-bit integer	tpncp.participants_handle_list_137
tpncp.participants_handle_list_138 Signed 32-bit integer	tpncp.participants_handle_list_138
tpncp.participants_handle_list_139 Signed 32-bit integer	tpncp.participants_handle_list_139
tpncp.participants_handle_list_14 Signed 32-bit integer	tpncp.participants_handle_list_14
tpncp.participants_handle_list_140 Signed 32-bit integer	tpncp.participants_handle_list_140
tpncp.participants_handle_list_141 Signed 32-bit integer	tpncp.participants_handle_list_141
tpncp.participants_handle_list_142 Signed 32-bit integer	tpncp.participants_handle_list_142
tpncp.participants_handle_list_143 Signed 32-bit integer	tpncp.participants_handle_list_143
tpncp.participants_handle_list_144 Signed 32-bit integer	tpncp.participants_handle_list_144
tpncp.participants_handle_list_145 Signed 32-bit integer	tpncp.participants_handle_list_145
tpncp.participants_handle_list_146 Signed 32-bit integer	tpncp.participants_handle_list_146
tpncp.participants_handle_list_147 Signed 32-bit integer	tpncp.participants_handle_list_147
tpncp.participants_handle_list_148 Signed 32-bit integer	tpncp.participants_handle_list_148
tpncp.participants_handle_list_149 Signed 32-bit integer	tpncp.participants_handle_list_149
tpncp.participants_handle_list_15 Signed 32-bit integer	tpncp.participants_handle_list_15
tpncp.participants_handle_list_150 Signed 32-bit integer	tpncp.participants_handle_list_150
tpncp.participants_handle_list_151 Signed 32-bit integer	tpncp.participants_handle_list_151
tpncp.participants_handle_list_152 Signed 32-bit integer	tpncp.participants_handle_list_152
tpncp.participants_handle_list_153 Signed 32-bit integer	tpncp.participants_handle_list_153

tpncp.participants_handle_list_154 Signed 32-bit integer	tpncp.participants_handle_list_154
tpncp.participants_handle_list_155 Signed 32-bit integer	tpncp.participants_handle_list_155
tpncp.participants_handle_list_156 Signed 32-bit integer	tpncp.participants_handle_list_156
tpncp.participants_handle_list_157 Signed 32-bit integer	tpncp.participants_handle_list_157
tpncp.participants_handle_list_158 Signed 32-bit integer	tpncp.participants_handle_list_158
tpncp.participants_handle_list_159 Signed 32-bit integer	tpncp.participants_handle_list_159
tpncp.participants_handle_list_16 Signed 32-bit integer	tpncp.participants_handle_list_16
tpncp.participants_handle_list_160 Signed 32-bit integer	tpncp.participants_handle_list_160
tpncp.participants_handle_list_161 Signed 32-bit integer	tpncp.participants_handle_list_161
tpncp.participants_handle_list_162 Signed 32-bit integer	tpncp.participants_handle_list_162
tpncp.participants_handle_list_163 Signed 32-bit integer	tpncp.participants_handle_list_163
tpncp.participants_handle_list_164 Signed 32-bit integer	tpncp.participants_handle_list_164
tpncp.participants_handle_list_165 Signed 32-bit integer	tpncp.participants_handle_list_165
tpncp.participants_handle_list_166 Signed 32-bit integer	tpncp.participants_handle_list_166
tpncp.participants_handle_list_167 Signed 32-bit integer	tpncp.participants_handle_list_167
tpncp.participants_handle_list_168 Signed 32-bit integer	tpncp.participants_handle_list_168
tpncp.participants_handle_list_169 Signed 32-bit integer	tpncp.participants_handle_list_169
tpncp.participants_handle_list_17 Signed 32-bit integer	tpncp.participants_handle_list_17
tpncp.participants_handle_list_170 Signed 32-bit integer	tpncp.participants_handle_list_170
tpncp.participants_handle_list_171 Signed 32-bit integer	tpncp.participants_handle_list_171
tpncp.participants_handle_list_172 Signed 32-bit integer	tpncp.participants_handle_list_172
tpncp.participants_handle_list_173 Signed 32-bit integer	tpncp.participants_handle_list_173

tpncp.participants_handle_list_174 Signed 32-bit integer	tpncp.participants_handle_list_174
tpncp.participants_handle_list_175 Signed 32-bit integer	tpncp.participants_handle_list_175
tpncp.participants_handle_list_176 Signed 32-bit integer	tpncp.participants_handle_list_176
tpncp.participants_handle_list_177 Signed 32-bit integer	tpncp.participants_handle_list_177
tpncp.participants_handle_list_178 Signed 32-bit integer	tpncp.participants_handle_list_178
tpncp.participants_handle_list_179 Signed 32-bit integer	tpncp.participants_handle_list_179
tpncp.participants_handle_list_18 Signed 32-bit integer	tpncp.participants_handle_list_18
tpncp.participants_handle_list_180 Signed 32-bit integer	tpncp.participants_handle_list_180
tpncp.participants_handle_list_181 Signed 32-bit integer	tpncp.participants_handle_list_181
tpncp.participants_handle_list_182 Signed 32-bit integer	tpncp.participants_handle_list_182
tpncp.participants_handle_list_183 Signed 32-bit integer	tpncp.participants_handle_list_183
tpncp.participants_handle_list_184 Signed 32-bit integer	tpncp.participants_handle_list_184
tpncp.participants_handle_list_185 Signed 32-bit integer	tpncp.participants_handle_list_185
tpncp.participants_handle_list_186 Signed 32-bit integer	tpncp.participants_handle_list_186
tpncp.participants_handle_list_187 Signed 32-bit integer	tpncp.participants_handle_list_187
tpncp.participants_handle_list_188 Signed 32-bit integer	tpncp.participants_handle_list_188
tpncp.participants_handle_list_189 Signed 32-bit integer	tpncp.participants_handle_list_189
tpncp.participants_handle_list_19 Signed 32-bit integer	tpncp.participants_handle_list_19
tpncp.participants_handle_list_190 Signed 32-bit integer	tpncp.participants_handle_list_190
tpncp.participants_handle_list_191 Signed 32-bit integer	tpncp.participants_handle_list_191
tpncp.participants_handle_list_192 Signed 32-bit integer	tpncp.participants_handle_list_192
tpncp.participants_handle_list_193 Signed 32-bit integer	tpncp.participants_handle_list_193

tpncp.participants_handle_list_194 Signed 32-bit integer	tpncp.participants_handle_list_194
tpncp.participants_handle_list_195 Signed 32-bit integer	tpncp.participants_handle_list_195
tpncp.participants_handle_list_196 Signed 32-bit integer	tpncp.participants_handle_list_196
tpncp.participants_handle_list_197 Signed 32-bit integer	tpncp.participants_handle_list_197
tpncp.participants_handle_list_198 Signed 32-bit integer	tpncp.participants_handle_list_198
tpncp.participants_handle_list_199 Signed 32-bit integer	tpncp.participants_handle_list_199
tpncp.participants_handle_list_2 Signed 32-bit integer	tpncp.participants_handle_list_2
tpncp.participants_handle_list_20 Signed 32-bit integer	tpncp.participants_handle_list_20
tpncp.participants_handle_list_200 Signed 32-bit integer	tpncp.participants_handle_list_200
tpncp.participants_handle_list_201 Signed 32-bit integer	tpncp.participants_handle_list_201
tpncp.participants_handle_list_202 Signed 32-bit integer	tpncp.participants_handle_list_202
tpncp.participants_handle_list_203 Signed 32-bit integer	tpncp.participants_handle_list_203
tpncp.participants_handle_list_204 Signed 32-bit integer	tpncp.participants_handle_list_204
tpncp.participants_handle_list_205 Signed 32-bit integer	tpncp.participants_handle_list_205
tpncp.participants_handle_list_206 Signed 32-bit integer	tpncp.participants_handle_list_206
tpncp.participants_handle_list_207 Signed 32-bit integer	tpncp.participants_handle_list_207
tpncp.participants_handle_list_208 Signed 32-bit integer	tpncp.participants_handle_list_208
tpncp.participants_handle_list_209 Signed 32-bit integer	tpncp.participants_handle_list_209
tpncp.participants_handle_list_21 Signed 32-bit integer	tpncp.participants_handle_list_21
tpncp.participants_handle_list_210 Signed 32-bit integer	tpncp.participants_handle_list_210
tpncp.participants_handle_list_211 Signed 32-bit integer	tpncp.participants_handle_list_211
tpncp.participants_handle_list_212 Signed 32-bit integer	tpncp.participants_handle_list_212

tpncp.participants_handle_list_213 Signed 32-bit integer	tpncp.participants_handle_list_213
tpncp.participants_handle_list_214 Signed 32-bit integer	tpncp.participants_handle_list_214
tpncp.participants_handle_list_215 Signed 32-bit integer	tpncp.participants_handle_list_215
tpncp.participants_handle_list_216 Signed 32-bit integer	tpncp.participants_handle_list_216
tpncp.participants_handle_list_217 Signed 32-bit integer	tpncp.participants_handle_list_217
tpncp.participants_handle_list_218 Signed 32-bit integer	tpncp.participants_handle_list_218
tpncp.participants_handle_list_219 Signed 32-bit integer	tpncp.participants_handle_list_219
tpncp.participants_handle_list_22 Signed 32-bit integer	tpncp.participants_handle_list_22
tpncp.participants_handle_list_220 Signed 32-bit integer	tpncp.participants_handle_list_220
tpncp.participants_handle_list_221 Signed 32-bit integer	tpncp.participants_handle_list_221
tpncp.participants_handle_list_222 Signed 32-bit integer	tpncp.participants_handle_list_222
tpncp.participants_handle_list_223 Signed 32-bit integer	tpncp.participants_handle_list_223
tpncp.participants_handle_list_224 Signed 32-bit integer	tpncp.participants_handle_list_224
tpncp.participants_handle_list_225 Signed 32-bit integer	tpncp.participants_handle_list_225
tpncp.participants_handle_list_226 Signed 32-bit integer	tpncp.participants_handle_list_226
tpncp.participants_handle_list_227 Signed 32-bit integer	tpncp.participants_handle_list_227
tpncp.participants_handle_list_228 Signed 32-bit integer	tpncp.participants_handle_list_228
tpncp.participants_handle_list_229 Signed 32-bit integer	tpncp.participants_handle_list_229
tpncp.participants_handle_list_23 Signed 32-bit integer	tpncp.participants_handle_list_23
tpncp.participants_handle_list_230 Signed 32-bit integer	tpncp.participants_handle_list_230
tpncp.participants_handle_list_231 Signed 32-bit integer	tpncp.participants_handle_list_231
tpncp.participants_handle_list_232 Signed 32-bit integer	tpncp.participants_handle_list_232

tpncp.participants_handle_list_233 Signed 32-bit integer	tpncp.participants_handle_list_233
tpncp.participants_handle_list_234 Signed 32-bit integer	tpncp.participants_handle_list_234
tpncp.participants_handle_list_235 Signed 32-bit integer	tpncp.participants_handle_list_235
tpncp.participants_handle_list_236 Signed 32-bit integer	tpncp.participants_handle_list_236
tpncp.participants_handle_list_237 Signed 32-bit integer	tpncp.participants_handle_list_237
tpncp.participants_handle_list_238 Signed 32-bit integer	tpncp.participants_handle_list_238
tpncp.participants_handle_list_239 Signed 32-bit integer	tpncp.participants_handle_list_239
tpncp.participants_handle_list_24 Signed 32-bit integer	tpncp.participants_handle_list_24
tpncp.participants_handle_list_240 Signed 32-bit integer	tpncp.participants_handle_list_240
tpncp.participants_handle_list_241 Signed 32-bit integer	tpncp.participants_handle_list_241
tpncp.participants_handle_list_242 Signed 32-bit integer	tpncp.participants_handle_list_242
tpncp.participants_handle_list_243 Signed 32-bit integer	tpncp.participants_handle_list_243
tpncp.participants_handle_list_244 Signed 32-bit integer	tpncp.participants_handle_list_244
tpncp.participants_handle_list_245 Signed 32-bit integer	tpncp.participants_handle_list_245
tpncp.participants_handle_list_246 Signed 32-bit integer	tpncp.participants_handle_list_246
tpncp.participants_handle_list_247 Signed 32-bit integer	tpncp.participants_handle_list_247
tpncp.participants_handle_list_248 Signed 32-bit integer	tpncp.participants_handle_list_248
tpncp.participants_handle_list_249 Signed 32-bit integer	tpncp.participants_handle_list_249
tpncp.participants_handle_list_25 Signed 32-bit integer	tpncp.participants_handle_list_25
tpncp.participants_handle_list_250 Signed 32-bit integer	tpncp.participants_handle_list_250
tpncp.participants_handle_list_251 Signed 32-bit integer	tpncp.participants_handle_list_251
tpncp.participants_handle_list_252 Signed 32-bit integer	tpncp.participants_handle_list_252

tpncp.participants_handle_list_253 Signed 32-bit integer	tpncp.participants_handle_list_253
tpncp.participants_handle_list_254 Signed 32-bit integer	tpncp.participants_handle_list_254
tpncp.participants_handle_list_255 Signed 32-bit integer	tpncp.participants_handle_list_255
tpncp.participants_handle_list_26 Signed 32-bit integer	tpncp.participants_handle_list_26
tpncp.participants_handle_list_27 Signed 32-bit integer	tpncp.participants_handle_list_27
tpncp.participants_handle_list_28 Signed 32-bit integer	tpncp.participants_handle_list_28
tpncp.participants_handle_list_29 Signed 32-bit integer	tpncp.participants_handle_list_29
tpncp.participants_handle_list_3 Signed 32-bit integer	tpncp.participants_handle_list_3
tpncp.participants_handle_list_30 Signed 32-bit integer	tpncp.participants_handle_list_30
tpncp.participants_handle_list_31 Signed 32-bit integer	tpncp.participants_handle_list_31
tpncp.participants_handle_list_32 Signed 32-bit integer	tpncp.participants_handle_list_32
tpncp.participants_handle_list_33 Signed 32-bit integer	tpncp.participants_handle_list_33
tpncp.participants_handle_list_34 Signed 32-bit integer	tpncp.participants_handle_list_34
tpncp.participants_handle_list_35 Signed 32-bit integer	tpncp.participants_handle_list_35
tpncp.participants_handle_list_36 Signed 32-bit integer	tpncp.participants_handle_list_36
tpncp.participants_handle_list_37 Signed 32-bit integer	tpncp.participants_handle_list_37
tpncp.participants_handle_list_38 Signed 32-bit integer	tpncp.participants_handle_list_38
tpncp.participants_handle_list_39 Signed 32-bit integer	tpncp.participants_handle_list_39
tpncp.participants_handle_list_4 Signed 32-bit integer	tpncp.participants_handle_list_4
tpncp.participants_handle_list_40 Signed 32-bit integer	tpncp.participants_handle_list_40
tpncp.participants_handle_list_41 Signed 32-bit integer	tpncp.participants_handle_list_41
tpncp.participants_handle_list_42 Signed 32-bit integer	tpncp.participants_handle_list_42



tpncp.participants_handle_list_43 Signed 32-bit integer	tpncp.participants_handle_list_43
tpncp.participants_handle_list_44 Signed 32-bit integer	tpncp.participants_handle_list_44
tpncp.participants_handle_list_45 Signed 32-bit integer	tpncp.participants_handle_list_45
tpncp.participants_handle_list_46 Signed 32-bit integer	tpncp.participants_handle_list_46
tpncp.participants_handle_list_47 Signed 32-bit integer	tpncp.participants_handle_list_47
tpncp.participants_handle_list_48 Signed 32-bit integer	tpncp.participants_handle_list_48
tpncp.participants_handle_list_49 Signed 32-bit integer	tpncp.participants_handle_list_49
tpncp.participants_handle_list_5 Signed 32-bit integer	tpncp.participants_handle_list_5
tpncp.participants_handle_list_50 Signed 32-bit integer	tpncp.participants_handle_list_50
tpncp.participants_handle_list_51 Signed 32-bit integer	tpncp.participants_handle_list_51
tpncp.participants_handle_list_52 Signed 32-bit integer	tpncp.participants_handle_list_52
tpncp.participants_handle_list_53 Signed 32-bit integer	tpncp.participants_handle_list_53
tpncp.participants_handle_list_54 Signed 32-bit integer	tpncp.participants_handle_list_54
tpncp.participants_handle_list_55 Signed 32-bit integer	tpncp.participants_handle_list_55
tpncp.participants_handle_list_56 Signed 32-bit integer	tpncp.participants_handle_list_56
tpncp.participants_handle_list_57 Signed 32-bit integer	tpncp.participants_handle_list_57
tpncp.participants_handle_list_58 Signed 32-bit integer	tpncp.participants_handle_list_58
tpncp.participants_handle_list_59 Signed 32-bit integer	tpncp.participants_handle_list_59
tpncp.participants_handle_list_6 Signed 32-bit integer	tpncp.participants_handle_list_6
tpncp.participants_handle_list_60 Signed 32-bit integer	tpncp.participants_handle_list_60
tpncp.participants_handle_list_61 Signed 32-bit integer	tpncp.participants_handle_list_61
tpncp.participants_handle_list_62 Signed 32-bit integer	tpncp.participants_handle_list_62

tpncp.participants_handle_list_63 Signed 32-bit integer	tpncp.participants_handle_list_63
tpncp.participants_handle_list_64 Signed 32-bit integer	tpncp.participants_handle_list_64
tpncp.participants_handle_list_65 Signed 32-bit integer	tpncp.participants_handle_list_65
tpncp.participants_handle_list_66 Signed 32-bit integer	tpncp.participants_handle_list_66
tpncp.participants_handle_list_67 Signed 32-bit integer	tpncp.participants_handle_list_67
tpncp.participants_handle_list_68 Signed 32-bit integer	tpncp.participants_handle_list_68
tpncp.participants_handle_list_69 Signed 32-bit integer	tpncp.participants_handle_list_69
tpncp.participants_handle_list_7 Signed 32-bit integer	tpncp.participants_handle_list_7
tpncp.participants_handle_list_70 Signed 32-bit integer	tpncp.participants_handle_list_70
tpncp.participants_handle_list_71 Signed 32-bit integer	tpncp.participants_handle_list_71
tpncp.participants_handle_list_72 Signed 32-bit integer	tpncp.participants_handle_list_72
tpncp.participants_handle_list_73 Signed 32-bit integer	tpncp.participants_handle_list_73
tpncp.participants_handle_list_74 Signed 32-bit integer	tpncp.participants_handle_list_74
tpncp.participants_handle_list_75 Signed 32-bit integer	tpncp.participants_handle_list_75
tpncp.participants_handle_list_76 Signed 32-bit integer	tpncp.participants_handle_list_76
tpncp.participants_handle_list_77 Signed 32-bit integer	tpncp.participants_handle_list_77
tpncp.participants_handle_list_78 Signed 32-bit integer	tpncp.participants_handle_list_78
tpncp.participants_handle_list_79 Signed 32-bit integer	tpncp.participants_handle_list_79
tpncp.participants_handle_list_8 Signed 32-bit integer	tpncp.participants_handle_list_8
tpncp.participants_handle_list_80 Signed 32-bit integer	tpncp.participants_handle_list_80
tpncp.participants_handle_list_81 Signed 32-bit integer	tpncp.participants_handle_list_81
tpncp.participants_handle_list_82 Signed 32-bit integer	tpncp.participants_handle_list_82

tpncp.participants_handle_list_83	tpncp.participants_handle_list_83
Signed 32-bit integer	
tpncp.participants_handle_list_84	tpncp.participants_handle_list_84
Signed 32-bit integer	
tpncp.participants_handle_list_85	tpncp.participants_handle_list_85
Signed 32-bit integer	
tpncp.participants_handle_list_86	tpncp.participants_handle_list_86
Signed 32-bit integer	
tpncp.participants_handle_list_87	tpncp.participants_handle_list_87
Signed 32-bit integer	
tpncp.participants_handle_list_88	tpncp.participants_handle_list_88
Signed 32-bit integer	
tpncp.participants_handle_list_89	tpncp.participants_handle_list_89
Signed 32-bit integer	
tpncp.participants_handle_list_9	tpncp.participants_handle_list_9
Signed 32-bit integer	
tpncp.participants_handle_list_90	tpncp.participants_handle_list_90
Signed 32-bit integer	
tpncp.participants_handle_list_91	tpncp.participants_handle_list_91
Signed 32-bit integer	
tpncp.participants_handle_list_92	tpncp.participants_handle_list_92
Signed 32-bit integer	
tpncp.participants_handle_list_93	tpncp.participants_handle_list_93
Signed 32-bit integer	
tpncp.participants_handle_list_94	tpncp.participants_handle_list_94
Signed 32-bit integer	
tpncp.participants_handle_list_95	tpncp.participants_handle_list_95
Signed 32-bit integer	
tpncp.participants_handle_list_96	tpncp.participants_handle_list_96
Signed 32-bit integer	
tpncp.participants_handle_list_97	tpncp.participants_handle_list_97
Signed 32-bit integer	
tpncp.participants_handle_list_98	tpncp.participants_handle_list_98
Signed 32-bit integer	
tpncp.participants_handle_list_99	tpncp.participants_handle_list_99
Signed 32-bit integer	
tpncp.path_coding_violation	tpncp.path_coding_violation
Signed 32-bit integer	
tpncp.path_failed	tpncp.path_failed
Signed 32-bit integer	
tpncp.pattern	tpncp.pattern
Unsigned 32-bit integer	
tpncp.pattern_detector_cmd	tpncp.pattern_detector_cmd
Signed 32-bit integer	

```
tpncp.pattern_expected  tpncp.pattern_expected
    Unsigned 8-bit integer
tpncp.pattern_index    tpncp.pattern_index
    Signed 32-bit integer
tpncp.pattern_received  tpncp.pattern_received
    Unsigned 8-bit integer
tpncp.patterns         tpncp.patterns
    String
tpncp.payload          tpncp.payload
    String
tpncp.payload_length   tpncp.payload_length
    Unsigned 16-bit integer
tpncp.payload_type_0   tpncp.payload_type_0
    Signed 32-bit integer
tpncp.payload_type_1   tpncp.payload_type_1
    Signed 32-bit integer
tpncp.payload_type_2   tpncp.payload_type_2
    Signed 32-bit integer
tpncp.payload_type_3   tpncp.payload_type_3
    Signed 32-bit integer
tpncp.payload_type_4   tpncp.payload_type_4
    Signed 32-bit integer
tpncp.pcm_coder_type   tpncp.pcm_coder_type
    Unsigned 8-bit integer
tpncp.pcm_switch_bit_return_code  tpncp.pcm_switch_bit_return_code
    Signed 32-bit integer
tpncp.pcm_sync_fail_number  tpncp.pcm_sync_fail_number
    Signed 32-bit integer
tpncp.pcr              tpncp.pcr
    Signed 32-bit integer
tpncp.peer_info_ip_dst_addr  tpncp.peer_info_ip_dst_addr
    Unsigned 32-bit integer
tpncp.peer_info_udp_dst_port  tpncp.peer_info_udp_dst_port
    Unsigned 16-bit integer
tpncp.performance_monitoring_element  tpncp.performance_monitoring_element
    Signed 32-bit integer
tpncp.performance_monitoring_enable  tpncp.performance_monitoring_enable
    Signed 32-bit integer
tpncp.performance_monitoring_interval  tpncp.performance_monitoring_interval
    Signed 32-bit integer
tpncp.performance_monitoring_state  tpncp.performance_monitoring_state
    Signed 32-bit integer
tpncp.pfe              tpncp.pfe
    Signed 32-bit integer
```

```
tpncp.phy_test_bit_return_code  tpncp.phy_test_bit_return_code
    Signed 32-bit integer
tpncp.phys_channel  tpncp.phys_channel
    Signed 32-bit integer
tpncp.phys_core_num  tpncp.phys_core_num
    Signed 32-bit integer
tpncp.physical_link_status  tpncp.physical_link_status
    Signed 32-bit integer
tpncp.physical_link_type  tpncp.physical_link_type
    Signed 32-bit integer
tpncp.plan  tpncp.plan
    Signed 32-bit integer
tpncp.play_bytes_processed  tpncp.play_bytes_processed
    Unsigned 32-bit integer
tpncp.play_coder  tpncp.play_coder
    Signed 32-bit integer
tpncp.play_timing  tpncp.play_timing
    Unsigned 8-bit integer
tpncp.playing_time  tpncp.playing_time
    Signed 32-bit integer
tpncp.plm  tpncp.plm
    Signed 32-bit integer
tpncp.polarity_status  tpncp.polarity_status
    Signed 32-bit integer
tpncp.port  tpncp.port
    Unsigned 8-bit integer
tpncp.port_activity_mode_0  tpncp.port_activity_mode_0
    Signed 32-bit integer
tpncp.port_activity_mode_1  tpncp.port_activity_mode_1
    Signed 32-bit integer
tpncp.port_activity_mode_2  tpncp.port_activity_mode_2
    Signed 32-bit integer
tpncp.port_activity_mode_3  tpncp.port_activity_mode_3
    Signed 32-bit integer
tpncp.port_activity_mode_4  tpncp.port_activity_mode_4
    Signed 32-bit integer
tpncp.port_activity_mode_5  tpncp.port_activity_mode_5
    Signed 32-bit integer
tpncp.port_control_command  tpncp.port_control_command
    Signed 32-bit integer
tpncp.port_id  tpncp.port_id
    Unsigned 32-bit integer
tpncp.port_id_0  tpncp.port_id_0
    Unsigned 32-bit integer
```

```
tpncp.port_id_1 tpncp.port_id_1
    Unsigned 32-bit integer
tpncp.port_id_2 tpncp.port_id_2
    Unsigned 32-bit integer
tpncp.port_id_3 tpncp.port_id_3
    Unsigned 32-bit integer
tpncp.port_id_4 tpncp.port_id_4
    Unsigned 32-bit integer
tpncp.port_id_5 tpncp.port_id_5
    Unsigned 32-bit integer
tpncp.port_speed_0 tpncp.port_speed_0
    Signed 32-bit integer
tpncp.port_speed_1 tpncp.port_speed_1
    Signed 32-bit integer
tpncp.port_speed_2 tpncp.port_speed_2
    Signed 32-bit integer
tpncp.port_speed_3 tpncp.port_speed_3
    Signed 32-bit integer
tpncp.port_speed_4 tpncp.port_speed_4
    Signed 32-bit integer
tpncp.port_speed_5 tpncp.port_speed_5
    Signed 32-bit integer
tpncp.port_type tpncp.port_type
    Signed 32-bit integer
tpncp.port_unreachable tpncp.port_unreachable
    Unsigned 32-bit integer
tpncp.port_user_mode_0 tpncp.port_user_mode_0
    Signed 32-bit integer
tpncp.port_user_mode_1 tpncp.port_user_mode_1
    Signed 32-bit integer
tpncp.port_user_mode_2 tpncp.port_user_mode_2
    Signed 32-bit integer
tpncp.port_user_mode_3 tpncp.port_user_mode_3
    Signed 32-bit integer
tpncp.port_user_mode_4 tpncp.port_user_mode_4
    Signed 32-bit integer
tpncp.port_user_mode_5 tpncp.port_user_mode_5
    Signed 32-bit integer
tpncp.post_speech_timer tpncp.post_speech_timer
    Signed 32-bit integer
tpncp.pre_speech_timer tpncp.pre_speech_timer
    Signed 32-bit integer
tpncp.prerecorded_tone_hdr tpncp.prerecorded_tone_hdr
    String
```

```
tpncp.presentation tpncp.presentation
    Signed 32-bit integer

tpncp.primary_clock_source tpncp.primary_clock_source
    Signed 32-bit integer

tpncp.primary_clock_source_status tpncp.primary_clock_source_status
    Signed 32-bit integer

tpncp.primary_language tpncp.primary_language
    Signed 32-bit integer

tpncp.profile_entry tpncp.profile_entry
    Unsigned 8-bit integer

tpncp.profile_group tpncp.profile_group
    Unsigned 8-bit integer

tpncp.profile_id tpncp.profile_id
    Unsigned 8-bit integer

tpncp.progress_cause tpncp.progress_cause
    Signed 32-bit integer

tpncp.progress_ind tpncp.progress_ind
    Signed 32-bit integer

tpncp.progress_ind_description tpncp.progress_ind_description
    Signed 32-bit integer

tpncp.progress_ind_location tpncp.progress_ind_location
    Signed 32-bit integer

tpncp.prompt_timer tpncp.prompt_timer
    Signed 16-bit integer

tpncp.protection_dll_error tpncp.protection_dll_error
    Signed 32-bit integer

tpncp.protection_dl2_error tpncp.protection_dl2_error
    Signed 32-bit integer

tpncp.protocol_parameter_duration_type tpncp.protocol_parameter_duration_type
    Signed 32-bit integer

tpncp.protocol_parameter_signal_type tpncp.protocol_parameter_signal_type
    Signed 32-bit integer

tpncp.protocol_unreachable tpncp.protocol_unreachable
    Unsigned 32-bit integer

tpncp.pstn_protocol_data_link_error tpncp.pstn_protocol_data_link_error
    Signed 32-bit integer

tpncp.pstn_stack_message_add_or_conn_id tpncp.pstn_stack_message_add_or_conn_id
    Signed 32-bit integer

tpncp.pstn_stack_message_code tpncp.pstn_stack_message_code
    Signed 32-bit integer

tpncp.pstn_stack_message_data tpncp.pstn_stack_message_data
    String

tpncp.pstn_stack_message_data_size tpncp.pstn_stack_message_data_size
    Signed 32-bit integer
```

```

tpncp.pstn_stack_message_from  tpncp.pstn_stack_message_from
    Signed 32-bit integer
tpncp.pstn_stack_message_inf0  tpncp.pstn_stack_message_inf0
    Signed 32-bit integer
tpncp.pstn_stack_message_nai   tpncp.pstn_stack_message_nai
    Signed 32-bit integer
tpncp.pstn_stack_message_sapi  tpncp.pstn_stack_message_sapi
    Signed 32-bit integer
tpncp.pstn_stack_message_to    tpncp.pstn_stack_message_to
    Signed 32-bit integer
tpncp.pstn_state               tpncp.pstn_state
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_0  tpncp.pstn_trunk_bchannels_status_0
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_1  tpncp.pstn_trunk_bchannels_status_1
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_10  tpncp.pstn_trunk_bchannels_status_10
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_11  tpncp.pstn_trunk_bchannels_status_11
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_12  tpncp.pstn_trunk_bchannels_status_12
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_13  tpncp.pstn_trunk_bchannels_status_13
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_14  tpncp.pstn_trunk_bchannels_status_14
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_15  tpncp.pstn_trunk_bchannels_status_15
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_16  tpncp.pstn_trunk_bchannels_status_16
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_17  tpncp.pstn_trunk_bchannels_status_17
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_18  tpncp.pstn_trunk_bchannels_status_18
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_19  tpncp.pstn_trunk_bchannels_status_19
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_2  tpncp.pstn_trunk_bchannels_status_2
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_20  tpncp.pstn_trunk_bchannels_status_20
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_21  tpncp.pstn_trunk_bchannels_status_21
    Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_22  tpncp.pstn_trunk_bchannels_status_22
    Signed 32-bit integer

```



```

tpncp.pstn_trunk_bchannels_status_23  tpncp.pstn_trunk_bchannels_status_23
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_24  tpncp.pstn_trunk_bchannels_status_24
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_25  tpncp.pstn_trunk_bchannels_status_25
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_26  tpncp.pstn_trunk_bchannels_status_26
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_27  tpncp.pstn_trunk_bchannels_status_27
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_28  tpncp.pstn_trunk_bchannels_status_28
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_29  tpncp.pstn_trunk_bchannels_status_29
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_3   tpncp.pstn_trunk_bchannels_status_3
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_30  tpncp.pstn_trunk_bchannels_status_30
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_31  tpncp.pstn_trunk_bchannels_status_31
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_4   tpncp.pstn_trunk_bchannels_status_4
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_5   tpncp.pstn_trunk_bchannels_status_5
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_6   tpncp.pstn_trunk_bchannels_status_6
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_7   tpncp.pstn_trunk_bchannels_status_7
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_8   tpncp.pstn_trunk_bchannels_status_8
Signed 32-bit integer
tpncp.pstn_trunk_bchannels_status_9   tpncp.pstn_trunk_bchannels_status_9
Signed 32-bit integer
tpncp.pstn_user_port_id  tpncp.pstn_user_port_id
Signed 32-bit integer
tpncp.pulse_count  tpncp.pulse_count
Signed 32-bit integer
tpncp.pulse_type  tpncp.pulse_type
Signed 32-bit integer
tpncp.pulsed_signal  tpncp.pulsed_signal
Signed 32-bit integer
tpncp.pulsed_signal_signal_type  tpncp.pulsed_signal_signal_type
Signed 32-bit integer
tpncp.qcelpl3_rate  tpncp.qcelpl3_rate
Signed 32-bit integer

```

```
tpncp.qcelp8_rate  tpncp.qcelp8_rate
    Signed 32-bit integer

tpncp.query_result  tpncp.query_result
    Signed 32-bit integer

tpncp.query_seq_no  tpncp.query_seq_no
    Signed 32-bit integer

tpncp.r_factor      tpncp.r_factor
    Unsigned 8-bit integer

tpncp.ra_state      tpncp.ra_state
    Signed 32-bit integer

tpncp.rai           tpncp.rai
    Signed 32-bit integer

tpncp.ras_debug_mode  tpncp.ras_debug_mode
    Unsigned 8-bit integer

tpncp.rate_0        tpncp.rate_0
    Signed 32-bit integer

tpncp.rate_1        tpncp.rate_1
    Signed 32-bit integer

tpncp.rate_2        tpncp.rate_2
    Signed 32-bit integer

tpncp.rate_3        tpncp.rate_3
    Signed 32-bit integer

tpncp.rate_4        tpncp.rate_4
    Signed 32-bit integer

tpncp.rate_5        tpncp.rate_5
    Signed 32-bit integer

tpncp.rate_6        tpncp.rate_6
    Signed 32-bit integer

tpncp.rate_7        tpncp.rate_7
    Signed 32-bit integer

tpncp.rate_type     tpncp.rate_type
    Signed 32-bit integer

tpncp.ready_for_update  tpncp.ready_for_update
    Signed 32-bit integer

tpncp.rear_firm_ware_ver  tpncp.rear_firm_ware_ver
    Signed 32-bit integer

tpncp.rear_io_id    tpncp.rear_io_id
    Signed 32-bit integer

tpncp.reason        tpncp.reason
    Unsigned 32-bit integer

tpncp.reassembly_timeout  tpncp.reassembly_timeout
    Unsigned 32-bit integer

tpncp.rec_buff_size  tpncp.rec_buff_size
    Signed 32-bit integer
```

```
tpncp.receive_window_size_offered  tpncp.receive_window_size_offered
    Unsigned 16-bit integer
tpncp.received  tpncp.received
    Unsigned 32-bit integer
tpncp.received_digit_ack_req_ind  tpncp.received_digit_ack_req_ind
    Signed 32-bit integer
tpncp.received_octets  tpncp.received_octets
    Unsigned 32-bit integer
tpncp.received_packets  tpncp.received_packets
    Unsigned 32-bit integer
tpncp.recognize_timeout  tpncp.recognize_timeout
    Signed 32-bit integer
tpncp.record_bytes_processed  tpncp.record_bytes_processed
    Signed 32-bit integer
tpncp.record_coder  tpncp.record_coder
    Signed 32-bit integer
tpncp.record_length_timer  tpncp.record_length_timer
    Signed 32-bit integer
tpncp.record_points  tpncp.record_points
    Unsigned 32-bit integer
tpncp.recording_id  tpncp.recording_id
    String
tpncp.recording_time  tpncp.recording_time
    Signed 32-bit integer
tpncp.red_alarm  tpncp.red_alarm
    Signed 32-bit integer
tpncp.redirecting_number  tpncp.redirecting_number
    String
tpncp.redirecting_number_plan  tpncp.redirecting_number_plan
    Signed 32-bit integer
tpncp.redirecting_number_pres  tpncp.redirecting_number_pres
    Signed 32-bit integer
tpncp.redirecting_number_reason  tpncp.redirecting_number_reason
    Signed 32-bit integer
tpncp.redirecting_number_screen  tpncp.redirecting_number_screen
    Signed 32-bit integer
tpncp.redirecting_number_size  tpncp.redirecting_number_size
    Signed 32-bit integer
tpncp.redirecting_number_type  tpncp.redirecting_number_type
    Signed 32-bit integer
tpncp.redirecting_phone_num  tpncp.redirecting_phone_num
    String
tpncp.redirection  tpncp.redirection
    Signed 32-bit integer
```

```
tpncp.reduction_intensity tpncp.reduction_intensity
    Unsigned 8-bit integer
tpncp.redundancy_level_0 tpncp.redundancy_level_0
    Signed 32-bit integer
tpncp.redundancy_level_1 tpncp.redundancy_level_1
    Signed 32-bit integer
tpncp.redundancy_level_2 tpncp.redundancy_level_2
    Signed 32-bit integer
tpncp.redundancy_level_3 tpncp.redundancy_level_3
    Signed 32-bit integer
tpncp.redundancy_level_4 tpncp.redundancy_level_4
    Signed 32-bit integer
tpncp.redundancy_level_5 tpncp.redundancy_level_5
    Signed 32-bit integer
tpncp.redundancy_level_6 tpncp.redundancy_level_6
    Signed 32-bit integer
tpncp.redundancy_level_7 tpncp.redundancy_level_7
    Signed 32-bit integer
tpncp.redundant_cmd tpncp.redundant_cmd
    Signed 32-bit integer
tpncp.ref_energy tpncp.ref_energy
    Signed 32-bit integer
tpncp.reg tpncp.reg
    Signed 32-bit integer
tpncp.register_value tpncp.register_value
    Signed 32-bit integer
tpncp.registration_state tpncp.registration_state
    Signed 32-bit integer
tpncp.reinput_key_sequence tpncp.reinput_key_sequence
    String
tpncp.reject_cause tpncp.reject_cause
    Signed 32-bit integer
tpncp.relay_bypass tpncp.relay_bypass
    Signed 32-bit integer
tpncp.release_indication_cause tpncp.release_indication_cause
    Signed 32-bit integer
tpncp.remote_alarm tpncp.remote_alarm
    Unsigned 16-bit integer
tpncp.remote_alarm_received tpncp.remote_alarm_received
    Signed 32-bit integer
tpncp.remote_apip tpncp.remote_apip
    Unsigned 32-bit integer
tpncp.remote_disconnect tpncp.remote_disconnect
    Signed 32-bit integer
```

```
tpncp.remote_file_coder tpncp.remote_file_coder
    Signed 32-bit integer
tpncp.remote_file_duration tpncp.remote_file_duration
    Signed 32-bit integer
tpncp.remote_file_query_result tpncp.remote_file_query_result
    Signed 32-bit integer
tpncp.remote_gwip tpncp.remote_gwip
    Unsigned 32-bit integer
tpncp.remote_ip_addr tpncp.remote_ip_addr
    Signed 32-bit integer
tpncp.remote_ip_addr_0 tpncp.remote_ip_addr_0
    Unsigned 32-bit integer
tpncp.remote_ip_addr_1 tpncp.remote_ip_addr_1
    Unsigned 32-bit integer
tpncp.remote_ip_addr_10 tpncp.remote_ip_addr_10
    Unsigned 32-bit integer
tpncp.remote_ip_addr_11 tpncp.remote_ip_addr_11
    Unsigned 32-bit integer
tpncp.remote_ip_addr_12 tpncp.remote_ip_addr_12
    Unsigned 32-bit integer
tpncp.remote_ip_addr_13 tpncp.remote_ip_addr_13
    Unsigned 32-bit integer
tpncp.remote_ip_addr_14 tpncp.remote_ip_addr_14
    Unsigned 32-bit integer
tpncp.remote_ip_addr_15 tpncp.remote_ip_addr_15
    Unsigned 32-bit integer
tpncp.remote_ip_addr_16 tpncp.remote_ip_addr_16
    Unsigned 32-bit integer
tpncp.remote_ip_addr_17 tpncp.remote_ip_addr_17
    Unsigned 32-bit integer
tpncp.remote_ip_addr_18 tpncp.remote_ip_addr_18
    Unsigned 32-bit integer
tpncp.remote_ip_addr_19 tpncp.remote_ip_addr_19
    Unsigned 32-bit integer
tpncp.remote_ip_addr_2 tpncp.remote_ip_addr_2
    Unsigned 32-bit integer
tpncp.remote_ip_addr_20 tpncp.remote_ip_addr_20
    Unsigned 32-bit integer
tpncp.remote_ip_addr_21 tpncp.remote_ip_addr_21
    Unsigned 32-bit integer
tpncp.remote_ip_addr_22 tpncp.remote_ip_addr_22
    Unsigned 32-bit integer
tpncp.remote_ip_addr_23 tpncp.remote_ip_addr_23
    Unsigned 32-bit integer
```

```
tpncp.remote_ip_addr_24  tpncp.remote_ip_addr_24
    Unsigned 32-bit integer
tpncp.remote_ip_addr_25  tpncp.remote_ip_addr_25
    Unsigned 32-bit integer
tpncp.remote_ip_addr_26  tpncp.remote_ip_addr_26
    Unsigned 32-bit integer
tpncp.remote_ip_addr_27  tpncp.remote_ip_addr_27
    Unsigned 32-bit integer
tpncp.remote_ip_addr_28  tpncp.remote_ip_addr_28
    Unsigned 32-bit integer
tpncp.remote_ip_addr_29  tpncp.remote_ip_addr_29
    Unsigned 32-bit integer
tpncp.remote_ip_addr_3   tpncp.remote_ip_addr_3
    Unsigned 32-bit integer
tpncp.remote_ip_addr_30  tpncp.remote_ip_addr_30
    Unsigned 32-bit integer
tpncp.remote_ip_addr_31  tpncp.remote_ip_addr_31
    Unsigned 32-bit integer
tpncp.remote_ip_addr_4   tpncp.remote_ip_addr_4
    Unsigned 32-bit integer
tpncp.remote_ip_addr_5   tpncp.remote_ip_addr_5
    Unsigned 32-bit integer
tpncp.remote_ip_addr_6   tpncp.remote_ip_addr_6
    Unsigned 32-bit integer
tpncp.remote_ip_addr_7   tpncp.remote_ip_addr_7
    Unsigned 32-bit integer
tpncp.remote_ip_addr_8   tpncp.remote_ip_addr_8
    Unsigned 32-bit integer
tpncp.remote_ip_addr_9   tpncp.remote_ip_addr_9
    Unsigned 32-bit integer
tpncp.remote_port_0      tpncp.remote_port_0
    Signed 32-bit integer
tpncp.remote_port_1      tpncp.remote_port_1
    Signed 32-bit integer
tpncp.remote_port_10     tpncp.remote_port_10
    Signed 32-bit integer
tpncp.remote_port_11     tpncp.remote_port_11
    Signed 32-bit integer
tpncp.remote_port_12     tpncp.remote_port_12
    Signed 32-bit integer
tpncp.remote_port_13     tpncp.remote_port_13
    Signed 32-bit integer
tpncp.remote_port_14     tpncp.remote_port_14
    Signed 32-bit integer
```

```
tpncp.remote_port_15  tpncp.remote_port_15
    Signed 32-bit integer
tpncp.remote_port_16  tpncp.remote_port_16
    Signed 32-bit integer
tpncp.remote_port_17  tpncp.remote_port_17
    Signed 32-bit integer
tpncp.remote_port_18  tpncp.remote_port_18
    Signed 32-bit integer
tpncp.remote_port_19  tpncp.remote_port_19
    Signed 32-bit integer
tpncp.remote_port_2   tpncp.remote_port_2
    Signed 32-bit integer
tpncp.remote_port_20  tpncp.remote_port_20
    Signed 32-bit integer
tpncp.remote_port_21  tpncp.remote_port_21
    Signed 32-bit integer
tpncp.remote_port_22  tpncp.remote_port_22
    Signed 32-bit integer
tpncp.remote_port_23  tpncp.remote_port_23
    Signed 32-bit integer
tpncp.remote_port_24  tpncp.remote_port_24
    Signed 32-bit integer
tpncp.remote_port_25  tpncp.remote_port_25
    Signed 32-bit integer
tpncp.remote_port_26  tpncp.remote_port_26
    Signed 32-bit integer
tpncp.remote_port_27  tpncp.remote_port_27
    Signed 32-bit integer
tpncp.remote_port_28  tpncp.remote_port_28
    Signed 32-bit integer
tpncp.remote_port_29  tpncp.remote_port_29
    Signed 32-bit integer
tpncp.remote_port_3   tpncp.remote_port_3
    Signed 32-bit integer
tpncp.remote_port_30  tpncp.remote_port_30
    Signed 32-bit integer
tpncp.remote_port_31  tpncp.remote_port_31
    Signed 32-bit integer
tpncp.remote_port_4   tpncp.remote_port_4
    Signed 32-bit integer
tpncp.remote_port_5   tpncp.remote_port_5
    Signed 32-bit integer
tpncp.remote_port_6   tpncp.remote_port_6
    Signed 32-bit integer
```

```

tpncp.remote_port_7  tpncp.remote_port_7
    Signed 32-bit integer

tpncp.remote_port_8  tpncp.remote_port_8
    Signed 32-bit integer

tpncp.remote_port_9  tpncp.remote_port_9
    Signed 32-bit integer

tpncp.remote_rtcp_port  tpncp.remote_rtcp_port
    Unsigned 16-bit integer

tpncp.remote_rtcpip_add_address_family  tpncp.remote_rtcpip_add_address_family
    Signed 32-bit integer

tpncp.remote_rtcpip_add_ipv6_addr_0  tpncp.remote_rtcpip_add_ipv6_addr_0
    Unsigned 32-bit integer

tpncp.remote_rtcpip_add_ipv6_addr_1  tpncp.remote_rtcpip_add_ipv6_addr_1
    Unsigned 32-bit integer

tpncp.remote_rtcpip_add_ipv6_addr_2  tpncp.remote_rtcpip_add_ipv6_addr_2
    Unsigned 32-bit integer

tpncp.remote_rtcpip_add_ipv6_addr_3  tpncp.remote_rtcpip_add_ipv6_addr_3
    Unsigned 32-bit integer

tpncp.remote_rtcpip_addr_address_family  tpncp.remote_rtcpip_addr_address_family
    Signed 32-bit integer

tpncp.remote_rtcpip_addr_ipv6_addr_0  tpncp.remote_rtcpip_addr_ipv6_addr_0
    Unsigned 32-bit integer

tpncp.remote_rtcpip_addr_ipv6_addr_1  tpncp.remote_rtcpip_addr_ipv6_addr_1
    Unsigned 32-bit integer

tpncp.remote_rtcpip_addr_ipv6_addr_2  tpncp.remote_rtcpip_addr_ipv6_addr_2
    Unsigned 32-bit integer

tpncp.remote_rtcpip_addr_ipv6_addr_3  tpncp.remote_rtcpip_addr_ipv6_addr_3
    Unsigned 32-bit integer

tpncp.remote_rtp_port  tpncp.remote_rtp_port
    Unsigned 16-bit integer

tpncp.remote_rtpip_addr_address_family  tpncp.remote_rtpip_addr_address_family
    Signed 32-bit integer

tpncp.remote_rtpip_addr_ipv6_addr_0  tpncp.remote_rtpip_addr_ipv6_addr_0
    Unsigned 32-bit integer

tpncp.remote_rtpip_addr_ipv6_addr_1  tpncp.remote_rtpip_addr_ipv6_addr_1
    Unsigned 32-bit integer

tpncp.remote_rtpip_addr_ipv6_addr_2  tpncp.remote_rtpip_addr_ipv6_addr_2
    Unsigned 32-bit integer

tpncp.remote_rtpip_addr_ipv6_addr_3  tpncp.remote_rtpip_addr_ipv6_addr_3
    Unsigned 32-bit integer

tpncp.remote_session_id  tpncp.remote_session_id
    Signed 32-bit integer

tpncp.remote_session_seq_num  tpncp.remote_session_seq_num
    Signed 32-bit integer

```



```
tpncp.remote_t38_port  tpncp.remote_t38_port
    Signed 32-bit integer
tpncp.remote_t38ip_addr_address_family  tpncp.remote_t38ip_addr_address_family
    Signed 32-bit integer
tpncp.remote_t38ip_addr_ipv6_addr_0  tpncp.remote_t38ip_addr_ipv6_addr_0
    Unsigned 32-bit integer
tpncp.remote_t38ip_addr_ipv6_addr_1  tpncp.remote_t38ip_addr_ipv6_addr_1
    Unsigned 32-bit integer
tpncp.remote_t38ip_addr_ipv6_addr_2  tpncp.remote_t38ip_addr_ipv6_addr_2
    Unsigned 32-bit integer
tpncp.remote_t38ip_addr_ipv6_addr_3  tpncp.remote_t38ip_addr_ipv6_addr_3
    Unsigned 32-bit integer
tpncp.remotely_inhibited  tpncp.remotely_inhibited
    Signed 32-bit integer
tpncp.repeat  tpncp.repeat
    Unsigned 8-bit integer
tpncp.repeated_dial_string_total_duration  tpncp.repeated_dial_string_total_dura
    Signed 32-bit integer
tpncp.repeated_string_total_duration  tpncp.repeated_string_total_duration
    Signed 32-bit integer
tpncp.report_lbc  tpncp.report_lbc
    Signed 32-bit integer
tpncp.report_reason  tpncp.report_reason
    Signed 32-bit integer
tpncp.report_type  tpncp.report_type
    Signed 32-bit integer
tpncp.report_ubic  tpncp.report_ubic
    Signed 32-bit integer
tpncp.reporting_pulse_count  tpncp.reporting_pulse_count
    Signed 32-bit integer
tpncp.request  tpncp.request
    Signed 32-bit integer
tpncp.reserve  tpncp.reserve
    String
tpncp.reserve1  tpncp.reserve1
    String
tpncp.reserve2  tpncp.reserve2
    String
tpncp.reserve3  tpncp.reserve3
    String
tpncp.reserve4  tpncp.reserve4
    String
tpncp.reserve_0  tpncp.reserve_0
    Signed 32-bit integer
```

```
tpncp.reserve_1  tpncp.reserve_1
    Signed 32-bit integer
tpncp.reserve_2  tpncp.reserve_2
    Signed 32-bit integer
tpncp.reserve_3  tpncp.reserve_3
    Signed 32-bit integer
tpncp.reserve_4  tpncp.reserve_4
    Signed 32-bit integer
tpncp.reserve_5  tpncp.reserve_5
    Signed 32-bit integer
tpncp.reserved   Reserved
    Unsigned 16-bit integer
tpncp.reserved1  tpncp.reserved1
    Signed 32-bit integer
tpncp.reserved2  tpncp.reserved2
    Signed 32-bit integer
tpncp.reserved3  tpncp.reserved3
    Signed 32-bit integer
tpncp.reserved4  tpncp.reserved4
    Signed 32-bit integer
tpncp.reserved5  tpncp.reserved5
    Signed 32-bit integer
tpncp.reserved_0  tpncp.reserved_0
    Signed 32-bit integer
tpncp.reserved_1  tpncp.reserved_1
    Signed 32-bit integer
tpncp.reserved_10  tpncp.reserved_10
    Signed 16-bit integer
tpncp.reserved_11  tpncp.reserved_11
    Signed 16-bit integer
tpncp.reserved_2  tpncp.reserved_2
    Signed 32-bit integer
tpncp.reserved_3  tpncp.reserved_3
    Signed 32-bit integer
tpncp.reserved_4  tpncp.reserved_4
    Signed 16-bit integer
tpncp.reserved_5  tpncp.reserved_5
    Signed 16-bit integer
tpncp.reserved_6  tpncp.reserved_6
    Signed 16-bit integer
tpncp.reserved_7  tpncp.reserved_7
    Signed 16-bit integer
tpncp.reserved_8  tpncp.reserved_8
    Signed 16-bit integer
```

```
tpncp.reserved_9  tpncp.reserved_9
    Signed 16-bit integer

tpncp.reset_cmd  tpncp.reset_cmd
    Signed 32-bit integer

tpncp.reset_mode  tpncp.reset_mode
    Signed 32-bit integer

tpncp.reset_source_report_bit_return_code  tpncp.reset_source_report_bit_return
    Signed 32-bit integer

tpncp.reset_total  tpncp.reset_total
    Unsigned 8-bit integer

tpncp.residual_echo_return_loss  tpncp.residual_echo_return_loss
    Unsigned 8-bit integer

tpncp.response_code  tpncp.response_code
    Signed 32-bit integer

tpncp.restart_key_sequence  tpncp.restart_key_sequence
    String

tpncp.restart_not_ok  tpncp.restart_not_ok
    Signed 32-bit integer

tpncp.resume_call_action_code  tpncp.resume_call_action_code
    Signed 32-bit integer

tpncp.resynchronized  tpncp.resynchronized
    Unsigned 16-bit integer

tpncp.ret_cause  tpncp.ret_cause
    Signed 32-bit integer

tpncp.retrc  tpncp.retrc
    Unsigned 16-bit integer

tpncp.return_code  tpncp.return_code
    Signed 32-bit integer

tpncp.return_key_sequence  tpncp.return_key_sequence
    String

tpncp.rev_num  tpncp.rev_num
    Signed 32-bit integer

tpncp.reversal_polarity  tpncp.reversal_polarity
    Signed 32-bit integer

tpncp.rfc  tpncp.rfc
    Signed 32-bit integer

tpncp.rfc2833_rtp_rx_payload_type  tpncp.rfc2833_rtp_rx_payload_type
    Signed 32-bit integer

tpncp.rfc2833_rtp_tx_payload_type  tpncp.rfc2833_rtp_tx_payload_type
    Signed 32-bit integer

tpncp.ria_crc  tpncp.ria_crc
    Signed 32-bit integer

tpncp.ring  tpncp.ring
    Signed 32-bit integer
```

```
tpncp.ring_splash tpncp.ring_splash
    Signed 32-bit integer
tpncp.ring_state tpncp.ring_state
    Signed 32-bit integer
tpncp.ring_type tpncp.ring_type
    Signed 32-bit integer
tpncp.round_trip tpncp.round_trip
    Unsigned 32-bit integer
tpncp.route_set tpncp.route_set
    Signed 32-bit integer
tpncp.route_set_event_cause tpncp.route_set_event_cause
    Signed 32-bit integer
tpncp.route_set_name tpncp.route_set_name
    String
tpncp.route_set_no tpncp.route_set_no
    Signed 32-bit integer
tpncp.routesets_per_sn tpncp.routesets_per_sn
    Signed 32-bit integer
tpncp.rs_alarms_status_0 tpncp.rs_alarms_status_0
    Signed 32-bit integer
tpncp.rs_alarms_status_1 tpncp.rs_alarms_status_1
    Signed 32-bit integer
tpncp.rs_alarms_status_2 tpncp.rs_alarms_status_2
    Signed 32-bit integer
tpncp.rs_alarms_status_3 tpncp.rs_alarms_status_3
    Signed 32-bit integer
tpncp.rs_alarms_status_4 tpncp.rs_alarms_status_4
    Signed 32-bit integer
tpncp.rs_alarms_status_5 tpncp.rs_alarms_status_5
    Signed 32-bit integer
tpncp.rs_alarms_status_6 tpncp.rs_alarms_status_6
    Signed 32-bit integer
tpncp.rs_alarms_status_7 tpncp.rs_alarms_status_7
    Signed 32-bit integer
tpncp.rs_alarms_status_8 tpncp.rs_alarms_status_8
    Signed 32-bit integer
tpncp.rs_alarms_status_9 tpncp.rs_alarms_status_9
    Signed 32-bit integer
tpncp.rsip_reason tpncp.rsip_reason
    Signed 16-bit integer
tpncp.rt_delay tpncp.rt_delay
    Unsigned 16-bit integer
tpncp.rtcp_authentication_algorithm tpncp.rtcp_authentication_algorithm
    Signed 32-bit integer
```

```
tpncp.rtcp_bye_reason    tpncp.rtcp_bye_reason
    String

tpncp.rtcp_bye_reason_length  tpncp.rtcp_bye_reason_length
    Unsigned 8-bit integer

tpncp.rtcp_encryption_algorithm  tpncp.rtcp_encryption_algorithm
    Signed 32-bit integer

tpncp.rtcp_encryption_key    tpncp.rtcp_encryption_key
    String

tpncp.rtcp_encryption_key_size  tpncp.rtcp_encryption_key_size
    Unsigned 32-bit integer

tpncp.rtcp_extension_msg    tpncp.rtcp_extension_msg
    String

tpncp.rtcp_icmp_received_data_icmp_type  tpncp.rtcp_icmp_received_data_icmp_type
    Unsigned 8-bit integer

tpncp.rtcp_icmp_received_data_icmp_unreachable_counter  tpncp.rtcp_icmp_received
    Unsigned 32-bit integer

tpncp.rtcp_mac_key    tpncp.rtcp_mac_key
    String

tpncp.rtcp_mac_key_size  tpncp.rtcp_mac_key_size
    Unsigned 32-bit integer

tpncp.rtcp_mean_tx_interval  tpncp.rtcp_mean_tx_interval
    Signed 32-bit integer

tpncp.rtcp_peer_info_ip_dst_addr  tpncp.rtcp_peer_info_ip_dst_addr
    Unsigned 32-bit integer

tpncp.rtcp_peer_info_udp_dst_port  tpncp.rtcp_peer_info_udp_dst_port
    Unsigned 16-bit integer

tpncp.rtp_authentication_algorithm  tpncp.rtp_authentication_algorithm
    Signed 32-bit integer

tpncp.rtp_encryption_algorithm  tpncp.rtp_encryption_algorithm
    Signed 32-bit integer

tpncp.rtp_encryption_key    tpncp.rtp_encryption_key
    String

tpncp.rtp_encryption_key_size  tpncp.rtp_encryption_key_size
    Unsigned 32-bit integer

tpncp.rtp_init_key    tpncp.rtp_init_key
    String

tpncp.rtp_init_key_size  tpncp.rtp_init_key_size
    Unsigned 32-bit integer

tpncp.rtp_mac_key    tpncp.rtp_mac_key
    String

tpncp.rtp_mac_key_size  tpncp.rtp_mac_key_size
    Unsigned 32-bit integer

tpncp.rtp_no_operation_payload_type  tpncp.rtp_no_operation_payload_type
    Signed 32-bit integer
```

```
tpncp.rtp_redundancy_depth  tpncp.rtp_redundancy_depth
    Signed 32-bit integer
tpncp.rtp_redundancy_rfc2198_payload_type  tpncp.rtp_redundancy_rfc2198_payload_
    Signed 32-bit integer
tpncp.rtp_reflector_mode  tpncp.rtp_reflector_mode
    Unsigned 8-bit integer
tpncp.rtp_sequence_number_mode  tpncp.rtp_sequence_number_mode
    Signed 32-bit integer
tpncp.rtp_silence_indicator_coefficients_number  tpncp.rtp_silence_indicator_coe
    Signed 32-bit integer
tpncp.rtp_silence_indicator_packets_enable  tpncp.rtp_silence_indicator_packets_
    Signed 32-bit integer
tpncp.rtp_time_stamp  tpncp.rtp_time_stamp
    Unsigned 32-bit integer
tpncp.rtpdtmfrfc2833_payload_type  tpncp.rtpdtmfrfc2833_payload_type
    Signed 32-bit integer
tpncp.rtpssrc_mode  tpncp.rtpssrc_mode
    Signed 32-bit integer
tpncp.rx_bytes  tpncp.rx_bytes
    Unsigned 32-bit integer
tpncp.rx_config  tpncp.rx_config
    Unsigned 8-bit integer
tpncp.rx_config_zero_fill  tpncp.rx_config_zero_fill
    Unsigned 8-bit integer
tpncp.rx_dtmf_hang_over_time  tpncp.rx_dtmf_hang_over_time
    Signed 16-bit integer
tpncp.rx_dumped_pkts_cnt  tpncp.rx_dumped_pkts_cnt
    Unsigned 16-bit integer
tpncp.rx_rtp_payload_type  tpncp.rx_rtp_payload_type
    Signed 32-bit integer
tpncp.s_name  tpncp.s_name
    String
tpncp.sample_based_coders_rtp_packet_interval  tpncp.sample_based_coders_rtp_pac
    Signed 32-bit integer
tpncp.sce  tpncp.sce
    Signed 32-bit integer
tpncp.scr  tpncp.scr
    Signed 32-bit integer
tpncp.screening  tpncp.screening
    Signed 32-bit integer
tpncp.sdh_lp_mappingtype  tpncp.sdh_lp_mappingtype
    Signed 32-bit integer
tpncp.sdh_sonet_mode  tpncp.sdh_sonet_mode
    Signed 32-bit integer
```

```
tpncp.sdram_bit_return_code  tpncp.sdram_bit_return_code
    Signed 32-bit integer
tpncp.second  tpncp.second
    Signed 32-bit integer
tpncp.second_digit_country_code  tpncp.second_digit_country_code
    Unsigned 8-bit integer
tpncp.second_redirecting_number_plan  tpncp.second_redirecting_number_plan
    Signed 32-bit integer
tpncp.second_redirecting_number_pres  tpncp.second_redirecting_number_pres
    Signed 32-bit integer
tpncp.second_redirecting_number_reason  tpncp.second_redirecting_number_reason
    Signed 32-bit integer
tpncp.second_redirecting_number_screen  tpncp.second_redirecting_number_screen
    Signed 32-bit integer
tpncp.second_redirecting_number_size  tpncp.second_redirecting_number_size
    Signed 32-bit integer
tpncp.second_redirecting_number_type  tpncp.second_redirecting_number_type
    Signed 32-bit integer
tpncp.second_redirecting_phone_num  tpncp.second_redirecting_phone_num
    String
tpncp.second_tone_duration  tpncp.second_tone_duration
    Unsigned 32-bit integer
tpncp.secondary_clock_source  tpncp.secondary_clock_source
    Signed 32-bit integer
tpncp.secondary_clock_source_status  tpncp.secondary_clock_source_status
    Signed 32-bit integer
tpncp.secondary_language  tpncp.secondary_language
    Signed 32-bit integer
tpncp.seconds  tpncp.seconds
    Signed 32-bit integer
tpncp.section  tpncp.section
    Signed 32-bit integer
tpncp.security_cmd_offset  tpncp.security_cmd_offset
    Signed 32-bit integer
tpncp.segment  tpncp.segment
    Signed 32-bit integer
tpncp.seized_line  tpncp.seized_line
    Signed 32-bit integer
tpncp.send_alarm_operation  tpncp.send_alarm_operation
    Signed 32-bit integer
tpncp.send_dummy_packets  tpncp.send_dummy_packets
    Unsigned 8-bit integer
tpncp.send_each_digit  tpncp.send_each_digit
    Signed 32-bit integer
```

```
tpncp.send_event_board_started_flag  tpncp.send_event_board_started_flag
Signed 32-bit integer

tpncp.send_once  tpncp.send_once
Signed 32-bit integer

tpncp.send_rtcp_bye_packet_mode  tpncp.send_rtcp_bye_packet_mode
Signed 32-bit integer

tpncp.send_silence_dummy_packets  tpncp.send_silence_dummy_packets
Signed 32-bit integer

tpncp.sending_complete  tpncp.sending_complete
Signed 32-bit integer

tpncp.sending_mode  tpncp.sending_mode
Signed 32-bit integer

tpncp.sensor_id  tpncp.sensor_id
Signed 32-bit integer

tpncp.seq_number  Sequence number
Unsigned 16-bit integer

tpncp.sequence_response  tpncp.sequence_response
Signed 32-bit integer

tpncp.serial_id  tpncp.serial_id
Signed 32-bit integer

tpncp.serial_num  tpncp.serial_num
Signed 32-bit integer

tpncp.server_id  tpncp.server_id
Unsigned 32-bit integer

tpncp.service_change_delay  tpncp.service_change_delay
Signed 32-bit integer

tpncp.service_change_reason  tpncp.service_change_reason
Unsigned 32-bit integer

tpncp.service_error_type  tpncp.service_error_type
Signed 32-bit integer

tpncp.service_report_type  tpncp.service_report_type
Signed 32-bit integer

tpncp.service_status  tpncp.service_status
Signed 32-bit integer

tpncp.service_type  tpncp.service_type
Signed 32-bit integer

tpncp.session_id  tpncp.session_id
Signed 32-bit integer

tpncp.set_mode_action  tpncp.set_mode_action
Signed 32-bit integer

tpncp.set_mode_code  tpncp.set_mode_code
Signed 32-bit integer

tpncp.severely_errored_framing_seconds  tpncp.severely_errored_framing_seconds
Signed 32-bit integer
```



```

tpncp.severely_errored_seconds  tpncp.severely_errored_seconds
    Signed 32-bit integer

tpncp.severity  tpncp.severity
    Signed 32-bit integer

tpncp.si  tpncp.si
    Signed 32-bit integer

tpncp.signal_generation_enable  tpncp.signal_generation_enable
    Signed 32-bit integer

tpncp.signal_level  tpncp.signal_level
    Signed 32-bit integer

tpncp.signal_level_decimal  tpncp.signal_level_decimal
    Signed 16-bit integer

tpncp.signal_level_integer  tpncp.signal_level_integer
    Signed 16-bit integer

tpncp.signal_lost  tpncp.signal_lost
    Unsigned 16-bit integer

tpncp.signal_type  tpncp.signal_type
    Signed 32-bit integer

tpncp.signaling_detectors_control  tpncp.signaling_detectors_control
    Signed 32-bit integer

tpncp.signaling_input_connection_bus  tpncp.signaling_input_connection_bus
    Signed 32-bit integer

tpncp.signaling_input_connection_occupied  tpncp.signaling_input_connection_occu
    Signed 32-bit integer

tpncp.signaling_input_connection_port  tpncp.signaling_input_connection_port
    Signed 32-bit integer

tpncp.signaling_input_connection_time_slot  tpncp.signaling_input_connection_tim
    Signed 32-bit integer

tpncp.signaling_system  tpncp.signaling_system
    Signed 32-bit integer

tpncp.signaling_system_0  tpncp.signaling_system_0
    Signed 32-bit integer

tpncp.signaling_system_1  tpncp.signaling_system_1
    Signed 32-bit integer

tpncp.signaling_system_10  tpncp.signaling_system_10
    Signed 32-bit integer

tpncp.signaling_system_11  tpncp.signaling_system_11
    Signed 32-bit integer

tpncp.signaling_system_12  tpncp.signaling_system_12
    Signed 32-bit integer

tpncp.signaling_system_13  tpncp.signaling_system_13
    Signed 32-bit integer

tpncp.signaling_system_14  tpncp.signaling_system_14
    Signed 32-bit integer

```

tpncp.signaling_system_15 Signed 32-bit integer	tpncp.signaling_system_15
tpncp.signaling_system_16 Signed 32-bit integer	tpncp.signaling_system_16
tpncp.signaling_system_17 Signed 32-bit integer	tpncp.signaling_system_17
tpncp.signaling_system_18 Signed 32-bit integer	tpncp.signaling_system_18
tpncp.signaling_system_19 Signed 32-bit integer	tpncp.signaling_system_19
tpncp.signaling_system_2 Signed 32-bit integer	tpncp.signaling_system_2
tpncp.signaling_system_20 Signed 32-bit integer	tpncp.signaling_system_20
tpncp.signaling_system_21 Signed 32-bit integer	tpncp.signaling_system_21
tpncp.signaling_system_22 Signed 32-bit integer	tpncp.signaling_system_22
tpncp.signaling_system_23 Signed 32-bit integer	tpncp.signaling_system_23
tpncp.signaling_system_24 Signed 32-bit integer	tpncp.signaling_system_24
tpncp.signaling_system_25 Signed 32-bit integer	tpncp.signaling_system_25
tpncp.signaling_system_26 Signed 32-bit integer	tpncp.signaling_system_26
tpncp.signaling_system_27 Signed 32-bit integer	tpncp.signaling_system_27
tpncp.signaling_system_28 Signed 32-bit integer	tpncp.signaling_system_28
tpncp.signaling_system_29 Signed 32-bit integer	tpncp.signaling_system_29
tpncp.signaling_system_3 Signed 32-bit integer	tpncp.signaling_system_3
tpncp.signaling_system_30 Signed 32-bit integer	tpncp.signaling_system_30
tpncp.signaling_system_31 Signed 32-bit integer	tpncp.signaling_system_31
tpncp.signaling_system_32 Signed 32-bit integer	tpncp.signaling_system_32
tpncp.signaling_system_33 Signed 32-bit integer	tpncp.signaling_system_33
tpncp.signaling_system_34 Signed 32-bit integer	tpncp.signaling_system_34

```

tpncp.signaling_system_35 tpncp.signaling_system_35
    Signed 32-bit integer
tpncp.signaling_system_36 tpncp.signaling_system_36
    Signed 32-bit integer
tpncp.signaling_system_37 tpncp.signaling_system_37
    Signed 32-bit integer
tpncp.signaling_system_38 tpncp.signaling_system_38
    Signed 32-bit integer
tpncp.signaling_system_39 tpncp.signaling_system_39
    Signed 32-bit integer
tpncp.signaling_system_4 tpncp.signaling_system_4
    Signed 32-bit integer
tpncp.signaling_system_5 tpncp.signaling_system_5
    Signed 32-bit integer
tpncp.signaling_system_6 tpncp.signaling_system_6
    Signed 32-bit integer
tpncp.signaling_system_7 tpncp.signaling_system_7
    Signed 32-bit integer
tpncp.signaling_system_8 tpncp.signaling_system_8
    Signed 32-bit integer
tpncp.signaling_system_9 tpncp.signaling_system_9
    Signed 32-bit integer
tpncp.silence_length_between_iterations tpncp.silence_length_between_iterations
    Unsigned 32-bit integer
tpncp.single_listener_participant_id tpncp.single_listener_participant_id
    Signed 32-bit integer
tpncp.single_vcc tpncp.single_vcc
    Unsigned 8-bit integer
tpncp.size tpncp.size
    Signed 32-bit integer
tpncp.skip_interval tpncp.skip_interval
    Signed 32-bit integer
tpncp.slave_temperature tpncp.slave_temperature
    Signed 32-bit integer
tpncp.slc tpncp.slc
    Signed 32-bit integer
tpncp.sli tpncp.sli
    Signed 32-bit integer
tpncp.slot_name tpncp.slot_name
    String
tpncp.sls tpncp.sls
    Signed 32-bit integer
tpncp.smooth_average_round_trip tpncp.smooth_average_round_trip
    Unsigned 32-bit integer

```

```
tpncp.sn tpncp.sn
Signed 32-bit integer

tpncp.sn_event_cause tpncp.sn_event_cause
Signed 32-bit integer

tpncp.sn_timer_sets tpncp.sn_timer_sets
Signed 32-bit integer

tpncp.sns_per_card tpncp.sns_per_card
Signed 32-bit integer

tpncp.source_category tpncp.source_category
Signed 32-bit integer

tpncp.source_cid tpncp.source_cid
Signed 32-bit integer

tpncp.source_direction tpncp.source_direction
Signed 32-bit integer

tpncp.source_ip_address_family tpncp.source_ip_address_family
Signed 32-bit integer

tpncp.source_ip_ipv6_addr_0 tpncp.source_ip_ipv6_addr_0
Unsigned 32-bit integer

tpncp.source_ip_ipv6_addr_1 tpncp.source_ip_ipv6_addr_1
Unsigned 32-bit integer

tpncp.source_ip_ipv6_addr_2 tpncp.source_ip_ipv6_addr_2
Unsigned 32-bit integer

tpncp.source_ip_ipv6_addr_3 tpncp.source_ip_ipv6_addr_3
Unsigned 32-bit integer

tpncp.source_number_non_notification_reason tpncp.source_number_non_notification_reason
Signed 32-bit integer

tpncp.source_number_plan tpncp.source_number_plan
Signed 32-bit integer

tpncp.source_number_pres tpncp.source_number_pres
Signed 32-bit integer

tpncp.source_number_screening tpncp.source_number_screening
Signed 32-bit integer

tpncp.source_number_type tpncp.source_number_type
Signed 32-bit integer

tpncp.source_phone_num tpncp.source_phone_num
String

tpncp.source_phone_sub_num tpncp.source_phone_sub_num
String

tpncp.source_route_failed tpncp.source_route_failed
Unsigned 32-bit integer

tpncp.source_sub_address_format tpncp.source_sub_address_format
Signed 32-bit integer

tpncp.source_sub_address_type tpncp.source_sub_address_type
Signed 32-bit integer
```

```
tpncp.sp_stp tpncp.sp_stp
    Signed 32-bit integer

tpncp.speed tpncp.speed
    Signed 32-bit integer

tpncp.ss7_additional_info tpncp.ss7_additional_info
    String

tpncp.ss7_config_text tpncp.ss7_config_text
    String

tpncp.ss7_mon_msg tpncp.ss7_mon_msg
    String

tpncp.ss7_mon_msg_size tpncp.ss7_mon_msg_size
    Signed 32-bit integer

tpncp.sscf_state tpncp.sscf_state
    Unsigned 8-bit integer

tpncp.sscop_state tpncp.sscop_state
    Unsigned 8-bit integer

tpncp.ssf_spare tpncp.ssf_spare
    Signed 32-bit integer

tpncp.ssrc tpncp.ssrc
    Unsigned 32-bit integer

tpncp.ssrc_sender tpncp.ssrc_sender
    Unsigned 32-bit integer

tpncp.start tpncp.start
    Signed 32-bit integer

tpncp.start_channel_id tpncp.start_channel_id
    Signed 32-bit integer

tpncp.start_end_testing tpncp.start_end_testing
    Signed 32-bit integer

tpncp.start_event tpncp.start_event
    Signed 32-bit integer

tpncp.start_index tpncp.start_index
    Signed 32-bit integer

tpncp.static_mapped_channels_count tpncp.static_mapped_channels_count
    Signed 32-bit integer

tpncp.status tpncp.status
    Signed 32-bit integer

tpncp.status_0 tpncp.status_0
    Signed 32-bit integer

tpncp.status_1 tpncp.status_1
    Signed 32-bit integer

tpncp.status_2 tpncp.status_2
    Signed 32-bit integer

tpncp.status_3 tpncp.status_3
    Signed 32-bit integer
```

```
tpncp.status_4 tpncp.status_4
    Signed 32-bit integer

tpncp.status_flag tpncp.status_flag
    Signed 32-bit integer

tpncp.steady_signal tpncp.steady_signal
    Signed 32-bit integer

tpncp.stm_number tpncp.stm_number
    Unsigned 8-bit integer

tpncp.stop_mode tpncp.stop_mode
    Signed 32-bit integer

tpncp.stream_id tpncp.stream_id
    Unsigned 32-bit integer

tpncp.su_type tpncp.su_type
    Signed 32-bit integer

tpncp.sub_add_odd_indicator tpncp.sub_add_odd_indicator
    Signed 32-bit integer

tpncp.sub_add_type tpncp.sub_add_type
    Signed 32-bit integer

tpncp.sub_generic_event_family tpncp.sub_generic_event_family
    Signed 32-bit integer

tpncp.subnet_mask tpncp.subnet_mask
    Unsigned 32-bit integer

tpncp.subnet_mask_address_0 tpncp.subnet_mask_address_0
    Unsigned 32-bit integer

tpncp.subnet_mask_address_1 tpncp.subnet_mask_address_1
    Unsigned 32-bit integer

tpncp.subnet_mask_address_2 tpncp.subnet_mask_address_2
    Unsigned 32-bit integer

tpncp.subnet_mask_address_3 tpncp.subnet_mask_address_3
    Unsigned 32-bit integer

tpncp.subnet_mask_address_4 tpncp.subnet_mask_address_4
    Unsigned 32-bit integer

tpncp.subnet_mask_address_5 tpncp.subnet_mask_address_5
    Unsigned 32-bit integer

tpncp.subtype tpncp.subtype
    Unsigned 8-bit integer

tpncp.sum_additional_ts_enable tpncp.sum_additional_ts_enable
    Signed 32-bit integer

tpncp.sum_rtt tpncp.sum_rtt
    Unsigned 32-bit integer

tpncp.summation_detection_origin tpncp.summation_detection_origin
    Signed 32-bit integer

tpncp.supp_ind tpncp.supp_ind
    Signed 32-bit integer
```

```
tpncp.suppress_end_event  tpncp.suppress_end_event
    Signed 32-bit integer

tpncp.suspend_call_action_code  tpncp.suspend_call_action_code
    Signed 32-bit integer

tpncp.switching_option  tpncp.switching_option
    Signed 32-bit integer

tpncp.sync_not_possible  tpncp.sync_not_possible
    Unsigned 16-bit integer

tpncp.tl1_span_code  tpncp.tl1_span_code
    Signed 32-bit integer

tpncp.t38_fax_relay_ecm_mode  tpncp.t38_fax_relay_ecm_mode
    Signed 32-bit integer

tpncp.t38_fax_relay_protection_mode  tpncp.t38_fax_relay_protection_mode
    Signed 32-bit integer

tpncp.t38_icmp_received_data_icmp_code_fragmentation_needed_and_df_set  tpncp.t38_icmp_received_data_icmp_code_fragmentation_needed_and_df_set
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_icmp_code_host_unreachable  tpncp.t38_icmp_received_data_icmp_code_host_unreachable
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_icmp_code_net_unreachable  tpncp.t38_icmp_received_data_icmp_code_net_unreachable
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_icmp_code_port_unreachable  tpncp.t38_icmp_received_data_icmp_code_port_unreachable
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_icmp_code_protocol_unreachable  tpncp.t38_icmp_received_data_icmp_code_protocol_unreachable
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_icmp_code_source_route_failed  tpncp.t38_icmp_received_data_icmp_code_source_route_failed
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_icmp_type  tpncp.t38_icmp_received_data_icmp_type
    Unsigned 8-bit integer

tpncp.t38_icmp_received_data_icmp_unreachable_counter  tpncp.t38_icmp_received_data_icmp_unreachable_counter
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_peer_info_ip_dst_addr  tpncp.t38_icmp_received_data_peer_info_ip_dst_addr
    Unsigned 32-bit integer

tpncp.t38_icmp_received_data_peer_info_udp_dst_port  tpncp.t38_icmp_received_data_peer_info_udp_dst_port
    Unsigned 16-bit integer

tpncp.t38_peer_info_ip_dst_addr  tpncp.t38_peer_info_ip_dst_addr
    Unsigned 32-bit integer

tpncp.t38_peer_info_udp_dst_port  tpncp.t38_peer_info_udp_dst_port
    Unsigned 16-bit integer

tpncp.talker_participant_id  tpncp.talker_participant_id
    Signed 32-bit integer

tpncp.tar_file_url  tpncp.tar_file_url
    String

tpncp.target_addr  tpncp.target_addr
    Signed 32-bit integer
```

```
tpncp.target_energy tpncp.target_energy
    Signed 32-bit integer

tpncp.tdm_bus_in tpncp.tdm_bus_in
    Signed 32-bit integer

tpncp.tdm_bus_input_channel tpncp.tdm_bus_input_channel
    Signed 32-bit integer

tpncp.tdm_bus_input_port tpncp.tdm_bus_input_port
    Signed 32-bit integer

tpncp.tdm_bus_out tpncp.tdm_bus_out
    Signed 32-bit integer

tpncp.tdm_bus_output_channel tpncp.tdm_bus_output_channel
    Signed 32-bit integer

tpncp.tdm_bus_output_disable tpncp.tdm_bus_output_disable
    Signed 32-bit integer

tpncp.tdm_bus_output_port tpncp.tdm_bus_output_port
    Signed 32-bit integer

tpncp.tdm_bus_type tpncp.tdm_bus_type
    Signed 32-bit integer

tpncp.tdm_connection_mode tpncp.tdm_connection_mode
    Signed 32-bit integer

tpncp.temp tpncp.temp
    Signed 32-bit integer

tpncp.ter_type tpncp.ter_type
    Signed 32-bit integer

tpncp.termination_cause tpncp.termination_cause
    Signed 32-bit integer

tpncp.termination_result tpncp.termination_result
    Signed 32-bit integer

tpncp.termination_state tpncp.termination_state
    Signed 32-bit integer

tpncp.test_mode tpncp.test_mode
    Signed 32-bit integer

tpncp.test_result tpncp.test_result
    Signed 32-bit integer

tpncp.test_results tpncp.test_results
    Signed 32-bit integer

tpncp.test_tone_enable tpncp.test_tone_enable
    Signed 32-bit integer

tpncp.text_to_speak tpncp.text_to_speak
    String

tpncp.tfc tpncp.tfc
    Signed 32-bit integer

tpncp.tftp_server_ip tpncp.tftp_server_ip
    Unsigned 32-bit integer
```



```
tpncp.third_digit_country_code  tpncp.third_digit_country_code
    Unsigned 8-bit integer
tpncp.third_tone_duration  tpncp.third_tone_duration
    Unsigned 32-bit integer
tpncp.time  tpncp.time
    String
tpncp.time_above_high_threshold  tpncp.time_above_high_threshold
    Signed 16-bit integer
tpncp.time_below_low_threshold  tpncp.time_below_low_threshold
    Signed 16-bit integer
tpncp.time_between_high_low_threshold  tpncp.time_between_high_low_threshold
    Signed 16-bit integer
tpncp.time_milli_sec  tpncp.time_milli_sec
    Signed 16-bit integer
tpncp.time_out_value  tpncp.time_out_value
    Unsigned 8-bit integer
tpncp.time_sec  tpncp.time_sec
    Signed 32-bit integer
tpncp.time_slot  tpncp.time_slot
    Signed 32-bit integer
tpncp.time_slot_number  tpncp.time_slot_number
    Unsigned 8-bit integer
tpncp.time_stamp  tpncp.time_stamp
    Unsigned 16-bit integer
tpncp.timer_idx  tpncp.timer_idx
    Signed 32-bit integer
tpncp.timeslot  tpncp.timeslot
    Signed 32-bit integer
tpncp.to_entity  tpncp.to_entity
    Signed 32-bit integer
tpncp.to_fiber_link  tpncp.to_fiber_link
    Signed 32-bit integer
tpncp.to_trunk  tpncp.to_trunk
    Signed 32-bit integer
tpncp.tone_component_reserved  tpncp.tone_component_reserved
    String
tpncp.tone_component_reserved_0  tpncp.tone_component_reserved_0
    String
tpncp.tone_component_reserved_1  tpncp.tone_component_reserved_1
    String
tpncp.tone_duration  tpncp.tone_duration
    Unsigned 32-bit integer
tpncp.tone_generation_interface  tpncp.tone_generation_interface
    Unsigned 8-bit integer
```

```
tpncp.tone_index  tpncp.tone_index
    Signed 32-bit integer

tpncp.tone_level  tpncp.tone_level
    Unsigned 32-bit integer

tpncp.tone_number  tpncp.tone_number
    Signed 32-bit integer

tpncp.tone_reserved  tpncp.tone_reserved
    String

tpncp.tone_type  tpncp.tone_type
    Signed 32-bit integer

tpncp.total  tpncp.total
    Signed 32-bit integer

tpncp.total_duration_time  tpncp.total_duration_time
    Unsigned 32-bit integer

tpncp.total_remote_file_length  tpncp.total_remote_file_length
    Signed 32-bit integer

tpncp.total_vaild_dsp_channels_left  tpncp.total_vaild_dsp_channels_left
    Signed 32-bit integer

tpncp.total_voice_prompt_length  tpncp.total_voice_prompt_length
    Signed 32-bit integer

tpncp.tpncp_port  tpncp.tpncp_port
    Unsigned 32-bit integer

tpncp.tpncpip  tpncp.tpncpip
    Unsigned 32-bit integer

tpncp.tr08_alarm_format  tpncp.tr08_alarm_format
    Signed 32-bit integer

tpncp.tr08_field  tpncp.tr08_field
    Signed 32-bit integer

tpncp.tr08_group_id  tpncp.tr08_group_id
    Signed 32-bit integer

tpncp.tr08_last_line_switch_received  tpncp.tr08_last_line_switch_received
    Signed 32-bit integer

tpncp.tr08_line_switch  tpncp.tr08_line_switch
    Signed 32-bit integer

tpncp.tr08_line_switch_state  tpncp.tr08_line_switch_state
    Signed 32-bit integer

tpncp.tr08_maintenance_info_detection  tpncp.tr08_maintenance_info_detection
    Signed 32-bit integer

tpncp.tr08_member  tpncp.tr08_member
    Signed 32-bit integer

tpncp.trace_level  tpncp.trace_level
    Signed 32-bit integer

tpncp.traffic_type  tpncp.traffic_type
    Unsigned 32-bit integer
```

```
tpncp.transaction_id  tpncp.transaction_id
    Unsigned 32-bit integer
tpncp.transceiver_port_state_0  tpncp.transceiver_port_state_0
    Signed 32-bit integer
tpncp.transceiver_port_state_1  tpncp.transceiver_port_state_1
    Signed 32-bit integer
tpncp.transceiver_port_state_2  tpncp.transceiver_port_state_2
    Signed 32-bit integer
tpncp.transceiver_port_state_3  tpncp.transceiver_port_state_3
    Signed 32-bit integer
tpncp.transceiver_port_state_4  tpncp.transceiver_port_state_4
    Signed 32-bit integer
tpncp.transceiver_port_state_5  tpncp.transceiver_port_state_5
    Signed 32-bit integer
tpncp.transceiver_port_state_6  tpncp.transceiver_port_state_6
    Signed 32-bit integer
tpncp.transceiver_port_state_7  tpncp.transceiver_port_state_7
    Signed 32-bit integer
tpncp.transceiver_port_state_8  tpncp.transceiver_port_state_8
    Signed 32-bit integer
tpncp.transceiver_port_state_9  tpncp.transceiver_port_state_9
    Signed 32-bit integer
tpncp.transcode  tpncp.transcode
    Unsigned 8-bit integer
tpncp.transcoding_mode  tpncp.transcoding_mode
    Signed 32-bit integer
tpncp.transfer_cap  tpncp.transfer_cap
    Signed 32-bit integer
tpncp.transmitted  tpncp.transmitted
    Unsigned 32-bit integer
tpncp.transport_media  tpncp.transport_media
    Unsigned 8-bit integer
tpncp.trigger_cause  tpncp.trigger_cause
    Signed 32-bit integer
tpncp.trigger_event  tpncp.trigger_event
    Signed 32-bit integer
tpncp.trigger_on_duration  tpncp.trigger_on_duration
    Signed 32-bit integer
tpncp.trunk  tpncp.trunk
    Signed 32-bit integer
tpncp.trunk_b_channel  tpncp.trunk_b_channel
    Signed 16-bit integer
tpncp.trunk_blocking_mode  tpncp.trunk_blocking_mode
    Signed 32-bit integer
```

```
tpncp.trunk_blocking_mode_status  tpncp.trunk_blocking_mode_status
    Signed 32-bit integer
tpncp.trunk_count  tpncp.trunk_count
    Signed 32-bit integer
tpncp.trunk_id  tpncp.trunk_id
    Signed 32-bit integer
tpncp.trunk_id1  tpncp.trunk_id1
    Signed 32-bit integer
tpncp.trunk_id2  tpncp.trunk_id2
    Signed 32-bit integer
tpncp.trunk_number  tpncp.trunk_number
    Signed 16-bit integer
tpncp.trunk_number_0  tpncp.trunk_number_0
    Unsigned 32-bit integer
tpncp.trunk_number_1  tpncp.trunk_number_1
    Unsigned 32-bit integer
tpncp.trunk_number_10  tpncp.trunk_number_10
    Unsigned 32-bit integer
tpncp.trunk_number_11  tpncp.trunk_number_11
    Unsigned 32-bit integer
tpncp.trunk_number_12  tpncp.trunk_number_12
    Unsigned 32-bit integer
tpncp.trunk_number_13  tpncp.trunk_number_13
    Unsigned 32-bit integer
tpncp.trunk_number_14  tpncp.trunk_number_14
    Unsigned 32-bit integer
tpncp.trunk_number_15  tpncp.trunk_number_15
    Unsigned 32-bit integer
tpncp.trunk_number_16  tpncp.trunk_number_16
    Unsigned 32-bit integer
tpncp.trunk_number_17  tpncp.trunk_number_17
    Unsigned 32-bit integer
tpncp.trunk_number_18  tpncp.trunk_number_18
    Unsigned 32-bit integer
tpncp.trunk_number_19  tpncp.trunk_number_19
    Unsigned 32-bit integer
tpncp.trunk_number_2  tpncp.trunk_number_2
    Unsigned 32-bit integer
tpncp.trunk_number_20  tpncp.trunk_number_20
    Unsigned 32-bit integer
tpncp.trunk_number_21  tpncp.trunk_number_21
    Unsigned 32-bit integer
tpncp.trunk_number_22  tpncp.trunk_number_22
    Unsigned 32-bit integer
```

```
tpncp.trunk_number_23  tpncp.trunk_number_23
    Unsigned 32-bit integer
tpncp.trunk_number_24  tpncp.trunk_number_24
    Unsigned 32-bit integer
tpncp.trunk_number_25  tpncp.trunk_number_25
    Unsigned 32-bit integer
tpncp.trunk_number_26  tpncp.trunk_number_26
    Unsigned 32-bit integer
tpncp.trunk_number_27  tpncp.trunk_number_27
    Unsigned 32-bit integer
tpncp.trunk_number_28  tpncp.trunk_number_28
    Unsigned 32-bit integer
tpncp.trunk_number_29  tpncp.trunk_number_29
    Unsigned 32-bit integer
tpncp.trunk_number_3   tpncp.trunk_number_3
    Unsigned 32-bit integer
tpncp.trunk_number_30  tpncp.trunk_number_30
    Unsigned 32-bit integer
tpncp.trunk_number_31  tpncp.trunk_number_31
    Unsigned 32-bit integer
tpncp.trunk_number_32  tpncp.trunk_number_32
    Unsigned 32-bit integer
tpncp.trunk_number_33  tpncp.trunk_number_33
    Unsigned 32-bit integer
tpncp.trunk_number_34  tpncp.trunk_number_34
    Unsigned 32-bit integer
tpncp.trunk_number_35  tpncp.trunk_number_35
    Unsigned 32-bit integer
tpncp.trunk_number_36  tpncp.trunk_number_36
    Unsigned 32-bit integer
tpncp.trunk_number_37  tpncp.trunk_number_37
    Unsigned 32-bit integer
tpncp.trunk_number_38  tpncp.trunk_number_38
    Unsigned 32-bit integer
tpncp.trunk_number_39  tpncp.trunk_number_39
    Unsigned 32-bit integer
tpncp.trunk_number_4   tpncp.trunk_number_4
    Unsigned 32-bit integer
tpncp.trunk_number_40  tpncp.trunk_number_40
    Unsigned 32-bit integer
tpncp.trunk_number_41  tpncp.trunk_number_41
    Unsigned 32-bit integer
tpncp.trunk_number_42  tpncp.trunk_number_42
    Unsigned 32-bit integer
```

```
tpncp.trunk_number_43  tpncp.trunk_number_43
    Unsigned 32-bit integer
tpncp.trunk_number_44  tpncp.trunk_number_44
    Unsigned 32-bit integer
tpncp.trunk_number_45  tpncp.trunk_number_45
    Unsigned 32-bit integer
tpncp.trunk_number_46  tpncp.trunk_number_46
    Unsigned 32-bit integer
tpncp.trunk_number_47  tpncp.trunk_number_47
    Unsigned 32-bit integer
tpncp.trunk_number_48  tpncp.trunk_number_48
    Unsigned 32-bit integer
tpncp.trunk_number_49  tpncp.trunk_number_49
    Unsigned 32-bit integer
tpncp.trunk_number_5   tpncp.trunk_number_5
    Unsigned 32-bit integer
tpncp.trunk_number_50  tpncp.trunk_number_50
    Unsigned 32-bit integer
tpncp.trunk_number_51  tpncp.trunk_number_51
    Unsigned 32-bit integer
tpncp.trunk_number_52  tpncp.trunk_number_52
    Unsigned 32-bit integer
tpncp.trunk_number_53  tpncp.trunk_number_53
    Unsigned 32-bit integer
tpncp.trunk_number_54  tpncp.trunk_number_54
    Unsigned 32-bit integer
tpncp.trunk_number_55  tpncp.trunk_number_55
    Unsigned 32-bit integer
tpncp.trunk_number_56  tpncp.trunk_number_56
    Unsigned 32-bit integer
tpncp.trunk_number_57  tpncp.trunk_number_57
    Unsigned 32-bit integer
tpncp.trunk_number_58  tpncp.trunk_number_58
    Unsigned 32-bit integer
tpncp.trunk_number_59  tpncp.trunk_number_59
    Unsigned 32-bit integer
tpncp.trunk_number_6   tpncp.trunk_number_6
    Unsigned 32-bit integer
tpncp.trunk_number_60  tpncp.trunk_number_60
    Unsigned 32-bit integer
tpncp.trunk_number_61  tpncp.trunk_number_61
    Unsigned 32-bit integer
tpncp.trunk_number_62  tpncp.trunk_number_62
    Unsigned 32-bit integer
```

```
tpncp.trunk_number_63  tpncp.trunk_number_63
    Unsigned 32-bit integer
tpncp.trunk_number_64  tpncp.trunk_number_64
    Unsigned 32-bit integer
tpncp.trunk_number_65  tpncp.trunk_number_65
    Unsigned 32-bit integer
tpncp.trunk_number_66  tpncp.trunk_number_66
    Unsigned 32-bit integer
tpncp.trunk_number_67  tpncp.trunk_number_67
    Unsigned 32-bit integer
tpncp.trunk_number_68  tpncp.trunk_number_68
    Unsigned 32-bit integer
tpncp.trunk_number_69  tpncp.trunk_number_69
    Unsigned 32-bit integer
tpncp.trunk_number_7  tpncp.trunk_number_7
    Unsigned 32-bit integer
tpncp.trunk_number_70  tpncp.trunk_number_70
    Unsigned 32-bit integer
tpncp.trunk_number_71  tpncp.trunk_number_71
    Unsigned 32-bit integer
tpncp.trunk_number_72  tpncp.trunk_number_72
    Unsigned 32-bit integer
tpncp.trunk_number_73  tpncp.trunk_number_73
    Unsigned 32-bit integer
tpncp.trunk_number_74  tpncp.trunk_number_74
    Unsigned 32-bit integer
tpncp.trunk_number_75  tpncp.trunk_number_75
    Unsigned 32-bit integer
tpncp.trunk_number_76  tpncp.trunk_number_76
    Unsigned 32-bit integer
tpncp.trunk_number_77  tpncp.trunk_number_77
    Unsigned 32-bit integer
tpncp.trunk_number_78  tpncp.trunk_number_78
    Unsigned 32-bit integer
tpncp.trunk_number_79  tpncp.trunk_number_79
    Unsigned 32-bit integer
tpncp.trunk_number_8  tpncp.trunk_number_8
    Unsigned 32-bit integer
tpncp.trunk_number_80  tpncp.trunk_number_80
    Unsigned 32-bit integer
tpncp.trunk_number_81  tpncp.trunk_number_81
    Unsigned 32-bit integer
tpncp.trunk_number_82  tpncp.trunk_number_82
    Unsigned 32-bit integer
```

```
tpncp.trunk_number_83  tpncp.trunk_number_83
    Unsigned 32-bit integer
tpncp.trunk_number_9   tpncp.trunk_number_9
    Unsigned 32-bit integer
tpncp.trunk_pack_software_compilation_type  tpncp.trunk_pack_software_compilatio
    Unsigned 8-bit integer
tpncp.trunk_pack_software_date  tpncp.trunk_pack_software_date
    String
tpncp.trunk_pack_software_fix_num  tpncp.trunk_pack_software_fix_num
    Signed 32-bit integer
tpncp.trunk_pack_software_minor_ver  tpncp.trunk_pack_software_minor_ver
    Signed 32-bit integer
tpncp.trunk_pack_software_stream_name  tpncp.trunk_pack_software_stream_name
    String
tpncp.trunk_pack_software_ver  tpncp.trunk_pack_software_ver
    Signed 32-bit integer
tpncp.trunk_pack_software_version_string  tpncp.trunk_pack_software_version_stri
    String
tpncp.trunk_status  tpncp.trunk_status
    Signed 32-bit integer
tpncp.trunk_testing_fsk_duration  tpncp.trunk_testing_fsk_duration
    Signed 32-bit integer
tpncp.ts_trib_inst  tpncp.ts_trib_inst
    Unsigned 32-bit integer
tpncp.tty_transport_type  tpncp.tty_transport_type
    Signed 32-bit integer
tpncp.tu_digit  tpncp.tu_digit
    Unsigned 32-bit integer
tpncp.tu_digit_0  tpncp.tu_digit_0
    Unsigned 32-bit integer
tpncp.tu_digit_1  tpncp.tu_digit_1
    Unsigned 32-bit integer
tpncp.tu_digit_10  tpncp.tu_digit_10
    Unsigned 32-bit integer
tpncp.tu_digit_11  tpncp.tu_digit_11
    Unsigned 32-bit integer
tpncp.tu_digit_12  tpncp.tu_digit_12
    Unsigned 32-bit integer
tpncp.tu_digit_13  tpncp.tu_digit_13
    Unsigned 32-bit integer
tpncp.tu_digit_14  tpncp.tu_digit_14
    Unsigned 32-bit integer
tpncp.tu_digit_15  tpncp.tu_digit_15
    Unsigned 32-bit integer
```



```
tpncp.tu_digit_16  tpncp.tu_digit_16
    Unsigned 32-bit integer
tpncp.tu_digit_17  tpncp.tu_digit_17
    Unsigned 32-bit integer
tpncp.tu_digit_18  tpncp.tu_digit_18
    Unsigned 32-bit integer
tpncp.tu_digit_19  tpncp.tu_digit_19
    Unsigned 32-bit integer
tpncp.tu_digit_2   tpncp.tu_digit_2
    Unsigned 32-bit integer
tpncp.tu_digit_20  tpncp.tu_digit_20
    Unsigned 32-bit integer
tpncp.tu_digit_21  tpncp.tu_digit_21
    Unsigned 32-bit integer
tpncp.tu_digit_22  tpncp.tu_digit_22
    Unsigned 32-bit integer
tpncp.tu_digit_23  tpncp.tu_digit_23
    Unsigned 32-bit integer
tpncp.tu_digit_24  tpncp.tu_digit_24
    Unsigned 32-bit integer
tpncp.tu_digit_25  tpncp.tu_digit_25
    Unsigned 32-bit integer
tpncp.tu_digit_26  tpncp.tu_digit_26
    Unsigned 32-bit integer
tpncp.tu_digit_27  tpncp.tu_digit_27
    Unsigned 32-bit integer
tpncp.tu_digit_28  tpncp.tu_digit_28
    Unsigned 32-bit integer
tpncp.tu_digit_29  tpncp.tu_digit_29
    Unsigned 32-bit integer
tpncp.tu_digit_3   tpncp.tu_digit_3
    Unsigned 32-bit integer
tpncp.tu_digit_30  tpncp.tu_digit_30
    Unsigned 32-bit integer
tpncp.tu_digit_31  tpncp.tu_digit_31
    Unsigned 32-bit integer
tpncp.tu_digit_32  tpncp.tu_digit_32
    Unsigned 32-bit integer
tpncp.tu_digit_33  tpncp.tu_digit_33
    Unsigned 32-bit integer
tpncp.tu_digit_34  tpncp.tu_digit_34
    Unsigned 32-bit integer
tpncp.tu_digit_35  tpncp.tu_digit_35
    Unsigned 32-bit integer
```

```
tpncp.tu_digit_36  tpncp.tu_digit_36
    Unsigned 32-bit integer
tpncp.tu_digit_37  tpncp.tu_digit_37
    Unsigned 32-bit integer
tpncp.tu_digit_38  tpncp.tu_digit_38
    Unsigned 32-bit integer
tpncp.tu_digit_39  tpncp.tu_digit_39
    Unsigned 32-bit integer
tpncp.tu_digit_4   tpncp.tu_digit_4
    Unsigned 32-bit integer
tpncp.tu_digit_40  tpncp.tu_digit_40
    Unsigned 32-bit integer
tpncp.tu_digit_41  tpncp.tu_digit_41
    Unsigned 32-bit integer
tpncp.tu_digit_42  tpncp.tu_digit_42
    Unsigned 32-bit integer
tpncp.tu_digit_43  tpncp.tu_digit_43
    Unsigned 32-bit integer
tpncp.tu_digit_44  tpncp.tu_digit_44
    Unsigned 32-bit integer
tpncp.tu_digit_45  tpncp.tu_digit_45
    Unsigned 32-bit integer
tpncp.tu_digit_46  tpncp.tu_digit_46
    Unsigned 32-bit integer
tpncp.tu_digit_47  tpncp.tu_digit_47
    Unsigned 32-bit integer
tpncp.tu_digit_48  tpncp.tu_digit_48
    Unsigned 32-bit integer
tpncp.tu_digit_49  tpncp.tu_digit_49
    Unsigned 32-bit integer
tpncp.tu_digit_5   tpncp.tu_digit_5
    Unsigned 32-bit integer
tpncp.tu_digit_50  tpncp.tu_digit_50
    Unsigned 32-bit integer
tpncp.tu_digit_51  tpncp.tu_digit_51
    Unsigned 32-bit integer
tpncp.tu_digit_52  tpncp.tu_digit_52
    Unsigned 32-bit integer
tpncp.tu_digit_53  tpncp.tu_digit_53
    Unsigned 32-bit integer
tpncp.tu_digit_54  tpncp.tu_digit_54
    Unsigned 32-bit integer
tpncp.tu_digit_55  tpncp.tu_digit_55
    Unsigned 32-bit integer
```

```
tpncp.tu_digit_56  tpncp.tu_digit_56
    Unsigned 32-bit integer
tpncp.tu_digit_57  tpncp.tu_digit_57
    Unsigned 32-bit integer
tpncp.tu_digit_58  tpncp.tu_digit_58
    Unsigned 32-bit integer
tpncp.tu_digit_59  tpncp.tu_digit_59
    Unsigned 32-bit integer
tpncp.tu_digit_6   tpncp.tu_digit_6
    Unsigned 32-bit integer
tpncp.tu_digit_60  tpncp.tu_digit_60
    Unsigned 32-bit integer
tpncp.tu_digit_61  tpncp.tu_digit_61
    Unsigned 32-bit integer
tpncp.tu_digit_62  tpncp.tu_digit_62
    Unsigned 32-bit integer
tpncp.tu_digit_63  tpncp.tu_digit_63
    Unsigned 32-bit integer
tpncp.tu_digit_64  tpncp.tu_digit_64
    Unsigned 32-bit integer
tpncp.tu_digit_65  tpncp.tu_digit_65
    Unsigned 32-bit integer
tpncp.tu_digit_66  tpncp.tu_digit_66
    Unsigned 32-bit integer
tpncp.tu_digit_67  tpncp.tu_digit_67
    Unsigned 32-bit integer
tpncp.tu_digit_68  tpncp.tu_digit_68
    Unsigned 32-bit integer
tpncp.tu_digit_69  tpncp.tu_digit_69
    Unsigned 32-bit integer
tpncp.tu_digit_7   tpncp.tu_digit_7
    Unsigned 32-bit integer
tpncp.tu_digit_70  tpncp.tu_digit_70
    Unsigned 32-bit integer
tpncp.tu_digit_71  tpncp.tu_digit_71
    Unsigned 32-bit integer
tpncp.tu_digit_72  tpncp.tu_digit_72
    Unsigned 32-bit integer
tpncp.tu_digit_73  tpncp.tu_digit_73
    Unsigned 32-bit integer
tpncp.tu_digit_74  tpncp.tu_digit_74
    Unsigned 32-bit integer
tpncp.tu_digit_75  tpncp.tu_digit_75
    Unsigned 32-bit integer
```

```
tpncp.tu_digit_76  tpncp.tu_digit_76
    Unsigned 32-bit integer
tpncp.tu_digit_77  tpncp.tu_digit_77
    Unsigned 32-bit integer
tpncp.tu_digit_78  tpncp.tu_digit_78
    Unsigned 32-bit integer
tpncp.tu_digit_79  tpncp.tu_digit_79
    Unsigned 32-bit integer
tpncp.tu_digit_8   tpncp.tu_digit_8
    Unsigned 32-bit integer
tpncp.tu_digit_80  tpncp.tu_digit_80
    Unsigned 32-bit integer
tpncp.tu_digit_81  tpncp.tu_digit_81
    Unsigned 32-bit integer
tpncp.tu_digit_82  tpncp.tu_digit_82
    Unsigned 32-bit integer
tpncp.tu_digit_83  tpncp.tu_digit_83
    Unsigned 32-bit integer
tpncp.tu_digit_9   tpncp.tu_digit_9
    Unsigned 32-bit integer
tpncp.tu_number    tpncp.tu_number
    Unsigned 8-bit integer
tpncp.tug2_digit   tpncp.tug2_digit
    Unsigned 32-bit integer
tpncp.tug2_digit_0 tpncp.tug2_digit_0
    Unsigned 32-bit integer
tpncp.tug2_digit_1 tpncp.tug2_digit_1
    Unsigned 32-bit integer
tpncp.tug2_digit_10 tpncp.tug2_digit_10
    Unsigned 32-bit integer
tpncp.tug2_digit_11 tpncp.tug2_digit_11
    Unsigned 32-bit integer
tpncp.tug2_digit_12 tpncp.tug2_digit_12
    Unsigned 32-bit integer
tpncp.tug2_digit_13 tpncp.tug2_digit_13
    Unsigned 32-bit integer
tpncp.tug2_digit_14 tpncp.tug2_digit_14
    Unsigned 32-bit integer
tpncp.tug2_digit_15 tpncp.tug2_digit_15
    Unsigned 32-bit integer
tpncp.tug2_digit_16 tpncp.tug2_digit_16
    Unsigned 32-bit integer
tpncp.tug2_digit_17 tpncp.tug2_digit_17
    Unsigned 32-bit integer
```

```
tpncp.tug2_digit_18  tpncp.tug2_digit_18
    Unsigned 32-bit integer
tpncp.tug2_digit_19  tpncp.tug2_digit_19
    Unsigned 32-bit integer
tpncp.tug2_digit_2   tpncp.tug2_digit_2
    Unsigned 32-bit integer
tpncp.tug2_digit_20  tpncp.tug2_digit_20
    Unsigned 32-bit integer
tpncp.tug2_digit_21  tpncp.tug2_digit_21
    Unsigned 32-bit integer
tpncp.tug2_digit_22  tpncp.tug2_digit_22
    Unsigned 32-bit integer
tpncp.tug2_digit_23  tpncp.tug2_digit_23
    Unsigned 32-bit integer
tpncp.tug2_digit_24  tpncp.tug2_digit_24
    Unsigned 32-bit integer
tpncp.tug2_digit_25  tpncp.tug2_digit_25
    Unsigned 32-bit integer
tpncp.tug2_digit_26  tpncp.tug2_digit_26
    Unsigned 32-bit integer
tpncp.tug2_digit_27  tpncp.tug2_digit_27
    Unsigned 32-bit integer
tpncp.tug2_digit_28  tpncp.tug2_digit_28
    Unsigned 32-bit integer
tpncp.tug2_digit_29  tpncp.tug2_digit_29
    Unsigned 32-bit integer
tpncp.tug2_digit_3   tpncp.tug2_digit_3
    Unsigned 32-bit integer
tpncp.tug2_digit_30  tpncp.tug2_digit_30
    Unsigned 32-bit integer
tpncp.tug2_digit_31  tpncp.tug2_digit_31
    Unsigned 32-bit integer
tpncp.tug2_digit_32  tpncp.tug2_digit_32
    Unsigned 32-bit integer
tpncp.tug2_digit_33  tpncp.tug2_digit_33
    Unsigned 32-bit integer
tpncp.tug2_digit_34  tpncp.tug2_digit_34
    Unsigned 32-bit integer
tpncp.tug2_digit_35  tpncp.tug2_digit_35
    Unsigned 32-bit integer
tpncp.tug2_digit_36  tpncp.tug2_digit_36
    Unsigned 32-bit integer
tpncp.tug2_digit_37  tpncp.tug2_digit_37
    Unsigned 32-bit integer
```

```
tpncp.tug2_digit_38  tpncp.tug2_digit_38
    Unsigned 32-bit integer
tpncp.tug2_digit_39  tpncp.tug2_digit_39
    Unsigned 32-bit integer
tpncp.tug2_digit_4   tpncp.tug2_digit_4
    Unsigned 32-bit integer
tpncp.tug2_digit_40  tpncp.tug2_digit_40
    Unsigned 32-bit integer
tpncp.tug2_digit_41  tpncp.tug2_digit_41
    Unsigned 32-bit integer
tpncp.tug2_digit_42  tpncp.tug2_digit_42
    Unsigned 32-bit integer
tpncp.tug2_digit_43  tpncp.tug2_digit_43
    Unsigned 32-bit integer
tpncp.tug2_digit_44  tpncp.tug2_digit_44
    Unsigned 32-bit integer
tpncp.tug2_digit_45  tpncp.tug2_digit_45
    Unsigned 32-bit integer
tpncp.tug2_digit_46  tpncp.tug2_digit_46
    Unsigned 32-bit integer
tpncp.tug2_digit_47  tpncp.tug2_digit_47
    Unsigned 32-bit integer
tpncp.tug2_digit_48  tpncp.tug2_digit_48
    Unsigned 32-bit integer
tpncp.tug2_digit_49  tpncp.tug2_digit_49
    Unsigned 32-bit integer
tpncp.tug2_digit_5   tpncp.tug2_digit_5
    Unsigned 32-bit integer
tpncp.tug2_digit_50  tpncp.tug2_digit_50
    Unsigned 32-bit integer
tpncp.tug2_digit_51  tpncp.tug2_digit_51
    Unsigned 32-bit integer
tpncp.tug2_digit_52  tpncp.tug2_digit_52
    Unsigned 32-bit integer
tpncp.tug2_digit_53  tpncp.tug2_digit_53
    Unsigned 32-bit integer
tpncp.tug2_digit_54  tpncp.tug2_digit_54
    Unsigned 32-bit integer
tpncp.tug2_digit_55  tpncp.tug2_digit_55
    Unsigned 32-bit integer
tpncp.tug2_digit_56  tpncp.tug2_digit_56
    Unsigned 32-bit integer
tpncp.tug2_digit_57  tpncp.tug2_digit_57
    Unsigned 32-bit integer
```

```
tpncp.tug2_digit_58  tpncp.tug2_digit_58
    Unsigned 32-bit integer
tpncp.tug2_digit_59  tpncp.tug2_digit_59
    Unsigned 32-bit integer
tpncp.tug2_digit_6   tpncp.tug2_digit_6
    Unsigned 32-bit integer
tpncp.tug2_digit_60  tpncp.tug2_digit_60
    Unsigned 32-bit integer
tpncp.tug2_digit_61  tpncp.tug2_digit_61
    Unsigned 32-bit integer
tpncp.tug2_digit_62  tpncp.tug2_digit_62
    Unsigned 32-bit integer
tpncp.tug2_digit_63  tpncp.tug2_digit_63
    Unsigned 32-bit integer
tpncp.tug2_digit_64  tpncp.tug2_digit_64
    Unsigned 32-bit integer
tpncp.tug2_digit_65  tpncp.tug2_digit_65
    Unsigned 32-bit integer
tpncp.tug2_digit_66  tpncp.tug2_digit_66
    Unsigned 32-bit integer
tpncp.tug2_digit_67  tpncp.tug2_digit_67
    Unsigned 32-bit integer
tpncp.tug2_digit_68  tpncp.tug2_digit_68
    Unsigned 32-bit integer
tpncp.tug2_digit_69  tpncp.tug2_digit_69
    Unsigned 32-bit integer
tpncp.tug2_digit_7   tpncp.tug2_digit_7
    Unsigned 32-bit integer
tpncp.tug2_digit_70  tpncp.tug2_digit_70
    Unsigned 32-bit integer
tpncp.tug2_digit_71  tpncp.tug2_digit_71
    Unsigned 32-bit integer
tpncp.tug2_digit_72  tpncp.tug2_digit_72
    Unsigned 32-bit integer
tpncp.tug2_digit_73  tpncp.tug2_digit_73
    Unsigned 32-bit integer
tpncp.tug2_digit_74  tpncp.tug2_digit_74
    Unsigned 32-bit integer
tpncp.tug2_digit_75  tpncp.tug2_digit_75
    Unsigned 32-bit integer
tpncp.tug2_digit_76  tpncp.tug2_digit_76
    Unsigned 32-bit integer
tpncp.tug2_digit_77  tpncp.tug2_digit_77
    Unsigned 32-bit integer
```

```
tpncp.tug2_digit_78  tpncp.tug2_digit_78
    Unsigned 32-bit integer
tpncp.tug2_digit_79  tpncp.tug2_digit_79
    Unsigned 32-bit integer
tpncp.tug2_digit_8   tpncp.tug2_digit_8
    Unsigned 32-bit integer
tpncp.tug2_digit_80  tpncp.tug2_digit_80
    Unsigned 32-bit integer
tpncp.tug2_digit_81  tpncp.tug2_digit_81
    Unsigned 32-bit integer
tpncp.tug2_digit_82  tpncp.tug2_digit_82
    Unsigned 32-bit integer
tpncp.tug2_digit_83  tpncp.tug2_digit_83
    Unsigned 32-bit integer
tpncp.tug2_digit_9   tpncp.tug2_digit_9
    Unsigned 32-bit integer
tpncp.tug_number     tpncp.tug_number
    Unsigned 8-bit integer
tpncp.tunnel_id      tpncp.tunnel_id
    Signed 32-bit integer
tpncp.tx_bytes       tpncp.tx_bytes
    Unsigned 32-bit integer
tpncp.tx_dtmf_hang_over_time  tpncp.tx_dtmf_hang_over_time
    Signed 16-bit integer
tpncp.tx_over_run_cnt  tpncp.tx_over_run_cnt
    Unsigned 16-bit integer
tpncp.tx_rtp_payload_type  tpncp.tx_rtp_payload_type
    Signed 32-bit integer
tpncp.type           tpncp.type
    Signed 32-bit integer
tpncp.type_of_calling_user  tpncp.type_of_calling_user
    Unsigned 8-bit integer
tpncp.type_of_forwarded_call  tpncp.type_of_forwarded_call
    Unsigned 8-bit integer
tpncp.type_of_number  tpncp.type_of_number
    Unsigned 8-bit integer
tpncp.udp_dst_port    tpncp.udp_dst_port
    Unsigned 16-bit integer
tpncp.umts_protocol_mode  tpncp.umts_protocol_mode
    Unsigned 8-bit integer
tpncp.un_available_seconds  tpncp.un_available_seconds
    Signed 32-bit integer
tpncp.uneq           tpncp.uneq
    Signed 32-bit integer
```



```
tpncp.uni_directional_pci_mode  tpncp.uni_directional_pci_mode
    Signed 32-bit integer
tpncp.uni_directional_rtp  tpncp.uni_directional_rtp
    Signed 32-bit integer
tpncp.unlocked_clock  tpncp.unlocked_clock
    Signed 32-bit integer
tpncp.up_down  tpncp.up_down
    Unsigned 32-bit integer
tpncp.up_iu_deliver_erroneous_sdu  tpncp.up_iu_deliver_erroneous_sdu
    Unsigned 8-bit integer
tpncp.up_local_rate  tpncp.up_local_rate
    Unsigned 8-bit integer
tpncp.up_mode  tpncp.up_mode
    Unsigned 8-bit integer
tpncp.up_pcm_coder  tpncp.up_pcm_coder
    Unsigned 8-bit integer
tpncp.up_pdu_type  tpncp.up_pdu_type
    Unsigned 8-bit integer
tpncp.up_remote_rate  tpncp.up_remote_rate
    Unsigned 8-bit integer
tpncp.up_rfc_i_indicators  tpncp.up_rfc_i_indicators
    Unsigned 16-bit integer
tpncp.up_rfc_i_values  tpncp.up_rfc_i_values
    String
tpncp.up_support_mode_type  tpncp.up_support_mode_type
    Unsigned 8-bit integer
tpncp.up_time  tpncp.up_time
    Signed 32-bit integer
tpncp.up_version  tpncp.up_version
    Unsigned 16-bit integer
tpncp.url_to_remote_file  tpncp.url_to_remote_file
    String
tpncp.use_channel_id_as_dsp_handle  tpncp.use_channel_id_as_dsp_handle
    Signed 32-bit integer
tpncp.use_end_dial_key  tpncp.use_end_dial_key
    Signed 32-bit integer
tpncp.use_ni_or_pci  tpncp.use_ni_or_pci
    Signed 32-bit integer
tpncp.user_data  tpncp.user_data
    Unsigned 16-bit integer
tpncp.user_info_l1_protocol  tpncp.user_info_l1_protocol
    Signed 32-bit integer
tpncp.user_port_id  tpncp.user_port_id
    Signed 32-bit integer
```

```
tpncp.user_port_type tpncp.user_port_type
    Signed 32-bit integer

tpncp.utterance tpncp.utterance
    String

tpncp.uui_data tpncp.uui_data
    String

tpncp.uui_data_length tpncp.uui_data_length
    Signed 32-bit integer

tpncp.uui_protocol_description tpncp.uui_protocol_description
    Signed 32-bit integer

tpncp.uui_sequence_num tpncp.uui_sequence_num
    Signed 32-bit integer

tpncp.v21_modem_transport_type tpncp.v21_modem_transport_type
    Signed 32-bit integer

tpncp.v22_modem_transport_type tpncp.v22_modem_transport_type
    Signed 32-bit integer

tpncp.v23_modem_transport_type tpncp.v23_modem_transport_type
    Signed 32-bit integer

tpncp.v32_modem_transport_type tpncp.v32_modem_transport_type
    Signed 32-bit integer

tpncp.v34_fax_transport_type tpncp.v34_fax_transport_type
    Signed 32-bit integer

tpncp.v34_modem_transport_type tpncp.v34_modem_transport_type
    Signed 32-bit integer

tpncp.v5_interface_id_not_equal tpncp.v5_interface_id_not_equal
    Signed 32-bit integer

tpncp.v5_interface_trunk_group_id tpncp.v5_interface_trunk_group_id
    Signed 32-bit integer

tpncp.v5_trace_level tpncp.v5_trace_level
    Signed 32-bit integer

tpncp.v5_variant_not_equal tpncp.v5_variant_not_equal
    Signed 32-bit integer

tpncp.v5id_check_time_out_error tpncp.v5id_check_time_out_error
    Signed 32-bit integer

tpncp.val tpncp.val
    Signed 32-bit integer

tpncp.value tpncp.value
    Signed 32-bit integer

tpncp.variant tpncp.variant
    Signed 32-bit integer

tpncp.vbr_coder_dtx_max tpncp.vbr_coder_dtx_max
    Signed 16-bit integer

tpncp.vbr_coder_dtx_min tpncp.vbr_coder_dtx_min
    Signed 16-bit integer
```

```
tpncp.vbr_coder_hangover  tpncp.vbr_coder_hangover
    Signed 32-bit integer
tpncp.vbr_coder_header_format  tpncp.vbr_coder_header_format
    Signed 32-bit integer
tpncp.vbr_coder_noise_suppression  tpncp.vbr_coder_noise_suppression
    Unsigned 8-bit integer
tpncp.vbr_coder_vad_enable  tpncp.vbr_coder_vad_enable
    Signed 32-bit integer
tpncp.vcc_handle  tpncp.vcc_handle
    Unsigned 32-bit integer
tpncp.vcc_id  tpncp.vcc_id
    Signed 32-bit integer
tpncp.vcc_params_atm_port  tpncp.vcc_params_atm_port
    Unsigned 32-bit integer
tpncp.vcc_params_vci  tpncp.vcc_params_vci
    Unsigned 32-bit integer
tpncp.vcc_params_vpi  tpncp.vcc_params_vpi
    Unsigned 32-bit integer
tpncp.vci  tpncp.vci
    Unsigned 16-bit integer
tpncp.vci_lsb  tpncp.vci_lsb
    Unsigned 8-bit integer
tpncp.vci_msb  tpncp.vci_msb
    Unsigned 8-bit integer
tpncp.version  Version
    Unsigned 16-bit integer
tpncp.video_broken_connection_event_activation_mode  tpncp.video_broken_connecti
    Unsigned 8-bit integer
tpncp.video_broken_connection_event_timeout  tpncp.video_broken_connection_event
    Unsigned 32-bit integer
tpncp.video_buffering_verifier_occupancy  tpncp.video_buffering_verifier_occupan
    Unsigned 8-bit integer
tpncp.video_buffering_verifier_size  tpncp.video_buffering_verifier_size
    Signed 32-bit integer
tpncp.video_conference_switching_interval  tpncp.video_conference_switching_inte
    Signed 32-bit integer
tpncp.video_decoder_coder  tpncp.video_decoder_coder
    Unsigned 8-bit integer
tpncp.video_decoder_customized_height  tpncp.video_decoder_customized_height
    Unsigned 16-bit integer
tpncp.video_decoder_customized_width  tpncp.video_decoder_customized_width
    Unsigned 16-bit integer
tpncp.video_decoder_deblocking_filter_strength  tpncp.video_decoder_deblocking_f
    Unsigned 8-bit integer
```

```
tpncp.video_decoder_level_at_profile  tpncp.video_decoder_level_at_profile
    Unsigned 16-bit integer
tpncp.video_decoder_max_frame_rate  tpncp.video_decoder_max_frame_rate
    Unsigned 8-bit integer
tpncp.video_decoder_resolution_type  tpncp.video_decoder_resolution_type
    Unsigned 8-bit integer
tpncp.video_djb_optimization_factor  tpncp.video_djb_optimization_factor
    Signed 32-bit integer
tpncp.video_enable_active_speaker_highlight  tpncp.video_enable_active_speaker_h
    Signed 32-bit integer
tpncp.video_enable_audio_video_synchronization  tpncp.video_enable_audio_video_s
    Unsigned 8-bit integer
tpncp.video_enable_encoder_denoising_filter  tpncp.video_enable_encoder_denoisin
    Unsigned 8-bit integer
tpncp.video_enable_re_sync_header  tpncp.video_enable_re_sync_header
    Unsigned 8-bit integer
tpncp.video_enable_test_pattern  tpncp.video_enable_test_pattern
    Unsigned 8-bit integer
tpncp.video_encoder_coder  tpncp.video_encoder_coder
    Unsigned 8-bit integer
tpncp.video_encoder_customized_height  tpncp.video_encoder_customized_height
    Unsigned 16-bit integer
tpncp.video_encoder_customized_width  tpncp.video_encoder_customized_width
    Unsigned 16-bit integer
tpncp.video_encoder_intra_interval  tpncp.video_encoder_intra_interval
    Signed 32-bit integer
tpncp.video_encoder_level_at_profile  tpncp.video_encoder_level_at_profile
    Unsigned 16-bit integer
tpncp.video_encoder_max_frame_rate  tpncp.video_encoder_max_frame_rate
    Unsigned 8-bit integer
tpncp.video_encoder_resolution_type  tpncp.video_encoder_resolution_type
    Unsigned 8-bit integer
tpncp.video_ip_tos_field_in_udp_packet  tpncp.video_ip_tos_field_in_udp_packet
    Unsigned 8-bit integer
tpncp.video_is_disable_rtcp_interval_randomization  tpncp.video_is_disable_rtcp
    Unsigned 8-bit integer
tpncp.video_is_self_view  tpncp.video_is_self_view
    Signed 32-bit integer
tpncp.video_jitter_buffer_max_delay  tpncp.video_jitter_buffer_max_delay
    Signed 32-bit integer
tpncp.video_jitter_buffer_min_delay  tpncp.video_jitter_buffer_min_delay
    Signed 32-bit integer
tpncp.video_max_decoder_bit_rate  tpncp.video_max_decoder_bit_rate
    Signed 32-bit integer
```

```

tpncp.video_max_packet_size  tpncp.video_max_packet_size
    Signed 32-bit integer

tpncp.video_max_participants  tpncp.video_max_participants
    Signed 32-bit integer

tpncp.video_max_time_between_av_synchronization_events  tpncp.video_max_time_bet
    Signed 32-bit integer

tpncp.video_open_video_channel_without_dsp  tpncp.video_open_video_channel_witho
    Unsigned 8-bit integer

tpncp.video_participant_layout  tpncp.video_participant_layout
    Signed 32-bit integer

tpncp.video_participant_name  tpncp.video_participant_name
    String

tpncp.video_participant_trigger_mode  tpncp.video_participant_trigger_mode
    Signed 32-bit integer

tpncp.video_participant_type  tpncp.video_participant_type
    Signed 32-bit integer

tpncp.video_participant_view_at_location_0  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

tpncp.video_participant_view_at_location_1  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

tpncp.video_participant_view_at_location_10  tpncp.video_participant_view_at_loc
    Signed 32-bit integer

tpncp.video_participant_view_at_location_11  tpncp.video_participant_view_at_loc
    Signed 32-bit integer

tpncp.video_participant_view_at_location_12  tpncp.video_participant_view_at_loc
    Signed 32-bit integer

tpncp.video_participant_view_at_location_13  tpncp.video_participant_view_at_loc
    Signed 32-bit integer

tpncp.video_participant_view_at_location_14  tpncp.video_participant_view_at_loc
    Signed 32-bit integer

tpncp.video_participant_view_at_location_15  tpncp.video_participant_view_at_loc
    Signed 32-bit integer

tpncp.video_participant_view_at_location_2  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

tpncp.video_participant_view_at_location_3  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

tpncp.video_participant_view_at_location_4  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

tpncp.video_participant_view_at_location_5  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

tpncp.video_participant_view_at_location_6  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

tpncp.video_participant_view_at_location_7  tpncp.video_participant_view_at_loca
    Signed 32-bit integer

```

```

tpncp.video_participant_view_at_location_8  tpncp.video_participant_view_at_loca
Signed 32-bit integer
tpncp.video_participant_view_at_location_9  tpncp.video_participant_view_at_loca
Signed 32-bit integer
tpncp.video_quality_parameter_for_rate_control  tpncp.video_quality_parameter_fo
Unsigned 8-bit integer
tpncp.video_rate_control_type  tpncp.video_rate_control_type
Signed 16-bit integer
tpncp.video_remote_rtcp_port  tpncp.video_remote_rtcp_port
Unsigned 16-bit integer
tpncp.video_remote_rtcpip_add_address_family  tpncp.video_remote_rtcpip_add_addr
Signed 32-bit integer
tpncp.video_remote_rtcpip_add_ipv6_addr_0  tpncp.video_remote_rtcpip_add_ipv6_ad
Unsigned 32-bit integer
tpncp.video_remote_rtcpip_add_ipv6_addr_1  tpncp.video_remote_rtcpip_add_ipv6_ad
Unsigned 32-bit integer
tpncp.video_remote_rtcpip_add_ipv6_addr_2  tpncp.video_remote_rtcpip_add_ipv6_ad
Unsigned 32-bit integer
tpncp.video_remote_rtcpip_add_ipv6_addr_3  tpncp.video_remote_rtcpip_add_ipv6_ad
Unsigned 32-bit integer
tpncp.video_remote_rtp_port  tpncp.video_remote_rtp_port
Unsigned 16-bit integer
tpncp.video_rtcp_mean_tx_interval  tpncp.video_rtcp_mean_tx_interval
Unsigned 16-bit integer
tpncp.video_rtcpcname  tpncp.video_rtcpcname
String
tpncp.video_rtp_ssrc  tpncp.video_rtp_ssrc
Unsigned 32-bit integer
tpncp.video_rx_packetization_mode  tpncp.video_rx_packetization_mode
Unsigned 8-bit integer
tpncp.video_rx_rtp_payload_type  tpncp.video_rx_rtp_payload_type
Signed 32-bit integer
tpncp.video_synchronization_method  tpncp.video_synchronization_method
Unsigned 8-bit integer
tpncp.video_target_bitrate  tpncp.video_target_bitrate
Signed 32-bit integer
tpncp.video_transmit_sequence_number  tpncp.video_transmit_sequence_number
Unsigned 32-bit integer
tpncp.video_transmit_time_stamp  tpncp.video_transmit_time_stamp
Unsigned 32-bit integer
tpncp.video_tx_packetization_mode  tpncp.video_tx_packetization_mode
Unsigned 8-bit integer
tpncp.video_tx_rtp_payload_type  tpncp.video_tx_rtp_payload_type
Signed 32-bit integer

```

```
tpncp.video_uni_directional_rtp tpncp.video_uni_directional_rtp
    Unsigned 8-bit integer
tpncp.vlan_id_0 tpncp.vlan_id_0
    Unsigned 32-bit integer
tpncp.vlan_id_1 tpncp.vlan_id_1
    Unsigned 32-bit integer
tpncp.vlan_id_2 tpncp.vlan_id_2
    Unsigned 32-bit integer
tpncp.vlan_id_3 tpncp.vlan_id_3
    Unsigned 32-bit integer
tpncp.vlan_id_4 tpncp.vlan_id_4
    Unsigned 32-bit integer
tpncp.vlan_id_5 tpncp.vlan_id_5
    Unsigned 32-bit integer
tpncp.vlan_traffic_type tpncp.vlan_traffic_type
    Signed 32-bit integer
tpncp.vmwi_status tpncp.vmwi_status
    Unsigned 8-bit integer
tpncp.voice_input_connection_bus tpncp.voice_input_connection_bus
    Signed 32-bit integer
tpncp.voice_input_connection_occupied tpncp.voice_input_connection_occupied
    Signed 32-bit integer
tpncp.voice_input_connection_port tpncp.voice_input_connection_port
    Signed 32-bit integer
tpncp.voice_input_connection_time_slot tpncp.voice_input_connection_time_slot
    Signed 32-bit integer
tpncp.voice_packet_loss_counter tpncp.voice_packet_loss_counter
    Unsigned 32-bit integer
tpncp.voice_packetizer_stack_ver tpncp.voice_packetizer_stack_ver
    Signed 32-bit integer
tpncp.voice_payload_format tpncp.voice_payload_format
    Signed 32-bit integer
tpncp.voice_prompt_addition_status tpncp.voice_prompt_addition_status
    Signed 32-bit integer
tpncp.voice_prompt_coder tpncp.voice_prompt_coder
    Signed 32-bit integer
tpncp.voice_prompt_duration tpncp.voice_prompt_duration
    Signed 32-bit integer
tpncp.voice_prompt_id tpncp.voice_prompt_id
    Signed 32-bit integer
tpncp.voice_prompt_query_result tpncp.voice_prompt_query_result
    Signed 32-bit integer
tpncp.voice_quality_monitoring_burst_threshold tpncp.voice_quality_monitoring_b
```

```

tpncp.voice_quality_monitoring_delay_threshold  tpncp.voice_quality_monitoring_d
Signed 32-bit integer
tpncp.voice_quality_monitoring_end_of_call_r_val_delay_threshold  tpncp.voice_qu
Signed 32-bit integer
tpncp.voice_quality_monitoring_minimum_gap_size  tpncp.voice_quality_monitoring
Signed 32-bit integer
tpncp.voice_quality_monitoring_mode  tpncp.voice_quality_monitoring_mode
Signed 32-bit integer
tpncp.voice_quality_monitoring_mode_zero_fill  tpncp.voice_quality_monitoring_mo
Unsigned 8-bit integer
tpncp.voice_signaling_mode  tpncp.voice_signaling_mode
Unsigned 16-bit integer
tpncp.voice_spare1  tpncp.voice_spare1
Unsigned 8-bit integer
tpncp.voice_spare2  tpncp.voice_spare2
Unsigned 8-bit integer
tpncp.voice_stream_error_code  tpncp.voice_stream_error_code
Signed 32-bit integer
tpncp.voice_stream_type  tpncp.voice_stream_type
Signed 32-bit integer
tpncp.voice_volume  tpncp.voice_volume
Signed 32-bit integer
tpncp.voltage_bit_return_code  tpncp.voltage_bit_return_code
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_0  tpncp.voltage_current_bit_return_code_0
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_1  tpncp.voltage_current_bit_return_code_1
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_10  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_11  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_12  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_13  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_14  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_15  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_16  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_17  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer

```



```

tpncp.voltage_current_bit_return_code_18  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_19  tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_2    tpncp.voltage_current_bit_return_code_2
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_20   tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_21   tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_22   tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_23   tpncp.voltage_current_bit_return_code_
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_3    tpncp.voltage_current_bit_return_code_3
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_4    tpncp.voltage_current_bit_return_code_4
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_5    tpncp.voltage_current_bit_return_code_5
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_6    tpncp.voltage_current_bit_return_code_6
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_7    tpncp.voltage_current_bit_return_code_7
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_8    tpncp.voltage_current_bit_return_code_8
Signed 32-bit integer
tpncp.voltage_current_bit_return_code_9    tpncp.voltage_current_bit_return_code_9
Signed 32-bit integer
tpncp.volume  tpncp.volume
Signed 32-bit integer
tpncp.vp_end_index_0  tpncp.vp_end_index_0
Signed 32-bit integer
tpncp.vp_end_index_1  tpncp.vp_end_index_1
Signed 32-bit integer
tpncp.vp_start_index_0  tpncp.vp_start_index_0
Signed 32-bit integer
tpncp.vp_start_index_1  tpncp.vp_start_index_1
Signed 32-bit integer
tpncp.vpi  tpncp.vpi
Unsigned 16-bit integer
tpncp.vrh  tpncp.vrh
Unsigned 32-bit integer
tpncp.vrmr  tpncp.vrmr
Unsigned 32-bit integer

```

```
tpncp.vrr tpncp.vrr
    Unsigned 32-bit integer
tpncp.vta tpncp.vta
    Unsigned 32-bit integer
tpncp.vtms tpncp.vtms
    Unsigned 32-bit integer
tpncp.vtpa tpncp.vtpa
    Unsigned 32-bit integer
tpncp.vtps tpncp.vtps
    Unsigned 32-bit integer
tpncp.vts tpncp.vts
    Unsigned 32-bit integer
tpncp.wrong_payload_type tpncp.wrong_payload_type
    Signed 32-bit integer
tpncp.year tpncp.year
    Signed 32-bit integer
tpncp.zero_fill tpncp.zero_fill
    String
tpncp.zero_fill1 tpncp.zero_fill1
    String
tpncp.zero_fill2 tpncp.zero_fill2
    String
tpncp.zero_fill3 tpncp.zero_fill3
    String
tpncp.zero_fill_padding tpncp.zero_fill_padding
    Unsigned 8-bit integer
```

**AudioCodes Trunk Trace (actrace)**

```
actrace.cas.bchannel BChannel
    Signed 32-bit integer
    BChannel
actrace.cas.conn_id Connection ID
    Signed 32-bit integer
    Connection ID
actrace.cas.curr_state Current State
    Signed 32-bit integer
    Current State
actrace.cas.event Event
    Signed 32-bit integer
    New Event
actrace.cas.function Function
    Signed 32-bit integer
    Function
actrace.cas.next_state Next State
    Signed 32-bit integer
    Next State
```

actrace.cas.par0 Parameter 0  
Signed 32-bit integer  
Parameter 0

actrace.cas.par1 Parameter 1  
Signed 32-bit integer  
Parameter 1

actrace.cas.par2 Parameter 2  
Signed 32-bit integer  
Parameter 2

actrace.cas.source Source  
Signed 32-bit integer  
Source

actrace.cas.time Time  
Signed 32-bit integer  
Capture Time

actrace.cas.trunk Trunk Number  
Signed 32-bit integer  
Trunk Number

actrace.isdn.dir Direction  
Signed 32-bit integer  
Direction

actrace.isdn.length Length  
Signed 16-bit integer  
Length

actrace.isdn.trunk Trunk Number  
Signed 16-bit integer  
Trunk Number

**Authentication Header (ah)**

ah.icv AH ICV  
Byte array  
IP Authentication Header Integrity Check Value

ah.sequence AH Sequence  
Unsigned 32-bit integer  
IP Authentication Header Sequence Number

ah.spi AH SPI  
Unsigned 32-bit integer  
IP Authentication Header Security Parameters Index

**BACnet Virtual Link Control (bvlc)**

bvlc.bdt\_ip IP  
IPv4 address  
BDT IP

bvlc.bdt\_mask Mask  
Byte array  
BDT Broadcast Distribution Mask

```
bvlc.bdt_port  Port
    Unsigned 16-bit integer
    BDT Port

bvlc.fdt_ip    IP
    IPv4 address
    FDT IP

bvlc.fdt_port  Port
    Unsigned 16-bit integer
    FDT Port

bvlc.fdt_timeout  Timeout
    Unsigned 16-bit integer
    Foreign Device Timeout (seconds)

bvlc.fdt_ttl   TTL
    Unsigned 16-bit integer
    Foreign Device Time To Live

bvlc.function  Function
    Unsigned 8-bit integer
    BVLC Function

bvlc.fwd_ip    IP
    IPv4 address
    FWD IP

bvlc.fwd_port  Port
    Unsigned 16-bit integer
    FWD Port

bvlc.length   BVLC-Length
    Unsigned 16-bit integer
    Length of BVLC

bvlc.reg_ttl  TTL
    Unsigned 16-bit integer
    Foreign Device Time To Live

bvlc.result   Result
    Unsigned 16-bit integer
    Result Code

bvlc.type     Type
    Unsigned 8-bit integer
    Type
```

**BCTP Q.1990 (bctp)**

```
bctp.bvei  BVEI
    Unsigned 16-bit integer
    BCTP Version Error Indicator

bctp.bvi   BVI
    Unsigned 16-bit integer
    BCTP Version Indicator

bctp.tpei  TPEI
    Unsigned 16-bit integer
    Tunnelled Protocol Error Indicator
```

```

bctp.tpi  TPI
  Unsigned 16-bit integer
  Tunnelled Protocol Indicator

```

**BEA Tuxedo (tuxedo)**

```

tuxedo.magic  Magic
  Unsigned 32-bit integer
  TUXEDO magic

tuxedo.opcode  Opcode
  Unsigned 32-bit integer
  TUXEDO opcode

```

**BSSAP/BSAP (bssap)**

```

bssap.dlci.cc  Control Channel
  Unsigned 8-bit integer

bssap.dlci.rsvd  Reserved
  Unsigned 8-bit integer

bssap.dlci.sapi  SAPI
  Unsigned 8-bit integer

bssap.pdu_type  Message Type
  Unsigned 8-bit integer

bssap.Gs_cause_ie  Gs Cause IE
  No value
  Gs Cause IE

bssap.Tom_prot_disc  TOM Protocol Discriminator
  Unsigned 8-bit integer
  TOM Protocol Discriminator

bssap.cell_global_id_ie  Cell global identity IE
  No value
  Cell global identity IE

bssap.cn_id  CN-Id
  Unsigned 16-bit integer
  CN-Id

bssap.dlci.cc  Control Channel
  Unsigned 8-bit integer

bssap.dlci.sapi  SAPI
  Unsigned 8-bit integer

bssap.dlci.spare  Spare
  Unsigned 8-bit integer

bssap.dlink_tnl_pld_cntrl_amd_inf_ie  Downlink Tunnel Payload Control and Info IE
  No value
  Downlink Tunnel Payload Control and Info IE

bssap.emlpp_prio_ie  eMLPP Priority IE
  No value
  eMLPP Priority IE

```

```
bssap.erroneous_msg_ie  Erroneous message IE
    No value
    Erroneous message IE

bssap.extension  Extension
    Boolean
    Extension

bssap.global_cn_id  Global CN-Id
    Byte array
    Global CN-Id

bssap.global_cn_id_ie  Global CN-Id IE
    No value
    Global CN-Id IE

bssap.gprs_loc_upd_type  eMLPP Priority
    Unsigned 8-bit integer
    eMLPP Priority

bssap.ie_data  IE Data
    Byte array
    IE Data

bssap.imei  IMEI
    String
    IMEI

bssap.imei_ie  IMEI IE
    No value
    IMEI IE

bssap.imeisv  IMEISV
    String
    IMEISV

bssap.imesiv  IMEISV IE
    No value
    IMEISV IE

bssap.imsi  IMSI
    String
    IMSI

bssap.imsi_det_from_gprs_serv_type  IMSI detach from GPRS service type
    Unsigned 8-bit integer
    IMSI detach from GPRS service type

bssap.imsi_ie  IMSI IE
    No value
    IMSI IE

bssap.info_req  Information requested
    Unsigned 8-bit integer
    Information requested

bssap.info_req_ie  Information requested IE
    No value
    Information requested IE

bssap.length  Length
    Unsigned 8-bit integer
```

```
bssap.loc_area_id_ie  Location area identifier IE
    No value
    Location area identifier IE
bssap.loc_inf_age    Location information age IE
    No value
    Location information age IE
bssap.loc_upd_type_ie  GPRS location update type IE
    No value
    GPRS location update type IE
bssap.mm_information  MM information IE
    No value
    MM information IE
bssap.mobile_id_ie   Mobile identity IE
    No value
    Mobile identity IE
bssap.mobile_station_state  Mobile station state
    Unsigned 8-bit integer
    Mobile station state
bssap.mobile_station_state_ie  Mobile station state IE
    No value
    Mobile station state IE
bssap.mobile_stn_cls_mrk1_ie  Mobile station classmark 1 IE
    No value
    Mobile station classmark 1 IE
bssap.msi_det_from_gprs_serv_type_ie  IMSI detach from GPRS service type IE
    No value
    IMSI detach from GPRS service type IE
bssap.msi_det_from_non_gprs_serv_type_ie  IMSI detach from non-GPRS servic IE
    No value
    IMSI detach from non-GPRS servic IE
bssap.number_plan    Numbering plan identification
    Unsigned 8-bit integer
    Numbering plan identification
bssap.pdu_type       Message Type
    Unsigned 8-bit integer
bssap.plmn_id        PLMN-Id
    Byte array
    PLMN-Id
bssap.ptmsi          PTMSI
    Byte array
    PTMSI
bssap.ptmsi_ie       PTMSI IE
    No value
    PTMSI IE
bssap.reject_cause_ie  Reject cause IE
    No value
    Reject cause IE
```

```
bssap.sgsn_number  SGSN number
    String
    SGSN number

bssap.tmsi  TMSI
    Byte array
    TMSI

bssap.tmsi_ie  TMSI IE
    No value
    TMSI IE

bssap.tmsi_status  TMSI status
    Boolean
    TMSI status

bssap.tmsi_status_ie  TMSI status IE
    No value
    TMSI status IE

bssap.tunnel_prio  Tunnel Priority
    Unsigned 8-bit integer
    Tunnel Priority

bssap.type_of_number  Type of number
    Unsigned 8-bit integer
    Type of number

bssap.ulink_tnl_pld_cntrl_and_inf_ie  Uplink Tunnel Payload Control and Info IE
    No value
    Uplink Tunnel Payload Control and Info IE

bssap.vlr_number  VLR number
    String
    VLR number

bssap.vlr_number_ie  VLR number IE
    No value
    VLR number IE

bssap_plus.iei  IEI
    Unsigned 8-bit integer

bssap_plus.msg_type  Message Type
    Unsigned 8-bit integer
    Message Type
```

**Banyan Vines ARP (vines\_arp)**

**Banyan Vines Echo (vines\_echo)**

**Banyan Vines Fragmentation Protocol (vines\_frp)**

**Banyan Vines ICP (vines\_icp)**



**Banyan Vines IP (vines\_ip)**

```
vines_ip.protocol Protocol
vines_ip.protocol Unsigned 8-bit integer
vines_ip.protocol Vines protocol
```

**Banyan Vines IPC (vines\_ipc)****Banyan Vines LLC (vines\_llc)****Banyan Vines RTP (vines\_rtp)****Banyan Vines SPP (vines\_spp)****Base Station Subsystem GPRS Protocol (bssgp)**

```
bssgp.appid Application ID
bssgp.appid Unsigned 8-bit integer
bssgp.appid Application ID

bssgp.bvci BVCI
bssgp.bvci Unsigned 16-bit integer

bssgp.ci CI
bssgp.ci Unsigned 16-bit integer
bssgp.ci Cell Identity

bssgp.ie_type IE Type
bssgp.ie_type Unsigned 8-bit integer
bssgp.ie_type Information element type

bssgp.iei.nacc_cause NACC Cause
bssgp.iei.nacc_cause Unsigned 8-bit integer
bssgp.iei.nacc_cause NACC Cause

bssgp.imei IMEI
bssgp.imei String

bssgp.imeisv IMEISV
bssgp.imeisv String

bssgp.imsi IMSI
bssgp.imsi String

bssgp.lac LAC
bssgp.lac Unsigned 16-bit integer

bssgp.mcc MCC
bssgp.mcc Unsigned 8-bit integer

bssgp.mnc MNC
bssgp.mnc Unsigned 8-bit integer

bssgp.nri NRI
bssgp.nri Unsigned 16-bit integer

bssgp.nsei NSEI
bssgp.nsei Unsigned 16-bit integer

bssgp.pdu_type PDU Type
bssgp.pdu_type Unsigned 8-bit integer
```

```

bssgp.rac  RAC
    Unsigned 8-bit integer
bssgp.rad  Routing Address Discriminator
    Unsigned 8-bit integer
    Routing Address Discriminator
bssgp.ran_inf_req_pdu_type_ext  PDU Type Extension
    Unsigned 8-bit integer
    PDU Type Extension
bssgp.ran_req_pdu_type_ext  PDU Type Extension
    Unsigned 8-bit integer
    PDU Type Extension
bssgp.rcid  Reporting Cell Identity
    Unsigned 64-bit integer
    Reporting Cell Identity
bssgp.rrc_si_type  RRC SI type
    Unsigned 8-bit integer
    RRC SI type
bssgp.tlli  TLLI
    Unsigned 32-bit integer
bssgp.tmsi_ptmsi  TMSI/PTMSI
    Unsigned 32-bit integer

```

#### **Basic Encoding Rules (ASN.1 X.690) (ber)**

```

ber.arbitrary  arbitrary
    Byte array
    ber.T_arbitrary
ber.bitstring.empty  Empty
    Unsigned 8-bit integer
    This is an empty bitstring
ber.bitstring.padding  Padding
    Unsigned 8-bit integer
    Number of unused bits in the last octet of the bitstring
ber.constructed.OCTETSTRING  OCTETSTRING
    Byte array
    This is a component of an constructed OCTETSTRING
ber.data_value_descriptor  data-value-descriptor
    String
    ber.ObjectDescriptor
ber.direct_reference  direct-reference
    ber.OBJECT_IDENTIFIER
ber.encoding  encoding
    Unsigned 32-bit integer
    ber.T_encoding
ber.id.class  Class
    Unsigned 8-bit integer
    Class of BER TLV Identifier

```

```
ber.id.pc P/C
  Boolean
  Primitive or Constructed BER encoding
ber.id.tag Tag
  Unsigned 8-bit integer
  Tag value for non-Universal classes
ber.id.uni_tag Tag
  Unsigned 8-bit integer
  Universal tag type
ber.indirect_reference indirect-reference
  Signed 32-bit integer
  ber.INTEGER
ber.length Length
  Unsigned 32-bit integer
  Length of contents
ber.octet_aligned octet-aligned
  Byte array
  ber.T_octet_aligned
ber.single_ASN1_type single-ASN1-type
  No value
  ber.T_single_ASN1_type
ber.unknown.BITSTRING BITSTRING
  Byte array
  This is an unknown BITSTRING
ber.unknown.BMPString BMPString
  String
  This is an unknown BMPString
ber.unknown.BOOLEAN BOOLEAN
  Unsigned 8-bit integer
  This is an unknown BOOLEAN
ber.unknown.ENUMERATED ENUMERATED
  Unsigned 32-bit integer
  This is an unknown ENUMERATED
ber.unknown.GRAPHICSTRING GRAPHICSTRING
  String
  This is an unknown GRAPHICSTRING
ber.unknown.GeneralString GeneralString
  String
  This is an unknown GeneralString
ber.unknown.GeneralizedTime GeneralizedTime
  String
  This is an unknown GeneralizedTime
ber.unknown.IA5String IA5String
  String
  This is an unknown IA5String
ber.unknown.INTEGER INTEGER
  Unsigned 32-bit integer
  This is an unknown INTEGER
```

```
ber.unknown.NumericString  NumericString
    String
    This is an unknown NumericString
ber.unknown.OCTETSTRING  OCTETSTRING
    Byte array
    This is an unknown OCTETSTRING
ber.unknown.OID  OID
    This is an unknown Object Identifier
ber.unknown.PrintableString  PrintableString
    String
    This is an unknown PrintableString
ber.unknown.TeletexString  TeletexString
    String
    This is an unknown TeletexString
ber.unknown.UTCTime  UTCTime
    String
    This is an unknown UTCTime
ber.unknown.UTF8String  UTF8String
    String
    This is an unknown UTF8String
ber.unknown.UniversalString  UniversalString
    String
    This is an unknown UniversalString
ber.unknown.VisibleString  VisibleString
    String
    This is an unknown VisibleString
```

**Bearer Independent Call Control (bicc)**

```
bicc.cic  Call identification Code (CIC)
    Unsigned 32-bit integer
```

**Bidirectional Forwarding Detection Control Message (bfd)**

```
bfd.auth.key  Authentication Key ID
    Unsigned 8-bit integer
    The Authentication Key ID, identifies which password is in use for this pack
bfd.auth.len  Authentication Length
    Unsigned 8-bit integer
    The length, in bytes, of the authentication section
bfd.auth.password  Password
    String
    The simple password in use on this session
bfd.auth.seq_num  Sequence Number
    Unsigned 32-bit integer
    The Sequence Number is periodically incremented to prevent replay attacks
bfd.auth.type  Authentication Type
    Unsigned 8-bit integer
    The type of authentication in use on this session
```

`bfd.desired_min_tx_interval` Desired Min TX Interval  
Unsigned 32-bit integer  
The minimum interval to use when transmitting BFD Control packets

`bfd.detect_time_multiplier` Detect Time Multiplier  
Unsigned 8-bit integer  
The transmit interval multiplied by this value is the failure detection time

`bfd.diag` Diagnostic Code  
Unsigned 8-bit integer  
This field give the reason for a BFD session failure

`bfd.flags` Message Flags  
Unsigned 8-bit integer

`bfd.flags.a` Authentication Present  
Boolean  
The Authentication Section is present

`bfd.flags.c` Control Plane Independent  
Boolean  
If set, the BFD implementation is implemented in the forwarding plane

`bfd.flags.d` Demand  
Boolean

`bfd.flags.f` Final  
Boolean

`bfd.flags.h` I hear you  
Boolean

`bfd.flags.m` Multipoint  
Boolean  
Reserved for future point-to-multipoint extensions

`bfd.flags.p` Poll  
Boolean

`bfd.message_length` Message Length  
Unsigned 8-bit integer  
Length of the BFD Control packet, in bytes

`bfd.my_discriminator` My Discriminator  
Unsigned 32-bit integer

`bfd.required_min_echo_interval` Required Min Echo Interval  
Unsigned 32-bit integer  
The minimum interval between received BFD Echo packets that this system can

`bfd.required_min_rx_interval` Required Min RX Interval  
Unsigned 32-bit integer  
The minimum interval between received BFD Control packets that this system c

`bfd.sta` Session State  
Unsigned 8-bit integer  
The BFD state as seen by the transmitting system

`bfd.version` Protocol Version  
Unsigned 8-bit integer  
The version number of the BFD protocol

`bfd.your_discriminator` Your Discriminator  
Unsigned 32-bit integer

**BitTorrent (bittorrent)**

```
bittorrent.azureus_msg  Azureus Message
    No value
bittorrent.bdict  Dictionary
    No value
bittorrent.bdict.entry  Entry
    No value
bittorrent.bint  Integer
    Signed 32-bit integer
bittorrent.blist  List
    No value
bittorrent.bstr  String
    String
bittorrent.bstr.length  String Length
    Unsigned 32-bit integer
bittorrent.info_hash  SHA1 Hash of info dictionary
    Byte array
bittorrent.jpc.addr  Cache Address
    String
bittorrent.jpc.addr.length  Cache Address Length
    Unsigned 32-bit integer
bittorrent.jpc.port  Port
    Unsigned 32-bit integer
bittorrent.jpc.session  Session ID
    Unsigned 32-bit integer
bittorrent.length  Field Length
    Unsigned 32-bit integer
bittorrent.msg  Message
    No value
bittorrent.msg.aztype  Message Type
    String
bittorrent.msg.bitfield  Bitfield data
    Byte array
bittorrent.msg.length  Message Length
    Unsigned 32-bit integer
bittorrent.msg.prio  Message Priority
    Unsigned 8-bit integer
bittorrent.msg.type  Message Type
    Unsigned 8-bit integer
bittorrent.msg.typelen  Message Type Length
    Unsigned 32-bit integer
bittorrent.peer_id  Peer ID
    Byte array
bittorrent.piece.begin  Begin offset of piece
    Unsigned 32-bit integer
```

```
bittorrent.piece.data  Data in a piece
    Byte array
bittorrent.piece.index  Piece index
    Unsigned 32-bit integer
bittorrent.piece.length  Piece Length
    Unsigned 32-bit integer
bittorrent.protocol.name  Protocol Name
    String
bittorrent.protocol.name.length  Protocol Name Length
    Unsigned 8-bit integer
bittorrent.reserved  Reserved Extension Bytes
    Byte array
```

### **Bitswapped ITU-T Recommendation H.223 (h223\_bitswapped)**

#### **Blocks Extensible Exchange Protocol (beep)**

```
beep.ansno  Ansno
    Unsigned 32-bit integer
beep.channel  Channel
    Unsigned 32-bit integer
beep.end  End
    Boolean
beep.more.complete  Complete
    Boolean
beep.more.intermediate  Intermediate
    Boolean
beep.msgno  Msgno
    Unsigned 32-bit integer
beep.req  Request
    Boolean
beep.req.channel  Request Channel Number
    Unsigned 32-bit integer
beep.rsp  Response
    Boolean
beep.rsp.channel  Response Channel Number
    Unsigned 32-bit integer
beep.seq  Sequence
    Boolean
beep.seq.ackno  Ackno
    Unsigned 32-bit integer
beep.seq.channel  Sequence Channel Number
    Unsigned 32-bit integer
beep.seq.window  Window
    Unsigned 32-bit integer
```

```
beep.seqno  Seqno
            Unsigned 32-bit integer

beep.size   Size
            Unsigned 32-bit integer

beep.status.negative  Negative
                    Boolean

beep.status.positive  Positive
                    Boolean

beep.violation  Protocol Violation
                Boolean
```

**Blubster/Piolet MANOLITO Protocol (manolito)**

```
manolito.checksum  Checksum
                  Unsigned 32-bit integer
                  Checksum used for verifying integrity

manolito.dest      Destination IP Address
                  IPv4 address
                  Destination IPv4 address

manolito.options   Options
                  Unsigned 32-bit integer
                  Packet-dependent data

manolito.seqno     Sequence Number
                  Unsigned 32-bit integer
                  Incremental sequence number

manolito.src       Forwarded IP Address
                  IPv4 address
                  Host packet was forwarded from (or 0)
```

**Bluetooth HCI (hci\_h1)**

```
hci_h1.direction  Direction
                  Unsigned 8-bit integer
                  HCI Packet Direction Sent/Rcvd

hci_h1.type        HCI Packet Type
                  Unsigned 8-bit integer
                  HCI Packet Type
```

**Bluetooth HCI ACL Packet (bthci\_acl)**

```
btacl.bc_flag     BC Flag
                  Unsigned 16-bit integer
                  Broadcast Flag

btacl.chandle     Connection Handle
                  Unsigned 16-bit integer
                  Connection Handle

btacl.continuation_to  This is a continuation to the PDU in frame
                    Frame number
                    This is a continuation to the PDU in frame #
```



```

btacl.data Data
  No value
  Data

btacl.length Data Total Length
  Unsigned 16-bit integer
  Data Total Length

btacl.pb_flag PB Flag
  Unsigned 16-bit integer
  Packet Boundary Flag

btacl.reassembled_in This PDU is reassembled in frame
  Frame number
  This PDU is reassembled in frame #

```

### Bluetooth HCI Command (bthci\_cmd)

```

bthci_cmd.afh_ch_assessment_mode AFH Channel Assessment Mode
  Unsigned 8-bit integer
  AFH Channel Assessment Mode

bthci_cmd.afh_ch_classification Channel Classification
  No value
  Channel Classification

bthci_cmd.air_coding_format Air Coding Format
  Unsigned 16-bit integer
  Air Coding Format

bthci_cmd.allow_role_switch Allow Role Switch
  Unsigned 8-bit integer
  Allow Role Switch

bthci_cmd.auth_enable Authentication Enable
  Unsigned 8-bit integer
  Authentication Enable

bthci_cmd.auth_requirements Authentication Requirements
  Unsigned 8-bit integer
  Authentication Requirements

bthci_cmd.auto_accept_flag Auto Accept Flag
  Unsigned 8-bit integer
  Class of Device of Interest

bthci_cmd.bd_addr BD_ADDR:
  No value
  Bluetooth Device Address

bthci_cmd.beacon_max_int Beacon Max Interval
  Unsigned 16-bit integer
  Maximal acceptable number of Baseband slots between consecutive beacons.

bthci_cmd.beacon_min_int Beacon Min Interval
  Unsigned 16-bit integer
  Minimum acceptable number of Baseband slots between consecutive beacons.

bthci_cmd.class_of_device Class of Device
  Unsigned 24-bit integer
  Class of Device

```

bthci\_cmd.class\_of\_device\_mask Class of Device Mask  
Unsigned 24-bit integer  
Bit Mask used to determine which bits of the Class of Device parameter are o

bthci\_cmd.clock\_offset Clock Offset  
Unsigned 16-bit integer  
Bit 2-16 of the Clock Offset between CLKmaster-CLKslave

bthci\_cmd.clock\_offset\_valid Clock\_Offset\_Valid\_Flag  
Unsigned 16-bit integer  
Indicates if clock offset is valid

bthci\_cmd.connection\_handle Connection Handle  
Unsigned 16-bit integer  
Connection Handle

bthci\_cmd.delay\_variation Delay Variation  
Unsigned 32-bit integer  
Delay Variation, in microseconds

bthci\_cmd.delete\_all\_flag Delete All Flag  
Unsigned 8-bit integer  
Delete All Flag

bthci\_cmd.device\_name Device Name  
String  
Userfriendly descriptive name for the device

bthci\_cmd.eir\_data Data  
Byte array  
EIR Data

bthci\_cmd.eir\_data\_type Type  
Unsigned 8-bit integer  
Data Type

bthci\_cmd.eir\_struct\_length Length  
Unsigned 8-bit integer  
Structure Length

bthci\_cmd.encrypt\_mode Encryption Mode  
Unsigned 8-bit integer  
Encryption Mode

bthci\_cmd.encryption\_enable Encryption Enable  
Unsigned 8-bit integer  
Encryption Enable

bthci\_cmd.err\_data\_reporting Erroneous Data Reporting  
Unsigned 8-bit integer  
Erroneous Data Reporting

bthci\_cmd.evt\_mask\_00 Inquiry Complete  
Unsigned 8-bit integer  
Inquiry Complete Bit

bthci\_cmd.evt\_mask\_01 Inquiry Result  
Unsigned 8-bit integer  
Inquiry Result Bit

bthci\_cmd.evt\_mask\_02 Connect Complete  
Unsigned 8-bit integer  
Connection Complete Bit

```
bthci_cmd.evt_mask_03  Connect Request
    Unsigned 8-bit integer
    Connect Request Bit

bthci_cmd.evt_mask_04  Disconnect Complete
    Unsigned 8-bit integer
    Disconnect Complete Bit

bthci_cmd.evt_mask_05  Auth Complete
    Unsigned 8-bit integer
    Auth Complete Bit

bthci_cmd.evt_mask_06  Remote Name Req Complete
    Unsigned 8-bit integer
    Remote Name Req Complete Bit

bthci_cmd.evt_mask_07  Encrypt Change
    Unsigned 8-bit integer
    Encrypt Change Bit

bthci_cmd.evt_mask_10  Change Connection Link Key Complete
    Unsigned 8-bit integer
    Change Connection Link Key Complete Bit

bthci_cmd.evt_mask_11  Master Link Key Complete
    Unsigned 8-bit integer
    Master Link Key Complete Bit

bthci_cmd.evt_mask_12  Read Remote Supported Features
    Unsigned 8-bit integer
    Read Remote Supported Features Bit

bthci_cmd.evt_mask_13  Read Remote Ver Info Complete
    Unsigned 8-bit integer
    Read Remote Ver Info Complete Bit

bthci_cmd.evt_mask_14  QoS Setup Complete
    Unsigned 8-bit integer
    QoS Setup Complete Bit

bthci_cmd.evt_mask_17  Hardware Error
    Unsigned 8-bit integer
    Hardware Error Bit

bthci_cmd.evt_mask_20  Flush Occurred
    Unsigned 8-bit integer
    Flush Occurred Bit

bthci_cmd.evt_mask_21  Role Change
    Unsigned 8-bit integer
    Role Change Bit

bthci_cmd.evt_mask_23  Mode Change
    Unsigned 8-bit integer
    Mode Change Bit

bthci_cmd.evt_mask_24  Return Link Keys
    Unsigned 8-bit integer
    Return Link Keys Bit

bthci_cmd.evt_mask_25  PIN Code Request
    Unsigned 8-bit integer
    PIN Code Request Bit
```

```
bthci_cmd.evt_mask_26  Link Key Request
    Unsigned 8-bit integer
    Link Key Request Bit

bthci_cmd.evt_mask_27  Link Key Notification
    Unsigned 8-bit integer
    Link Key Notification Bit

bthci_cmd.evt_mask_30  Loopback Command
    Unsigned 8-bit integer
    Loopback Command Bit

bthci_cmd.evt_mask_31  Data Buffer Overflow
    Unsigned 8-bit integer
    Data Buffer Overflow Bit

bthci_cmd.evt_mask_32  Max Slots Change
    Unsigned 8-bit integer
    Max Slots Change Bit

bthci_cmd.evt_mask_33  Read Clock Offset Complete
    Unsigned 8-bit integer
    Read Clock Offset Complete Bit

bthci_cmd.evt_mask_34  Connection Packet Type Changed
    Unsigned 8-bit integer
    Connection Packet Type Changed Bit

bthci_cmd.evt_mask_35  QoS Violation
    Unsigned 8-bit integer
    QoS Violation Bit

bthci_cmd.evt_mask_36  Page Scan Mode Change
    Unsigned 8-bit integer
    Page Scan Mode Change Bit

bthci_cmd.evt_mask_37  Page Scan Repetition Mode Change
    Unsigned 8-bit integer
    Page Scan Repetition Mode Change Bit

bthci_cmd.evt_mask_40  Flow Specification Complete
    Unsigned 8-bit integer
    Flow Specification Complete Bit

bthci_cmd.evt_mask_41  Inquiry Result With RSSI
    Unsigned 8-bit integer
    Inquiry Result With RSSI Bit

bthci_cmd.evt_mask_42  Read Remote Ext. Features Complete
    Unsigned 8-bit integer
    Read Remote Ext. Features Complete Bit

bthci_cmd.evt_mask_53  Synchronous Connection Complete
    Unsigned 8-bit integer
    Synchronous Connection Complete Bit

bthci_cmd.evt_mask_54  Synchronous Connection Changed
    Unsigned 8-bit integer
    Synchronous Connection Changed Bit

bthci_cmd.evt_mask_55  Sniff Substrate
    Unsigned 8-bit integer
    Sniff Substrate Bit
```

```
bthci_cmd.evt_mask_56  Extended Inquiry Result
    Unsigned 8-bit integer
    Extended Inquiry Result Bit

bthci_cmd.evt_mask_57  Encryption Key Refresh Complete
    Unsigned 8-bit integer
    Encryption Key Refresh Complete Bit

bthci_cmd.evt_mask_60  IO Capability Request
    Unsigned 8-bit integer
    IO Capability Request Bit

bthci_cmd.evt_mask_61  IO Capability Response
    Unsigned 8-bit integer
    IO Capability Response Bit

bthci_cmd.evt_mask_62  User Confirmation Request
    Unsigned 8-bit integer
    User Confirmation Request Bit

bthci_cmd.evt_mask_63  User Passkey Request
    Unsigned 8-bit integer
    User Passkey Request Bit

bthci_cmd.evt_mask_64  Remote OOB Data Request
    Unsigned 8-bit integer
    Remote OOB Data Request Bit

bthci_cmd.evt_mask_65  Simple Pairing Complete
    Unsigned 8-bit integer
    Simple Pairing Complete Bit

bthci_cmd.evt_mask_67  Link Supervision Timeout Changed
    Unsigned 8-bit integer
    Link Supervision Timeout Changed Bit

bthci_cmd.evt_mask_70  Enhanced Flush Complete
    Unsigned 8-bit integer
    Enhanced Flush Complete Bit

bthci_cmd.evt_mask_72  User Passkey Notification
    Unsigned 8-bit integer
    User Passkey Notification Bit

bthci_cmd.evt_mask_73  Keypress Notification
    Unsigned 8-bit integer
    Keypress Notification Bit

bthci_cmd.fec_required  FEC Required
    Unsigned 8-bit integer
    FEC Required

bthci_cmd.filter_condition_type  Filter Condition Type
    Unsigned 8-bit integer
    Filter Condition Type

bthci_cmd.filter_type  Filter Type
    Unsigned 8-bit integer
    Filter Type

bthci_cmd.flags  Flags
    Unsigned 8-bit integer
    Flags
```

```
bthci_cmd.flow_contr_enable  Flow Control Enable
    Unsigned 8-bit integer
    Flow Control Enable

bthci_cmd.flow_control  SCO Flow Control
    Unsigned 8-bit integer
    SCO Flow Control

bthci_cmd.flush_packet_type  Packet Type
    Unsigned 8-bit integer
    Packet Type

bthci_cmd.hash_c  Hash C
    Unsigned 16-bit integer
    Hash C

bthci_cmd.hold_mode_inquiry  Suspend Inquiry Scan
    Unsigned 8-bit integer
    Device can enter low power state

bthci_cmd.hold_mode_max_int  Hold Mode Max Interval
    Unsigned 16-bit integer
    Maximal acceptable number of Baseband slots to wait in Hold Mode.

bthci_cmd.hold_mode_min_int  Hold Mode Min Interval
    Unsigned 16-bit integer
    Minimum acceptable number of Baseband slots to wait in Hold Mode.

bthci_cmd.hold_mode_page  Suspend Page Scan
    Unsigned 8-bit integer
    Device can enter low power state

bthci_cmd.hold_mode_periodic  Suspend Periodic Inquiries
    Unsigned 8-bit integer
    Device can enter low power state

bthci_cmd.input_coding  Input Coding
    Unsigned 16-bit integer
    Authentication Enable

bthci_cmd.input_data_format  Input Data Format
    Unsigned 16-bit integer
    Input Data Format

bthci_cmd.input_sample_size  Input Sample Size
    Unsigned 16-bit integer
    Input Sample Size

bthci_cmd.inq_length  Inquiry Length
    Unsigned 8-bit integer
    Inquiry Length (*1.28s)

bthci_cmd.inq_scan_type  Scan Type
    Unsigned 8-bit integer
    Scan Type

bthci_cmd.interval  Interval
    Unsigned 16-bit integer
    Interval

bthci_cmd.io_capability  IO Capability
    Unsigned 8-bit integer
    IO Capability
```

```
bthci_cmd.key_flag  Key Flag
    Unsigned 8-bit integer
    Key Flag

bthci_cmd.lap      LAP
    Unsigned 24-bit integer
    LAP for the inquiry access code

bthci_cmd.latency  Latency
    Unsigned 32-bit integer
    Latency, in microseconds

bthci_cmd.lin_pcm_bit_pos  Linear PCM Bit Pos
    Unsigned 16-bit integer
    # bit pos. that MSB of sample is away from starting at MSB

bthci_cmd.link_key  Link Key
    Byte array
    Link Key for the associated BD_ADDR

bthci_cmd.link_policy_hold  Enable Hold Mode
    Unsigned 16-bit integer
    Enable Hold Mode

bthci_cmd.link_policy_park  Enable Park Mode
    Unsigned 16-bit integer
    Enable Park Mode

bthci_cmd.link_policy_sniff  Enable Sniff Mode
    Unsigned 16-bit integer
    Enable Sniff Mode

bthci_cmd.link_policy_switch  Enable Master Slave Switch
    Unsigned 16-bit integer
    Enable Master Slave Switch

bthci_cmd.loopback_mode  Loopback Mode
    Unsigned 8-bit integer
    Loopback Mode

bthci_cmd.max_data_length_acl  Host ACL Data Packet Length (bytes)
    Unsigned 16-bit integer
    Max Host ACL Data Packet length of data portion host is able to accept

bthci_cmd.max_data_length_sco  Host SCO Data Packet Length (bytes)
    Unsigned 8-bit integer
    Max Host SCO Data Packet length of data portion host is able to accept

bthci_cmd.max_data_num_acl  Host Total Num ACL Data Packets
    Unsigned 16-bit integer
    Total Number of HCI ACL Data Packets that can be stored in the data buffers

bthci_cmd.max_data_num_sco  Host Total Num SCO Data Packets
    Unsigned 16-bit integer
    Total Number of HCI SCO Data Packets that can be stored in the data buffers

bthci_cmd.max_latency  Max. Latency
    Unsigned 16-bit integer
    Max. Latency in baseband slots

bthci_cmd.max_latency_ms  Max. Latency (ms)
    Unsigned 16-bit integer
    Max. Latency (ms)
```

bthci\_cmd.max\_period\_length Max Period Length  
Unsigned 16-bit integer  
Maximum amount of time specified between consecutive inquiries.

bthci\_cmd.min\_local\_timeout Min. Local Timeout  
Unsigned 16-bit integer  
Min. Local Timeout in baseband slots

bthci\_cmd.min\_period\_length Min Period Length  
Unsigned 16-bit integer  
Minimum amount of time specified between consecutive inquiries.

bthci\_cmd.min\_remote\_timeout Min. Remote Timeout  
Unsigned 16-bit integer  
Min. Remote Timeout in baseband slots

bthci\_cmd.notification\_type Notification Type  
Unsigned 8-bit integer  
Notification Type

bthci\_cmd.num\_broad\_retran Num Broadcast Retran  
Unsigned 8-bit integer  
Number of Broadcast Retransmissions

bthci\_cmd.num\_compl\_packets Number of Completed Packets  
Unsigned 16-bit integer  
Number of Completed HCI Data Packets

bthci\_cmd.num\_curr\_iac Number of Current IAC  
Unsigned 8-bit integer  
Number of IACs which are currently in use

bthci\_cmd.num\_handles Number of Handles  
Unsigned 8-bit integer  
Number of Handles

bthci\_cmd.num\_responses Num Responses  
Unsigned 8-bit integer  
Number of Responses

bthci\_cmd.ocf ocf  
Unsigned 16-bit integer  
Opcode Command Field

bthci\_cmd.ogf ogf  
Unsigned 16-bit integer  
Opcode Group Field

bthci\_cmd.oob\_data\_present OOB Data Present  
Unsigned 8-bit integer  
OOB Data Present

bthci\_cmd.opcode Command Opcode  
Unsigned 16-bit integer  
HCI Command Opcode

bthci\_cmd.packet\_type\_2dh1 Packet Type 2-DH1  
Unsigned 16-bit integer  
Packet Type 2-DH1

bthci\_cmd.packet\_type\_2dh3 Packet Type 2-DH3  
Unsigned 16-bit integer  
Packet Type 2-DH3



```
bthci_cmd.packet_type_2dh5  Packet Type 2-DH5
    Unsigned 16-bit integer
    Packet Type 2-DH5

bthci_cmd.packet_type_3dh1  Packet Type 3-DH1
    Unsigned 16-bit integer
    Packet Type 3-DH1

bthci_cmd.packet_type_3dh3  Packet Type 3-DH3
    Unsigned 16-bit integer
    Packet Type 3-DH3

bthci_cmd.packet_type_3dh5  Packet Type 3-DH5
    Unsigned 16-bit integer
    Packet Type 3-DH5

bthci_cmd.packet_type_dh1   Packet Type DH1
    Unsigned 16-bit integer
    Packet Type DH1

bthci_cmd.packet_type_dh3   Packet Type DH3
    Unsigned 16-bit integer
    Packet Type DH3

bthci_cmd.packet_type_dh5   Packet Type DH5
    Unsigned 16-bit integer
    Packet Type DH5

bthci_cmd.packet_type_dm1   Packet Type DM1
    Unsigned 16-bit integer
    Packet Type DM1

bthci_cmd.packet_type_dm3   Packet Type DM3
    Unsigned 16-bit integer
    Packet Type DM3

bthci_cmd.packet_type_dm5   Packet Type DM5
    Unsigned 16-bit integer
    Packet Type DM5

bthci_cmd.packet_type_hv1   Packet Type HV1
    Unsigned 16-bit integer
    Packet Type HV1

bthci_cmd.packet_type_hv2   Packet Type HV2
    Unsigned 16-bit integer
    Packet Type HV2

bthci_cmd.packet_type_hv3   Packet Type HV3
    Unsigned 16-bit integer
    Packet Type HV3

bthci_cmd.page_number       Page Number
    Unsigned 8-bit integer
    Page Number

bthci_cmd.page_scan_mode    Page Scan Mode
    Unsigned 8-bit integer
    Page Scan Mode

bthci_cmd.page_scan_period_mode  Page Scan Period Mode
    Unsigned 8-bit integer
    Page Scan Period Mode
```

```
bthci_cmd.page_scan_repetition_mode  Page Scan Repetition Mode
    Unsigned 8-bit integer
    Page Scan Repetition Mode

bthci_cmd.param_length  Parameter Total Length
    Unsigned 8-bit integer
    Parameter Total Length

bthci_cmd.params  Command Parameters
    Byte array
    Command Parameters

bthci_cmd.passkey  Passkey
    Unsigned 32-bit integer
    Passkey

bthci_cmd.peak_bandwidth  Peak Bandwidth
    Unsigned 32-bit integer
    Peak Bandwidth, in bytes per second

bthci_cmd.pin_code  PIN Code
    String
    PIN Code

bthci_cmd.pin_code_length  PIN Code Length
    Unsigned 8-bit integer
    PIN Code Length

bthci_cmd.pin_type  PIN Type
    Unsigned 8-bit integer
    PIN Types

bthci_cmd.power_level  Power Level (dBm)
    Signed 8-bit integer
    Power Level (dBm)

bthci_cmd.power_level_type  Type
    Unsigned 8-bit integer
    Type

bthci_cmd.randomizer_r  Randomizer R
    Unsigned 16-bit integer
    Randomizer R

bthci_cmd.read_all_flag  Read All Flag
    Unsigned 8-bit integer
    Read All Flag

bthci_cmd.reason  Reason
    Unsigned 8-bit integer
    Reason

bthci_cmd.retransmission_effort  Retransmission Effort
    Unsigned 8-bit integer
    Retransmission Effort

bthci_cmd.role  Role
    Unsigned 8-bit integer
    Role

bthci_cmd.rx_bandwidth  Rx Bandwidth (bytes/s)
    Unsigned 32-bit integer
    Rx Bandwidth
```

```

bthci_cmd.scan_enable  Scan Enable
    Unsigned 8-bit integer
    Scan Enable

bthci_cmd.sco_packet_type_2ev3  Packet Type 2-EV3
    Unsigned 16-bit integer
    Packet Type 2-EV3

bthci_cmd.sco_packet_type_2ev5  Packet Type 2-EV5
    Unsigned 16-bit integer
    Packet Type 2-EV5

bthci_cmd.sco_packet_type_3ev3  Packet Type 3-EV3
    Unsigned 16-bit integer
    Packet Type 3-EV3

bthci_cmd.sco_packet_type_3ev5  Packet Type 3-EV5
    Unsigned 16-bit integer
    Packet Type 3-EV5

bthci_cmd.sco_packet_type_ev3   Packet Type EV3
    Unsigned 16-bit integer
    Packet Type EV3

bthci_cmd.sco_packet_type_ev4   Packet Type EV4
    Unsigned 16-bit integer
    Packet Type EV4

bthci_cmd.sco_packet_type_ev5   Packet Type EV5
    Unsigned 16-bit integer
    Packet Type EV5

bthci_cmd.sco_packet_type_hv1   Packet Type HV1
    Unsigned 16-bit integer
    Packet Type HV1

bthci_cmd.sco_packet_type_hv2   Packet Type HV2
    Unsigned 16-bit integer
    Packet Type HV2

bthci_cmd.sco_packet_type_hv3   Packet Type HV3
    Unsigned 16-bit integer
    Packet Type HV3

bthci_cmd.service_class_uuid128  UUID
    Byte array
    128-bit Service Class UUID

bthci_cmd.service_class_uuid16   UUID
    Unsigned 16-bit integer
    16-bit Service Class UUID

bthci_cmd.service_class_uuid32   UUID
    Unsigned 32-bit integer
    32-bit Service Class UUID

bthci_cmd.service_type  Service Type
    Unsigned 8-bit integer
    Service Type

bthci_cmd.simple_pairing_debug_mode  Simple Pairing Debug Mode
    Unsigned 8-bit integer
    Simple Pairing Debug Mode

```

```
bthci_cmd.simple_pairing_mode  Simple Pairing Mode
    Unsigned 8-bit integer
    Simple Pairing Mode

bthci_cmd.sniff_attempt  Sniff Attempt
    Unsigned 16-bit integer
    Number of Baseband receive slots for sniff attempt.

bthci_cmd.sniff_max_int  Sniff Max Interval
    Unsigned 16-bit integer
    Maximal acceptable number of Baseband slots between each sniff period.

bthci_cmd.sniff_min_int  Sniff Min Interval
    Unsigned 16-bit integer
    Minimum acceptable number of Baseband slots between each sniff period.

bthci_cmd.status  Status
    Unsigned 8-bit integer
    Status

bthci_cmd.timeout  Timeout
    Unsigned 16-bit integer
    Number of Baseband slots for timeout.

bthci_cmd.token_bucket_size  Available Token Bucket Size
    Unsigned 32-bit integer
    Token Bucket Size in bytes

bthci_cmd.token_rate  Available Token Rate
    Unsigned 32-bit integer
    Token Rate, in bytes per second

bthci_cmd.tx_bandwidth  Tx Bandwidth (bytes/s)
    Unsigned 32-bit integer
    Tx Bandwidth

bthci_cmd.which_clock  Which Clock
    Unsigned 8-bit integer
    Which Clock

bthci_cmd.window  Interval
    Unsigned 16-bit integer
    Window

bthci_cmd_num_link_keys  Number of Link Keys
    Unsigned 8-bit integer
    Number of Link Keys
```

#### **Bluetooth HCI Event (bthci\_evt)**

```
bthci_evt.afh_ch_assessment_mode  AFH Channel Assessment Mode
    Unsigned 8-bit integer
    AFH Channel Assessment Mode

bthci_evt.afh_channel_map  AFH Channel Map
    AFH Channel Map

bthci_evt.afh_mode  AFH Mode
    Unsigned 8-bit integer
    AFH Mode
```

```
bthci_evt.air_mode  Air Mode
    Unsigned 8-bit integer
    Air Mode

bthci_evt.auth_enable  Authentication
    Unsigned 8-bit integer
    Authentication Enable

bthci_evt.auth_requirements  Authentication Requirements
    Unsigned 8-bit integer
    Authentication Requirements

bthci_evt.bd_addr  BD_ADDR:
    No value
    Bluetooth Device Address

bthci_evt.class_of_device  Class of Device
    Unsigned 24-bit integer
    Class of Device

bthci_evt.clock  Clock
    Unsigned 32-bit integer
    Clock

bthci_evt.clock_accuracy  Clock
    Unsigned 16-bit integer
    Clock

bthci_evt.clock_offset  Clock Offset
    Unsigned 16-bit integer
    Bit 2-16 of the Clock Offset between CLKmaster-CLKslave

bthci_evt.code  Event Code
    Unsigned 8-bit integer
    Event Code

bthci_evt.com_opcode  Command Opcode
    Unsigned 16-bit integer
    Command Opcode

bthci_evt.comp_id  Manufacturer Name
    Unsigned 16-bit integer
    Manufacturer Name of Bluetooth Hardware

bthci_evt.connection_handle  Connection Handle
    Unsigned 16-bit integer
    Connection Handle

bthci_evt.country_code  Country Code
    Unsigned 8-bit integer
    Country Code

bthci_evt.current_mode  Current Mode
    Unsigned 8-bit integer
    Current Mode

bthci_evt.delay_variation  Available Delay Variation
    Unsigned 32-bit integer
    Available Delay Variation, in microseconds

bthci_evt.device_name  Device Name
    String
    Userfriendly descriptive name for the device
```

```
bthci_evt.encryption_enable  Encryption Enable
    Unsigned 8-bit integer
    Encryption Enable

bthci_evt.encryption_mode    Encryption Mode
    Unsigned 8-bit integer
    Encryption Mode

bthci_evt.err_data_reporting  Erroneous Data Reporting
    Unsigned 8-bit integer
    Erroneous Data Reporting

bthci_evt.failed_contact_counter  Failed Contact Counter
    Unsigned 16-bit integer
    Failed Contact Counter

bthci_evt.fec_required        FEC Required
    Unsigned 8-bit integer
    FEC Required

bthci_evt.flags               Flags
    Unsigned 8-bit integer
    Flags

bthci_evt.flow_direction      Flow Direction
    Unsigned 8-bit integer
    Flow Direction

bthci_evt.hardware_code       Hardware Code
    Unsigned 8-bit integer
    Hardware Code (implementation specific)

bthci_evt.hash_c              Hash C
    Unsigned 16-bit integer
    Hash C

bthci_evt.hci_vers_nr         HCI Version
    Unsigned 8-bit integer
    Version of the Current HCI

bthci_evt.hold_mode_inquiry   Suspend Inquiry Scan
    Unsigned 8-bit integer
    Device can enter low power state

bthci_evt.hold_mode_page      Suspend Page Scan
    Unsigned 8-bit integer
    Device can enter low power state

bthci_evt.hold_mode_periodic  Suspend Periodic Inquiries
    Unsigned 8-bit integer
    Device can enter low power state

bthci_evt.input_coding        Input Coding
    Unsigned 16-bit integer
    Authentication Enable

bthci_evt.input_data_format    Input Data Format
    Unsigned 16-bit integer
    Input Data Format

bthci_evt.input_sample_size    Input Sample Size
    Unsigned 16-bit integer
    Input Sample Size
```

```
bthci_evt.inq_scan_type  Scan Type
    Unsigned 8-bit integer
    Scan Type

bthci_evt.interval      Interval
    Unsigned 16-bit integer
    Interval - Number of Baseband slots

bthci_evt.io_capability  IO Capability
    Unsigned 8-bit integer
    IO Capability

bthci_evt.key_flag      Key Flag
    Unsigned 8-bit integer
    Key Flag

bthci_evt.key_type      Key Type
    Unsigned 8-bit integer
    Key Type

bthci_evt.latency       Available Latency
    Unsigned 32-bit integer
    Available Latency, in microseconds

bthci_evt.link_key      Link Key
    Byte array
    Link Key for the associated BD_ADDR

bthci_evt.link_policy_hold  Enable Hold Mode
    Unsigned 16-bit integer
    Enable Hold Mode

bthci_evt.link_policy_park  Enable Park Mode
    Unsigned 16-bit integer
    Enable Park Mode

bthci_evt.link_policy_sniff  Enable Sniff Mode
    Unsigned 16-bit integer
    Enable Sniff Mode

bthci_evt.link_policy_switch  Enable Master Slave Switch
    Unsigned 16-bit integer
    Enable Master Slave Switch

bthci_evt.link_quality    Link Quality
    Unsigned 8-bit integer
    Link Quality (0x00 - 0xFF Higher Value = Better Link)

bthci_evt.link_supervision_timeout  Link Supervision Timeout
    Unsigned 16-bit integer
    Link Supervision Timeout

bthci_evt.link_type      Link Type
    Unsigned 8-bit integer
    Link Type

bthci_evt.link_type_2dh1  ACL Link Type 2-DH1
    Unsigned 16-bit integer
    ACL Link Type 2-DH1

bthci_evt.link_type_2dh3  ACL Link Type 2-DH3
    Unsigned 16-bit integer
    ACL Link Type 2-DH3
```

```
bthci_evt.link_type_2dh5  ACL Link Type 2-DH5
    Unsigned 16-bit integer
    ACL Link Type 2-DH5

bthci_evt.link_type_3dh1  ACL Link Type 3-DH1
    Unsigned 16-bit integer
    ACL Link Type 3-DH1

bthci_evt.link_type_3dh3  ACL Link Type 3-DH3
    Unsigned 16-bit integer
    ACL Link Type 3-DH3

bthci_evt.link_type_3dh5  ACL Link Type 3-DH5
    Unsigned 16-bit integer
    ACL Link Type 3-DH5

bthci_evt.link_type_dh1   ACL Link Type DH1
    Unsigned 16-bit integer
    ACL Link Type DH1

bthci_evt.link_type_dh3   ACL Link Type DH3
    Unsigned 16-bit integer
    ACL Link Type DH3

bthci_evt.link_type_dh5   ACL Link Type DH5
    Unsigned 16-bit integer
    ACL Link Type DH5

bthci_evt.link_type_dm1   ACL Link Type DM1
    Unsigned 16-bit integer
    ACL Link Type DM1

bthci_evt.link_type_dm3   ACL Link Type DM3
    Unsigned 16-bit integer
    ACL Link Type DM3

bthci_evt.link_type_dm5   ACL Link Type DM5
    Unsigned 16-bit integer
    ACL Link Type DM5

bthci_evt.link_type_hv1   SCO Link Type HV1
    Unsigned 16-bit integer
    SCO Link Type HV1

bthci_evt.link_type_hv2   SCO Link Type HV2
    Unsigned 16-bit integer
    SCO Link Type HV2

bthci_evt.link_type_hv3   SCO Link Type HV3
    Unsigned 16-bit integer
    SCO Link Type HV3

bthci_evt.lmp_feature     3-slot packets
    Unsigned 8-bit integer
    3-slot packets

bthci_evt.lmp_handle      LMP Handle
    Unsigned 16-bit integer
    LMP Handle

bthci_evt.lmp_sub_vers_nr LMP Subversion
    Unsigned 16-bit integer
    Subversion of the Current LMP
```



```
bthci_evt.lmp_vers_nr  LMP Version
    Unsigned 8-bit integer
    Version of the Current LMP

bthci_evt.local_supported_cmds  Local Supported Commands
    Byte array
    Local Supported Commands

bthci_evt.loopback_mode  Loopback Mode
    Unsigned 8-bit integer
    Loopback Mode

bthci_evt.max_data_length_acl  Host ACL Data Packet Length (bytes)
    Unsigned 16-bit integer
    Max Host ACL Data Packet length of data portion host is able to accept

bthci_evt.max_data_length_sco  Host SCO Data Packet Length (bytes)
    Unsigned 8-bit integer
    Max Host SCO Data Packet length of data portion host is able to accept

bthci_evt.max_data_num_acl  Host Total Num ACL Data Packets
    Unsigned 16-bit integer
    Total Number of HCI ACL Data Packets that can be stored in the data buffers

bthci_evt.max_data_num_sco  Host Total Num SCO Data Packets
    Unsigned 16-bit integer
    Total Number of HCI SCO Data Packets that can be stored in the data buffers

bthci_evt.max_num_keys  Max Num Keys
    Unsigned 16-bit integer
    Total Number of Link Keys that the Host Controller can store

bthci_evt.max_page_number  Max. Page Number
    Unsigned 8-bit integer
    Max. Page Number

bthci_evt.max_rx_latency  Max. Rx Latency
    Unsigned 16-bit integer
    Max. Rx Latency

bthci_evt.max_slots  Maximum Number of Slots
    Unsigned 8-bit integer
    Maximum Number of slots allowed for baseband packets

bthci_evt.max_tx_latency  Max. Tx Latency
    Unsigned 16-bit integer
    Max. Tx Latency

bthci_evt.min_local_timeout  Min. Local Timeout
    Unsigned 16-bit integer
    Min. Local Timeout

bthci_evt.min_remote_timeout  Min. Remote Timeout
    Unsigned 16-bit integer
    Min. Remote Timeout

bthci_evt.notification_type  Notification Type
    Unsigned 8-bit integer
    Notification Type

bthci_evt.num_broad_retran  Num Broadcast Retran
    Unsigned 8-bit integer
    Number of Broadcast Retransmissions
```

bthci\_evt.num\_command\_packets Number of Allowed Command Packets  
Unsigned 8-bit integer  
Number of Allowed Command Packets

bthci\_evt.num\_compl\_packets Number of Completed Packets  
Unsigned 16-bit integer  
The number of HCI Data Packets that have been completed

bthci\_evt.num\_curr\_iac Num Current IAC  
Unsigned 8-bit integer  
Num of IACs currently in use to simultaneously listen

bthci\_evt.num\_handles Number of Connection Handles  
Unsigned 8-bit integer  
Number of Connection Handles and Num\_HCI\_Data\_Packets parameter pairs

bthci\_evt.num\_keys Number of Link Keys  
Unsigned 8-bit integer  
Number of Link Keys contained

bthci\_evt.num\_keys\_deleted Number of Link Keys Deleted  
Unsigned 16-bit integer  
Number of Link Keys Deleted

bthci\_evt.num\_keys\_read Number of Link Keys Read  
Unsigned 16-bit integer  
Number of Link Keys Read

bthci\_evt.num\_keys\_written Number of Link Keys Written  
Unsigned 8-bit integer  
Number of Link Keys Written

bthci\_evt.num\_responses Number of responses  
Unsigned 8-bit integer  
Number of Responses from Inquiry

bthci\_evt.num\_supp\_iac Num Support IAC  
Unsigned 8-bit integer  
Num of supported IAC the device can simultaneously listen

bthci\_evt.numeric\_value Numeric Value  
Unsigned 32-bit integer  
Numeric Value

bthci\_evt.ocf ocf  
Unsigned 16-bit integer  
Opcode Command Field

bthci\_evt.ogf ogf  
Unsigned 16-bit integer  
Opcode Group Field

bthci\_evt.oob\_data\_present OOB Data Present  
Unsigned 8-bit integer  
OOB Data Present

bthci\_evt.page\_number Page Number  
Unsigned 8-bit integer  
Page Number

bthci\_evt.page\_scan\_mode Page Scan Mode  
Unsigned 8-bit integer  
Page Scan Mode

```
bthci_evt.page_scan_period_mode  Page Scan Period Mode
    Unsigned 8-bit integer
    Page Scan Period Mode

bthci_evt.page_scan_repetition_mode  Page Scan Repetition Mode
    Unsigned 8-bit integer
    Page Scan Repetition Mode

bthci_evt.param_length  Parameter Total Length
    Unsigned 8-bit integer
    Parameter Total Length

bthci_evt.params  Event Parameter
    No value
    Event Parameter

bthci_evt.passkey  Passkey
    Unsigned 32-bit integer
    Passkey

bthci_evt.peak_bandwidth  Available Peak Bandwidth
    Unsigned 32-bit integer
    Available Peak Bandwidth, in bytes per second

bthci_evt.pin_type  PIN Type
    Unsigned 8-bit integer
    PIN Types

bthci_evt.power_level_type  Type
    Unsigned 8-bit integer
    Type

bthci_evt.randomizer_r  Randomizer R
    Unsigned 16-bit integer
    Randomizer R

bthci_evt.reason  Reason
    Unsigned 8-bit integer
    Reason

bthci_evt.remote_name  Remote Name
    String
    Userfriendly descriptive name for the remote device

bthci_evt.ret_params  Return Parameter
    No value
    Return Parameter

bthci_evt.role  Role
    Unsigned 8-bit integer
    Role

bthci_evt.rssi  RSSI (dB)
    Signed 8-bit integer
    RSSI (dB)

bthci_evt.scan_enable  Scan
    Unsigned 8-bit integer
    Scan Enable

bthci_evt.sco_flow_cont_enable  SCO Flow Control
    Unsigned 8-bit integer
    SCO Flow Control Enable
```

```
bthci_evt.service_type  Service Type
    Unsigned 8-bit integer
    Service Type

bthci_evt.simple_pairing_mode  Simple Pairing Mode
    Unsigned 8-bit integer
    Simple Pairing Mode

bthci_evt.status  Status
    Unsigned 8-bit integer
    Status

bthci_evt.sync_link_type  Link Type
    Unsigned 8-bit integer
    Link Type

bthci_evt.sync_rtx_window  Retransmit Window
    Unsigned 8-bit integer
    Retransmit Window

bthci_evt.sync_rx_pkt_len  Rx Packet Length
    Unsigned 16-bit integer
    Rx Packet Length

bthci_evt.sync_tx_interval  Transmit Interval
    Unsigned 8-bit integer
    Transmit Interval

bthci_evt.sync_tx_pkt_len  Tx Packet Length
    Unsigned 16-bit integer
    Tx Packet Length

bthci_evt.timeout  Timeout
    Unsigned 16-bit integer
    Number of Baseband slots for timeout.

bthci_evt.token_bucket_size  Token Bucket Size
    Unsigned 32-bit integer
    Token Bucket Size (bytes)

bthci_evt.token_rate  Available Token Rate
    Unsigned 32-bit integer
    Available Token Rate, in bytes per second

bthci_evt.transmit_power_level  Transmit Power Level (dBm)
    Signed 8-bit integer
    Transmit Power Level (dBm)

bthci_evt.window  Interval
    Unsigned 16-bit integer
    Window

bthci_evt_curr_role  Current Role
    Unsigned 8-bit integer
    Current role for this connection handle
```

**Bluetooth HCI H4 (hci\_h4)**

```
hci_h4.direction  Direction
    Unsigned 8-bit integer
    HCI Packet Direction Sent/Rcvd
```

hci\_h4.type HCI Packet Type  
Unsigned 8-bit integer  
HCI Packet Type

**Bluetooth HCI SCO Packet (bthci\_sco)**

btsco.chandle Connection Handle  
Unsigned 16-bit integer  
Connection Handle

btsco.data Data  
No value  
Data

btsco.length Data Total Length  
Unsigned 8-bit integer  
Data Total Length

**Bluetooth L2CAP Packet (btl2cap)**

btl2cap.cid CID  
Unsigned 16-bit integer  
L2CAP Channel Identifier

btl2cap.cmd\_code Command Code  
Unsigned 8-bit integer  
L2CAP Command Code

btl2cap.cmd\_data Command Data  
No value  
L2CAP Command Data

btl2cap.cmd\_ident Command Identifier  
Unsigned 8-bit integer  
L2CAP Command Identifier

btl2cap.cmd\_length Command Length  
Unsigned 8-bit integer  
L2CAP Command Length

btl2cap.command Command  
No value  
L2CAP Command

btl2cap.conf\_param\_option Configuration Parameter Option  
No value  
Configuration Parameter Option

btl2cap.conf\_result Result  
Unsigned 16-bit integer  
Configuration Result

btl2cap.continuation Continuation Flag  
Boolean  
Continuation Flag

btl2cap.dcid Destination CID  
Unsigned 16-bit integer  
Destination Channel Identifier

```
bt12cap.info_bidirqos  Bi-Directional QOS
    Unsigned 8-bit integer
    Bi-Directional QOS support

bt12cap.info_flowcontrol  Flow Control Mode
    Unsigned 8-bit integer
    Flow Control mode support

bt12cap.info_mtu  Remote Entity MTU
    Unsigned 16-bit integer
    Remote entities acceptable connectionless MTU

bt12cap.info_result  Result
    Unsigned 16-bit integer
    Information about the success of the request

bt12cap.info_retransmission  Retransmission Mode
    Unsigned 8-bit integer
    Retransmission mode support

bt12cap.info_type  Information Type
    Unsigned 16-bit integer
    Type of implementation-specific information

bt12cap.length  Length
    Unsigned 16-bit integer
    L2CAP Payload Length

bt12cap.maxtransmit  MaxTransmit
    Unsigned 8-bit integer
    Maximum I-frame retransmissions

bt12cap.monitortimeout  Monitor Timeout (ms)
    Unsigned 16-bit integer
    S-frame transmission interval (milliseconds)

bt12cap.mps  MPS
    Unsigned 16-bit integer
    Maximum PDU Payload Size

bt12cap.option_delayvar  Delay Variation (microseconds)
    Unsigned 32-bit integer
    Difference between maximum and minimum delay (microseconds)

bt12cap.option_flags  Flags
    Unsigned 8-bit integer
    Flags - must be set to 0 (Reserved for future use)

bt12cap.option_flush_to  Flush Timeout (ms)
    Unsigned 16-bit integer
    Flush Timeout in milliseconds

bt12cap.option_latency  Latency (microseconds)
    Unsigned 32-bit integer
    Maximal acceptable delay (microseconds)

bt12cap.option_length  Length
    Unsigned 8-bit integer
    Number of octets in option payload

bt12cap.option_mtu  MTU
    Unsigned 16-bit integer
    Maximum Transmission Unit
```

```
bt12cap.option_peakbandwidth  Peak Bandwidth (bytes/s)
    Unsigned 32-bit integer
    Limit how fast packets may be sent (bytes/s)

bt12cap.option_servicetype    Service Type
    Unsigned 8-bit integer
    Level of service required

bt12cap.option_tokenbysize    Token Bucket Size (bytes)
    Unsigned 32-bit integer
    Size of the token bucket (bytes)

bt12cap.option_tokenrate     Token Rate (bytes/s)
    Unsigned 32-bit integer
    Rate at which traffic credits are granted (bytes/s)

bt12cap.option_type          Type
    Unsigned 8-bit integer
    Type of option

bt12cap.payload              Payload
    Byte array
    L2CAP Payload

bt12cap.psm                  PSM
    Unsigned 16-bit integer
    Protocol/Service Multiplexor

bt12cap.rej_reason           Reason
    Unsigned 16-bit integer
    Reason

bt12cap.result               Result
    Unsigned 16-bit integer
    Result

bt12cap.retransmissionmode   Mode
    Unsigned 8-bit integer
    Retransmission/Flow Control mode

bt12cap.retransmittimeout    Retransmit timeout (ms)
    Unsigned 16-bit integer
    Retransmission timeout (milliseconds)

bt12cap.scid                 Source CID
    Unsigned 16-bit integer
    Source Channel Identifier

bt12cap.sig_mtu              Maximum Signalling MTU
    Unsigned 16-bit integer
    Maximum Signalling MTU

bt12cap.status               Status
    Unsigned 16-bit integer
    Status

bt12cap.txwindow             TxWindow
    Unsigned 8-bit integer
    Retransmission window size
```

**Bluetooth RFCOMM Packet (btrfcomm)**

```
btrfcomm.cr  C/R Flag
  Unsigned 8-bit integer
  Command/Response flag

btrfcomm.credits  Credits
  Unsigned 8-bit integer
  Flow control: number of UIH frames allowed to send

btrfcomm.dlci  DLCI
  Unsigned 8-bit integer
  RFCOMM DLCI

btrfcomm.ea  EA Flag
  Unsigned 8-bit integer
  EA flag (should be always 1)

btrfcomm.error_recovery_mode  Error Recovery Mode
  Unsigned 8-bit integer
  Error Recovery Mode

btrfcomm.fcs  Frame Check Sequence
  Unsigned 8-bit integer
  Checksum over frame

btrfcomm.frame_type  Frame type
  Unsigned 8-bit integer
  Command/Response flag

btrfcomm.len  Payload length
  Unsigned 16-bit integer
  Frame length

btrfcomm.max_frame_size  Max Frame Size
  Unsigned 16-bit integer
  Maximum Frame Size

btrfcomm.max_retrans  Max Retrans
  Unsigned 8-bit integer
  Maximum number of retransmissions

btrfcomm.mcc.cmd  C/R Flag
  Unsigned 8-bit integer
  Command/Response flag

btrfcomm.mcc.cr  C/R Flag
  Unsigned 8-bit integer
  Command/Response flag

btrfcomm.mcc.ea  EA Flag
  Unsigned 8-bit integer
  EA flag (should be always 1)

btrfcomm.mcc.len  MCC Length
  Unsigned 16-bit integer
  Length of MCC data

btrfcomm.msc.bl  Length of break in units of 200ms
  Unsigned 8-bit integer
  Length of break in units of 200ms
```



```
btrfcomm.msc.dv  Data Valid (DV)
    Unsigned 8-bit integer
    Data Valid

btrfcomm.msc.fc  Flow Control (FC)
    Unsigned 8-bit integer
    Flow Control

btrfcomm.msc.ic  Incoming Call Indicator (IC)
    Unsigned 8-bit integer
    Incoming Call Indicator

btrfcomm.msc.rtc Ready To Communicate (RTC)
    Unsigned 8-bit integer
    Ready To Communicate

btrfcomm.msc.rtr Ready To Receive (RTR)
    Unsigned 8-bit integer
    Ready To Receive

btrfcomm.pf     P/F flag
    Unsigned 8-bit integer
    Poll/Final bit

btrfcomm.pn.cl  Convergence layer
    Unsigned 8-bit integer
    Convergence layer used for that particular DLCI

btrfcomm.pn.i   Type of frame
    Unsigned 8-bit integer
    Type of information frames used for that particular DLCI

btrfcomm.priority Priority
    Unsigned 8-bit integer
    Priority
```

**Bluetooth SDP (btsdp)**

```
btsdp.error_code  ErrorCode
    Unsigned 16-bit integer
    Error Code

btsdp.len  ParameterLength
    Unsigned 16-bit integer
    ParameterLength

btsdp.pdu  PDU
    Unsigned 8-bit integer
    PDU type

btsdp.ssares.byte_count  AttributeListsByteCount
    Unsigned 16-bit integer
    count of bytes in attribute list response

btsdp.ssr.current_count  CurrentServiceRecordCount
    Unsigned 16-bit integer
    count of service records in this message

btsdp.ssr.total_count  TotalServiceRecordCount
    Unsigned 16-bit integer
    Total count of service records
```

btsdp.tid TransactionID  
Unsigned 16-bit integer  
Transaction ID

**Boardwalk (brdwlk)**

brdwlk.drop Packet Dropped  
Boolean

brdwlk.eof EOF  
Unsigned 8-bit integer  
EOF

brdwlk.error Error  
Unsigned 8-bit integer  
Error

brdwlk.error.crc CRC  
Boolean

brdwlk.error.ctrl Ctrl Char Inside Frame  
Boolean

brdwlk.error.ef Empty Frame  
Boolean

brdwlk.error.ff Fifo Full  
Boolean

brdwlk.error.jumbo Jumbo FC Frame  
Boolean

brdwlk.error.nd No Data  
Boolean

brdwlk.error.plp Packet Length Present  
Boolean

brdwlk.error.tr Truncated  
Boolean

brdwlk.pktcnt Packet Count  
Unsigned 16-bit integer

brdwlk.plen Original Packet Length  
Unsigned 32-bit integer

brdwlk.sof SOF  
Unsigned 8-bit integer  
SOF

brdwlk.vsan VSAN  
Unsigned 16-bit integer

**Boot Parameters (bootparams)**

bootparams.domain Client Domain  
String  
Client Domain

bootparams.fileid File ID  
String  
File ID

```
bootparams.filepath  File Path
    String
    File Path

bootparams.host      Client Host
    String
    Client Host

bootparams.hostaddr  Client Address
    IPv4 address
    Address

bootparams.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

bootparams.routeraddr  Router Address
    IPv4 address
    Router Address

bootparams.type      Address Type
    Unsigned 32-bit integer
    Address Type
```

**Bootstrap Protocol (bootp)**

```
bootp.client_id_uuid  Client Identifier (UUID)
    Client Machine Identifier (UUID)

bootp.client_network_id_major  Client Network ID Major Version
    Unsigned 8-bit integer
    Client Machine Identifier, Major Version

bootp.client_network_id_minor  Client Network ID Minor Version
    Unsigned 8-bit integer
    Client Machine Identifier, Major Version

bootp.cookie          Magic cookie
    IPv4 address

bootp.dhcp            Frame is DHCP
    Boolean

bootp.file            Boot file name
    String

bootp.flags           Bootp flags
    Unsigned 16-bit integer

bootp.flags.bc        Broadcast flag
    Boolean

bootp.flags.reserved  Reserved flags
    Unsigned 16-bit integer

bootp.fqdn.e          Encoding
    Boolean
    If true, name is binary encoded

bootp.fqdn.mbz        Reserved flags
    Unsigned 8-bit integer
```

```
bootp.fqdn.n  Server DDNS
              Boolean
              If true, server should not do any DDNS updates
bootp.fqdn.name  Client name
                Byte array
                Name to register via DDNS
bootp.fqdn.o  Server overrides
              Boolean
              If true, server insists on doing DDNS update
bootp.fqdn.rcode1  A-RR result
                  Unsigned 8-bit integer
                  Result code of A-RR update
bootp.fqdn.rcode2  PTR-RR result
                  Unsigned 8-bit integer
                  Result code of PTR-RR update
bootp.fqdn.s  Server
              Boolean
              If true, server should do DDNS update
bootp.hops  Hops
            Unsigned 8-bit integer
bootp.hw.addr  Client hardware address
              Byte array
bootp.hw.len  Hardware address length
             Unsigned 8-bit integer
bootp.hw.mac_addr  Client MAC address
                  6-byte Hardware (MAC) Address
bootp.hw.type  Hardware type
              Unsigned 8-bit integer
bootp.id  Transaction ID
         Unsigned 32-bit integer
bootp.ip.client  Client IP address
                IPv4 address
bootp.ip.relay  Relay agent IP address
               IPv4 address
bootp.ip.server  Next server IP address
                 IPv4 address
bootp.ip.your  Your (client) IP address
              IPv4 address
bootp.option.length  Length
                    Unsigned 8-bit integer
                    Bootp/Dhcp option length
bootp.option.type  Option
                  Unsigned 8-bit integer
                  Bootp/Dhcp option type
```

```
bootp.option.value  Value
    Byte array
    Bootp/Dhcp option value
bootp.secs  Seconds elapsed
    Unsigned 16-bit integer
bootp.server  Server host name
    String
bootp.type  Message type
    Unsigned 8-bit integer
bootp.vendor  Bootp Vendor Options
    Byte array
bootp.vendor.alu.tftp1  Spatial Redundancy TFTP1
    IPv4 address
bootp.vendor.alu.tftp2  Spatial Redundancy TFTP2
    IPv4 address
bootp.vendor.alu.vid  Voice VLAN ID
    Unsigned 16-bit integer
    Alcatel-Lucent VLAN ID to define Voice VLAN
bootp.vendor.docsis.cmcap_len  CM DC Length
    Unsigned 8-bit integer
    DOCSIS Cable Modem Device Capabilities Length
bootp.vendor.pktc.mtacap_len  MTA DC Length
    Unsigned 8-bit integer
    PacketCable MTA Device Capabilities Length
```

### **Border Gateway Protocol (bgp)**

```
bgp.aggregator_as  Aggregator AS
    Unsigned 16-bit integer
bgp.aggregator_origin  Aggregator origin
    IPv4 address
bgp.as_path  AS Path
    Unsigned 16-bit integer
bgp.cluster_identifier  Cluster identifier
    IPv4 address
bgp.cluster_list  Cluster List
    Byte array
bgp.community_as  Community AS
    Unsigned 16-bit integer
bgp.community_value  Community value
    Unsigned 16-bit integer
bgp.local_pref  Local preference
    Unsigned 32-bit integer
bgp.mp_nlri_tnl_id  MP Reach NLRI Tunnel Identifier
    Unsigned 16-bit integer
bgp.mp_reach_nlri_ipv4_prefix  MP Reach NLRI IPv4 prefix
    IPv4 address
```

```
bgp.mp_unreach_nlri_ipv4_prefix  MP Unreach NLRI IPv4 prefix
    IPv4 address
bgp.multi_exit_disc  Multiple exit discriminator
    Unsigned 32-bit integer
bgp.next_hop  Next hop
    IPv4 address
bgp.nlri_prefix  NLRI prefix
    IPv4 address
bgp.origin  Origin
    Unsigned 8-bit integer
bgp.originator_id  Originator identifier
    IPv4 address
bgp.ssa_l2tpv3_Unused  Unused
    Boolean
    Unused Flags
bgp.ssa_l2tpv3_cookie  Cookie
    Byte array
    Cookie
bgp.ssa_l2tpv3_cookie_len  Cookie Length
    Unsigned 8-bit integer
    Cookie Length
bgp.ssa_l2tpv3_pref  Preference
    Unsigned 16-bit integer
    Preference
bgp.ssa_l2tpv3_s  Sequencing bit
    Boolean
    Sequencing S-bit
bgp.ssa_l2tpv3_session_id  Session ID
    Unsigned 32-bit integer
    Session ID
bgp.ssa_len  Length
    Unsigned 16-bit integer
    SSA Length
bgp.ssa_t  Transitive bit
    Boolean
    SSA Transitive bit
bgp.ssa_type  SSA Type
    Unsigned 16-bit integer
    SSA Type
bgp.ssa_value  Value
    Byte array
    SSA Value
bgp.type  Type
    Unsigned 8-bit integer
    BGP message type
bgp.withdrawn_prefix  Withdrawn prefix
    IPv4 address
```

**Building Automation and Control Network APDU (bacapp)**

bacapp.LVT Length Value Type  
Unsigned 8-bit integer  
Length Value Type

bacapp.NAK NAK  
Boolean  
negativ ACK

bacapp.SA SA  
Boolean  
Segmented Response accepted

bacapp.SRV SRV  
Boolean  
Server

bacapp.abort\_reason Abort Reason  
Unsigned 8-bit integer  
Abort Reason

bacapp.application\_tag\_number Application Tag Number  
Unsigned 8-bit integer  
Application Tag Number

bacapp.confirmed\_service Service Choice  
Unsigned 8-bit integer  
Service Choice

bacapp.context\_tag\_number Context Tag Number  
Unsigned 8-bit integer  
Context Tag Number

bacapp.extended\_tag\_number Extended Tag Number  
Unsigned 8-bit integer  
Extended Tag Number

bacapp.instance\_number Instance Number  
Unsigned 32-bit integer  
Instance Number

bacapp.invoke\_id Invoke ID  
Unsigned 8-bit integer  
Invoke ID

bacapp.max\_adpu\_size Size of Maximum ADPU accepted  
Unsigned 8-bit integer  
Size of Maximum ADPU accepted

bacapp.more\_segments More Segments  
Boolean  
More Segments Follow

bacapp.named\_tag Named Tag  
Unsigned 8-bit integer  
Named Tag

bacapp.objectType Object Type  
Unsigned 32-bit integer  
Object Type

```
bacapp.pduflags  PDU Flags
  Unsigned 8-bit integer
  PDU Flags

bacapp.processId  ProcessIdentifier
  Unsigned 32-bit integer
  Process Identifier

bacapp.reject_reason  Reject Reason
  Unsigned 8-bit integer
  Reject Reason

bacapp.response_segments  Max Response Segments accepted
  Unsigned 8-bit integer
  Max Response Segments accepted

bacapp.segmented_request  Segmented Request
  Boolean
  Segmented Request

bacapp.sequence_number  Sequence Number
  Unsigned 8-bit integer
  Sequence Number

bacapp.string_character_set  String Character Set
  Unsigned 8-bit integer
  String Character Set

bacapp.tag  BACnet Tag
  Byte array
  BACnet Tag

bacapp.tag_class  Tag Class
  Boolean
  Tag Class

bacapp.tag_value16  Tag Value 16-bit
  Unsigned 16-bit integer
  Tag Value 16-bit

bacapp.tag_value32  Tag Value 32-bit
  Unsigned 32-bit integer
  Tag Value 32-bit

bacapp.tag_value8  Tag Value
  Unsigned 8-bit integer
  Tag Value

bacapp.type  APDU Type
  Unsigned 8-bit integer
  APDU Type

bacapp.unconfirmed_service  Unconfirmed Service Choice
  Unsigned 8-bit integer
  Unconfirmed Service Choice

bacapp.variable_part  BACnet APDU variable part:
  No value
  BACnet APDU variable part

bacapp.window_size  Proposed Window Size
  Unsigned 8-bit integer
  Proposed Window Size
```



**Building Automation and Control Network NPDU (bacnet)**

```
bacnet.control    Control
                  Unsigned 8-bit integer
                  BACnet Control

bacnet.control_dest  Destination Specifier
                  Boolean
                  BACnet Control

bacnet.control_expect  Expecting Reply
                  Boolean
                  BACnet Control

bacnet.control_net    NSDU contains
                  Boolean
                  BACnet Control

bacnet.control_prio_high  Priority
                  Boolean
                  BACnet Control

bacnet.control_prio_low  Priority
                  Boolean
                  BACnet Control

bacnet.control_res1    Reserved
                  Boolean
                  BACnet Control

bacnet.control_res2    Reserved
                  Boolean
                  BACnet Control

bacnet.control_src    Source specifier
                  Boolean
                  BACnet Control

bacnet.dadr_eth    Destination ISO 8802-3 MAC Address
                  6-byte Hardware (MAC) Address
                  Destination ISO 8802-3 MAC Address

bacnet.dadr_mstp    DADR
                  Unsigned 8-bit integer
                  Destination MS/TP or ARCNET MAC Address

bacnet.dadr_tmp    Unknown Destination MAC
                  Byte array
                  Unknown Destination MAC

bacnet.dlen    Destination MAC Layer Address Length
                  Unsigned 8-bit integer
                  Destination MAC Layer Address Length

bacnet.dnet    Destination Network Address
                  Unsigned 16-bit integer
                  Destination Network Address

bacnet.hopc    Hop Count
                  Unsigned 8-bit integer
                  Hop Count
```

```
bacnet.mesgtyp  Network Layer Message Type
                Unsigned 8-bit integer
                Network Layer Message Type

bacnet.perf     Performance Index
                Unsigned 8-bit integer
                Performance Index

bacnet.pinfoLen Port Info Length
                Unsigned 8-bit integer
                Port Info Length

bacnet.portid   Port ID
                Unsigned 8-bit integer
                Port ID

bacnet.rejectreason  Reject Reason
                Unsigned 8-bit integer
                Reject Reason

bacnet.rportnum Number of Port Mappings
                Unsigned 8-bit integer
                Number of Port Mappings

bacnet.sadr_eth  SADR
                6-byte Hardware (MAC) Address
                Source ISO 8802-3 MAC Address

bacnet.sadr_mstp SADR
                Unsigned 8-bit integer
                Source MS/TP or ARCNET MAC Address

bacnet.sadr_tmp  Unknown Source MAC
                Byte array
                Unknown Source MAC

bacnet.slenn    Source MAC Layer Address Length
                Unsigned 8-bit integer
                Source MAC Layer Address Length

bacnet.snet     Source Network Address
                Unsigned 16-bit integer
                Source Network Address

bacnet.term_time_value  Termination Time Value (seconds)
                Unsigned 8-bit integer
                Termination Time Value

bacnet.vendor   Vendor ID
                Unsigned 16-bit integer
                Vendor ID

bacnet.version  Version
                Unsigned 8-bit integer
                BACnet Version
```

**CCSDS (ccsds)**

```
ccsds.apid     APID
                Unsigned 16-bit integer
                Represents APID
```

```
ccsds.checkword  checkword indicator
                  Unsigned 8-bit integer
                  checkword indicator

ccsds.dcc  Data Cycle Counter
           Unsigned 16-bit integer
           Data Cycle Counter

ccsds.length  packet length
              Unsigned 16-bit integer
              packet length

ccsds.packtype  packet type
               Unsigned 8-bit integer
               Packet Type - Unused in Ku-Band

ccsds.secheader  secondary header
                Boolean
                secondary header present

ccsds.seqflag  sequence flags
              Unsigned 16-bit integer
              sequence flags

ccsds.seqnum  sequence number
            Unsigned 16-bit integer
            sequence number

ccsds.time  time
           Byte array
           time

ccsds.timeid  time identifier
            Unsigned 8-bit integer
            time identifier

ccsds.type  type
          Unsigned 16-bit integer
          type

ccsds.version  version
             Unsigned 16-bit integer
             version

ccsds.vid  version identifier
         Unsigned 16-bit integer
         version identifier

ccsds.zoe  ZOE TLM
          Unsigned 8-bit integer
          CONTAINS S-BAND ZOE PACKETS
```

#### **CDS Clerk Server Calls (cds\_clerkserver)**

```
cds_clerkserver.opnum  Operation
                      Unsigned 16-bit integer
                      Operation
```

**CFM EOAM 802.1ag/ITU Protocol (cfm)**

cfm.ais.pdu CFM AIS PDU  
No value

cfm.all.tlvs CFM TLVs  
No value

cfm.aps.data APS data  
Byte array

cfm.aps.pdu CFM APS PDU  
No value

cfm.ccm.itu.t.y1731 Defined by ITU-T Y.1731  
No value

cfm.ccm.ma.ep.id Maintenance Association End Point Identifier  
Unsigned 16-bit integer

cfm.ccm.maid Maintenance Association Identifier (MEG ID)  
No value

cfm.ccm.maid.padding Zero-Padding  
No value

cfm.ccm.pdu CFM CCM PDU  
No value

cfm.ccm.seq.num Sequence Number  
Unsigned 32-bit integer

cfm.dmm.dmr.rxtimestampb RxTimestampb  
Byte array

cfm.dmm.dmr.txtimestampb TxTimestampb  
Byte array

cfm.dmm.pdu CFM DMM PDU  
No value

cfm.dmr.pdu CFM DMR PDU  
No value

cfm.exm.pdu CFM EXM PDU  
No value

cfm.exr.pdu CFM EXR PDU  
No value

cfm.first.tlv.offset First TLV Offset  
Unsigned 8-bit integer

cfm.flags Flags  
Unsigned 8-bit integer

cfm.flags.ccm.reserved Reserved  
Unsigned 8-bit integer

cfm.flags.fwdyes FwdYes  
Unsigned 8-bit integer

cfm.flags.interval Interval Field  
Unsigned 8-bit integer

cfm.flags.ltm.reserved Reserved  
Unsigned 8-bit integer

```
cfm.flags.ltr.reserved  Reserved
                        Unsigned 8-bit integer
cfm.flags.ltr.termalmep TerminalMEP
                        Unsigned 8-bit integer
cfm.flags.period       Period
                        Unsigned 8-bit integer
cfm.flags.rdi          RDI
                        Unsigned 8-bit integer
cfm.flags.reserved     Reserved
                        Unsigned 8-bit integer
cfm.flags.usefdbonly   UseFDBOnly
                        Unsigned 8-bit integer
cfm.itu.reserved       Reserved
                        Byte array
cfm.itu.rxfcB          RxFCb
                        Byte array
cfm.itu.txfcB          TxFCb
                        Byte array
cfm.itu.txfcf          TxFCf
                        Byte array
cfm.lb.transaction.id  Loopback Transaction Identifier
                        Unsigned 32-bit integer
cfm.lbm.pdu            CFM LBM PDU
                        No value
cfm.lbr.pdu            CFM LBR PDU
                        No value
cfm.lck.pdu            CFM LCK PDU
                        No value
cfm.lmm.lmr.rxfcf     RxFCf
                        Byte array
cfm.lmm.lmr.txfcB     TxFCb
                        Byte array
cfm.lmm.lmr.txfcf     TxFCf
                        Byte array
cfm.lmm.pdu            CFM LMM PDU
                        No value
cfm.lmr.pdu            CFM LMR PDU
                        No value
cfm.lt.transaction.id Linktrace Transaction Identifier
                        Unsigned 32-bit integer
cfm.lt.ttl             Linktrace TTL
                        Unsigned 8-bit integer
cfm.ltm.orig.addr      Linktrace Message: Original Address
                        6-byte Hardware (MAC) Address
```

```
cfm.ltm.pdu    CFM LTM PDU
               No value

cfm.ltm.targ.addr  Linktrace Message:   Target Address
                  6-byte Hardware (MAC) Address

cfm.ltr.pdu    CFM LTR PDU
               No value

cfm.ltr.relay.action  Linktrace Reply Relay Action
                     Unsigned 8-bit integer

cfm.maid.ma.name  Short MA Name
                  String

cfm.maid.ma.name.format  Short MA Name (MEG ID) Format
                          Unsigned 8-bit integer

cfm.maid.ma.name.length  Short MA Name (MEG ID) Length
                          Unsigned 8-bit integer

cfm.maid.md.name  MD Name (String)
                  String

cfm.maid.md.name.format  MD Name Format
                          Unsigned 8-bit integer

cfm.maid.md.name.length  MD Name Length
                          Unsigned 8-bit integer

cfm.maid.md.name.mac  MD Name (MAC)
                      6-byte Hardware (MAC) Address

cfm.maid.md.name.mac.id  MD Name (MAC)
                          Byte array

cfm.mcc.data  MCC data
              Byte array

cfm.mcc.pdu  CFM MCC PDU
             No value

cfm.md.level  CFM MD Level
              Unsigned 8-bit integer

cfm.odm.dmm.dmr.rxtimestampf  RxTimestampf
                               Byte array

cfm.odm.dmm.dmr.txtimestampf  TxTimestampf
                               Byte array

cfm.odm.pdu  CFM lDM PDU
             No value

cfm.opcode  CFM OpCode
            Unsigned 8-bit integer

cfm.tlv.chassis.id  Chassis ID
                   Byte array

cfm.tlv.chassis.id.length  Chassis ID Length
                           Unsigned 8-bit integer

cfm.tlv.chassis.id.subtype  Chassis ID Sub-type
                            Unsigned 8-bit integer
```

```
cfm.tlv.data.value  Data Value
    Byte array
cfm.tlv.length  TLV Length
    Unsigned 16-bit integer
cfm.tlv.ltm.egress.id.mac  Egress Identifier - MAC of LT Initiator/Responder
    6-byte Hardware (MAC) Address
cfm.tlv.ltm.egress.id.ui  Egress Identifier - Unique Identifier
    Byte array
cfm.tlv.ltr.egress.last.id.mac  Last Egress Identifier - MAC address
    6-byte Hardware (MAC) Address
cfm.tlv.ltr.egress.last.id.ui  Last Egress Identifier - Unique Identifier
    Byte array
cfm.tlv.ltr.egress.next.id.mac  Next Egress Identifier - MAC address
    6-byte Hardware (MAC) Address
cfm.tlv.ltr.egress.next.id.ui  Next Egress Identifier - Unique Identifier
    Byte array
cfm.tlv.ma.domain  Management Address Domain
    Byte array
cfm.tlv.ma.domain.length  Management Address Domain Length
    Unsigned 8-bit integer
cfm.tlv.management.addr  Management Address
    Byte array
cfm.tlv.management.addr.length  Management Address Length
    Unsigned 8-bit integer
cfm.tlv.org.spec.oui  OUI
    Byte array
cfm.tlv.org.spec.subtype  Sub-Type
    Byte array
cfm.tlv.org.spec.value  Value
    Byte array
cfm.tlv.port.interface.value  Interface Status value
    Unsigned 8-bit integer
cfm.tlv.port.status.value  Port Status value
    Unsigned 8-bit integer
cfm.tlv.reply.egress.action  Egress Action
    Unsigned 8-bit integer
cfm.tlv.reply.egress.mac.address  Egress MAC address
    6-byte Hardware (MAC) Address
cfm.tlv.reply.ingress.action  Ingress Action
    Unsigned 8-bit integer
cfm.tlv.reply.ingress.mac.address  Ingress MAC address
    6-byte Hardware (MAC) Address
cfm.tlv.tst.crc32  CRC-32
    Byte array
```

```

cfm.tlv.tst.test.pattern  Test Pattern
    No value
cfm.tlv.tst.test.pattern.type  Test Pattern Type
    Unsigned 8-bit integer
cfm.tlv.type  TLV Type
    Unsigned 8-bit integer
cfm.tst.pdu  CFM TST PDU
    No value
cfm.tst.sequence.num  Sequence Number
    Unsigned 32-bit integer
cfm.version  CFM Version
    Unsigned 8-bit integer
cfm.vsm.pdu  CFM VSM PDU
    No value
cfm.vsr.pdu  CFM VSR PDU
    No value

```

**CRTP (crtp)**

```

crtp.cid  Context Id
    Unsigned 16-bit integer
    The context identifier of the compressed packet.
crtp.cnt  Count
    Unsigned 8-bit integer
    The count of the context state packet.
crtp.flags  Flags
    Unsigned 8-bit integer
    The flags of the full header packet.
crtp.gen  Generation
    Unsigned 8-bit integer
    The generation of the compressed packet.
crtp.invalid  Invalid
    Boolean
    The invalid bit of the context state packet.
crtp.seq  Sequence
    Unsigned 8-bit integer
    The sequence of the compressed packet.

```

**CSM\_ENCAPS (csm\_encaps)**

```

csm_encaps.channel  Channel Number
    Unsigned 16-bit integer
    CSM_ENCAPS Channel Number
csm_encaps.class  Class
    Unsigned 8-bit integer
    CSM_ENCAPS Class
csm_encaps.ctrl  Control
    Unsigned 8-bit integer
    CSM_ENCAPS Control

```



```
csm_encaps.ctrl.ack    Packet Bit
    Boolean
    Message Packet/ACK Packet

csm_encaps.ctrl.ack_suppress  ACK Suppress Bit
    Boolean
    ACK Required/ACK Suppressed

csm_encaps.ctrl.endian  Endian Bit
    Boolean
    Little Endian/Big Endian

csm_encaps.function_code  Function Code
    Unsigned 16-bit integer
    CSM_ENCAPS Function Code

csm_encaps.index  Index
    Unsigned 8-bit integer
    CSM_ENCAPS Index

csm_encaps.length  Length
    Unsigned 8-bit integer
    CSM_ENCAPS Length

csm_encaps.opcode  Opcode
    Unsigned 16-bit integer
    CSM_ENCAPS Opcode

csm_encaps.param  Parameter
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter

csm_encaps.param1  Parameter 1
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 1

csm_encaps.param10  Parameter 10
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 10

csm_encaps.param11  Parameter 11
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 11

csm_encaps.param12  Parameter 12
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 12

csm_encaps.param13  Parameter 13
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 13

csm_encaps.param14  Parameter 14
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 14

csm_encaps.param15  Parameter 15
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 15

csm_encaps.param16  Parameter 16
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 16
```

```
csm_encaps.param17  Parameter 17
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 17

csm_encaps.param18  Parameter 18
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 18

csm_encaps.param19  Parameter 19
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 19

csm_encaps.param2   Parameter 2
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 2

csm_encaps.param20  Parameter 20
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 20

csm_encaps.param21  Parameter 21
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 21

csm_encaps.param22  Parameter 22
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 22

csm_encaps.param23  Parameter 23
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 23

csm_encaps.param24  Parameter 24
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 24

csm_encaps.param25  Parameter 25
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 25

csm_encaps.param26  Parameter 26
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 26

csm_encaps.param27  Parameter 27
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 27

csm_encaps.param28  Parameter 28
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 28

csm_encaps.param29  Parameter 29
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 29

csm_encaps.param3   Parameter 3
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 3

csm_encaps.param30  Parameter 30
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 30
```

```
csm_encaps.param31  Parameter 31
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 31

csm_encaps.param32  Parameter 32
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 32

csm_encaps.param33  Parameter 33
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 33

csm_encaps.param34  Parameter 34
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 34

csm_encaps.param35  Parameter 35
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 35

csm_encaps.param36  Parameter 36
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 36

csm_encaps.param37  Parameter 37
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 37

csm_encaps.param38  Parameter 38
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 38

csm_encaps.param39  Parameter 39
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 39

csm_encaps.param4   Parameter 4
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 4

csm_encaps.param40  Parameter 40
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 40

csm_encaps.param5   Parameter 5
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 5

csm_encaps.param6   Parameter 6
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 6

csm_encaps.param7   Parameter 7
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 7

csm_encaps.param8   Parameter 8
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 8

csm_encaps.param9   Parameter 9
    Unsigned 16-bit integer
    CSM_ENCAPS Parameter 9
```

```

csm_encaps.reserved  Reserved
    Unsigned 16-bit integer
    CSM_ENCAPS Reserved

csm_encaps.seq_num  Sequence Number
    Unsigned 8-bit integer
    CSM_ENCAPS Sequence Number

csm_encaps.type  Type
    Unsigned 8-bit integer
    CSM_ENCAPS Type

```

**Calculation Application Protocol (calcappprotocol)**

```

calcappprotocol.message_completed  Completed
    Unsigned 64-bit integer

calcappprotocol.message_flags  Flags
    Unsigned 8-bit integer

calcappprotocol.message_jobid  JobID
    Unsigned 32-bit integer

calcappprotocol.message_jobsize  JobSize
    Unsigned 64-bit integer

calcappprotocol.message_length  Length
    Unsigned 16-bit integer

calcappprotocol.message_type  Type
    Unsigned 8-bit integer

```

**Call Specification Language (Xcsl) (xcsl)**

```

xcsl.command  Command
    String

xcsl.information  Information
    String

xcsl.parameter  Parameter
    String

xcsl.protocol_version  Protocol Version
    String

xcsl.result  Result
    String

xcsl.transacion_id  Transaction ID
    String

```

**Camel (camel)**

```

camel.ApplyChargingArg  ApplyChargingArg
    No value
    camel.ApplyChargingArg

camel.ApplyChargingGPRSArg  ApplyChargingGPRSArg
    No value
    camel.ApplyChargingGPRSArg

```

```

camel.ApplyChargingReportArg  ApplyChargingReportArg
    Byte array
    camel.ApplyChargingReportArg
camel.ApplyChargingReportGPRSArg  ApplyChargingReportGPRSArg
    No value
    camel.ApplyChargingReportGPRSArg
camel.AssistRequestInstructionsArg  AssistRequestInstructionsArg
    No value
    camel.AssistRequestInstructionsArg
camel.CAMEL_AChBillingChargingCharacteristics  CAMEL-AChBillingChargingCharacteristics
    Unsigned 32-bit integer
    CAMEL-AChBillingChargingCharacteristics
camel.CAMEL_CallResult  CAMEL-CAMEL_CallResult
    Unsigned 32-bit integer
    CAMEL-CallResult
camel.CAMEL_FCIBillingChargingCharacteristics  CAMEL-FCIBillingChargingCharacteristics
    Unsigned 32-bit integer
    CAMEL-FCIBillingChargingCharacteristics
camel.CAMEL_FCIGPRSBillingChargingCharacteristics  CAMEL-FCIGPRSBillingChargingCharacteristics
    Unsigned 32-bit integer
    CAMEL-FCIGPRSBillingChargingCharacteristics
camel.CAMEL_FCISMSBillingChargingCharacteristics  CAMEL-FCISMSBillingChargingCharacteristics
    Unsigned 32-bit integer
    CAMEL-FCISMSBillingChargingCharacteristics
camel.CAMEL_SCIBillingChargingCharacteristics  CAMEL-SCIBillingChargingCharacteristics
    Unsigned 32-bit integer
    CAMEL-SCIBillingChargingCharacteristics
camel.CAMEL_SCIGPRSBillingChargingCharacteristics  CAMEL-SCIGPRSBillingChargingCharacteristics
    Unsigned 32-bit integer
    CAMEL-FSCIGPRSBillingChargingCharacteristics
camel.CAP_GPRS_ReferenceNumber  CAP-GPRS-ReferenceNumber
    No value
    camel.CAP_GPRS_ReferenceNumber
camel.CAP_U_ABORT_REASON  CAP-U-ABORT-REASON
    Unsigned 32-bit integer
    camel.CAP_U_ABORT_REASON
camel.CallGapArg  CallGapArg
    No value
    camel.CallGapArg
camel.CallInformationReportArg  CallInformationReportArg
    No value
    camel.CallInformationReportArg
camel.CallInformationRequestArg  CallInformationRequestArg
    No value
    camel.CallInformationRequestArg
camel.CancelArg  CancelArg
    Unsigned 32-bit integer
    camel.CancelArg

```

```

camel.CancelGPRSArg  CancelGPRSArg
    No value
    camel.CancelGPRSArg

camel.CellGlobalIdOrServiceAreaIdFixedLength  CellGlobalIdOrServiceAreaIdFixedLength
    Byte array
    LocationInformationGPRS/CellGlobalIdOrServiceAreaIdOrLAI

camel.ChangeOfPositionControlInfo_item  Item
    Unsigned 32-bit integer
    camel.ChangeOfLocation

camel.ConnectArg  ConnectArg
    No value
    camel.ConnectArg

camel.ConnectGPRSArg  ConnectGPRSArg
    No value
    camel.ConnectGPRSArg

camel.ConnectSMSArg  ConnectSMSArg
    No value
    camel.ConnectSMSArg

camel.ConnectToResourceArg  ConnectToResourceArg
    No value
    camel.ConnectToResourceArg

camel.ContinueGPRSArg  ContinueGPRSArg
    No value
    camel.ContinueGPRSArg

camel.ContinueWithArgumentArg  ContinueWithArgumentArg
    No value
    camel.ContinueWithArgumentArg

camel.DestinationRoutingAddress_item  Item
    Byte array
    camel.CalledPartyNumber

camel.DisconnectForwardConnectionWithArgumentArg  DisconnectForwardConnectionWithArgumentArg
    No value
    camel.DisconnectForwardConnectionWithArgumentArg

camel.DisconnectLegArg  DisconnectLegArg
    No value
    camel.DisconnectLegArg

camel.EntityReleasedArg  EntityReleasedArg
    Unsigned 32-bit integer
    camel.EntityReleasedArg

camel.EntityReleasedGPRSArg  EntityReleasedGPRSArg
    No value
    camel.EntityReleasedGPRSArg

camel.EstablishTemporaryConnectionArg  EstablishTemporaryConnectionArg
    No value
    camel.EstablishTemporaryConnectionArg

camel.EventReportBCSMArg  EventReportBCSMArg
    No value
    camel.EventReportBCSMArg

```

```
camel.EventReportGPRSArg  EventReportGPRSArg
    No value
    camel.EventReportGPRSArg
camel.EventReportSMSArg  EventReportSMSArg
    No value
    camel.EventReportSMSArg
camel.Extensions_item  Item
    No value
    camel.ExtensionField
camel.FurnishChargingInformationArg  FurnishChargingInformationArg
    Byte array
    camel.FurnishChargingInformationArg
camel.FurnishChargingInformationGPRSArg  FurnishChargingInformationGPRSArg
    Byte array
    camel.FurnishChargingInformationGPRSArg
camel.FurnishChargingInformationSMSArg  FurnishChargingInformationSMSArg
    Byte array
    camel.FurnishChargingInformationSMSArg
camel.GenericNumbers_item  Item
    Byte array
    camel.GenericNumber
camel.InitialDPArg  InitialDPArg
    No value
    camel.InitialDPArg
camel.InitialDPGPRSArg  InitialDPGPRSArg
    No value
    camel.InitialDPGPRSArg
camel.InitialDPSMSArg  InitialDPSMSArg
    No value
    camel.InitialDPSMSArg
camel.InitiateCallAttemptArg  InitiateCallAttemptArg
    No value
    camel.InitiateCallAttemptArg
camel.InitiateCallAttemptRes  InitiateCallAttemptRes
    No value
    camel.InitiateCallAttemptRes
camel.InvokeId_present  InvokeId.present
    Signed 32-bit integer
    camel.InvokeId_present
camel.MetDPCriteriaList_item  Item
    Unsigned 32-bit integer
    camel.MetDPCriterion
camel.MoveLegArg  MoveLegArg
    No value
    camel.MoveLegArg
camel.PAR_cancelFailed  PAR-cancelFailed
    No value
    camel.PAR_cancelFailed
```

```
camel.PAR_requestedInfoError  PAR-requestedInfoError
    Unsigned 32-bit integer
    camel.PAR_requestedInfoError

camel.PAR_taskRefused  PAR-taskRefused
    Unsigned 32-bit integer
    camel.PAR_taskRefused

camel.PDPAddress_IPv4  PDPAddress IPv4
    IPv4 address
    IPAddress IPv4

camel.PDPAddress_IPv6  PDPAddress IPv6
    IPv6 address
    IPAddress IPv6

camel.PDPTYPE_number_etsi  ETSI defined PDP Type Value
    Unsigned 8-bit integer
    ETSI defined PDP Type Value

camel.PDPTYPE_number_ietf  IETF defined PDP Type Value
    Unsigned 8-bit integer
    IETF defined PDP Type Value

camel.PlayAnnouncementArg  PlayAnnouncementArg
    No value
    camel.PlayAnnouncementArg

camel.PlayToneArg  PlayToneArg
    No value
    camel.PlayToneArg

camel.PromptAndCollectUserInformationArg  PromptAndCollectUserInformationArg
    No value
    camel.PromptAndCollectUserInformationArg

camel.RP_Cause  RP Cause
    Unsigned 8-bit integer
    RP Cause Value

camel.ReceivedInformationArg  ReceivedInformationArg
    Unsigned 32-bit integer
    camel.ReceivedInformationArg

camel.ReleaseCallArg  ReleaseCallArg
    Byte array
    camel.ReleaseCallArg

camel.ReleaseGPRSArg  ReleaseGPRSArg
    No value
    camel.ReleaseGPRSArg

camel.ReleaseSMSArg  ReleaseSMSArg
    Byte array
    camel.ReleaseSMSArg

camel.RequestReportBCSMEEventArg  RequestReportBCSMEEventArg
    No value
    camel.RequestReportBCSMEEventArg

camel.RequestReportGPRSEventArg  RequestReportGPRSEventArg
    No value
    camel.RequestReportGPRSEventArg
```



```
camel.RequestReportSMSEventArg RequestReportSMSEventArg
    No value
    camel.RequestReportSMSEventArg
camel.RequestedInformationList_item Item
    No value
    camel.RequestedInformation
camel.RequestedInformationTypeList_item Item
    Unsigned 32-bit integer
    camel.RequestedInformationType
camel.ResetTimerArg ResetTimerArg
    No value
    camel.ResetTimerArg
camel.ResetTimerGPRSArg ResetTimerGPRSArg
    No value
    camel.ResetTimerGPRSArg
camel.ResetTimerSMSArg ResetTimerSMSArg
    No value
    camel.ResetTimerSMSArg
camel.SendChargingInformationArg SendChargingInformationArg
    No value
    camel.SendChargingInformationArg
camel.SendChargingInformationGPRSArg SendChargingInformationGPRSArg
    No value
    camel.SendChargingInformationGPRSArg
camel.SpecializedResourceReportArg SpecializedResourceReportArg
    Unsigned 32-bit integer
    camel.SpecializedResourceReportArg
camel.SplitLegArg SplitLegArg
    No value
    camel.SplitLegArg
camel.UnavailableNetworkResource UnavailableNetworkResource
    Unsigned 32-bit integer
    camel.UnavailableNetworkResource
camel.aChBillingChargingCharacteristics aChBillingChargingCharacteristics
    Byte array
    camel.AChBillingChargingCharacteristics
camel.aChChargingAddress aChChargingAddress
    Unsigned 32-bit integer
    camel.AChChargingAddress
camel.aOCAfterAnswer aOCAfterAnswer
    No value
    camel.AOCSubsequent
camel.aOCBeforeAnswer aOCBeforeAnswer
    No value
    camel.AOCBeforeAnswer
camel.aOCGPRS aOCGPRS
    No value
    camel.AOCGPRS
```

```

camel.aOCInitial  aOCInitial
    No value
    camel.CAI_GSM0224

camel.aOCSubsequent  aOCSubsequent
    No value
    camel.AOCSubsequent

camel.aOC_extension  aOC-extension
    No value
    camel.CAMEL_SCIBillingChargingCharacteristicsAlt

camel.absent  absent
    No value
    camel.NULL

camel.accessPointName  accessPointName
    String
    camel.AccessPointName

camel.active  active
    Boolean
    camel.BOOLEAN

camel.additionalCallingPartyNumber  additionalCallingPartyNumber
    Byte array
    camel.AdditionalCallingPartyNumber

camel.alertingPattern  alertingPattern
    Byte array
    camel.AlertingPattern

camel.allAnnouncementsComplete  allAnnouncementsComplete
    No value
    camel.NULL

camel.allRequests  allRequests
    No value
    camel.NULL

camel.appendFreeFormatData  appendFreeFormatData
    Unsigned 32-bit integer
    camel.AppendFreeFormatData

camel.applicationTimer  applicationTimer
    Unsigned 32-bit integer
    camel.ApplicationTimer

camel.argument  argument
    No value
    camel.T_argument

camel.assistingSSPIPRoutingAddress  assistingSSPIPRoutingAddress
    Byte array
    camel.AssistingSSPIPRoutingAddress

camel.attachChangeOfPositionSpecificInformation  attachChangeOfPositionSpecificInformation
    No value
    camel.T_attachChangeOfPositionSpecificInformation

camel.attributes  attributes
    Byte array
    camel.OCTET_STRING_SIZE_bound__minAttributesLength_bound__maxAttributesLength

```

```
camel.audibleIndicator audibleIndicator
    Unsigned 32-bit integer
    camel.T_audibleIndicator

camel.automaticRearm automaticRearm
    No value
    camel.NULL

camel.bCSM_Failure bCSM-Failure
    No value
    camel.BCSM_Failure

camel.backwardServiceInteractionInd backwardServiceInteractionInd
    No value
    camel.BackwardServiceInteractionInd

camel.basicGapCriteria basicGapCriteria
    Unsigned 32-bit integer
    camel.BasicGapCriteria

camel.bcsmEvents bcsmEvents
    Unsigned 32-bit integer
    camel.SEQUENCE_SIZE_1_bound__numOfBCSMEvents_OF_BCSMEvent

camel.bcsmEvents_item Item
    No value
    camel.BCSMEvent

camel.bearerCap bearerCap
    Byte array
    camel.T_bearerCap

camel.bearerCapability bearerCapability
    Unsigned 32-bit integer
    camel.BearerCapability

camel.bearerCapability2 bearerCapability2
    Unsigned 32-bit integer
    camel.BearerCapability

camel.bor_InterrogationRequested bor-InterrogationRequested
    No value
    camel.NULL

camel.bothwayThroughConnectionInd bothwayThroughConnectionInd
    Unsigned 32-bit integer
    inap.BothwayThroughConnectionInd

camel.burstInterval burstInterval
    Unsigned 32-bit integer
    camel.INTEGER_1_1200

camel.burstList burstList
    No value
    camel.BurstList

camel.bursts bursts
    No value
    camel.Burst

camel.busyCause busyCause
    Byte array
    camel.Cause
```

```
camel.cAI_GSM0224  cAI-GSM0224
  No value
  camel.CAI_GSM0224

camel.cGEncountered  cGEncountered
  Unsigned 32-bit integer
  camel.CGEncountered

camel.callAcceptedSpecificInfo  callAcceptedSpecificInfo
  No value
  camel.T_callAcceptedSpecificInfo

camel.callAttemptElapsedTimeValue  callAttemptElapsedTimeValue
  Unsigned 32-bit integer
  camel.INTEGER_0_255

camel.callCompletionTreatmentIndicator  callCompletionTreatmentIndicator
  Byte array
  camel.OCTET_STRING_SIZE_1

camel.callConnectedElapsedTimeValue  callConnectedElapsedTimeValue
  Unsigned 32-bit integer
  inap.Integer4

camel.callDiversionTreatmentIndicator  callDiversionTreatmentIndicator
  Byte array
  camel.OCTET_STRING_SIZE_1

camel.callForwarded  callForwarded
  No value
  camel.NULL

camel.callForwardingSS_Pending  callForwardingSS-Pending
  No value
  camel.NULL

camel.callLegReleasedAtTcpExpiry  callLegReleasedAtTcpExpiry
  No value
  camel.NULL

camel.callReferenceNumber  callReferenceNumber
  Byte array
  gsm_map_ch.CallReferenceNumber

camel.callSegmentFailure  callSegmentFailure
  No value
  camel.CallSegmentFailure

camel.callSegmentID  callSegmentID
  Unsigned 32-bit integer
  camel.CallSegmentID

camel.callSegmentToCancel  callSegmentToCancel
  No value
  camel.CallSegmentToCancel

camel.callStopTimeValue  callStopTimeValue
  String
  camel.DateAndTime

camel.calledAddressAndService  calledAddressAndService
  No value
  camel.T_calledAddressAndService
```

```
camel.calledAddressValue  calledAddressValue
    Byte array
    camel.Digits

camel.calledPartyBCDNumber  calledPartyBCDNumber
    Byte array
    camel.CalledPartyBCDNumber

camel.calledPartyNumber  calledPartyNumber
    Byte array
    camel.CalledPartyNumber

camel.callingAddressAndService  callingAddressAndService
    No value
    camel.T_callingAddressAndService

camel.callingAddressValue  callingAddressValue
    Byte array
    camel.Digits

camel.callingPartyNumber  callingPartyNumber
    Byte array
    camel.CallingPartyNumber

camel.callingPartyRestrictionIndicator  callingPartyRestrictionIndicator
    Byte array
    camel.OCTET_STRING_SIZE_1

camel.callingPartysCategory  callingPartysCategory
    Unsigned 16-bit integer
    inap.CallingPartysCategory

camel.callingPartysNumber  callingPartysNumber
    Byte array
    camel.SMS_AddressString

camel.cancelDigit  cancelDigit
    Byte array
    camel.OCTET_STRING_SIZE_1_2

camel.carrier  carrier
    Byte array
    camel.Carrier

camel.cause  cause
    Byte array
    camel.Cause

camel.cause_indicator  Cause indicator
    Unsigned 8-bit integer

camel.cellGlobalId  cellGlobalId
    Byte array
    gsm_map.CellGlobalIdOrServiceAreaIdFixedLength

camel.cellGlobalIdOrServiceAreaIdOrLAI  cellGlobalIdOrServiceAreaIdOrLAI
    Byte array
    camel.T_cellGlobalIdOrServiceAreaIdOrLAI

camel.changeOfLocationAlt  changeOfLocationAlt
    No value
    camel.ChangeOfLocationAlt
```

```
camel.changeOfPositionControlInfo  changeOfPositionControlInfo
    Unsigned 32-bit integer
    camel.ChangeOfPositionControlInfo
camel.chargeIndicator  chargeIndicator
    Byte array
    camel.ChargeIndicator
camel.chargeNumber  chargeNumber
    Byte array
    camel.ChargeNumber
camel.chargingCharacteristics  chargingCharacteristics
    Unsigned 32-bit integer
    camel.ChargingCharacteristics
camel.chargingID  chargingID
    Byte array
    gsm_map_ms.GPRSChargingID
camel.chargingResult  chargingResult
    Unsigned 32-bit integer
    camel.ChargingResult
camel.chargingRollOver  chargingRollOver
    Unsigned 32-bit integer
    camel.ChargingRollOver
camel.collectInformationAllowed  collectInformationAllowed
    No value
    camel.NULL
camel.collectedDigits  collectedDigits
    No value
    camel.CollectedDigits
camel.collectedInfo  collectedInfo
    Unsigned 32-bit integer
    camel.CollectedInfo
camel.collectedInfoSpecificInfo  collectedInfoSpecificInfo
    No value
    camel.T_collectedInfoSpecificInfo
camel.compoundGapCriteria  compoundGapCriteria
    No value
    camel.CompoundCriteria
camel.conferenceTreatmentIndicator  conferenceTreatmentIndicator
    Byte array
    camel.OCTET_STRING_SIZE_1
camel.connectedNumberTreatmentInd  connectedNumberTreatmentInd
    Unsigned 32-bit integer
    camel.ConnectedNumberTreatmentInd
camel.continueWithArgumentArgExtension  continueWithArgumentArgExtension
    No value
    camel.ContinueWithArgumentArgExtension
camel.controlType  controlType
    Unsigned 32-bit integer
    camel.ControlType
```

```
camel.correlationID  correlationID
    Byte array
    camel.CorrelationID

camel.criticality  criticality
    Unsigned 32-bit integer
    inap.CriticalityType

camel.cug_Index  cug-Index
    Unsigned 32-bit integer
    gsm_map_ms.CUG_Index

camel.cug_Interlock  cug-Interlock
    Byte array
    gsm_map_ms.CUG_Interlock

camel.cug_OutgoingAccess  cug-OutgoingAccess
    No value
    camel.NULL

camel.cwTreatmentIndicator  cwTreatmentIndicator
    Signed 32-bit integer
    camel.OCTET_STRING_SIZE_1

camel.dTMFDigitsCompleted  dTMFDigitsCompleted
    Byte array
    camel.Digits

camel.dTMFDigitsTimeOut  dTMFDigitsTimeOut
    Byte array
    camel.Digits

camel.date  date
    Byte array
    camel.OCTET_STRING_SIZE_4

camel.destinationAddress  destinationAddress
    Byte array
    camel.CalledPartyNumber

camel.destinationReference  destinationReference
    Unsigned 32-bit integer
    inap.Integer4

camel.destinationRoutingAddress  destinationRoutingAddress
    Unsigned 32-bit integer
    camel.DestinationRoutingAddress

camel.destinationSubscriberNumber  destinationSubscriberNumber
    Byte array
    camel.CalledPartyBCDNumber

camel.detachSpecificInformation  detachSpecificInformation
    No value
    camel.T_detachSpecificInformation

camel.digit_value  Digit Value
    Unsigned 8-bit integer
    Digit Value

camel.digitsResponse  digitsResponse
    Byte array
    camel.Digits
```

```
camel.disconnectFromIPForbidden disconnectFromIPForbidden
  Boolean
  camel.BOOLEAN

camel.disconnectSpecificInformation disconnectSpecificInformation
  No value
  camel.T_disconnectSpecificInformation

camel.dpSpecificCriteria dpSpecificCriteria
  Unsigned 32-bit integer
  camel.DpSpecificCriteria

camel.dpSpecificCriteriaAlt dpSpecificCriteriaAlt
  No value
  camel.DpSpecificCriteriaAlt

camel.dpSpecificInfoAlt dpSpecificInfoAlt
  No value
  camel.DpSpecificInfoAlt

camel.duration duration
  Signed 32-bit integer
  inap.Duration

camel.e1 e1
  Unsigned 32-bit integer
  camel.INTEGER_0_8191

camel.e2 e2
  Unsigned 32-bit integer
  camel.INTEGER_0_8191

camel.e3 e3
  Unsigned 32-bit integer
  camel.INTEGER_0_8191

camel.e4 e4
  Unsigned 32-bit integer
  camel.INTEGER_0_8191

camel.e5 e5
  Unsigned 32-bit integer
  camel.INTEGER_0_8191

camel.e6 e6
  Unsigned 32-bit integer
  camel.INTEGER_0_8191

camel.e7 e7
  Unsigned 32-bit integer
  camel.INTEGER_0_8191

camel.ectTreatmentIndicator ectTreatmentIndicator
  Signed 32-bit integer
  camel.OCTET_STRING_SIZE_1

camel.elapsedTime elapsedTime
  Unsigned 32-bit integer
  camel.ElapsedTime

camel.elapsedTimeRollOver elapsedTimeRollOver
  Unsigned 32-bit integer
  camel.ElapsedTimeRollOver
```



```
camel.elementaryMessageID elementaryMessageID
    Unsigned 32-bit integer
    inap.Integer4

camel.elementaryMessageIDs elementaryMessageIDs
    Unsigned 32-bit integer
    camel.SEQUENCE_SIZE_1_bound__numOfMessageIDs_OF_Integer4

camel.elementaryMessageIDs_item Item
    Unsigned 32-bit integer
    inap.Integer4

camel.endOfReplyDigit endOfReplyDigit
    Byte array
    camel.OCTET_STRING_SIZE_1_2

camel.endUserAddress endUserAddress
    No value
    camel.EndUserAddress

camel.enhancedDialledServicesAllowed enhancedDialledServicesAllowed
    No value
    camel.NULL

camel.enteringCellGlobalId enteringCellGlobalId
    Byte array
    gsm_map.CellGlobalIdOrServiceAreaIdFixedLength

camel.enteringLocationAreaId enteringLocationAreaId
    Byte array
    gsm_map.LAIFixedLength

camel.enteringServiceAreaId enteringServiceAreaId
    Byte array
    gsm_map.CellGlobalIdOrServiceAreaIdFixedLength

camel.errcode errcode
    Unsigned 32-bit integer
    camel.Code

camel.errorTreatment errorTreatment
    Unsigned 32-bit integer
    camel.ErrorTreatment

camel.error_code_local local
    Signed 32-bit integer
    ERROR code

camel.eventSpecificInformationBCSM eventSpecificInformationBCSM
    Unsigned 32-bit integer
    camel.EventSpecificInformationBCSM

camel.eventSpecificInformationSMS eventSpecificInformationSMS
    Unsigned 32-bit integer
    camel.EventSpecificInformationSMS

camel.eventTypeBCSM eventTypeBCSM
    Unsigned 32-bit integer
    camel.EventTypeBCSM

camel.eventTypeSMS eventTypeSMS
    Unsigned 32-bit integer
    camel.EventTypeSMS
```

```

camel.ext_basicServiceCode  ext-basicServiceCode
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode
camel.ext_basicServiceCode2  ext-basicServiceCode2
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode
camel.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer
camel.extension_code_local  local
    Signed 32-bit integer
    Extension local code
camel.extensions  extensions
    Unsigned 32-bit integer
    camel.Extensions
camel.fCIBCCAMELsequence1  fCIBCCAMELsequence1
    No value
    camel.T_fci_fCIBCCAMELsequence1
camel.failureCause  failureCause
    Byte array
    camel.Cause
camel.firstAnnouncementStarted  firstAnnouncementStarted
    No value
    camel.NULL
camel.firstDigitTimeOut  firstDigitTimeOut
    Unsigned 32-bit integer
    camel.INTEGER_1_127
camel.forwardServiceInteractionInd  forwardServiceInteractionInd
    No value
    camel.ForwardServiceInteractionInd
camel.forwardedCall  forwardedCall
    No value
    camel.NULL
camel.forwardingDestinationNumber  forwardingDestinationNumber
    Byte array
    camel.CalledPartyNumber
camel.freeFormatData  freeFormatData
    Byte array
    camel.OCTET_STRING_SIZE_bound__minFCIBillingChargingDataLength_bound__maxFCI
camel.gGSNAddress  gGSNAddress
    Byte array
    gsm_map_ms.GSN_Address
camel.gPRSCause  gPRSCause
    Byte array
    camel.GPRSCause
camel.gPRSEvent  gPRSEvent
    Unsigned 32-bit integer
    camel.SEQUENCE_SIZE_1_bound__numOfGPRSEvents_OF_GPRSEvent

```

```
camel.gPRSEventSpecificInformation  gPRSEventSpecificInformation
    Unsigned 32-bit integer
    camel.GPRSEventSpecificInformation

camel.gPRSEventType  gPRSEventType
    Unsigned 32-bit integer
    camel.GPRSEventType

camel.gPRSEvent_item  Item
    No value
    camel.GPRSEvent

camel.gPRSMSCClass  gPRSMSCClass
    No value
    gsm_map_ms.GPRSMSCClass

camel.gapCriteria  gapCriteria
    Unsigned 32-bit integer
    camel.GapCriteria

camel.gapIndicators  gapIndicators
    No value
    camel.GapIndicators

camel.gapInterval  gapInterval
    Signed 32-bit integer
    inap.Interval

camel.gapOnService  gapOnService
    No value
    camel.GapOnService

camel.gapTreatment  gapTreatment
    Unsigned 32-bit integer
    camel.GapTreatment

camel.general  general
    Signed 32-bit integer
    camel.GeneralProblem

camel.genericNumbers  genericNumbers
    Unsigned 32-bit integer
    camel.GenericNumbers

camel.geographicalInformation  geographicalInformation
    Byte array
    gsm_map_ms.GeographicalInformation

camel.global  global
    camel.T_global

camel.gsmcAddress  gsmcAddress
    Byte array
    gsm_map.ISDN_AddressString

camel.gprsCause  gprsCause
    Byte array
    camel.GPRSCause

camel.gsmSCFAddress  gsmSCFAddress
    Byte array
    gsm_map.ISDN_AddressString
```

```
camel.highLayerCompatibility  highLayerCompatibility
    Byte array
    inap.HighLayerCompatibility
camel.highLayerCompatibility2  highLayerCompatibility2
    Byte array
    inap.HighLayerCompatibility
camel.holdTreatmentIndicator  holdTreatmentIndicator
    Signed 32-bit integer
    camel.OCTET_STRING_SIZE_1
camel.iMEI  iMEI
    Byte array
    gsm_map.iMEI
camel.iMSI  iMSI
    Byte array
    gsm_map.iMSI
camel.iPSSPCapabilities  iPSSPCapabilities
    Byte array
    camel.iPSSPCapabilities
camel.inbandInfo  inbandInfo
    No value
    camel.InbandInfo
camel.informationToSend  informationToSend
    Unsigned 32-bit integer
    camel.InformationToSend
camel.initialDPArgExtension  initialDPArgExtension
    No value
    camel.InitialDPArgExtension
camel.initiatingEntity  initiatingEntity
    Unsigned 32-bit integer
    camel.InitiatingEntity
camel.initiatorOfServiceChange  initiatorOfServiceChange
    Unsigned 32-bit integer
    camel.InitiatorOfServiceChange
camel.integer  integer
    Unsigned 32-bit integer
    inap.Integer4
camel.interDigitTimeOut  interDigitTimeOut
    Unsigned 32-bit integer
    camel.INTEGER_1_127
camel.interDigitTimeout  interDigitTimeout
    Unsigned 32-bit integer
    camel.INTEGER_1_127
camel.inter_MSCHandOver  inter-MSCHandOver
    No value
    camel.NULL
camel.inter_PLMNHandOver  inter-PLMNHandOver
    No value
    camel.NULL
```

```
camel.inter_SystemHandOver  inter-SystemHandOver
    No value
    camel.NULL

camel.inter_SystemHandOverToGSM  inter-SystemHandOverToGSM
    No value
    camel.NULL

camel.inter_SystemHandOverToUMTS  inter-SystemHandOverToUMTS
    No value
    camel.NULL

camel.interruptableAnnInd  interruptableAnnInd
    Boolean
    camel.BOOLEAN

camel.interval  interval
    Unsigned 32-bit integer
    camel.INTEGER_0_32767

camel.invoke  invoke
    No value
    camel.Invoke

camel.invokeID  invokeID
    Unsigned 32-bit integer
    camel.InvokeID

camel.invokeId  invokeId
    Unsigned 32-bit integer
    camel.InvokeId

camel.ipRoutingAddress  ipRoutingAddress
    Byte array
    camel.IPRoutingAddress

camel.leavingCellGlobalId  leavingCellGlobalId
    Byte array
    gsm_map.CellGlobalIdOrServiceAreaIdFixedLength

camel.leavingLocationAreaId  leavingLocationAreaId
    Byte array
    gsm_map.LAIFixedLength

camel.leavingServiceAreaId  leavingServiceAreaId
    Byte array
    gsm_map.CellGlobalIdOrServiceAreaIdFixedLength

camel.legActive  legActive
    Boolean
    camel.BOOLEAN

camel.legID  legID
    Unsigned 32-bit integer
    inap.LegID

camel.legIDToMove  legIDToMove
    Unsigned 32-bit integer
    inap.LegID

camel.legOrCallSegment  legOrCallSegment
    Unsigned 32-bit integer
    camel.LegOrCallSegment
```

```
camel.legToBeConnected  legToBeConnected
    Unsigned 32-bit integer
    inap.LegID

camel.legToBeCreated  legToBeCreated
    Unsigned 32-bit integer
    inap.LegID

camel.legToBeReleased  legToBeReleased
    Unsigned 32-bit integer
    inap.LegID

camel.legToBeSplit  legToBeSplit
    Unsigned 32-bit integer
    inap.LegID

camel.linkedId  linkedId
    Unsigned 32-bit integer
    camel.T_linkedId

camel.local  local
    Signed 32-bit integer
    camel.T_local

camel.locationAreaId  locationAreaId
    Byte array
    gsm_map.LAIFixedLength

camel.locationInformation  locationInformation
    No value
    gsm_map_ms.LocationInformation

camel.locationInformationGPRS  locationInformationGPRS
    No value
    camel.LocationInformationGPRS

camel.locationInformationMSC  locationInformationMSC
    No value
    gsm_map_ms.LocationInformation

camel.locationNumber  locationNumber
    Byte array
    camel.LocationNumber

camel.long_QoS_format  long-QoS-format
    Byte array
    gsm_map_ms.Ext_QoS_Subscribed

camel.lowLayerCompatibility  lowLayerCompatibility
    Byte array
    camel.LowLayerCompatibility

camel.lowLayerCompatibility2  lowLayerCompatibility2
    Byte array
    camel.LowLayerCompatibility

camel.mSISDN  mSISDN
    Byte array
    gsm_map.ISDN_AddressString

camel.maxCallPeriodDuration  maxCallPeriodDuration
    Unsigned 32-bit integer
    camel.INTEGER_1_864000
```

```
camel.maxElapsedTime maxElapsedTime
    Unsigned 32-bit integer
    camel.INTEGER_1_86400

camel.maxTransferredVolume maxTransferredVolume
    Unsigned 32-bit integer
    camel.INTEGER_1_4294967295

camel.maximumNbOfDigits maximumNbOfDigits
    Unsigned 32-bit integer
    camel.INTEGER_1_30

camel.maximumNumberOfDigits maximumNumberOfDigits
    Unsigned 32-bit integer
    camel.INTEGER_1_30

camel.messageContent messageContent
    String
    camel.IA5String_SIZE_bound__minMessageContentLength_bound__maxMessageContent

camel.messageID messageID
    Unsigned 32-bit integer
    camel.MessageID

camel.metDPCriteriaList metDPCriteriaList
    Unsigned 32-bit integer
    camel.MetDPCriteriaList

camel.metDPCriterionAlt metDPCriterionAlt
    No value
    camel.MetDPCriterionAlt

camel.midCallControlInfo midCallControlInfo
    No value
    camel.MidCallControlInfo

camel.midCallEvents midCallEvents
    Unsigned 32-bit integer
    camel.T_omidCallEvents

camel.minimumNbOfDigits minimumNbOfDigits
    Unsigned 32-bit integer
    camel.INTEGER_1_30

camel.minimumNumberOfDigits minimumNumberOfDigits
    Unsigned 32-bit integer
    camel.INTEGER_1_30

camel.miscCallInfo miscCallInfo
    No value
    inap.MiscCallInfo

camel.miscGPRSInfo miscGPRSInfo
    No value
    inap.MiscCallInfo

camel.monitorMode monitorMode
    Unsigned 32-bit integer
    camel.MonitorMode

camel.ms_Classmark2 ms-Classmark2
    Byte array
    gsm_map_ms.MS_Classmark2
```

```
camel.mscAddress mscAddress
  Byte array
  gsm_map.ISDN_AddressString
camel.naOliInfo naOliInfo
  Byte array
  camel.NAOliInfo
camel.natureOfServiceChange natureOfServiceChange
  Unsigned 32-bit integer
  camel.NatureOfServiceChange
camel.negotiated_QoS negotiated-QoS
  Unsigned 32-bit integer
  camel.GPRS_QoS
camel.negotiated_QoS_Extension negotiated-QoS-Extension
  No value
  camel.GPRS_QoS_Extension
camel.newCallSegment newCallSegment
  Unsigned 32-bit integer
  camel.CallSegmentID
camel.nonCUGCall nonCUGCall
  No value
  camel.NULL
camel.none none
  No value
  camel.NULL
camel.number number
  Byte array
  camel.Digits
camel.numberOfBursts numberOfBursts
  Unsigned 32-bit integer
  camel.INTEGER_1_3
camel.numberOfDigits numberOfDigits
  Unsigned 32-bit integer
  camel.NumberOfDigits
camel.numberOfRepetitions numberOfRepetitions
  Unsigned 32-bit integer
  camel.INTEGER_1_127
camel.numberOfTonesInBurst numberOfTonesInBurst
  Unsigned 32-bit integer
  camel.INTEGER_1_3
camel.oAbandonSpecificInfo oAbandonSpecificInfo
  No value
  camel.T_oAbandonSpecificInfo
camel.oAnswerSpecificInfo oAnswerSpecificInfo
  No value
  camel.T_oAnswerSpecificInfo
camel.oCSIApplicable oCSIApplicable
  No value
  camel.OCSIApplicable
```



```

camel.oCalledPartyBusySpecificInfo  oCalledPartyBusySpecificInfo
    No value
    camel.T_oCalledPartyBusySpecificInfo
camel.oChangeOfPositionSpecificInfo  oChangeOfPositionSpecificInfo
    No value
    camel.T_oChangeOfPositionSpecificInfo
camel.oDisconnectSpecificInfo  oDisconnectSpecificInfo
    No value
    camel.T_oDisconnectSpecificInfo
camel.oMidCallSpecificInfo  oMidCallSpecificInfo
    No value
    camel.T_oMidCallSpecificInfo
camel.oNoAnswerSpecificInfo  oNoAnswerSpecificInfo
    No value
    camel.T_oNoAnswerSpecificInfo
camel.oServiceChangeSpecificInfo  oServiceChangeSpecificInfo
    No value
    camel.T_oServiceChangeSpecificInfo
camel.oTermSeizedSpecificInfo  oTermSeizedSpecificInfo
    No value
    camel.T_oTermSeizedSpecificInfo
camel.o_smsFailureSpecificInfo  o-smsFailureSpecificInfo
    No value
    camel.T_o_smsFailureSpecificInfo
camel.o_smsSubmissionSpecificInfo  o-smsSubmissionSpecificInfo
    No value
    camel.T_o_smsSubmissionSpecificInfo
camel.offeredCamel4Functionalities  offeredCamel4Functionalities
    Byte array
    gsm_map_ms.OfferedCamel4Functionalities
camel.opcode  opcode
    Unsigned 32-bit integer
    camel.Code
camel.operation  operation
    Unsigned 32-bit integer
    camel.InvokeID
camel.or_Call  or-Call
    No value
    camel.NULL
camel.originalCalledPartyID  originalCalledPartyID
    Byte array
    camel.OriginalCalledPartyID
camel.originationReference  originationReference
    Unsigned 32-bit integer
    inap.Integer4
camel.pDPAddress  pDPAddress
    Byte array
    camel.T_pDPAddress

```

```

camel.pDPContextEstablishmentAcknowledgementSpecificInformation  pDPContextEstab
    No value
    camel.T_pDPContextEstablishmentAcknowledgementSpecificInformation
camel.pDPContextEstablishmentSpecificInformation  pDPContextEstablishmentSpecifi
    No value
    camel.T_pDPContextEstablishmentSpecificInformation
camel.pDPID  pDPID
    Byte array
    camel.PDPID
camel.pDPInitiationType  pDPInitiationType
    Unsigned 32-bit integer
    camel.PDPInitiationType
camel.pDPTypeNumber  pDPTypeNumber
    Byte array
    camel.T_pDPTypeNumber
camel.pDPTypeOrganization  pDPTypeOrganization
    Byte array
    camel.T_pDPTypeOrganization
camel.parameter  parameter
    No value
    camel.T_parameter
camel.partyToCharge  partyToCharge
    Unsigned 32-bit integer
    camel.ReceivingSideID
camel.pdpID  pdpID
    Byte array
    camel.PDPID
camel.pdp_ContextchangeOfPositionSpecificInformation  pdp-ContextchangeOfPositio
    No value
    camel.T_pdp_ContextchangeOfPositionSpecificInformation
camel.present  present
    Signed 32-bit integer
    camel.T_linkedIdPresent
camel.price  price
    Byte array
    camel.OCTET_STRING_SIZE_4
camel.problem  problem
    Unsigned 32-bit integer
    camel.T_par_cancelFailedProblem
camel.qualityOfService  qualityOfService
    No value
    camel.QualityOfService
camel.rO_TimeGPRSIfNoTariffSwitch  rO-TimeGPRSIfNoTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_255
camel.rO_TimeGPRSIfTariffSwitch  rO-TimeGPRSIfTariffSwitch
    No value
    camel.T_rO_TimeGPRSIfTariffSwitch

```

```

camel.rO_TimeGPRSSinceLastTariffSwitch  rO-TimeGPRSSinceLastTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_255

camel.rO_TimeGPRSTariffSwitchInterval  rO-TimeGPRSTariffSwitchInterval
    Unsigned 32-bit integer
    camel.INTEGER_0_255

camel.rO_VolumeIfNoTariffSwitch  rO-VolumeIfNoTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_255

camel.rO_VolumeIfTariffSwitch  rO-VolumeIfTariffSwitch
    No value
    camel.T_rO_VolumeIfTariffSwitch

camel.rO_VolumeSinceLastTariffSwitch  rO-VolumeSinceLastTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_255

camel.rO_VolumeTariffSwitchInterval  rO-VolumeTariffSwitchInterval
    Unsigned 32-bit integer
    camel.INTEGER_0_255

camel.receivingSideID  receivingSideID
    Byte array
    camel.LegType

camel.redirectingPartyID  redirectingPartyID
    Byte array
    camel.RedirectingPartyID

camel.redirectionInformation  redirectionInformation
    Byte array
    inap.RedirectionInformation

camel.reject  reject
    No value
    camel.Reject

camel.releaseCause  releaseCause
    Byte array
    camel.Cause

camel.releaseCauseValue  releaseCauseValue
    Byte array
    camel.Cause

camel.releaseIfdurationExceeded  releaseIfdurationExceeded
    Boolean
    camel.BOOLEAN

camel.requestAnnouncementCompleteNotification  requestAnnouncementCompleteNotifi
    Boolean
    camel.BOOLEAN

camel.requestAnnouncementStartedNotification  requestAnnouncementStartedNotifica
    Boolean
    camel.BOOLEAN

camel.requestedInformationList  requestedInformationList
    Unsigned 32-bit integer
    camel.RequestedInformationList

```

```
camel.requestedInformationType requestedInformationType
    Unsigned 32-bit integer
    camel.RequestedInformationType

camel.requestedInformationTypeList requestedInformationTypeList
    Unsigned 32-bit integer
    camel.RequestedInformationTypeList

camel.requestedInformationValue requestedInformationValue
    Unsigned 32-bit integer
    camel.RequestedInformationValue

camel.requested_QoS requested-QoS
    Unsigned 32-bit integer
    camel.GPRS_QoS

camel.requested_QoS_Extension requested-QoS-Extension
    No value
    camel.GPRS_QoS_Extension

camel.resourceAddress resourceAddress
    Unsigned 32-bit integer
    camel.T_resourceAddress

camel.result result
    No value
    camel.T_result

camel.returnError returnError
    No value
    camel.ReturnError

camel.returnResult returnResult
    No value
    camel.ReturnResult

camel.routeNotPermitted routeNotPermitted
    No value
    camel.NULL

camel.routeSelectFailureSpecificInfo routeSelectFailureSpecificInfo
    No value
    camel.T_routeSelectFailureSpecificInfo

camel.routeingAreaIdentity routeingAreaIdentity
    Byte array
    gsm_map_ms.RAIdentity

camel.routeingAreaUpdate routeingAreaUpdate
    No value
    camel.NULL

camel.sCIBillingChargingCharacteristics sCIBillingChargingCharacteristics
    Byte array
    camel.SCIBillingChargingCharacteristics

camel.sCIGPRSBillingChargingCharacteristics sCIGPRSBillingChargingCharacteristics
    Byte array
    camel.SCIGPRSBillingChargingCharacteristics

camel.sGSNCapabilities sGSNCapabilities
    Byte array
    camel.SGSNCapabilities
```

```
camel.sMSCAddress  sMSCAddress
  Byte array
  gsm_map.ISDN_AddressString
camel.SMSEvents  sMSEvents
  Unsigned 32-bit integer
  camel.SEQUENCE_SIZE_1_bound__numOfSMSEvents_OF_SMSEvent
camel.SMSEvents_item  Item
  No value
  camel.SMSEvent
camel.sai_Present  sai-Present
  No value
  camel.NULL
camel.scfID  scfID
  Byte array
  camel.ScfID
camel.secondaryPDP_context  secondaryPDP-context
  No value
  camel.NULL
camel.selectedLSAIdentity  selectedLSAIdentity
  Byte array
  gsm_map_ms.LSAIdentity
camel.sendingSideID  sendingSideID
  Byte array
  camel.LegType
camel.serviceAreaId  serviceAreaId
  Byte array
  gsm_map.CellGlobalIdOrServiceAreaIdFixedLength
camel.serviceInteractionIndicatorsTwo  serviceInteractionIndicatorsTwo
  No value
  camel.ServiceInteractionIndicatorsTwo
camel.serviceKey  serviceKey
  Unsigned 32-bit integer
  inap.ServiceKey
camel.sgsn_Number  sgsn-Number
  Byte array
  gsm_map.ISDN_AddressString
camel.short_QoS_format  short-QoS-format
  Byte array
  gsm_map_ms.QoS_Subscribed
camel.smsReferenceNumber  smsReferenceNumber
  Byte array
  gsm_map_ch.CallReferenceNumber
camel.srfConnection  srfConnection
  Unsigned 32-bit integer
  camel.CallSegmentID
camel.srt.deltatime  Service Response Time
  Time duration
  DeltaTime between Request and Response
```

```
camel.srt.deltatime22  Service Response Time
    Time duration
    DeltaTime between EventReport(Disconnect) and Release Call
camel.srt.deltatime31  Service Response Time
    Time duration
    DeltaTime between InitialDP and Continue
camel.srt.deltatime35  Service Response Time
    Time duration
    DeltaTime between ApplyCharginReport and ApplyCharging
camel.srt.deltatime65  Service Response Time
    Time duration
    DeltaTime between InitialDPSMS and ContinueSMS
camel.srt.deltatime75  Service Response Time
    Time duration
    DeltaTime between InitialDPGPRS and ContinueGPRS
camel.srt.deltatime80  Service Response Time
    Time duration
    DeltaTime between EventReportGPRS and ContinueGPRS
camel.srt.duplicate    Request Duplicate
    Unsigned 32-bit integer
camel.srt.reqframe     Requested Frame
    Frame number
    SRT Request Frame
camel.srt.request_number Request Number
    Unsigned 64-bit integer
camel.srt.rspframe     Response Frame
    Frame number
    SRT Response Frame
camel.srt.session_id   Session Id
    Unsigned 32-bit integer
camel.srt.sessiontime  Session duration
    Time duration
    Duration of the TCAP session
camel.startDigit       startDigit
    Byte array
    camel.OCTET_STRING_SIZE_1_2
camel.subscribed_QoS   subscribed-QoS
    Unsigned 32-bit integer
    camel.GPRS_QoS
camel.subscribed_QoS_Extension subscribed-QoS-Extension
    No value
    camel.GPRS_QoS_Extension
camel.subscriberState  subscriberState
    Unsigned 32-bit integer
    gsm_map_ms.SubscriberState
```

```
camel.supplement_to_long_QoS_format  supplement-to-long-QoS-format
    Byte array
    gsm_map_ms.Ext2_QoS_Subscribed

camel.supportedCamelPhases  supportedCamelPhases
    Byte array
    gsm_map_ms.SupportedCamelPhases

camel.suppressOutgoingCallBarring  suppressOutgoingCallBarring
    No value
    camel.NULL

camel.suppress_D_CSI  suppress-D-CSI
    No value
    camel.NULL

camel.suppress_N_CSI  suppress-N-CSI
    No value
    camel.NULL

camel.suppress_O_CSI  suppress-O-CSI
    No value
    camel.NULL

camel.suppress_T_CSI  suppress-T-CSI
    No value
    camel.NULL

camel.suppressionOfAnnouncement  suppressionOfAnnouncement
    No value
    gsm_map_ch.SuppressionOfAnnouncement

camel.tAnswerSpecificInfo  tAnswerSpecificInfo
    No value
    camel.T_tAnswerSpecificInfo

camel.tBusySpecificInfo  tBusySpecificInfo
    No value
    camel.T_tBusySpecificInfo

camel.tChangeOfPositionSpecificInfo  tChangeOfPositionSpecificInfo
    No value
    camel.T_tChangeOfPositionSpecificInfo

camel.tDisconnectSpecificInfo  tDisconnectSpecificInfo
    No value
    camel.T_tDisconnectSpecificInfo

camel.tMidCallSpecificInfo  tMidCallSpecificInfo
    No value
    camel.T_tMidCallSpecificInfo

camel.tNoAnswerSpecificInfo  tNoAnswerSpecificInfo
    No value
    camel.T_tNoAnswerSpecificInfo

camel.tPDataCodingScheme  tPDataCodingScheme
    Byte array
    camel.TPDataCodingScheme

camel.tPProtocolIdentifier  tPProtocolIdentifier
    Byte array
    camel.TPProtocolIdentifier
```

```
camel.tPShortMessageSpecificInfo  tPShortMessageSpecificInfo
    Byte array
    camel.TPShortMessageSpecificInfo
camel.tPValidityPeriod  tPValidityPeriod
    Byte array
    camel.TPValidityPeriod
camel.tServiceChangeSpecificInfo  tServiceChangeSpecificInfo
    No value
    camel.T_tServiceChangeSpecificInfo
camel.t_smsDeliverySpecificInfo  t-smsDeliverySpecificInfo
    No value
    camel.T_t_smsDeliverySpecificInfo
camel.t_smsFailureSpecificInfo  t-smsFailureSpecificInfo
    No value
    camel.T_t_smsFailureSpecificInfo
camel.tariffSwitchInterval  tariffSwitchInterval
    Unsigned 32-bit integer
    camel.INTEGER_1_86400
camel.text  text
    No value
    camel.T_text
camel.time  time
    Byte array
    camel.OCTET_STRING_SIZE_2
camel.timeAndTimeZone  timeAndTimeZone
    Byte array
    camel.TimeAndTimezone
camel.timeAndTimezone  timeAndTimezone
    Byte array
    camel.TimeAndTimezone
camel.timeDurationCharging  timeDurationCharging
    No value
    camel.T_timeDurationCharging
camel.timeDurationChargingResult  timeDurationChargingResult
    No value
    camel.T_timeDurationChargingResult
camel.timeGPRSIfNoTariffSwitch  timeGPRSIfNoTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_86400
camel.timeGPRSIfTariffSwitch  timeGPRSIfTariffSwitch
    No value
    camel.T_timeGPRSIfTariffSwitch
camel.timeGPRSSinceLastTariffSwitch  timeGPRSSinceLastTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_86400
camel.timeGPRSTariffSwitchInterval  timeGPRSTariffSwitchInterval
    Unsigned 32-bit integer
    camel.INTEGER_0_86400
```



```
camel.timeIfNoTariffSwitch  timeIfNoTariffSwitch
    Unsigned 32-bit integer
    camel.TimeIfNoTariffSwitch

camel.timeIfTariffSwitch  timeIfTariffSwitch
    No value
    camel.TimeIfTariffSwitch

camel.timeInformation  timeInformation
    Unsigned 32-bit integer
    camel.TimeInformation

camel.timeSinceTariffSwitch  timeSinceTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_864000

camel.timerID  timerID
    Unsigned 32-bit integer
    camel.TimerID

camel.timervalue  timervalue
    Unsigned 32-bit integer
    camel.TimerValue

camel.tone  tone
    Boolean
    camel.BOOLEAN

camel.toneDuration  toneDuration
    Unsigned 32-bit integer
    camel.INTEGER_1_20

camel.toneID  toneID
    Unsigned 32-bit integer
    inap.Integer4

camel.toneInterval  toneInterval
    Unsigned 32-bit integer
    camel.INTEGER_1_20

camel.transferredVolume  transferredVolume
    Unsigned 32-bit integer
    camel.TransferredVolume

camel.transferredVolumeRollOver  transferredVolumeRollOver
    Unsigned 32-bit integer
    camel.TransferredVolumeRollOver

camel.type  type
    Unsigned 32-bit integer
    camel.Code

camel.uu_Data  uu-Data
    No value
    gsm_map_ch.UU_Data

camel.value  value
    No value
    camel.T_value

camel.variableMessage  variableMessage
    No value
    camel.T_variableMessage
```

```
camel.variableParts  variableParts
    Unsigned 32-bit integer
    camel.SEQUENCE_SIZE_1_5_OF_VariablePart

camel.variableParts_item  Item
    Unsigned 32-bit integer
    camel.VariablePart

camel.voiceBack  voiceBack
    Boolean
    camel.BOOLEAN

camel.voiceInformation  voiceInformation
    Boolean
    camel.BOOLEAN

camel.volumeIfNoTariffSwitch  volumeIfNoTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_4294967295

camel.volumeIfTariffSwitch  volumeIfTariffSwitch
    No value
    camel.T_volumeIfTariffSwitch

camel.volumeSinceLastTariffSwitch  volumeSinceLastTariffSwitch
    Unsigned 32-bit integer
    camel.INTEGER_0_4294967295

camel.volumeTariffSwitchInterval  volumeTariffSwitchInterval
    Unsigned 32-bit integer
    camel.INTEGER_0_4294967295

camel.warningPeriod  warningPeriod
    Unsigned 32-bit integer
    camel.INTEGER_1_1200
```

#### **Cast Client Control Protocol (cast)**

```
cast.DSCPValue  DSCPValue
    Unsigned 32-bit integer
    DSCPValue.

cast.MPI  MPI
    Unsigned 32-bit integer
    MPI.

cast.ORCStatus  ORCStatus
    Unsigned 32-bit integer
    The status of the opened receive channel.

cast.RTPPayloadFormat  RTPPayloadFormat
    Unsigned 32-bit integer
    RTPPayloadFormat.

cast.activeConferenceOnRegistration  ActiveConferenceOnRegistration
    Unsigned 32-bit integer
    ActiveConferenceOnRegistration.

cast.activeStreamsOnRegistration  ActiveStreamsOnRegistration
    Unsigned 32-bit integer
    ActiveStreamsOnRegistration.
```

```
cast.annexNandWFutureUse AnnexNandWFutureUse
    Unsigned 32-bit integer
    AnnexNandWFutureUse.

cast.audio AudioCodec
    Unsigned 32-bit integer
    The audio codec that is in use.

cast.bandwidth Bandwidth
    Unsigned 32-bit integer
    Bandwidth.

cast.bitRate BitRate
    Unsigned 32-bit integer
    BitRate.

cast.callIdentifier Call Identifier
    Unsigned 32-bit integer
    Call identifier for this call.

cast.callInstance CallInstance
    Unsigned 32-bit integer
    CallInstance.

cast.callSecurityStatus CallSecurityStatus
    Unsigned 32-bit integer
    CallSecurityStatus.

cast.callState CallState
    Unsigned 32-bit integer
    CallState.

cast.callType Call Type
    Unsigned 32-bit integer
    What type of call, in/out/etc

cast.calledParty CalledParty
    String
    The number called.

cast.calledPartyName Called Party Name
    String
    The name of the party we are calling.

cast.callingPartyName Calling Party Name
    String
    The passed name of the calling party.

cast.cdpnVoiceMailbox CdpnVoiceMailbox
    String
    CdpnVoiceMailbox.

cast.cgpnVoiceMailbox CgpnVoiceMailbox
    String
    CgpnVoiceMailbox.

cast.clockConversionCode ClockConversionCode
    Unsigned 32-bit integer
    ClockConversionCode.

cast.clockDivisor ClockDivisor
    Unsigned 32-bit integer
    Clock Divisor.
```

```
cast.confServiceNum  ConfServiceNum
    Unsigned 32-bit integer
    ConfServiceNum.

cast.conferenceID    Conference ID
    Unsigned 32-bit integer
    The conference ID

cast.customPictureFormatCount  CustomPictureFormatCount
    Unsigned 32-bit integer
    CustomPictureFormatCount.

cast.dataCapCount    DataCapCount
    Unsigned 32-bit integer
    DataCapCount.

cast.data_length     Data Length
    Unsigned 32-bit integer
    Number of bytes in the data portion.

cast.directoryNumber  Directory Number
    String
    The number we are reporting statistics for.

cast.echoCancelType  Echo Cancel Type
    Unsigned 32-bit integer
    Is echo cancelling enabled or not

cast.firstGOB        FirstGOB
    Unsigned 32-bit integer
    FirstGOB.

cast.firstMB         FirstMB
    Unsigned 32-bit integer
    FirstMB.

cast.format          Format
    Unsigned 32-bit integer
    Format.

cast.g723BitRate     G723 BitRate
    Unsigned 32-bit integer
    The G723 bit rate for this stream/JUNK if not g723 stream

cast.h263_capability_bitfield  H263_capability_bitfield
    Unsigned 32-bit integer
    H263_capability_bitfield.

cast.ipAddress       IP Address
    IPv4 address
    An IP address

cast.isConferenceCreator  IsConferenceCreator
    Unsigned 32-bit integer
    IsConferenceCreator.

cast.lastRedirectingParty  LastRedirectingParty
    String
    LastRedirectingParty.

cast.lastRedirectingPartyName  LastRedirectingPartyName
    String
    LastRedirectingPartyName.
```

```
cast.lastRedirectingReason  LastRedirectingReason
    Unsigned 32-bit integer
    LastRedirectingReason.

cast.lastRedirectingVoiceMailbox  LastRedirectingVoiceMailbox
    String
    LastRedirectingVoiceMailbox.

cast.layout  Layout
    Unsigned 32-bit integer
    Layout

cast.layoutCount  LayoutCount
    Unsigned 32-bit integer
    LayoutCount.

cast.levelPreferenceCount  LevelPreferenceCount
    Unsigned 32-bit integer
    LevelPreferenceCount.

cast.lineInstance  Line Instance
    Unsigned 32-bit integer
    The display call plane associated with this call.

cast.longTermPictureIndex  LongTermPictureIndex
    Unsigned 32-bit integer
    LongTermPictureIndex.

cast.marker  Marker
    Unsigned 32-bit integer
    Marker value should ne zero.

cast.maxBW  MaxBW
    Unsigned 32-bit integer
    MaxBW.

cast.maxBitRate  MaxBitRate
    Unsigned 32-bit integer
    MaxBitRate.

cast.maxConferences  MaxConferences
    Unsigned 32-bit integer
    MaxConferences.

cast.maxStreams  MaxStreams
    Unsigned 32-bit integer
    32 bit unsigned integer indicating the maximum number of simultansous RTP du

cast.messageid  Message ID
    Unsigned 32-bit integer
    The function requested/done with this message.

cast.millisecondPacketSize  MS/Packet
    Unsigned 32-bit integer
    The number of milliseconds of conversation in each packet

cast.minBitRate  MinBitRate
    Unsigned 32-bit integer
    MinBitRate.

cast.miscCommandType  MiscCommandType
    Unsigned 32-bit integer
    MiscCommandType
```

cast.modelNumber ModelNumber  
Unsigned 32-bit integer  
ModelNumber.

cast.numberOfGOBs NumberOfGOBs  
Unsigned 32-bit integer  
NumberOfGOBs.

cast.numberOfMBS NumberOfMBS  
Unsigned 32-bit integer  
NumberOfMBS.

cast.originalCalledParty Original Called Party  
String  
The number of the original calling party.

cast.originalCalledPartyName Original Called Party Name  
String  
name of the original person who placed the call.

cast.originalCdpnRedirectReason OriginalCdpnRedirectReason  
Unsigned 32-bit integer  
OriginalCdpnRedirectReason.

cast.originalCdpnVoiceMailbox OriginalCdpnVoiceMailbox  
String  
OriginalCdpnVoiceMailbox.

cast.passThruPartyID PassThruPartyID  
Unsigned 32-bit integer  
The pass thru party id

cast.payloadCapability PayloadCapability  
Unsigned 32-bit integer  
The payload capability for this media capability structure.

cast.payloadType PayloadType  
Unsigned 32-bit integer  
PayloadType.

cast.payload\_rfc\_number Payload\_rfc\_number  
Unsigned 32-bit integer  
Payload\_rfc\_number.

cast.pictureFormatCount PictureFormatCount  
Unsigned 32-bit integer  
PictureFormatCount.

cast.pictureHeight PictureHeight  
Unsigned 32-bit integer  
PictureHeight.

cast.pictureNumber PictureNumber  
Unsigned 32-bit integer  
PictureNumber.

cast.pictureWidth PictureWidth  
Unsigned 32-bit integer  
PictureWidth.

cast.pixelAspectRatio PixelAspectRatio  
Unsigned 32-bit integer  
PixelAspectRatio.

```
cast.portNumber Port Number
    Unsigned 32-bit integer
    A port number

cast.precedenceDm PrecedenceDm
    Unsigned 32-bit integer
    Precedence Domain.

cast.precedenceLv PrecedenceLv
    Unsigned 32-bit integer
    Precedence Level.

cast.precedenceValue Precedence
    Unsigned 32-bit integer
    Precedence value

cast.privacy Privacy
    Unsigned 32-bit integer
    Privacy.

cast.protocolDependentData ProtocolDependentData
    Unsigned 32-bit integer
    ProtocolDependentData.

cast.recoveryReferencePictureCount RecoveryReferencePictureCount
    Unsigned 32-bit integer
    RecoveryReferencePictureCount.

cast.requestorIpAddress RequestorIpAddress
    IPv4 address
    RequestorIpAddress

cast.serviceNum ServiceNum
    Unsigned 32-bit integer
    ServiceNum.

cast.serviceNumber ServiceNumber
    Unsigned 32-bit integer
    ServiceNumber.

cast.serviceResourceCount ServiceResourceCount
    Unsigned 32-bit integer
    ServiceResourceCount.

cast.stationFriendlyName StationFriendlyName
    String
    StationFriendlyName.

cast.stationGUID stationGUID
    String
    stationGUID.

cast.stationIpAddress StationIpAddress
    IPv4 address
    StationIpAddress

cast.stillImageTransmission StillImageTransmission
    Unsigned 32-bit integer
    StillImageTransmission.

cast.temporalSpatialTradeOff TemporalSpatialTradeOff
    Unsigned 32-bit integer
    TemporalSpatialTradeOff.
```

```
cast.temporalSpatialTradeOffCapability TemporalSpatialTradeOffCapability
    Unsigned 32-bit integer
    TemporalSpatialTradeOffCapability.

cast.transmitOrReceive TransmitOrReceive
    Unsigned 32-bit integer
    TransmitOrReceive

cast.transmitPreference TransmitPreference
    Unsigned 32-bit integer
    TransmitPreference.

cast.version Version
    Unsigned 32-bit integer
    The version in the keepalive version messages.

cast.videoCapCount VideoCapCount
    Unsigned 32-bit integer
    VideoCapCount.
```

**Catapult DCT2000 packet (dct2000)**

```
dct2000.context Context
    String
    Context name

dct2000.context_port Context Port number
    Unsigned 8-bit integer
    Context port number

dct2000.direction Direction
    Unsigned 8-bit integer
    Frame direction (Sent or Received)

dct2000.dissected-length Dissected length
    Unsigned 16-bit integer
    Number of bytes dissected by subdissector(s)

dct2000.encapsulation Wireshark encapsulation
    Unsigned 8-bit integer
    Wireshark frame encapsulation used

dct2000.ipprim IPPrim Addresses
    String
    IPPrim Addresses

dct2000.ipprim.addr Address
    IPv4 address
    IPPrim IPv4 Address

dct2000.ipprim.addr6 Address
    IPv6 address
    IPPrim IPv6 Address

dct2000.ipprim.conn-id Conn Id
    Unsigned 16-bit integer
    IPPrim TCP Connection ID

dct2000.ipprim.dst Destination Address
    IPv4 address
    IPPrim IPv4 Destination Address
```



```
dct2000.ipprim.dstv6  Destination Address
    IPv6 address
    IPPrim IPv6 Destination Address
dct2000.ipprim.src   Source Address
    IPv4 address
    IPPrim IPv4 Source Address
dct2000.ipprim.srcv6 Source Address
    IPv6 address
    IPPrim IPv6 Source Address
dct2000.ipprim.tcp.dstport  TCP Destination Port
    Unsigned 16-bit integer
    IPPrim TCP Destination Port
dct2000.ipprim.tcp.port   TCP Port
    Unsigned 16-bit integer
    IPPrim TCP Port
dct2000.ipprim.tcp.srcport  TCP Source Port
    Unsigned 16-bit integer
    IPPrim TCP Source Port
dct2000.ipprim.udp.dstport  UDP Destination Port
    Unsigned 16-bit integer
    IPPrim UDP Destination Port
dct2000.ipprim.udp.port   UDP Port
    Unsigned 16-bit integer
    IPPrim UDP Port
dct2000.ipprim.udp.srcport  UDP Source Port
    Unsigned 16-bit integer
    IPPrim UDP Source Port
dct2000.outhdr  Out-header
    String
    DCT2000 protocol outhdr
dct2000.protocol  DCT2000 protocol
    String
    Original (DCT2000) protocol name
dct2000.sctpprim  SCTPPrim Addresses
    String
    SCTPPrim Addresses
dct2000.sctpprim.addr  Address
    IPv4 address
    SCTPPrim IPv4 Address
dct2000.sctpprim.addr6  Address
    IPv6 address
    SCTPPrim IPv6 Address
dct2000.sctpprim.dst  Destination Address
    IPv4 address
    SCTPPrim IPv4 Destination Address
dct2000.sctpprim.dstv6  Destination Address
    IPv6 address
    SCTPPrim IPv6 Destination Address
```

```

dct2000.sctprim.dstport  UDP Destination Port
                        Unsigned 16-bit integer
                        SCTPPrim Destination Port

dct2000.timestamp      Timestamp
                        Double-precision floating point
                        File timestamp

dct2000.tty            tty contents
                        No value
                        tty contents

dct2000.tty-line      tty line
                        String
                        tty line

dct2000.unparsed_data  Unparsed protocol data
                        Byte array
                        Unparsed DCT2000 protocol data

dct2000.variant        Protocol variant
                        String
                        DCT2000 protocol variant

```

#### **Certificate Management Protocol (cmp)**

```

cmp.CAKeyUpdateInfoValue  CAKeyUpdateInfoValue
                        No value
                        cmp.CAKeyUpdateInfoValue

cmp.CAProtEncCertValue    CAProtEncCertValue
                        Unsigned 32-bit integer
                        cmp.CAProtEncCertValue

cmp.CRLAnnContent_item    Item
                        No value
                        pkixexplicit.CertificateList

cmp.CertConfirmContent_item  Item
                        No value
                        cmp.CertStatus

cmp.ConfirmWaitTimeValue  ConfirmWaitTimeValue
                        String
                        cmp.ConfirmWaitTimeValue

cmp.CurrentCRLValue       CurrentCRLValue
                        No value
                        cmp.CurrentCRLValue

cmp.DHBMPParameter        DHBMPParameter
                        No value
                        cmp.DHBMPParameter

cmp.EncKeyPairTypesValue  EncKeyPairTypesValue
                        Unsigned 32-bit integer
                        cmp.EncKeyPairTypesValue

cmp.EncKeyPairTypesValue_item  Item
                        No value
                        pkixexplicit.AlgorithmIdentifier

```

```
cmp.GenMsgContent_item  Item
    No value
    cmp.InfoTypeAndValue

cmp.GenRepContent_item  Item
    No value
    cmp.InfoTypeAndValue

cmp.ImplicitConfirmValue  ImplicitConfirmValue
    No value
    cmp.ImplicitConfirmValue

cmp.KeyPairParamRepValue  KeyPairParamRepValue
    No value
    cmp.KeyPairParamRepValue

cmp.KeyPairParamReqValue  KeyPairParamReqValue
    cmp.KeyPairParamReqValue

cmp.OrigPKIMessageValue  OrigPKIMessageValue
    Unsigned 32-bit integer
    cmp.OrigPKIMessageValue

cmp.PBMPParameter  PBMPParameter
    No value
    cmp.PBMPParameter

cmp.PKIFreeText_item  Item
    String
    cmp.UTF8String

cmp.PKIMessages_item  Item
    No value
    cmp.PKIMessage

cmp.POPDecKeyChallContent_item  Item
    No value
    cmp.Challenge

cmp.POPDecKeyRespContent_item  Item
    Signed 32-bit integer
    cmp.INTEGER

cmp.PollRepContent_item  Item
    No value
    cmp.PollRepContent_item

cmp.PollReqContent_item  Item
    No value
    cmp.PollReqContent_item

cmp.PreferredSymmAlgValue  PreferredSymmAlgValue
    No value
    cmp.PreferredSymmAlgValue

cmp.RevPassphraseValue  RevPassphraseValue
    No value
    cmp.RevPassphraseValue

cmp.RevReqContent_item  Item
    No value
    cmp.RevDetails
```

```
cmp.SignKeyPairTypesValue  SignKeyPairTypesValue
    Unsigned 32-bit integer
    cmp.SignKeyPairTypesValue

cmp.SignKeyPairTypesValue_item  Item
    No value
    pkixexplicit.AlgorithmIdentifier

cmp.SuppLangTagsValue  SuppLangTagsValue
    Unsigned 32-bit integer
    cmp.SuppLangTagsValue

cmp.SuppLangTagsValue_item  Item
    String
    cmp.UTF8String

cmp.UnsupportedOIDsValue  UnsupportedOIDsValue
    Unsigned 32-bit integer
    cmp.UnsupportedOIDsValue

cmp.UnsupportedOIDsValue_item  Item
    cmp.OBJECT_IDENTIFIER

cmp.addInfoNotAvailable  addInfoNotAvailable
    Boolean

cmp.badAlg  badAlg
    Boolean

cmp.badCertId  badCertId
    Boolean

cmp.badCertTemplate  badCertTemplate
    Boolean

cmp.badDataFormat  badDataFormat
    Boolean

cmp.badMessageCheck  badMessageCheck
    Boolean

cmp.badPOP  badPOP
    Boolean

cmp.badRecipientNonce  badRecipientNonce
    Boolean

cmp.badRequest  badRequest
    Boolean

cmp.badSenderNonce  badSenderNonce
    Boolean

cmp.badSinceDate  badSinceDate
    String
    cmp.GeneralizedTime

cmp.badTime  badTime
    Boolean

cmp.body  body
    Unsigned 32-bit integer
    cmp.PKIBody
```

```
cmp.caCerts caCerts
  Unsigned 32-bit integer
  cmp.SEQUENCE_SIZE_1_MAX_OF_CMPCertificate

cmp.caCerts_item Item
  Unsigned 32-bit integer
  cmp.CMPCertificate

cmp.caPubs caPubs
  Unsigned 32-bit integer
  cmp.SEQUENCE_SIZE_1_MAX_OF_CMPCertificate

cmp.caPubs_item Item
  Unsigned 32-bit integer
  cmp.CMPCertificate

cmp.cann cann
  Unsigned 32-bit integer
  cmp.CertAnnContent

cmp.ccp ccp
  No value
  cmp.CertRepMessage

cmp.ccr ccr
  Unsigned 32-bit integer
  crmf.CertReqMessages

cmp.certConf certConf
  Unsigned 32-bit integer
  cmp.CertConfirmContent

cmp.certConfirmed certConfirmed
  Boolean

cmp.certDetails certDetails
  No value
  crmf.CertTemplate

cmp.certHash certHash
  Byte array
  cmp.OCTET_STRING

cmp.certId certId
  No value
  crmf.CertId

cmp.certOrEncCert certOrEncCert
  Unsigned 32-bit integer
  cmp.CertOrEncCert

cmp.certReqId certReqId
  Signed 32-bit integer
  cmp.INTEGER

cmp.certRevoked certRevoked
  Boolean

cmp.certificate certificate
  Unsigned 32-bit integer
  cmp.CMPCertificate
```

```
cmp.certifiedKeyPair  certifiedKeyPair
    No value
    cmp.CertifiedKeyPair
cmp.challenge  challenge
    Byte array
    cmp.OCTET_STRING
cmp.checkAfter  checkAfter
    Signed 32-bit integer
    cmp.INTEGER
cmp.ckuann  ckuann
    No value
    cmp.CAKeyUpdAnnContent
cmp.cp  cp
    No value
    cmp.CertRepMessage
cmp.cr  cr
    Unsigned 32-bit integer
    crmf.CertReqMessages
cmp.crlDetails  crlDetails
    Unsigned 32-bit integer
    pkixexplicit.Extensions
cmp.crlEntryDetails  crlEntryDetails
    Unsigned 32-bit integer
    pkixexplicit.Extensions
cmp.crlann  crlann
    Unsigned 32-bit integer
    cmp.CRLAnnContent
cmp.crls  crls
    Unsigned 32-bit integer
    cmp.SEQUENCE_SIZE_1_MAX_OF_CertificateList
cmp.crls_item  Item
    No value
    pkixexplicit.CertificateList
cmp.duplicateCertReq  duplicateCertReq
    Boolean
cmp.encryptedCert  encryptedCert
    No value
    crmf.EncryptedValue
cmp.error  error
    No value
    cmp.ErrorMessageContent
cmp.errorCode  errorCode
    Signed 32-bit integer
    cmp.INTEGER
cmp.errorDetails  errorDetails
    Unsigned 32-bit integer
    cmp.PKIFreeText
```

```
cmp.extraCerts  extraCerts
    Unsigned 32-bit integer
    cmp.SEQUENCE_SIZE_1_MAX_OF_CMPCertificate

cmp.extraCerts_item  Item
    Unsigned 32-bit integer
    cmp.CMPCertificate

cmp.failInfo  failInfo
    Byte array
    cmp.PKIFailureInfo

cmp.freeText  freeText
    Unsigned 32-bit integer
    cmp.PKIFreeText

cmp.generalInfo  generalInfo
    Unsigned 32-bit integer
    cmp.SEQUENCE_SIZE_1_MAX_OF_InfoTypeAndValue

cmp.generalInfo_item  Item
    No value
    cmp.InfoTypeAndValue

cmp.genm  genm
    Unsigned 32-bit integer
    cmp.GenMsgContent

cmp.genp  genp
    Unsigned 32-bit integer
    cmp.GenRepContent

cmp.hashAlg  hashAlg
    No value
    pkixexplicit.AlgorithmIdentifier

cmp.hashVal  hashVal
    Byte array
    cmp.BIT_STRING

cmp.header  header
    No value
    cmp.PKIHeader

cmp.incorrectData  incorrectData
    Boolean

cmp.infoType  infoType
    cmp.T_infoType

cmp.infoValue  infoValue
    No value
    cmp.T_infoValue

cmp.ip  ip
    No value
    cmp.CertRepMessage

cmp.ir  ir
    Unsigned 32-bit integer
    crmf.CertReqMessages
```

```
cmp.iterationCount  iterationCount
    Signed 32-bit integer
    cmp.INTEGER

cmp.keyPairHist  keyPairHist
    Unsigned 32-bit integer
    cmp.SEQUENCE_SIZE_1_MAX_OF_CertifiedKeyPair

cmp.keyPairHist_item  Item
    No value
    cmp.CertifiedKeyPair

cmp.krp  krp
    No value
    cmp.KeyRecRepContent

cmp.krr  krr
    Unsigned 32-bit integer
    crmf.CertReqMessages

cmp.kup  kup
    No value
    cmp.CertRepMessage

cmp.kur  kur
    Unsigned 32-bit integer
    crmf.CertReqMessages

cmp.mac  mac
    No value
    pkixexplicit.AlgorithmIdentifier

cmp.messageTime  messageTime
    String
    cmp.GeneralizedTime

cmp.missingTimeStamp  missingTimeStamp
    Boolean

cmp.nested  nested
    Unsigned 32-bit integer
    cmp.NestedMessageContent

cmp.newSigCert  newSigCert
    Unsigned 32-bit integer
    cmp.CMPCertificate

cmp.newWithNew  newWithNew
    Unsigned 32-bit integer
    cmp.CMPCertificate

cmp.newWithOld  newWithOld
    Unsigned 32-bit integer
    cmp.CMPCertificate

cmp.next_poll_ref  Next Polling Reference
    Unsigned 32-bit integer

cmp.notAuthorized  notAuthorized
    Boolean
```



```
cmp.oldWithNew  oldWithNew
  Unsigned 32-bit integer
  cmp.CMPCertificate

cmp.owf  owf
  No value
  pkixexplicit.AlgorithmIdentifier

cmp.pKIStatusInfo  pKIStatusInfo
  No value
  cmp.PKIStatusInfo

cmp.pkiconf  pkiconf
  No value
  cmp.PKIConfirmContent

cmp.pollRep  pollRep
  Unsigned 32-bit integer
  cmp.PollRepContent

cmp.pollReq  pollReq
  Unsigned 32-bit integer
  cmp.PollReqContent

cmp.poll_ref  Polling Reference
  Unsigned 32-bit integer

cmp.popdecc  popdecc
  Unsigned 32-bit integer
  cmp.POPDecKeyChallContent

cmp.popdecr  popdecr
  Unsigned 32-bit integer
  cmp.POPDecKeyRespContent

cmp.privateKey  privateKey
  No value
  crmf.EncryptedValue

cmp.protection  protection
  Byte array
  cmp.PKIProtection

cmp.protectionAlg  protectionAlg
  No value
  pkixexplicit.AlgorithmIdentifier

cmp.publicationInfo  publicationInfo
  No value
  crmf.PKIPublicationInfo

cmp.pvno  pvno
  Signed 32-bit integer
  cmp.T_pvno

cmp.rann  rann
  No value
  cmp.RevAnnContent

cmp.reason  reason
  Unsigned 32-bit integer
  cmp.PKIFreeText
```

```
cmp.recipKID recipKID
  Byte array
  pkixlimplicit.KeyIdentifier

cmp.recipNonce recipNonce
  Byte array
  cmp.OCTET_STRING

cmp.recipient recipient
  Unsigned 32-bit integer
  pkixlimplicit.GeneralName

cmp.response response
  Unsigned 32-bit integer
  cmp.SEQUENCE_OF_CertResponse

cmp.response_item Item
  No value
  cmp.CertResponse

cmp.revCerts revCerts
  Unsigned 32-bit integer
  cmp.SEQUENCE_SIZE_1_MAX_OF_CertId

cmp.revCerts_item Item
  No value
  crmf.CertId

cmp.rm Record Marker
  Unsigned 32-bit integer
  Record Marker length of PDU in bytes

cmp.rp rp
  No value
  cmp.RevRepContent

cmp.rr rr
  Unsigned 32-bit integer
  cmp.RevReqContent

cmp.rspInfo rspInfo
  Byte array
  cmp.OCTET_STRING

cmp.salt salt
  Byte array
  cmp.OCTET_STRING

cmp.sender sender
  Unsigned 32-bit integer
  pkixlimplicit.GeneralName

cmp.senderKID senderKID
  Byte array
  pkixlimplicit.KeyIdentifier

cmp.senderNonce senderNonce
  Byte array
  cmp.OCTET_STRING

cmp.signerNotTrusted signerNotTrusted
  Boolean
```

```
cmp.status      status
                Signed 32-bit integer
                cmp.PKIStatus

cmp.statusInfo  statusInfo
                No value
                cmp.PKIStatusInfo

cmp.statusString statusString
                Unsigned 32-bit integer
                cmp.PKIFreeText

cmp.status_item Item
                No value
                cmp.PKIStatusInfo

cmp.systemFailure systemFailure
                Boolean

cmp.systemUnavail systemUnavail
                Boolean

cmp.timeNotAvailable timeNotAvailable
                Boolean

cmp.transactionID transactionID
                Byte array
                cmp.OCTET_STRING

cmp.transactionIdInUse transactionIdInUse
                Boolean

cmp.ttcbb       Time to check Back
                Date/Time stamp

cmp.type        Type
                Unsigned 8-bit integer
                PDU Type

cmp.type.oid    InfoType
                String
                Type of InfoTypeAndValue

cmp.unacceptedExtension unacceptedExtension
                Boolean

cmp.unacceptedPolicy  unacceptedPolicy
                Boolean

cmp.unsupportedVersion unsupportedVersion
                Boolean

cmp.willBeRevokedAt willBeRevokedAt
                String
                cmp.GeneralizedTime

cmp.witness       witness
                Byte array
                cmp.OCTET_STRING

cmp.wrongAuthority wrongAuthority
                Boolean
```

```
cmp.wrongIntegrity wrongIntegrity
  Boolean
cmp.x509v3PKCert x509v3PKCert
  No value
  pkixexplicit.Certificate
```

### **Certificate Request Message Format (crmf)**

```
crmf.Attributes_item Item
  No value
  pkixexplicit.Attribute
crmf.CertId CertId
  No value
  crmf.CertId
crmf.CertReqMessages_item Item
  No value
  crmf.CertReqMsg
crmf.CertRequest CertRequest
  No value
  crmf.CertRequest
crmf.Controls_item Item
  No value
  crmf.AttributeTypeAndValue
crmf.EncKeyWithID EncKeyWithID
  No value
  crmf.EncKeyWithID
crmf.PBMPParameter PBMPParameter
  No value
  crmf.PBMPParameter
crmf.ProtocolEncrKey ProtocolEncrKey
  No value
  crmf.ProtocolEncrKey
crmf.UTF8Pairs UTF8Pairs
  String
  crmf.UTF8Pairs
crmf.action action
  Signed 32-bit integer
  crmf.T_action
crmf.agreeMAC agreeMAC
  No value
  crmf.PKMACValue
crmf.algId algId
  No value
  pkixexplicit.AlgorithmIdentifier
crmf.algorithmIdentifier algorithmIdentifier
  No value
  pkixexplicit.AlgorithmIdentifier
```

```
crmf.archiveRemGenPrivKey  archiveRemGenPrivKey
    Boolean
    crmf.BOOLEAN

crmf.attributes  attributes
    Unsigned 32-bit integer
    crmf.Attributes

crmf.authInfo  authInfo
    Unsigned 32-bit integer
    crmf.T_authInfo

crmf.certReq  certReq
    No value
    crmf.CertRequest

crmf.certReqId  certReqId
    Signed 32-bit integer
    crmf.INTEGER

crmf.certTemplate  certTemplate
    No value
    crmf.CertTemplate

crmf.controls  controls
    Unsigned 32-bit integer
    crmf.Controls

crmf.dhMAC  dhMAC
    Byte array
    crmf.BIT_STRING

crmf.encSymmKey  encSymmKey
    Byte array
    crmf.BIT_STRING

crmf.encValue  encValue
    Byte array
    crmf.BIT_STRING

crmf.encryptedKey  encryptedKey
    No value
    cms.EnvelopedData

crmf.encryptedPrivKey  encryptedPrivKey
    Unsigned 32-bit integer
    crmf.EncryptedKey

crmf.encryptedValue  encryptedValue
    No value
    crmf.EncryptedValue

crmf.envelopedData  envelopedData
    No value
    cms.EnvelopedData

crmf.extensions  extensions
    Unsigned 32-bit integer
    pkixexplicit.Extensions

crmf.generalName  generalName
    Unsigned 32-bit integer
    pkiximplicit.GeneralName
```

```
crmf.identifier identifier
    Unsigned 32-bit integer
    crmf.T_identifier

crmf.intendedAlg intendedAlg
    No value
    pkixexplicit.AlgorithmIdentifier

crmf.issuer issuer
    Unsigned 32-bit integer
    pkixexplicit.Name

crmf.issuerUID issuerUID
    Byte array
    pkixexplicit.UniqueIdentifier

crmf.iterationCount iterationCount
    Signed 32-bit integer
    crmf.INTEGER

crmf.keyAgreement keyAgreement
    Unsigned 32-bit integer
    crmf.POPOPrivKey

crmf.keyAlg keyAlg
    No value
    pkixexplicit.AlgorithmIdentifier

crmf.keyEncipherment keyEncipherment
    Unsigned 32-bit integer
    crmf.POPOPrivKey

crmf.keyGenParameters keyGenParameters
    Byte array
    crmf.KeyGenParameters

crmf.mac mac
    No value
    pkixexplicit.AlgorithmIdentifier

crmf.notAfter notAfter
    Unsigned 32-bit integer
    pkixexplicit.Time

crmf.notBefore notBefore
    Unsigned 32-bit integer
    pkixexplicit.Time

crmf.owf owf
    No value
    pkixexplicit.AlgorithmIdentifier

crmf.popo popo
    Unsigned 32-bit integer
    crmf.ProofOfPossession

crmf.pposkInput pposkInput
    No value
    crmf.POPOSigningKeyInput

crmf.privateKey privateKey
    No value
    crmf.PrivateKeyInfo
```

```
crmf.privateKeyAlgorithm  privateKeyAlgorithm
    No value
    pkixexplicit.AlgorithmIdentifier

crmf.pubInfos  pubInfos
    Unsigned 32-bit integer
    crmf.SEQUENCE_SIZE_1_MAX_OF_SinglePubInfo

crmf.pubInfos_item  Item
    No value
    crmf.SinglePubInfo

crmf.pubLocation  pubLocation
    Unsigned 32-bit integer
    pkiximplicit.GeneralName

crmf.pubMethod  pubMethod
    Signed 32-bit integer
    crmf.T_pubMethod

crmf.publicKey  publicKey
    No value
    pkixexplicit.SubjectPublicKeyInfo

crmf.publicKeyMAC  publicKeyMAC
    No value
    crmf.PKMACValue

crmf.raVerified  raVerified
    No value
    crmf.NULL

crmf.regInfo  regInfo
    Unsigned 32-bit integer
    crmf.SEQUENCE_SIZE_1_MAX_OF_AttributeTypeAndValue

crmf.regInfo_item  Item
    No value
    crmf.AttributeTypeAndValue

crmf.salt  salt
    Byte array
    crmf.OCTET_STRING

crmf.sender  sender
    Unsigned 32-bit integer
    pkiximplicit.GeneralName

crmf.serialNumber  serialNumber
    Signed 32-bit integer
    crmf.INTEGER

crmf.signature  signature
    No value
    crmf.POPOSigningKey

crmf.signingAlg  signingAlg
    No value
    pkixexplicit.AlgorithmIdentifier

crmf.string  string
    String
    crmf.UTF8String
```

```
crmf.subject  subject
    Unsigned 32-bit integer
    pkixexplicit.Name

crmf.subjectUID  subjectUID
    Byte array
    pkixexplicit.UniqueIdentifier

crmf.subsequentMessage  subsequentMessage
    Signed 32-bit integer
    crmf.SubsequentMessage

crmf.symmAlg  symmAlg
    No value
    pkixexplicit.AlgorithmIdentifier

crmf.thisMessage  thisMessage
    Byte array
    crmf.BIT_STRING

crmf.type  type
    crmf.T_type

crmf.type.oid  Type
    String
    Type of AttributeTypeAndValue

crmf.validity  validity
    No value
    crmf.OptionalValidity

crmf.value  value
    No value
    crmf.T_value

crmf.valueHint  valueHint
    Byte array
    crmf.OCTET_STRING

crmf.version  version
    Signed 32-bit integer
    pkixexplicit.Version
```

#### **Check Point High Availability Protocol (cpha)**

```
cpha.cluster_number  Cluster Number
    Unsigned 16-bit integer
    Cluster Number

cpha.dst_id  Destination Machine ID
    Unsigned 16-bit integer
    Destination Machine ID

cpha.ethernet_addr  Ethernet Address
    6-byte Hardware (MAC) Address
    Ethernet Address

cpha.filler  Filler
    Unsigned 16-bit integer
```



```
cpha.ha_mode  HA mode
              Unsigned 16-bit integer
              HA Mode

cpha.ha_time_unit  HA Time unit
                  Unsigned 16-bit integer
                  HA Time unit (ms)

cpha.hash_len  Hash list length
               Signed 32-bit integer
               Hash list length

cpha.id_num  Number of IDs reported
            Unsigned 16-bit integer
            Number of IDs reported

cpha.if_trusted  Interface Trusted
                Boolean
                Interface Trusted

cpha.ifn  Interface Number
         Unsigned 32-bit integer

cpha.in_assume_up  Interfaces assumed up in the Inbound
                  Signed 8-bit integer

cpha.in_up  Interfaces up in the Inbound
           Signed 8-bit integer
           Interfaces up in the Inbound

cpha.ip  IP Address
        IPv4 address
        IP Address

cpha.machine_num  Machine Number
                 Signed 16-bit integer
                 Machine Number

cpha.magic_number  CPHAP Magic Number
                  Unsigned 16-bit integer
                  CPHAP Magic Number

cpha.opcode  OpCode
            Unsigned 16-bit integer
            OpCode

cpha.out_assume_up  Interfaces assumed up in the Outbound
                   Signed 8-bit integer

cpha.out_up  Interfaces up in the Outbound
            Signed 8-bit integer

cpha.policy_id  Policy ID
               Unsigned 16-bit integer
               Policy ID

cpha.random_id  Random ID
               Unsigned 16-bit integer
               Random ID

cpha.reported_ifs  Reported Interfaces
                  Unsigned 32-bit integer
                  Reported Interfaces
```

```
cpha.seed Seed
    Unsigned 32-bit integer
    Seed

cpha.slot_num Slot Number
    Signed 16-bit integer
    Slot Number

cpha.src_id Source Machine ID
    Unsigned 16-bit integer
    Source Machine ID

cpha.src_if Source Interface
    Unsigned 16-bit integer
    Source Interface

cpha.status Status
    Unsigned 32-bit integer

cpha.version Protocol Version
    Unsigned 16-bit integer
    CPHAP Version
```

**Checkpoint FW-1 (fw1)**

```
fw1.chain Chain Position
    String
    Chain Position

fw1.direction Direction
    String
    Direction

fw1.interface Interface
    String
    Interface

fw1.type Type
    Unsigned 16-bit integer

fw1.uuid UUID
    Unsigned 32-bit integer
    UUID
```

**China Mobile Point to Point Protocol (cmpp)**

```
cmpp.Command_Id Command Id
    Unsigned 32-bit integer
    Command Id of the CMPP messages

cmpp.Dest_terminal_Id Destination Address
    String
    MSISDN number which receive the SMS

cmpp.LinkID Link ID
    String
    Link ID

cmpp.Msg_Content Message Content
    String
    Message Content
```

```

cmpp.Msg_Fmt  Message Format
  Unsigned 8-bit integer
  Message Format

cmpp.Msg_Id  Msg_Id
  Unsigned 64-bit integer
  Message ID

cmpp.Msg_Id.ismg_code  ISMG Code
  Unsigned 32-bit integer
  ISMG Code, bit 38 ~ 17

cmpp.Msg_Id.sequence_id  Msg_Id sequence Id
  Unsigned 16-bit integer
  Msg_Id sequence Id, bit 16 ~ 1

cmpp.Msg_Id.timestamp  Timestamp
  String
  Timestamp MM/DD HH:MM:SS Bit 64 ~ 39

cmpp.Msg_Length  Message length
  Unsigned 8-bit integer
  SMS Message length, ASCII must be <= 160 bytes, other must be <= 140 bytes

cmpp.Report.SMSC_sequence  SMSC_sequence
  Unsigned 32-bit integer
  Sequence number

cmpp.Sequence_Id  Sequence Id
  Unsigned 32-bit integer
  Sequence Id of the CMPP messages

cmpp.Servicd_Id  Service ID
  String
  Service ID, a mix of characters, numbers and symbol

cmpp.TP_pId  TP pId
  Unsigned 8-bit integer
  GSM TP pId Field

cmpp.TP_udhi  TP udhi
  Unsigned 8-bit integer
  GSM TP udhi field

cmpp.Total_Length  Total Length
  Unsigned 32-bit integer
  Total length of the CMPP PDU.

cmpp.Version  Version
  String
  CMPP Version

cmpp.connect.AuthenticatorSource  Authenticator Source
  String
  Authenticator source, MD5(Source_addr + 9 zero + shared secret + timestamp)

cmpp.connect.Source_Addr  Source Addr
  String
  Source Address, the SP_Id

cmpp.connect.Timestamp  Timestamp
  String
  Timestamp MM/DD HH:MM:SS

```

```
cmpp.connect_resp.AuthenticatorISMG  SIMG Authenticate result
    String
    Authenticator result, MD5(Status + AuthenticatorSource + shared secret)
cmpp.connect_resp.Status  Connect Response Status
    Unsigned 32-bit integer
    Response Status, Value higher then 4 means other error
cmpp.deliver.Dest_Id  Destination ID
    String
    SP Service ID or server number
cmpp.deliver.Registered_Delivery  Deliver Report
    Boolean
    The message is a deliver report if this value = 1
cmpp.deliver.Report  Detail Deliver Report
    No value
    The detail report
cmpp.deliver.Report.Done_time  Done_time
    String
    Format YMMDDHHMM
cmpp.deliver.Report.Status  Deliver Status
    String
    Deliver Status
cmpp.deliver.Report.Submit_time  Submit_time
    String
    Format YMMDDHHMM
cmpp.deliver.Src_terminal_Id  Src_terminal_Id
    String
    Source MSISDN number, if it is deliver report, this will be the CMPP_SUBMIT
cmpp.deliver.Src_terminal_type  Fake source terminal type
    Boolean
    Type of the source terminal, can be 0 (real) or 1 (fake)
cmpp.deliver_resp.Result  Result
    Unsigned 32-bit integer
    Deliver Result
cmpp.submit.At_time  Send time
    String
    Message send time, format following SMPP 3.3
cmpp.submit.DestUstr_t1  Destination Address Count
    Unsigned 8-bit integer
    Number of destination address, must smaller then 100
cmpp.submit.Dest_terminal_type  Fake Destination Terminal
    Boolean
    destination terminal type, 0 is real, 1 is fake
cmpp.submit.FeeCode  Fee Code
    String
    Fee Code
cmpp.submit.FeeType  Fee Type
    String
    Fee Type
```

cmpp.submit.Fee\_UserType Charging Informations  
Unsigned 8-bit integer  
Charging Informations, if value is 3, this field will not be used

cmpp.submit.Fee\_terminal\_Id Fee Terminal ID  
String  
Fee Terminal ID, Valid only when Fee\_UserType is 3

cmpp.submit.Fee\_terminal\_type Fake Fee Terminal  
Boolean  
Fee terminal type, 0 is real, 1 is fake

cmpp.submit.Msg\_level Message Level  
Unsigned 8-bit integer  
Message Level

cmpp.submit.Msg\_src Message Source SP\_Id  
String  
Message source SP ID

cmpp.submit.Pk\_number Part Number  
Unsigned 8-bit integer  
Part number of the message with the same Msg\_Id, start from 1

cmpp.submit.Pk\_total Number of Part  
Unsigned 8-bit integer  
Total number of parts of the message with the same Msg\_Id, start from 1

cmpp.submit.Registered\_Delivery Registered Delivery  
Boolean  
Registered Delivery flag

cmpp.submit.Src\_Id Source ID  
String  
This value matches SMPP submit\_sm source\_addr field

cmpp.submit.Valld\_Time Valid time  
String  
Message Valid Time, format follow SMPP 3.3

cmpp.submit\_resp.Result Result  
Unsigned 32-bit integer  
Submit Result

**Cisco Auto-RP (auto\_rp)**

auto\_rp.group\_prefix Prefix  
IPv4 address  
Group prefix

auto\_rp.holdtime Holdtime  
Unsigned 16-bit integer  
The amount of time in seconds this announcement is valid

auto\_rp.mask\_len Mask length  
Unsigned 8-bit integer  
Length of group prefix

auto\_rp.pim\_ver Version  
Unsigned 8-bit integer  
RP's highest PIM version

```
auto_rp.prefix_sign  Sign
    Unsigned 8-bit integer
    Group prefix sign

auto_rp.rp_addr  RP address
    IPv4 address
    The unicast IP address of the RP

auto_rp.rp_count  RP count
    Unsigned 8-bit integer
    The number of RP addresses contained in this message

auto_rp.type  Packet type
    Unsigned 8-bit integer
    Auto-RP packet type

auto_rp.version  Protocol version
    Unsigned 8-bit integer
    Auto-RP protocol version
```

### **Cisco Discovery Protocol (cdp)**

```
cdp.checksum  Checksum
    Unsigned 16-bit integer

cdp.checksum_bad  Bad
    Boolean
    True: checksum doesn't match packet content; False: matches content or not c

cdp.checksum_good  Good
    Boolean
    True: checksum matches packet content; False: doesn't match content or not c

cdp.tlv.len  Length
    Unsigned 16-bit integer

cdp.tlv.type  Type
    Unsigned 16-bit integer

cdp.ttl  TTL
    Unsigned 16-bit integer

cdp.version  Version
    Unsigned 8-bit integer
```

### **Cisco Group Management Protocol (cgmp)**

```
cgmp.count  Count
    Unsigned 8-bit integer

cgmp.gda  Group Destination Address
    6-byte Hardware (MAC) Address
    Group Destination Address

cgmp.type  Type
    Unsigned 8-bit integer

cgmp.usa  Unicast Source Address
    6-byte Hardware (MAC) Address
    Unicast Source Address

cgmp.version  Version
    Unsigned 8-bit integer
```

**Cisco HDLC (chdlc)**

chdlc.address Address  
Unsigned 8-bit integer

chdlc.protocol Protocol  
Unsigned 16-bit integer

**Cisco Hot Standby Router Protocol (hsrp)**

hsrp.adv.activegrp Adv active groups  
Unsigned 8-bit integer  
Advertisement active group count

hsrp.adv.passivegrp Adv passive groups  
Unsigned 8-bit integer  
Advertisement passive group count

hsrp.adv.reserved1 Adv reserved1  
Unsigned 8-bit integer  
Advertisement tlv length

hsrp.adv.reserved2 Adv reserved2  
Unsigned 32-bit integer  
Advertisement tlv length

hsrp.adv.state Adv state  
Unsigned 8-bit integer  
Advertisement tlv length

hsrp.adv.tlvtlength Adv length  
Unsigned 16-bit integer  
Advertisement tlv length

hsrp.adv.tlvtype Adv type  
Unsigned 16-bit integer  
Advertisement tlv type

hsrp.auth\_data Authentication Data  
String  
Contains a clear-text 8 character reused password

hsrp.group Group  
Unsigned 8-bit integer  
This field identifies the standby group

hsrp.hellotime Hellotime  
Unsigned 8-bit integer  
The approximate period between the Hello messages that the router sends

hsrp.holdtime Holdtime  
Unsigned 8-bit integer  
Time that the current Hello message should be considered valid

hsrp.md5\_ip\_address Sender's IP Address  
IPv4 address  
IP Address of the sender interface

hsrp.opcode Op Code  
Unsigned 8-bit integer  
The type of message contained in this packet

hsrp.priority Priority  
Unsigned 8-bit integer  
Used to elect the active and standby routers. Numerically higher priority wi

hsrp.reserved Reserved  
Unsigned 8-bit integer  
Reserved

hsrp.state State  
Unsigned 8-bit integer  
The current state of the router sending the message

hsrp.version Version  
Unsigned 8-bit integer  
The version of the HSRP messages

hsrp.virt\_ip Virtual IP Address  
IPv4 address  
The virtual IP address used by this group

hsrp2.\_md5\_algorithm MD5 Algorithm  
Unsigned 8-bit integer  
Hash Algorithm used by this group

hsrp2.\_md5\_flags MD5 Flags  
Unsigned 8-bit integer  
Undefined

hsrp2.active\_groups Active Groups  
Unsigned 16-bit integer  
Active group number which becomes the active router myself

hsrp2.auth\_data Authentication Data  
String  
Contains a clear-text 8 character reused password

hsrp2.group Group  
Unsigned 16-bit integer  
This field identifies the standby group

hsrp2.group\_state\_tlv Group State TLV  
Unsigned 8-bit integer  
Group State TLV

hsrp2.hellotime Hellotime  
Unsigned 32-bit integer  
The approximate period between the Hello messages that the router sends

hsrp2.holdtime Holdtime  
Unsigned 32-bit integer  
Time that the current Hello message should be considered valid

hsrp2.identifier Identifier  
6-byte Hardware (MAC) Address  
BIA value of a sender interafce

hsrp2.interface\_state\_tlv Interface State TLV  
Unsigned 8-bit integer  
Interface State TLV

hsrp2.ipversion IP Ver.  
Unsigned 8-bit integer  
The IP protocol version used in this hsrp message



hsrp2.md5\_auth\_data MD5 Authentication Data  
Unsigned 32-bit integer  
MD5 digest string is contained.

hsrp2.md5\_auth\_tlv MD5 Authentication TLV  
Unsigned 8-bit integer  
MD5 Authentication TLV

hsrp2.md5\_key\_id MD5 Key ID  
Unsigned 32-bit integer  
This field contains Key chain ID

hsrp2.opcode Op Code  
Unsigned 8-bit integer  
The type of message contained in this packet

hsrp2.passive\_groups Passive Groups  
Unsigned 16-bit integer  
Standby group number which doesn't become the active router myself

hsrp2.priority Priority  
Unsigned 32-bit integer  
Used to elect the active and standby routers. Numerically higher priority wins

hsrp2.state State  
Unsigned 8-bit integer  
The current state of the router sending the message

hsrp2.text\_auth\_tlv Text Authentication TLV  
Unsigned 8-bit integer  
Text Authentication TLV

hsrp2.version Version  
Unsigned 8-bit integer  
The version of the HSRP messages

hsrp2.virt\_ip Virtual IP Address  
IPv4 address  
The virtual IP address used by this group

hsrp2.virt\_ip\_v6 Virtual IPv6 Address  
IPv6 address  
The virtual IPv6 address used by this group

**Cisco ISL (isl)**

isl.addr Source or Destination Address  
6-byte Hardware (MAC) Address  
Source or Destination Hardware Address

isl.bpdu BPDU  
Boolean  
BPDU indicator

isl.crc CRC  
Unsigned 32-bit integer  
CRC field of encapsulated frame

isl.dst Destination  
Byte array  
Destination Address

```
isl.dst_route_desc  Destination route descriptor
                    Unsigned 16-bit integer
                    Route descriptor to be used for forwarding

isl.esize  Esize
           Unsigned 8-bit integer
           Frame size for frames less than 64 bytes

isl.explorer  Explorer
             Boolean
             Explorer

isl.fcs_not_incl  FCS Not Included
                 Boolean
                 FCS not included

isl.hsa  HSA
        Unsigned 24-bit integer
        High bits of source address

isl.index  Index
          Unsigned 16-bit integer
          Port index of packet source

isl.len  Length
        Unsigned 16-bit integer

isl.src  Source
        6-byte Hardware (MAC) Address
        Source Hardware Address

isl.src_route_desc  Source-route descriptor
                   Unsigned 16-bit integer
                   Route descriptor to be used for source learning

isl.src_vlan_id  Source VLAN ID
                Unsigned 16-bit integer
                Source Virtual LAN ID

isl.trailer  Trailer
            Byte array
            Ethernet Trailer or Checksum

isl.type  Type
         Unsigned 8-bit integer
         Type

isl.user  User
        Unsigned 8-bit integer
        User-defined bits

isl.user_eth  User
             Unsigned 8-bit integer
             Priority (for Ethernet)

isl.vlan_id  VLAN ID
            Unsigned 16-bit integer
            Virtual LAN ID
```

**Cisco Interior Gateway Routing Protocol (igrp)**

```
igrp.as Autonomous System
      Unsigned 16-bit integer
      Autonomous System number

igrp.update Update Release
      Unsigned 8-bit integer
      Update Release number
```

**Cisco NetFlow/IPFIX (cflow)**

```
cflow.aggmeth AggMethod
      Unsigned 8-bit integer
      CFlow V8 Aggregation Method

cflow.aggver AggVersion
      Unsigned 8-bit integer
      CFlow V8 Aggregation Version

cflow.bgpnexthop BGPNextHop
      IPv4 address
      BGP Router Nexthop

cflow.bgpnexthopv6 BGPNextHop
      IPv6 address
      BGP Router Nexthop

cflow.count Count
      Unsigned 16-bit integer
      Count of PDUs

cflow.data_datarecord_id DataRecord (Template Id)
      Unsigned 16-bit integer
      DataRecord with corresponding to a template Id

cflow.data_flowset_id Data FlowSet (Template Id)
      Unsigned 16-bit integer
      Data FlowSet with corresponding to a template Id

cflow.direction Direction
      Unsigned 8-bit integer
      Direction

cflow.dstaddr DstAddr
      IPv4 address
      Flow Destination Address

cflow.dstaddrv6 DstAddr
      IPv6 address
      Flow Destination Address

cflow.dstas DstAS
      Unsigned 16-bit integer
      Destination AS

cflow.dstmask DstMask
      Unsigned 8-bit integer
      Destination Prefix Mask

cflow.dstmaskv6 DstMask
      Unsigned 8-bit integer
      IPv6 Destination Prefix Mask
```

```
cflow.dstport  DstPort
    Unsigned 16-bit integer
    Flow Destination Port

cflow.dstprefix  DstPrefix
    IPv4 address
    Flow Destination Prefix

cflow.engine_id  EngineId
    Unsigned 8-bit integer
    Slot number of switching engine

cflow.engine_type  EngineType
    Unsigned 8-bit integer
    Flow switching engine type

cflow.exporttime  ExportTime
    Unsigned 32-bit integer
    Time when the flow has been exported

cflow.flags  Export Flags
    Unsigned 8-bit integer
    CFlow Flags

cflow.flow_active_timeout  Flow active timeout
    Unsigned 16-bit integer
    Flow active timeout

cflow.flow_class  FlowClass
    Unsigned 8-bit integer
    Flow Class

cflow.flow_exporter  FlowExporter
    Byte array
    Flow Exporter

cflow.flow_inactive_timeout  Flow inactive timeout
    Unsigned 16-bit integer
    Flow inactive timeout

cflow.flows  Flows
    Unsigned 32-bit integer
    Flows Aggregated in PDU

cflow.flowset_id  FlowSet Id
    Unsigned 16-bit integer
    FlowSet Id

cflow.flowset_length  FlowSet Length
    Unsigned 16-bit integer
    FlowSet length

cflow.flowsexp  FlowsExp
    Unsigned 32-bit integer
    Flows exported

cflow.forwarding_code  ForwdCode
    Unsigned 8-bit integer
    Forwarding Code

cflow.forwarding_status  ForwdStat
    Unsigned 8-bit integer
    Forwarding Status
```

```
cflow.icmp_ipv4_code  IPv4 ICMP Code
    Unsigned 8-bit integer
    IPv4 ICMP code

cflow.icmp_ipv4_type  IPv4 ICMP Type
    Unsigned 8-bit integer
    IPv4 ICMP type

cflow.icmp_ipv6_code  IPv6 ICMP Code
    Unsigned 8-bit integer
    IPv6 ICMP code

cflow.icmp_ipv6_type  IPv6 ICMP Type
    Unsigned 8-bit integer
    IPv6 ICMP type

cflow.icmp_type       ICMP Type
    Unsigned 8-bit integer
    ICMP type

cflow.if_descr        IfDescr
    String
    SNMP Interface Description

cflow.if_name         IfName
    String
    SNMP Interface Name

cflow.igmp_type       IGMP Type
    Unsigned 8-bit integer
    IGMP type

cflow.inputint        InputInt
    Unsigned 16-bit integer
    Flow Input Interface

cflow.ip_dscp         DSCP
    Unsigned 8-bit integer
    IP DSCP

cflow.ip_header_words IPHeaderLen
    Unsigned 8-bit integer
    IPHeaderLen

cflow.ip_tos          IP TOS
    Unsigned 8-bit integer
    IP type of service

cflow.ip_total_length IP Total Length
    Unsigned 8-bit integer
    IP total length

cflow.ip_ttl          IP TTL
    Unsigned 8-bit integer
    IP time to live

cflow.ip_version      IPVersion
    Byte array
    IP Version

cflow.ipv4_ident      IPv4Ident
    Unsigned 16-bit integer
    IPv4 Identifier
```

```
cflow.is_multicast  IsMulticast
    Unsigned 8-bit integer
    Is Multicast

cflow.len  Length
    Unsigned 16-bit integer
    Length of PDUs

cflow.length_max  MaxLength
    Unsigned 16-bit integer
    Packet Length Max

cflow.length_min  MinLength
    Unsigned 16-bit integer
    Packet Length Min

cflow.muloctets  MulticastOctets
    Unsigned 32-bit integer
    Count of multicast octets

cflow.mulpackets  MulticastPackets
    Unsigned 32-bit integer
    Count of multicast packets

cflow.nexthop  NextHop
    IPv4 address
    Router nexthop

cflow.nexthopv6  NextHop
    IPv6 address
    Router nexthop

cflow.octets  Octets
    Unsigned 32-bit integer
    Count of bytes

cflow.octets64  Octets
    Unsigned 64-bit integer
    Count of bytes

cflow.octets_squared  OctetsSquared
    Unsigned 64-bit integer
    Octets Squared

cflow.octetsexp  OctetsExp
    Unsigned 32-bit integer
    Octets exported

cflow.option_length  Option Length
    Unsigned 16-bit integer
    Option length

cflow.option_map  OptionMap
    Byte array
    Option Map

cflow.option_scope_length  Option Scope Length
    Unsigned 16-bit integer
    Option scope length

cflow.options_flowset_id  Options FlowSet
    Unsigned 16-bit integer
    Options FlowSet
```

```
cflow.outputint  OutputInt
    Unsigned 16-bit integer
    Flow Output Interface

cflow.packets    Packets
    Unsigned 32-bit integer
    Count of packets

cflow.packets64  Packets
    Unsigned 64-bit integer
    Count of packets

cflow.packetsexp PacketsExp
    Unsigned 32-bit integer
    Packets exported

cflow.packetsout PacketsOut
    Unsigned 64-bit integer
    Count of packets going out

cflow.peer_dstas PeerDstAS
    Unsigned 16-bit integer
    Peer Destination AS

cflow.peer_srcas PeerSrcAS
    Unsigned 16-bit integer
    Peer Source AS

cflow.protocol  Protocol
    Unsigned 8-bit integer
    IP Protocol

cflow.routersc   Router Shortcut
    IPv4 address
    Router shortcut by switch

cflow.sampler_mode  SamplerMode
    Unsigned 8-bit integer
    Flow Sampler Mode

cflow.sampler_name  SamplerName
    String
    Sampler Name

cflow.sampler_random_interval  SamplerRandomInterval
    Unsigned 32-bit integer
    Flow Sampler Random Interval

cflow.samplerate  SampleRate
    Unsigned 16-bit integer
    Sample Frequency of exporter

cflow.sampling_algorithm  Sampling algorithm
    Unsigned 8-bit integer
    Sampling algorithm

cflow.sampling_interval  Sampling interval
    Unsigned 32-bit integer
    Sampling interval

cflow.samplingmode  SamplingMode
    Unsigned 16-bit integer
    Sampling Mode of exporter
```

```
cflow.scope      Scope Unknown
    Byte array
    Option Scope Unknown

cflow.scope_cache  ScopeCache
    Byte array
    Option Scope Cache

cflow.scope_field_length  Scope Field Length
    Unsigned 16-bit integer
    Scope field length

cflow.scope_field_type  Scope Type
    Unsigned 16-bit integer
    Scope field type

cflow.scope_interface  ScopeInterface
    Unsigned 32-bit integer
    Option Scope Interface

cflow.scope_linecard  ScopeLinecard
    Byte array
    Option Scope Linecard

cflow.scope_system  ScopeSystem
    IPv4 address
    Option Scope System

cflow.scope_template  ScopeTemplate
    Byte array
    Option Scope Template

cflow.section_header  SectionHeader
    Byte array
    Header of Packet

cflow.section_payload  SectionPayload
    Byte array
    Payload of Packet

cflow.sequence  FlowSequence
    Unsigned 32-bit integer
    Sequence number of flows seen

cflow.source_id  SourceId
    Unsigned 32-bit integer
    Identifier for export device

cflow.srcaddr  SrcAddr
    IPv4 address
    Flow Source Address

cflow.srcaddrv6  SrcAddr
    IPv6 address
    Flow Source Address

cflow.srcas  SrcAS
    Unsigned 16-bit integer
    Source AS

cflow.srcmask  SrcMask
    Unsigned 8-bit integer
    Source Prefix Mask
```



```
cflow.srcmaskv6  SrcMask
    Unsigned 8-bit integer
    IPv6 Source Prefix Mask

cflow.srcnet    SrcNet
    IPv4 address
    Flow Source Network

cflow.srcport   SrcPort
    Unsigned 16-bit integer
    Flow Source Port

cflow.srcprefix SrcPrefix
    IPv4 address
    Flow Source Prefix

cflow.sysuptime SysUptime
    Unsigned 32-bit integer
    Time since router booted (in milliseconds)

cflow.tcp_windows_size  TCP Windows Size
    Unsigned 16-bit integer
    TCP Windows size

cflow.tcpflags  TCP Flags
    Unsigned 8-bit integer
    TCP Flags

cflow.template_field_count  Field Count
    Unsigned 16-bit integer
    Template field count

cflow.template_field_length  Length
    Unsigned 16-bit integer
    Template field length

cflow.template_field_type  Type
    Unsigned 16-bit integer
    Template field type

cflow.template_flowset_id  Template FlowSet
    Unsigned 16-bit integer
    Template FlowSet

cflow.template_id  Template Id
    Unsigned 16-bit integer
    Template Id

cflow.timedelta  Duration
    Time duration
    Duration of flow sample (end - start)

cflow.timeend  EndTime
    Time duration
    Uptime at end of flow

cflow.timestamp  Timestamp
    Date/Time stamp
    Current seconds since epoch

cflow.timestart  StartTime
    Time duration
    Uptime at start of flow
```

```
cflow.toplabeladdr  TopLabelAddr
    IPv4 address
    Top MPLS label PE address
cflow.toplabeltype  TopLabelType
    Unsigned 8-bit integer
    Top MPLS label Type
cflow.tos           IP ToS
    Unsigned 8-bit integer
    IP Type of Service
cflow.ttl_max      MaxTTL
    Unsigned 8-bit integer
    TTL maximum
cflow.ttl_min      MinTTL
    Unsigned 8-bit integer
    TTL minimum
cflow.udp_length   UDP Length
    Unsigned 16-bit integer
    UDP length
cflow.unix_nsecs   CurrentNSecs
    Unsigned 32-bit integer
    Residual nanoseconds since epoch
cflow.unix_secs    CurrentSecs
    Unsigned 32-bit integer
    Current seconds since epoch
cflow.version      Version
    Unsigned 16-bit integer
    NetFlow Version
```

**Cisco SLARP (slarp)**

```
slarp.address      Address
    IPv4 address
slarp.mysequence   Outgoing sequence number
    Unsigned 32-bit integer
slarp.ptype        Packet type
    Unsigned 32-bit integer
slarp.yoursequence Returned sequence number
    Unsigned 32-bit integer
```

**Cisco Session Management (sm)**

```
sm.bearer         Bearer ID
    Unsigned 16-bit integer
sm.channel         Channel ID
    Unsigned 16-bit integer
sm.context         Context
    Unsigned 32-bit integer
    Context(guesswork!)
```

```
sm.eisup_message_id  Message id
    Unsigned 8-bit integer
    Message id(guesswork!)
sm.ip_addr  IPv4 address
    IPv4 address
    IPv4 address
sm.len  Length
    Unsigned 16-bit integer
sm.msg_type  Message Type
    Unsigned 16-bit integer
sm.msgid  Message ID
    Unsigned 16-bit integer
sm.protocol  Protocol Type
    Unsigned 16-bit integer
sm.sm_msg_type  SM Message Type
    Unsigned 32-bit integer
sm.tag  Tag
    Unsigned 16-bit integer
    Tag(guesswork!)
```

#### **Cisco Wireless IDS Captures (cwids)**

```
cwids.caplen  Capture length
    Unsigned 16-bit integer
    Captured bytes in record
cwids.channel  Channel
    Unsigned 8-bit integer
    Channel for this capture
cwids.reallen  Original length
    Unsigned 16-bit integer
    Original num bytes in frame
cwids.unknown1  Unknown1
    Byte array
    1st Unknown block - timestamp?
cwids.unknown2  Unknown2
    Byte array
    2nd Unknown block
cwids.unknown3  Unknown3
    Byte array
    3rd Unknown block
cwids.version  Capture Version
    Unsigned 16-bit integer
    Version or format of record
```

#### **Cisco Wireless LAN Context Control Protocol (wlccp)**

```
wlccp.80211_apsd_flag  APSD flag
    Unsigned 16-bit integer
    APSD Flag
```

```
wlccp.80211_capabilities 802.11 Capabilities Flags
    Unsigned 16-bit integer
    802.11 Capabilities Flags

wlccp.80211_cf_poll_req_flag CF Poll Request flag
    Unsigned 16-bit integer
    CF Poll Request Flag

wlccp.80211_cf_pollable_flag CF Pollable flag
    Unsigned 16-bit integer
    CF Pollable Flag

wlccp.80211_chan_agility_flag Channel Agility flag
    Unsigned 16-bit integer
    Channel Agility Flag

wlccp.80211_ess_flag ESS flag
    Unsigned 16-bit integer
    Set on by APs in Beacon or Probe Response

wlccp.80211_ibss_flag IBSS flag
    Unsigned 16-bit integer
    Set on by STAs in Beacon or Probe Response

wlccp.80211_pbcc_flag PBCC flag
    Unsigned 16-bit integer
    PBCC Flag

wlccp.80211_qos_flag QOS flag
    Unsigned 16-bit integer
    QOS Flag

wlccp.80211_reserved Reserved
    Unsigned 16-bit integer
    Reserved

wlccp.80211_short_preamble_flag Short Preamble flag
    Unsigned 16-bit integer
    Short Preamble Flag

wlccp.80211_short_time_slot_flag Short Time Slot flag
    Unsigned 16-bit integer
    Short Time Slot Flag

wlccp.80211_spectrum_mgmt_flag Spectrum Management flag
    Unsigned 16-bit integer
    Spectrum Management Flag

wlccp.aaa_auth_type AAA Authentication Type
    Unsigned 8-bit integer
    AAA Authentication Type

wlccp.aaa_keymgmt_type AAA Key Management Type
    Unsigned 8-bit integer
    AAA Key Management Type

wlccp.aaa_msg_type AAA Message Type
    Unsigned 8-bit integer
    AAA Message Type

wlccp.ack_required_flag Ack Required flag
    Unsigned 16-bit integer
    Set on to require an acknowledgement
```

```
wlccp.age Age
    Unsigned 32-bit integer
    Time since AP became a WDS master

wlccp.apnodeid AP Node ID
    No value
    AP Node ID

wlccp.apnodeidaddress AP Node Address
    6-byte Hardware (MAC) Address
    AP Node Address

wlccp.apnodetype AP Node Type
    Unsigned 16-bit integer
    AP Node Type

wlccp.apregstatus Registration Status
    Unsigned 8-bit integer
    AP Registration Status

wlccp.auth_type Authentication Type
    Unsigned 8-bit integer
    Authentication Type

wlccp.base_message_type Base message type
    Unsigned 8-bit integer
    Base message type

wlccp.beacon_interval Beacon Interval
    Unsigned 16-bit integer
    Beacon Interval

wlccp.bssid BSS ID
    6-byte Hardware (MAC) Address
    Basic Service Set ID

wlccp.cca_busy CCA Busy
    Unsigned 8-bit integer
    CCA Busy

wlccp.channel Channel
    Unsigned 8-bit integer
    Channel

wlccp.cisco_acctg_msg Cisco Accounting Message
    Byte array
    Cisco Accounting Message

wlccp.client_mac Client MAC
    6-byte Hardware (MAC) Address
    Client MAC

wlccp.dest_node_id Destination node ID
    6-byte Hardware (MAC) Address
    Destination node ID

wlccp.dest_node_type Destination node type
    Unsigned 16-bit integer
    Destination node type

wlccp.destination_node_type Destination node type
    Unsigned 16-bit integer
    Node type of the hop destination
```

```
wlccp.dsss_dlyd_block_ack_flag  Delayed Block Ack Flag
    Unsigned 16-bit integer
    Delayed Block Ack Flag

wlccp.dsss_imm_block_ack_flag  Immediate Block Ack Flag
    Unsigned 16-bit integer
    Immediate Block Ack Flag

wlccp.dsss_ofdm_flag  DSSS-OFDM Flag
    Unsigned 16-bit integer
    DSSS-OFDM Flag

wlccp.dstmac  Dst MAC
    6-byte Hardware (MAC) Address
    Destination MAC address

wlccp.duration  Duration
    Unsigned 16-bit integer
    Duration

wlccp.eap_msg  EAP Message
    Byte array
    EAP Message

wlccp.eap_pkt_length  EAP Packet Length
    Unsigned 16-bit integer
    EAPOL Type

wlccp.eapol_msg  EAPOL Message
    No value
    EAPOL Message

wlccp.eapol_type  EAPOL Type
    Unsigned 8-bit integer
    EAPOL Type

wlccp.eapol_version  EAPOL Version
    Unsigned 8-bit integer
    EAPOL Version

wlccp.element_count  Element Count
    Unsigned 8-bit integer
    Element Count

wlccp.flags  Flags
    Unsigned 16-bit integer
    Flags

wlccp.framereport_elements  Frame Report Elements
    No value
    Frame Report Elements

wlccp.hops  Hops
    Unsigned 8-bit integer
    Number of WLCCP hops

wlccp.hopwise_routing_flag  Hopwise-routing flag
    Unsigned 16-bit integer
    On to force intermediate access points to process the message also

wlccp.hostname  Hostname
    String
    Hostname of device
```

```
wlccp.inbound_flag  Inbound flag
    Unsigned 16-bit integer
    Message is inbound to the top of the topology tree

wlccp.interval  Interval
    Unsigned 16-bit integer
    Interval

wlccp.ipv4_address  IPv4 Address
    IPv4 address
    IPv4 address

wlccp.key_mgmt_type  Key Management type
    Unsigned 8-bit integer
    Key Management type

wlccp.key_seq_count  Key Sequence Count
    Unsigned 32-bit integer
    Key Sequence Count

wlccp.length  Length
    Unsigned 16-bit integer
    Length of WLCCP payload (bytes)

wlccp.mfp_capability  MFP Capability
    Unsigned 16-bit integer
    MFP Capability

wlccp.mfp_config  MFP Config
    Unsigned 16-bit integer
    MFP Config

wlccp.mfp_flags  MFP Flags
    Unsigned 16-bit integer
    MFP Flags

wlccp.mic_flag  MIC flag
    Unsigned 16-bit integer
    On in a message that must be authenticated and has an authentication TLV

wlccp.mic_length  MIC Length
    Unsigned 16-bit integer
    MIC Length

wlccp.mic_msg_seq_count  MIC Message Sequence Count
    Unsigned 64-bit integer
    MIC Message Sequence Count

wlccp.mic_value  MIC Value
    Byte array
    MIC Value

wlccp.mode  Mode
    Unsigned 8-bit integer
    Mode

wlccp.msg_id  Message ID
    Unsigned 16-bit integer
    Sequence number used to match request/reply pairs

wlccp.nm_capability  NM Capability
    Unsigned 8-bit integer
    NM Capability
```

```
wlccp.nm_version  NM Version
    Unsigned 8-bit integer
    NM Version

wlccp.nmconfig    NM Config
    Unsigned 8-bit integer
    NM Config

wlccp.nonce_value Nonce Value
    Byte array
    Nonce Value

wlccp.numframes  Number of frames
    Unsigned 8-bit integer
    Number of Frames

wlccp.originator Originator
    6-byte Hardware (MAC) Address
    Originating device's MAC address

wlccp.originator_node_type Originator node type
    Unsigned 16-bit integer
    Originating device's node type

wlccp.outbound_flag Outbound flag
    Unsigned 16-bit integer
    Message is outbound from the top of the topology tree

wlccp.parent_ap_mac Parent AP MAC
    6-byte Hardware (MAC) Address
    Parent AP MAC

wlccp.parenttsf  Parent TSF
    Unsigned 32-bit integer
    Parent TSF

wlccp.path_init_reserved Reserved
    Unsigned 8-bit integer
    Reserved

wlccp.path_length Path Length
    Unsigned 8-bit integer
    Path Length

wlccp.period     Period
    Unsigned 8-bit integer
    Interval between announcements (seconds)

wlccp.phy_type   PHY Type
    Unsigned 8-bit integer
    PHY Type

wlccp.priority   WDS priority
    Unsigned 8-bit integer
    WDS priority of this access point

wlccp.radius_username RADIUS Username
    String
    RADIUS Username

wlccp.refresh_request_id Refresh Request ID
    Unsigned 32-bit integer
    Refresh Request ID
```



wlccp.reg\_lifetime Reg. LifeTime  
Unsigned 8-bit integer  
Reg. LifeTime

wlccp.relay\_flag Relay flag  
Unsigned 16-bit integer  
Signifies that this header is immediately followed by a relay node field

wlccp.relay\_node\_id Relay node ID  
6-byte Hardware (MAC) Address  
Node which relayed this message

wlccp.relay\_node\_type Relay node type  
Unsigned 16-bit integer  
Type of node which relayed this message

wlccp.requ\_node\_type Requestor node type  
Unsigned 16-bit integer  
Requesting device's node type

wlccp.request\_reply\_flag Request Reply flag  
Unsigned 8-bit integer  
Set on to request a reply

wlccp.requestor Requestor  
6-byte Hardware (MAC) Address  
Requestor device's MAC address

wlccp.responder Responder  
6-byte Hardware (MAC) Address  
Responding device's MAC address

wlccp.responder\_node\_type Responder node type  
Unsigned 16-bit integer  
Responding device's node type

wlccp.response\_request\_flag Response request flag  
Unsigned 16-bit integer  
Set on to request a reply

wlccp.retry\_flag Retry flag  
Unsigned 16-bit integer  
Set on for retransmissions

wlccp.rm\_flags RM Flags  
Unsigned 8-bit integer  
RM Flags

wlccp.root\_cm\_flag Root context manager flag  
Unsigned 16-bit integer  
Set to on to send message to the root context manager of the topology tree

wlccp.rpi\_denisty RPI Density  
Byte array  
RPI Density

wlccp.rss RSS  
Signed 8-bit integer  
Received Signal Strength

wlccp.sap SAP  
Unsigned 8-bit integer  
Service Access Point

```
wlccp.sap_id    SAP ID
    Unsigned 8-bit integer
    Service Access Point ID

wlccp.sap_version  SAP Version
    Unsigned 8-bit integer
    Service Access Point Version

wlccp.scan_mode   Scan Mode
    Unsigned 8-bit integer
    Scan Mode

wlccp.scmattach_state  SCM Attach State
    Unsigned 8-bit integer
    SCM Attach State

wlccp.scmstate_change  SCM State Change
    Unsigned 8-bit integer
    SCM State Change

wlccp.scmstate_change_reason  SCM State Change Reason
    Unsigned 8-bit integer
    SCM State Change Reason

wlccp.session_timeout  Session Timeout
    Unsigned 32-bit integer
    Session Timeout

wlccp.source_node_id  Source node ID
    6-byte Hardware (MAC) Address
    Source node ID

wlccp.source_node_type  Source node type
    Unsigned 16-bit integer
    Source node type

wlccp.srcidx  Source Index
    Unsigned 8-bit integer
    Source Index

wlccp.srcmac  Src MAC
    6-byte Hardware (MAC) Address
    Source MAC address

wlccp.station_mac  Station MAC
    6-byte Hardware (MAC) Address
    Station MAC

wlccp.station_type  Station Type
    Unsigned 8-bit integer
    Station Type

wlccp.status  Status
    Unsigned 8-bit integer
    Status

wlccp.subtype  Subtype
    Unsigned 8-bit integer
    Message Subtype

wlccp.supp_node_id  Supporting node ID
    6-byte Hardware (MAC) Address
    Supporting node ID
```

```
wlccp.supp_node_type  Destination node type
    Unsigned 16-bit integer
    Destination node type

wlccp.targettsf  Target TSF
    Unsigned 64-bit integer
    Target TSF

wlccp.time_elapsed  Elapsed Time
    Unsigned 16-bit integer
    Elapsed Time

wlccp.timestamp  Timestamp
    Unsigned 64-bit integer
    Registration Timestamp

wlccp.tlv  WLCCP TLV
    No value
    WLCCP TLV

wlccp.tlv80211  802.11 TLV Value
    Byte array
    802.11 TLV Value

wlccp.tlv_container_flag  TLV Container Flag
    Unsigned 16-bit integer
    Set on if the TLV is a container

wlccp.tlv_encrypted_flag  TLV Encrypted Flag
    Unsigned 16-bit integer
    Set on if the TLV is encrypted

wlccp.tlv_flag  TLV flag
    Unsigned 16-bit integer
    Set to indicate that optional TLVs follow the fixed fields

wlccp.tlv_flags  TLV Flags
    Unsigned 16-bit integer
    TLV Flags, Group and Type

wlccp.tlv_length  TLV Length
    Unsigned 16-bit integer
    TLV Length

wlccp.tlv_request_flag  TLV Request Flag
    Unsigned 16-bit integer
    Set on if the TLV is a request

wlccp.tlv_reserved_bit  Reserved bits
    Unsigned 16-bit integer
    Reserved

wlccp.tlv_unknown_value  Unknown TLV Contents
    Byte array
    Unknown TLV Contents

wlccp.token  Token
    Unsigned 8-bit integer
    Token

wlccp.token2  2 Byte Token
    Unsigned 16-bit integer
    2 Byte Token
```

```
wlccp.type      Message Type
                Unsigned 8-bit integer
                Message Type

wlccp.version   Version
                Unsigned 8-bit integer
                Protocol ID/Version

wlccp.wds_reason Reason Code
                Unsigned 8-bit integer
                Reason Code

wlccp.wids_msg_type WIDS Message Type
                Unsigned 8-bit integer
                WIDS Message Type

wlccp.wlccp_null_tlv NULL TLV
                Byte array
                NULL TLV

wlccp.wlccp_tlv_group TLV Group
                Unsigned 16-bit integer
                TLV Group ID

wlccp.wlccp_tlv_type TLV Type
                Unsigned 16-bit integer
                TLV Type ID
```

**Clearcase NFS (clearcase)**

```
clearcase.procedure_v3 V3 Procedure
                Unsigned 32-bit integer
                V3 Procedure
```

**Cluster TDB (ctdb)**

```
ctdb.callid     Call Id
                Unsigned 32-bit integer
                Call ID

ctdb.clientid   ClientId
                Unsigned 32-bit integer

ctdb.ctrl_flags CTRL Flags
                Unsigned 32-bit integer

ctdb.ctrl_opcode CTRL Opcode
                Unsigned 32-bit integer

ctdb.data       Data
                Byte array

ctdb.datalen    Data Length
                Unsigned 32-bit integer

ctdb.dbid       DB Id
                Unsigned 32-bit integer
                Database ID

ctdb.dmaster    Dmaster
                Unsigned 32-bit integer
```

```
ctdb.dst Destination
    Unsigned 32-bit integer
ctdb.error Error
    Byte array
ctdb.errorlen Error Length
    Unsigned 32-bit integer
ctdb.generation Generation
    Unsigned 32-bit integer
ctdb.hopcount Hopcount
    Unsigned 32-bit integer
ctdb.id Id
    Unsigned 32-bit integer
    Transaction ID
ctdb.immediate Immediate
    Boolean
    Force migration of DMASTER?
ctdb.key Key
    Byte array
ctdb.keyhash KeyHash
    Unsigned 32-bit integer
ctdb.keylen Key Length
    Unsigned 32-bit integer
ctdb.len Length
    Unsigned 32-bit integer
    Size of CTDB PDU
ctdb.magic Magic
    Unsigned 32-bit integer
ctdb.node_flags Node Flags
    Unsigned 32-bit integer
ctdb.node_ip Node IP
    IPv4 address
ctdb.num_nodes Num Nodes
    Unsigned 32-bit integer
ctdb.opcode Opcode
    Unsigned 32-bit integer
    CTDB command opcode
ctdb.pid PID
    Unsigned 32-bit integer
ctdb.process_exists Process Exists
    Boolean
ctdb.recmaster Recovery Master
    Unsigned 32-bit integer
ctdb.recmode Recovery Mode
    Unsigned 32-bit integer
ctdb.request_in Request In
    Frame number
```

```

ctdb.response_in  Response In
                  Frame number
ctdb.rsn          RSN
                  Unsigned 64-bit integer
ctdb.src          Source
                  Unsigned 32-bit integer
ctdb.srvid        SrvId
                  Unsigned 64-bit integer
ctdb.status       Status
                  Unsigned 32-bit integer
ctdb.time         Time since request
                  Time duration
ctdb.version      Version
                  Unsigned 32-bit integer
ctdb.vnn          VNN
                  Unsigned 32-bit integer
ctdb.xid          xid
                  Unsigned 32-bit integer

```

#### **CoSine IPNOS L2 debug output (cosine)**

```

cosine.err        Error Code
                  Unsigned 8-bit integer
cosine.off        Offset
                  Unsigned 8-bit integer
cosine.pri        Priority
                  Unsigned 8-bit integer
cosine.pro        Protocol
                  Unsigned 8-bit integer
cosine.rm         Rate Marking
                  Unsigned 8-bit integer

```

#### **Common Image Generator Interface (cigi)**

```

cigi.3_2_los_ext_response  Line of Sight Extended Response
                           String
                           Line of Sight Extended Response Packet
cigi.3_2_los_ext_response.alpha  Alpha
                           Unsigned 8-bit integer
                           Indicates the alpha component of the surface at the point of intersection
cigi.3_2_los_ext_response.alt_zoff  Altitude (m)/Z Offset(m)
                           Double-precision floating point
                           Indicates the geodetic altitude of the point of intersection along the LOS t
cigi.3_2_los_ext_response.blue  Blue
                           Unsigned 8-bit integer
                           Indicates the blue color component of the surface at the point of intersecti
cigi.3_2_los_ext_response.entity_id  Entity ID
                           Unsigned 16-bit integer
                           Indicates the entity with which a LOS test vector or segment intersects

```

```

cigi.3_2_los_ext_response.entity_id_valid  Entity ID Valid
    Boolean
    Indicates whether the LOS test vector or segment intersects with an entity
cigi.3_2_los_ext_response.green  Green
    Unsigned 8-bit integer
    Indicates the green color component of the surface at the point of intersect
cigi.3_2_los_ext_response.host_frame_number_lsn  Host Frame Number LSN
    Unsigned 8-bit integer
    Least significant nibble of the host frame number parameter of the last IG C
cigi.3_2_los_ext_response.lat_xoff  Latitude (degrees)/X Offset (m)
    Double-precision floating point
    Indicates the geodetic latitude of the point of intersection along the LOS t
cigi.3_2_los_ext_response.lon_yoff  Longitude (degrees)/Y Offset (m)
    Double-precision floating point
    Indicates the geodetic longitude of the point of intersection along the LOS
cigi.3_2_los_ext_response.los_id  LOS ID
    Unsigned 16-bit integer
    Identifies the LOS response
cigi.3_2_los_ext_response.material_code  Material Code
    Unsigned 32-bit integer
    Indicates the material code of the surface intersected by the LOS test segme
cigi.3_2_los_ext_response.normal_vector_azimuth  Normal Vector Azimuth (degrees)
    Indicates the azimuth of a unit vector normal to the surface intersected by
cigi.3_2_los_ext_response.normal_vector_elevation  Normal Vector Elevation (degr
    Indicates the elevation of a unit vector normal to the surface intersected b
cigi.3_2_los_ext_response.range  Range (m)
    Double-precision floating point
    Indicates the distance along the LOS test segment or vector from the source
cigi.3_2_los_ext_response.range_valid  Range Valid
    Boolean
    Indicates whether the Range parameter is valid
cigi.3_2_los_ext_response.red  Red
    Unsigned 8-bit integer
    Indicates the red color component of the surface at the point of intersectio
cigi.3_2_los_ext_response.response_count  Response Count
    Unsigned 8-bit integer
    Indicates the total number of Line of Sight Extended Response packets the IG
cigi.3_2_los_ext_response.valid  Valid
    Boolean
    Indicates whether this packet contains valid data
cigi.3_2_los_ext_response.visible  Visible
    Boolean
    Indicates whether the destination point is visible from the source point
cigi.aerosol_concentration_response  Aerosol Concentration Response
    String
    Aerosol Concentration Response Packet

```

cigi.aerosol\_concentration\_response.aerosol\_concentration Aerosol Concentration  
Identifies the concentration of airborne particles

cigi.aerosol\_concentration\_response.layer\_id Layer ID  
Unsigned 8-bit integer  
Identifies the weather layer whose aerosol concentration is being described

cigi.aerosol\_concentration\_response.request\_id Request ID  
Unsigned 8-bit integer  
Identifies the environmental conditions request to which this response packet

cigi.animation\_stop\_notification Animation Stop Notification  
String  
Animation Stop Notification Packet

cigi.animation\_stop\_notification.entity\_id Entity ID  
Unsigned 16-bit integer  
Indicates the entity ID of the animation that has stopped

cigi.art\_part\_control Articulated Parts Control  
String  
Articulated Parts Control Packet

cigi.art\_part\_control.entity\_id Entity ID  
Unsigned 16-bit integer  
Identifies the entity to which this data packet will be applied

cigi.art\_part\_control.part\_enable Articulated Part Enable  
Boolean  
Determines whether the articulated part submodel should be enabled or disabled

cigi.art\_part\_control.part\_id Articulated Part ID  
Unsigned 8-bit integer  
Identifies which articulated part is controlled with this data packet

cigi.art\_part\_control.part\_state Articulated Part State  
Boolean  
Indicates whether an articulated part is to be shown in the display

cigi.art\_part\_control.pitch Pitch (degrees)  
Specifies the pitch of this part with respect to the submodel coordinate system

cigi.art\_part\_control.pitch\_enable Pitch Enable  
Boolean  
Identifies whether the articulated part pitch enable in this data packet is

cigi.art\_part\_control.roll Roll (degrees)  
Specifies the roll of this part with respect to the submodel coordinate system

cigi.art\_part\_control.roll\_enable Roll Enable  
Boolean  
Identifies whether the articulated part roll enable in this data packet is

cigi.art\_part\_control.x\_offset X Offset (m)  
Identifies the distance along the X axis by which the articulated part should

cigi.art\_part\_control.xoff X Offset (m)  
Specifies the distance of the articulated part along its X axis



`cigi.art_part_control.xoff_enable` X Offset Enable  
Boolean  
Identifies whether the articulated part x offset in this data packet is mani

`cigi.art_part_control.y_offset` Y Offset (m)  
Identifies the distance along the Y axis by which the articulated part shoul

`cigi.art_part_control.yaw` Yaw (degrees)  
Specifies the yaw of this part with respect to the submodel coordinate syste

`cigi.art_part_control.yaw_enable` Yaw Enable  
Unsigned 8-bit integer  
Identifies whether the articulated part yaw enable in this data packet is ma

`cigi.art_part_control.yoff` Y Offset (m)  
Specifies the distance of the articulated part along its Y axis

`cigi.art_part_control.yoff_enable` Y Offset Enable  
Boolean  
Identifies whether the articulated part y offset in this data packet is mani

`cigi.art_part_control.z_offset` Z Offset (m)  
Identifies the distance along the Z axis by which the articulated part shoul

`cigi.art_part_control.zoff` Z Offset (m)  
Specifies the distance of the articulated part along its Z axis

`cigi.art_part_control.zoff_enable` Z Offset Enable  
Boolean  
Identifies whether the articulated part z offset in this data packet is mani

`cigi.atmosphere_control` Atmosphere Control  
String  
Atmosphere Control Packet

`cigi.atmosphere_control.air_temp` Global Air Temperature (degrees C)  
Specifies the global air temperature of the environment

`cigi.atmosphere_control.atmospheric_model_enable` Atmospheric Model Enable  
Boolean  
Specifies whether the IG should use an atmospheric model to determine spectr

`cigi.atmosphere_control.barometric_pressure` Global Barometric Pressure (mb or h  
Specifies the global atmospheric pressure

`cigi.atmosphere_control.horiz_wind` Global Horizontal Wind Speed (m/s)  
Specifies the global wind speed parallel to the ellipsoid-tangential referen

`cigi.atmosphere_control.humidity` Global Humidity (%)  
Unsigned 8-bit integer  
Specifies the global humidity of the environment

`cigi.atmosphere_control.vert_wind` Global Vertical Wind Speed (m/s)  
Specifies the global vertical wind speed

`cigi.atmosphere_control.visibility_range` Global Visibility Range (m)  
Specifies the global visibility range through the atmosphere

`cigi.atmosphere_control.wind_direction` Global Wind Direction (degrees)

Specifies the global wind direction

`cigi.byte_swap` Byte Swap  
Unsigned 16-bit integer  
Used to determine whether the incoming data should be byte-swapped

`cigi.celestial_sphere_control` Celestial Sphere Control  
String  
Celestial Sphere Control Packet

`cigi.celestial_sphere_control.date` Date (MMDDYYYY)  
Unsigned 32-bit integer  
Specifies the current date within the simulation

`cigi.celestial_sphere_control.date_time_valid` Date/Time Valid  
Boolean  
Specifies whether the Hour, Minute, and Date parameters are valid

`cigi.celestial_sphere_control.ephemeris_enable` Ephemeris Model Enable  
Boolean  
Controls whether the time of day is static or continuous

`cigi.celestial_sphere_control.hour` Hour (h)  
Unsigned 8-bit integer  
Specifies the current hour of the day within the simulation

`cigi.celestial_sphere_control.minute` Minute (min)  
Unsigned 8-bit integer  
Specifies the current minute of the day within the simulation

`cigi.celestial_sphere_control.moon_enable` Moon Enable  
Boolean  
Specifies whether the moon is enabled in the sky model

`cigi.celestial_sphere_control.star_enable` Star Field Enable  
Boolean  
Specifies whether the star field is enabled in the sky model

`cigi.celestial_sphere_control.star_intensity` Star Field Intensity (%)  
Specifies the intensity of the star field within the sky model

`cigi.celestial_sphere_control.sun_enable` Sun Enable  
Boolean  
Specifies whether the sun is enabled in the sky model

`cigi.coll_det_seg_def` Collision Detection Segment Definition  
String  
Collision Detection Segment Definition Packet

`cigi.coll_det_seg_def.collusion_mask` Collision Mask  
Byte array  
Indicates which environment features will be included in or excluded from collision detection

`cigi.coll_det_seg_def.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates the entity to which this collision detection definition is assigned

`cigi.coll_det_seg_def.material_mask` Material Mask  
Unsigned 32-bit integer  
Specifies the environmental and cultural features to be included in or excluded from collision detection

`cigi.coll_det_seg_def.segment_enable` Segment Enable  
Boolean  
Indicates whether the defined segment is enabled for collision testing

`cigi.coll_det_seg_def.segment_id` Segment ID  
Unsigned 8-bit integer  
Indicates which segment is being uniquely defined for the given entity

`cigi.coll_det_seg_def.x1` X1 (m)  
Specifies the X offset of one endpoint of the collision segment

`cigi.coll_det_seg_def.x2` X2 (m)  
Specifies the X offset of one endpoint of the collision segment

`cigi.coll_det_seg_def.x_end` Segment X End (m)  
Specifies the ending point of the collision segment in the X-axis with respect to the source endpoint

`cigi.coll_det_seg_def.x_start` Segment X Start (m)  
Specifies the starting point of the collision segment in the X-axis with respect to the source endpoint

`cigi.coll_det_seg_def.y1` Y1 (m)  
Specifies the Y offset of one endpoint of the collision segment

`cigi.coll_det_seg_def.y2` Y2 (m)  
Specifies the Y offset of one endpoint of the collision segment

`cigi.coll_det_seg_def.y_end` Segment Y End (m)  
Specifies the ending point of the collision segment in the Y-axis with respect to the source endpoint

`cigi.coll_det_seg_def.y_start` Segment Y Start (m)  
Specifies the starting point of the collision segment in the Y-axis with respect to the source endpoint

`cigi.coll_det_seg_def.z1` Z1 (m)  
Specifies the Z offset of one endpoint of the collision segment

`cigi.coll_det_seg_def.z2` Z2 (m)  
Specifies the Z offset of one endpoint of the collision segment

`cigi.coll_det_seg_def.z_end` Segment Z End (m)  
Specifies the ending point of the collision segment in the Z-axis with respect to the source endpoint

`cigi.coll_det_seg_def.z_start` Segment Z Start (m)  
Specifies the starting point of the collision segment in the Z-axis with respect to the source endpoint

`cigi.coll_det_seg_notification` Collision Detection Segment Notification  
String  
Collision Detection Segment Notification Packet

`cigi.coll_det_seg_notification.contacted_entity_id` Contacted Entity ID  
Unsigned 16-bit integer  
Indicates the entity with which the collision occurred

`cigi.coll_det_seg_notification.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates the entity to which the collision detection segment belongs

`cigi.coll_det_seg_notification.intersection_distance` Intersection Distance (m)  
Indicates the distance along the collision test vector from the source endpoint to the intersection point

`cigi.coll_det_seg_notification.material_code` Material Code  
Unsigned 32-bit integer  
Indicates the material code of the surface at the point of collision

`cigi.coll_det_seg_notification.segment_id` Segment ID  
Unsigned 8-bit integer  
Indicates the ID of the collision detection segment along which the collision occurred

`cigi.coll_det_seg_notification.type` Collision Type  
Boolean  
Indicates whether the collision occurred with another entity or with a non-entity

`cigi.coll_det_seg_response` Collision Detection Segment Response  
String  
Collision Detection Segment Response Packet

`cigi.coll_det_seg_response.collision_x` Collision Point X (m)  
Specifies the X component of a vector, which lies along the defined segment

`cigi.coll_det_seg_response.collision_y` Collision Point Y (m)  
Specifies the Y component of a vector, which lies along the defined segment

`cigi.coll_det_seg_response.collision_z` Collision Point Z (m)  
Specifies the Z component of a vector, which lies along the defined segment

`cigi.coll_det_seg_response.contact` Entity/Non-Entity Contact  
Boolean  
Indicates whether another entity was contacted during this collision

`cigi.coll_det_seg_response.contacted_entity` Contacted Entity ID  
Unsigned 16-bit integer  
Indicates which entity was contacted during the collision

`cigi.coll_det_seg_response.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates which entity experienced a collision

`cigi.coll_det_seg_response.material_type` Material Type  
Signed 32-bit integer  
Specifies the material type of the surface that this collision test segment is on

`cigi.coll_det_seg_response.segment_id` Segment ID  
Unsigned 8-bit integer  
Identifies the collision segment

`cigi.coll_det_vol_def` Collision Detection Volume Definition  
String  
Collision Detection Volume Definition Packet

`cigi.coll_det_vol_def.depth` Depth (m)  
Specifies the depth of the volume

`cigi.coll_det_vol_def.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates the entity to which this collision detection definition is assigned

`cigi.coll_det_vol_def.height` Height (m)  
Specifies the height of the volume

`cigi.coll_det_vol_def.pitch` Pitch (degrees)  
Specifies the pitch of the cuboid with respect to the entity's coordinate system

`cigi.coll_det_vol_def.radius_height` Radius (m)/Height (m)  
Specifies the radius of the sphere or specifies the length of the cuboid along the Z axis

`cigi.coll_det_vol_def.roll` Roll (degrees)  
Specifies the roll of the cuboid with respect to the entity's coordinate system

`cigi.coll_det_vol_def.volume_enable` Volume Enable  
Boolean  
Indicates whether the defined volume is enabled for collision testing

`cigi.coll_det_vol_def.volume_id` Volume ID  
Unsigned 8-bit integer  
Indicates which volume is being uniquely defined for a given entity

`cigi.coll_det_vol_def.volume_type` Volume Type  
Boolean  
Specifies whether the volume is spherical or cuboid

`cigi.coll_det_vol_def.width` Width (m)  
Specifies the width of the volume

`cigi.coll_det_vol_def.x` X (m)  
Specifies the X offset of the center of the volume

`cigi.coll_det_vol_def.x_offset` Centroid X Offset (m)  
Specifies the offset of the volume's centroid along the X axis with respect to the entity's coordinate system

`cigi.coll_det_vol_def.y` Y (m)  
Specifies the Y offset of the center of the volume

`cigi.coll_det_vol_def.y_offset` Centroid Y Offset (m)  
Specifies the offset of the volume's centroid along the Y axis with respect to the entity's coordinate system

`cigi.coll_det_vol_def.yaw` Yaw (degrees)  
Specifies the yaw of the cuboid with respect to the entity's coordinate system

`cigi.coll_det_vol_def.z` Z (m)  
Specifies the Z offset of the center of the volume

`cigi.coll_det_vol_def.z_offset` Centroid Z Offset (m)  
Specifies the offset of the volume's centroid along the Z axis with respect to the entity's coordinate system

`cigi.coll_det_vol_notification` Collision Detection Volume Notification  
String  
Collision Detection Volume Notification Packet

`cigi.coll_det_vol_notification.contacted_entity_id` Contacted Entity ID  
Unsigned 16-bit integer  
Indicates the entity with which the collision occurred

`cigi.coll_det_vol_notification.contacted_volume_id` Contacted Volume ID  
Unsigned 8-bit integer  
Indicates the ID of the collision detection volume with which the collision occurred

`cigi.coll_det_vol_notification.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates the entity to which the collision detection volume belongs

`cigi.coll_det_vol_notification.type` Collision Type  
Boolean  
Indicates whether the collision occurred with another entity or with a non-e

`cigi.coll_det_vol_notification.volume_id` Volume ID  
Unsigned 8-bit integer  
Indicates the ID of the collision detection volume within which the collision

`cigi.coll_det_vol_response` Collision Detection Volume Response  
String  
Collision Detection Volume Response Packet

`cigi.coll_det_vol_response.contact` Entity/Non-Entity Contact  
Boolean  
Indicates whether another entity was contacted during this collision

`cigi.coll_det_vol_response.contact_entity` Contacted Entity ID  
Unsigned 16-bit integer  
Indicates which entity was contacted with during the collision

`cigi.coll_det_vol_response.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates which entity experienced a collision

`cigi.coll_det_vol_response.volume_id` Volume ID  
Unsigned 8-bit integer  
Identifies the collision volume corresponding to the associated Collision De

`cigi.component_control` Component Control  
String  
Component Control Packet

`cigi.component_control.component_class` Component Class  
Unsigned 8-bit integer  
Identifies the class the component being controlled is in

`cigi.component_control.component_id` Component ID  
Unsigned 16-bit integer  
Identifies the component of a component class and instance ID this packet wi

`cigi.component_control.component_state` Component State  
Unsigned 16-bit integer  
Identifies the commanded state of a component

`cigi.component_control.component_val1` Component Value 1  
Identifies a continuous value to be applied to a component

`cigi.component_control.component_val2` Component Value 2  
Identifies a continuous value to be applied to a component

`cigi.component_control.data_1` Component Data 1  
Byte array  
User-defined component data

`cigi.component_control.data_2` Component Data 2  
Byte array  
User-defined component data

`cigi.component_control.data_3` Component Data 3  
Byte array  
User-defined component data

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cigi.component_control.data_4  Component Data 4
    Byte array
    User-defined component data
cigi.component_control.data_5  Component Data 5
    Byte array
    User-defined component data
cigi.component_control.data_6  Component Data 6
    Byte array
    User-defined component data
cigi.component_control.instance_id  Instance ID
    Unsigned 16-bit integer
    Identifies the instance of the a class the component being controlled belong
cigi.conformal_clamped_entity_control  Conformal Clamped Entity Control
    String
    Conformal Clamped Entity Control Packet
cigi.conformal_clamped_entity_control.entity_id  Entity ID
    Unsigned 16-bit integer
    Specifies the entity to which this packet is applied
cigi.conformal_clamped_entity_control.lat  Latitude (degrees)
    Double-precision floating point
    Specifies the entity's geodetic latitude
cigi.conformal_clamped_entity_control.lon  Longitude (degrees)
    Double-precision floating point
    Specifies the entity's geodetic longitude
cigi.conformal_clamped_entity_control.yaw  Yaw (degrees)
    Specifies the instantaneous heading of the entity
cigi.destport  Destination Port
    Unsigned 16-bit integer
    Destination Port
cigi.earth_ref_model_def  Earth Reference Model Definition
    String
    Earth Reference Model Definition Packet
cigi.earth_ref_model_def.equatorial_radius  Equatorial Radius (m)
    Double-precision floating point
    Specifies the semi-major axis of the ellipsoid
cigi.earth_ref_model_def.erm_enable  Custom ERM Enable
    Boolean
    Specifies whether the IG should use the Earth Reference Model defined by thi
cigi.earth_ref_model_def.flattening  Flattening (m)
    Double-precision floating point
    Specifies the flattening of the ellipsoid
cigi.entity_control  Entity Control
    String
    Entity Control Packet
cigi.entity_control.alpha  Alpha
    Unsigned 8-bit integer
    Specifies the explicit alpha to be applied to the entity's geometry
```

`cigi.entity_control.alt` Altitude (m)  
Double-precision floating point  
Identifies the altitude position of the reference point of the entity in meters

`cigi.entity_control.alt_zoff` Altitude (m)/Z Offset (m)  
Double-precision floating point  
Specifies the entity's altitude or the distance from the parent's reference point

`cigi.entity_control.animation_dir` Animation Direction  
Boolean  
Specifies the direction in which an animation plays

`cigi.entity_control.animation_loop_mode` Animation Loop Mode  
Boolean  
Specifies whether an animation should be a one-shot

`cigi.entity_control.animation_state` Animation State  
Unsigned 8-bit integer  
Specifies the state of an animation

`cigi.entity_control.attach_state` Attach State  
Boolean  
Identifies whether the entity should be attached as a child to a parent

`cigi.entity_control.coll_det_request` Collision Detection Request  
Boolean  
Determines whether any collision detection segments and volumes associated with the entity are active

`cigi.entity_control.collision_detect` Collision Detection Request  
Boolean  
Identifies if collision detection is enabled for the entity

`cigi.entity_control.effect_state` Effect Animation State  
Unsigned 8-bit integer  
Identifies the animation state of a special effect

`cigi.entity_control.entity_id` Entity ID  
Unsigned 16-bit integer  
Identifies the entity motion system

`cigi.entity_control.entity_state` Entity State  
Unsigned 8-bit integer  
Identifies the entity's geometry state

`cigi.entity_control.entity_type` Entity Type  
Unsigned 16-bit integer  
Specifies the type for the entity

`cigi.entity_control.ground_ocean_clamp` Ground/Ocean Clamp  
Unsigned 8-bit integer  
Specifies whether the entity should be clamped to the ground or water surface

`cigi.entity_control.inherit_alpha` Inherit Alpha  
Boolean  
Specifies whether the entity's alpha is combined with the apparent alpha of the parent

`cigi.entity_control.internal_temp` Internal Temperature (degrees C)  
Double-precision floating point  
Specifies the internal temperature of the entity in degrees Celsius

`cigi.entity_control.lat` Latitude (degrees)  
Double-precision floating point  
Identifies the latitude position of the reference point of the entity in degrees



`cigi.entity_control.lat_xoff` Latitude (degrees)/X Offset (m)  
Double-precision floating point  
Specifies the entity's geodetic latitude or the distance from the parent's r

`cigi.entity_control.lon` Longitude (degrees)  
Double-precision floating point  
Identifies the longitude position of the reference point of the entity in de

`cigi.entity_control.lon_yoff` Longitude (°)/Y Offset (m)  
Double-precision floating point  
Specifies the entity's geodetic longitude or the distance from the parent's

`cigi.entity_control.opacity` Percent Opacity  
Specifies the degree of opacity of the entity

`cigi.entity_control.parent_id` Parent Entity ID  
Unsigned 16-bit integer  
Identifies the parent to which the entity should be attached

`cigi.entity_control.pitch` Pitch (degrees)  
Specifies the pitch angle of the entity

`cigi.entity_control.roll` Roll (degrees)  
Identifies the roll angle of the entity in degrees

`cigi.entity_control.type` Entity Type  
Unsigned 16-bit integer  
Identifies the type of the entity

`cigi.entity_control.yaw` Yaw (degrees)  
Specifies the instantaneous heading of the entity

`cigi.env_cond_request` Environmental Conditions Request  
String  
Environmental Conditions Request Packet

`cigi.env_cond_request.alt` Altitude (m)  
Double-precision floating point  
Specifies the geodetic altitude at which the environmental state is requeste

`cigi.env_cond_request.id` Request ID  
Unsigned 8-bit integer  
Identifies the environmental conditions request

`cigi.env_cond_request.lat` Latitude (degrees)  
Double-precision floating point  
Specifies the geodetic latitude at which the environmental state is requeste

`cigi.env_cond_request.lon` Longitude (degrees)  
Double-precision floating point  
Specifies the geodetic longitude at which the environmental state is request

`cigi.env_cond_request.type` Request Type  
Unsigned 8-bit integer  
Specifies the desired response type for the request

`cigi.env_control` Environment Control  
String  
Environment Control Packet

`cigi.env_control.aerosol` Aerosol (gm/m<sup>3</sup>)

Controls the liquid water content for the defined atmosphere

`cigi.env_control.air_temp` Air Temperature (degrees C)  
Identifies the global temperature of the environment

`cigi.env_control.date` Date (MMDDYYYY)  
Signed 32-bit integer  
Specifies the desired date for use by the ephemeris program within the image

`cigi.env_control.ephemeris_enable` Ephemeris Enable  
Boolean  
Identifies whether a continuous time of day or static time of day is used

`cigi.env_control.global_visibility` Global Visibility (m)  
Identifies the global visibility

`cigi.env_control.hour` Hour (h)  
Unsigned 8-bit integer  
Identifies the hour of the day for the ephemeris program within the image

`cigi.env_control.humidity` Humidity (%)  
Unsigned 8-bit integer  
Specifies the global humidity of the environment

`cigi.env_control.minute` Minute (min)  
Unsigned 8-bit integer  
Identifies the minute of the hour for the ephemeris program within the image

`cigi.env_control.modtran_enable` MODTRAN  
Boolean  
Identifies whether atmospheric will be included in the calculations

`cigi.env_control.pressure` Barometric Pressure (mb)  
Controls the atmospheric pressure input into MODTRAN

`cigi.env_control.wind_direction` Wind Direction (degrees)  
Identifies the global wind direction

`cigi.env_control.wind_speed` Wind Speed (m/s)  
Identifies the global wind speed

`cigi.env_region_control` Environmental Region Control  
String  
Environmental Region Control Packet

`cigi.env_region_control.corner_radius` Corner Radius (m)  
Specifies the radius of the corner of the rounded rectangle

`cigi.env_region_control.lat` Latitude (degrees)  
Double-precision floating point  
Specifies the geodetic latitude of the center of the rounded rectangle

`cigi.env_region_control.lon` Longitude (degrees)  
Double-precision floating point  
Specifies the geodetic longitude of the center of the rounded rectangle

`cigi.env_region_control.merge_aerosol` Merge Aerosol Concentrations  
Boolean  
Specifies whether the concentrations of aerosols found within this region sh

`cigi.env_region_control.merge_maritime` Merge Maritime Surface Conditions  
Boolean  
Specifies whether the maritime surface conditions found within this region should be merged

`cigi.env_region_control.merge_terrestrial` Merge Terrestrial Surface Conditions  
Boolean  
Specifies whether the terrestrial surface conditions found within this region should be merged

`cigi.env_region_control.merge_weather` Merge Weather Properties  
Boolean  
Specifies whether atmospheric conditions within this region should be merged

`cigi.env_region_control.region_id` Region ID  
Unsigned 16-bit integer  
Specifies the environmental region to which the data in this packet will be merged

`cigi.env_region_control.region_state` Region State  
Unsigned 8-bit integer  
Specifies whether the region should be active or destroyed

`cigi.env_region_control.rotation` Rotation (degrees)  
Specifies the yaw angle of the rounded rectangle

`cigi.env_region_control.size_x` Size X (m)  
Specifies the length of the environmental region along its X axis at the geographic location

`cigi.env_region_control.size_y` Size Y (m)  
Specifies the length of the environmental region along its Y axis at the geographic location

`cigi.env_region_control.transition_perimeter` Transition Perimeter (m)  
Specifies the width of the transition perimeter around the environmental region

`cigi.event_notification` Event Notification  
String  
Event Notification Packet

`cigi.event_notification.data_1` Event Data 1  
Byte array  
Used for user-defined event data

`cigi.event_notification.data_2` Event Data 2  
Byte array  
Used for user-defined event data

`cigi.event_notification.data_3` Event Data 3  
Byte array  
Used for user-defined event data

`cigi.event_notification.event_id` Event ID  
Unsigned 16-bit integer  
Indicates which event has occurred

`cigi.frame_size` Frame Size (bytes)  
Unsigned 8-bit integer  
Number of bytes sent with all cigi packets in this frame

`cigi.hat_hot_ext_response` HAT/HOT Extended Response  
String  
HAT/HOT Extended Response Packet

```

cigi.hat_hot_ext_response.hat  HAT
    Double-precision floating point
    Indicates the height of the test point above the terrain
cigi.hat_hot_ext_response.hat_hot_id  HAT/HOT ID
    Unsigned 16-bit integer
    Identifies the HAT/HOT response
cigi.hat_hot_ext_response.host_frame_number_lsn  Host Frame Number LSN
    Unsigned 8-bit integer
    Least significant nibble of the host frame number parameter of the last IG C
cigi.hat_hot_ext_response.hot  HOT
    Double-precision floating point
    Indicates the height of terrain above or below the test point
cigi.hat_hot_ext_response.material_code  Material Code
    Unsigned 32-bit integer
    Indicates the material code of the terrain surface at the point of intersect
cigi.hat_hot_ext_response.normal_vector_azimuth  Normal Vector Azimuth (degrees)
    Indicates the azimuth of the normal unit vector of the surface intersected b
cigi.hat_hot_ext_response.normal_vector_elevation  Normal Vector Elevation (degr
    Indicates the elevation of the normal unit vector of the surface intersected
cigi.hat_hot_ext_response.valid  Valid
    Boolean
    Indicates whether the remaining parameters in this packet contain valid numb
cigi.hat_hot_request  HAT/HOT Request
    String
    HAT/HOT Request Packet
cigi.hat_hot_request.alt_zoff  Altitude (m)/Z Offset (m)
    Double-precision floating point
    Specifies the altitude from which the HAT/HOT request is being made or speci
cigi.hat_hot_request.coordinate_system  Coordinate System
    Boolean
    Specifies the coordinate system within which the test point is defined
cigi.hat_hot_request.entity_id  Entity ID
    Unsigned 16-bit integer
    Specifies the entity relative to which the test point is defined
cigi.hat_hot_request.hat_hot_id  HAT/HOT ID
    Unsigned 16-bit integer
    Identifies the HAT/HOT request
cigi.hat_hot_request.lat_xoff  Latitude (degrees)/X Offset (m)
    Double-precision floating point
    Specifies the latitude from which the HAT/HOT request is being made or speci
cigi.hat_hot_request.lon_yoff  Longitude (degrees)/Y Offset (m)
    Double-precision floating point
    Specifies the longitude from which the HAT/HOT request is being made or spec
cigi.hat_hot_request.type  Request Type
    Unsigned 8-bit integer
    Determines the type of response packet the IG should return for this packet

```

cigi.hat\_hot\_request.update\_period Update Period  
Unsigned 8-bit integer  
Specifies interval between successive responses to this request. A zero indi

cigi.hat\_hot\_response HAT/HOT Response  
String  
HAT/HOT Response Packet

cigi.hat\_hot\_response.hat\_hot\_id HAT/HOT ID  
Unsigned 16-bit integer  
Identifies the HAT or HOT response

cigi.hat\_hot\_response.height Height  
Double-precision floating point  
Contains the requested height

cigi.hat\_hot\_response.host\_frame\_number\_lsn Host Frame Number LSN  
Unsigned 8-bit integer  
Least significant nibble of the host frame number parameter of the last IG C

cigi.hat\_hot\_response.type Response Type  
Boolean  
Indicates whether the Height parameter represent Height Above Terrain or Hei

cigi.hat\_hot\_response.valid Valid  
Boolean  
Indicates whether the Height parameter contains a valid number

cigi.hat\_request Height Above Terrain Request  
String  
Height Above Terrain Request Packet

cigi.hat\_request.alt Altitude (m)  
Double-precision floating point  
Specifies the altitude from which the HAT request is being made

cigi.hat\_request.hat\_id HAT ID  
Unsigned 16-bit integer  
Identifies the HAT request

cigi.hat\_request.lat Latitude (degrees)  
Double-precision floating point  
Specifies the latitudinal position from which the HAT request is being made

cigi.hat\_request.lon Longitude (degrees)  
Double-precision floating point  
Specifies the longitudinal position from which the HAT request is being made

cigi.hat\_response Height Above Terrain Response  
String  
Height Above Terrain Response Packet

cigi.hat\_response.alt Altitude (m)  
Double-precision floating point  
Represents the altitude above or below the terrain for the position requeste

cigi.hat\_response.hat\_id HAT ID  
Unsigned 16-bit integer  
Identifies the HAT response

cigi.hat\_response.material\_type Material Type  
Signed 32-bit integer  
Specifies the material type of the object intersected by the HAT test vector

cigi.hat\_response.valid Valid  
Boolean  
Indicates whether the response is valid or invalid

cigi.hot\_request Height of Terrain Request  
String  
Height of Terrain Request Packet

cigi.hot\_request.hot\_id HOT ID  
Unsigned 16-bit integer  
Identifies the HOT request

cigi.hot\_request.lat Latitude (degrees)  
Double-precision floating point  
Specifies the latitudinal position from which the HOT request is made

cigi.hot\_request.lon Longitude (degrees)  
Double-precision floating point  
Specifies the longitudinal position from which the HOT request is made

cigi.hot\_response Height of Terrain Response  
String  
Height of Terrain Response Packet

cigi.hot\_response.alt Altitude (m)  
Double-precision floating point  
Represents the altitude of the terrain for the position requested in the HOT

cigi.hot\_response.hot\_id HOT ID  
Unsigned 16-bit integer  
Identifies the HOT response corresponding to the associated HOT request

cigi.hot\_response.material\_type Material Type  
Signed 32-bit integer  
Specifies the material type of the object intersected by the HOT test segment

cigi.hot\_response.valid Valid  
Boolean  
Indicates whether the response is valid or invalid

cigi.ig\_control IG Control  
String  
IG Control Packet

cigi.ig\_control.boresight Tracking Device Boresight  
Boolean  
Used by the host to enable boresight mode

cigi.ig\_control.db\_number Database Number  
Signed 8-bit integer  
Identifies the number associated with the database requiring loading

cigi.ig\_control.frame\_ctr Frame Counter  
Unsigned 32-bit integer  
Identifies a particular frame

cigi.ig\_control.host\_frame\_number Host Frame Number  
Unsigned 32-bit integer  
Uniquely identifies a data frame on the host

cigi.ig\_control.ig\_mode IG Mode Change Request  
Unsigned 8-bit integer  
Commands the IG to enter its various modes

`cigi.ig_control.last_ig_frame_number` IG Frame Number  
Unsigned 32-bit integer  
Contains the value of the IG Frame Number parameter in the last Start of Fra

`cigi.ig_control.time_tag` Timing Value (microseconds)  
Identifies synchronous operation

`cigi.ig_control.timestamp` Timestamp (microseconds)  
Unsigned 32-bit integer  
Indicates the number of 10 microsecond "ticks" since some initial reference

`cigi.ig_control.timestamp_valid` Timestamp Valid  
Boolean  
Indicates whether the timestamp contains a valid value

`cigi.ig_control.tracking_enable` Tracking Device Enable  
Boolean  
Identifies the state of an external tracking device

`cigi.image_generator_message` Image Generator Message  
String  
Image Generator Message Packet

`cigi.image_generator_message.message` Message  
String  
Image generator message

`cigi.image_generator_message.message_id` Message ID  
Unsigned 16-bit integer  
Uniquely identifies an instance of an Image Generator Response Message

`cigi.los_ext_response` Line of Sight Extended Response  
String  
Line of Sight Extended Response Packet

`cigi.los_ext_response.alpha` Alpha  
Unsigned 8-bit integer  
Indicates the alpha component of the surface at the point of intersection

`cigi.los_ext_response.alt_zoff` Altitude (m)/Z Offset(m)  
Double-precision floating point  
Indicates the geodetic altitude of the point of intersection along the LOS t

`cigi.los_ext_response.blue` Blue  
Unsigned 8-bit integer  
Indicates the blue color component of the surface at the point of intersecti

`cigi.los_ext_response.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates the entity with which a LOS test vector or segment intersects

`cigi.los_ext_response.entity_id_valid` Entity ID Valid  
Boolean  
Indicates whether the LOS test vector or segment intersects with an entity

`cigi.los_ext_response.green` Green  
Unsigned 8-bit integer  
Indicates the green color component of the surface at the point of intersect

`cigi.los_ext_response.intersection_coord` Intersection Point Coordinate System  
Boolean  
Indicates the coordinate system relative to which the intersection point is

`cigi.los_ext_response.lat_xoff` Latitude (degrees)/X Offset (m)  
 Double-precision floating point  
 Indicates the geodetic latitude of the point of intersection along the LOS t

`cigi.los_ext_response.lon_yoff` Longitude (degrees)/Y Offset (m)  
 Double-precision floating point  
 Indicates the geodetic longitude of the point of intersection along the LOS

`cigi.los_ext_response.los_id` LOS ID  
 Unsigned 16-bit integer  
 Identifies the LOS response

`cigi.los_ext_response.material_code` Material Code  
 Unsigned 32-bit integer  
 Indicates the material code of the surface intersected by the LOS test segme

`cigi.los_ext_response.normal_vector_azimuth` Normal Vector Azimuth (degrees)  
 Indicates the azimuth of a unit vector normal to the surface intersected by

`cigi.los_ext_response.normal_vector_elevation` Normal Vector Elevation (degrees)  
 Indicates the elevation of a unit vector normal to the surface intersected b

`cigi.los_ext_response.range` Range (m)  
 Double-precision floating point  
 Indicates the distance along the LOS test segment or vector from the source

`cigi.los_ext_response.range_valid` Range Valid  
 Boolean  
 Indicates whether the Range parameter is valid

`cigi.los_ext_response.red` Red  
 Unsigned 8-bit integer  
 Indicates the red color component of the surface at the point of intersectio

`cigi.los_ext_response.response_count` Response Count  
 Unsigned 8-bit integer  
 Indicates the total number of Line of Sight Extended Response packets the IG

`cigi.los_ext_response.valid` Valid  
 Boolean  
 Indicates whether this packet contains valid data

`cigi.los_ext_response.visible` Visible  
 Boolean  
 Indicates whether the destination point is visible from the source point

`cigi.los_occult_request` Line of Sight Occult Request  
 String  
 Line of Sight Occult Request Packet

`cigi.los_occult_request.dest_alt` Destination Altitude (m)  
 Double-precision floating point  
 Specifies the altitude of the destination point for the LOS request segment

`cigi.los_occult_request.dest_lat` Destination Latitude (degrees)  
 Double-precision floating point  
 Specifies the latitudinal position for the destination point for the LOS req

`cigi.los_occult_request.dest_lon` Destination Longitude (degrees)  
 Double-precision floating point  
 Specifies the longitudinal position of the destination point for the LOS req



`cigi.los_occult_request.los_id` LOS ID  
Unsigned 16-bit integer  
Identifies the LOS request

`cigi.los_occult_request.source_alt` Source Altitude (m)  
Double-precision floating point  
Specifies the altitude of the source point for the LOS request segment

`cigi.los_occult_request.source_lat` Source Latitude (degrees)  
Double-precision floating point  
Specifies the latitudinal position of the source point for the LOS request segment

`cigi.los_occult_request.source_lon` Source Longitude (degrees)  
Double-precision floating point  
Specifies the longitudinal position of the source point for the LOS request segment

`cigi.los_range_request` Line of Sight Range Request  
String  
Line of Sight Range Request Packet

`cigi.los_range_request.azimuth` Azimuth (degrees)  
Specifies the azimuth of the LOS vector

`cigi.los_range_request.elevation` Elevation (degrees)  
Specifies the elevation for the LOS vector

`cigi.los_range_request.los_id` LOS ID  
Unsigned 16-bit integer  
Identifies the LOS request

`cigi.los_range_request.max_range` Maximum Range (m)  
Specifies the maximum extent from the source position specified in this data packet

`cigi.los_range_request.min_range` Minimum Range (m)  
Specifies the distance from the source position specified in this data packet

`cigi.los_range_request.source_alt` Source Altitude (m)  
Double-precision floating point  
Specifies the altitude of the source point of the LOS request vector

`cigi.los_range_request.source_lat` Source Latitude (degrees)  
Double-precision floating point  
Specifies the latitudinal position of the source point of the LOS request vector

`cigi.los_range_request.source_lon` Source Longitude (degrees)  
Double-precision floating point  
Specifies the longitudinal position of the source point of the LOS request vector

`cigi.los_response` Line of Sight Response  
String  
Line of Sight Response Packet

`cigi.los_response.alt` Intersection Altitude (m)  
Double-precision floating point  
Specifies the altitude of the point of intersection of the LOS request vector and the target

`cigi.los_response.count` Response Count  
Unsigned 8-bit integer  
Indicates the total number of Line of Sight Response packets the IG will return

cigi.los\_response.entity\_id Entity ID  
 Unsigned 16-bit integer  
 Indicates the entity with which an LOS test vector or segment intersects

cigi.los\_response.entity\_id\_valid Entity ID Valid  
 Boolean  
 Indicates whether the LOS test vector or segment intersects with an entity

cigi.los\_response.host\_frame\_number\_lsn Host Frame Number LSN  
 Unsigned 8-bit integer  
 Least significant nibble of the host frame number parameter of the last IGMP

cigi.los\_response.lat Intersection Latitude (degrees)  
 Double-precision floating point  
 Specifies the latitudinal position of the intersection point of the LOS request

cigi.los\_response.lon Intersection Longitude (degrees)  
 Double-precision floating point  
 Specifies the longitudinal position of the intersection point of the LOS request

cigi.los\_response.los\_id LOS ID  
 Unsigned 16-bit integer  
 Identifies the LOS response corresponding to the associated LOS request

cigi.los\_response.material\_type Material Type  
 Signed 32-bit integer  
 Specifies the material type of the object intersected by the LOS test segment

cigi.los\_response.occult\_response Occult Response  
 Boolean  
 Used to respond to the LOS occult request data packet

cigi.los\_response.range Range (m)  
 Used to respond to the Line of Sight Range Request data packet

cigi.los\_response.valid Valid  
 Boolean  
 Indicates whether the response is valid or invalid

cigi.los\_response.visible Visible  
 Boolean  
 Indicates whether the destination point is visible from the source point

cigi.los\_segment\_request Line of Sight Segment Request  
 String  
 Line of Sight Segment Request Packet

cigi.los\_segment\_request.alpha\_threshold Alpha Threshold  
 Unsigned 8-bit integer  
 Specifies the minimum alpha value a surface may have for an LOS response to

cigi.los\_segment\_request.destination\_alt\_zoff Destination Altitude (m)/ Destination  
 Double-precision floating point  
 Specifies the altitude of the destination endpoint of the LOS test segment

cigi.los\_segment\_request.destination\_coord Destination Point Coordinate System  
 Boolean  
 Indicates the coordinate system relative to which the test segment destination

cigi.los\_segment\_request.destination\_entity\_id Destination Entity ID  
 Unsigned 16-bit integer  
 Indicates the entity with respect to which the Destination X Offset, Y Offset

`cigi.los_segment_request.destination_entity_id_valid` Destination Entity ID Valid  
Boolean  
Destination Entity ID is valid

`cigi.los_segment_request.destination_lat_xoff` Destination Latitude (degrees)/Destination X Offset (m)  
Double-precision floating point  
Specifies the latitude of the destination endpoint of the LOS test segment or specifies the X offset of the destination endpoint

`cigi.los_segment_request.destination_lon_yoff` Destination Longitude (degrees)/Destination Y Offset (m)  
Double-precision floating point  
Specifies the longitude of the destination endpoint of the LOS test segment or specifies the Y offset of the destination endpoint

`cigi.los_segment_request.entity_id` Entity ID  
Unsigned 16-bit integer  
Specifies the entity relative to which the test segment endpoints are defined

`cigi.los_segment_request.los_id` LOS ID  
Unsigned 16-bit integer  
Identifies the LOS request

`cigi.los_segment_request.material_mask` Material Mask  
Unsigned 32-bit integer  
Specifies the environmental and cultural features to be included in or excluded from the test

`cigi.los_segment_request.response_coord` Response Coordinate System  
Boolean  
Specifies the coordinate system to be used in the response

`cigi.los_segment_request.source_alt_zoff` Source Altitude (m)/Source Z Offset (m)  
Double-precision floating point  
Specifies the altitude of the source endpoint of the LOS test segment or specifies the Z offset of the source endpoint

`cigi.los_segment_request.source_coord` Source Point Coordinate System  
Boolean  
Indicates the coordinate system relative to which the test segment source endpoints are defined

`cigi.los_segment_request.source_lat_xoff` Source Latitude (degrees)/Source X Offset (m)  
Double-precision floating point  
Specifies the latitude of the source endpoint of the LOS test segment or specifies the X offset of the source endpoint

`cigi.los_segment_request.source_lon_yoff` Source Longitude (degrees)/Source Y Offset (m)  
Double-precision floating point  
Specifies the longitude of the source endpoint of the LOS test segment or specifies the Y offset of the source endpoint

`cigi.los_segment_request.type` Request Type  
Boolean  
Determines what type of response the IG should return for this request

`cigi.los_segment_request.update_period` Update Period  
Unsigned 8-bit integer  
Specifies interval between successive responses to this request. A zero indicates that the IG should respond immediately

`cigi.los_vector_request` Line of Sight Vector Request  
String  
Line of Sight Vector Request Packet

`cigi.los_vector_request.alpha` Alpha Threshold  
Unsigned 8-bit integer  
Specifies the minimum alpha value a surface may have for an LOS response to be returned

`cigi.los_vector_request.azimuth` Azimuth (degrees)  
Specifies the horizontal angle of the LOS test vector

`cigi.los_vector_request.elevation` Elevation (degrees)  
Specifies the vertical angle of the LOS test vector

`cigi.los_vector_request.entity_id` Entity ID  
Unsigned 16-bit integer  
Specifies the entity relative to which the test segment endpoints are defined

`cigi.los_vector_request.los_id` LOS ID  
Unsigned 16-bit integer  
Identifies the LOS request

`cigi.los_vector_request.material_mask` Material Mask  
Unsigned 32-bit integer  
Specifies the environmental and cultural features to be included in LOS segments

`cigi.los_vector_request.max_range` Maximum Range (m)  
Specifies the maximum range along the LOS test vector at which intersection

`cigi.los_vector_request.min_range` Minimum Range (m)  
Specifies the minimum range along the LOS test vector at which intersection

`cigi.los_vector_request.response_coord` Response Coordinate System  
Boolean  
Specifies the coordinate system to be used in the response

`cigi.los_vector_request.source_alt_zoff` Source Altitude (m)/Source Z Offset (m)  
Double-precision floating point  
Specifies the altitude of the source point of the LOS test vector or specifies

`cigi.los_vector_request.source_coord` Source Point Coordinate System  
Boolean  
Indicates the coordinate system relative to which the test vector source point

`cigi.los_vector_request.source_lat_xoff` Source Latitude (degrees)/Source X Offset  
Double-precision floating point  
Specifies the latitude of the source point of the LOS test vector

`cigi.los_vector_request.source_lon_yoff` Source Longitude (degrees)/Source Y Offset  
Double-precision floating point  
Specifies the longitude of the source point of the LOS test vector

`cigi.los_vector_request.type` Request Type  
Boolean  
Determines what type of response the IG should return for this request

`cigi.los_vector_request.update_period` Update Period  
Unsigned 8-bit integer  
Specifies interval between successive responses to this request. A zero indicates

`cigi.maritime_surface_conditions_control` Maritime Surface Conditions Control  
String  
Maritime Surface Conditions Control Packet

`cigi.maritime_surface_conditions_control.entity_region_id` Entity ID/Region ID  
Unsigned 16-bit integer  
Specifies the entity to which the surface attributes in this packet are applied

`cigi.maritime_surface_conditions_control.scope` Scope  
Unsigned 8-bit integer  
Specifies whether this packet is applied globally, applied to region, or applied to asset

`cigi.maritime_surface_conditions_control.sea_surface_height` Sea Surface Height

Specifies the height of the water above MSL at equilibrium

cigi.maritime\_surface\_conditions\_control.surface\_clarity Surface Clarity (%)  
Specifies the clarity of the water at its surface

cigi.maritime\_surface\_conditions\_control.surface\_conditions\_enable Surface Cond  
Boolean  
Determines the state of the specified surface conditions

cigi.maritime\_surface\_conditions\_control.surface\_water\_temp Surface Water Tempe  
Specifies the water temperature at the surface

cigi.maritime\_surface\_conditions\_control.whitecap\_enable Whitecap Enable  
Boolean  
Determines whether whitecaps are enabled

cigi.maritime\_surface\_conditions\_response Maritime Surface Conditions Response  
String  
Maritime Surface Conditions Response Packet

cigi.maritime\_surface\_conditions\_response.request\_id Request ID  
Unsigned 8-bit integer  
Identifies the environmental conditions request to which this response packe

cigi.maritime\_surface\_conditions\_response.sea\_surface\_height Sea Surface Height  
Indicates the height of the sea surface at equilibrium

cigi.maritime\_surface\_conditions\_response.surface\_clarity Surface Clarity (%)  
Indicates the clarity of the water at its surface

cigi.maritime\_surface\_conditions\_response.surface\_water\_temp Surface Water Temp  
Indicates the water temperature at the sea surface

cigi.motion\_tracker\_control Motion Tracker Control  
String  
Motion Tracker Control Packet

cigi.motion\_tracker\_control.boresight\_enable Boresight Enable  
Boolean  
Sets the boresight state of the external tracking device

cigi.motion\_tracker\_control.pitch\_enable Pitch Enable  
Boolean  
Used to enable or disable the pitch of the motion tracker

cigi.motion\_tracker\_control.roll\_enable Roll Enable  
Boolean  
Used to enable or disable the roll of the motion tracker

cigi.motion\_tracker\_control.tracker\_enable Tracker Enable  
Boolean  
Specifies whether the tracking device is enabled

cigi.motion\_tracker\_control.tracker\_id Tracker ID  
Unsigned 8-bit integer  
Specifies the tracker whose state the data in this packet represents

cigi.motion\_tracker\_control.view\_group\_id View/View Group ID  
Unsigned 16-bit integer  
Specifies the view or view group to which the tracking device is attached

`cigi.motion_tracker_control.view_group_select` View/View Group Select  
Boolean  
Specifies whether the tracking device is attached to a single view or a view group

`cigi.motion_tracker_control.x_enable` X Enable  
Boolean  
Used to enable or disable the X-axis position of the motion tracker

`cigi.motion_tracker_control.y_enable` Y Enable  
Boolean  
Used to enable or disable the Y-axis position of the motion tracker

`cigi.motion_tracker_control.yaw_enable` Yaw Enable  
Boolean  
Used to enable or disable the yaw of the motion tracker

`cigi.motion_tracker_control.z_enable` Z Enable  
Boolean  
Used to enable or disable the Z-axis position of the motion tracker

`cigi.packet_id` Packet ID  
Unsigned 8-bit integer  
Identifies the packet's id

`cigi.packet_size` Packet Size (bytes)  
Unsigned 8-bit integer  
Identifies the number of bytes in this type of packet

`cigi.port` Source or Destination Port  
Unsigned 16-bit integer  
Source or Destination Port

`cigi.pos_request` Position Request  
String  
Position Request Packet

`cigi.pos_request.coord_system` Coordinate System  
Unsigned 8-bit integer  
Specifies the desired coordinate system relative to which the position and orientation is being requested

`cigi.pos_request.object_class` Object Class  
Unsigned 8-bit integer  
Specifies the type of object whose position is being requested

`cigi.pos_request.object_id` Object ID  
Unsigned 16-bit integer  
Identifies the entity, view, view group, or motion tracking device whose position is being requested

`cigi.pos_request.part_id` Articulated Part ID  
Unsigned 8-bit integer  
Identifies the articulated part whose position is being requested

`cigi.pos_request.update_mode` Update Mode  
Boolean  
Specifies whether the IG should report the position of the requested object

`cigi.pos_response` Position Response  
String  
Position Response Packet

`cigi.pos_response.alt_zoff` Altitude (m)/Z Offset (m)  
Double-precision floating point  
Indicates the geodetic altitude of the entity, articulated part, view, or view group

`cigi.pos_response.coord_system` Coordinate System  
 Unsigned 8-bit integer  
 Indicates the coordinate system in which the position and orientation are sp

`cigi.pos_response.lat_xoff` Latitude (degrees)/X Offset (m)  
 Double-precision floating point  
 Indicates the geodetic latitude of the entity, articulated part, view, or vi

`cigi.pos_response.lon_yoff` Longitude (degrees)/Y Offset (m)  
 Double-precision floating point  
 Indicates the geodetic longitude of the entity, articulated part, view, or v

`cigi.pos_response.object_class` Object Class  
 Unsigned 8-bit integer  
 Indicates the type of object whose position is being reported

`cigi.pos_response.object_id` Object ID  
 Unsigned 16-bit integer  
 Identifies the entity, view, view group, or motion tracking device whose pos

`cigi.pos_response.part_id` Articulated Part ID  
 Unsigned 8-bit integer  
 Identifies the articulated part whose position is being reported

`cigi.pos_response.pitch` Pitch (degrees)  
 Indicates the pitch angle of the specified entity, articulated part, view, o

`cigi.pos_response.roll` Roll (degrees)  
 Indicates the roll angle of the specified entity, articulated part, view, or

`cigi.pos_response.yaw` Yaw (degrees)  
 Indicates the yaw angle of the specified entity, articulated part, view, or

`cigi.rate_control` Rate Control  
 String  
 Rate Control Packet

`cigi.rate_control.apply_to_part` Apply to Articulated Part  
 Boolean  
 Determines whether the rate is applied to the articulated part specified by

`cigi.rate_control.coordinate_system` Coordinate System  
 Boolean  
 Specifies the reference coordinate system to which the linear and angular ra

`cigi.rate_control.entity_id` Entity ID  
 Unsigned 16-bit integer  
 Specifies the entity to which this data packet will be applied

`cigi.rate_control.part_id` Articulated Part ID  
 Signed 8-bit integer  
 Identifies which articulated part is controlled with this data packet

`cigi.rate_control.pitch_rate` Pitch Angular Rate (degrees/s)  
 Specifies the pitch angular rate for the entity being represented

`cigi.rate_control.roll_rate` Roll Angular Rate (degrees/s)  
 Specifies the roll angular rate for the entity being represented

`cigi.rate_control.x_rate` X Linear Rate (m/s)  
 Specifies the x component of the velocity vector for the entity being repres

cigi.rate\_control.y\_rate Y Linear Rate (m/s)

Specifies the y component of the velocity vector for the entity being represented

cigi.rate\_control.yaw\_rate Yaw Angular Rate (degrees/s)

Specifies the yaw angular rate for the entity being represented

cigi.rate\_control.z\_rate Z Linear Rate (m/s)

Specifies the z component of the velocity vector for the entity being represented

cigi.sensor\_control Sensor Control

String

Sensor Control Packet

cigi.sensor\_control.ac\_coupling AC Coupling

Indicates the AC Coupling decay rate for the weapon sensor option

cigi.sensor\_control.auto\_gain Automatic Gain

Boolean

When set to "on," cause the weapons sensor to automatically adjust the gain

cigi.sensor\_control.gain Gain

Indicates the gain value for the weapon sensor option

cigi.sensor\_control.level Level

Indicates the level value for the weapon sensor option

cigi.sensor\_control.line\_dropout Line-by-Line Dropout

Boolean

Indicates whether the line-by-line dropout feature is enabled

cigi.sensor\_control.line\_dropout\_enable Line-by-Line Dropout Enable

Boolean

Specifies whether line-by-line dropout is enabled

cigi.sensor\_control.noise Noise

Indicates the detector-noise gain for the weapon sensor option

cigi.sensor\_control.polarity Polarity

Boolean

Indicates whether this sensor is showing white hot or black hot

cigi.sensor\_control.response\_type Response Type

Boolean

Specifies whether the IG should return a Sensor Response packet or a Sensor

cigi.sensor\_control.sensor\_enable Sensor On/Off

Boolean

Indicates whether the sensor is turned on or off

cigi.sensor\_control.sensor\_id Sensor ID

Unsigned 8-bit integer

Identifies the sensor to which this packet should be applied

cigi.sensor\_control.sensor\_on\_off Sensor On/Off

Boolean

Specifies whether the sensor is turned on or off

cigi.sensor\_control.track\_mode Track Mode

Unsigned 8-bit integer

Indicates which track mode the sensor should be



`cigi.sensor_control.track_polarity` Track White/Black  
Boolean  
Identifies whether the weapons sensor will track wither white or black

`cigi.sensor_control.track_white_black` Track White/Black  
Boolean  
Specifies whether the sensor tracks white or black

`cigi.sensor_control.view_id` View ID  
Unsigned 8-bit integer  
Dictates to which view the corresponding sensor is assigned, regardless of t

`cigi.sensor_ext_response` Sensor Extended Response  
String  
Sensor Extended Response Packet

`cigi.sensor_ext_response.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates the entity ID of the target

`cigi.sensor_ext_response.entity_id_valid` Entity ID Valid  
Boolean  
Indicates whether the target is an entity or a non-entity object

`cigi.sensor_ext_response.frame_ctr` Frame Counter  
Unsigned 32-bit integer  
Indicates the IG's frame counter at the time that the IG calculates the gate

`cigi.sensor_ext_response.gate_x_pos` Gate X Position (degrees)  
Specifies the gate symbol's position along the view's X axis

`cigi.sensor_ext_response.gate_x_size` Gate X Size (pixels or raster lines)  
Unsigned 16-bit integer  
Specifies the gate symbol size along the view's X axis

`cigi.sensor_ext_response.gate_y_pos` Gate Y Position (degrees)  
Specifies the gate symbol's position along the view's Y axis

`cigi.sensor_ext_response.gate_y_size` Gate Y Size (pixels or raster lines)  
Unsigned 16-bit integer  
Specifies the gate symbol size along the view's Y axis

`cigi.sensor_ext_response.sensor_id` Sensor ID  
Unsigned 8-bit integer  
Specifies the sensor to which the data in this packet apply

`cigi.sensor_ext_response.sensor_status` Sensor Status  
Unsigned 8-bit integer  
Indicates the current tracking state of the sensor

`cigi.sensor_ext_response.track_alt` Track Point Altitude (m)  
Double-precision floating point  
Indicates the geodetic altitude of the point being tracked by the sensor

`cigi.sensor_ext_response.track_lat` Track Point Latitude (degrees)  
Double-precision floating point  
Indicates the geodetic latitude of the point being tracked by the sensor

`cigi.sensor_ext_response.track_lon` Track Point Longitude (degrees)  
Double-precision floating point  
Indicates the geodetic longitude of the point being tracked by the sensor

`cigi.sensor_ext_response.view_id` View ID  
Unsigned 16-bit integer  
Specifies the view that represents the sensor display

`cigi.sensor_response` Sensor Response  
String  
Sensor Response Packet

`cigi.sensor_response.frame_ctr` Frame Counter  
Unsigned 32-bit integer  
Indicates the IG's frame counter at the time that the IG calculates the gate

`cigi.sensor_response.gate_x_pos` Gate X Position (degrees)  
Specifies the gate symbol's position along the view's X axis

`cigi.sensor_response.gate_x_size` Gate X Size (pixels or raster lines)  
Unsigned 16-bit integer  
Specifies the gate symbol size along the view's X axis

`cigi.sensor_response.gate_y_pos` Gate Y Position (degrees)  
Specifies the gate symbol's position along the view's Y axis

`cigi.sensor_response.gate_y_size` Gate Y Size (pixels or raster lines)  
Unsigned 16-bit integer  
Specifies the gate symbol size along the view's Y axis

`cigi.sensor_response.sensor_id` Sensor ID  
Unsigned 8-bit integer  
Identifies the sensor response corresponding to the associated sensor control

`cigi.sensor_response.sensor_status` Sensor Status  
Unsigned 8-bit integer  
Indicates the current tracking state of the sensor

`cigi.sensor_response.status` Sensor Status  
Unsigned 8-bit integer  
Indicates the current sensor mode

`cigi.sensor_response.view_id` View ID  
Unsigned 8-bit integer  
Indicates the sensor view

`cigi.sensor_response.x_offset` Gate X Offset (degrees)  
Unsigned 16-bit integer  
Specifies the target's horizontal offset from the view plane normal

`cigi.sensor_response.x_size` Gate X Size  
Unsigned 16-bit integer  
Specifies the target size in the X direction (horizontal) in pixels

`cigi.sensor_response.y_offset` Gate Y Offset (degrees)  
Unsigned 16-bit integer  
Specifies the target's vertical offset from the view plane normal

`cigi.sensor_response.y_size` Gate Y Size  
Unsigned 16-bit integer  
Specifies the target size in the Y direction (vertical) in pixels

`cigi.short_art_part_control` Short Articulated Part Control  
String  
Short Articulated Part Control Packet

`cigi.short_art_part_control.dof_1` DOF 1  
Specifies either an offset or an angular position for the part identified by

`cigi.short_art_part_control.dof_2` DOF 2  
Specifies either an offset or an angular position for the part identified by

`cigi.short_art_part_control.dof_select_1` DOF Select 1  
Unsigned 8-bit integer  
Specifies the degree of freedom to which the value of DOF 1 is applied

`cigi.short_art_part_control.dof_select_2` DOF Select 2  
Unsigned 8-bit integer  
Specifies the degree of freedom to which the value of DOF 2 is applied

`cigi.short_art_part_control.entity_id` Entity ID  
Unsigned 16-bit integer  
Specifies the entity to which the articulated part(s) belongs

`cigi.short_art_part_control.part_enable_1` Articulated Part Enable 1  
Boolean  
Determines whether the articulated part submodel specified by Articulated Pa

`cigi.short_art_part_control.part_enable_2` Articulated Part Enable 2  
Boolean  
Determines whether the articulated part submodel specified by Articulated Pa

`cigi.short_art_part_control.part_id_1` Articulated Part ID 1  
Unsigned 8-bit integer  
Specifies an articulated part to which the data in this packet should be app

`cigi.short_art_part_control.part_id_2` Articulated Part ID 2  
Unsigned 8-bit integer  
Specifies an articulated part to which the data in this packet should be app

`cigi.short_component_control` Short Component Control  
String  
Short Component Control Packet

`cigi.short_component_control.component_class` Component Class  
Unsigned 8-bit integer  
Identifies the type of object to which the Instance ID parameter refers

`cigi.short_component_control.component_id` Component ID  
Unsigned 16-bit integer  
Identifies the component to which the data in this packet should be applied

`cigi.short_component_control.component_state` Component State  
Unsigned 8-bit integer  
Specifies a discrete state for the component

`cigi.short_component_control.data_1` Component Data 1  
Byte array  
User-defined component data

`cigi.short_component_control.data_2` Component Data 2  
Byte array  
User-defined component data

`cigi.short_component_control.instance_id` Instance ID  
Unsigned 16-bit integer  
Identifies the object to which the component belongs

cigi.sof Start of Frame  
String  
Start of Frame Packet

cigi.sof.db\_number Database Number  
Signed 8-bit integer  
Indicates load status of the requested database

cigi.sof.earth\_reference\_model Earth Reference Model  
Boolean  
Indicates whether the IG is using a custom Earth Reference Model or the default

cigi.sof.frame\_ctr IG to Host Frame Counter  
Unsigned 32-bit integer  
Contains a number representing a particular frame

cigi.sof.ig\_frame\_number IG Frame Number  
Unsigned 32-bit integer  
Uniquely identifies the IG data frame

cigi.sof.ig\_mode IG Mode  
Unsigned 8-bit integer  
Identifies to the host the current operating mode of the IG

cigi.sof.ig\_status IG Status Code  
Unsigned 8-bit integer  
Indicates the error status of the IG

cigi.sof.ig\_status\_code IG Status Code  
Unsigned 8-bit integer  
Indicates the operational status of the IG

cigi.sof.last\_host\_frame\_number Last Host Frame Number  
Unsigned 32-bit integer  
Contains the value of the Host Frame parameter in the last IG Control packet

cigi.sof.time\_tag Timing Value (microseconds)  
Contains a timing value that is used to time-tag the ethernet message during

cigi.sof.timestamp Timestamp (microseconds)  
Unsigned 32-bit integer  
Indicates the number of 10 microsecond "ticks" since some initial reference

cigi.sof.timestamp\_valid Timestamp Valid  
Boolean  
Indicates whether the Timestamp parameter contains a valid value

cigi.special\_effect\_def Special Effect Definition  
String  
Special Effect Definition Packet

cigi.special\_effect\_def.blue Blue Color Value  
Unsigned 8-bit integer  
Specifies the blue component of a color to be applied to the effect

cigi.special\_effect\_def.burst\_interval Burst Interval (s)  
Indicates the time between successive bursts

cigi.special\_effect\_def.color\_enable Color Enable  
Boolean  
Indicates whether the red, green, and blue color values will be applied to t

`cigi.special_effect_def.duration` Duration (s)  
Indicates how long an effect or sequence of burst will be active

`cigi.special_effect_def.effect_count` Effect Count  
Unsigned 16-bit integer  
Indicates how many effects are contained within a single burst

`cigi.special_effect_def.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates which effect is being modified

`cigi.special_effect_def.green` Green Color Value  
Unsigned 8-bit integer  
Specifies the green component of a color to be applied to the effect

`cigi.special_effect_def.red` Red Color Value  
Unsigned 8-bit integer  
Specifies the red component of a color to be applied to the effect

`cigi.special_effect_def.separation` Separation (m)  
Indicates the distance between particles within a burst

`cigi.special_effect_def.seq_direction` Sequence Direction  
Boolean  
Indicates whether the effect animation sequence should be sequence from beginning

`cigi.special_effect_def.time_scale` Time Scale  
Specifies a scale factor to apply to the time period for the effect's animation

`cigi.special_effect_def.x_scale` X Scale  
Specifies a scale factor to apply along the effect's X axis

`cigi.special_effect_def.y_scale` Y Scale  
Specifies a scale factor to apply along the effect's Y axis

`cigi.special_effect_def.z_scale` Z Scale  
Specifies a scale factor to apply along the effect's Z axis

`cigi.srcport` Source Port  
Unsigned 16-bit integer  
Source Port

`cigi.terr_surface_cond_response` Terrestrial Surface Conditions Response  
String  
Terrestrial Surface Conditions Response Packet

`cigi.terr_surface_cond_response.request_id` Request ID  
Unsigned 8-bit integer  
Identifies the environmental conditions request to which this response packet

`cigi.terr_surface_cond_response.surface_id` Surface Condition ID  
Unsigned 32-bit integer  
Indicates the presence of a specific surface condition or contaminant at the

`cigi.terrestrial_surface_conditions_control` Terrestrial Surface Conditions Control  
String  
Terrestrial Surface Conditions Control Packet

`cigi.terrestrial_surface_conditions_control.coverage` Coverage (%)  
Unsigned 8-bit integer  
Determines the degree of coverage of the specified surface contaminant

```

cigi.terrestrial_surface_conditions_control.entity_region_id  Entity ID/Region ID
    Unsigned 16-bit integer
    Specifies the environmental entity to which the surface condition attributes

cigi.terrestrial_surface_conditions_control.scope  Scope
    Unsigned 8-bit integer
    Determines whether the specified surface conditions are applied globally, re

cigi.terrestrial_surface_conditions_control.severity  Severity
    Unsigned 8-bit integer
    Determines the degree of severity for the specified surface contaminant(s)

cigi.terrestrial_surface_conditions_control.surface_condition_enable  Surface Co
    Boolean
    Specifies whether the surface condition attribute identified by the Surface

cigi.terrestrial_surface_conditions_control.surface_condition_id  Surface Condit
    Unsigned 16-bit integer
    Identifies a surface condition or contaminant

cigi.trajectory_def  Trajectory Definition
    String
    Trajectory Definition Packet

cigi.trajectory_def.acceleration  Acceleration Factor (m/s^2)
    Indicates the acceleration factor that will be applied to the Vz component o

cigi.trajectory_def.acceleration_x  Acceleration X (m/s^2)
    Specifies the X component of the acceleration vector

cigi.trajectory_def.acceleration_y  Acceleration Y (m/s^2)
    Specifies the Y component of the acceleration vector

cigi.trajectory_def.acceleration_z  Acceleration Z (m/s^2)
    Specifies the Z component of the acceleration vector

cigi.trajectory_def.entity_id  Entity ID
    Unsigned 16-bit integer
    Indicates which entity is being influenced by this trajectory behavior

cigi.trajectory_def.retardation  Retardation Rate (m/s)
    Indicates what retardation factor will be applied to the object's motion

cigi.trajectory_def.retardation_rate  Retardation Rate (m/s^2)
    Specifies the magnitude of an acceleration applied against the entity's inst

cigi.trajectory_def.terminal_velocity  Terminal Velocity (m/s)
    Indicates what final velocity the object will be allowed to obtain

cigi.unknown  Unknown
    String
    Unknown Packet

cigi.user_definable  User Definable
    String
    User definable packet

cigi.user_defined  User-Defined
    String
    User-Defined Packet

```

`cigi.version` CIGI Version  
Unsigned 8-bit integer  
Identifies the version of CIGI interface that is currently running on the host

`cigi.view_control` View Control  
String  
View Control Packet

`cigi.view_control.entity_id` Entity ID  
Unsigned 16-bit integer  
Indicates the entity to which this view should be attached

`cigi.view_control.group_id` Group ID  
Unsigned 8-bit integer  
Specifies the view group to which the contents of this packet are applied

`cigi.view_control.pitch` Pitch (degrees)  
The rotation about the view's Y axis

`cigi.view_control.pitch_enable` Pitch Enable  
Unsigned 8-bit integer  
Identifies whether the pitch parameter should be applied to the specified view

`cigi.view_control.roll` Roll (degrees)  
The rotation about the view's X axis

`cigi.view_control.roll_enable` Roll Enable  
Unsigned 8-bit integer  
Identifies whether the roll parameter should be applied to the specified view

`cigi.view_control.view_group` View Group Select  
Unsigned 8-bit integer  
Specifies which view group is to be controlled by the offsets

`cigi.view_control.view_id` View ID  
Unsigned 8-bit integer  
Specifies which view position is associated with offsets and rotation specifications

`cigi.view_control.x_offset` X Offset (m)  
Defines the X component of the view offset vector along the entity's longitudinal axis

`cigi.view_control.xoff` X Offset (m)  
Specifies the position of the view eyepoint along the X axis of the entity's longitudinal axis

`cigi.view_control.xoff_enable` X Offset Enable  
Boolean  
Identifies whether the x offset parameter should be applied to the specified view

`cigi.view_control.y_offset` Y Offset  
Defines the Y component of the view offset vector along the entity's lateral axis

`cigi.view_control.yaw` Yaw (degrees)  
The rotation about the view's Z axis

`cigi.view_control.yaw_enable` Yaw Enable  
Unsigned 8-bit integer  
Identifies whether the yaw parameter should be applied to the specified view

`cigi.view_control.yoff` Y Offset (m)  
Specifies the position of the view eyepoint along the Y axis of the entity's lateral axis

`cigi.view_control.yoff_enable` Y Offset Enable  
Unsigned 8-bit integer  
Identifies whether the y offset parameter should be applied to the specified

`cigi.view_control.z_offset` Z Offset  
Defines the Z component of the view offset vector along the entity's vertical

`cigi.view_control.zoff` Z Offset (m)  
Specifies the position of the view eyepoint along the Z axis of the entity s

`cigi.view_control.zoff_enable` Z Offset Enable  
Unsigned 8-bit integer  
Identifies whether the z offset parameter should be applied to the specified

`cigi.view_def` View Definition  
String  
View Definition Packet

`cigi.view_def.bottom` Bottom (degrees)  
Specifies the bottom half-angle of the view frustum

`cigi.view_def.bottom_enable` Field of View Bottom Enable  
Boolean  
Identifies whether the field of view bottom value is manipulated from the Ho

`cigi.view_def.far` Far (m)  
Specifies the position of the view's far clipping plane

`cigi.view_def.far_enable` Field of View Far Enable  
Boolean  
Identifies whether the field of view far value is manipulated from the Host

`cigi.view_def.fov_bottom` Field of View Bottom (degrees)  
Defines the bottom clipping plane for the view

`cigi.view_def.fov_far` Field of View Far (m)  
Defines the far clipping plane for the view

`cigi.view_def.fov_left` Field of View Left (degrees)  
Defines the left clipping plane for the view

`cigi.view_def.fov_near` Field of View Near (m)  
Defines the near clipping plane for the view

`cigi.view_def.fov_right` Field of View Right (degrees)  
Defines the right clipping plane for the view

`cigi.view_def.fov_top` Field of View Top (degrees)  
Defines the top clipping plane for the view

`cigi.view_def.group_id` Group ID  
Unsigned 8-bit integer  
Specifies the group to which the view is to be assigned

`cigi.view_def.left` Left (degrees)  
Specifies the left half-angle of the view frustum



`cigi.view_def.left_enable` Field of View Left Enable  
Boolean  
Identifies whether the field of view left value is manipulated from the Host

`cigi.view_def.mirror` View Mirror  
Unsigned 8-bit integer  
Specifies what mirroring function should be applied to the view

`cigi.view_def.mirror_mode` Mirror Mode  
Unsigned 8-bit integer  
Specifies the mirroring function to be performed on the view

`cigi.view_def.near` Near (m)  
Specifies the position of the view's near clipping plane

`cigi.view_def.near_enable` Field of View Near Enable  
Boolean  
Identifies whether the field of view near value is manipulated from the Host

`cigi.view_def.pixel_rep` Pixel Replication  
Unsigned 8-bit integer  
Specifies what pixel replication function should be applied to the view

`cigi.view_def.pixel_replication` Pixel Replication Mode  
Unsigned 8-bit integer  
Specifies the pixel replication function to be performed on the view

`cigi.view_def.projection_type` Projection Type  
Boolean  
Specifies whether the view projection should be perspective or orthographic

`cigi.view_def.reorder` Reorder  
Boolean  
Specifies whether the view should be moved to the top of any overlapping view

`cigi.view_def.right` Right (degrees)  
Specifies the right half-angle of the view frustum

`cigi.view_def.right_enable` Field of View Right Enable  
Boolean  
Identifies whether the field of view right value is manipulated from the Host

`cigi.view_def.top` Top (degrees)  
Specifies the top half-angle of the view frustum

`cigi.view_def.top_enable` Field of View Top Enable  
Boolean  
Identifies whether the field of view top value is manipulated from the Host

`cigi.view_def.tracker_assign` Tracker Assign  
Boolean  
Specifies whether the view should be controlled by an external tracking device

`cigi.view_def.view_group` View Group  
Unsigned 8-bit integer  
Specifies the view group to which the view is to be assigned

`cigi.view_def.view_id` View ID  
Unsigned 8-bit integer  
Specifies the view to which this packet should be applied

`cigi.view_def.view_type` View Type  
Unsigned 8-bit integer  
Specifies the view type

`cigi.wave_control` Wave Control  
String  
Wave Control Packet

`cigi.wave_control.breaker_type` Breaker Type  
Unsigned 8-bit integer  
Specifies the type of breaker within the surf zone

`cigi.wave_control.direction` Direction (degrees)  
Specifies the direction in which the wave propagates

`cigi.wave_control.entity_region_id` Entity ID/Region ID  
Unsigned 16-bit integer  
Specifies the surface entity for which the wave is defined or specifies the

`cigi.wave_control.height` Wave Height (m)  
Specifies the average vertical distance from trough to crest produced by the

`cigi.wave_control.leading` Leading (degrees)  
Specifies the phase angle at which the crest occurs

`cigi.wave_control.period` Period (s)  
Specifies the time required fro one complete oscillation of the wave

`cigi.wave_control.phase_offset` Phase Offset (degrees)  
Specifies a phase offset for the wave

`cigi.wave_control.scope` Scope  
Unsigned 8-bit integer  
Specifies whether the wave is defined for global, regional, or entity-control

`cigi.wave_control.wave_enable` Wave Enable  
Boolean  
Determines whether the wave is enabled or disabled

`cigi.wave_control.wave_id` Wave ID  
Unsigned 8-bit integer  
Specifies the wave to which the attributes in this packet are applied

`cigi.wave_control.wavelength` Wavelength (m)  
Specifies the distance from a particular phase on a wave to the same phase o

`cigi.wea_cond_response` Weather Conditions Response  
String  
Weather Conditions Response Packet

`cigi.wea_cond_response.air_temp` Air Temperature (degrees C)  
Indicates the air temperature at the requested location

`cigi.wea_cond_response.barometric_pressure` Barometric Pressure (mb or hPa)  
Indicates the atmospheric pressure at the requested location

`cigi.wea_cond_response.horiz_speed` Horizontal Wind Speed (m/s)  
Indicates the local wind speed parallel to the ellipsoid-tangential referenc

`cigi.wea_cond_response.humidity` Humidity (%)  
Unsigned 8-bit integer  
Indicates the humidity at the request location

`cigi.wea_cond_response.request_id` Request ID  
Unsigned 8-bit integer  
Identifies the environmental conditions request to which this response packet

`cigi.wea_cond_response.vert_speed` Vertical Wind Speed (m/s)  
Indicates the local vertical wind speed

`cigi.wea_cond_response.visibility_range` Visibility Range (m)  
Indicates the visibility range at the requested location

`cigi.wea_cond_response.wind_direction` Wind Direction (degrees)  
Indicates the local wind direction

`cigi.weather_control` Weather Control  
String  
Weather Control Packet

`cigi.weather_control.aerosol_concentration` Aerosol Concentration (g/m<sup>3</sup>)  
Specifies the concentration of water, smoke, dust, or other particles suspended in the air

`cigi.weather_control.air_temp` Air Temperature (degrees C)  
Identifies the local temperature inside the weather phenomenon

`cigi.weather_control.barometric_pressure` Barometric Pressure (mb or hPa)  
Specifies the atmospheric pressure within the weather layer

`cigi.weather_control.base_elevation` Base Elevation (m)  
Specifies the altitude of the base of the weather layer

`cigi.weather_control.cloud_type` Cloud Type  
Unsigned 8-bit integer  
Specifies the type of clouds contained within the weather layer

`cigi.weather_control.coverage` Coverage (%)  
Indicates the amount of area coverage a particular phenomenon has over the surface

`cigi.weather_control.elevation` Elevation (m)  
Indicates the base altitude of the weather phenomenon

`cigi.weather_control.entity_id` Entity ID  
Unsigned 16-bit integer  
Identifies the entity's ID

`cigi.weather_control.entity_region_id` Entity ID/Region ID  
Unsigned 16-bit integer  
Specifies the entity to which the weather attributes in this packet are applied

`cigi.weather_control.horiz_wind` Horizontal Wind Speed (m/s)  
Specifies the local wind speed parallel to the ellipsoid-tangential reference plane

`cigi.weather_control.humidity` Humidity (%)  
Unsigned 8-bit integer  
Specifies the humidity within the weather layer

`cigi.weather_control.layer_id` Layer ID  
Unsigned 8-bit integer  
Specifies the weather layer to which the data in this packet are applied

`cigi.weather_control.opacity` Opacity (%)  
Identifies the opacity of the weather phenomenon

`cigi.weather_control.phenomenon_type` Phenomenon Type  
Unsigned 16-bit integer  
Identifies the type of weather described by this data packet

`cigi.weather_control.random_lightning_enable` Random Lightning Enable  
Unsigned 8-bit integer  
Specifies whether the weather layer exhibits random lightning effects

`cigi.weather_control.random_winds` Random Winds Aloft  
Boolean  
Indicates whether a random frequency and duration should be applied to the w

`cigi.weather_control.random_winds_enable` Random Winds Enable  
Boolean  
Specifies whether a random frequency and duration should be applied to the l

`cigi.weather_control.scope` Scope  
Unsigned 8-bit integer  
Specifies whether the weather is global, regional, or assigned to an entity

`cigi.weather_control.scud_enable` Scud Enable  
Boolean  
Indicates whether there will be scud effects applied to the phenomenon speci

`cigi.weather_control.scud_frequency` Scud Frequency (%)  
Identifies the frequency for the scud effect

`cigi.weather_control.severity` Severity  
Unsigned 8-bit integer  
Indicates the severity of the weather phenomenon

`cigi.weather_control.thickness` Thickness (m)  
Indicates the vertical thickness of the weather phenomenon

`cigi.weather_control.transition_band` Transition Band (m)  
Indicates a vertical transition band both above and below a phenomenon

`cigi.weather_control.vert_wind` Vertical Wind Speed (m/s)  
Specifies the local vertical wind speed

`cigi.weather_control.visibility_range` Visibility Range (m)  
Specifies the visibility range through the weather layer

`cigi.weather_control.weather_enable` Weather Enable  
Boolean  
Indicates whether the phenomena specified by this data packet is visible

`cigi.weather_control.wind_direction` Winds Aloft Direction (degrees)  
Indicates local direction of the wind applied to the phenomenon

`cigi.weather_control.wind_speed` Winds Aloft Speed  
Identifies the local wind speed applied to the phenomenon

**Common Industrial Protocol (cip)**

```

cip.attribute  Attribute
  Unsigned 8-bit integer
  Attribute

cip.class      Class
  Unsigned 8-bit integer
  Class

cip.connpoint  Connection Point
  Unsigned 8-bit integer
  Connection Point

cip.devtype    Device Type
  Unsigned 16-bit integer
  Device Type

cip.ephath     EPath
  Byte array
  EPath

cip.fwo.cmp    Compatibility
  Unsigned 8-bit integer
  Fwd Open: Compatibility bit

cip.fwo.consize Connection Size
  Unsigned 16-bit integer
  Fwd Open: Connection size

cip.fwo.dir    Direction
  Unsigned 8-bit integer
  Fwd Open: Direction

cip.fwo.f_v    Connection Size Type
  Unsigned 16-bit integer
  Fwd Open: Fixed or variable connection size

cip.fwo.major  Major Revision
  Unsigned 8-bit integer
  Fwd Open: Major Revision

cip.fwo.owner  Owner
  Unsigned 16-bit integer
  Fwd Open: Redundant owner bit

cip.fwo.prio   Priority
  Unsigned 16-bit integer
  Fwd Open: Connection priority

cip.fwo.transport Class
  Unsigned 8-bit integer
  Fwd Open: Transport Class

cip.fwo.trigger Trigger
  Unsigned 8-bit integer
  Fwd Open: Production trigger

cip.fwo.type   Connection Type
  Unsigned 16-bit integer
  Fwd Open: Connection type
```

```

cip.genstat  General Status
             Unsigned 8-bit integer
             General Status

cip.instance Instance
             Unsigned 8-bit integer
             Instance

cip.linkaddress Link Address
             Unsigned 8-bit integer
             Link Address

cip.port     Port
             Unsigned 8-bit integer
             Port Identifier

cip.rr      Request/Response
            Unsigned 8-bit integer
            Request or Response message

cip.sc     Service
           Unsigned 8-bit integer
           Service Code

cip.symbol Symbol
           String
           ANSI Extended Symbol Segment

cip.vendor Vendor ID
           Unsigned 16-bit integer
           Vendor ID
```

#### **Common Open Policy Service (cops)**

```

cops.accttimer.value Contents: ACCT Timer Value
                    Unsigned 16-bit integer
                    Accounting Timer Value in AcctTimer object

cops.c_num  C-Num
           Unsigned 8-bit integer
           C-Num in COPS Object Header

cops.c_type C-Type
           Unsigned 8-bit integer
           C-Type in COPS Object Header

cops.client_type Client Type
           Unsigned 16-bit integer
           Client Type in COPS Common Header

cops.context.m_type M-Type
           Unsigned 16-bit integer
           M-Type in COPS Context Object

cops.context.r_type R-Type
           Unsigned 16-bit integer
           R-Type in COPS Context Object

cops.cperor Error
           Unsigned 16-bit integer
           Error in Error object
```

```
cops.cperror_sub  Error Sub-code
    Unsigned 16-bit integer
    Error Sub-code in Error object

cops.decision.cmd  Command-Code
    Unsigned 16-bit integer
    Command-Code in Decision/LPDP Decision object

cops.decision.flags  Flags
    Unsigned 16-bit integer
    Flags in Decision/LPDP Decision object

cops.epd.int  EPD Integer Data
    Signed 64-bit integer

cops.epd.integer64  EPD Integer64 Data
    Signed 64-bit integer

cops.epd.ipv4  EPD IP Address Data
    IPv4 address

cops.epd.null  EPD Null Data
    Byte array

cops.epd.octets  EPD Octet String Data
    Byte array

cops.epd.oid  EPD OID Data

cops.epd.opaque  EPD Opaque Data
    Byte array

cops.epd.timeticks  EPD TimeTicks Data
    Unsigned 64-bit integer

cops.epd.unknown  EPD Unknown Data
    Byte array

cops.epd.unsigned32  EPD Unsigned32 Data
    Unsigned 64-bit integer

cops.epd.unsigned64  EPD Unsigned64 Data
    Unsigned 64-bit integer

cops.error  Error
    Unsigned 16-bit integer
    Error in Error object

cops.error_sub  Error Sub-code
    Unsigned 16-bit integer
    Error Sub-code in Error object

cops.errprid.instance_id  ErrorPRID Instance Identifier

cops.flags  Flags
    Unsigned 8-bit integer
    Flags in COPS Common Header

cops.gperror  Error
    Unsigned 16-bit integer
    Error in Error object

cops.gperror_sub  Error Sub-code
    Unsigned 16-bit integer
    Error Sub-code in Error object
```

```
cops.in-int.ipv4  IPv4 address
  IPv4 address
  IPv4 address in COPS IN-Int object
cops.in-int.ipv6  IPv6 address
  IPv6 address
  IPv6 address in COPS IN-Int object
cops.in-out-int.ifindex  ifIndex
  Unsigned 32-bit integer
  If SNMP is supported, corresponds to MIB-II ifIndex
cops.integrity.key_id  Contents: Key ID
  Unsigned 32-bit integer
  Key ID in Integrity object
cops.integrity.seq_num  Contents: Sequence Number
  Unsigned 32-bit integer
  Sequence Number in Integrity object
cops.katimer.value  Contents: KA Timer Value
  Unsigned 16-bit integer
  Keep-Alive Timer Value in KATimer object
cops.lastpdpaddr.ipv4  IPv4 address
  IPv4 address
  IPv4 address in COPS LastPDPAddr object
cops.lastpdpaddr.ipv6  IPv6 address
  IPv6 address
  IPv6 address in COPS LastPDPAddr object
cops.msg_len  Message Length
  Unsigned 32-bit integer
  Message Length in COPS Common Header
cops.obj.len  Object Length
  Unsigned 32-bit integer
  Object Length in COPS Object Header
cops.op_code  Op Code
  Unsigned 8-bit integer
  Op Code in COPS Common Header
cops.out-int.ipv4  IPv4 address
  IPv4 address
  IPv4 address in COPS OUT-Int object
cops.out-int.ipv6  IPv6 address
  IPv6 address
  IPv6 address in COPS OUT-Int
cops.pc_activity_count  Count
  Unsigned 32-bit integer
  Count
cops.pc_algorithm  Algorithm
  Unsigned 16-bit integer
  Algorithm
cops.pc_bcid  Billing Correlation ID
  Unsigned 32-bit integer
  Billing Correlation ID
```



```
cops.pc_bcid_ev  BDID Event Counter
  Unsigned 32-bit integer
  BCID Event Counter

cops.pc_bcid_ts  BDID Timestamp
  Unsigned 32-bit integer
  BCID Timestamp

cops.pc_close_subcode  Reason Sub Code
  Unsigned 16-bit integer
  Reason Sub Code

cops.pc_cmts_ip  CMTS IP Address
  IPv4 address
  CMTS IP Address

cops.pc_cmts_ip_port  CMTS IP Port
  Unsigned 16-bit integer
  CMTS IP Port

cops.pc_delete_subcode  Reason Sub Code
  Unsigned 16-bit integer
  Reason Sub Code

cops.pc_dest_ip  Destination IP Address
  IPv4 address
  Destination IP Address

cops.pc_dest_port  Destination IP Port
  Unsigned 16-bit integer
  Destination IP Port

cops.pc_dfccc_id  CCC ID
  Unsigned 32-bit integer
  CCC ID

cops.pc_dfccc_ip  DF IP Address CCC
  IPv4 address
  DF IP Address CCC

cops.pc_dfccc_ip_port  DF IP Port CCC
  Unsigned 16-bit integer
  DF IP Port CCC

cops.pc_dfcdc_ip  DF IP Address CDC
  IPv4 address
  DF IP Address CDC

cops.pc_dfcdc_ip_port  DF IP Port CDC
  Unsigned 16-bit integer
  DF IP Port CDC

cops.pc_direction  Direction
  Unsigned 8-bit integer
  Direction

cops.pc_ds_field  DS Field (DSCP or TOS)
  Unsigned 8-bit integer
  DS Field (DSCP or TOS)

cops.pc_gate_command_type  Gate Command Type
  Unsigned 16-bit integer
  Gate Command Type
```

```
cops.pc_gate_id  Gate Identifier
  Unsigned 32-bit integer
  Gate Identifier

cops.pc_gate_spec_flags  Flags
  Unsigned 8-bit integer
  Flags

cops.pc_key  Security Key
  Unsigned 32-bit integer
  Security Key

cops.pc_max_packet_size  Maximum Packet Size
  Unsigned 32-bit integer
  Maximum Packet Size

cops.pc_min_policed_unit  Minimum Policed Unit
  Unsigned 32-bit integer
  Minimum Policed Unit

cops.pc_mm_amid_am_tag  AMID Application Manager Tag
  Unsigned 32-bit integer
  PacketCable Multimedia AMID Application Manager Tag

cops.pc_mm_amid_application_type  AMID Application Type
  Unsigned 32-bit integer
  PacketCable Multimedia AMID Application Type

cops.pc_mm_amrtrps  Assumed Minimum Reserved Traffic Rate Packet Size
  Unsigned 16-bit integer
  PacketCable Multimedia Committed Envelope Assumed Minimum Reserved Traffic R

cops.pc_mm_classifier_action  Priority
  Unsigned 8-bit integer
  PacketCable Multimedia Classifier Action

cops.pc_mm_classifier_activation_state  Priority
  Unsigned 8-bit integer
  PacketCable Multimedia Classifier Activation State

cops.pc_mm_classifier_dscp  DSCP/TOS Field
  Unsigned 8-bit integer
  PacketCable Multimedia Classifier DSCP/TOS Field

cops.pc_mm_classifier_dscp_mask  DSCP/TOS Mask
  Unsigned 8-bit integer
  PacketCable Multimedia Classifier DSCP/TOS Mask

cops.pc_mm_classifier_dst_addr  Destination address
  IPv4 address
  PacketCable Multimedia Classifier Destination IP Address

cops.pc_mm_classifier_dst_mask  Destination address
  IPv4 address
  PacketCable Multimedia Classifier Destination Mask

cops.pc_mm_classifier_dst_port  Destination Port
  Unsigned 16-bit integer
  PacketCable Multimedia Classifier Source Port

cops.pc_mm_classifier_dst_port_end  Destination Port
  Unsigned 16-bit integer
  PacketCable Multimedia Classifier Source Port End
```

```
cops.pc_mm_classifier_id  Priority
    Unsigned 16-bit integer
    PacketCable Multimedia Classifier ID

cops.pc_mm_classifier_priority  Priority
    Unsigned 8-bit integer
    PacketCable Multimedia Classifier Priority

cops.pc_mm_classifier_proto_id  Protocol ID
    Unsigned 16-bit integer
    PacketCable Multimedia Classifier Protocol ID

cops.pc_mm_classifier_src_addr  Source address
    IPv4 address
    PacketCable Multimedia Classifier Source IP Address

cops.pc_mm_classifier_src_mask  Source mask
    IPv4 address
    PacketCable Multimedia Classifier Source Mask

cops.pc_mm_classifier_src_port  Source Port
    Unsigned 16-bit integer
    PacketCable Multimedia Classifier Source Port

cops.pc_mm_classifier_src_port_end  Source Port End
    Unsigned 16-bit integer
    PacketCable Multimedia Classifier Source Port End

cops.pc_mm_docsis_scn  Service Class Name
    String
    PacketCable Multimedia DOCSIS Service Class Name

cops.pc_mm_envelope  Envelope
    Unsigned 8-bit integer
    PacketCable Multimedia Envelope

cops.pc_mm_error_ec  Error-Code
    Unsigned 16-bit integer
    PacketCable Multimedia PacketCable-Error Error-Code

cops.pc_mm_error_esc  Error-code
    Unsigned 16-bit integer
    PacketCable Multimedia PacketCable-Error Error Sub-code

cops.pc_mm_fs_envelope  Envelope
    Unsigned 8-bit integer
    PacketCable Multimedia Flow Spec Envelope

cops.pc_mm_fs_svc_num  Service Number
    Unsigned 8-bit integer
    PacketCable Multimedia Flow Spec Service Number

cops.pc_mm_gpi  Grants Per Interval
    Unsigned 8-bit integer
    PacketCable Multimedia Grants Per Interval

cops.pc_mm_gs_dscp  DSCP/TOS Field
    Unsigned 8-bit integer
    PacketCable Multimedia GateSpec DSCP/TOS Field

cops.pc_mm_gs_dscp_mask  DSCP/TOS Mask
    Unsigned 8-bit integer
    PacketCable Multimedia GateSpec DSCP/TOS Mask
```

```
cops.pc_mm_gs_flags  Flags
    Unsigned 8-bit integer
    PacketCable Multimedia GateSpec Flags

cops.pc_mm_gs_reason Reason
    Unsigned 16-bit integer
    PacketCable Multimedia Gate State Reason

cops.pc_mm_gs_scid  SessionClassID
    Unsigned 8-bit integer
    PacketCable Multimedia GateSpec SessionClassID

cops.pc_mm_gs_scid_conf  SessionClassID Configurable
    Unsigned 8-bit integer
    PacketCable Multimedia GateSpec SessionClassID Configurable

cops.pc_mm_gs_scid_preempt  SessionClassID Preemption
    Unsigned 8-bit integer
    PacketCable Multimedia GateSpec SessionClassID Preemption

cops.pc_mm_gs_scid_prio  SessionClassID Priority
    Unsigned 8-bit integer
    PacketCable Multimedia GateSpec SessionClassID Priority

cops.pc_mm_gs_state  State
    Unsigned 16-bit integer
    PacketCable Multimedia Gate State

cops.pc_mm_gs_timer_t1  Timer T1
    Unsigned 16-bit integer
    PacketCable Multimedia GateSpec Timer T1

cops.pc_mm_gs_timer_t2  Timer T2
    Unsigned 16-bit integer
    PacketCable Multimedia GateSpec Timer T2

cops.pc_mm_gs_timer_t3  Timer T3
    Unsigned 16-bit integer
    PacketCable Multimedia GateSpec Timer T3

cops.pc_mm_gs_timer_t4  Timer T4
    Unsigned 16-bit integer
    PacketCable Multimedia GateSpec Timer T4

cops.pc_mm_gti  Gate Time Info
    Unsigned 32-bit integer
    PacketCable Multimedia Gate Time Info

cops.pc_mm_gui  Gate Usage Info
    Unsigned 32-bit integer
    PacketCable Multimedia Gate Usage Info

cops.pc_mm_md1  Maximum Downstream Latency
    Unsigned 32-bit integer
    PacketCable Multimedia Maximum Downstream Latency

cops.pc_mm_mrtr  Minimum Reserved Traffic Rate
    Unsigned 32-bit integer
    PacketCable Multimedia Committed Envelope Minimum Reserved Traffic Rate

cops.pc_mm_msg_receipt_key  Msg Receipt Key
    Unsigned 32-bit integer
    PacketCable Multimedia Msg Receipt Key
```

```
cops.pc_mm_mstr  Maximum Sustained Traffic Rate
    Unsigned 32-bit integer
    PacketCable Multimedia Committed Envelope Maximum Sustained Traffic Rate

cops.pc_mm_mtb  Maximum Traffic Burst
    Unsigned 32-bit integer
    PacketCable Multimedia Committed Envelope Maximum Traffic Burst

cops.pc_mm_ngi  Nominal Grant Interval
    Unsigned 32-bit integer
    PacketCable Multimedia Nominal Grant Interval

cops.pc_mm_npi  Nominal Polling Interval
    Unsigned 32-bit integer
    PacketCable Multimedia Nominal Polling Interval

cops.pc_mm_psid  PSID
    Unsigned 32-bit integer
    PacketCable Multimedia PSID

cops.pc_mm_rtp  Request Transmission Policy
    Unsigned 32-bit integer
    PacketCable Multimedia Committed Envelope Traffic Priority

cops.pc_mm_synch_options_report_type  Report Type
    Unsigned 8-bit integer
    PacketCable Multimedia Synch Options Report Type

cops.pc_mm_synch_options_synch_type  Synch Type
    Unsigned 8-bit integer
    PacketCable Multimedia Synch Options Synch Type

cops.pc_mm_tbul_ul  Usage Limit
    Unsigned 32-bit integer
    PacketCable Multimedia Time-Based Usage Limit

cops.pc_mm_tgj  Tolerated Grant Jitter
    Unsigned 32-bit integer
    PacketCable Multimedia Tolerated Grant Jitter

cops.pc_mm_tp  Traffic Priority
    Unsigned 8-bit integer
    PacketCable Multimedia Committed Envelope Traffic Priority

cops.pc_mm_tpj  Tolerated Poll Jitter
    Unsigned 32-bit integer
    PacketCable Multimedia Tolerated Poll Jitter

cops.pc_mm_ugs  Unsolicited Grant Size
    Unsigned 16-bit integer
    PacketCable Multimedia Unsolicited Grant Size

cops.pc_mm_vbul_ul  Usage Limit
    Unsigned 64-bit integer
    PacketCable Multimedia Volume-Based Usage Limit

cops.pc_mm_vi_major  Major Version Number
    Unsigned 16-bit integer
    PacketCable Multimedia Major Version Number

cops.pc_mm_vi_minor  Minor Version Number
    Unsigned 16-bit integer
    PacketCable Multimedia Minor Version Number
```

```
cops.pc_packetcable_err_code  Error Code
    Unsigned 16-bit integer
    Error Code

cops.pc_packetcable_sub_code  Error Sub Code
    Unsigned 16-bit integer
    Error Sub Code

cops.pc_peak_data_rate  Peak Data Rate
    Peak Data Rate

cops.pc_prks_ip  PRKS IP Address
    IPv4 address
    PRKS IP Address

cops.pc_prks_ip_port  PRKS IP Port
    Unsigned 16-bit integer
    PRKS IP Port

cops.pc_protocol_id  Protocol ID
    Unsigned 8-bit integer
    Protocol ID

cops.pc_reason_code  Reason Code
    Unsigned 16-bit integer
    Reason Code

cops.pc_remote_flags  Flags
    Unsigned 16-bit integer
    Flags

cops.pc_remote_gate_id  Remote Gate ID
    Unsigned 32-bit integer
    Remote Gate ID

cops.pc_reserved  Reserved
    Unsigned 32-bit integer
    Reserved

cops.pc_session_class  Session Class
    Unsigned 8-bit integer
    Session Class

cops.pc_slack_term  Slack Term
    Unsigned 32-bit integer
    Slack Term

cops.pc_spec_rate  Rate
    Rate

cops.pc_src_ip  Source IP Address
    IPv4 address
    Source IP Address

cops.pc_src_port  Source IP Port
    Unsigned 16-bit integer
    Source IP Port

cops.pc_srks_ip  SRKS IP Address
    IPv4 address
    SRKS IP Address
```

```
cops.pc_srks_ip_port  SRKS IP Port
    Unsigned 16-bit integer
    SRKS IP Port

cops.pc_subscriber_id4  Subscriber Identifier (IPv4)
    IPv4 address
    Subscriber Identifier (IPv4)

cops.pc_subscriber_id6  Subscriber Identifier (IPv6)
    IPv6 address
    Subscriber Identifier (IPv6)

cops.pc_subtree  Object Subtree
    No value
    Object Subtree

cops.pc_t1_value  Timer T1 Value (sec)
    Unsigned 16-bit integer
    Timer T1 Value (sec)

cops.pc_t7_value  Timer T7 Value (sec)
    Unsigned 16-bit integer
    Timer T7 Value (sec)

cops.pc_t8_value  Timer T8 Value (sec)
    Unsigned 16-bit integer
    Timer T8 Value (sec)

cops.pc_token_bucket_rate  Token Bucket Rate
    Token Bucket Rate

cops.pc_token_bucket_size  Token Bucket Size
    Token Bucket Size

cops.pc_transaction_id  Transaction Identifier
    Unsigned 16-bit integer
    Transaction Identifier

cops.pdp.tcp_port  TCP Port Number
    Unsigned 32-bit integer
    TCP Port Number of PDP in PDPRedirAddr/LastPDPAddr object

cops.pdprediraddr.ipv4  IPv4 address
    IPv4 address
    IPv4 address in COPS PDPRedirAddr object

cops.pdprediraddr.ipv6  IPv6 address
    IPv6 address
    IPv6 address in COPS PDPRedirAddr object

cops.pepid.id  Contents: PEP Id
    String
    PEP Id in PEPID object

cops.pprid.prefix_id  Prefix Identifier

cops.prid.instance_id  PRID Instance Identifier

cops.reason  Reason
    Unsigned 16-bit integer
    Reason in Reason object
```

```

cops.reason_sub Reason Sub-code
    Unsigned 16-bit integer
    Reason Sub-code in Reason object

cops.report_type Contents: Report-Type
    Unsigned 16-bit integer
    Report-Type in Report-Type object

cops.s_num S-Num
    Unsigned 8-bit integer
    S-Num in COPS-PR Object Header

cops.s_type S-Type
    Unsigned 8-bit integer
    S-Type in COPS-PR Object Header

cops.ver_flags Version and Flags
    Unsigned 8-bit integer
    Version and Flags in COPS Common Header

cops.version Version
    Unsigned 8-bit integer
    Version in COPS Common Header

```

#### **Common Unix Printing System (CUPS) Browsing Protocol (cups)**

```

cups.ptype Type
    Unsigned 32-bit integer

cups.state State
    Unsigned 8-bit integer

```

#### **Component Status Protocol (componentstatusprotocol)**

```

componentstatusprotocol.componentassociation_duration Duration
    Unsigned 64-bit integer

componentstatusprotocol.componentassociation_flags Flags
    Unsigned 16-bit integer

componentstatusprotocol.componentassociation_ppid PPID
    Unsigned 32-bit integer

componentstatusprotocol.componentassociation_protocolid ProtocolID
    Unsigned 16-bit integer

componentstatusprotocol.componentassociation_receiverid ReceiverID
    Unsigned 64-bit integer

componentstatusprotocol.componentstatusreport_AssociationArray AssociationArray
    Unsigned 32-bit integer

componentstatusprotocol.componentstatusreport_associations Associations
    Unsigned 16-bit integer

componentstatusprotocol.componentstatusreport_location Location
    String

componentstatusprotocol.componentstatusreport_reportinterval ReportInterval
    Unsigned 32-bit integer

componentstatusprotocol.componentstatusreport_status Status
    String

```



```

componentstatusprotocol.componentstatusreport_workload  Workload
    Unsigned 16-bit integer
componentstatusprotocol.message_flags  Flags
    Unsigned 8-bit integer
componentstatusprotocol.message_length  Length
    Unsigned 16-bit integer
componentstatusprotocol.message_senderid  SenderID
    Unsigned 64-bit integer
componentstatusprotocol.message_sendertimestamp  SenderTimeStamp
    Unsigned 64-bit integer
componentstatusprotocol.message_type  Type
    Unsigned 8-bit integer
componentstatusprotocol.message_version  Version
    Unsigned 32-bit integer

```

### Compressed Data Type (cdt)

```

cdt.CompressedData  CompressedData
    No value
    cdt.CompressedData
cdt.algorithmID_OID  algorithmID-OID
    cdt.OBJECT_IDENTIFIER
cdt.algorithmID_ShortForm  algorithmID-ShortForm
    Signed 32-bit integer
    cdt.AlgorithmID_ShortForm
cdt.compressedContent  compressedContent
    Byte array
    cdt.CompressedContent
cdt.compressedContentInfo  compressedContentInfo
    No value
    cdt.CompressedContentInfo
cdt.compressionAlgorithm  compressionAlgorithm
    Unsigned 32-bit integer
    cdt.CompressionAlgorithmIdentifier
cdt.contentType  contentType
    Unsigned 32-bit integer
    cdt.T_contentType
cdt.contentType_OID  contentType-OID
    cdt.T_contentType_OID
cdt.contentType_ShortForm  contentType-ShortForm
    Signed 32-bit integer
    cdt.ContentType_ShortForm

```

### Compuserve GIF (image-gif)

```

image-gif.end  Trailer (End of the GIF stream)
    No value
    This byte tells the decoder that the data stream is finished.

```

image-gif.extension Extension  
No value  
Extension.

image-gif.extension.label Extension label  
Unsigned 8-bit integer  
Extension label.

image-gif.global.bpp Image bits per pixel minus 1  
Unsigned 8-bit integer  
The number of bits per pixel is one plus the field value.

image-gif.global.color\_bpp Bits per color minus 1  
Unsigned 8-bit integer  
The number of bits per color is one plus the field value.

image-gif.global.color\_map Global color map  
Byte array  
Global color map.

image-gif.global.color\_map.ordered Global color map is ordered  
Unsigned 8-bit integer  
Indicates whether the global color map is ordered.

image-gif.global.color\_map.present Global color map is present  
Unsigned 8-bit integer  
Indicates if the global color map is present

image-gif.global.pixel\_aspect\_ratio Global pixel aspect ratio  
Unsigned 8-bit integer  
Gives an approximate value of the aspect ratio of the pixels.

image-gif.image Image  
No value  
Image.

image-gif.image.code\_size LZW minimum code size  
Unsigned 8-bit integer  
Minimum code size for the LZW compression.

image-gif.image.height Image height  
Unsigned 16-bit integer  
Image height.

image-gif.image.left Image left position  
Unsigned 16-bit integer  
Offset between left of Screen and left of Image.

image-gif.image.top Image top position  
Unsigned 16-bit integer  
Offset between top of Screen and top of Image.

image-gif.image.width Image width  
Unsigned 16-bit integer  
Image width.

image-gif.image\_background\_index Background color index  
Unsigned 8-bit integer  
Index of the background color in the color map.

image-gif.local.bpp Image bits per pixel minus 1  
Unsigned 8-bit integer  
The number of bits per pixel is one plus the field value.

image-gif.local.color\_bpp Bits per color minus 1  
Unsigned 8-bit integer  
The number of bits per color is one plus the field value.

image-gif.local.color\_map Local color map  
Byte array  
Local color map.

image-gif.local.color\_map.ordered Local color map is ordered  
Unsigned 8-bit integer  
Indicates whether the local color map is ordered.

image-gif.local.color\_map.present Local color map is present  
Unsigned 8-bit integer  
Indicates if the local color map is present

image-gif.screen.height Screen height  
Unsigned 16-bit integer  
Screen height

image-gif.screen.width Screen width  
Unsigned 16-bit integer  
Screen width

image-gif.version Version  
String  
GIF Version

#### **Computer Interface to Message Distribution (cimd)**

cimd.aoi Alphanumeric Originating Address  
String  
CIMD Alphanumeric Originating Address

cimd.ce Cancel Enabled  
String  
CIMD Cancel Enabled

cimd.chksum Checksum  
Unsigned 8-bit integer  
CIMD Checksum

cimd.cm Cancel Mode  
String  
CIMD Cancel Mode

cimd.da Destination Address  
String  
CIMD Destination Address

cimd.dcs Data Coding Scheme  
Unsigned 8-bit integer  
CIMD Data Coding Scheme

cimd.dcs.cf Compressed  
Unsigned 8-bit integer  
CIMD DCS Compressed Flag

cimd.dcs.cg Coding Group  
Unsigned 8-bit integer  
CIMD DCS Coding Group

```
cimd.dcs.chs  Character Set
              Unsigned 8-bit integer
              CIMD DCS Character Set

cimd.dcs.is  Indication Sense
             Unsigned 8-bit integer
             CIMD DCS Indication Sense

cimd.dcs.it  Indication Type
             Unsigned 8-bit integer
             CIMD DCS Indication Type

cimd.dcs.mc  Message Class
             Unsigned 8-bit integer
             CIMD DCS Message Class

cimd.dcs.mcm Message Class Meaning
             Unsigned 8-bit integer
             CIMD DCS Message Class Meaning Flag

cimd.drmode  Delivery Request Mode
             String
             CIMD Delivery Request Mode

cimd.dt      Discharge Time
             String
             CIMD Discharge Time

cimd.errcode Error Code
             String
             CIMD Error Code

cimd.errtext Error Text
             String
             CIMD Error Text

cimd.fdta    First Delivery Time Absolute
             String
             CIMD First Delivery Time Absolute

cimd.fdrtr   First Delivery Time Relative
             String
             CIMD First Delivery Time Relative

cimd.gpar    Get Parameter
             String
             CIMD Get Parameter

cimd.mcount  Message Count
             String
             CIMD Message Count

cimd.mms     More Messages To Send
             String
             CIMD More Messages To Send

cimd.oa      Originating Address
             String
             CIMD Originating Address

cimd.oimsi   Originating IMSI
             String
             CIMD Originating IMSI
```

```
cimd.opcode  Operation Code
             Unsigned 8-bit integer
             CIMD Operation Code

cimd.ovma    Originated Visited MSC Address
             String
             CIMD Originated Visited MSC Address

cimd.passwd  Password
             String
             CIMD Password

cimd.pcode   Code
             String
             CIMD Parameter Code

cimd.pi      Protocol Identifier
             String
             CIMD Protocol Identifier

cimd.pnumber Packet Number
             Unsigned 8-bit integer
             CIMD Packet Number

cimd.priority Priority
             String
             CIMD Priority

cimd.rpath   Reply Path
             String
             CIMD Reply Path

cimd.saddr   Subaddress
             String
             CIMD Subaddress

cimd.scaddr  Service Center Address
             String
             CIMD Service Center Address

cimd.scts    Service Centre Time Stamp
             String
             CIMD Service Centre Time Stamp

cimd.sdes    Service Description
             String
             CIMD Service Description

cimd.smsct   SMS Center Time
             String
             CIMD SMS Center Time

cimd.srr     Status Report Request
             String
             CIMD Status Report Request

cimd.stcode  Status Code
             String
             CIMD Status Code

cimd.sterrcode Status Error Code
             String
             CIMD Status Error Code
```

```
cimd.tclass  Tariff Class
             String
             CIMD Tariff Class

cimd.ud      User Data
             String
             CIMD User Data

cimd.udb     User Data Binary
             String
             CIMD User Data Binary

cimd.udh     User Data Header
             String
             CIMD User Data Header

cimd.ui      User Identity
             String
             CIMD User Identity

cimd.vpa     Validity Period Absolute
             String
             CIMD Validity Period Absolute

cimd.vpr     Validity Period Relative
             String
             CIMD Validity Period Relative

cimd.ws      Window Size
             String
             CIMD Window Size
```

#### **Configuration Test Protocol (loopback) (loop)**

```
loop.forwarding_address  Forwarding address
                          6-byte Hardware (MAC) Address

loop.function            Function
                          Unsigned 16-bit integer

loop.receipt_number      Receipt number
                          Unsigned 16-bit integer

loop.skipcount           skipCount
                          Unsigned 16-bit integer
```

#### **Connectionless Lightweight Directory Access Protocol (cldap)**

#### **Coseventcomm Dissector Using GIOP API (giop-coseventcomm)**

#### **Cosnaming Dissector Using GIOP API (giop-cosnaming)**

#### **Cross Point Frame Injector (cpfi)**

```
cpfi.word_two  Word two
               Unsigned 32-bit integer

cpfi.EOFtype   EOFtype
               Unsigned 32-bit integer
               EOF Type
```

```
cpfi.OPMerror  OPMerror
  Boolean
  OPM Error?

cpfi.SOFtype  SOFtype
  Unsigned 32-bit integer
  SOF Type

cpfi.board  Board
  Byte array

cpfi.crc-32  CRC-32
  Unsigned 32-bit integer

cpfi.dstTDA  dstTDA
  Unsigned 32-bit integer
  Source TDA (10 bits)

cpfi.dst_board  Destination Board
  Byte array

cpfi.dst_instance  Destination Instance
  Byte array

cpfi.dst_port  Destination Port
  Byte array

cpfi.frmtype  FrmType
  Unsigned 32-bit integer
  Frame Type

cpfi.fromLCM  fromLCM
  Boolean
  from LCM?

cpfi.instance  Instance
  Byte array

cpfi.port  Port
  Byte array

cpfi.speed  speed
  Unsigned 32-bit integer
  SOF Type

cpfi.srcTDA  srcTDA
  Unsigned 32-bit integer
  Source TDA (10 bits)

cpfi.src_board  Source Board
  Byte array

cpfi.src_instance  Source Instance
  Byte array

cpfi.src_port  Source Port
  Byte array

cpfi.word_one  Word one
  Unsigned 32-bit integer
```

**Cryptographic Message Syntax (cms)**

```
cms.AuthAttributes_item  Item
  No value
  cms.Attribute

cms.AuthenticatedData  AuthenticatedData
  No value
  cms.AuthenticatedData

cms.CertificateRevocationLists_item  Item
  No value
  x509af.CertificateList

cms.CertificateSet_item  Item
  Unsigned 32-bit integer
  cms.CertificateChoices

cms.ContentInfo  ContentInfo
  No value
  cms.ContentInfo

cms.ContentType  ContentType
  cms.ContentType

cms.Countersignature  Countersignature
  No value
  cms.Countersignature

cms.DigestAlgorithmIdentifiers_item  Item
  No value
  cms.DigestAlgorithmIdentifier

cms.DigestedData  DigestedData
  No value
  cms.DigestedData

cms.EncryptedData  EncryptedData
  No value
  cms.EncryptedData

cms.EnvelopedData  EnvelopedData
  No value
  cms.EnvelopedData

cms.IssuerAndSerialNumber  IssuerAndSerialNumber
  No value
  cms.IssuerAndSerialNumber

cms.MessageDigest  MessageDigest
  Byte array
  cms.MessageDigest

cms.RC2CBCParameters  RC2CBCParameters
  Unsigned 32-bit integer
  cms.RC2CBCParameters

cms.RC2WrapParameter  RC2WrapParameter
  Signed 32-bit integer
  cms.RC2WrapParameter
```



```
cms.RecipientEncryptedKeys_item  Item
    No value
    cms.RecipientEncryptedKey
cms.RecipientInfos_item  Item
    Unsigned 32-bit integer
    cms.RecipientInfo
cms.SMIMECapabilities  SMIMECapabilities
    Unsigned 32-bit integer
    cms.SMIMECapabilities
cms.SMIMECapabilities_item  Item
    No value
    cms.SMIMECapability
cms.SMIMEEncryptionKeyPreference  SMIMEEncryptionKeyPreference
    Unsigned 32-bit integer
    cms.SMIMEEncryptionKeyPreference
cms.SignedAttributes_item  Item
    No value
    cms.Attribute
cms.SignedData  SignedData
    No value
    cms.SignedData
cms.SignerInfos_item  Item
    No value
    cms.SignerInfo
cms.SigningTime  SigningTime
    Unsigned 32-bit integer
    cms.SigningTime
cms.UnauthAttributes_item  Item
    No value
    cms.Attribute
cms.UnprotectedAttributes_item  Item
    No value
    cms.Attribute
cms.UnsignedAttributes_item  Item
    No value
    cms.Attribute
cms.algorithm  algorithm
    No value
    x509af.AlgorithmIdentifier
cms.attrCert  attrCert
    No value
    x509af.AttributeCertificate
cms.attrType  attrType
    cms.T_attrType
cms.attrValues  attrValues
    Unsigned 32-bit integer
    cms.SET_OF_AttributeValue
```

```
cms.attrValues_item  Item
    No value
    cms.AttributeValue

cms.attributes  attributes
    Unsigned 32-bit integer
    cms.UnauthAttributes

cms.authenticatedAttributes  authenticatedAttributes
    Unsigned 32-bit integer
    cms.AuthAttributes

cms.capability  capability
    cms.T_capability

cms.certificate  certificate
    No value
    x509af.Certificate

cms.certificates  certificates
    Unsigned 32-bit integer
    cms.CertificateSet

cms.certs  certs
    Unsigned 32-bit integer
    cms.CertificateSet

cms.content  content
    No value
    cms.T_content

cms.contentEncryptionAlgorithm  contentEncryptionAlgorithm
    No value
    cms.ContentEncryptionAlgorithmIdentifier

cms.contentInfo.contentType  contentType
    ContentType

cms.contentType  contentType
    cms.ContentType

cms.crls  crls
    Unsigned 32-bit integer
    cms.CertificateRevocationLists

cms.date  date
    String
    cms.GeneralizedTime

cms.digest  digest
    Byte array
    cms.Digest

cms.digestAlgorithm  digestAlgorithm
    No value
    cms.DigestAlgorithmIdentifier

cms.digestAlgorithms  digestAlgorithms
    Unsigned 32-bit integer
    cms.DigestAlgorithmIdentifiers
```

```
cms.eContent eContent
    Byte array
    cms.T_eContent

cms.eContentType eContentType
    cms.ContentType

cms.encapContentInfo encapContentInfo
    No value
    cms.EncapsulatedContentInfo

cms.encryptedContent encryptedContent
    Byte array
    cms.EncryptedContent

cms.encryptedContentInfo encryptedContentInfo
    No value
    cms.EncryptedContentInfo

cms.encryptedKey encryptedKey
    Byte array
    cms.EncryptedKey

cms.extendedCertificate extendedCertificate
    No value
    cms.ExtendedCertificate

cms.extendedCertificateInfo extendedCertificateInfo
    No value
    cms.ExtendedCertificateInfo

cms.generalTime generalTime
    String
    cms.GeneralizedTime

cms.issuer issuer
    Unsigned 32-bit integer
    x509if.Name

cms.issuerAndSerialNumber issuerAndSerialNumber
    No value
    cms.IssuerAndSerialNumber

cms.iv iv
    Byte array
    cms.OCTET_STRING

cms.kari kari
    No value
    cms.KeyAgreeRecipientInfo

cms.kekid kekid
    No value
    cms.KEKIdentifier

cms.kekri kekri
    No value
    cms.KEKRecipientInfo

cms.keyAttr keyAttr
    No value
    cms.T_keyAttr
```

```
cms.keyAttrId keyAttrId
    cms.T_keyAttrId
cms.keyEncryptionAlgorithm keyEncryptionAlgorithm
    No value
    cms.KeyEncryptionAlgorithmIdentifier
cms.keyIdentifier keyIdentifier
    Byte array
    cms.OCTET_STRING
cms.ktri ktri
    No value
    cms.KeyTransRecipientInfo
cms.mac mac
    Byte array
    cms.MessageAuthenticationCode
cms.macAlgorithm macAlgorithm
    No value
    cms.MessageAuthenticationCodeAlgorithm
cms.originator originator
    Unsigned 32-bit integer
    cms.OriginatorIdentifierOrKey
cms.originatorInfo originatorInfo
    No value
    cms.OriginatorInfo
cms.originatorKey originatorKey
    No value
    cms.OriginatorPublicKey
cms.other other
    No value
    cms.OtherKeyAttribute
cms.parameters parameters
    No value
    cms.T_parameters
cms.publicKey publicKey
    Byte array
    cms.BIT_STRING
cms.rKeyId rKeyId
    No value
    cms.RecipientKeyIdentifier
cms.rc2CBCParameter rc2CBCParameter
    No value
    cms.RC2CBCParameter
cms.rc2ParameterVersion rc2ParameterVersion
    Signed 32-bit integer
    cms.INTEGER
cms.rc2WrapParameter rc2WrapParameter
    Signed 32-bit integer
    cms.RC2WrapParameter
```

```
cms.recipientEncryptedKeys  recipientEncryptedKeys
    Unsigned 32-bit integer
    cms.RecipientEncryptedKeys

cms.recipientInfos  recipientInfos
    Unsigned 32-bit integer
    cms.RecipientInfos

cms.recipientKeyId  recipientKeyId
    No value
    cms.RecipientKeyIdentifier

cms.rid  rid
    Unsigned 32-bit integer
    cms.RecipientIdentifier

cms.serialNumber  serialNumber
    Signed 32-bit integer
    x509af.CertificateSerialNumber

cms.sid  sid
    Unsigned 32-bit integer
    cms.SignerIdentifier

cms.signature  signature
    Byte array
    cms.SignatureValue

cms.signatureAlgorithm  signatureAlgorithm
    No value
    cms.SignatureAlgorithmIdentifier

cms.signedAttrs  signedAttrs
    Unsigned 32-bit integer
    cms.SignedAttributes

cms.signerInfos  signerInfos
    Unsigned 32-bit integer
    cms.SignerInfos

cms.subjectAltKeyIdentifier  subjectAltKeyIdentifier
    Byte array
    cms.SubjectKeyIdentifier

cms.subjectKeyIdentifier  subjectKeyIdentifier
    Byte array
    cms.SubjectKeyIdentifier

cms.ukm  ukm
    Byte array
    cms.UserKeyingMaterial

cms.unauthenticatedAttributes  unauthenticatedAttributes
    Unsigned 32-bit integer
    cms.UnauthAttributes

cms.unprotectedAttrs  unprotectedAttrs
    Unsigned 32-bit integer
    cms.UnprotectedAttributes

cms.unsignedAttrs  unsignedAttrs
    Unsigned 32-bit integer
    cms.UnsignedAttributes
```

```

cms.utcTime   utcTime
              String
              cms.UTCTime

cms.version   version
              Signed 32-bit integer
              cms.CMSVersion

```

**DCE DFS Basic Overseer Server (bossvr)**

```

bossvr.opnum  Operation
              Unsigned 16-bit integer
              Operation

```

**DCE DFS FLDB UBIK TRANSFER (ubikdisk)**

```

ubikdisk.opnum Operation
              Unsigned 16-bit integer
              Operation

```

**DCE DFS FLDB UBIKVOTE (ubikvote)**

```

ubikvote.opnum Operation
              Unsigned 16-bit integer
              Operation

```

**DCE DFS File Exporter (fileexp)**

```

afsNetAddr.data  IP Data
                 Unsigned 8-bit integer

afsNetAddr.type  Type
                 Unsigned 16-bit integer

fileexp.NameString_principal  Principal Name
                              String

fileexp.TaggedPath_tp_chars  AFS Tagged Path
                              String

fileexp.TaggedPath_tp_tag  AFS Tagged Path Name
                           Unsigned 32-bit integer

fileexp.accesstime_msec  fileexp.accesstime_msec
                           Unsigned 32-bit integer

fileexp.accesstime_sec  fileexp.accesstime_sec
                           Unsigned 32-bit integer

fileexp.acl_len  Acl Length
                 Unsigned 32-bit integer

fileexp.aclexpirationtime  fileexp.aclexpirationtime
                           Unsigned 32-bit integer

fileexp.acltype  fileexp.acltype
                 Unsigned 32-bit integer

fileexp.afsFid.Unique  Unique
                       Unsigned 32-bit integer
afsFid Unique

```

```
fileexp.afsFid.Vnode  Vnode
    Unsigned 32-bit integer
    afsFid Vnode

fileexp.afsFid.cell_high  Cell High
    Unsigned 32-bit integer
    afsFid Cell High

fileexp.afsFid.cell_low  Cell Low
    Unsigned 32-bit integer
    afsFid Cell Low

fileexp.afsFid.volume_high  Volume High
    Unsigned 32-bit integer
    afsFid Volume High

fileexp.afsFid.volume_low  Volume Low
    Unsigned 32-bit integer
    afsFid Volume Low

fileexp.afsTaggedPath_length  Tagged Path Length
    Unsigned 32-bit integer

fileexp.afsacl_uuid1  AFS ACL UUID1
    UUID

fileexp.afserrortstatus_st  AFS Error Code
    Unsigned 32-bit integer

fileexp.afsreturndesc_tokenid_high  Tokenid High
    Unsigned 32-bit integer

fileexp.afsreturndesc_tokenid_low  Tokenid low
    Unsigned 32-bit integer

fileexp.agtypeunique  fileexp.agtypeunique
    Unsigned 32-bit integer

fileexp.anonymousaccess  fileexp.anonymousaccess
    Unsigned 32-bit integer

fileexp.author  fileexp.author
    Unsigned 32-bit integer

fileexp.beginrange  fileexp.beginrange
    Unsigned 32-bit integer

fileexp.beginrangeext  fileexp.beginrangeext
    Unsigned 32-bit integer

fileexp.blocksused  fileexp.blocksused
    Unsigned 32-bit integer

fileexp.bulkfetchkeepalive_spare1  BulkFetch KeepAlive spare1
    Unsigned 32-bit integer

fileexp.bulkfetchkeepalive_spare2  BulkKeepAlive spare4
    Unsigned 32-bit integer

fileexp.bulkfetchstatus_size  BulkFetchStatus Size
    Unsigned 32-bit integer

fileexp.bulkfetchvv_numvols  fileexp.bulkfetchvv_numvols
    Unsigned 32-bit integer
```

```
fileexp.bulkfetchvv_spare1  fileexp.bulkfetchvv_spare1
    Unsigned 32-bit integer
fileexp.bulkfetchvv_spare2  fileexp.bulkfetchvv_spare2
    Unsigned 32-bit integer
fileexp.bulkkeepalive_numexecfids  BulkKeepAlive numexecfids
    Unsigned 32-bit integer
fileexp.calleraccess  fileexp.calleraccess
    Unsigned 32-bit integer
fileexp.cellidp_high  cellidp high
    Unsigned 32-bit integer
fileexp.cellidp_low  cellidp low
    Unsigned 32-bit integer
fileexp.changetime_msec  fileexp.changetime_msec
    Unsigned 32-bit integer
fileexp.changetime_sec  fileexp.changetime_sec
    Unsigned 32-bit integer
fileexp.clientspare1  fileexp.clientspare1
    Unsigned 32-bit integer
fileexp.dataversion_high  fileexp.dataversion_high
    Unsigned 32-bit integer
fileexp.dataversion_low  fileexp.dataversion_low
    Unsigned 32-bit integer
fileexp.defaultcell_uuid  Default Cell UUID
    UUID
fileexp.devicenumber  fileexp.devicenumber
    Unsigned 32-bit integer
fileexp.devicenumberhighbits  fileexp.devicenumberhighbits
    Unsigned 32-bit integer
fileexp.endrange  fileexp.endrange
    Unsigned 32-bit integer
fileexp.endrangeext  fileexp.endrangeext
    Unsigned 32-bit integer
fileexp.expirationtime  fileexp.expirationtime
    Unsigned 32-bit integer
fileexp.fetchdata_pipe_t_size  FetchData Pipe_t size
    String
fileexp.filetype  fileexp.filetype
    Unsigned 32-bit integer
fileexp.flags  DFS Flags
    Unsigned 32-bit integer
fileexp.fstype  Filetype
    Unsigned 32-bit integer
fileexp.gettime.syncdistance  SyncDistance
    Unsigned 32-bit integer
```



```
fileexp.gettime_secondsp  GetTime secondsp
    Unsigned 32-bit integer
fileexp.gettime_syncdispersion  GetTime Syncdispersion
    Unsigned 32-bit integer
fileexp.gettime_usesecondsp  GetTime usesecondsp
    Unsigned 32-bit integer
fileexp.group  fileexp.group
    Unsigned 32-bit integer
fileexp.himaxspare  fileexp.himaxspare
    Unsigned 32-bit integer
fileexp.interfaceversion  fileexp.interfaceversion
    Unsigned 32-bit integer
fileexp.l_end_pos  fileexp.l_end_pos
    Unsigned 32-bit integer
fileexp.l_end_pos_ext  fileexp.l_end_pos_ext
    Unsigned 32-bit integer
fileexp.l_fstype  fileexp.l_fstype
    Unsigned 32-bit integer
fileexp.l_pid  fileexp.l_pid
    Unsigned 32-bit integer
fileexp.l_start_pos  fileexp.l_start_pos
    Unsigned 32-bit integer
fileexp.l_start_pos_ext  fileexp.l_start_pos_ext
    Unsigned 32-bit integer
fileexp.l_sysid  fileexp.l_sysid
    Unsigned 32-bit integer
fileexp.l_type  fileexp.l_type
    Unsigned 32-bit integer
fileexp.l_whence  fileexp.l_whence
    Unsigned 32-bit integer
fileexp.length  Length
    Unsigned 32-bit integer
fileexp.length_high  fileexp.length_high
    Unsigned 32-bit integer
fileexp.length_low  fileexp.length_low
    Unsigned 32-bit integer
fileexp.linkcount  fileexp.linkcount
    Unsigned 32-bit integer
fileexp.lomaxspare  fileexp.lomaxspare
    Unsigned 32-bit integer
fileexp.minvvp_high  fileexp.minvvp_high
    Unsigned 32-bit integer
fileexp.minvvp_low  fileexp.minvvp_low
    Unsigned 32-bit integer
```

```
fileexp.mode fileexp.mode
    Unsigned 32-bit integer
fileexp.modtime_msec fileexp.modtime_msec
    Unsigned 32-bit integer
fileexp.modtime_sec fileexp.modtime_sec
    Unsigned 32-bit integer
fileexp.nextoffset_high next offset high
    Unsigned 32-bit integer
fileexp.nextoffset_low next offset low
    Unsigned 32-bit integer
fileexp.objectuuid fileexp.objectuuid
    UUID
fileexp.offset_high offset high
    Unsigned 32-bit integer
fileexp.opnum Operation
    Unsigned 16-bit integer
    Operation
fileexp.owner fileexp.owner
    Unsigned 32-bit integer
fileexp.parentunique fileexp.parentunique
    Unsigned 32-bit integer
fileexp.parentvnode fileexp.parentvnode
    Unsigned 32-bit integer
fileexp.pathconfspare fileexp.pathconfspare
    Unsigned 32-bit integer
fileexp.position_high Position High
    Unsigned 32-bit integer
fileexp.position_low Position Low
    Unsigned 32-bit integer
fileexp.principalName_size Principal Name Size
    Unsigned 32-bit integer
fileexp.principalName_size2 Principal Name Size2
    Unsigned 32-bit integer
fileexp.readdir.size Readdir Size
    Unsigned 32-bit integer
fileexp.returntokenidp_high return token idp high
    Unsigned 32-bit integer
fileexp.returntokenidp_low return token idp low
    Unsigned 32-bit integer
fileexp.servermodtime_msec fileexp.servermodtime_msec
    Unsigned 32-bit integer
fileexp.servermodtime_sec fileexp.servermodtime_sec
    Unsigned 32-bit integer
fileexp.setcontext.parm7 Parm7:
    Unsigned 32-bit integer
```

```
fileexp.setcontext_clientsizesattrs ClientSizeAttrs:
    Unsigned 32-bit integer
fileexp.setcontext_rqst_epochtime EpochTime:
    Date/Time stamp
fileexp.setcontext_secobjextid SetObjectid:
    String
    UUID
fileexp.spare4 fileexp.spare4
    Unsigned 32-bit integer
fileexp.spare5 fileexp.spare5
    Unsigned 32-bit integer
fileexp.spare6 fileexp.spare6
    Unsigned 32-bit integer
fileexp.st AFS4Int Error Status Code
    Unsigned 32-bit integer
fileexp.storestatus_accesstime_sec fileexp.storestatus_accesstime_sec
    Unsigned 32-bit integer
fileexp.storestatus_accesstime_usec fileexp.storestatus_accesstime_usec
    Unsigned 32-bit integer
fileexp.storestatus_changetime_sec fileexp.storestatus_changetime_sec
    Unsigned 32-bit integer
fileexp.storestatus_changetime_usec fileexp.storestatus_changetime_usec
    Unsigned 32-bit integer
fileexp.storestatus_clientspare1 fileexp.storestatus_clientspare1
    Unsigned 32-bit integer
fileexp.storestatus_cmask fileexp.storestatus_cmask
    Unsigned 32-bit integer
fileexp.storestatus_devicenumber fileexp.storestatus_devicenumber
    Unsigned 32-bit integer
fileexp.storestatus_devicenumberhighbits fileexp.storestatus_devicenumberhighbits
    Unsigned 32-bit integer
fileexp.storestatus_devicetype fileexp.storestatus_devicetype
    Unsigned 32-bit integer
fileexp.storestatus_group fileexp.storestatus_group
    Unsigned 32-bit integer
fileexp.storestatus_length_high fileexp.storestatus_length_high
    Unsigned 32-bit integer
fileexp.storestatus_length_low fileexp.storestatus_length_low
    Unsigned 32-bit integer
fileexp.storestatus_mask fileexp.storestatus_mask
    Unsigned 32-bit integer
fileexp.storestatus_mode fileexp.storestatus_mode
    Unsigned 32-bit integer
fileexp.storestatus_modtime_sec fileexp.storestatus_modtime_sec
    Unsigned 32-bit integer
```

```
fileexp.storestatus_modtime_usec  fileexp.storestatus_modtime_usec
    Unsigned 32-bit integer
fileexp.storestatus_owner  fileexp.storestatus_owner
    Unsigned 32-bit integer
fileexp.storestatus_spare1  fileexp.storestatus_spare1
    Unsigned 32-bit integer
fileexp.storestatus_spare2  fileexp.storestatus_spare2
    Unsigned 32-bit integer
fileexp.storestatus_spare3  fileexp.storestatus_spare3
    Unsigned 32-bit integer
fileexp.storestatus_spare4  fileexp.storestatus_spare4
    Unsigned 32-bit integer
fileexp.storestatus_spare5  fileexp.storestatus_spare5
    Unsigned 32-bit integer
fileexp.storestatus_spare6  fileexp.storestatus_spare6
    Unsigned 32-bit integer
fileexp.storestatus_trunc_high  fileexp.storestatus_trunc_high
    Unsigned 32-bit integer
fileexp.storestatus_trunc_low  fileexp.storestatus_trunc_low
    Unsigned 32-bit integer
fileexp.storestatus_typeuuid  fileexp.storestatus_typeuuid
    UUID
fileexp.string  String
    String
fileexp.tn_length  fileexp.tn_length
    Unsigned 16-bit integer
fileexp.tn_size  String Size
    Unsigned 32-bit integer
fileexp.tn_tag  fileexp.tn_tag
    Unsigned 32-bit integer
fileexp.tokenid_hi  fileexp.tokenid_hi
    Unsigned 32-bit integer
fileexp.tokenid_low  fileexp.tokenid_low
    Unsigned 32-bit integer
fileexp.type_hi  fileexp.type_hi
    Unsigned 32-bit integer
fileexp.type_high  Type high
    Unsigned 32-bit integer
fileexp.type_low  fileexp.type_low
    Unsigned 32-bit integer
fileexp.typeuuid  fileexp.typeuuid
    UUID
fileexp.uint  fileexp.uint
    Unsigned 32-bit integer
```

```

fileexp.unique fileexp.unique
    Unsigned 32-bit integer
fileexp.uuid AFS UUID
    UUID
fileexp.vnode fileexp.vnode
    Unsigned 32-bit integer
fileexp.volid_hi fileexp.volid_hi
    Unsigned 32-bit integer
fileexp.volid_low fileexp.volid_low
    Unsigned 32-bit integer
fileexp.volume_high fileexp.volume_high
    Unsigned 32-bit integer
fileexp.volume_low fileexp.volume_low
    Unsigned 32-bit integer
fileexp.vv_hi fileexp.vv_hi
    Unsigned 32-bit integer
fileexp.vv_low fileexp.vv_low
    Unsigned 32-bit integer
fileexp.vvage fileexp.vvage
    Unsigned 32-bit integer
fileexp.vvpingage fileexp.vvpingage
    Unsigned 32-bit integer
fileexp.vvspare1 fileexp.vvspare1
    Unsigned 32-bit integer
fileexp.vvspare2 fileexp.vvspare2
    Unsigned 32-bit integer
hf_afsconnparams_mask hf_afsconnparams_mask
    Unsigned 32-bit integer
hf_afsconnparams_values hf_afsconnparams_values
    Unsigned 32-bit integer

```

**DCE DFS Fileset Location Server (fldb)**

```

fldb.NameString_principal Principal Name
    String
fldb.afsnetaddr.data IP Data
    Unsigned 8-bit integer
fldb.afsnetaddr.type Type
    Unsigned 16-bit integer
fldb.createentry_rqst_key_size Volume Size
    Unsigned 32-bit integer
fldb.createentry_rqst_key_t Volume
    String
fldb.creationquota creation quota
    Unsigned 32-bit integer

```

```
fldb.creationuses  creation uses
    Unsigned 32-bit integer
fldb.deletedflag  deletedflag
    Unsigned 32-bit integer
fldb.deleteentry_rqst_fsid_high  FSID deleteentry Hi
    Unsigned 32-bit integer
fldb.deleteentry_rqst_fsid_low  FSID deleteentry Low
    Unsigned 32-bit integer
fldb.deleteentry_rqst_voloper  voloper
    Unsigned 32-bit integer
fldb.deleteentry_rqst_voltype  voltype
    Unsigned 32-bit integer
fldb.error_st  Error Status 2
    Unsigned 32-bit integer
fldb.flagsp  flagsp
    Unsigned 32-bit integer
fldb.getentrybyid_rqst_fsid_high  FSID deleteentry Hi
    Unsigned 32-bit integer
fldb.getentrybyid_rqst_fsid_low  FSID getentrybyid Low
    Unsigned 32-bit integer
fldb.getentrybyid_rqst_voloper  voloper
    Unsigned 32-bit integer
fldb.getentrybyid_rqst_voltype  voltype
    Unsigned 32-bit integer
fldb.getentrybyname_resp_cloneid_high  fldb_getentrybyname_resp_cloneid_high
    Unsigned 32-bit integer
fldb.getentrybyname_resp_cloneid_low  fldb_getentrybyname_resp_cloneid_low
    Unsigned 32-bit integer
fldb.getentrybyname_resp_defaultmaxreplat  fldb_getentrybyname_resp_defaultmaxre
    Unsigned 32-bit integer
fldb.getentrybyname_resp_flags  fldb_getentrybyname_resp_flags
    Unsigned 32-bit integer
fldb.getentrybyname_resp_hardmaxtotlat  fldb_getentrybyname_resp_hardmaxtotlat
    Unsigned 32-bit integer
fldb.getentrybyname_resp_key_size  fldb_getentrybyname_resp_key_size
    Unsigned 32-bit integer
fldb.getentrybyname_resp_key_t  fldb_getentrybyname_resp_key_t
    String
fldb.getentrybyname_resp_maxtotallat  fldb_getentrybyname_resp_maxtotallat
    Unsigned 32-bit integer
fldb.getentrybyname_resp_minpouncedally  fldb_getentrybyname_resp_minpouncedally
    Unsigned 32-bit integer
fldb.getentrybyname_resp_numservers  fldb_getentrybyname_resp_numservers
    Unsigned 32-bit integer
```

```

fldb.getentrybyname_resp_reclaimdally  fldb_getentrybyname_resp_reclaimdally
    Unsigned 32-bit integer
fldb.getentrybyname_resp_sitecookies  fldb_getentrybyname_resp_sitecookies
    Unsigned 32-bit integer
fldb.getentrybyname_resp_siteflags  fldb_getentrybyname_resp_siteflags
    Unsigned 32-bit integer
fldb.getentrybyname_resp_sitemaxreplat  fldb_getentrybyname_resp_sitemaxreplat
    Unsigned 32-bit integer
fldb.getentrybyname_resp_sitepartition  fldb_getentrybyname_resp_sitepartition
    Unsigned 32-bit integer
fldb.getentrybyname_resp_spare1  fldb_getentrybyname_resp_spare1
    Unsigned 32-bit integer
fldb.getentrybyname_resp_spare2  fldb_getentrybyname_resp_spare2
    Unsigned 32-bit integer
fldb.getentrybyname_resp_spare3  fldb_getentrybyname_resp_spare3
    Unsigned 32-bit integer
fldb.getentrybyname_resp_spare4  fldb_getentrybyname_resp_spare4
    Unsigned 32-bit integer
fldb.getentrybyname_resp_test  fldb_getentrybyname_resp_test
    Unsigned 8-bit integer
fldb.getentrybyname_resp_volid_high  fldb_getentrybyname_resp_volid_high
    Unsigned 32-bit integer
fldb.getentrybyname_resp_volid_low  fldb_getentrybyname_resp_volid_low
    Unsigned 32-bit integer
fldb.getentrybyname_resp_voltype  fldb_getentrybyname_resp_voltype
    Unsigned 32-bit integer
fldb.getentrybyname_resp_volumetype  fldb_getentrybyname_resp_volumetype
    Unsigned 32-bit integer
fldb.getentrybyname_resp_whenlocked  fldb_getentrybyname_resp_whenlocked
    Unsigned 32-bit integer
fldb.getentrybyname_rqst_key_size  getentrybyname
    Unsigned 32-bit integer
fldb.getentrybyname_rqst_var1  getentrybyname var1
    Unsigned 32-bit integer
fldb.listentry_resp_count  Count
    Unsigned 32-bit integer
fldb.listentry_resp_key_size  Key Size
    Unsigned 32-bit integer
fldb.listentry_resp_key_size2  key_size2
    Unsigned 32-bit integer
fldb.listentry_resp_key_t  Volume
    String
fldb.listentry_resp_key_t2  Server
    String

```

```
flodb.listentry_resp_next_index  Next Index
    Unsigned 32-bit integer
flodb.listentry_resp_voltype     VolType
    Unsigned 32-bit integer
flodb.listentry_rqst_previous_index  Previous Index
    Unsigned 32-bit integer
flodb.listentry_rqst_var1        Var 1
    Unsigned 32-bit integer
flodb.namestring_size            namestring size
    Unsigned 32-bit integer
flodb.nextstartp                nextstartp
    Unsigned 32-bit integer
flodb.numwanted                 number wanted
    Unsigned 32-bit integer
flodb.opnum                      Operation
    Unsigned 16-bit integer
    Operation
flodb.principalName_size         Principal Name Size
    Unsigned 32-bit integer
flodb.principalName_size2       Principal Name Size2
    Unsigned 32-bit integer
flodb.releaselock_rqst_fsid_high  FSID releaselock Hi
    Unsigned 32-bit integer
flodb.releaselock_rqst_fsid_low  FSID releaselock Low
    Unsigned 32-bit integer
flodb.releaselock_rqst_voloper   voloper
    Unsigned 32-bit integer
flodb.releaselock_rqst_voltype   voltype
    Unsigned 32-bit integer
flodb.replaceentry_resp_st       Error
    Unsigned 32-bit integer
flodb.replaceentry_resp_st2     Error
    Unsigned 32-bit integer
flodb.replaceentry_rqst_fsid_high  FSID replaceentry Hi
    Unsigned 32-bit integer
flodb.replaceentry_rqst_fsid_low  FSID replaceentry Low
    Unsigned 32-bit integer
flodb.replaceentry_rqst_key_size  Key Size
    Unsigned 32-bit integer
flodb.replaceentry_rqst_key_t    Key
    String
flodb.replaceentry_rqst_voltype   voltype
    Unsigned 32-bit integer
flodb.setlock_resp_st           Error
    Unsigned 32-bit integer
```



```
fldb.setlock_resp_st2  Error
    Unsigned 32-bit integer
fldb.setlock_rqst_fsid_high  FSID setlock Hi
    Unsigned 32-bit integer
fldb.setlock_rqst_fsid_low  FSID setlock Low
    Unsigned 32-bit integer
fldb.setlock_rqst_voloper  voloper
    Unsigned 32-bit integer
fldb.setlock_rqst_voltype  voltype
    Unsigned 32-bit integer
fldb.spare2  spare2
    Unsigned 32-bit integer
fldb.spare3  spare3
    Unsigned 32-bit integer
fldb.spare4  spare4
    Unsigned 32-bit integer
fldb.spare5  spare5
    Unsigned 32-bit integer
fldb.uuid_objid  objid
    UUID
fldb.uuid_owner  owner
    UUID
fldb.vlconf.cellidhigh  CellID High
    Unsigned 32-bit integer
fldb.vlconf.cellidlow  CellID Low
    Unsigned 32-bit integer
fldb.vlconf.hostname  hostName
    String
fldb.vlconf.name  Name
    String
fldb.vlconf.numservers  Number of Servers
    Unsigned 32-bit integer
fldb.vlconf.spare1  Spare1
    Unsigned 32-bit integer
fldb.vlconf.spare2  Spare2
    Unsigned 32-bit integer
fldb.vlconf.spare3  Spare3
    Unsigned 32-bit integer
fldb.vlconf.spare4  Spare4
    Unsigned 32-bit integer
fldb.vlconf.spare5  Spare5
    Unsigned 32-bit integer
fldb.vldbentry.afsflags  AFS Flags
    Unsigned 32-bit integer
```

```
flodb.vldbentry.charspares  Char Spares  
    String  
flodb.vldbentry.cloneidhigh CloneID High  
    Unsigned 32-bit integer  
flodb.vldbentry.cloneidlow  CloneID Low  
    Unsigned 32-bit integer  
flodb.vldbentry.defaultmaxreplicalatency  Default Max Replica Latency  
    Unsigned 32-bit integer  
flodb.vldbentry.hardmaxtotalatency  Hard Max Total Latency  
    Unsigned 32-bit integer  
flodb.vldbentry.lockername  Locker Name  
    String  
flodb.vldbentry.maxtotalatency  Max Total Latency  
    Unsigned 32-bit integer  
flodb.vldbentry.minimumpouncedally  Minimum Pounce Dally  
    Unsigned 32-bit integer  
flodb.vldbentry.nservers  Number of Servers  
    Unsigned 32-bit integer  
flodb.vldbentry.reclaimdally  Reclaim Dally  
    Unsigned 32-bit integer  
flodb.vldbentry.siteflags  Site Flags  
    Unsigned 32-bit integer  
flodb.vldbentry.sitemaxreplatency  Site Max Replica Latench  
    Unsigned 32-bit integer  
flodb.vldbentry.siteobjid  Site Object ID  
    UUID  
flodb.vldbentry.siteowner  Site Owner  
    UUID  
flodb.vldbentry.sitepartition  Site Partition  
    Unsigned 32-bit integer  
flodb.vldbentry.siteprincipal  Principal Name  
    String  
flodb.vldbentry.spare1  Spare 1  
    Unsigned 32-bit integer  
flodb.vldbentry.spare2  Spare 2  
    Unsigned 32-bit integer  
flodb.vldbentry.spare3  Spare 3  
    Unsigned 32-bit integer  
flodb.vldbentry.spare4  Spare 4  
    Unsigned 32-bit integer  
flodb.vldbentry.volidshigh  VolIDs high  
    Unsigned 32-bit integer  
flodb.vldbentry.volidslow  VolIDs low  
    Unsigned 32-bit integer
```

```
fldb.vldbentry.voltypes  VolTypes
    Unsigned 32-bit integer
fldb.vldbentry.volumename  VolumeName
    String
fldb.vldbentry.volumetype  VolumeType
    Unsigned 32-bit integer
fldb.vldbentry.whenlocked  When Locked
    Unsigned 32-bit integer
fldb.volid_high  volid high
    Unsigned 32-bit integer
fldb.volid_low  volid low
    Unsigned 32-bit integer
fldb.voltype  voltype
    Unsigned 32-bit integer
```

**DCE DFS ICL RPC (icl\_rpc)**

```
icl_rpc.opnum  Operation
    Unsigned 16-bit integer
    Operation
```

**DCE DFS Replication Server (rep\_proc)**

```
rep_proc.opnum  Operation
    Unsigned 16-bit integer
    Operation
```

**DCE DFS Token Server (tkn4int)**

```
tkn4int.opnum  Operation
    Unsigned 16-bit integer
    Operation
```

**DCE Distributed Time Service Local Server (dtsstime\_req)**

```
dtsstime_req.opnum  Operation
    Unsigned 16-bit integer
    Operation
```

**DCE Distributed Time Service Provider (dtsprovider)**

```
dtsprovider.opnum  Operation
    Unsigned 16-bit integer
    Operation
dtsprovider.status  Status
    Unsigned 32-bit integer
    Return code, status of executed command
```

**DCE Name Service (rs\_pgo)**

```
hf_error_status_t  hf_error_status_t
    Unsigned 32-bit integer
hf_rgy_acct_user_flags_t  hf_rgy_acct_user_flags_t
    Unsigned 32-bit integer
```

```
hf_rgy_get_rqst_key_size hf_rgy_get_rqst_key_size
    Unsigned 32-bit integer
hf_rgy_get_rqst_key_t hf_rgy_get_rqst_key_t
    Unsigned 32-bit integer
hf_rgy_get_rqst_name_domain hf_rgy_get_rqst_name_domain
    Unsigned 32-bit integer
hf_rgy_get_rqst_var hf_rgy_get_rqst_var
    Unsigned 32-bit integer
hf_rgy_get_rqst_var2 hf_rgy_get_rqst_var2
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_key1 hf_rgy_is_member_rqst_key1
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_key1_size hf_rgy_is_member_rqst_key1_size
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_key2 hf_rgy_is_member_rqst_key2
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_key2_size hf_rgy_is_member_rqst_key2_size
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_var1 hf_rgy_is_member_rqst_var1
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_var2 hf_rgy_is_member_rqst_var2
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_var3 hf_rgy_is_member_rqst_var3
    Unsigned 32-bit integer
hf_rgy_is_member_rqst_var4 hf_rgy_is_member_rqst_var4
    Unsigned 32-bit integer
hf_rgy_key_transfer_rqst_var1 hf_rgy_key_transfer_rqst_var1
    Unsigned 32-bit integer
hf_rgy_key_transfer_rqst_var2 hf_rgy_key_transfer_rqst_var2
    Unsigned 32-bit integer
hf_rgy_key_transfer_rqst_var3 hf_rgy_key_transfer_rqst_var3
    Unsigned 32-bit integer
hf_rgy_name_domain hf_rgy_name_domain
    Unsigned 32-bit integer
hf_rgy_sec_rgy_name_max_len hf_rgy_sec_rgy_name_max_len
    Unsigned 32-bit integer
hf_rgy_sec_rgy_name_t hf_rgy_sec_rgy_name_t
    Unsigned 32-bit integer
hf_rgy_sec_rgy_name_t_size hf_rgy_sec_rgy_name_t_size
    Unsigned 32-bit integer
hf_rs_pgo_id_key_t hf_rs_pgo_id_key_t
    Unsigned 32-bit integer
hf_rs_pgo_query_key_t hf_rs_pgo_query_key_t
    Unsigned 32-bit integer
```

```
hf_rs_pgo_query_result_t hf_rs_pgo_query_result_t
    Unsigned 32-bit integer
hf_rs_pgo_query_t hf_rs_pgo_query_t
    Unsigned 32-bit integer
hf_rs_pgo_unix_num_key_t hf_rs_pgo_unix_num_key_t
    Unsigned 32-bit integer
hf_rs_sec_rgy_pgo_item_t_quota hf_rs_sec_rgy_pgo_item_t_quota
    Unsigned 32-bit integer
hf_rs_sec_rgy_pgo_item_t_unix_num hf_rs_sec_rgy_pgo_item_t_unix_num
    Unsigned 32-bit integer
hf_rs_timeval hf_rs_timeval
    Time duration
hf_rs_uuid1 hf_rs_uuid1
    UUID
hf_rs_var1 hf_rs_var1
    Unsigned 32-bit integer
hf_sec_attr_component_name_t_handle hf_sec_attr_component_name_t_handle
    Unsigned 32-bit integer
hf_sec_attr_component_name_t_valid hf_sec_attr_component_name_t_valid
    Unsigned 32-bit integer
hf_sec_passwd_type_t hf_sec_passwd_type_t
    Unsigned 32-bit integer
hf_sec_passwd_version_t hf_sec_passwd_version_t
    Unsigned 32-bit integer
hf_sec_rgy_acct_admin_flags hf_sec_rgy_acct_admin_flags
    Unsigned 32-bit integer
hf_sec_rgy_acct_auth_flags_t hf_sec_rgy_acct_auth_flags_t
    Unsigned 32-bit integer
hf_sec_rgy_acct_key_t hf_sec_rgy_acct_key_t
    Unsigned 32-bit integer
hf_sec_rgy_domain_t hf_sec_rgy_domain_t
    Unsigned 32-bit integer
hf_sec_rgy_name_t_principalName_string hf_sec_rgy_name_t_principalName_string
    String
hf_sec_rgy_name_t_size hf_sec_rgy_name_t_size
    Unsigned 32-bit integer
hf_sec_rgy_pgo_flags_t hf_sec_rgy_pgo_flags_t
    Unsigned 32-bit integer
hf_sec_rgy_pgo_item_t hf_sec_rgy_pgo_item_t
    Unsigned 32-bit integer
hf_sec_rgy_pname_t_principalName_string hf_sec_rgy_pname_t_principalName_string
    String
hf_sec_rgy_pname_t_size hf_sec_rgy_pname_t_size
    Unsigned 32-bit integer
```

```
hf_sec_rgy_unix_sid_t_group hf_sec_rgy_unix_sid_t_group
    Unsigned 32-bit integer
hf_sec_rgy_unix_sid_t_org hf_sec_rgy_unix_sid_t_org
    Unsigned 32-bit integer
hf_sec_rgy_unix_sid_t_person hf_sec_rgy_unix_sid_t_person
    Unsigned 32-bit integer
hf_sec_timeval_sec_t hf_sec_timeval_sec_t
    Unsigned 32-bit integer
rs_pgo.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE RPC (dcerpc)**

```
dcerpc.array.actual_count Actual Count
    Unsigned 32-bit integer
    Actual Count: Actual number of elements in the array
dcerpc.array.buffer Buffer
    Byte array
    Buffer: Buffer containing elements of the array
dcerpc.array.max_count Max Count
    Unsigned 32-bit integer
    Maximum Count: Number of elements in the array
dcerpc.array.offset Offset
    Unsigned 32-bit integer
    Offset for first element in array
dcerpc.auth_ctx_id Auth Context ID
    Unsigned 32-bit integer
dcerpc.auth_level Auth level
    Unsigned 8-bit integer
dcerpc.auth_pad_len Auth pad len
    Unsigned 8-bit integer
dcerpc.auth_rsrvd Auth Rsrvd
    Unsigned 8-bit integer
dcerpc.auth_type Auth type
    Unsigned 8-bit integer
dcerpc.cn_ack_reason Ack reason
    Unsigned 16-bit integer
dcerpc.cn_ack_result Ack result
    Unsigned 16-bit integer
dcerpc.cn_ack_trans_id Transfer Syntax
dcerpc.cn_ack_trans_ver Syntax ver
    Unsigned 32-bit integer
dcerpc.cn_alloc_hint Alloc hint
    Unsigned 32-bit integer
dcerpc.cn_assoc_group Assoc Group
    Unsigned 32-bit integer
```

```
dcerpc.cn_auth_len  Auth Length
    Unsigned 16-bit integer
dcerpc.cn_bind_abstract_syntax  Abstract Syntax
    No value
dcerpc.cn_bind_if_ver  Interface Ver
    Unsigned 16-bit integer
dcerpc.cn_bind_if_ver_minor  Interface Ver Minor
    Unsigned 16-bit integer
dcerpc.cn_bind_to_uuid  Interface UUID
dcerpc.cn_bind_trans  Transfer Syntax
    No value
dcerpc.cn_bind_trans_id  ID
dcerpc.cn_bind_trans_ver  ver
    Unsigned 32-bit integer
dcerpc.cn_call_id  Call ID
    Unsigned 32-bit integer
dcerpc.cn_cancel_count  Cancel count
    Unsigned 8-bit integer
dcerpc.cn_ctx_id  Context ID
    Unsigned 16-bit integer
dcerpc.cn_ctx_item  Ctx Item
    No value
dcerpc.cn_deseg_req  Desegmentation Required
    Unsigned 32-bit integer
dcerpc.cn_flags  Packet Flags
    Unsigned 8-bit integer
dcerpc.cn_flags.cancel_pending  Cancel Pending
    Boolean
dcerpc.cn_flags.dne  Did Not Execute
    Boolean
dcerpc.cn_flags.first_frag  First Frag
    Boolean
dcerpc.cn_flags.last_frag  Last Frag
    Boolean
dcerpc.cn_flags.maybe  Maybe
    Boolean
dcerpc.cn_flags.mpx  Multiplex
    Boolean
dcerpc.cn_flags.object  Object
    Boolean
dcerpc.cn_flags.reserved  Reserved
    Boolean
dcerpc.cn_frag_len  Frag Length
    Unsigned 16-bit integer
```

```
dcerpc.cn_max_recv  Max Recv Frag
    Unsigned 16-bit integer
dcerpc.cn_max_xmit  Max Xmit Frag
    Unsigned 16-bit integer
dcerpc.cn_num_ctx_items  Num Ctx Items
    Unsigned 8-bit integer
dcerpc.cn_num_protocols  Number of protocols
    Unsigned 8-bit integer
dcerpc.cn_num_results  Num results
    Unsigned 8-bit integer
dcerpc.cn_num_trans_items  Num Trans Items
    Unsigned 8-bit integer
dcerpc.cn_protocol_ver_major  Protocol major version
    Unsigned 8-bit integer
dcerpc.cn_protocol_ver_minor  Protocol minor version
    Unsigned 8-bit integer
dcerpc.cn_reject_reason  Reject reason
    Unsigned 16-bit integer
dcerpc.cn_sec_addr  Scndry Addr
    String
dcerpc.cn_sec_addr_len  Scndry Addr len
    Unsigned 16-bit integer
dcerpc.cn_status  Status
    Unsigned 32-bit integer
dcerpc.dg_act_id  Activity
dcerpc.dg_ahint  Activity Hint
    Unsigned 16-bit integer
dcerpc.dg_auth_proto  Auth proto
    Unsigned 8-bit integer
dcerpc.dg_cancel_id  Cancel ID
    Unsigned 32-bit integer
dcerpc.dg_cancel_vers  Cancel Version
    Unsigned 32-bit integer
dcerpc.dg_flags1  Flags1
    Unsigned 8-bit integer
dcerpc.dg_flags1_broadcast  Broadcast
    Boolean
dcerpc.dg_flags1_frag  Fragment
    Boolean
dcerpc.dg_flags1_idempotent  Idempotent
    Boolean
dcerpc.dg_flags1_last_frag  Last Fragment
    Boolean
dcerpc.dg_flags1_maybe  Maybe
    Boolean
```



```
dcerpc.dg_flags1_nofack  No Fack
    Boolean
dcerpc.dg_flags1_rsrvd_01  Reserved
    Boolean
dcerpc.dg_flags1_rsrvd_80  Reserved
    Boolean
dcerpc.dg_flags2  Flags2
    Unsigned 8-bit integer
dcerpc.dg_flags2_cancel_pending  Cancel Pending
    Boolean
dcerpc.dg_flags2_rsrvd_01  Reserved
    Boolean
dcerpc.dg_flags2_rsrvd_04  Reserved
    Boolean
dcerpc.dg_flags2_rsrvd_08  Reserved
    Boolean
dcerpc.dg_flags2_rsrvd_10  Reserved
    Boolean
dcerpc.dg_flags2_rsrvd_20  Reserved
    Boolean
dcerpc.dg_flags2_rsrvd_40  Reserved
    Boolean
dcerpc.dg_flags2_rsrvd_80  Reserved
    Boolean
dcerpc.dg_frag_len  Fragment len
    Unsigned 16-bit integer
dcerpc.dg_frag_num  Fragment num
    Unsigned 16-bit integer
dcerpc.dg_if_id  Interface
dcerpc.dg_if_ver  Interface Ver
    Unsigned 32-bit integer
dcerpc.dg_ihint  Interface Hint
    Unsigned 16-bit integer
dcerpc.dg_seqnum  Sequence num
    Unsigned 32-bit integer
dcerpc.dg_serial_hi  Serial High
    Unsigned 8-bit integer
dcerpc.dg_serial_lo  Serial Low
    Unsigned 8-bit integer
dcerpc.dg_server_boot  Server boot time
    Date/Time stamp
dcerpc.dg_status  Status
    Unsigned 32-bit integer
dcerpc.drep  Data Representation
    Byte array
```

```
dcerpc.drep.byteorder  Byte order
    Unsigned 8-bit integer
dcerpc.drep.character  Character
    Unsigned 8-bit integer
dcerpc.drep.fp         Floating-point
    Unsigned 8-bit integer
dcerpc.fack_max_frag_size  Max Frag Size
    Unsigned 32-bit integer
dcerpc.fack_max_tsdu   Max TSDU
    Unsigned 32-bit integer
dcerpc.fack_selack    Selective ACK
    Unsigned 32-bit integer
dcerpc.fack_selack_len  Selective ACK Len
    Unsigned 16-bit integer
dcerpc.fack_serial_num  Serial Num
    Unsigned 16-bit integer
dcerpc.fack_vers      FACK Version
    Unsigned 8-bit integer
dcerpc.fack_window_size  Window Size
    Unsigned 16-bit integer
dcerpc.fragment      DCE/RPC Fragment
    Frame number
    DCE/RPC Fragment
dcerpc.fragment.error  Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments
dcerpc.fragment.multipletails  Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet
dcerpc.fragment.overlap  Fragment overlap
    Boolean
    Fragment overlaps with other fragments
dcerpc.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
dcerpc.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet
dcerpc.fragments      Reassembled DCE/RPC Fragments
    No value
    DCE/RPC Fragments
dcerpc.krb5_av.auth_verifier  Authentication Verifier
    Byte array
dcerpc.krb5_av.key_vers_num  Key Version Number
    Unsigned 8-bit integer
```

```
dcerpc.krb5_av.prot_level  Protection Level
    Unsigned 8-bit integer

dcerpc.nt.acb.autolock  Account is autolocked
    Boolean
    If this account has been autolocked

dcerpc.nt.acb.disabled  Account disabled
    Boolean
    If this account is enabled or disabled

dcerpc.nt.acb.domtrust  Interdomain trust account
    Boolean
    Interdomain trust account

dcerpc.nt.acb.homedirreq  Home dir required
    Boolean
    Is homedirs required for this account?

dcerpc.nt.acb.mns  MNS logon user account
    Boolean
    MNS logon user account

dcerpc.nt.acb.normal  Normal user account
    Boolean
    If this is a normal user account

dcerpc.nt.acb.pwnoexp  Password expires
    Boolean
    If this account expires or not

dcerpc.nt.acb.pwnotreq  Password required
    Boolean
    If a password is required for this account?

dcerpc.nt.acb.svrtrust  Server trust account
    Boolean
    Server trust account

dcerpc.nt.acb.tempdup  Temporary duplicate account
    Boolean
    If this is a temporary duplicate account

dcerpc.nt.acb.wstrust  Workstation trust account
    Boolean
    Workstation trust account

dcerpc.nt.acct_ctrl  Acct Ctrl
    Unsigned 32-bit integer
    Acct CTRL

dcerpc.nt.attr  Attributes
    Unsigned 32-bit integer

dcerpc.nt.close_frame  Frame handle closed
    Frame number
    Frame handle closed

dcerpc.nt.count  Count
    Unsigned 32-bit integer
    Number of elements in following array
```

```
dcerpc.nt.domain_sid  Domain SID
    String
    The Domain SID
dcerpc.nt.guid  GUID
    GUID (uuid for groups?)
dcerpc.nt.logonhours.divisions  Divisions
    Unsigned 16-bit integer
    Number of divisions for LOGON_HOURS
dcerpc.nt.open_frame  Frame handle opened
    Frame number
    Frame handle opened
dcerpc.nt.str.len  Length
    Unsigned 16-bit integer
    Length of string in short integers
dcerpc.nt.str.size  Size
    Unsigned 16-bit integer
    Size of string in short integers
dcerpc.nt.unknown.char  Unknown char
    Unsigned 8-bit integer
    Unknown char. If you know what this is, contact wireshark developers.
dcerpc.obj_id  Object
dcerpc.op  Operation
    Unsigned 16-bit integer
dcerpc.opnum  Opnum
    Unsigned 16-bit integer
dcerpc.pkt_type  Packet type
    Unsigned 8-bit integer
dcerpc.reassembled_in  Reassembled PDU in frame
    Frame number
    The DCE/RPC PDU is completely reassembled in the packet with this number
dcerpc.referent_id  Referent ID
    Unsigned 32-bit integer
    Referent ID for this NDR encoded pointer
dcerpc.request_in  Request in frame
    Frame number
    This packet is a response to the packet with this number
dcerpc.response_in  Response in frame
    Frame number
    This packet will be responded in the packet with this number
dcerpc.server_accepting_cancels  Server accepting cancels
    Boolean
dcerpc.time  Time from request
    Time duration
    Time between Request and Response for DCE-RPC calls
dcerpc.unknown_if_id  Unknown DCERPC interface id
    Boolean
```

```
dcerpc.ver  Version
  Unsigned 8-bit integer
dcerpc.ver_minor  Version (minor)
  Unsigned 8-bit integer
```

**DCE Security ID Mapper (secidmap)**

```
secidmap.opnum  Operation
  Unsigned 16-bit integer
  Operation
```

**DCE/DFS BUDB (budb)**

```
budb.AddVolume.vol  vol
  No value
budb.AddVolumes.cnt  cnt
  Unsigned 32-bit integer
budb.AddVolumes.vol  vol
  No value
budb.CreateDump.dump  dump
  No value
budb.DbHeader.cell  cell
  String
budb.DbHeader.created  created
  Signed 32-bit integer
budb.DbHeader.dbversion  dbversion
  Signed 32-bit integer
budb.DbHeader.lastDumpId  lastDumpId
  Unsigned 32-bit integer
budb.DbHeader.lastInstanceId  lastInstanceId
  Unsigned 32-bit integer
budb.DbHeader.lastTapeId  lastTapeId
  Unsigned 32-bit integer
budb.DbHeader.spare1  spare1
  Unsigned 32-bit integer
budb.DbHeader.spare2  spare2
  Unsigned 32-bit integer
budb.DbHeader.spare3  spare3
  Unsigned 32-bit integer
budb.DbHeader.spare4  spare4
  Unsigned 32-bit integer
budb.DbVerify.host  host
  Signed 32-bit integer
budb.DbVerify.orphans  orphans
  Signed 32-bit integer
budb.DbVerify.status  status
  Signed 32-bit integer
```

```
budb.DeleteDump.id id
    Unsigned 32-bit integer
budb.DeleteTape.tape tape
    No value
budb.DeleteVDP.curDumpId curDumpId
    Signed 32-bit integer
budb.DeleteVDP.dsname dsname
    String
budb.DeleteVDP.dumpPath dumpPath
    String
budb.DumpDB.charListPtr charListPtr
    No value
budb.DumpDB.flags flags
    Signed 32-bit integer
budb.DumpDB.maxLength maxLength
    Signed 32-bit integer
budb.FindClone.cloneSpare cloneSpare
    Unsigned 32-bit integer
budb.FindClone.clonetime clonetime
    Unsigned 32-bit integer
budb.FindClone.dumpID dumpID
    Signed 32-bit integer
budb.FindClone.volName volName
    String
budb.FindDump.beforeDate beforeDate
    Unsigned 32-bit integer
budb.FindDump.dateSpare dateSpare
    Unsigned 32-bit integer
budb.FindDump.deptr deptr
    No value
budb.FindDump.volName volName
    String
budb.FindLatestDump.dname dname
    String
budb.FindLatestDump.dumpentry dumpentry
    No value
budb.FindLatestDump.vsname vsname
    String
budb.FinishDump.dump dump
    No value
budb.FinishTape.tape tape
    No value
budb.FreeAllLocks.instanceId instanceId
    Unsigned 32-bit integer
```

```
budb.FreeLock.lockHandle lockHandle
    Unsigned 32-bit integer
budb.GetDumps.dbUpdate dbUpdate
    Signed 32-bit integer
budb.GetDumps.dumps dumps
    No value
budb.GetDumps.end end
    Signed 32-bit integer
budb.GetDumps.flags flags
    Signed 32-bit integer
budb.GetDumps.index index
    Signed 32-bit integer
budb.GetDumps.majorVersion majorVersion
    Signed 32-bit integer
budb.GetDumps.name name
    String
budb.GetDumps.nextIndex nextIndex
    Signed 32-bit integer
budb.GetDumps.start start
    Signed 32-bit integer
budb.GetInstanceId.instanceId instanceId
    Unsigned 32-bit integer
budb.GetLock.expiration expiration
    Signed 32-bit integer
budb.GetLock.instanceId instanceId
    Unsigned 32-bit integer
budb.GetLock.lockHandle lockHandle
    Unsigned 32-bit integer
budb.GetLock.lockName lockName
    Signed 32-bit integer
budb.GetServerInterfaces.serverInterfacesP serverInterfacesP
    No value
budb.GetTapes.dbUpdate dbUpdate
    Signed 32-bit integer
budb.GetTapes.end end
    Signed 32-bit integer
budb.GetTapes.flags flags
    Signed 32-bit integer
budb.GetTapes.index index
    Signed 32-bit integer
budb.GetTapes.majorVersion majorVersion
    Signed 32-bit integer
budb.GetTapes.name name
    String
```

```
budb.GetTapes.nextIndex  nextIndex
    Signed 32-bit integer
budb.GetTapes.start  start
    Signed 32-bit integer
budb.GetTapes.tapes  tapes
    No value
budb.GetText.charListPtr  charListPtr
    No value
budb.GetText.lockHandle  lockHandle
    Signed 32-bit integer
budb.GetText.maxLength  maxLength
    Signed 32-bit integer
budb.GetText.nextOffset  nextOffset
    Signed 32-bit integer
budb.GetText.offset  offset
    Signed 32-bit integer
budb.GetText.textType  textType
    Signed 32-bit integer
budb.GetTextVersion.textType  textType
    Signed 32-bit integer
budb.GetTextVersion.tversion  tversion
    Signed 32-bit integer
budb.GetVolumes.dbUpdate  dbUpdate
    Signed 32-bit integer
budb.GetVolumes.end  end
    Signed 32-bit integer
budb.GetVolumes.flags  flags
    Signed 32-bit integer
budb.GetVolumes.index  index
    Signed 32-bit integer
budb.GetVolumes.majorVersion  majorVersion
    Signed 32-bit integer
budb.GetVolumes.name  name
    String
budb.GetVolumes.nextIndex  nextIndex
    Signed 32-bit integer
budb.GetVolumes.start  start
    Signed 32-bit integer
budb.GetVolumes.volumes  volumes
    No value
budb.RestoreDbHeader.header  header
    No value
budb.SaveText.charListPtr  charListPtr
    No value
```



```
budb.SaveText.flags flags
    Signed 32-bit integer
budb.SaveText.lockHandle lockHandle
    Signed 32-bit integer
budb.SaveText.offset offset
    Signed 32-bit integer
budb.SaveText.textType textType
    Signed 32-bit integer
budb.T_DumpDatabase.filename filename
    String
budb.T_DumpHashTable.filename filename
    String
budb.T_DumpHashTable.type type
    Signed 32-bit integer
budb.T_GetVersion.majorVersion majorVersion
    Signed 32-bit integer
budb.UseTape.new new
    Signed 32-bit integer
budb.UseTape.tape tape
    No value
budb.charListT.charListT_len charListT_len
    Unsigned 32-bit integer
budb.charListT.charListT_val charListT_val
    Unsigned 8-bit integer
budb.dbVolume.clone clone
    Date/Time stamp
budb.dbVolume.dump dump
    Unsigned 32-bit integer
budb.dbVolume.flags flags
    Unsigned 32-bit integer
budb.dbVolume.id id
    Unsigned 64-bit integer
budb.dbVolume.incTime incTime
    Date/Time stamp
budb.dbVolume.nBytes nBytes
    Signed 32-bit integer
budb.dbVolume.nFragments nFragments
    Signed 32-bit integer
budb.dbVolume.name name
    String
budb.dbVolume.partition partition
    Signed 32-bit integer
budb.dbVolume.position position
    Signed 32-bit integer
```

```
budb.dbVolume.seq seq
    Signed 32-bit integer
budb.dbVolume.server server
    String
budb.dbVolume.spare1 spare1
    Unsigned 32-bit integer
budb.dbVolume.spare2 spare2
    Unsigned 32-bit integer
budb.dbVolume.spare3 spare3
    Unsigned 32-bit integer
budb.dbVolume.spare4 spare4
    Unsigned 32-bit integer
budb.dbVolume.startByte startByte
    Signed 32-bit integer
budb.dbVolume.tape tape
    String
budb.dfs_interfaceDescription.interface_uuid interface_uuid
budb.dfs_interfaceDescription.spare0 spare0
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare1 spare1
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare2 spare2
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare3 spare3
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare4 spare4
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare5 spare5
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare6 spare6
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare7 spare7
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare8 spare8
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spare9 spare9
    Unsigned 32-bit integer
budb.dfs_interfaceDescription.spareText spareText
    Unsigned 8-bit integer
budb.dfs_interfaceDescription.vers_major vers_major
    Unsigned 16-bit integer
budb.dfs_interfaceDescription.vers_minor vers_minor
    Unsigned 16-bit integer
budb.dfs_interfaceDescription.vers_provider vers_provider
    Unsigned 32-bit integer
```

```

budb.dfs_interfaceList.dfs_interfaceList_len  dfs_interfaceList_len
    Unsigned 32-bit integer
budb.dfs_interfaceList.dfs_interfaceList_val  dfs_interfaceList_val
    No value
budb.dumpEntry.created  created
    Date/Time stamp
budb.dumpEntry.dumpPath  dumpPath
    String
budb.dumpEntry.dumper  dumper
    No value
budb.dumpEntry.flags  flags
    Signed 32-bit integer
budb.dumpEntry.id  id
    Unsigned 32-bit integer
budb.dumpEntry.incTime  incTime
    Date/Time stamp
budb.dumpEntry.level  level
    Signed 32-bit integer
budb.dumpEntry.nVolumes  nVolumes
    Signed 32-bit integer
budb.dumpEntry.name  name
    String
budb.dumpEntry.parent  parent
    Unsigned 32-bit integer
budb.dumpEntry.spare1  spare1
    Unsigned 32-bit integer
budb.dumpEntry.spare2  spare2
    Unsigned 32-bit integer
budb.dumpEntry.spare3  spare3
    Unsigned 32-bit integer
budb.dumpEntry.spare4  spare4
    Unsigned 32-bit integer
budb.dumpEntry.tapes  tapes
    No value
budb.dumpEntry.volumeSetName  volumeSetName
    String
budb.dumpList.dumpList_len  dumpList_len
    Unsigned 32-bit integer
budb.dumpList.dumpList_val  dumpList_val
    No value
budb.opnum  Operation
    Unsigned 16-bit integer
budb.principal.cell  cell
    String

```

```
budb.principal.instance instance
    String
budb.principal.name name
    String
budb.principal.spare spare
    String
budb.principal.spare1 spare1
    Unsigned 32-bit integer
budb.principal.spare2 spare2
    Unsigned 32-bit integer
budb.principal.spare3 spare3
    Unsigned 32-bit integer
budb.principal.spare4 spare4
    Unsigned 32-bit integer
budb.rc Return code
    Unsigned 32-bit integer
budb.structDumpHeader.size size
    Signed 32-bit integer
budb.structDumpHeader.spare1 spare1
    Unsigned 32-bit integer
budb.structDumpHeader.spare2 spare2
    Unsigned 32-bit integer
budb.structDumpHeader.spare3 spare3
    Unsigned 32-bit integer
budb.structDumpHeader.spare4 spare4
    Unsigned 32-bit integer
budb.structDumpHeader.structversion structversion
    Signed 32-bit integer
budb.structDumpHeader.type type
    Signed 32-bit integer
budb.tapeEntry.dump dump
    Unsigned 32-bit integer
budb.tapeEntry.expires expires
    Date/Time stamp
budb.tapeEntry.flags flags
    Unsigned 32-bit integer
budb.tapeEntry.mediaType mediaType
    Signed 32-bit integer
budb.tapeEntry.nBytes nBytes
    Unsigned 32-bit integer
budb.tapeEntry.nFiles nFiles
    Signed 32-bit integer
budb.tapeEntry.nMBytes nMBytes
    Unsigned 32-bit integer
```

```
budb.tapeEntry.nVolumes  nVolumes
    Signed 32-bit integer
budb.tapeEntry.name     name
    String
budb.tapeEntry.seq      seq
    Signed 32-bit integer
budb.tapeEntry.spare1   spare1
    Unsigned 32-bit integer
budb.tapeEntry.spare2   spare2
    Unsigned 32-bit integer
budb.tapeEntry.spare3   spare3
    Unsigned 32-bit integer
budb.tapeEntry.spare4   spare4
    Unsigned 32-bit integer
budb.tapeEntry.tapeid   tapeid
    Signed 32-bit integer
budb.tapeEntry.useCount useCount
    Signed 32-bit integer
budb.tapeEntry.written  written
    Date/Time stamp
budb.tapeList.tapeList_len  tapeList_len
    Unsigned 32-bit integer
budb.tapeList.tapeList_val  tapeList_val
    No value
budb.tapeSet.a           a
    Signed 32-bit integer
budb.tapeSet.b           b
    Signed 32-bit integer
budb.tapeSet.format     format
    String
budb.tapeSet.id         id
    Signed 32-bit integer
budb.tapeSet.maxTapes   maxTapes
    Signed 32-bit integer
budb.tapeSet.spare1     spare1
    Unsigned 32-bit integer
budb.tapeSet.spare2     spare2
    Unsigned 32-bit integer
budb.tapeSet.spare3     spare3
    Unsigned 32-bit integer
budb.tapeSet.spare4     spare4
    Unsigned 32-bit integer
budb.tapeSet.tapeServer tapeServer
    String
```

```
budb.volumeEntry.clone clone
    Date/Time stamp
budb.volumeEntry.dump dump
    Unsigned 32-bit integer
budb.volumeEntry.flags flags
    Unsigned 32-bit integer
budb.volumeEntry.id id
    Unsigned 64-bit integer
budb.volumeEntry.incTime incTime
    Date/Time stamp
budb.volumeEntry.nBytes nBytes
    Signed 32-bit integer
budb.volumeEntry.nFragments nFragments
    Signed 32-bit integer
budb.volumeEntry.name name
    String
budb.volumeEntry.partition partition
    Signed 32-bit integer
budb.volumeEntry.position position
    Signed 32-bit integer
budb.volumeEntry.seq seq
    Signed 32-bit integer
budb.volumeEntry.server server
    String
budb.volumeEntry.spare1 spare1
    Unsigned 32-bit integer
budb.volumeEntry.spare2 spare2
    Unsigned 32-bit integer
budb.volumeEntry.spare3 spare3
    Unsigned 32-bit integer
budb.volumeEntry.spare4 spare4
    Unsigned 32-bit integer
budb.volumeEntry.startByte startByte
    Signed 32-bit integer
budb.volumeEntry.tape tape
    String
budb.volumeList.volumeList_len volumeList_len
    Unsigned 32-bit integer
budb.volumeList.volumeList_val volumeList_val
    No value
```

**DCE/RPC BUTC (butc)**

```
butc.BUTC_AbortDump.dumpID dumpID
    Signed 32-bit integer
```

```
butc.BUTC_EndStatus.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_GetStatus.statusPtr  statusPtr
    No value
butc.BUTC_GetStatus.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_LabelTape.label  label
    No value
butc.BUTC_LabelTape.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_PerformDump.dumpID  dumpID
    Signed 32-bit integer
butc.BUTC_PerformDump.dumps  dumps
    No value
butc.BUTC_PerformDump.tcdiPtr  tcdiPtr
    No value
butc.BUTC_PerformRestore.dumpID  dumpID
    Signed 32-bit integer
butc.BUTC_PerformRestore.dumpSetName  dumpSetName
    String
butc.BUTC_PerformRestore.restores  restores
    No value
butc.BUTC_ReadLabel.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_RequestAbort.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_RestoreDb.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_SaveDb.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_ScanDumps.addDbFlag  addDbFlag
    Signed 32-bit integer
butc.BUTC_ScanDumps.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_ScanStatus.flags  flags
    Unsigned 32-bit integer
butc.BUTC_ScanStatus.statusPtr  statusPtr
    No value
butc.BUTC_ScanStatus.taskId  taskId
    Unsigned 32-bit integer
butc.BUTC_TCInfo.tciptr  tciptr
    No value
butc.Restore_flags.TC_RESTORE_CREATE  TC_RESTORE_CREATE
    Boolean
```

```
butc.Restore_flags.TC_RESTORE_INCR  TC_RESTORE_INCR
    Boolean
butc.afsNetAddr.data  data
    Unsigned 8-bit integer
butc.afsNetAddr.type  type
    Unsigned 16-bit integer
butc.opnum  Operation
    Unsigned 16-bit integer
butc.rc  Return code
    Unsigned 32-bit integer
butc.tc_dumpArray.tc_dumpArray  tc_dumpArray
    No value
butc.tc_dumpArray.tc_dumpArray_len  tc_dumpArray_len
    Unsigned 32-bit integer
butc.tc_dumpDesc.cloneDate  cloneDate
    Date/Time stamp
butc.tc_dumpDesc.date  date
    Date/Time stamp
butc.tc_dumpDesc.hostAddr  hostAddr
    No value
butc.tc_dumpDesc.name  name
    String
butc.tc_dumpDesc.partition  partition
    Signed 32-bit integer
butc.tc_dumpDesc.spare1  spare1
    Unsigned 32-bit integer
butc.tc_dumpDesc.spare2  spare2
    Unsigned 32-bit integer
butc.tc_dumpDesc.spare3  spare3
    Unsigned 32-bit integer
butc.tc_dumpDesc.spare4  spare4
    Unsigned 32-bit integer
butc.tc_dumpDesc.vid  vid
    Unsigned 64-bit integer
butc.tc_dumpInterface.dumpLevel  dumpLevel
    Signed 32-bit integer
butc.tc_dumpInterface.dumpName  dumpName
    String
butc.tc_dumpInterface.dumpPath  dumpPath
    String
butc.tc_dumpInterface.parentDumpId  parentDumpId
    Signed 32-bit integer
butc.tc_dumpInterface.spare1  spare1
    Unsigned 32-bit integer
```



```
butc.tc_dumpInterface.spare2  spare2
    Unsigned 32-bit integer
butc.tc_dumpInterface.spare3  spare3
    Unsigned 32-bit integer
butc.tc_dumpInterface.spare4  spare4
    Unsigned 32-bit integer
butc.tc_dumpInterface.tapeSet  tapeSet
    No value
butc.tc_dumpInterface.volumeSetName  volumeSetName
    String
butc.tc_dumpStat.bytesDumped  bytesDumped
    Signed 32-bit integer
butc.tc_dumpStat.dumpID  dumpID
    Signed 32-bit integer
butc.tc_dumpStat.flags  flags
    Signed 32-bit integer
butc.tc_dumpStat.numVolErrs  numVolErrs
    Signed 32-bit integer
butc.tc_dumpStat.spare1  spare1
    Unsigned 32-bit integer
butc.tc_dumpStat.spare2  spare2
    Unsigned 32-bit integer
butc.tc_dumpStat.spare3  spare3
    Unsigned 32-bit integer
butc.tc_dumpStat.spare4  spare4
    Unsigned 32-bit integer
butc.tc_dumpStat.volumeBeingDumped  volumeBeingDumped
    Unsigned 64-bit integer
butc.tc_restoreArray.tc_restoreArray_len  tc_restoreArray_len
    Unsigned 32-bit integer
butc.tc_restoreArray.tc_restoreArray_val  tc_restoreArray_val
    No value
butc.tc_restoreDesc.flags  flags
    Unsigned 32-bit integer
butc.tc_restoreDesc.frag  frag
    Signed 32-bit integer
butc.tc_restoreDesc.hostAddr  hostAddr
    No value
butc.tc_restoreDesc.newName  newName
    String
butc.tc_restoreDesc.oldName  oldName
    String
butc.tc_restoreDesc.origVid  origVid
    Unsigned 64-bit integer
```

```
butc.tc_restoreDesc.partition  partition
    Signed 32-bit integer
butc.tc_restoreDesc.position  position
    Signed 32-bit integer
butc.tc_restoreDesc.realDumpId  realDumpId
    Unsigned 32-bit integer
butc.tc_restoreDesc.spare2  spare2
    Unsigned 32-bit integer
butc.tc_restoreDesc.spare3  spare3
    Unsigned 32-bit integer
butc.tc_restoreDesc.spare4  spare4
    Unsigned 32-bit integer
butc.tc_restoreDesc.tapeName  tapeName
    String
butc.tc_restoreDesc.vid  vid
    Unsigned 64-bit integer
butc.tc_statusInfoSwitch.label  label
    No value
butc.tc_statusInfoSwitch.none  none
    Unsigned 32-bit integer
butc.tc_statusInfoSwitch.spare1  spare1
    Unsigned 32-bit integer
butc.tc_statusInfoSwitch.spare2  spare2
    Unsigned 32-bit integer
butc.tc_statusInfoSwitch.spare3  spare3
    Unsigned 32-bit integer
butc.tc_statusInfoSwitch.spare4  spare4
    Unsigned 32-bit integer
butc.tc_statusInfoSwitch.spare5  spare5
    Unsigned 32-bit integer
butc.tc_statusInfoSwitch.vol  vol
    No value
butc.tc_statusInfoSwitchLabel.spare1  spare1
    Unsigned 32-bit integer
butc.tc_statusInfoSwitchLabel.tapeLabel  tapeLabel
    No value
butc.tc_statusInfoSwitchVol.nKBytes  nKBytes
    Unsigned 32-bit integer
butc.tc_statusInfoSwitchVol.spare1  spare1
    Unsigned 32-bit integer
butc.tc_statusInfoSwitchVol.volsFailed  volsFailed
    Signed 32-bit integer
butc.tc_statusInfoSwitchVol.volumeName  volumeName
    String
```

```
butc.tc_tapeLabel.name  name
    String
butc.tc_tapeLabel.nameLen  nameLen
    Unsigned 32-bit integer
butc.tc_tapeLabel.size  size
    Unsigned 32-bit integer
butc.tc_tapeLabel.size_ext  size_ext
    Unsigned 32-bit integer
butc.tc_tapeLabel.spare1  spare1
    Unsigned 32-bit integer
butc.tc_tapeLabel.spare2  spare2
    Unsigned 32-bit integer
butc.tc_tapeLabel.spare3  spare3
    Unsigned 32-bit integer
butc.tc_tapeLabel.spare4  spare4
    Unsigned 32-bit integer
butc.tc_tapeSet.a  a
    Signed 32-bit integer
butc.tc_tapeSet.b  b
    Signed 32-bit integer
butc.tc_tapeSet.expDate  expDate
    Signed 32-bit integer
butc.tc_tapeSet.expType  expType
    Signed 32-bit integer
butc.tc_tapeSet.format  format
    String
butc.tc_tapeSet.id  id
    Signed 32-bit integer
butc.tc_tapeSet.maxTapes  maxTapes
    Signed 32-bit integer
butc.tc_tapeSet.spare1  spare1
    Unsigned 32-bit integer
butc.tc_tapeSet.spare2  spare2
    Unsigned 32-bit integer
butc.tc_tapeSet.spare3  spare3
    Unsigned 32-bit integer
butc.tc_tapeSet.spare4  spare4
    Unsigned 32-bit integer
butc.tc_tapeSet.tapeServer  tapeServer
    String
butc.tc_tcInfo.spare1  spare1
    Unsigned 32-bit integer
butc.tc_tcInfo.spare2  spare2
    Unsigned 32-bit integer
```

```

butc.tc_tcInfo.spare3  spare3
    Unsigned 32-bit integer
butc.tc_tcInfo.spare4  spare4
    Unsigned 32-bit integer
butc.tc_tcInfo.tcVersion  tcVersion
    Signed 32-bit integer
butc.tciStatusS.flags  flags
    Unsigned 32-bit integer
butc.tciStatusS.info  info
    Unsigned 32-bit integer
butc.tciStatusS.lastPolled  lastPolled
    Date/Time stamp
butc.tciStatusS.spare2  spare2
    Unsigned 32-bit integer
butc.tciStatusS.spare3  spare3
    Unsigned 32-bit integer
butc.tciStatusS.spare4  spare4
    Unsigned 32-bit integer
butc.tciStatusS.taskId  taskId
    Unsigned 32-bit integer
butc.tciStatusS.taskName  taskName
    String

```

**DCE/RPC CDS Solicitation (cds\_solicit)**

```

cds_solicit.opnum  Operation
    Unsigned 16-bit integer
    Operation

```

**DCE/RPC Conversation Manager (conv)**

```

conv.opnum  Operation
    Unsigned 16-bit integer
    Operation
conv.status  Status
    Unsigned 32-bit integer
conv.who_are_you2_resp_casuuid  Client's address space UUID
    UUID
conv.who_are_you2_resp_seq  Sequence Number
    Unsigned 32-bit integer
conv.who_are_you2_rqst_actuid  Activity UID
    UUID
conv.who_are_you2_rqst_boot_time  Boot time
    Date/Time stamp
conv.who_are_you_resp_seq  Sequence Number
    Unsigned 32-bit integer
conv.who_are_you_rqst_actuid  Activity UID

```

## UUID

conv.who\_are\_you\_rqst\_boot\_time Boot time  
Date/Time stamp

**DCE/RPC Directory Acl Interface (rdaclif)**

rdaclif.opnum Operation  
Unsigned 16-bit integer  
Operation

**DCE/RPC Endpoint Mapper (epm)**

epm.ann\_len Annotation length  
Unsigned 32-bit integer

epm.ann\_offset Annotation offset  
Unsigned 32-bit integer

epm.annotation Annotation  
String  
Annotation

epm.hnd Handle  
Byte array  
Context handle

epm.if\_id Interface

epm.inq\_type Inquiry type  
Unsigned 32-bit integer

epm.max\_ents Max entries  
Unsigned 32-bit integer

epm.max\_towers Max Towers  
Unsigned 32-bit integer  
Maximum number of towers to return

epm.num\_ents Num entries  
Unsigned 32-bit integer

epm.num\_towers Num Towers  
Unsigned 32-bit integer  
Number number of towers to return

epm.object Object

epm.opnum Operation  
Unsigned 16-bit integer  
Operation

epm.proto.http\_port TCP Port  
Unsigned 16-bit integer  
TCP Port where this service can be found

epm.proto.ip IP  
IPv4 address  
IP address where service is located

epm.proto.named\_pipe Named Pipe  
String  
Name of the named pipe for this service

```
epm.proto.netbios_name  NetBIOS Name
    String
    NetBIOS name where this service can be found
epm.proto.tcp_port      TCP Port
    Unsigned 16-bit integer
    TCP Port where this service can be found
epm.proto.udp_port      UDP Port
    Unsigned 16-bit integer
    UDP Port where this service can be found
epm.rc                  Return code
    Unsigned 32-bit integer
    EPM return value
epm.replace             Replace
    Unsigned 8-bit integer
    Replace existing objects?
epm.tower               Tower
    Byte array
    Tower data
epm.tower.len           Length
    Unsigned 32-bit integer
    Length of tower data
epm.tower.lhs.len       LHS Length
    Unsigned 16-bit integer
    Length of LHS data
epm.tower.num_floors    Number of floors
    Unsigned 16-bit integer
    Number of floors in tower
epm.tower.proto_id      Protocol
    Unsigned 8-bit integer
    Protocol identifier
epm.tower.rhs.len       RHS Length
    Unsigned 16-bit integer
    Length of RHS data
epm.uuid                UUID
    UUID
epm.ver_maj             Version Major
    Unsigned 16-bit integer
epm.ver_min             Version Minor
    Unsigned 16-bit integer
epm.ver_opt             Version Option
    Unsigned 32-bit integer
```

**DCE/RPC Endpoint Mapper v4 (epm4)**

**DCE/RPC Kerberos V (krb5rpc)**

```

hf_krb5rpc_krb5 hf_krb5rpc_krb5
    Byte array
    krb5_blob

hf_krb5rpc_opnum hf_krb5rpc_opnum
    Unsigned 16-bit integer

hf_krb5rpc_sendto_kdc_resp_keysize hf_krb5rpc_sendto_kdc_resp_keysize
    Unsigned 32-bit integer

hf_krb5rpc_sendto_kdc_resp_len hf_krb5rpc_sendto_kdc_resp_len
    Unsigned 32-bit integer

hf_krb5rpc_sendto_kdc_resp_max hf_krb5rpc_sendto_kdc_resp_max
    Unsigned 32-bit integer

hf_krb5rpc_sendto_kdc_resp_spare1 hf_krb5rpc_sendto_kdc_resp_spare1
    Unsigned 32-bit integer

hf_krb5rpc_sendto_kdc_resp_st hf_krb5rpc_sendto_kdc_resp_st
    Unsigned 32-bit integer

hf_krb5rpc_sendto_kdc_rqst_keysize hf_krb5rpc_sendto_kdc_rqst_keysize
    Unsigned 32-bit integer

hf_krb5rpc_sendto_kdc_rqst_spare1 hf_krb5rpc_sendto_kdc_rqst_spare1
    Unsigned 32-bit integer

```

**DCE/RPC NCS 1.5.1 Local Location Broker (llb)**

```

llb.opnum Operation
    Unsigned 16-bit integer
    Operation

```

**DCE/RPC Operations between registry server replicas (rs\_repmgr)**

```

rs_repmgr.opnum Operation
    Unsigned 16-bit integer
    Operation

```

**DCE/RPC Prop Attr (rs\_prop\_attr)**

```

rs_prop_attr.opnum Operation
    Unsigned 16-bit integer
    Operation

```

**DCE/RPC RS\_ACCT (rs\_acct)**

```

rs_acct.get_projlist_rqst_key_size Var1
    Unsigned 32-bit integer

rs_acct.get_projlist_rqst_key_t Var1
    String

rs_acct.get_projlist_rqst_var1 Var1
    Unsigned 32-bit integer

rs_acct.lookup_rqst_key_size Key Size
    Unsigned 32-bit integer

rs_acct.lookup_rqst_var Var
    Unsigned 32-bit integer

```

```
rs_acct.opnum Operation
    Unsigned 16-bit integer
    Operation
rs_lookup.get_rqst_key_t Key
    String
```

**DCE/RPC RS\_BIND (rs\_bind)**

```
rs_bind.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC RS\_MISC (rs\_misc)**

```
rs.misc_login_get_info_rqst_key_t Key
    String
rs_misc.login_get_info_rqst_key_size Key Size
    Unsigned 32-bit integer
rs_misc.login_get_info_rqst_var Var
    Unsigned 32-bit integer
rs_misc.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC RS\_PROP\_ACCT (rs\_prop\_acct)**

```
rs_prop_acct.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC RS\_UNIX (rs\_unix)**

```
rs_unix.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC Registry Password Management (rs\_pwd\_mgmt)**

```
rs_pwd_mgmt.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC Registry Server Attributes Schema (rs\_attr\_schema)**

```
rs_attr_schema.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC Registry server propagation interface – ACLs. (rs\_prop\_acl)**

```
rs_prop_acl.opnum Operation
    Unsigned 16-bit integer
    Operation
```



**DCE/RPC Registry server propagation interface – PGO items (rs\_prop\_pgo)**

```
rs_prop_pgo.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC Registry server propagation interface – properties and policies (rs\_prop\_plcy)**

```
rs_prop_plcy.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC Remote Management (mgmt)**

```
mgmt.opnum Operation
    Unsigned 16-bit integer
```

**DCE/RPC Reprserver Calls (rs\_replist)**

```
rs_replist.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCE/RPC UpServer (dce\_update)**

```
dce_update.opnum Operation
    Unsigned 16-bit integer
    Operation
```

**DCOM (dcom)**

```
dcom.actual_count ActualCount
    Unsigned 32-bit integer
dcom.array_size (ArraySize)
    Unsigned 32-bit integer
dcom.byte_length ByteLength
    Unsigned 32-bit integer
dcom.clsid CLSID
dcom.dualstringarray.network_addr NetworkAddr
    String
dcom.dualstringarray.num_entries NumEntries
    Unsigned 16-bit integer
dcom.dualstringarray.security SecurityBinding
    No value
dcom.dualstringarray.security_authn_svc AuthnSvc
    Unsigned 16-bit integer
dcom.dualstringarray.security_authz_svc AuthzSvc
    Unsigned 16-bit integer
dcom.dualstringarray.security_offset SecurityOffset
    Unsigned 16-bit integer
dcom.dualstringarray.security_princ_name PrincName
    String
```

```
dcom.dualstringarray.string  StringBinding
    No value
dcom.dualstringarray.tower_id TowerId
    Unsigned 16-bit integer
dcom.extent  Extension
    No value
dcom.extent.array_count  Extension Count
    Unsigned 32-bit integer
dcom.extent.array_res  Reserved
    Unsigned 32-bit integer
dcom.extent.id  Extension Id
dcom.extent.size  Extension Size
    Unsigned 32-bit integer
dcom.hresult  HRESULT
    Unsigned 32-bit integer
dcom.ifp  InterfacePointer
    No value
dcom.iid  IID
dcom.ip_cnt_data  CntData
    Unsigned 32-bit integer
dcom.ipid  IPID
dcom.max_count  MaxCount
    Unsigned 32-bit integer
dcom.nospec  No Specification Available
    Byte array
dcom.objref  OBJREF
    No value
dcom.objref.cbextension  CBExtension
    Unsigned 32-bit integer
    Size of extension data
dcom.objref.flags  Flags
    Unsigned 32-bit integer
dcom.objref.resolver_address  ResolverAddress
    No value
dcom.objref.signature  Signature
    Unsigned 32-bit integer
dcom.objref.size  Size
    Unsigned 32-bit integer
dcom.offset  Offset
    Unsigned 32-bit integer
dcom.oid  OID
    Unsigned 64-bit integer
dcom.oxid  OXID
    Unsigned 64-bit integer
```

```
dcom.pointer_val  (PointerVal)
    Unsigned 32-bit integer
dcom.sa  SAFEARRAY
    No value
dcom.sa.bound_elements  BoundElements
    Unsigned 32-bit integer
dcom.sa.dims16  Dims16
    Unsigned 16-bit integer
dcom.sa.dims32  Dims32
    Unsigned 32-bit integer
dcom.sa.element_size  ElementSize
    Unsigned 32-bit integer
dcom.sa.elements  Elements
    Unsigned 32-bit integer
dcom.sa.features  Features
    Unsigned 16-bit integer
dcom.sa.features_auto  AUTO
    Boolean
dcom.sa.features_bstr  BSTR
    Boolean
dcom.sa.features_dispatch  DISPATCH
    Boolean
dcom.sa.features_embedded  EMBEDDED
    Boolean
dcom.sa.features_fixedsized  FIXEDSIZE
    Boolean
dcom.sa.features_have_iid  HAVEIID
    Boolean
dcom.sa.features_have_vartype  HAVEVARTYPE
    Boolean
dcom.sa.features_record  RECORD
    Boolean
dcom.sa.features_static  STATIC
    Boolean
dcom.sa.features_unknown  UNKNOWN
    Boolean
dcom.sa.features_variant  VARIANT
    Boolean
dcom.sa.locks  Locks
    Unsigned 16-bit integer
dcom.sa.low_bound  LowBound
    Unsigned 32-bit integer
dcom.sa.vartype  VarType32
    Unsigned 32-bit integer
```

```
dcom.stdobjref  STDOBJREF
    No value

dcom.stdobjref.flags  Flags
    Unsigned 32-bit integer

dcom.stdobjref.public_refs  PublicRefs
    Unsigned 32-bit integer

dcom.that.flags  Flags
    Unsigned 32-bit integer

dcom.this.flags  Flags
    Unsigned 32-bit integer

dcom.this.res  Reserved
    Unsigned 32-bit integer

dcom.this.uuid  Causality ID

dcom.this.version_major  VersionMajor
    Unsigned 16-bit integer

dcom.this.version_minor  VersionMinor
    Unsigned 16-bit integer

dcom.tobedone  To Be Done
    Byte array

dcom.variant  Variant
    No value

dcom.variant_rpc_res  RPC-Reserved
    Unsigned 32-bit integer

dcom.variant_size  Size
    Unsigned 32-bit integer

dcom.variant_type  VarType
    Unsigned 16-bit integer

dcom.variant_type32  VarType32
    Unsigned 32-bit integer

dcom.variant_wres  Reserved
    Unsigned 16-bit integer

dcom.version_major  VersionMajor
    Unsigned 16-bit integer

dcom.version_minor  VersionMinor
    Unsigned 16-bit integer

dcom.vt.bool  VT_BOOL
    Unsigned 16-bit integer

dcom.vt.bstr  VT_BSTR
    String

dcom.vt.byref  BYREF
    No value

dcom.vt.date  VT_DATE
    Double-precision floating point

dcom.vt.dispatch  VT_DISPATCH
    No value
```

```
dcom.vt.i1  VT_I1
    Signed 8-bit integer
dcom.vt.i2  VT_I2
    Signed 16-bit integer
dcom.vt.i4  VT_I4
    Signed 32-bit integer
dcom.vt.i8  VT_I8
    Signed 64-bit integer
dcom.vt.r4  VT_R4
dcom.vt.r8  VT_R8
    Double-precision floating point
dcom.vt.ui1 VT_UI1
    Unsigned 8-bit integer
dcom.vt.ui2 VT_UI2
    Unsigned 16-bit integer
dcom.vt.ui4 VT_UI4
    Unsigned 32-bit integer
```

**DCOM IDispatch (dispatch)**

```
dispatch_arg  Argument
    No value
dispatch_arg_err  ArgErr
    Unsigned 32-bit integer
dispatch_args  Args
    Unsigned 32-bit integer
dispatch_code  Code
    Unsigned 16-bit integer
dispatch_deferred_fill_in  DeferredFillIn
    Unsigned 32-bit integer
dispatch_description  Description
    String
dispatch_dispparams  DispParams
    No value
dispatch_excepinfo  ExcepInfo
    No value
dispatch_flags  Flags
    Unsigned 32-bit integer
dispatch_flags_method  Method
    Boolean
dispatch_flags_propget  PropertyGet
    Boolean
dispatch_flags_propput  PropertyPut
    Boolean
dispatch_flags_propputref  PropertyPutRef
    Boolean
```

```
dispatch_help_context  HelpContext
    Unsigned 32-bit integer
dispatch_help_file    HelpFile
    String
dispatch_id           DispID
    Unsigned 32-bit integer
dispatch_itinfo       TInfo
    No value
dispatch_lcid         LCID
    Unsigned 32-bit integer
dispatch_named_args   NamedArgs
    Unsigned 32-bit integer
dispatch_names        Names
    Unsigned 32-bit integer
dispatch_opnum        Operation
    Unsigned 16-bit integer
    Operation
dispatch_reserved16   Reserved
    Unsigned 16-bit integer
dispatch_reserved32   Reserved
    Unsigned 32-bit integer
dispatch_riid         RIID
dispatch_scode        SCode
    Unsigned 32-bit integer
dispatch_source       Source
    String
dispatch_tinfo        TInfo
    Unsigned 32-bit integer
dispatch_varref        VarRef
    Unsigned 32-bit integer
dispatch_varrefarg    VarRef
    No value
dispatch_varrefidx    VarRefIdx
    Unsigned 32-bit integer
dispatch_varresult    VarResult
    No value
hf_dispatch_name      Name
    String
```

**DCOM IRemoteActivation (remact)**

```
hf_remact_oxid_bindings  OxidBindings
    No value
remact_authn_hint        AuthnHint
    Unsigned 32-bit integer
```

```
remact_client_impl_level  ClientImplLevel
    Unsigned 32-bit integer
remact_interface_data    InterfaceData
    No value
remact_interfaces        Interfaces
    Unsigned 32-bit integer
remact_mode              Mode
    Unsigned 32-bit integer
remact_object_name      ObjectName
    String
remact_object_storage   ObjectStorage
    No value
remact_opnum            Operation
    Unsigned 16-bit integer
    Operation
remact_prot_seqs        ProtSeqs
    Unsigned 16-bit integer
remact_req_prot_seqs    RequestedProtSeqs
    Unsigned 16-bit integer
```

**DCOM OXID Resolver (oxid)**

```
dcom.oxid.address      Address
    No value
oxid.opnum             Operation
    Unsigned 16-bit integer
oxid5.unknown1        unknown 8 bytes 1
    Unsigned 64-bit integer
oxid5.unknown2        unknown 8 bytes 2
    Unsigned 64-bit integer
oxid_addtoiset        AddToSet
    Unsigned 16-bit integer
oxid_authn_hint       AuthnHint
    Unsigned 32-bit integer
oxid_bindings         OxidBindings
    No value
oxid_delfromset       DelFromSet
    Unsigned 16-bit integer
oxid_ipid             IPID
oxid_oid              OID
    Unsigned 64-bit integer
oxid_oxid             OXID
    Unsigned 64-bit integer
oxid_ping_backoff_factor  PingBackoffFactor
    Unsigned 16-bit integer
```

```
oxid_protseqs  ProtSeq
    Unsigned 16-bit integer
oxid_requested_protseqs  RequestedProtSeq
    Unsigned 16-bit integer
oxid_seqnum    SeqNum
    Unsigned 16-bit integer
oxid_setid     SetId
    Unsigned 64-bit integer
```

**DCP Application Framing Layer (dcp-af)**

```
dcp-af.crc     CRC
    Unsigned 16-bit integer
    CRC
dcp-af.crc_ok  CRC OK
    Boolean
    AF CRC OK
dcp-af.crcflag  crc flag
    Boolean
    Frame is protected by CRC
dcp-af.len     length
    Unsigned 32-bit integer
    length in bytes of the payload
dcp-af.maj     Major Revision
    Unsigned 8-bit integer
    Major Protocol Revision
dcp-af.min     Minor Revision
    Unsigned 8-bit integer
    Minor Protocol Revision
dcp-af.pt      Payload Type
    String
    T means Tag Packets, all other values reserved
dcp-af.seq     frame count
    Unsigned 16-bit integer
    Logical Frame Number
```

**DCP Protection, Fragmentation & Transport Layer (dcp-pft)**

```
dcp-pft.addr   Addr
    Boolean
    When set the optional transport header is present
dcp-pft.cmax   C max
    Unsigned 16-bit integer
    Maximum number of RS chunks sent
dcp-pft.crc    header CRC
    Unsigned 16-bit integer
    PFT Header CRC
dcp-pft.crc_ok  PFT CRC OK
    Boolean
    PFT Header CRC OK
```



```
dcp-pft.dest  dest addr
    Unsigned 16-bit integer
    PFT destination identifier

dcp-pft.fcount  Fragment Count
    Unsigned 24-bit integer
    Number of fragments produced from this AF Packet

dcp-pft.fec  FEC
    Boolean
    When set the optional RS header is present

dcp-pft.findex  Fragment Index
    Unsigned 24-bit integer
    Index of the fragment within one AF Packet

dcp-pft.fragment  Message fragment
    Frame number

dcp-pft.fragment.error  Message defragmentation error
    Frame number

dcp-pft.fragment.multiple_tails  Message has multiple tail fragments
    Boolean

dcp-pft.fragment.overlap  Message fragment overlap
    Boolean

dcp-pft.fragment.overlap.conflicts  Message fragment overlapping with conflictin
    Boolean

dcp-pft.fragment.too_long_fragment  Message fragment too long
    Boolean

dcp-pft.fragments  Message fragments
    No value

dcp-pft.len  fragment length
    Unsigned 16-bit integer
    length in bytes of the payload of this fragment

dcp-pft.payload  payload
    Byte array
    PFT Payload

dcp-pft.pt  Sub-protocol
    Unsigned 8-bit integer
    Always AF

dcp-pft.reassembled.in  Reassembled in
    Frame number

dcp-pft.rs_corrected  RS Symbols Corrected
    Signed 16-bit integer
    Number of symbols corrected by RS decode or -1 for failure

dcp-pft.rs_ok  RS decode OK
    Boolean
    successfully decoded RS blocks

dcp-pft.rsk  RSk
    Unsigned 8-bit integer
    The length of the Reed Solomon data word
```

dcp-pft.rsz RSz  
Unsigned 8-bit integer  
The number of padding bytes in the last Reed Solomon block

dcp-pft.rxmin Rx min  
Unsigned 16-bit integer  
Minimum number of fragments needed for RS decode

dcp-pft.seq Sequence No  
Unsigned 16-bit integer  
PFT Sequence No

dcp-pft.source source addr  
Unsigned 16-bit integer  
PFT source identifier

#### **DCP Tag Packet Layer (dcp-tpl)**

dcp-tpl.ptr Type  
String  
Protocol Type & Revision

dcp-tpl.tlv tag  
Byte array  
Tag Packet

#### **DEC DNA Routing Protocol (dec\_dna)**

dec\_dna.ctl.acknum Ack/Nak  
No value  
ack/nak number

dec\_dna.ctl.blk\_size Block size  
Unsigned 16-bit integer  
Block size

dec\_dna.ctl.elist List of router states  
No value  
Router states

dec\_dna.ctl.ename Ethernet name  
Byte array  
Ethernet name

dec\_dna.ctl.fcncval Verification message function value  
Byte array  
Routing Verification function

dec\_dna.ctl.id Transmitting system ID  
6-byte Hardware (MAC) Address  
Transmitting system ID

dec\_dna.ctl.iinfo.blkreq Blocking requested  
Boolean  
Blocking requested?

dec\_dna.ctl.iinfo.mta Accepts multicast traffic  
Boolean  
Accepts multicast traffic?

```
dec_dna.ct1.iinfo.node_type  Node type
    Unsigned 8-bit integer
    Node type

dec_dna.ct1.iinfo.rej  Rejected
    Boolean
    Rejected message

dec_dna.ct1.iinfo.verf  Verification failed
    Boolean
    Verification failed?

dec_dna.ct1.iinfo.vrf  Verification required
    Boolean
    Verification required?

dec_dna.ct1.prio  Routing priority
    Unsigned 8-bit integer
    Routing priority

dec_dna.ct1.reserved  Reserved
    Byte array
    Reserved

dec_dna.ct1.router_id  Router ID
    6-byte Hardware (MAC) Address
    Router ID

dec_dna.ct1.router_prio  Router priority
    Unsigned 8-bit integer
    Router priority

dec_dna.ct1.router_state  Router state
    String
    Router state

dec_dna.ct1.seed  Verification seed
    Byte array
    Verification seed

dec_dna.ct1.segment  Segment
    No value
    Routing Segment

dec_dna.ct1.test_data  Test message data
    Byte array
    Routing Test message data

dec_dna.ct1.tiinfo  Routing information
    Unsigned 8-bit integer
    Routing information

dec_dna.ct1.timer  Hello timer(seconds)
    Unsigned 16-bit integer
    Hello timer in seconds

dec_dna.ct1.version  Version
    No value
    Control protocol version

dec_dna.ct1_neighbor  Neighbor
    6-byte Hardware (MAC) Address
    Neighbour ID
```

```
dec_dna.dst.address  Destination Address
    6-byte Hardware (MAC) Address
    Destination address

dec_dna.dst_node     Destination node
    Unsigned 16-bit integer
    Destination node

dec_dna.flags        Routing flags
    Unsigned 8-bit integer
    DNA routing flag

dec_dna.flags.RQR    Return to Sender Request
    Boolean
    Return to Sender

dec_dna.flags.RTS    Packet on return trip
    Boolean
    Packet on return trip

dec_dna.flags.control Control packet
    Boolean
    Control packet

dec_dna.flags.discard Discarded packet
    Boolean
    Discarded packet

dec_dna.flags.intra_eth Intra-ethernet packet
    Boolean
    Intra-ethernet packet

dec_dna.flags.msglen Long data packet format
    Unsigned 8-bit integer
    Long message indicator

dec_dna.nl2          Next level 2 router
    Unsigned 8-bit integer
    reserved

dec_dna.nsp.delay    Delayed ACK allowed
    Boolean
    Delayed ACK allowed?

dec_dna.nsp.disc_reason Reason for disconnect
    Unsigned 16-bit integer
    Disconnect reason

dec_dna.nsp.fc_val    Flow control
    No value
    Flow control

dec_dna.nsp.flow_control Flow control
    Unsigned 8-bit integer
    Flow control(stop, go)

dec_dna.nsp.info     Version info
    Unsigned 8-bit integer
    Version info

dec_dna.nsp.msg_type  DNA NSP message
    Unsigned 8-bit integer
    NSP message
```

```
dec_dna.nsp.segnum  Message number
                   Unsigned 16-bit integer
                   Segment number

dec_dna.nsp.segsize Maximum data segment size
                   Unsigned 16-bit integer
                   Max. segment size

dec_dna.nsp.services Requested services
                   Unsigned 8-bit integer
                   Services requested

dec_dna.proto_type Protocol type
                   Unsigned 8-bit integer
                   reserved

dec_dna.rt.msg_type Routing control message
                   Unsigned 8-bit integer
                   Routing control

dec_dna.sess.conn   Session connect data
                   No value
                   Session connect data

dec_dna.sess.dst_name Session Destination end user
                   String
                   Session Destination end user

dec_dna.sess.grp_code Session Group code
                   Unsigned 16-bit integer
                   Session group code

dec_dna.sess.menu_ver Session Menu version
                   String
                   Session menu version

dec_dna.sess.obj_type Session Object type
                   Unsigned 8-bit integer
                   Session object type

dec_dna.sess.rqstr_id Session Requestor ID
                   String
                   Session requestor ID

dec_dna.sess.src_name Session Source end user
                   String
                   Session Source end user

dec_dna.sess.usr_code Session User code
                   Unsigned 16-bit integer
                   Session User code

dec_dna.src.addr    Source Address
                   6-byte Hardware (MAC) Address
                   Source address

dec_dna.src_node    Source node
                   Unsigned 16-bit integer
                   Source node

dec_dna.svc_cls     Service class
                   Unsigned 8-bit integer
                   reserved
```

```
dec_dna.visit_cnt  Visit count
                   Unsigned 8-bit integer
                   Visit count

dec_dna.vst_node   Nodes visited ty this package
                   Unsigned 8-bit integer
                   Nodes visited
```

**DEC Spanning Tree Protocol (dec\_stp)**

```
dec_stp.bridge.mac  Bridge MAC
                    6-byte Hardware (MAC) Address

dec_stp.bridge.pri  Bridge Priority
                    Unsigned 16-bit integer

dec_stp.flags       BPDU flags
                    Unsigned 8-bit integer

dec_stp.flags.short_timers  Use short timers
                    Boolean

dec_stp.flags.tc     Topology Change
                    Boolean

dec_stp.flags.tcack  Topology Change Acknowledgment
                    Boolean

dec_stp.forward      Forward Delay
                    Unsigned 8-bit integer

dec_stp.hello        Hello Time
                    Unsigned 8-bit integer

dec_stp.max_age      Max Age
                    Unsigned 8-bit integer

dec_stp.msg_age      Message Age
                    Unsigned 8-bit integer

dec_stp.port         Port identifier
                    Unsigned 8-bit integer

dec_stp.protocol     Protocol Identifier
                    Unsigned 8-bit integer

dec_stp.root.cost    Root Path Cost
                    Unsigned 16-bit integer

dec_stp.root.mac     Root MAC
                    6-byte Hardware (MAC) Address

dec_stp.root.pri     Root Priority
                    Unsigned 16-bit integer

dec_stp.type         BPDU Type
                    Unsigned 8-bit integer

dec_stp.version      BPDU Version
                    Unsigned 8-bit integer
```

**DG Gryphon Protocol (gryphon)**

`gryphon.cmd` Command  
Unsigned 8-bit integer

`gryphon.dest` Destination  
Unsigned 8-bit integer

`gryphon.destchan` Destination channel  
Unsigned 8-bit integer

`gryphon.src` Source  
Unsigned 8-bit integer

`gryphon.srcchan` Source channel  
Unsigned 8-bit integer

`gryphon.type` Frame type  
Unsigned 8-bit integer

**DHCP Failover (dhcpfo)**

`dhcpfo.additionalheaderbytes` Additional Header Bytes  
Byte array

`dhcpfo.addressestransferred` addresses transferred  
Unsigned 32-bit integer

`dhcpfo.assignedipaddress` assigned ip address  
IPv4 address

`dhcpfo.bindingstatus` Type  
Unsigned 32-bit integer

`dhcpfo.clienthardwareaddress` Client Hardware Address  
Byte array

`dhcpfo.clienthardwaretype` Client Hardware Type  
Unsigned 8-bit integer

`dhcpfo.clientidentifier` Client Identifier  
String

`dhcpfo.clientlasttransactiontime` Client last transaction time  
Unsigned 32-bit integer

`dhcpfo.dhcpstyleoption` DHCP Style Option  
No value

`dhcpfo.ftddns` FTDDNS  
String

`dhcpfo.graceexpirationtime` Grace expiration time  
Unsigned 32-bit integer

`dhcpfo.hashbucketassignment` Hash bucket assignment  
Byte array

`dhcpfo.leaseexpirationtime` Lease expiration time  
Unsigned 32-bit integer

`dhcpfo.length` Message length  
Unsigned 16-bit integer

`dhcpfo.maxunackedbndupd` Max unacked BNDUPD  
Unsigned 32-bit integer

```
dhcpfo.mclt    MCLT
               Unsigned 32-bit integer
dhcpfo.message Message
               String
dhcpfo.messagedigest Message digest
               String
dhcpfo.optioncode Option Code
               Unsigned 16-bit integer
dhcpfo.optionlength Length
               Unsigned 16-bit integer
dhcpfo.payloaddata Payload Data
               No value
dhcpfo.poffset Payload Offset
               Unsigned 8-bit integer
dhcpfo.potentialexpirationtime Potential expiration time
               Unsigned 32-bit integer
dhcpfo.protocolversion Protocol version
               Unsigned 8-bit integer
dhcpfo.receive timer Receive timer
               Unsigned 32-bit integer
dhcpfo.rejectreason Reject reason
               Unsigned 8-bit integer
dhcpfo.sendingserveripaddress sending server ip-address
               IPv4 address
dhcpfo.serverstatus server status
               Unsigned 8-bit integer
dhcpfo.starttimeofstate Start time of state
               Unsigned 32-bit integer
dhcpfo.time    Time
               Date/Time stamp
dhcpfo.type    Message Type
               Unsigned 8-bit integer
dhcpfo.vendorclass Vendor class
               String
dhcpfo.vendorooption Vendor option
               No value
dhcpfo.xid     Xid
               Unsigned 32-bit integer
```

**DHCPv6 (dhcpv6)**

```
dhcpv6.msgtype Message type
               Unsigned 8-bit integer
dhcpv6.msgtype.n N
               Boolean
```



```
dhcpv6.msgtype.o  O
  Boolean
dhcpv6.msgtype.reserved  Reserved
  Unsigned 8-bit integer
dhcpv6.msgtype.s  S
  Boolean
```

**DICOM (dcm)**

```
dcm.data.ctx  Data Context
  Unsigned 8-bit integer
dcm.data.flags  Flags
  Unsigned 8-bit integer
dcm.data.len  DATA LENGTH
  Unsigned 32-bit integer
dcm.data.tag  Tag
  Byte array
dcm.max_pdu_len  MAX PDU LENGTH
  Unsigned 32-bit integer
dcm.pdi.async  Asynch
  String
dcm.pdi.ctxt  Presentation Context
  Unsigned 8-bit integer
dcm.pdi.impl  Implementation
  String
dcm.pdi.name  Application Context
  String
dcm.pdi.result  Presentation Context result
  Unsigned 8-bit integer
dcm.pdi.syntax  Abstract Syntax
  String
dcm.pdi.version  Version
  String
dcm.pdu  PDU
  Unsigned 8-bit integer
dcm.pdu.pdi  Item
  Unsigned 8-bit integer
dcm.pdu_detail  PDU Detail
  String
dcm.pdu_len  PDU LENGTH
  Unsigned 32-bit integer
```

**DLT User (user\_dlt)**

**DNS Control Program Server (cprpc\_server)**

cprpc\_server.opnum Operation  
Unsigned 16-bit integer  
Operation

**DOCSIS 1.1 (docsis)**

docsis.bpi\_en Encryption  
Boolean  
BPI Enable

docsis.ehdr.act\_grants Active Grants  
Unsigned 8-bit integer  
Active Grants

docsis.ehdr.keyseq Key Sequence  
Unsigned 8-bit integer  
Key Sequence

docsis.ehdr.len Length  
Unsigned 8-bit integer  
TLV Len

docsis.ehdr.minislots MiniSlots  
Unsigned 8-bit integer  
Mini Slots Requested

docsis.ehdr.phsi Payload Header Suppression Index  
Unsigned 8-bit integer  
Payload Header Suppression Index

docsis.ehdr.qind Queue Indicator  
Boolean  
Queue Indicator

docsis.ehdr.rsvd Reserved  
Unsigned 8-bit integer  
Reserved Byte

docsis.ehdr.said SAID  
Unsigned 16-bit integer  
Security Association Identifier

docsis.ehdr.sid SID  
Unsigned 16-bit integer  
Service Identifier

docsis.ehdr.type Type  
Unsigned 8-bit integer  
TLV Type

docsis.ehdr.value Value  
Byte array  
TLV Value

docsis.ehdr.ver Version  
Unsigned 8-bit integer  
Version

docsis.ehdron EHDron  
Boolean  
Extended Header Presence

```
docsis.fcparm  FCParm
    Unsigned 8-bit integer
    Parameter Field

docsis.fctype  FCType
    Unsigned 8-bit integer
    Frame Control Type

docsis.frag_first  First Frame
    Boolean
    First Frame

docsis.frag_last  Last Frame
    Boolean
    Last Frame

docsis.frag_rsvd  Reserved
    Unsigned 8-bit integer
    Reserved

docsis.frag_seq  Fragmentation Sequence #
    Unsigned 8-bit integer
    Fragmentation Sequence Number

docsis.hcs  Header check sequence
    Unsigned 16-bit integer
    Header check sequence

docsis.lensid  Length after HCS (bytes)
    Unsigned 16-bit integer
    Length or SID

docsis.macparm  MacParm
    Unsigned 8-bit integer
    Mac Parameter Field

docsis.toggle_bit  Toggle
    Boolean
    Toggle
```

#### **DOCSIS Appendix C TLV's (docsis\_tlv)**

```
docsis_tlv.auth_block  30 Auth Block
    Byte array
    Auth Block

docsis_tlv.bpi  17 Baseline Privacy Encoding
    Byte array
    Baseline Privacy Encoding

docsis_tlv.bpi_en  29 Privacy Enable
    Boolean
    Privacy Enable

docsis_tlv.clsfr.actstate  .6 Activation State
    Boolean
    Classifier Activation State

docsis_tlv.clsfr.dot1q  .11 802.1Q Classifier Encodings
    Byte array
    802.1Q Classifier Encodings
```

```
docsis_tlv.clsfr.dot1q.ethertype  ..2 VLAN id
    Unsigned 16-bit integer
    VLAN Id

docsis_tlv.clsfr.dot1q.userpri  ..1 User Priority
    Unsigned 16-bit integer
    User Priority

docsis_tlv.clsfr.dot1q.vendorspec  ..43 Vendor Specific Encodings
    Byte array
    Vendor Specific Encodings

docsis_tlv.clsfr.dscact  .7 DSC Action
    Unsigned 8-bit integer
    Dynamic Service Change Action

docsis_tlv.clsfr.err  .8 Error Encodings
    Byte array
    Error Encodings

docsis_tlv.clsfr.err.code  ..2 Error Code
    Unsigned 8-bit integer
    TCP/UDP Destination Port End

docsis_tlv.clsfr.err.msg  ..3 Error Message
    String
    Error Message

docsis_tlv.clsfr.err.param  ..1 Param Subtype
    Unsigned 8-bit integer
    Parameter Subtype

docsis_tlv.clsfr.eth  .10 Ethernet Classifier Encodings
    Byte array
    Ethernet Classifier Encodings

docsis_tlv.clsfr.eth.dmac  ..1 Dest Mac Address
    6-byte Hardware (MAC) Address
    Destination Mac Address

docsis_tlv.clsfr.eth.ethertype  ..3 Ethertype
    Unsigned 24-bit integer
    Ethertype

docsis_tlv.clsfr.eth.smac  ..2 Source Mac Address
    6-byte Hardware (MAC) Address
    Source Mac Address

docsis_tlv.clsfr.id  .2 Classifier ID
    Unsigned 16-bit integer
    Classifier ID

docsis_tlv.clsfr.ip  .9 IP Classifier Encodings
    Byte array
    IP Classifier Encodings

docsis_tlv.clsfr.ip.dmask  ..6 Destination Mask
    IPv4 address
    Destination Mask

docsis_tlv.clsfr.ip.dportend  ..10 Dest Port End
    Unsigned 16-bit integer
    TCP/UDP Destination Port End
```

```
docsis_tlv.clsfr.ip.dportstart  ..9 Dest Port Start
    Unsigned 16-bit integer
    TCP/UDP Destination Port Start

docsis_tlv.clsfr.ip.dst  ..4 Destination Address
    IPv4 address
    Destination Address

docsis_tlv.clsfr.ip.ipproto  ..2 IP Protocol
    Unsigned 16-bit integer
    IP Protocol

docsis_tlv.clsfr.ip.smask  ..5 Source Mask
    IPv4 address
    Source Mask

docsis_tlv.clsfr.ip.sportend  ..8 Source Port End
    Unsigned 16-bit integer
    TCP/UDP Source Port End

docsis_tlv.clsfr.ip.sportstart  ..7 Source Port Start
    Unsigned 16-bit integer
    TCP/UDP Source Port Start

docsis_tlv.clsfr.ip.src  ..3 Source Address
    IPv4 address
    Source Address

docsis_tlv.clsfr.ip.tosmask  ..1 Type Of Service Mask
    Byte array
    Type Of Service Mask

docsis_tlv.clsfr.ref  .1 Classifier Ref
    Unsigned 8-bit integer
    Classifier Reference

docsis_tlv.clsfr.rulepri  .5 Rule Priority
    Unsigned 8-bit integer
    Rule Priority

docsis_tlv.clsfr.sflowid  .4 Service Flow ID
    Unsigned 16-bit integer
    Service Flow ID

docsis_tlv.clsfr.sflowref  .3 Service Flow Ref
    Unsigned 16-bit integer
    Service Flow Reference

docsis_tlv.clsfr.vendor  .43 Vendor Specific Encodings
    Byte array
    Vendor Specific Encodings

docsis_tlv.cmmic  6 CM MIC
    Byte array
    Cable Modem Message Integrity Check

docsis_tlv.cmtsmic  7 CMTS MIC
    Byte array
    CMTS Message Integrity Check

docsis_tlv.cos  4 COS Encodings
    Byte array
    4 COS Encodings
```

```
docsis_tlv.cos.id .1 Class ID
    Unsigned 8-bit integer
    Class ID

docsis_tlv.cos.maxdown .2 Max Downstream Rate (bps)
    Unsigned 32-bit integer
    Max Downstream Rate

docsis_tlv.cos.maxup .3 Max Upstream Rate (bps)
    Unsigned 32-bit integer
    Max Upstream Rate

docsis_tlv.cos.maxupburst .6 Maximum Upstream Burst
    Unsigned 16-bit integer
    Maximum Upstream Burst

docsis_tlv.cos.mingrntdup .5 Guaranteed Upstream Rate
    Unsigned 32-bit integer
    Guaranteed Minimum Upstream Data Rate

docsis_tlv.cos.privacy_enable .7 COS Privacy Enable
    Boolean
    Class of Service Privacy Enable

docsis_tlv.cos.sid .2 Service ID
    Unsigned 16-bit integer
    Service ID

docsis_tlv.cos.upchnlpri .4 Upstream Channel Priority
    Unsigned 8-bit integer
    Upstream Channel Priority

docsis_tlv.cosign_cvc 33 Co-Signer CVC
    Byte array
    Co-Signer CVC

docsis_tlv.cpe_ether 14 CPE Ethernet Addr
    6-byte Hardware (MAC) Address
    CPE Ethernet Addr

docsis_tlv.downclsfr 23 Downstream Classifier
    Byte array
    23 Downstream Classifier

docsis_tlv.downfreq 1 Downstream Frequency
    Unsigned 32-bit integer
    Downstream Frequency

docsis_tlv.downsflow 25 Downstream Service Flow
    Byte array
    25 Downstream Service Flow

docsis_tlv.hmac_digest 27 HMAC Digest
    Byte array
    HMAC Digest

docsis_tlv.key_seq 31 Key Sequence Number
    Byte array
    Key Sequence Number

docsis_tlv.map.docsver .2 Docsis Version
    Unsigned 8-bit integer
    DOCSIS Version
```

```
docsis_tlv.maxclass  28 Max # of Classifiers
    Unsigned 16-bit integer
    Max # of Classifiers

docsis_tlv.maxcpe    18 Max # of CPE's
    Unsigned 8-bit integer
    Max Number of CPE's

docsis_tlv.mcap      5 Modem Capabilities
    Byte array
    Modem Capabilities

docsis_tlv.mcap.concat  .1 Concatenation Support
    Boolean
    Concatenation Support

docsis_tlv.mcap.dcc   .12 DCC Support
    Boolean
    DCC Support

docsis_tlv.mcap.dot1pfiltering  .9 802.1P Filtering Support
    Unsigned 8-bit integer
    802.1P Filtering Support

docsis_tlv.mcap.dot1qfilt  .9 802.1Q Filtering Support
    Unsigned 8-bit integer
    802.1Q Filtering Support

docsis_tlv.mcap.downsaid  .7 # Downstream SAIDs Supported
    Unsigned 8-bit integer
    Downstream Said Support

docsis_tlv.mcap.frag     .3 Fragmentation Support
    Boolean
    Fragmentation Support

docsis_tlv.mcap.igmp     .5 IGMP Support
    Boolean
    IGMP Support

docsis_tlv.mcap.numtaps  .11 # Xmit Equalizer Taps
    Unsigned 8-bit integer
    Number of Transmit Equalizer Taps

docsis_tlv.mcap.phs      .4 PHS Support
    Boolean
    PHS Support

docsis_tlv.mcap.privacy  .6 Privacy Support
    Boolean
    Privacy Support

docsis_tlv.mcap.tapspersym  .10 Xmit Equalizer Taps/Sym
    Unsigned 8-bit integer
    Transmit Equalizer Taps per Symbol

docsis_tlv.mcap.upsid    .8 # Upstream SAIDs Supported
    Unsigned 8-bit integer
    Upstream SID Support

docsis_tlv.mfgr_cvc     32 Manufacturer CVC
    Byte array
    Manufacturer CVC
```

```
docsis_tlv.modemaddr 12 Modem IP Address
    IPv4 address
    Modem IP Address

docsis_tlv.netaccess 3 Network Access
    Boolean
    Network Access TLV

docsis_tlv.phs 26 PHS Rules
    Byte array
    PHS Rules

docsis_tlv.phs.classid .2 Classifier Id
    Unsigned 16-bit integer
    Classifier Id

docsis_tlv.phs.classref .1 Classifier Reference
    Unsigned 8-bit integer
    Classifier Reference

docsis_tlv.phs.dscaction .5 DSC Action
    Unsigned 8-bit integer
    Dynamic Service Change Action

docsis_tlv.phs.err .6 Error Encodings
    Byte array
    Error Encodings

docsis_tlv.phs.err.code ..2 Error Code
    Unsigned 8-bit integer
    Error Code

docsis_tlv.phs.err.msg ..3 Error Message
    String
    Error Message

docsis_tlv.phs.err.param ..1 Param Subtype
    Unsigned 8-bit integer
    Parameter Subtype

docsis_tlv.phs.phsf .7 PHS Field
    Byte array
    PHS Field

docsis_tlv.phs.phsi .8 PHS Index
    Unsigned 8-bit integer
    PHS Index

docsis_tlv.phs.phsm .9 PHS Mask
    Byte array
    PHS Mask

docsis_tlv.phs.phss .10 PHS Size
    Unsigned 8-bit integer
    PHS Size

docsis_tlv.phs.phsv .11 PHS Verify
    Boolean
    PHS Verify

docsis_tlv.phs.sflowid .4 Service flow Id
    Unsigned 16-bit integer
    Service Flow Id
```



```
docsis_tlv.phs.sflowref .3 Service flow reference
    Unsigned 16-bit integer
    Service Flow Reference

docsis_tlv.phs.vendorspec .43 PHS Vendor Specific
    Byte array
    PHS Vendor Specific

docsis_tlv.rng_tech Ranging Technique
    Unsigned 8-bit integer
    Ranging Technique

docsis_tlv.sflow.act_timeout .12 Timeout for Active Params (secs)
    Unsigned 16-bit integer
    Timeout for Active Params (secs)

docsis_tlv.sflow.adm_timeout .13 Timeout for Admitted Params (secs)
    Unsigned 16-bit integer
    Timeout for Admitted Params (secs)

docsis_tlv.sflow.assumed_min_pkt_size .11 Assumed Min Reserved Packet Size
    Unsigned 16-bit integer
    Assumed Minimum Reserved Packet Size

docsis_tlv.sflow.cname .4 Service Class Name
    String
    Service Class Name

docsis_tlv.sflow.err .5 Error Encodings
    Byte array
    Error Encodings

docsis_tlv.sflow.err.code ..2 Error Code
    Unsigned 8-bit integer
    Error Code

docsis_tlv.sflow.err.msg ..3 Error Message
    String
    Error Message

docsis_tlv.sflow.err.param ..1 Param Subtype
    Unsigned 8-bit integer
    Parameter Subtype

docsis_tlv.sflow.grnts_per_intvl .22 Grants Per Interval
    Unsigned 8-bit integer
    Grants Per Interval

docsis_tlv.sflow.id .2 Service Flow Id
    Unsigned 32-bit integer
    Service Flow Id

docsis_tlv.sflow.iptos_overwrite .23 IP TOS Overwrite
    Unsigned 16-bit integer
    IP TOS Overwrite

docsis_tlv.sflow.max_down_lat .14 Maximum Downstream Latency (usec)
    Unsigned 32-bit integer
    Maximum Downstream Latency (usec)

docsis_tlv.sflow.maxburst .9 Maximum Burst (bps)
    Unsigned 32-bit integer
    Maximum Burst (bps)
```

```
docsis_tlv.sflow.maxconcat .14 Max Concat Burst
    Unsigned 16-bit integer
    Max Concatenated Burst

docsis_tlv.sflow.maxtrafrate .8 Maximum Sustained Traffic Rate (bps)
    Unsigned 32-bit integer
    Maximum Sustained Traffic Rate (bps)

docsis_tlv.sflow.mintrafrate .10 Minimum Traffic Rate (bps)
    Unsigned 32-bit integer
    Minimum Traffic Rate (bps)

docsis_tlv.sflow.nom_grant_intvl .20 Nominal Grant Interval (usec)
    Unsigned 32-bit integer
    Nominal Grant Interval (usec)

docsis_tlv.sflow.nominal_polling .17 Nominal Polling Interval(usec)
    Unsigned 32-bit integer
    Nominal Polling Interval(usec)

docsis_tlv.sflow.qos .6 QOS Parameter Set
    Unsigned 8-bit integer
    QOS Parameter Set

docsis_tlv.sflow.ref .1 Service Flow Ref
    Unsigned 16-bit integer
    Service Flow Reference

docsis_tlv.sflow.reqxmitpol .16 Request/Transmission Policy
    Unsigned 32-bit integer
    Request/Transmission Policy

docsis_tlv.sflow.schedtype .15 Scheduling Type
    Unsigned 32-bit integer
    Scheduling Type

docsis_tlv.sflow.sid .3 Service Identifier
    Unsigned 16-bit integer
    Service Identifier

docsis_tlv.sflow.tol_grant_jitter .21 Tolerated Grant Jitter (usec)
    Unsigned 32-bit integer
    Tolerated Grant Jitter (usec)

docsis_tlv.sflow.toler_jitter .18 Tolerated Poll Jitter (usec)
    Unsigned 32-bit integer
    Tolerated Poll Jitter (usec)

docsis_tlv.sflow.trafpri .7 Traffic Priority
    Unsigned 8-bit integer
    Traffic Priority

docsis_tlv.sflow.ugs_size .19 Unsolicited Grant Size (bytes)
    Unsigned 16-bit integer
    Unsolicited Grant Size (bytes)

docsis_tlv.sflow.ugs_timeref .24 UGS Time Reference
    Unsigned 32-bit integer
    UGS Time Reference

docsis_tlv.sflow.vendorspec .43 Vendor Specific Encodings
    Byte array
    Vendor Specific Encodings
```

```
docsis_tlv.snmp_access  10 SNMP Write Access
    Byte array
    SNMP Write Access

docsis_tlv.snmp_obj    11 SNMP Object
    Byte array
    SNMP Object

docsis_tlv.snmpv3     34 SNMPv3 Kickstart Value
    Byte array
    SNMPv3 Kickstart Value

docsis_tlv.snmpv3.publicnum  .2 SNMPv3 Kickstart Manager Public Number
    Byte array
    SNMPv3 Kickstart Value Manager Public Number

docsis_tlv.snmpv3.secname  .1 SNMPv3 Kickstart Security Name
    String
    SNMPv3 Kickstart Security Name

docsis_tlv.subsfltrgrps  37 Subscriber Management Filter Groups
    Byte array
    Subscriber Management Filter Groups

docsis_tlv.subsipentry  Subscriber Management CPE IP Entry
    IPv4 address
    Subscriber Management CPE IP Entry

docsis_tlv.subsitable  36 Subscriber Management CPE IP Table
    Byte array
    Subscriber Management CPE IP Table

docsis_tlv.subsmgmtctrl  35 Subscriber Management Control
    Byte array
    Subscriber Management Control

docsis_tlv.svcunavail  13 Service Not Available Response
    Byte array
    Service Not Available Response

docsis_tlv.svcunavail.classid  Service Not Available: (Class ID)
    Unsigned 8-bit integer
    Service Not Available (Class ID)

docsis_tlv.svcunavail.code  Service Not Available (Code)
    Unsigned 8-bit integer
    Service Not Available (Code)

docsis_tlv.svcunavail.type  Service Not Available (Type)
    Unsigned 8-bit integer
    Service Not Available (Type)

docsis_tlv.sw_upg_file  9 Software Upgrade File
    String
    Software Upgrade File

docsis_tlv.sw_upg_srvr  21 Software Upgrade Server
    IPv4 address
    Software Upgrade Server

docsis_tlv.tftp_time  19 TFTP Server Timestamp
    Unsigned 32-bit integer
    TFTP Server TimeStamp
```

```
docsis_tlv.tftpmodemaddr  20 TFTP Server Provisioned Modem Addr
    IPv4 address
    TFTP Server Provisioned Modem Addr
docsis_tlv.upchid        2 Upstream Channel ID
    Unsigned 8-bit integer
    Service Identifier
docsis_tlv.upclsfr       22 Upstream Classifier
    Byte array
    22 Upstream Classifier
docsis_tlv.upsflow       24 Upstream Service Flow
    Byte array
    24 Upstream Service Flow
docsis_tlv.vendorid      8 Vendor ID
    Byte array
    Vendor Identifier
docsis_tlv.vendorspec    43 Vendor Specific Encodings
    Byte array
    Vendor Specific Encodings
```

**DOCSIS Baseline Privacy Key Management Attributes (docsis\_bpkmattr)**

```
docsis_bpkmattr.auth_key  7 Auth Key
    Byte array
    Auth Key
docsis_bpkmattr.bpiver    22 BPI Version
    Unsigned 8-bit integer
    BPKM Attributes
docsis_bpkmattr.cacert    17 CA Certificate
    Byte array
    CA Certificate
docsis_bpkmattr.cbciv     14 CBC IV
    Byte array
    Cypher Block Chaining
docsis_bpkmattr.cmcert    18 CM Certificate
    Byte array
    CM Certificate
docsis_bpkmattr.cmdid     5 CM Identification
    Byte array
    CM Identification
docsis_bpkmattr.crypto_suite_lst  21 Cryptographic Suite List
    Byte array
    Cryptographic Suite
docsis_bpkmattr.cryptosuite  20 Cryptographic Suite
    Unsigned 16-bit integer
    Cryptographic Suite
docsis_bpkmattr.dispstr   6 Display String
    String
    Display String
```

```
docsis_bpkmattr.dnld_params  28 Download Parameters
    Byte array
    Download Parameters

docsis_bpkmattr.errcode  16 Error Code
    Unsigned 8-bit integer
    Error Code

docsis_bpkmattr.hmacdigest  11 HMAC Digest
    Byte array
    HMAC Digest

docsis_bpkmattr.ipaddr  27 IP Address
    IPv4 address
    IP Address

docsis_bpkmattr.keylife  9 Key Lifetime (s)
    Unsigned 32-bit integer
    Key Lifetime (s)

docsis_bpkmattr.keyseq  10 Key Sequence Number
    Unsigned 8-bit integer
    Key Sequence Number

docsis_bpkmattr.macaddr  3 Mac Address
    6-byte Hardware (MAC) Address
    Mac Address

docsis_bpkmattr.manfid  2 Manufacturer Id
    Byte array
    Manufacturer Id

docsis_bpkmattr.rsa_pub_key  4 RSA Public Key
    Byte array
    RSA Public Key

docsis_bpkmattr.sadescr  23 SA Descriptor
    Byte array
    SA Descriptor

docsis_bpkmattr.said  12 SAID
    Unsigned 16-bit integer
    Security Association ID

docsis_bpkmattr.saquery  25 SA Query
    Byte array
    SA Query

docsis_bpkmattr.saquery_type  26 SA Query Type
    Unsigned 8-bit integer
    SA Query Type

docsis_bpkmattr.satype  24 SA Type
    Unsigned 8-bit integer
    SA Type

docsis_bpkmattr.seccap  19 Security Capabilities
    Byte array
    Security Capabilities

docsis_bpkmattr.serialnum  1 Serial Number
    String
    Serial Number
```

```
docsis_bpkmattr.tek  8 Traffic Encryption Key
    Byte array
    Traffic Encryption Key

docsis_bpkmattr.tekparams  13 TEK Parameters
    Byte array
    TEK Parameters

docsis_bpkmattr.vendordef  127 Vendor Defined
    Byte array
    Vendor Defined
```

**DOCSIS Baseline Privacy Key Management Request (docsis\_bpkmreq)**

```
docsis_bpkmreq.code  BPKM Code
    Unsigned 8-bit integer
    BPKM Request Message

docsis_bpkmreq.ident  BPKM Identifier
    Unsigned 8-bit integer
    BPKM Identifier

docsis_bpkmreq.length  BPKM Length
    Unsigned 16-bit integer
    BPKM Length
```

**DOCSIS Baseline Privacy Key Management Response (docsis\_bpkmrsp)**

```
docsis_bpkmrsp.code  BPKM Code
    Unsigned 8-bit integer
    BPKM Response Message

docsis_bpkmrsp.ident  BPKM Identifier
    Unsigned 8-bit integer
    BPKM Identifier

docsis_bpkmrsp.length  BPKM Length
    Unsigned 16-bit integer
    BPKM Length
```

**DOCSIS Downstream Channel Change Acknowledge (docsis\_dccack)**

```
docsis_dccack.hmac_digest  HMAC-DigestNumber
    Byte array
    HMAC-DigestNumber

docsis_dccack.key_seq_num  Auth Key Sequence Number
    Unsigned 8-bit integer
    Auth Key Sequence Number

docsis_dccack.tran_id  Transaction ID
    Unsigned 16-bit integer
    Transaction ID
```

**DOCSIS Downstream Channel Change Request (docsis\_dccreq)**

```
docsis_dccreq.cmts_mac_addr  CMTS Mac Address
    6-byte Hardware (MAC) Address
    CMTS Mac Address
```

```
docsis_dccreq.ds_chan_id  Downstream Channel ID
    Unsigned 8-bit integer
    Downstream Channel ID

docsis_dccreq.ds_freq    Frequency
    Unsigned 32-bit integer
    Frequency

docsis_dccreq.ds_intlv_depth_i  Interleaver Depth I Value
    Unsigned 8-bit integer
    Interleaver Depth I Value

docsis_dccreq.ds_intlv_depth_j  Interleaver Depth J Value
    Unsigned 8-bit integer
    Interleaver Depth J Value

docsis_dccreq.ds_mod_type  Modulation Type
    Unsigned 8-bit integer
    Modulation Type

docsis_dccreq.ds_sym_rate  Symbol Rate
    Unsigned 8-bit integer
    Symbol Rate

docsis_dccreq.ds_sync_sub  SYNC Substitution
    Unsigned 8-bit integer
    SYNC Substitution

docsis_dccreq.hmac_digest  HMAC-DigestNumber
    Byte array
    HMAC-DigestNumber

docsis_dccreq.init_tech  Initialization Technique
    Unsigned 8-bit integer
    Initialization Technique

docsis_dccreq.key_seq_num  Auth Key Sequence Number
    Unsigned 8-bit integer
    Auth Key Sequence Number

docsis_dccreq.said_sub_cur  SAID Sub - Current Value
    Unsigned 16-bit integer
    SAID Sub - Current Value

docsis_dccreq.said_sub_new  SAID Sub - New Value
    Unsigned 16-bit integer
    SAID Sub - New Value

docsis_dccreq.sf_sfid_cur  SF Sub - SFID Current Value
    Unsigned 32-bit integer
    SF Sub - SFID Current Value

docsis_dccreq.sf_sfid_new  SF Sub - SFID New Value
    Unsigned 32-bit integer
    SF Sub - SFID New Value

docsis_dccreq.sf_sid_cur  SF Sub - SID Current Value
    Unsigned 16-bit integer
    SF Sub - SID Current Value

docsis_dccreq.sf_sid_new  SF Sub - SID New Value
    Unsigned 16-bit integer
    SF Sub - SID New Value
```

```
docsis_dccreq.sf_unsol_grant_tref  SF Sub - Unsolicited Grant Time Reference
    Unsigned 32-bit integer
    SF Sub - Unsolicited Grant Time Reference

docsis_dccreq.tran_id  Transaction ID
    Unsigned 16-bit integer
    Transaction ID

docsis_dccreq.ucd_sub  UCD Substitution
    Byte array
    UCD Substitution

docsis_dccreq.up_chan_id  Up Channel ID
    Unsigned 8-bit integer
    Up Channel ID
```

#### **DOCSIS Downstream Channel Change Response (docsis\_dccrsp)**

```
docsis_dccrsp.cm_jump_time_length  Jump Time Length
    Unsigned 32-bit integer
    Jump Time Length

docsis_dccrsp.cm_jump_time_start  Jump Time Start
    Unsigned 64-bit integer
    Jump Time Start

docsis_dccrsp.conf_code  Confirmation Code
    Unsigned 8-bit integer
    Confirmation Code

docsis_dccrsp.hmac_digest  HMAC-DigestNumber
    Byte array
    HMAC-DigestNumber

docsis_dccrsp.key_seq_num  Auth Key Sequence Number
    Unsigned 8-bit integer
    Auth Key Sequence Number

docsis_dccrsp.tran_id  Transaction ID
    Unsigned 16-bit integer
    Transaction ID
```

#### **DOCSIS Downstream Channel Descriptor (docsis\_dcd)**

```
docsis_dcd.cfg_chan  DSG Configuration Channel
    Unsigned 32-bit integer
    DSG Configuration Channel

docsis_dcd.cfg_tdsg1  DSG Initialization Timeout (Tdsg1)
    Unsigned 16-bit integer
    DSG Initialization Timeout (Tdsg1)

docsis_dcd.cfg_tdsg2  DSG Operational Timeout (Tdsg2)
    Unsigned 16-bit integer
    DSG Operational Timeout (Tdsg2)

docsis_dcd.cfg_tdsg3  DSG Two-Way Retry Timer (Tdsg3)
    Unsigned 16-bit integer
    DSG Two-Way Retry Timer (Tdsg3)
```



```
docsis_dcd.cfg_tdsg4   DSG One-Way Retry Timer (Tdsg4)
    Unsigned 16-bit integer
    DSG One-Way Retry Timer (Tdsg4)

docsis_dcd.cfg_vendor_spec  DSG Configuration Vendor Specific Parameters
    Byte array
    DSG Configuration Vendor Specific Parameters

docsis_dcd.cfr_id   Downstream Classifier Id
    Unsigned 16-bit integer
    Downstream Classifier Id

docsis_dcd.cfr_ip_dest_addr  Downstream Classifier IP Destination Address
    IPv4 address
    Downstream Classifier IP Destination Address

docsis_dcd.cfr_ip_dest_mask  Downstream Classifier IP Destination Mask
    IPv4 address
    Downstream Classifier IP Destination Address

docsis_dcd.cfr_ip_source_addr  Downstream Classifier IP Source Address
    IPv4 address
    Downstream Classifier IP Source Address

docsis_dcd.cfr_ip_source_mask  Downstream Classifier IP Source Mask
    IPv4 address
    Downstream Classifier IP Source Mask

docsis_dcd.cfr_ip_tcpudp_dstport_end  Downstream Classifier IP TCP/UDP Destination Port End
    Unsigned 16-bit integer
    Downstream Classifier IP TCP/UDP Destination Port End

docsis_dcd.cfr_ip_tcpudp_dstport_start  Downstream Classifier IP TCP/UDP Destination Port Start
    Unsigned 16-bit integer
    Downstream Classifier IP TCP/UDP Destination Port Start

docsis_dcd.cfr_ip_tcpudp_srcport_end  Downstream Classifier IP TCP/UDP Source Port End
    Unsigned 16-bit integer
    Downstream Classifier IP TCP/UDP Source Port End

docsis_dcd.cfr_ip_tcpudp_srcport_start  Downstream Classifier IP TCP/UDP Source Port Start
    Unsigned 16-bit integer
    Downstream Classifier IP TCP/UDP Source Port Start

docsis_dcd.cfr_rule_pri  Downstream Classifier Rule Priority
    Unsigned 8-bit integer
    Downstream Classifier Rule Priority

docsis_dcd.clid_app_id  DSG Rule Client ID Application ID
    Unsigned 16-bit integer
    DSG Rule Client ID Application ID

docsis_dcd.clid_ca_sys_id  DSG Rule Client ID CA System ID
    Unsigned 16-bit integer
    DSG Rule Client ID CA System ID

docsis_dcd.clid_known_mac_addr  DSG Rule Client ID Known MAC Address
    6-byte Hardware (MAC) Address
    DSG Rule Client ID Known MAC Address

docsis_dcd.config_ch_cnt  Configuration Change Count
    Unsigned 8-bit integer
    Configuration Change Count
```

docsis\_dcd.frag\_sequence\_num Fragment Sequence Number  
Unsigned 8-bit integer  
Fragment Sequence Number

docsis\_dcd.num\_of\_frag Number of Fragments  
Unsigned 8-bit integer  
Number of Fragments

docsis\_dcd.rule\_cfr\_id DSG Rule Classifier ID  
Unsigned 16-bit integer  
DSG Rule Classifier ID

docsis\_dcd.rule\_id DSG Rule Id  
Unsigned 8-bit integer  
DSG Rule Id

docsis\_dcd.rule\_pri DSG Rule Priority  
Unsigned 8-bit integer  
DSG Rule Priority

docsis\_dcd.rule\_tunl\_addr DSG Rule Tunnel MAC Address  
6-byte Hardware (MAC) Address  
DSG Rule Tunnel MAC Address

docsis\_dcd.rule\_ucid\_list DSG Rule UCID Range  
Byte array  
DSG Rule UCID Range

docsis\_dcd.rule\_vendor\_spec DSG Rule Vendor Specific Parameters  
Byte array  
DSG Rule Vendor Specific Parameters

**DOCSIS Dynamic Service Addition Acknowledge (docsis\_dsaack)**

docsis\_dsaack.confcode Confirmation Code  
Unsigned 8-bit integer  
Confirmation Code

docsis\_dsaack.tranid Transaction Id  
Unsigned 16-bit integer  
Service Identifier

**DOCSIS Dynamic Service Addition Request (docsis\_dsareq)**

docsis\_dsareq.tranid Transaction Id  
Unsigned 16-bit integer  
Transaction Id

**DOCSIS Dynamic Service Addition Response (docsis\_dsarsp)**

docsis\_dsarsp.confcode Confirmation Code  
Unsigned 8-bit integer  
Confirmation Code

docsis\_dsarsp.tranid Transaction Id  
Unsigned 16-bit integer  
Service Identifier

**DOCSIS Dynamic Service Change Acknowledgement (docsis\_dscack)**

docsis\_dscack.confcode Confirmation Code  
Unsigned 8-bit integer  
Confirmation Code

docsis\_dscack.tranid Transaction Id  
Unsigned 16-bit integer  
Service Identifier

**DOCSIS Dynamic Service Change Request (docsis\_dscreq)**

docsis\_dscreq.tranid Transaction Id  
Unsigned 16-bit integer  
Transaction Id

**DOCSIS Dynamic Service Change Response (docsis\_dscrsp)**

docsis\_dscrsp.confcode Confirmation Code  
Unsigned 8-bit integer  
Confirmation Code

docsis\_dscrsp.tranid Transaction Id  
Unsigned 16-bit integer  
Service Identifier

**DOCSIS Dynamic Service Delete Request (docsis\_dsdreq)**

docsis\_dsdreq.rsvd Reserved  
Unsigned 16-bit integer  
Reserved

docsis\_dsdreq.sfid Service Flow ID  
Unsigned 32-bit integer  
Service Flow Id

docsis\_dsdreq.tranid Transaction Id  
Unsigned 16-bit integer  
Transaction Id

**DOCSIS Dynamic Service Delete Response (docsis\_dsdrsp)**

docsis\_dsdrsp.confcode Confirmation Code  
Unsigned 8-bit integer  
Confirmation Code

docsis\_dsdrsp.rsvd Reserved  
Unsigned 8-bit integer  
Reserved

docsis\_dsdrsp.tranid Transaction Id  
Unsigned 16-bit integer  
Transaction Id

**DOCSIS Initial Ranging Message (docsis\_intrngreq)**

docsis\_intrngreq.downchid Downstream Channel ID  
Unsigned 8-bit integer  
Downstream Channel ID

```
docsis_intrngreq.sid  Service Identifier
    Unsigned 16-bit integer
    Service Identifier

docsis_intrngreq.upchid  Upstream Channel ID
    Unsigned 8-bit integer
    Upstream Channel ID
```

**DOCSIS Mac Management (docsis\_mgmt)**

```
docsis_mgmt.control  Control [0x03]
    Unsigned 8-bit integer
    Control

docsis_mgmt.dsap  DSAP [0x00]
    Unsigned 8-bit integer
    Destination SAP

docsis_mgmt.dst  Destination Address
    6-byte Hardware (MAC) Address
    Destination Address

docsis_mgmt.msglen  Message Length - DSAP to End (Bytes)
    Unsigned 16-bit integer
    Message Length

docsis_mgmt.rsvd  Reserved [0x00]
    Unsigned 8-bit integer
    Reserved

docsis_mgmt.src  Source Address
    6-byte Hardware (MAC) Address
    Source Address

docsis_mgmt.ssap  SSAP [0x00]
    Unsigned 8-bit integer
    Source SAP

docsis_mgmt.type  Type
    Unsigned 8-bit integer
    Type

docsis_mgmt.version  Version
    Unsigned 8-bit integer
    Version
```

**DOCSIS Range Request Message (docsis\_rngreq)**

```
docsis_rngreq.downchid  Downstream Channel ID
    Unsigned 8-bit integer
    Downstream Channel ID

docsis_rngreq.pendcomp  Pending Till Complete
    Unsigned 8-bit integer
    Upstream Channel ID

docsis_rngreq.sid  Service Identifier
    Unsigned 16-bit integer
    Service Identifier
```

**DOCSIS Ranging Response (docsis\_rngrsp)**

docsis\_rngrsp.chid\_override Upstream Channel ID Override  
Unsigned 8-bit integer  
Upstream Channel ID Override

docsis\_rngrsp.freq\_over Downstream Frequency Override (Hz)  
Unsigned 32-bit integer  
Downstream Frequency Override

docsis\_rngrsp.freqadj Offset Freq Adjust (Hz)  
Signed 16-bit integer  
Frequency Adjust

docsis\_rngrsp.poweradj Power Level Adjust (0.25dB units)  
Signed 8-bit integer  
Power Level Adjust

docsis\_rngrsp.rng\_stat Ranging Status  
Unsigned 8-bit integer  
Ranging Status

docsis\_rngrsp.sid Service Identifier  
Unsigned 16-bit integer  
Service Identifier

docsis\_rngrsp.timingadj Timing Adjust (6.25us/64)  
Signed 32-bit integer  
Timing Adjust

docsis\_rngrsp.upchid Upstream Channel ID  
Unsigned 8-bit integer  
Upstream Channel ID

docsis\_rngrsp.xmit\_eq\_adj Transmit Equalisation Adjust  
Byte array  
Timing Equalisation Adjust

**DOCSIS Registration Acknowledge (docsis\_regack)**

docsis\_regack.response Response Code  
Unsigned 8-bit integer  
Response Code

docsis\_regack.sid Service Identifier  
Unsigned 16-bit integer  
Service Identifier

**DOCSIS Registration Requests (docsis\_regreq)**

docsis\_regreq.sid Service Identifier  
Unsigned 16-bit integer  
Service Identifier

**DOCSIS Registration Responses (docsis\_regrsp)**

docsis\_regrsp.response Response Code  
Unsigned 8-bit integer  
Response Code

docsis\_regrsp.sid Service Identifier  
Unsigned 16-bit integer  
Service Identifier

#### **DOCSIS Upstream Bandwidth Allocation (docsis\_map)**

docsis\_map.acktime ACK Time (minislots)  
Unsigned 32-bit integer  
Ack Time (minislots)

docsis\_map.allocstart Alloc Start Time (minislots)  
Unsigned 32-bit integer  
Alloc Start Time (minislots)

docsis\_map.data\_end Data Backoff End  
Unsigned 8-bit integer  
Data Backoff End

docsis\_map.data\_start Data Backoff Start  
Unsigned 8-bit integer  
Data Backoff Start

docsis\_map.ie Information Element  
Unsigned 32-bit integer  
Information Element

docsis\_map.iuc Interval Usage Code  
Unsigned 32-bit integer  
Interval Usage Code

docsis\_map.numie Number of IE's  
Unsigned 8-bit integer  
Number of Information Elements

docsis\_map.offset Offset  
Unsigned 32-bit integer  
Offset

docsis\_map.rng\_end Ranging Backoff End  
Unsigned 8-bit integer  
Ranging Backoff End

docsis\_map.rng\_start Ranging Backoff Start  
Unsigned 8-bit integer  
Ranging Backoff Start

docsis\_map.rsvd Reserved [0x00]  
Unsigned 8-bit integer  
Reserved Byte

docsis\_map.sid Service Identifier  
Unsigned 32-bit integer  
Service Identifier

docsis\_map.ucdcount UCD Count  
Unsigned 8-bit integer  
Map UCD Count

docsis\_map.upchid Upstream Channel ID  
Unsigned 8-bit integer  
Upstream Channel ID

**DOCSIS Upstream Channel Change Request (docsis\_uccreq)**

```

docsis_uccreq.upchid  Upstream Channel Id
    Unsigned 8-bit integer
    Upstream Channel Id

```

**DOCSIS Upstream Channel Change Response (docsis\_uccrsp)**

```

docsis_uccrsp.upchid  Upstream Channel Id
    Unsigned 8-bit integer
    Upstream Channel Id

```

**DOCSIS Upstream Channel Descriptor (docsis\_ucd)**

```

docsis_ucd.burst.diffenc  2 Differential Encoding
    Unsigned 8-bit integer
    Differential Encoding

docsis_ucd.burst.fec      5 FEC (T)
    Unsigned 8-bit integer
    FEC (T) Codeword Parity Bits = 2^T

docsis_ucd.burst.fec_codeword  6 FEC Codeword Info bytes (k)
    Unsigned 8-bit integer
    FEC Codeword Info Bytes (k)

docsis_ucd.burst.guardtime  9 Guard Time Size (Symbol Times)
    Unsigned 8-bit integer
    Guard Time Size

docsis_ucd.burst.last_cw_len  10 Last Codeword Length
    Unsigned 8-bit integer
    Last Codeword Length

docsis_ucd.burst.maxburst  8 Max Burst Size (Minislots)
    Unsigned 8-bit integer
    Max Burst Size (Minislots)

docsis_ucd.burst.modtype  1 Modulation Type
    Unsigned 8-bit integer
    Modulation Type

docsis_ucd.burst.preamble_len  3 Preamble Length (Bits)
    Unsigned 16-bit integer
    Preamble Length (Bits)

docsis_ucd.burst.preamble_off  4 Preamble Offset (Bits)
    Unsigned 16-bit integer
    Preamble Offset (Bits)

docsis_ucd.burst.preambletype  14 Preamble Type
    Unsigned 8-bit integer
    Preamble Type

docsis_ucd.burst.rsintblock  13 RS Interleaver Block Size
    Unsigned 8-bit integer
    R-S Interleaver Block

docsis_ucd.burst.rsintdepth  12 RS Interleaver Depth
    Unsigned 8-bit integer
    R-S Interleaver Depth

```

```
docsis_ucd.burst.scdmacodespersubframe  16 SCDMA Codes per Subframe
    Unsigned 8-bit integer
    SCDMA Codes per Subframe

docsis_ucd.burst.scdmaframerintstepsize  17 SDMA Framers Int Step Size
    Unsigned 8-bit integer
    SCDMA Framers Interleaving Step Size

docsis_ucd.burst.scdmascrambleronoff    15 SCDMA Scrambler On/Off
    Unsigned 8-bit integer
    SCDMA Scrambler On/Off

docsis_ucd.burst.scrambler_seed         7 Scrambler Seed
    Unsigned 16-bit integer
    Burst Descriptor

docsis_ucd.burst.scrambleronoff         11 Scrambler On/Off
    Unsigned 8-bit integer
    Scrambler On/Off

docsis_ucd.burst.tcmenabled             18 TCM Enable
    Unsigned 8-bit integer
    TCM Enabled

docsis_ucd.confchgcnt                   Config Change Count
    Unsigned 8-bit integer
    Configuration Change Count

docsis_ucd.downchid                     Downstream Channel ID
    Unsigned 8-bit integer
    Management Message

docsis_ucd.freq                          Frequency (Hz)
    Unsigned 32-bit integer
    Upstream Center Frequency

docsis_ucd.iuc                           Interval Usage Code
    Unsigned 8-bit integer
    Interval Usage Code

docsis_ucd.length                       TLV Length
    Unsigned 8-bit integer
    Channel TLV length

docsis_ucd.mslotsize                     Mini Slot Size (6.25us TimeTicks)
    Unsigned 8-bit integer
    Mini Slot Size (6.25us TimeTicks)

docsis_ucd.preamble                       Preamble Pattern
    Byte array
    Preamble Superstring

docsis_ucd.symrate                       Symbol Rate (ksym/sec)
    Unsigned 8-bit integer
    Symbol Rate

docsis_ucd.type                           TLV Type
    Unsigned 8-bit integer
    Channel TLV type

docsis_ucd.upchid                         Upstream Channel ID
    Unsigned 8-bit integer
    Upstream Channel ID
```



**DOCSIS Upstream Channel Descriptor Type 29 (docsis\_type29ucd)**

```
docsis_type29ucd.burst.diffenc  2 Differential Encoding
    Unsigned 8-bit integer
    Differential Encoding

docsis_type29ucd.burst.fec      5 FEC (T)
    Unsigned 8-bit integer
    FEC (T) Codeword Parity Bits = 2^T

docsis_type29ucd.burst.fec_codeword  6 FEC Codeword Info bytes (k)
    Unsigned 8-bit integer
    FEC Codeword Info Bytes (k)

docsis_type29ucd.burst.guardtime  9 Guard Time Size (Symbol Times)
    Unsigned 8-bit integer
    Guard Time Size

docsis_type29ucd.burst.last_cw_len  10 Last Codeword Length
    Unsigned 8-bit integer
    Last Codeword Length

docsis_type29ucd.burst.maxburst   8 Max Burst Size (Minislots)
    Unsigned 8-bit integer
    Max Burst Size (Minislots)

docsis_type29ucd.burst.modtype    1 Modulation Type
    Unsigned 8-bit integer
    Modulation Type

docsis_type29ucd.burst.preamble_len  3 Preamble Length (Bits)
    Unsigned 16-bit integer
    Preamble Length (Bits)

docsis_type29ucd.burst.preamble_off  4 Preamble Offset (Bits)
    Unsigned 16-bit integer
    Preamble Offset (Bits)

docsis_type29ucd.burst.preambletype  14 Scrambler On/Off
    Unsigned 8-bit integer
    Preamble Type

docsis_type29ucd.burst.rsintblock   13 Scrambler On/Off
    Unsigned 8-bit integer
    R-S Interleaver Block

docsis_type29ucd.burst.rsintdepth   12 Scrambler On/Off
    Unsigned 8-bit integer
    R-S Interleaver Depth

docsis_type29ucd.burst.scdmacodespersubframe  16 Scrambler On/Off
    Unsigned 8-bit integer
    SCDMA Codes per Subframe

docsis_type29ucd.burst.scdmaframerintstepsize  17 Scrambler On/Off
    Unsigned 8-bit integer
    SCDMA Framers Interleaving Step Size

docsis_type29ucd.burst.scdmascrambleronoff  15 Scrambler On/Off
    Unsigned 8-bit integer
    SCDMA Scrambler On/Off
```

```
docsis_type29ucd.burst.scrambler_seed  7 Scrambler Seed
    Unsigned 16-bit integer
    Burst Descriptor

docsis_type29ucd.burst.scrambleronoff  11 Scrambler On/Off
    Unsigned 8-bit integer
    Scrambler On/Off

docsis_type29ucd.burst.tcmenabled  18 Scrambler On/Off
    Unsigned 8-bit integer
    TCM Enabled

docsis_type29ucd.confchgcnt  Config Change Count
    Unsigned 8-bit integer
    Configuration Change Count

docsis_type29ucd.downchid  Downstream Channel ID
    Unsigned 8-bit integer
    Management Message

docsis_type29ucd.extpreamble  6 Extended Preamble Pattern
    Byte array
    Extended Preamble Pattern

docsis_type29ucd.freq  2 Frequency (Hz)
    Unsigned 32-bit integer
    Upstream Center Frequency

docsis_type29ucd.iuc  Interval Usage Code
    Unsigned 8-bit integer
    Interval Usage Code

docsis_type29ucd.maintainpowerspectraldensity  15 Maintain power spectral densit
    Byte array
    Maintain power spectral density

docsis_type29ucd.mslotsize  Mini Slot Size (6.25us TimeTicks)
    Unsigned 8-bit integer
    Mini Slot Size (6.25us TimeTicks)

docsis_type29ucd.preamble  3 Preamble Pattern
    Byte array
    Preamble Superstring

docsis_type29ucd.rangingrequired  16 Ranging Required
    Byte array
    Ranging Required

docsis_type29ucd.scdmaactivecodes  10 SCDMA Active Codes
    Byte array
    SCDMA Active Codes

docsis_type29ucd.scdmacodehoppingseed  11 SCDMA Code Hopping Seed
    Byte array
    SCDMA Code Hopping Seed

docsis_type29ucd.scdmacodesperminislot  9 SCDMA Codes per mini slot
    Byte array
    SCDMA Codes per mini slot

docsis_type29ucd.scdmaenable  7 SCDMA Mode Enable
    Byte array
    SCDMA Mode Enable
```

docsis\_type29ucd.scdmaspreadinginterval 8 SCDMA Spreading Interval  
Byte array  
SCDMA Spreading Interval

docsis\_type29ucd.scdmatimestamp 14 SCDMA Timestamp Snapshot  
Byte array  
SCDMA Timestamp Snapshot

docsis\_type29ucd.scdmausratiodenom 13 SCDMA US Ratio Denominator  
Byte array  
SCDMA US Ratio Denominator

docsis\_type29ucd.scdmausrationum 12 SCDMA US Ratio Numerator  
Byte array  
SCDMA US Ratio Numerator

docsis\_type29ucd.symrate 1 Symbol Rate (ksym/sec)  
Unsigned 8-bit integer  
Symbol Rate

docsis\_type29ucd.upchid Upstream Channel ID  
Unsigned 8-bit integer  
Upstream Channel ID

#### **DOCSIS Vendor Specific Encodings (docsis\_vsif)**

docsis\_vsif.cisco.iosfile IOS Config File  
String  
IOS Config File

docsis\_vsif.cisco.ipprec IP Precedence Encodings  
Byte array  
IP Precedence Encodings

docsis\_vsif.cisco.ipprec.bw IP Precedence Bandwidth  
Unsigned 8-bit integer  
IP Precedence Bandwidth

docsis\_vsif.cisco.ipprec.value IP Precedence Value  
Unsigned 8-bit integer  
IP Precedence Value

docsis\_vsif.cisco.numphones Number of phone lines  
Unsigned 8-bit integer  
Number of phone lines

docsis\_vsif.unknown VSIF Encodings  
Byte array  
Unknown Vendor

docsis\_vsif.vendorid Vendor Id  
Unsigned 24-bit integer  
Vendor Identifier

#### **DPNSS/DASS2–User Adaptation Layer (dua)**

dua.asp\_identifier ASP identifier  
Unsigned 32-bit integer

dua.diagnostic\_information Diagnostic information  
Byte array

```
dua.dlci_channel  Channel
    Unsigned 16-bit integer
dua.dlci_one_bit  One bit
    Boolean
dua.dlci_reserved  Reserved
    Unsigned 16-bit integer
dua.dlci_spare    Spare
    Unsigned 16-bit integer
dua.dlci_v_bit    V-bit
    Boolean
dua.dlci_zero_bit  Zero bit
    Boolean
dua.error_code    Error code
    Unsigned 32-bit integer
dua.heartbeat_data  Heartbeat data
    Byte array
dua.info_string   Info string
    String
dua.int_interface_identifier  Integer interface identifier
    Unsigned 32-bit integer
dua.interface_range_end  End
    Unsigned 32-bit integer
dua.interface_range_start  Start
    Unsigned 32-bit integer
dua.message_class  Message class
    Unsigned 8-bit integer
dua.message_length  Message length
    Unsigned 32-bit integer
dua.message_type   Message Type
    Unsigned 8-bit integer
dua.parameter_length  Parameter length
    Unsigned 16-bit integer
dua.parameter_padding  Parameter padding
    Byte array
dua.parameter_tag   Parameter Tag
    Unsigned 16-bit integer
dua.parameter_value  Parameter value
    Byte array
dua.release_reason  Reason
    Unsigned 32-bit integer
dua.reserved        Reserved
    Unsigned 8-bit integer
dua.states          States
    Byte array
```

```

dua.status_identification  Status identification
    Unsigned 16-bit integer
dua.status_type            Status type
    Unsigned 16-bit integer
dua.tei_status             TEI status
    Unsigned 32-bit integer
dua.text_interface_identifer  Text interface identifier
    String
dua.traffic_mode_type      Traffic mode type
    Unsigned 32-bit integer
dua.version                Version
    Unsigned 8-bit integer

```

**DRDA (drda)**

```

drda.ddm.codepoint        Code point
    Unsigned 16-bit integer
    DDM code point
drda.ddm.ddmid            Magic
    Unsigned 8-bit integer
    DDM magic
drda.ddm.fmt.bit0         Reserved
    Boolean
    DSSFMT reserved
drda.ddm.fmt.bit1         Chained
    Boolean
    DSSFMT chained
drda.ddm.fmt.bit2         Continue
    Boolean
    DSSFMT contine on error
drda.ddm.fmt.bit3         Same correlation
    Boolean
    DSSFMT same correlation
drda.ddm.fmt.dsstyp       DSS type
    Unsigned 8-bit integer
    DSSFMT type
drda.ddm.format           Format
    Unsigned 8-bit integer
    DDM format
drda.ddm.length           Length
    Unsigned 16-bit integer
    DDM length
drda.ddm.length2          Length2
    Unsigned 16-bit integer
    DDM length2
drda.ddm.rqscrr           CorrelId
    Unsigned 16-bit integer
    DDM correlation identifier

```

```

drda.param.codepoint  Code point
    Unsigned 16-bit integer
    Param code point

drda.param.data  Data (ASCII)
    String
    Param data left as ASCII for display

drda.param.length  Length
    Unsigned 16-bit integer
    Param length

drda.sqlstatement  SQL statement (ASCII)
    String
    SQL statement left as ASCII for display

```

**DRSUAPI (drsuapi)**

```

drsuapi.DsBind.bind_guid  bind_guid

drsuapi.DsBind.bind_handle  bind_handle
    Byte array

drsuapi.DsBind.bind_info  bind_info
    No value

drsuapi.DsBindInfo.info24  info24
    No value

drsuapi.DsBindInfo.info28  info28
    No value

drsuapi.DsBindInfo24.site_guid  site_guid

drsuapi.DsBindInfo24.supported_extensions  supported_extensions
    Unsigned 32-bit integer

drsuapi.DsBindInfo24.u1  u1
    Unsigned 32-bit integer

drsuapi.DsBindInfo28.repl_epoch  repl_epoch
    Unsigned 32-bit integer

drsuapi.DsBindInfo28.site_guid  site_guid

drsuapi.DsBindInfo28.supported_extensions  supported_extensions
    Unsigned 32-bit integer

drsuapi.DsBindInfo28.u1  u1
    Unsigned 32-bit integer

drsuapi.DsBindInfoCtr.info  info
    Unsigned 32-bit integer

drsuapi.DsBindInfoCtr.length  length
    Unsigned 32-bit integer

drsuapi.DsCrackNames.bind_handle  bind_handle
    Byte array

drsuapi.DsCrackNames.ctr  ctr
    Unsigned 32-bit integer

drsuapi.DsCrackNames.level  level
    Signed 32-bit integer

```

```
drsuapi.DsCrackNames.req req
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo01.server_nt4_account server_nt4_account
    String
drsuapi.DsGetDCInfo01.unknown1 unknown1
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo01.unknown2 unknown2
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo01.unknown3 unknown3
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo01.unknown4 unknown4
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo01.unknown5 unknown5
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo01.unknown6 unknown6
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo1.computer_dn computer_dn
    String
drsuapi.DsGetDCInfo1.dns_name dns_name
    String
drsuapi.DsGetDCInfo1.is_enabled is_enabled
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo1.is_pdc is_pdc
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo1.netbios_name netbios_name
    String
drsuapi.DsGetDCInfo1.server_dn server_dn
    String
drsuapi.DsGetDCInfo1.site_name site_name
    String
drsuapi.DsGetDCInfo2.computer_dn computer_dn
    String
drsuapi.DsGetDCInfo2.computer_guid computer_guid
drsuapi.DsGetDCInfo2.dns_name dns_name
    String
drsuapi.DsGetDCInfo2.is_enabled is_enabled
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo2.is_gc is_gc
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo2.is_pdc is_pdc
    Unsigned 32-bit integer
drsuapi.DsGetDCInfo2.netbios_name netbios_name
    String
drsuapi.DsGetDCInfo2.ntds_dn ntds_dn
    String
```

```
drsuapi.DsGetDCInfo2.ntds_guid  ntds_guid
drsuapi.DsGetDCInfo2.server_dn  server_dn
    String
drsuapi.DsGetDCInfo2.server_guid  server_guid
drsuapi.DsGetDCInfo2.site_dn  site_dn
    String
drsuapi.DsGetDCInfo2.site_guid  site_guid
drsuapi.DsGetDCInfo2.site_name  site_name
    String
drsuapi.DsGetDCInfoCtr.ctr01  ctr01
    No value
drsuapi.DsGetDCInfoCtr.ctr1  ctr1
    No value
drsuapi.DsGetDCInfoCtr.ctr2  ctr2
    No value
drsuapi.DsGetDCInfoCtr01.array  array
    No value
drsuapi.DsGetDCInfoCtr01.count  count
    Unsigned 32-bit integer
drsuapi.DsGetDCInfoCtr1.array  array
    No value
drsuapi.DsGetDCInfoCtr1.count  count
    Unsigned 32-bit integer
drsuapi.DsGetDCInfoCtr2.array  array
    No value
drsuapi.DsGetDCInfoCtr2.count  count
    Unsigned 32-bit integer
drsuapi.DsGetDCInfoRequest.req1  req1
    No value
drsuapi.DsGetDCInfoRequest1.domain_name  domain_name
    String
drsuapi.DsGetDCInfoRequest1.level  level
    Signed 32-bit integer
drsuapi.DsGetDomainControllerInfo.bind_handle  bind_handle
    Byte array
drsuapi.DsGetDomainControllerInfo.ctr  ctr
    Unsigned 32-bit integer
drsuapi.DsGetDomainControllerInfo.level  level
    Signed 32-bit integer
drsuapi.DsGetDomainControllerInfo.req  req
    Unsigned 32-bit integer
drsuapi.DsGetNCChanges.bind_handle  bind_handle
    Byte array
```



```
drsuapi.DsGetNCChanges.ctr    ctr
    Unsigned 32-bit integer
drsuapi.DsGetNCChanges.level  level
    Signed 32-bit integer
drsuapi.DsGetNCChanges.req    req
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesCtr.ctr6  ctr6
    No value
drsuapi.DsGetNCChangesCtr.ctr7  ctr7
    No value
drsuapi.DsGetNCChangesCtr6.array_ptr1  array_ptr1
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesCtr6.corsor_ex  corsor_ex
    No value
drsuapi.DsGetNCChangesCtr6.ctr12  ctr12
    No value
drsuapi.DsGetNCChangesCtr6.guid1  guid1
drsuapi.DsGetNCChangesCtr6.guid2  guid2
drsuapi.DsGetNCChangesCtr6.len1  len1
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesCtr6.ptr1  ptr1
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesCtr6.sync_req_info1  sync_req_info1
    No value
drsuapi.DsGetNCChangesCtr6.u1  u1
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesCtr6.u2  u2
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesCtr6.u3  u3
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesCtr6.usn1  usn1
    No value
drsuapi.DsGetNCChangesCtr6.usn2  usn2
    No value
drsuapi.DsGetNCChangesRequest.req5  req5
    No value
drsuapi.DsGetNCChangesRequest.req8  req8
    No value
drsuapi.DsGetNCChangesRequest5.corsor  corsor
    No value
drsuapi.DsGetNCChangesRequest5.guid1  guid1
drsuapi.DsGetNCChangesRequest5.guid2  guid2
drsuapi.DsGetNCChangesRequest5.h1  h1
    Unsigned 64-bit integer
```

```
drsuapi.DsGetNCChangesRequest5.sync_req_info1  sync_req_info1
  No value
drsuapi.DsGetNCChangesRequest5.unknown1  unknown1
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest5.unknown2  unknown2
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest5.unknown3  unknown3
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest5.unknown4  unknown4
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest5.usn1  usn1
  No value
drsuapi.DsGetNCChangesRequest8.coursor  coursor
  No value
drsuapi.DsGetNCChangesRequest8.ctr12  ctr12
  No value
drsuapi.DsGetNCChangesRequest8.guid1  guid1
drsuapi.DsGetNCChangesRequest8.guid2  guid2
drsuapi.DsGetNCChangesRequest8.h1  h1
  Unsigned 64-bit integer
drsuapi.DsGetNCChangesRequest8.sync_req_info1  sync_req_info1
  No value
drsuapi.DsGetNCChangesRequest8.unique_ptr1  unique_ptr1
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest8.unique_ptr2  unique_ptr2
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest8.unknown1  unknown1
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest8.unknown2  unknown2
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest8.unknown3  unknown3
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest8.unknown4  unknown4
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest8.usn1  usn1
  No value
drsuapi.DsGetNCChangesRequest_Ctr12.array  array
  No value
drsuapi.DsGetNCChangesRequest_Ctr12.count  count
  Unsigned 32-bit integer
drsuapi.DsGetNCChangesRequest_Ctr13.data  data
  No value
drsuapi.DsGetNCChangesRequest_Ctr13.unknown1  unknown1
  Unsigned 32-bit integer
```

```
drsuapi.DsGetNCChangesRequest_Ctrl14.byte_array  byte_array
    Unsigned 8-bit integer
drsuapi.DsGetNCChangesRequest_Ctrl14.length  length
    Unsigned 32-bit integer
drsuapi.DsGetNCChangesUsnTriple.usn1  usn1
    Unsigned 64-bit integer
drsuapi.DsGetNCChangesUsnTriple.usn2  usn2
    Unsigned 64-bit integer
drsuapi.DsGetNCChangesUsnTriple.usn3  usn3
    Unsigned 64-bit integer
drsuapi.DsNameCtr.ctr1  ctr1
    No value
drsuapi.DsNameCtr1.array  array
    No value
drsuapi.DsNameCtr1.count  count
    Unsigned 32-bit integer
drsuapi.DsNameInfol.dns_domain_name  dns_domain_name
    String
drsuapi.DsNameInfol.result_name  result_name
    String
drsuapi.DsNameInfol.status  status
    Signed 32-bit integer
drsuapi.DsNameRequest.req1  req1
    No value
drsuapi.DsNameRequest1.count  count
    Unsigned 32-bit integer
drsuapi.DsNameRequest1.format_desired  format_desired
    Signed 32-bit integer
drsuapi.DsNameRequest1.format_flags  format_flags
    Signed 32-bit integer
drsuapi.DsNameRequest1.format_offered  format_offered
    Signed 32-bit integer
drsuapi.DsNameRequest1.names  names
    No value
drsuapi.DsNameRequest1.unknown1  unknown1
    Unsigned 32-bit integer
drsuapi.DsNameRequest1.unknown2  unknown2
    Unsigned 32-bit integer
drsuapi.DsNameString.str  str
    String
drsuapi.DsReplica06.str1  str1
    String
drsuapi.DsReplica06.u1  u1
    Unsigned 32-bit integer
```

```

drsuapi.DsReplica06.u2  u2
    Unsigned 32-bit integer
drsuapi.DsReplica06.u3  u3
    Unsigned 32-bit integer
drsuapi.DsReplica06.u4  u4
    Unsigned 32-bit integer
drsuapi.DsReplica06.u5  u5
    Unsigned 32-bit integer
drsuapi.DsReplica06.u6  u6
    Unsigned 64-bit integer
drsuapi.DsReplica06.u7  u7
    Unsigned 32-bit integer
drsuapi.DsReplica06Ctr.array  array
    No value
drsuapi.DsReplica06Ctr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplica06Ctr.reserved  reserved
    Unsigned 32-bit integer
drsuapi.DsReplicaAddOptions.DRSUAPI_DS_REPLICA_ADD_ASYNCHRONOUS_OPERATION  DRSUA
    Boolean
drsuapi.DsReplicaAddOptions.DRSUAPI_DS_REPLICA_ADD_WRITEABLE  DRSUAPI_DS_REPLICA
    Boolean
drsuapi.DsReplicaAttrValMetaData.attribute_name  attribute_name
    String
drsuapi.DsReplicaAttrValMetaData.created  created
    Date/Time stamp
drsuapi.DsReplicaAttrValMetaData.deleted  deleted
    Date/Time stamp
drsuapi.DsReplicaAttrValMetaData.local_usn  local_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaAttrValMetaData.object_dn  object_dn
    String
drsuapi.DsReplicaAttrValMetaData.originating_dsa_invocation_id  originating_dsa_
drsuapi.DsReplicaAttrValMetaData.originating_last_changed  originating_last_chan
    Date/Time stamp
drsuapi.DsReplicaAttrValMetaData.originating_usn  originating_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaAttrValMetaData.value  value
    Unsigned 8-bit integer
drsuapi.DsReplicaAttrValMetaData.value_length  value_length
    Unsigned 32-bit integer
drsuapi.DsReplicaAttrValMetaData.version  version
    Unsigned 32-bit integer
drsuapi.DsReplicaAttrValMetaData2.attribute_name  attribute_name
    String

```

```

drsuapi.DsReplicaAttrValMetaData2.created    created
Date/Time stamp
drsuapi.DsReplicaAttrValMetaData2.deleted    deleted
Date/Time stamp
drsuapi.DsReplicaAttrValMetaData2.local_usn  local_usn
Unsigned 64-bit integer
drsuapi.DsReplicaAttrValMetaData2.object_dn  object_dn
String
drsuapi.DsReplicaAttrValMetaData2.originating_dsa_invocation_id  originating_dsa
drsuapi.DsReplicaAttrValMetaData2.originating_dsa_obj_dn  originating_dsa_obj_dn
String
drsuapi.DsReplicaAttrValMetaData2.originating_last_changed  originating_last_cha
Date/Time stamp
drsuapi.DsReplicaAttrValMetaData2.originating_usn  originating_usn
Unsigned 64-bit integer
drsuapi.DsReplicaAttrValMetaData2.value  value
Unsigned 8-bit integer
drsuapi.DsReplicaAttrValMetaData2.value_length  value_length
Unsigned 32-bit integer
drsuapi.DsReplicaAttrValMetaData2.version  version
Unsigned 32-bit integer
drsuapi.DsReplicaAttrValMetaData2Ctr.array  array
No value
drsuapi.DsReplicaAttrValMetaData2Ctr.count  count
Unsigned 32-bit integer
drsuapi.DsReplicaAttrValMetaData2Ctr.enumeration_context  enumeration_context
Signed 32-bit integer
drsuapi.DsReplicaAttrValMetaDataCtr.array  array
No value
drsuapi.DsReplicaAttrValMetaDataCtr.count  count
Unsigned 32-bit integer
drsuapi.DsReplicaAttrValMetaDataCtr.enumeration_context  enumeration_context
Signed 32-bit integer
drsuapi.DsReplicaConnection04.bind_guid  bind_guid
drsuapi.DsReplicaConnection04.bind_time  bind_time
Date/Time stamp
drsuapi.DsReplicaConnection04.u1  u1
Unsigned 64-bit integer
drsuapi.DsReplicaConnection04.u2  u2
Unsigned 32-bit integer
drsuapi.DsReplicaConnection04.u3  u3
Unsigned 32-bit integer
drsuapi.DsReplicaConnection04.u4  u4
Unsigned 32-bit integer

```

```
drsuapi.DsReplicaConnection04.u5    u5
    Unsigned 32-bit integer
drsuapi.DsReplicaConnection04Ctr.array  array
    No value
drsuapi.DsReplicaConnection04Ctr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplicaConnection04Ctr.reserved  reserved
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursor.highest_usn  highest_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaCoursor.source_dsa_invocation_id  source_dsa_invocation_id
drsuapi.DsReplicaCoursor05Ctr.array  array
    No value
drsuapi.DsReplicaCoursor05Ctr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursor05Ctr.u1    u1
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursor05Ctr.u2    u2
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursor05Ctr.u3    u3
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursor2.highest_usn  highest_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaCoursor2.last_sync_success  last_sync_success
    Date/Time stamp
drsuapi.DsReplicaCoursor2.source_dsa_invocation_id  source_dsa_invocation_id
drsuapi.DsReplicaCoursor2Ctr.array  array
    No value
drsuapi.DsReplicaCoursor2Ctr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursor2Ctr.enumeration_context  enumeration_context
    Signed 32-bit integer
drsuapi.DsReplicaCoursor3.highest_usn  highest_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaCoursor3.last_sync_success  last_sync_success
    Date/Time stamp
drsuapi.DsReplicaCoursor3.source_dsa_invocation_id  source_dsa_invocation_id
drsuapi.DsReplicaCoursor3.source_dsa_obj_dn  source_dsa_obj_dn
    String
drsuapi.DsReplicaCoursor3Ctr.array  array
    No value
drsuapi.DsReplicaCoursor3Ctr.count  count
    Unsigned 32-bit integer
```

```

drsuapi.DsReplicaCoursor3Ctr.enumeration_context enumeration_context
    Signed 32-bit integer
drsuapi.DsReplicaCoursorCtr.array array
    No value
drsuapi.DsReplicaCoursorCtr.count count
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursorCtr.reserved reserved
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursorEx.coursor coursor
    No value
drsuapi.DsReplicaCoursorEx.time1 time1
    Date/Time stamp
drsuapi.DsReplicaCoursorEx05Ctr.array array
    No value
drsuapi.DsReplicaCoursorEx05Ctr.count count
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursorEx05Ctr.u1 u1
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursorEx05Ctr.u2 u2
    Unsigned 32-bit integer
drsuapi.DsReplicaCoursorEx05Ctr.u3 u3
    Unsigned 32-bit integer
drsuapi.DsReplicaDeleteOptions.DRSUAPI_DS_REPLICA_DELETE_ASYNCHRONOUS_OPERATION
    Boolean
drsuapi.DsReplicaDeleteOptions.DRSUAPI_DS_REPLICA_DELETE_WRITEABLE DRSUAPI_DS_R
    Boolean
drsuapi.DsReplicaGetInfo.bind_handle bind_handle
    Byte array
drsuapi.DsReplicaGetInfo.info info
    Unsigned 32-bit integer
drsuapi.DsReplicaGetInfo.info_type info_type
    Signed 32-bit integer
drsuapi.DsReplicaGetInfo.level level
    Signed 32-bit integer
drsuapi.DsReplicaGetInfo.req req
    Unsigned 32-bit integer
drsuapi.DsReplicaGetInfoRequest.req1 req1
    No value
drsuapi.DsReplicaGetInfoRequest.req2 req2
    No value
drsuapi.DsReplicaGetInfoRequest1.guid1 guid1
drsuapi.DsReplicaGetInfoRequest1.info_type info_type
    Signed 32-bit integer
drsuapi.DsReplicaGetInfoRequest1.object_dn object_dn
    String

```

```
drsuapi.DsReplicaGetInfoRequest2.guid1    guid1
drsuapi.DsReplicaGetInfoRequest2.info_type info_type
Signed 32-bit integer
drsuapi.DsReplicaGetInfoRequest2.object_dn  object_dn
String
drsuapi.DsReplicaGetInfoRequest2.string1   string1
String
drsuapi.DsReplicaGetInfoRequest2.string2   string2
String
drsuapi.DsReplicaGetInfoRequest2.unknown1  unknown1
Unsigned 32-bit integer
drsuapi.DsReplicaGetInfoRequest2.unknown2  unknown2
Unsigned 32-bit integer
drsuapi.DsReplicaInfo.attrvalmetadata     attrvalmetadata
No value
drsuapi.DsReplicaInfo.attrvalmetadata2    attrvalmetadata2
No value
drsuapi.DsReplicaInfo.connectfailures     connectfailures
No value
drsuapi.DsReplicaInfo.connections04      connections04
No value
drsuapi.DsReplicaInfo.cursors             cursors
No value
drsuapi.DsReplicaInfo.cursors05           cursors05
No value
drsuapi.DsReplicaInfo.cursors2            cursors2
No value
drsuapi.DsReplicaInfo.cursors3            cursors3
No value
drsuapi.DsReplicaInfo.i06                 i06
No value
drsuapi.DsReplicaInfo.linkfailures        linkfailures
No value
drsuapi.DsReplicaInfo.neighbours          neighbours
No value
drsuapi.DsReplicaInfo.neighbours02        neighbours02
No value
drsuapi.DsReplicaInfo.objmetadata         objmetadata
No value
drsuapi.DsReplicaInfo.objmetadata2        objmetadata2
No value
drsuapi.DsReplicaInfo.pendingops          pendingops
No value
drsuapi.DsReplicaKccDsaFailure.dsa_obj_dn  dsa_obj_dn
String
```



```
drsuapi.DsReplicaKccDsaFailure.dsa_obj_guid  dsa_obj_guid
drsuapi.DsReplicaKccDsaFailure.first_failure  first_failure
Date/Time stamp
drsuapi.DsReplicaKccDsaFailure.last_result  last_result
Unsigned 32-bit integer
drsuapi.DsReplicaKccDsaFailure.num_failures  num_failures
Unsigned 32-bit integer
drsuapi.DsReplicaKccDsaFailuresCtr.array  array
No value
drsuapi.DsReplicaKccDsaFailuresCtr.count  count
Unsigned 32-bit integer
drsuapi.DsReplicaKccDsaFailuresCtr.reserved  reserved
Unsigned 32-bit integer
drsuapi.DsReplicaModifyOptions.DRSUAPI_DS_REPLICA_MODIFY_ASYNCHRONOUS_OPERATION
Boolean
drsuapi.DsReplicaModifyOptions.DRSUAPI_DS_REPLICA_MODIFY_WRITEABLE  DRSUAPI_DS_R
Boolean
drsuapi.DsReplicaNeighbour.consecutive_sync_failures  consecutive_sync_failures
Unsigned 32-bit integer
drsuapi.DsReplicaNeighbour.highest_usn  highest_usn
Unsigned 64-bit integer
drsuapi.DsReplicaNeighbour.last_attempt  last_attempt
Date/Time stamp
drsuapi.DsReplicaNeighbour.last_success  last_success
Date/Time stamp
drsuapi.DsReplicaNeighbour.naming_context_dn  naming_context_dn
String
drsuapi.DsReplicaNeighbour.naming_context_obj_guid  naming_context_obj_guid
drsuapi.DsReplicaNeighbour.replica_flags  replica_flags
Unsigned 32-bit integer
drsuapi.DsReplicaNeighbour.reserved  reserved
Unsigned 32-bit integer
drsuapi.DsReplicaNeighbour.result_last_attempt  result_last_attempt
Unsigned 32-bit integer
drsuapi.DsReplicaNeighbour.source_dsa_address  source_dsa_address
String
drsuapi.DsReplicaNeighbour.source_dsa_invocation_id  source_dsa_invocation_id
drsuapi.DsReplicaNeighbour.source_dsa_obj_dn  source_dsa_obj_dn
String
drsuapi.DsReplicaNeighbour.source_dsa_obj_guid  source_dsa_obj_guid
drsuapi.DsReplicaNeighbour.tmp_highest_usn  tmp_highest_usn
Unsigned 64-bit integer
drsuapi.DsReplicaNeighbour.transport_obj_dn  transport_obj_dn
String
```

```
drsuapi.DsReplicaNeighbour.transport_obj_guid  transport_obj_guid
drsuapi.DsReplicaNeighbourCtr.array  array
    No value
drsuapi.DsReplicaNeighbourCtr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplicaNeighbourCtr.reserved  reserved
    Unsigned 32-bit integer
drsuapi.DsReplicaObjMetaData.attribute_name  attribute_name
    String
drsuapi.DsReplicaObjMetaData.local_usn  local_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaObjMetaData.originating_dsa_invocation_id  originating_dsa_invo
drsuapi.DsReplicaObjMetaData.originating_last_changed  originating_last_changed
    Date/Time stamp
drsuapi.DsReplicaObjMetaData.originating_usn  originating_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaObjMetaData.version  version
    Unsigned 32-bit integer
drsuapi.DsReplicaObjMetaData2.attribute_name  attribute_name
    String
drsuapi.DsReplicaObjMetaData2.local_usn  local_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaObjMetaData2.originating_dsa_invocation_id  originating_dsa_inv
drsuapi.DsReplicaObjMetaData2.originating_dsa_obj_dn  originating_dsa_obj_dn
    String
drsuapi.DsReplicaObjMetaData2.originating_last_changed  originating_last_changed
    Date/Time stamp
drsuapi.DsReplicaObjMetaData2.originating_usn  originating_usn
    Unsigned 64-bit integer
drsuapi.DsReplicaObjMetaData2.version  version
    Unsigned 32-bit integer
drsuapi.DsReplicaObjMetaData2Ctr.array  array
    No value
drsuapi.DsReplicaObjMetaData2Ctr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplicaObjMetaData2Ctr.enumeration_context  enumeration_context
    Signed 32-bit integer
drsuapi.DsReplicaObjMetaDataCtr.array  array
    No value
drsuapi.DsReplicaObjMetaDataCtr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplicaObjMetaDataCtr.reserved  reserved
    Unsigned 32-bit integer
```

```

drsuapi.DsReplicaOp.nc_dn    nc_dn
    String
drsuapi.DsReplicaOp.nc_obj_guid  nc_obj_guid
drsuapi.DsReplicaOp.operation_start  operation_start
    Date/Time stamp
drsuapi.DsReplicaOp.operation_type  operation_type
    Signed 16-bit integer
drsuapi.DsReplicaOp.options  options
    Unsigned 16-bit integer
drsuapi.DsReplicaOp.priority  priority
    Unsigned 32-bit integer
drsuapi.DsReplicaOp.remote_dsa_address  remote_dsa_address
    String
drsuapi.DsReplicaOp.remote_dsa_obj_dn  remote_dsa_obj_dn
    String
drsuapi.DsReplicaOp.remote_dsa_obj_guid  remote_dsa_obj_guid
drsuapi.DsReplicaOp.serial_num  serial_num
    Unsigned 32-bit integer
drsuapi.DsReplicaOpCtr.array  array
    No value
drsuapi.DsReplicaOpCtr.count  count
    Unsigned 32-bit integer
drsuapi.DsReplicaOpCtr.time  time
    Date/Time stamp
drsuapi.DsReplicaSync.bind_handle  bind_handle
    Byte array
drsuapi.DsReplicaSync.level  level
    Signed 32-bit integer
drsuapi.DsReplicaSync.req  req
    Unsigned 32-bit integer
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_ABANDONED  DRSUAPI_DS_REPLI
    Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_ADD_REFERENCE  DRSUAPI_DS_R
    Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_ALL_SOURCES  DRSUAPI_DS_REP
    Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_ASYNCHRONOUS_OPERATION  DRS
    Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_ASYNCHRONOUS_REPLICA  DRSUA
    Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_CRITICAL  DRSUAPI_DS_REPLIC
    Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_FORCE  DRSUAPI_DS_REPLICA_S
    Boolean

```

```

drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_FULL    DRSUAPI_DS_REPLICA_SY
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_FULL_IN_PROGRESS    DRSUAPI_D
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_INITIAL    DRSUAPI_DS_REPLICA
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_INITIAL_IN_PROGRESS    DRSUAP
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_INTERSITE_MESSAGING    DRSUAP
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_NEVER_COMPLETED    DRSUAPI_DS
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_NEVER_NOTIFY    DRSUAPI_DS_RE
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_NOTIFICATION    DRSUAPI_DS_RE
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_NO_DISCARD    DRSUAPI_DS_REPL
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_PARTIAL_ATTRIBUTE_SET    DRSU
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_PERIODIC    DRSUAPI_DS_REPLIC
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_PREEMPTED    DRSUAPI_DS_REPLI
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_QUEUEUE    DRSUAPI_DS_REPLICA
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_TWO_WAY    DRSUAPI_DS_REPLICA
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_URGENT    DRSUAPI_DS_REPLICA_
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_USE_COMPRESSION    DRSUAPI_DS
Boolean
drsuapi.DsReplicaSyncOptions.DRSUAPI_DS_REPLICA_SYNC_WRITEABLE    DRSUAPI_DS_REPLI
Boolean
drsuapi.DsReplicaSyncRequest.req1    req1
No value
drsuapi.DsReplicaSyncRequest1.guid1    guid1
drsuapi.DsReplicaSyncRequest1.info    info
No value
drsuapi.DsReplicaSyncRequest1.options    options
Unsigned 32-bit integer
drsuapi.DsReplicaSyncRequest1.string1    string1
String
drsuapi.DsReplicaSyncRequest1Info.byte_array    byte_array
Unsigned 8-bit integer

```

```

drsuapi.DsReplicaSyncRequest1Info.guid1    guid1
drsuapi.DsReplicaSyncRequest1Info.nc_dn    nc_dn
String
drsuapi.DsReplicaSyncRequest1Info.str_len  str_len
Unsigned 32-bit integer
drsuapi.DsReplicaSyncRequest1Info.unknown1 unknown1
Unsigned 32-bit integer
drsuapi.DsReplicaSyncRequest1Info.unknown2 unknown2
Unsigned 32-bit integer
drsuapi.DsReplicaUpdateRefs.bind_handle   bind_handle
Byte array
drsuapi.DsReplicaUpdateRefs.level         level
Signed 32-bit integer
drsuapi.DsReplicaUpdateRefs.req          req
Unsigned 32-bit integer
drsuapi.DsReplicaUpdateRefsOptions.DRSUAPI_DS_REPLICA_UPDATE_0x00000010  DRSUAPI_
Boolean
drsuapi.DsReplicaUpdateRefsOptions.DRSUAPI_DS_REPLICA_UPDATE_ADD_REFERENCE  DRSUAPI_
Boolean
drsuapi.DsReplicaUpdateRefsOptions.DRSUAPI_DS_REPLICA_UPDATE_ASYNCHRONOUS_OPERAT
Boolean
drsuapi.DsReplicaUpdateRefsOptions.DRSUAPI_DS_REPLICA_UPDATE_DELETE_REFERENCE  D
Boolean
drsuapi.DsReplicaUpdateRefsOptions.DRSUAPI_DS_REPLICA_UPDATE_WRITEABLE  DRSUAPI_
Boolean
drsuapi.DsReplicaUpdateRefsRequest.req1   req1
No value
drsuapi.DsReplicaUpdateRefsRequest1.dest_dsa_dns_name  dest_dsa_dns_name
String
drsuapi.DsReplicaUpdateRefsRequest1.dest_dsa_guid     dest_dsa_guid
drsuapi.DsReplicaUpdateRefsRequest1.options          options
Unsigned 32-bit integer
drsuapi.DsReplicaUpdateRefsRequest1.sync_req_info1   sync_req_info1
No value
drsuapi.DsReplicaUpdateRefsRequest1.unknown1        unknown1
Unsigned 32-bit integer
drsuapi.DsReplicaUpdateRefsRequest1.unknown2        unknown2
Unsigned 32-bit integer
drsuapi.DsRplicaOpOptions.add                add
Unsigned 32-bit integer
drsuapi.DsRplicaOpOptions.delete            delete
Unsigned 32-bit integer
drsuapi.DsRplicaOpOptions.modify            modify
Unsigned 32-bit integer

```

```

drsuapi.DsRplicaOpOptions.sync    sync
    Unsigned 32-bit integer
drsuapi.DsRplicaOpOptions.unknown  unknown
    Unsigned 32-bit integer
drsuapi.DsRplicaOpOptions.update_refs  update_refs
    Unsigned 32-bit integer
drsuapi.DsUnbind.bind_handle  bind_handle
    Byte array
drsuapi.DsWriteAccountSpn.bind_handle  bind_handle
    Byte array
drsuapi.DsWriteAccountSpn.level  level
    Signed 32-bit integer
drsuapi.DsWriteAccountSpn.req  req
    Unsigned 32-bit integer
drsuapi.DsWriteAccountSpn.res  res
    Unsigned 32-bit integer
drsuapi.DsWriteAccountSpnRequest.req1  req1
    No value
drsuapi.DsWriteAccountSpnRequest1.count  count
    Unsigned 32-bit integer
drsuapi.DsWriteAccountSpnRequest1.object_dn  object_dn
    String
drsuapi.DsWriteAccountSpnRequest1.operation  operation
    Signed 32-bit integer
drsuapi.DsWriteAccountSpnRequest1.spn_names  spn_names
    No value
drsuapi.DsWriteAccountSpnRequest1.unknown1  unknown1
    Unsigned 32-bit integer
drsuapi.DsWriteAccountSpnResult.res1  res1
    No value
drsuapi.DsWriteAccountSpnResult1.status  status
    Unsigned 32-bit integer
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_00000080  DRSUAPI_SUPPOR
    Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_00100000  DRSUAPI_SUPPOR
    Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_20000000  DRSUAPI_SUPPOR
    Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_40000000  DRSUAPI_SUPPOR
    Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_80000000  DRSUAPI_SUPPOR
    Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_ADDENTRYREPLY_V3  DRSUAP
    Boolean

```

```
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_ADDENTRY_V2   DRSUAPI_SUP  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_ADD_SID_HISTORY   DRSUAPI  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_ASYNC_REPLICATION   DRSUA  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_BASE   DRSUAPI_SUPPORTED_  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_CRYPTO_BIND   DRSUAPI_SUP  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_DCINFO_V01   DRSUAPI_SUPP  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_DCINFO_V1   DRSUAPI_SUPPO  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_DCINFO_V2   DRSUAPI_SUPPO  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GETCHGREPLY_V5   DRSUAPI_  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GETCHGREPLY_V6   DRSUAPI_  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GETCHGREPLY_V7   DRSUAPI_  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GETCHGREQ_V6   DRSUAPI_SU  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GETCHGREQ_V8   DRSUAPI_SU  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GETCHG_COMPRESS   DRSUAPI  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GET_MEMBERSHIPS2   DRSUAP  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_GET_REPL_INFO   DRSUAPI_S  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_INSTANCE_TYPE_NOT_REQ_ON  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_KCC_EXECUTE   DRSUAPI_SUP  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_LINKED_VALUE_REPLICATION  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_MOVEREQ_V2   DRSUAPI_SUPP  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_NONDOMAIN_NCS   DRSUAPI_S  
Boolean  
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_POST_BETA3   DRSUAPI_SUPP  
Boolean
```

```

drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_REMOVEAPI  DRSUAPI_SUPPO
  Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_RESTORE_USN_OPTIMIZATION
  Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_STRONG_ENCRYPTION  DRSUA
  Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_TRANSITIVE_MEMBERSHIP  D
  Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_VERIFY_OBJECT  DRSUAPI_S
  Boolean
drsuapi.SupportedExtensions.DRSUAPI_SUPPORTED_EXTENSION_XPRESS_COMPRESS  DRSUAPI
  Boolean
drsuapi.opnum  Operation
  Unsigned 16-bit integer
drsuapi.rc  Return code
  Unsigned 32-bit integer

```

**Data (data)**

```

data.data  Data
  Byte array

```

**Data Link SWitching (dlsw)****Data Stream Interface (dsi)**

```

dsi.attn_flag  Flags
  Unsigned 16-bit integer
  Server attention flag
dsi.attn_flag.crash  Crash
  Boolean
  Attention flag, server crash bit
dsi.attn_flag.msg  Message
  Boolean
  Attention flag, server message bit
dsi.attn_flag.reconnect  Don't reconnect
  Boolean
  Attention flag, don't reconnect bit
dsi.attn_flag.shutdown  Shutdown
  Boolean
  Attention flag, server is shutting down
dsi.attn_flag.time  Minutes
  Unsigned 16-bit integer
  Number of minutes
dsi.command  Command
  Unsigned 8-bit integer
  Represents a DSI command.

```



`dsi.data_offset` Data offset  
Signed 32-bit integer  
Data offset

`dsi.error_code` Error code  
Signed 32-bit integer  
Error code

`dsi.flags` Flags  
Unsigned 8-bit integer  
Indicates request or reply.

`dsi.length` Length  
Unsigned 32-bit integer  
Total length of the data that follows the DSI header.

`dsi.open_len` Length  
Unsigned 8-bit integer  
Open session option len

`dsi.open_option` Option  
Byte array  
Open session options (undecoded)

`dsi.open_quantum` Quantum  
Unsigned 32-bit integer  
Server/Attention quantum

`dsi.open_type` Flags  
Unsigned 8-bit integer  
Open session option type.

`dsi.requestid` Request ID  
Unsigned 16-bit integer  
Keeps track of which request this is. Replies must match a Request. IDs mu

`dsi.reserved` Reserved  
Unsigned 32-bit integer  
Reserved for future use. Should be set to zero.

`dsi.server_addr.len` Length  
Unsigned 8-bit integer  
Address length.

`dsi.server_addr.type` Type  
Unsigned 8-bit integer  
Address type.

`dsi.server_addr.value` Value  
Byte array  
Address value

`dsi.server_directory` Directory service  
String  
Server directory service

`dsi.server_flag` Flag  
Unsigned 16-bit integer  
Server capabilities flag

`dsi.server_flag.copyfile` Support copyfile  
Boolean  
Server support copyfile

```
dsi.server_flag.directory  Support directory services
    Boolean
    Server support directory services
dsi.server_flag.fast_copy  Support fast copy
    Boolean
    Server support fast copy
dsi.server_flag.no_save_passwd  Don't allow save password
    Boolean
    Don't allow save password
dsi.server_flag.notify  Support server notifications
    Boolean
    Server support notifications
dsi.server_flag.passwd  Support change password
    Boolean
    Server support change password
dsi.server_flag.reconnect  Support server reconnect
    Boolean
    Server support reconnect
dsi.server_flag.srv_msg  Support server message
    Boolean
    Support server message
dsi.server_flag.srv_sig  Support server signature
    Boolean
    Support server signature
dsi.server_flag.tcpip  Support TCP/IP
    Boolean
    Server support TCP/IP
dsi.server_flag.utf8_name  Support UTF8 server name
    Boolean
    Server support UTF8 server name
dsi.server_flag.uuids  Support UUIDs
    Boolean
    Server supports UUIDs
dsi.server_icon  Icon bitmap
    Byte array
    Server icon bitmap
dsi.server_name  Server name
    String
    Server name
dsi.server_signature  Server signature
    Byte array
    Server signature
dsi.server_type  Server type
    String
    Server type
dsi.server_uams  UAM
    String
    UAM
```

```
dsi.server_vers  AFP version
                 String
                 AFP version
dsi.utf8_server_name  UTF8 Server name
                     String
                     UTF8 Server name
dsi.utf8_server_name_len  Length
                          Unsigned 16-bit integer
                          UTF8 server name length.
```

**Datagram Congestion Control Protocol (dccp)**

```
dccp.ack  Acknowledgement Number
          Unsigned 64-bit integer
dccp.ack_res  Reserved
             Unsigned 16-bit integer
dccp.ccval  CCVal
           Unsigned 8-bit integer
dccp.checksum  Checksum
              Unsigned 16-bit integer
dccp.checksum_bad  Bad Checksum
                  Boolean
dccp.checksum_data  Data Checksum
                   Unsigned 32-bit integer
dccp.cscov  Checksum Coverage
           Unsigned 8-bit integer
dccp.data1  Data 1
           Unsigned 8-bit integer
dccp.data2  Data 2
           Unsigned 8-bit integer
dccp.data3  Data 3
           Unsigned 8-bit integer
dccp.data_offset  Data Offset
                 Unsigned 8-bit integer
dccp.dstport  Destination Port
             Unsigned 16-bit integer
dccp.elapsed_time  Elapsed Time
                  Unsigned 32-bit integer
dccp.feature_number  Feature Number
                    Unsigned 8-bit integer
dccp.malformed  Malformed
               Boolean
dccp.ndp_count  NDP Count
               Unsigned 64-bit integer
dccp.option_type  Option Type
                 Unsigned 8-bit integer
```

```
dccp.options  Options
               No value
               DCCP Options fields

dccp.port     Source or Destination Port
               Unsigned 16-bit integer

dccp.res1     Reserved
               Unsigned 8-bit integer

dccp.res2     Reserved
               Unsigned 8-bit integer

dccp.reset_code  Reset Code
               Unsigned 8-bit integer

dccp.seq      Sequence Number
               Unsigned 64-bit integer

dccp.service_code  Service Code
               Unsigned 32-bit integer

dccp.srcport  Source Port
               Unsigned 16-bit integer

dccp.timestamp  Timestamp
               Unsigned 32-bit integer

dccp.timestamp_echo  Timestamp Echo
               Unsigned 32-bit integer

dccp.type     Type
               Unsigned 8-bit integer

dccp.x        Extended Sequence Numbers
               Boolean
```

#### **Datagram Delivery Protocol (ddp)**

```
ddp.checksum  Checksum
               Unsigned 16-bit integer

ddp.dst       Destination address
               String

ddp.dst.net   Destination Net
               Unsigned 16-bit integer

ddp.dst.node  Destination Node
               Unsigned 8-bit integer

ddp.dst_socket  Destination Socket
               Unsigned 8-bit integer

ddp.hopcount  Hop count
               Unsigned 8-bit integer

ddp.len       Datagram length
               Unsigned 16-bit integer

ddp.src       Source address
               String

ddp.src.net   Source Net
               Unsigned 16-bit integer
```

ddp.src.node Source Node  
Unsigned 8-bit integer

ddp.src\_socket Source Socket  
Unsigned 8-bit integer

ddp.type Protocol type  
Unsigned 8-bit integer

#### **Datagram Transport Layer Security (dtls)**

dtls.alert\_message Alert Message  
No value  
Alert message

dtls.alert\_message.desc Description  
Unsigned 8-bit integer  
Alert message description

dtls.alert\_message.level Level  
Unsigned 8-bit integer  
Alert message level

dtls.app\_data Encrypted Application Data  
Byte array  
Payload is encrypted application data

dtls.change\_cipher\_spec Change Cipher Spec Message  
No value  
Signals a change in cipher specifications

dtls.fragment Message fragment  
Frame number

dtls.fragment.error Message defragmentation error  
Frame number

dtls.fragment.multiple\_tails Message has multiple tail fragments  
Boolean

dtls.fragment.overlap Message fragment overlap  
Boolean

dtls.fragment.overlap.conflicts Message fragment overlapping with conflicting d  
Boolean

dtls.fragment.too\_long\_fragment Message fragment too long  
Boolean

dtls.fragments Message fragments  
No value

dtls.handshake Handshake Protocol  
No value  
Handshake protocol message

dtls.handshake.cert\_type Certificate type  
Unsigned 8-bit integer  
Certificate type

dtls.handshake.cert\_types Certificate types  
No value  
List of certificate types

dtls.handshake.cert\_types\_count Certificate types count  
Unsigned 8-bit integer  
Count of certificate types

dtls.handshake.certificate Certificate  
Byte array  
Certificate

dtls.handshake.certificate\_length Certificate Length  
Unsigned 24-bit integer  
Length of certificate

dtls.handshake.certificates Certificates  
No value  
List of certificates

dtls.handshake.certificates\_length Certificates Length  
Unsigned 24-bit integer  
Length of certificates field

dtls.handshake.cipher\_suites\_length Cipher Suites Length  
Unsigned 16-bit integer  
Length of cipher suites field

dtls.handshake.ciphersuite Cipher Suite  
Unsigned 16-bit integer  
Cipher suite

dtls.handshake.ciphersuites Cipher Suites  
No value  
List of cipher suites supported by client

dtls.handshake.comp\_method Compression Method  
Unsigned 8-bit integer  
Compression Method

dtls.handshake.comp\_methods Compression Methods  
No value  
List of compression methods supported by client

dtls.handshake.comp\_methods\_length Compression Methods Length  
Unsigned 8-bit integer  
Length of compression methods field

dtls.handshake.cookie Cookie  
No value  
Cookie

dtls.handshake.cookie\_length Cookie Length  
Unsigned 8-bit integer  
Length of the cookie field

dtls.handshake.dname Distinguished Name  
Byte array  
Distinguished name of a CA that server trusts

dtls.handshake.dname\_len Distinguished Name Length  
Unsigned 16-bit integer  
Length of distinguished name

dtls.handshake.dnames Distinguished Names  
No value  
List of CAs that server trusts

```
dtls.handshake.dnames_len  Distinguished Names Length
    Unsigned 16-bit integer
    Length of list of CAs that server trusts

dtls.handshake.extension.data  Data
    Byte array
    Hello Extension data

dtls.handshake.extension.len  Length
    Unsigned 16-bit integer
    Length of a hello extension

dtls.handshake.extension.type  Type
    Unsigned 16-bit integer
    Hello extension type

dtls.handshake.extensions_length  Extensions Length
    Unsigned 16-bit integer
    Length of hello extensions

dtls.handshake.fragment_length  Fragment Length
    Unsigned 24-bit integer
    Fragment length of handshake message

dtls.handshake.fragment_offset  Fragment Offset
    Unsigned 24-bit integer
    Fragment offset of handshake message

dtls.handshake.length  Length
    Unsigned 24-bit integer
    Length of handshake message

dtls.handshake.md5_hash  MD5 Hash
    No value
    Hash of messages, master_secret, etc.

dtls.handshake.message_seq  Message Sequence
    Unsigned 16-bit integer
    Message sequence of handshake message

dtls.handshake.random  Random.bytes
    No value
    Random challenge used to authenticate server

dtls.handshake.random_time  Random.gmt_unix_time
    Date/Time stamp
    Unix time field of random structure

dtls.handshake.session_id  Session ID
    Byte array
    Identifies the DTLS session, allowing later resumption

dtls.handshake.session_id_length  Session ID Length
    Unsigned 8-bit integer
    Length of session ID field

dtls.handshake.sha_hash  SHA-1 Hash
    No value
    Hash of messages, master_secret, etc.

dtls.handshake.type  Handshake Type
    Unsigned 8-bit integer
    Type of handshake message
```

```

dtls.handshake.verify_data  Verify Data
    No value
    Opaque verification data

dtls.handshake.version  Version
    Unsigned 16-bit integer
    Maximum version supported by client

dtls.reassembled.in  Reassembled in
    Frame number

dtls.record  Record Layer
    No value
    Record layer

dtls.record.content_type  Content Type
    Unsigned 8-bit integer
    Content type

dtls.record.epoch  Epoch
    Unsigned 16-bit integer
    Epoch

dtls.record.length  Length
    Unsigned 16-bit integer
    Length of DTLS record data

dtls.record.sequence_number  Sequence Number
    Double-precision floating point
    Sequence Number

dtls.record.version  Version
    Unsigned 16-bit integer
    Record layer version.

```

**Daytime Protocol (daytime)**

```

daytime.string  Daytime
    String
    String containing time and date

```

**Decompressed SigComp message as raw text (raw\_sigcomp)****DeskTop PassThrough Protocol (dtpt)**

```

dtpt.blob.cbSize  cbSize
    Unsigned 32-bit integer
    cbSize field in BLOB

dtpt.blob.data  Data
    Byte array
    Blob Data Block

dtpt.blob.data_length  Length
    Unsigned 32-bit integer
    Length of the Blob Data Block

dtpt.blob.pBlobData  pBlobData
    Unsigned 32-bit integer
    pBlobData field in BLOB

```



```
dtpt.blob_size  Blob Size
  Unsigned 32-bit integer
  Size of the binary BLOB

dtpt.buffer_size  Buffer Size
  Unsigned 32-bit integer
  Buffer Size

dtpt.comment  Comment
  String
  Comment

dtpt.context  Context
  String
  Context

dtpt.cs_addr.local  Local Address
  Unsigned 32-bit integer
  Local Address

dtpt.cs_addr.local_length  Local Address Length
  Unsigned 32-bit integer
  Local Address Pointer

dtpt.cs_addr.local_pointer  Local Address Pointer
  Unsigned 32-bit integer
  Local Address Pointer

dtpt.cs_addr.remote  Remote Address
  Unsigned 32-bit integer
  Remote Address

dtpt.cs_addr.remote_length  Remote Address Length
  Unsigned 32-bit integer
  Remote Address Pointer

dtpt.cs_addr.remote_pointer  Remote Address Pointer
  Unsigned 32-bit integer
  Remote Address Pointer

dtpt.cs_addrs.length1  Length of CS Addresses Part 1
  Unsigned 32-bit integer
  Length of CS Addresses Part 1

dtpt.cs_addrs.number  Number of CS Addresses
  Unsigned 32-bit integer
  Number of CS Addresses

dtpt.cs_addrs.protocol  Protocol
  Unsigned 32-bit integer
  Protocol

dtpt.cs_addrs.socket_type  Socket Type
  Unsigned 32-bit integer
  Socket Type

dtpt.data_size  Data Size
  Unsigned 32-bit integer
  Data Size

dtpt.error  Last Error
  Unsigned 32-bit integer
  Last Error
```

```
dtpt.flags  ControlFlags
    Unsigned 32-bit integer
    ControlFlags as documented for WSALookupServiceBegin

dtpt.flags.containers  CONTAINERS
    Boolean
    CONTAINERS

dtpt.flags.deep  DEEP
    Boolean
    DEEP

dtpt.flags.flushcache  FLUSHCACHE
    Boolean
    FLUSHCACHE

dtpt.flags.flushprevious  FLUSHPREVIOUS
    Boolean
    FLUSHPREVIOUS

dtpt.flags.nearest  NEAREST
    Boolean
    NEAREST

dtpt.flags.nocontainers  NOCONTAINERS
    Boolean
    NOCONTAINERS

dtpt.flags.res_service  RES_SERVICE
    Boolean
    RES_SERVICE

dtpt.flags.return_addr  RETURN_ADDR
    Boolean
    RETURN_ADDR

dtpt.flags.return_aliases  RETURN_ALIASES
    Boolean
    RETURN_ALIASES

dtpt.flags.return_blob  RETURN_BLOB
    Boolean
    RETURN_BLOB

dtpt.flags.return_comment  RETURN_COMMENT
    Boolean
    RETURN_COMMENT

dtpt.flags.return_name  RETURN_NAME
    Boolean
    RETURN_NAME

dtpt.flags.return_query_string  RETURN_QUERY_STRING
    Boolean
    RETURN_QUERY_STRING

dtpt.flags.return_type  RETURN_TYPE
    Boolean
    RETURN_TYPE

dtpt.flags.return_version  RETURN_VERSION
    Boolean
    RETURN_VERSION
```

```
dtpt.guid.data    Data
    GUID Data
dtpt.guid.length  Length
    Unsigned 32-bit integer
    GUID Length
dtpt.handle       Handle
    Unsigned 64-bit integer
    Lookup handle
dtpt.lpszComment  lpszComment
    Unsigned 32-bit integer
    lpszComment field in WSAQUERYSET
dtpt.message_type Message Type
    Unsigned 8-bit integer
    Packet Message Type
dtpt.ns_provider_id NS Provider ID
    NS Provider ID
dtpt.payload_size Payload Size
    Unsigned 32-bit integer
    Payload Size of the following packet containing a serialized WSAQUERYSET
dtpt.protocol.family Family
    Unsigned 32-bit integer
    Protocol Family
dtpt.protocol.protocol Protocol
    Unsigned 32-bit integer
    Protocol Protocol
dtpt.protocols.length Length of Protocols
    Unsigned 32-bit integer
    Length of Protocols
dtpt.protocols.number Number of Protocols
    Unsigned 32-bit integer
    Number of Protocols
dtpt.query_string Query String
    String
    Query String
dtpt.queryset.dwNameSpace dwNameSpace
    Unsigned 32-bit integer
    dwNameSpace field in WSAQUERYSE
dtpt.queryset.dwNumberOfCsAddrs dwNumberOfCsAddrs
    Unsigned 32-bit integer
    dwNumberOfCsAddrs field in WSAQUERYSET
dtpt.queryset.dwNumberOfProtocols dwNumberOfProtocols
    Unsigned 32-bit integer
    dwNumberOfProtocols field in WSAQUERYSET
dtpt.queryset.dwOutputFlags dwOutputFlags
    Unsigned 32-bit integer
    dwOutputFlags field in WSAQUERYSET
```

```
dtpt.queryset.dwSize  dwSize
    Unsigned 32-bit integer
    dwSize field in WSAQUERYSET

dtpt.queryset.lpBlob  lpBlob
    Unsigned 32-bit integer
    lpBlob field in WSAQUERYSET

dtpt.queryset.lpNSProviderId  lpNSProviderId
    Unsigned 32-bit integer
    lpNSProviderId field in WSAQUERYSET

dtpt.queryset.lpServiceClassId  lpServiceClassId
    Unsigned 32-bit integer
    lpServiceClassId in the WSAQUERYSET

dtpt.queryset.lpVersion  lpVersion
    Unsigned 32-bit integer
    lpVersion in WSAQUERYSET

dtpt.queryset.lpapfpProtocols  lpapfpProtocols
    Unsigned 32-bit integer
    lpapfpProtocols field in WSAQUERYSET

dtpt.queryset.lpcsabuffer  lpcsabuffer
    Unsigned 32-bit integer
    lpcsabuffer field in WSAQUERYSET

dtpt.queryset.lpszContext  lpszContext
    Unsigned 32-bit integer
    lpszContext field in WSAQUERYSET

dtpt.queryset.lpszQueryString  lpszQueryString
    Unsigned 32-bit integer
    lpszQueryString field in WSAQUERYSET

dtpt.queryset.lpszServiceInstanceName  lpszServiceInstanceName
    Unsigned 32-bit integer
    lpszServiceInstanceName field in WSAQUERYSET

dtpt.queryset_size  QuerySet Size
    Unsigned 32-bit integer
    Size of the binary WSAQUERYSET

dtpt.service_class_id  Service Class ID
    Service Class ID

dtpt.service_instance_name  Service Instance Name
    String
    Service Instance Name

dtpt.sockaddr.address  Address
    IPv4 address
    Socket Address Address

dtpt.sockaddr.family  Family
    Unsigned 16-bit integer
    Socket Address Family

dtpt.sockaddr.length  Length
    Unsigned 16-bit integer
    Socket Address Length
```

```
dtpt.sockaddr.port  Port
    Unsigned 16-bit integer
    Socket Address Port

dtpt.version  Version
    Unsigned 8-bit integer
    Protocol Version

dtpt.wstring.data  Data
    String
    String Data

dtpt.wstring.length  Length
    Unsigned 32-bit integer
    String Length
```

**Diameter 3GPP (diameter3gpp)**

```
diameter.3gpp.ipaddr  IPv4 Address
    IPv4 address
    IPv4 Address

diameter.3gpp.mbms_required_qos_prio  Allocation/Retention Priority
    Unsigned 8-bit integer
    Allocation/Retention Priority

diameter.3gpp.mbms_service_id  MBMS Service ID
    Unsigned 24-bit integer
    MBMS Service ID

diameter.3gpp.tmgi  TMGI
    Byte array
    TMGI
```

**Diameter Protocol (diameter)**

```
diameter.3GPP-IMEISV  3GPP-IMEISV
    Byte array
    vendor=10415 code=20

diameter.3GPP-IMSI  3GPP-IMSI
    String
    vendor=10415 code=1

diameter.3GPP-MSTimeZone  3GPP-MSTimeZone
    Byte array
    vendor=10415 code=23

diameter.3GPP-RAT-Type  3GPP-RAT-Type
    Byte array
    vendor=10415 code=21

diameter.3GPP-SGSN-IPv6-Address  3GPP-SGSN-IPv6-Address
    Byte array
    vendor=10415 code=15

diameter.3GPP-SGSNAddress  3GPP-SGSNAddress
    Byte array
    vendor=10415 code=6
```

```
diameter.3GPP-User-Location-Info  3GPP-User-Location-Info
  Byte array
  vendor=10415 code=22

diameter.AF-Application-Identifier  AF-Application-Identifier
  Byte array
  vendor=10415 code=504

diameter.AF-Charging-Identifier  AF-Charging-Identifier
  Byte array
  vendor=10415 code=505

diameter.ARAP-Challenge-Response  ARAP-Challenge-Response
  Byte array
  code=84

diameter.ARAP-Features  ARAP-Features
  Byte array
  code=71

diameter.ARAP-Password  ARAP-Password
  Byte array
  code=70

diameter.ARAP-Security  ARAP-Security
  Signed 32-bit integer
  code=73

diameter.ARAP-Security-Data  ARAP-Security-Data
  Byte array
  code=74

diameter.ARAP-Zone-Access  ARAP-Zone-Access
  Signed 32-bit integer
  code=72

diameter.Abort-Cause  Abort-Cause
  Unsigned 32-bit integer
  vendor=10415 code=500

diameter.Acc-Service-Type  Acc-Service-Type
  Unsigned 32-bit integer
  vendor=193 code=261

diameter.Access-Network-Charging-Address  Access-Network-Charging-Address
  Byte array
  vendor=10415 code=501

diameter.Access-Network-Charging-Address.addr_family  Access-Network-Charging-Ad
  Unsigned 16-bit integer

diameter.Access-Network-Charging-Identifier  Access-Network-Charging-Identifier
  Byte array
  vendor=10415 code=502

diameter.Access-Network-Charging-Identifier-Value  Access-Network-Charging-Ident
  Byte array
  vendor=10415 code=503

diameter.Access-Network-Information  Access-Network-Information
  Byte array
  vendor=10415 code=1263
```

```
diameter.Access-Network-Type  Access-Network-Type
    Byte array
    vendor=13019 code=306

diameter.Accounting-Auth-Method  Accounting-Auth-Method
    Unsigned 32-bit integer
    code=406

diameter.Accounting-Input-Octets  Accounting-Input-Octets
    Unsigned 64-bit integer
    code=363

diameter.Accounting-Input-Packets  Accounting-Input-Packets
    Unsigned 64-bit integer
    code=365

diameter.Accounting-Multi-Session-Id  Accounting-Multi-Session-Id
    Byte array
    code=50

diameter.Accounting-Output-Octets  Accounting-Output-Octets
    Unsigned 64-bit integer
    code=364

diameter.Accounting-Output-Packets  Accounting-Output-Packets
    Unsigned 64-bit integer
    code=366

diameter.Accounting-Realtime-Required  Accounting-Realtime-Required
    Unsigned 32-bit integer
    code=483

diameter.Accounting-Record-Number  Accounting-Record-Number
    Unsigned 32-bit integer
    code=485

diameter.Accounting-Record-Type  Accounting-Record-Type
    Unsigned 32-bit integer
    code=480

diameter.Accounting-Session-Id  Accounting-Session-Id
    Unsigned 32-bit integer
    code=44

diameter.Accounting-Sub-Session-Id  Accounting-Sub-Session-Id
    Unsigned 64-bit integer
    code=287

diameter.Acct-Application-Id  Acct-Application-Id
    Signed 32-bit integer
    code=259

diameter.Acct-Authentic  Acct-Authentic
    Unsigned 32-bit integer
    code=45

diameter.Acct-Delay-Time  Acct-Delay-Time
    Signed 32-bit integer
    code=41

diameter.Acct-Input-Gigawords  Acct-Input-Gigawords
    Signed 32-bit integer
    code=52
```

```
diameter.Acct-Input-Octets  Acct-Input-Octets
Signed 32-bit integer
code=42

diameter.Acct-Input-Packets  Acct-Input-Packets
Signed 32-bit integer
code=47

diameter.Acct-Interim-Interval  Acct-Interim-Interval
Signed 32-bit integer
code=85

diameter.Acct-Link-Count  Acct-Link-Count
Signed 32-bit integer
code=51

diameter.Acct-Output-Gigawords  Acct-Output-Gigawords
Signed 32-bit integer
code=53

diameter.Acct-Output-Octets  Acct-Output-Octets
Signed 32-bit integer
code=43

diameter.Acct-Output-Packets  Acct-Output-Packets
Signed 32-bit integer
code=48

diameter.Acct-Session-Time  Acct-Session-Time
Signed 32-bit integer
code=46

diameter.Acct-Status-Type  Acct-Status-Type
Unsigned 32-bit integer
code=40

diameter.Acct-Terminate-Cause  Acct-Terminate-Cause
Unsigned 32-bit integer
code=49

diameter.Acct-Tunnel-Client-Endpoint  Acct-Tunnel-Client-Endpoint
Byte array
code=66

diameter.Acct-Tunnel-Connection-ID  Acct-Tunnel-Connection-ID
Byte array
code=68

diameter.Adaptations  Adaptations
Unsigned 32-bit integer
vendor=10415 code=1217

diameter.Additional-MBMS-Trace-Info  Additional-MBMS-Trace-Info
Byte array
vendor=10415 code=910

diameter.Additional-Type-Information  Additional-Type-Information
String
vendor=10415 code=1205

diameter.Address-Data  Address-Data
String
vendor=10415 code=897
```



```
diameter.Address-Domain  Address-Domain
    Byte array
    vendor=10415 code=898

diameter.Address-Realm  Address-Realm
    Byte array
    vendor=13019 code=301

diameter.Address-Type  Address-Type
    Unsigned 32-bit integer
    vendor=10415 code=899

diameter.Aggregation-Network-Type  Aggregation-Network-Type
    Unsigned 32-bit integer
    vendor=13019 code=307

diameter.Alternate-Peer  Alternate-Peer
    String
    code=275

diameter.Alternative-APN  Alternative-APN
    String
    vendor=10415 code=905

diameter.Applic-ID  Applic-ID
    String
    vendor=10415 code=1218

diameter.Application-Class-ID  Application-Class-ID
    String
    vendor=13019 code=312

diameter.Application-Server  Application-Server
    String
    vendor=10415 code=836

diameter.Application-Server-Information  Application-Server-Information
    Byte array
    vendor=10415 code=850

diameter.Application-provided-Called-Party-Address  Application-provided-Called-
    String
    vendor=10415 code=837

diameter.Associated-Identities  Associated-Identities
    Byte array
    vendor=10415 code=632

diameter.Auth-Application-Id  Auth-Application-Id
    Signed 32-bit integer
    code=258

diameter.Auth-Grace-Period  Auth-Grace-Period
    Unsigned 32-bit integer
    code=276

diameter.Auth-Request-Type  Auth-Request-Type
    Unsigned 32-bit integer
    code=274

diameter.Auth-Session-State  Auth-Session-State
    Unsigned 32-bit integer
    code=277
```

```
diameter.Authorised-QoS Authorised-QoS
String
vendor=10415 code=849

diameter.Authorization-Lifetime Authorization-Lifetime
Signed 32-bit integer
code=291

diameter.Authorization-Token Authorization-Token
Byte array
vendor=10415 code=506

diameter.Aux-Applic-Info Aux-Applic-Info
String
vendor=10415 code=1219

diameter.Base-Time-Interval Base-Time-Interval
Unsigned 32-bit integer
vendor=10415 code=1265

diameter.Bearer-Service Bearer-Service
Byte array
vendor=10415 code=854

diameter.Bearer-Usage Bearer-Usage
Unsigned 32-bit integer
vendor=10415 code=1000

diameter.Billing-Information Billing-Information
String
vendor=10415 code=1115

diameter.Binding-Input-List Binding-Input-List
Byte array
vendor=13019 code=451

diameter.Binding-Output-List Binding-Output-List
Byte array
vendor=13019 code=452

diameter.Binding-information Binding-information
Byte array
vendor=13019 code=450

diameter.BootstrapInfoCreationTime BootstrapInfoCreationTime
Unsigned 32-bit integer
vendor=10415 code=408

diameter.CC-Correlation-Id CC-Correlation-Id
Byte array
code=411

diameter.CC-Input-Octets CC-Input-Octets
Unsigned 64-bit integer
code=412

diameter.CC-Money CC-Money
Byte array
code=413

diameter.CC-Output-Octets CC-Output-Octets
Unsigned 64-bit integer
code=414
```

```
diameter.CC-Request-Number  CC-Request-Number
    Unsigned 32-bit integer
    code=415

diameter.CC-Request-Type  CC-Request-Type
    Unsigned 32-bit integer
    code=416

diameter.CC-Service-Specific-Units  CC-Service-Specific-Units
    Unsigned 64-bit integer
    code=417

diameter.CC-Session-Failover  CC-Session-Failover
    Unsigned 32-bit integer
    code=418

diameter.CC-Sub-Session-Id  CC-Sub-Session-Id
    Unsigned 64-bit integer
    code=419

diameter.CC-Time  CC-Time
    Unsigned 32-bit integer
    code=420

diameter.CC-Total-Octets  CC-Total-Octets
    Unsigned 64-bit integer
    code=421

diameter.CC-Unit-Type  CC-Unit-Type
    Unsigned 32-bit integer
    code=454

diameter.CHAP-Algorithm  CHAP-Algorithm
    Unsigned 32-bit integer
    code=403

diameter.CHAP-Auth  CHAP-Auth
    Byte array
    code=402

diameter.CHAP-Challenge  CHAP-Challenge
    Byte array
    code=60

diameter.CHAP-Ident  CHAP-Ident
    Byte array
    code=404

diameter.CHAP-Password  CHAP-Password
    Byte array
    code=3

diameter.Callback-Id  Callback-Id
    Byte array
    code=20

diameter.Callback-Number  Callback-Number
    Byte array
    code=19

diameter.Called-Asserted-Identity  Called-Asserted-Identity
    String
    vendor=10415 code=1250
```

```
diameter.Called-Party-Address  Called-Party-Address
    String
    vendor=10415 code=832
diameter.Called-Station-Id  Called-Station-Id
    Byte array
    code=30
diameter.Calling-Party-Address  Calling-Party-Address
    String
    vendor=10415 code=831
diameter.Calling-Station-Id  Calling-Station-Id
    Byte array
    code=31
diameter.Cause  Cause
    Byte array
    vendor=10415 code=860
diameter.Cause-Code  Cause-Code
    Unsigned 32-bit integer
    vendor=10415 code=861
diameter.Charging-Information  Charging-Information
    Byte array
    vendor=10415 code=618
diameter.Charging-Rule-Base-Name  Charging-Rule-Base-Name
    String
    vendor=10415 code=1004
diameter.Charging-Rule-Definition  Charging-Rule-Definition
    Byte array
    vendor=10415 code=1003
diameter.Charging-Rule-Install  Charging-Rule-Install
    Byte array
    vendor=10415 code=1001
diameter.Charging-Rule-Name  Charging-Rule-Name
    Byte array
    vendor=10415 code=1005
diameter.Charging-Rule-Remove  Charging-Rule-Remove
    Byte array
    vendor=10415 code=1002
diameter.Check-Balance-Result  Check-Balance-Result
    Unsigned 32-bit integer
    code=422
diameter.Class  Class
    Byte array
    code=25
diameter.Class-Identifier  Class-Identifier
    Unsigned 32-bit integer
    vendor=10415 code=1214
diameter.Confidentiality-Key  Confidentiality-Key
    Byte array
    vendor=10415 code=27
```

```
diameter.Configuration-Token  Configuration-Token
    Byte array
    code=78

diameter.Connect-Info  Connect-Info
    Byte array
    code=77

diameter.Content-Class  Content-Class
    Unsigned 32-bit integer
    vendor=10415 code=1220

diameter.Content-Disposition  Content-Disposition
    String
    vendor=10415 code=828

diameter.Content-Length  Content-Length
    Unsigned 32-bit integer
    vendor=10415 code=827

diameter.Content-Size  Content-Size
    Unsigned 32-bit integer
    vendor=10415 code=1206

diameter.Content-Type  Content-Type
    String
    vendor=10415 code=826

diameter.Cost-Information  Cost-Information
    Byte array
    code=423

diameter.Cost-Unit  Cost-Unit
    String
    code=424

diameter.Credit-Control  Credit-Control
    Unsigned 32-bit integer
    code=426

diameter.Credit-Control-Failure-Handling  Credit-Control-Failure-Handling
    Unsigned 32-bit integer
    code=427

diameter.Currency-Code  Currency-Code
    Unsigned 32-bit integer
    code=425

diameter.Current-Location  Current-Location
    Unsigned 32-bit integer
    vendor=10415 code=707

diameter.DRM-Content  DRM-Content
    Unsigned 32-bit integer
    code=1221

diameter.Data-Reference  Data-Reference
    Unsigned 32-bit integer
    vendor=10415 code=703

diameter.Deferred-Location-Even-Type  Deferred-Location-Even-Type
    String
    vendor=10415 code=1230
```

```
diameter.Delivery-Report Delivery-Report
  Unsigned 32-bit integer
  vendor=10415 code=1111

diameter.Delivery-Report-Requested Delivery-Report-Requested
  Unsigned 32-bit integer
  vendor=10415 code=1216

diameter.Deregistration-Reason Deregistration-Reason
  Byte array
  vendor=10415 code=16

diameter.Destination-Host Destination-Host
  String
  code=293

diameter.Destination-Realm Destination-Realm
  String
  code=283

diameter.Direct-Debiting-Failure-Handling Direct-Debiting-Failure-Handling
  Unsigned 32-bit integer
  code=428

diameter.Disconnect-Cause Disconnect-Cause
  Unsigned 32-bit integer
  code=273

diameter.Domain-Name Domain-Name
  String
  vendor=10415 code=1200

diameter.E2E-Sequence E2E-Sequence
  Byte array
  code=300

diameter.EAP-Message EAP-Message
  Byte array
  code=79

diameter.ETSI-Digest-Algorithm ETSI-Digest-Algorithm
  String
  vendor=13019 code=509

diameter.ETSI-Digest-Auth-Param ETSI-Digest-Auth-Param
  String
  vendor=13019 code=512

diameter.ETSI-Digest-CNonce ETSI-Digest-CNonce
  String
  vendor=13019 code=516

diameter.ETSI-Digest-Domain ETSI-Digest-Domain
  String
  vendor=13019 code=506

diameter.ETSI-Digest-Entity-Body-Hash ETSI-Digest-Entity-Body-Hash
  String
  vendor=13019 code=519

diameter.ETSI-Digest-HA1 ETSI-Digest-HA1
  String
  vendor=13019 code=511
```

```
diameter.ETSI-Digest-Method  ETSI-Digest-Method
String
vendor=13019 code=518

diameter.ETSI-Digest-Nextnonce  ETSI-Digest-Nextnonce
String
vendor=13019 code=520

diameter.ETSI-Digest-Nonce  ETSI-Digest-Nonce
String
vendor=13019 code=505

diameter.ETSI-Digest-Nonce-Count  ETSI-Digest-Nonce-Count
String
vendor=13019 code=517

diameter.ETSI-Digest-Opaque  ETSI-Digest-Opaque
String
vendor=13019 code=507

diameter.ETSI-Digest-QoP  ETSI-Digest-QoP
String
vendor=13019 code=510

diameter.ETSI-Digest-Realm  ETSI-Digest-Realm
String
vendor=13019 code=504

diameter.ETSI-Digest-Response  ETSI-Digest-Response
String
vendor=13019 code=515

diameter.ETSI-Digest-Response-Auth  ETSI-Digest-Response-Auth
String
vendor=13019 code=521

diameter.ETSI-Digest-Stale  ETSI-Digest-Stale
String
vendor=13019 code=508

diameter.ETSI-Digest-URI  ETSI-Digest-URI
String
vendor=13019 code=514

diameter.ETSI-Digest-Username  ETSI-Digest-Username
String
vendor=13019 code=513

diameter.ETSI-SIP-Authenticate  ETSI-SIP-Authenticate
Byte array
vendor=13019 code=501

diameter.ETSI-SIP-Authentication-Info  ETSI-SIP-Authentication-Info
Byte array
vendor=13019 code=503

diameter.ETSI-SIP-Authorization  ETSI-SIP-Authorization
Byte array
vendor=13019 code=502

diameter.Error-Message  Error-Message
String
code=281
```

```
diameter.Error-Reporting-Host  Error-Reporting-Host
    String
    code=294

diameter.Event  Event
    String
    vendor=10415 code=825

diameter.Event-Timestamp  Event-Timestamp
    Unsigned 32-bit integer
    code=55

diameter.Event-Trigger  Event-Trigger
    Unsigned 32-bit integer
    vendor=10415 code=1006

diameter.Event-Type  Event-Type
    Byte array
    vendor=10415 code=823

diameter.Experimental-Result  Experimental-Result
    Byte array
    code=297

diameter.Experimental-Result-Code  Experimental-Result-Code
    Unsigned 32-bit integer
    code=298

diameter.Expires  Expires
    Unsigned 32-bit integer
    vendor=10415 code=888

diameter.Exponent  Exponent
    Signed 32-bit integer
    code=429

diameter.Failed-AVP  Failed-AVP
    Byte array
    code=279

diameter.Feature-List  Feature-List
    Unsigned 32-bit integer
    vendor=10415 code=630

diameter.Feature-List-ID  Feature-List-ID
    Unsigned 32-bit integer
    vendor=10415 code=629

diameter.File-Repair-Supported  File-Repair-Supported
    Unsigned 32-bit integer
    vendor=10415 code=1224

diameter.Filter-Id  Filter-Id
    Byte array
    code=11

diameter.Final-Unit-Action  Final-Unit-Action
    Unsigned 32-bit integer
    code=449

diameter.Final-Unit-Indication  Final-Unit-Indication
    Byte array
    code=430
```



```
diameter.Firmware-Revision  Firmware-Revision
    Unsigned 32-bit integer
    code=267

diameter.Flow-Description  Flow-Description
    String
    vendor=10415 code=507

diameter.Flow-Grouping  Flow-Grouping
    Byte array
    vendor=10415 code=508

diameter.Flow-Number  Flow-Number
    Unsigned 32-bit integer
    vendor=10415 code=509

diameter.Flow-Status  Flow-Status
    Unsigned 32-bit integer
    vendor=10415 code=511

diameter.Flow-Usage  Flow-Usage
    Unsigned 32-bit integer
    vendor=10415 code=512

diameter.Flows  Flows
    Byte array
    vendor=10415 code=510

diameter.Framed-AppleTalk-Link  Framed-AppleTalk-Link
    Signed 32-bit integer
    code=37

diameter.Framed-AppleTalk-Network  Framed-AppleTalk-Network
    Signed 32-bit integer
    code=38

diameter.Framed-AppleTalk-Zone  Framed-AppleTalk-Zone
    Byte array
    code=39

diameter.Framed-Compression  Framed-Compression
    Unsigned 32-bit integer
    code=13

diameter.Framed-IP-Address  Framed-IP-Address
    Byte array
    code=8

diameter.Framed-IP-Address.addr_family  Framed-IP-Address Address Family
    Unsigned 16-bit integer

diameter.Framed-IP-Netmask  Framed-IP-Netmask
    Byte array
    code=9

diameter.Framed-IP-Netmask.addr_family  Framed-IP-Netmask Address Family
    Unsigned 16-bit integer

diameter.Framed-IPX-Network  Framed-IPX-Network
    Signed 32-bit integer
    code=23
```

```
diameter.Framed-IPv6-Prefix Framed-IPv6-Prefix
  Byte array
  code=97

diameter.Framed-Interface-Id Framed-Interface-Id
  Unsigned 64-bit integer
  code=96

diameter.Framed-MTU Framed-MTU
  Signed 32-bit integer
  code=12

diameter.Framed-Protocol Framed-Protocol
  Unsigned 32-bit integer
  code=7

diameter.Framed-Route Framed-Route
  Byte array
  code=22

diameter.Framed-Routing Framed-Routing
  Unsigned 32-bit integer
  code=10

diameter.G-S-U-Pool-Identifier G-S-U-Pool-Identifier
  Unsigned 32-bit integer
  code=453

diameter.G-S-U-Pool-Reference G-S-U-Pool-Reference
  Byte array
  code=457

diameter.GAA-Service-Identifier GAA-Service-Identifier
  Byte array
  vendor=10415 code=403

diameter.GBA-Type GBA-Type
  Unsigned 32-bit integer
  vendor=10415 code=410

diameter.GBA-UserSecSettings GBA-UserSecSettings
  Byte array
  vendor=10415 code=400

diameter.GBA_U-Awareness-Indicator GBA_U-Awareness-Indicator
  Unsigned 32-bit integer
  vendor=10415 code=407

diameter.GGSN-Address GGSN-Address
  String
  vendor=10415 code=847

diameter.GPRS-Charging-ID GPRS-Charging-ID
  String
  vendor=10415 code=846

diameter.GUSS-Timestamp GUSS-Timestamp
  Unsigned 32-bit integer
  vendor=10415 code=409

diameter.Globally-Unique-Address Globally-Unique-Address
  Byte array
  vendor=13019 code=300
```

```
diameter.Granted-Service-Unit  Granted-Service-Unit
    Byte array
    code=431

diameter.Host-IP-Address  Host-IP-Address
    Byte array
    code=257

diameter.Host-IP-Address.addr_family  Host-IP-Address Address Family
    Unsigned 16-bit integer

diameter.IMS-Charging-Identifier  IMS-Charging-Identifier
    String
    vendor=10415 code=841

diameter.IMS-Information  IMS-Information
    Byte array
    vendor=10415 code=876

diameter.IP-Connectivity-Status  IP-Connectivity-Status
    Unsigned 32-bit integer
    vendor=13019 code=305

diameter.Identity-Set  Identity-Set
    Unsigned 32-bit integer
    vendor=10415 code=708

diameter.Idle-Timeout  Idle-Timeout
    Signed 32-bit integer
    code=28

diameter.Inband-Security-Id  Inband-Security-Id
    Unsigned 32-bit integer
    code=299

diameter.Incoming-Trunk-Group-ID  Incoming-Trunk-Group-ID
    String
    vendor=10415 code=852

diameter.Initial-Gate-Setting  Initial-Gate-Setting
    Byte array
    vendor=13019 code=303

diameter.Initial-Recipient-Address  Initial-Recipient-Address
    Byte array
    vendor=10415 code=1105

diameter.Integrity-Key  Integrity-Key
    Byte array
    vendor=10415 code=28

diameter.Inter-Operator-Identifier  Inter-Operator-Identifier
    Byte array
    vendor=10415 code=838

diameter.Key-ExpiryTime  Key-ExpiryTime
    Unsigned 32-bit integer
    vendor=10415 code=404

diameter.LCS-Client-Dialed-By-MS  LCS-Client-Dialed-By-MS
    String
    vendor=10415 code=1233
```

```
diameter.LCS-Client-External-ID  LCS-Client-External-ID
    String
    vendor=10415 code=1234
diameter.LCS-Client-ID  LCS-Client-ID
    Byte array
    vendor=10415 code=1232
diameter.LCS-Client-Name  LCS-Client-Name
    String
    vendor=10415 code=1231
diameter.LCS-Client-Type  LCS-Client-Type
    Unsigned 32-bit integer
    vendor=10415 code=1241
diameter.LCS-Data-Coding-Scheme  LCS-Data-Coding-Scheme
    String
    vendor=10415 code=1236
diameter.LCS-Format-Indicator  LCS-Format-Indicator
    Unsigned 32-bit integer
    vendor=10415 code=1237
diameter.LCS-Information  LCS-Information
    Byte array
    vendor=10415 code=878
diameter.LCS-Name-String  LCS-Name-String
    String
    vendor=10415 code=1238
diameter.LCS-Requestor-ID  LCS-Requestor-ID
    Byte array
    vendor=10415 code=1239
diameter.LCS-Requestor-ID-String  LCS-Requestor-ID-String
    String
    vendor=10415 code=1240
diameter.Line-Identifier  Line-Identifier
    Byte array
    vendor=13019 code=500
diameter.Location-Estimate  Location-Estimate
    String
    vendor=10415 code=1242
diameter.Location-Estimate-Type  Location-Estimate-Type
    Unsigned 32-bit integer
    vendor=10415 code=1243
diameter.Location-Information  Location-Information
    Byte array
    vendor=13019 code=350
diameter.Location-Type  Location-Type
    Byte array
    vendor=10415 code=1244
diameter.Logical-Access-Id  Logical-Access-Id
    Byte array
    vendor=13019 code=302
```

```
diameter.Login-IP-Host Login-IP-Host
  Byte array
  code=14

diameter.Login-IP-Host.addr_family Login-IP-Host Address Family
  Unsigned 16-bit integer

diameter.Login-LAT-Group Login-LAT-Group
  Byte array
  code=36

diameter.Login-LAT-Node Login-LAT-Node
  Byte array
  code=35

diameter.Login-LAT-Port Login-LAT-Port
  Byte array
  code=63

diameter.Login-LAT-Service Login-LAT-Service
  Byte array
  code=34

diameter.Login-Service Login-Service
  Unsigned 32-bit integer
  code=15

diameter.Login-TCP-Port Login-TCP-Port
  Signed 32-bit integer
  code=16

diameter.MBMS-2G-3G-Indicator MBMS-2G-3G-Indicator
  Unsigned 32-bit integer
  vendor=10415 code=907

diameter.MBMS-BMSC-SSM-IP-Address MBMS-BMSC-SSM-IP-Address
  Byte array
  vendor=10415 code=918

diameter.MBMS-BMSC-SSM-IPv6-Address MBMS-BMSC-SSM-IPv6-Address
  Byte array
  vendor=10415 code=919

diameter.MBMS-Counting-Information MBMS-Counting-Information
  Unsigned 32-bit integer
  vendor=10415 code=914

diameter.MBMS-GGSN-Address MBMS-GGSN-Address
  Byte array
  vendor=10415 code=916

diameter.MBMS-GGSN-IPv6-Address MBMS-GGSN-IPv6-Address
  Byte array
  vendor=10415 code=917

diameter.MBMS-Information MBMS-Information
  String
  vendor=10415 code=880

diameter.MBMS-Required-QoS MBMS-Required-QoS
  String
  vendor=10415 code=913
```

```
diameter.MBMS-Service-Area  MBMS-Service-Area
  Byte array
  vendor=10415 code=903

diameter.MBMS-Service-Type  MBMS-Service-Type
  Unsigned 32-bit integer
  vendor=10415 code=906

diameter.MBMS-Session-Duration  MBMS-Session-Duration
  Byte array
  vendor=10415 code=904

diameter.MBMS-Session-Identity-Repetition-Number  MBMS-Session-Identity-Repetiti
  Unsigned 32-bit integer
  vendor=10415 code=912

diameter.MBMS-StartStop-Indication  MBMS-StartStop-Indication
  Unsigned 32-bit integer
  vendor=10415 code=902

diameter.MBMS-Time-To-Data-Transfer  MBMS-Time-To-Data-Transfer
  Byte array
  vendor=10415 code=911

diameter.MBMS-User-Data-Mode-Indication  MBMS-User-Data-Mode-Indication
  Unsigned 32-bit integer
  vendor=10415 code=915

diameter.MBMS-User-Service-Type  MBMS-User-Service-Type
  Unsigned 32-bit integer
  vendor=10415 code=1225

diameter.ME-Key-Material  ME-Key-Material
  Byte array
  vendor=10415 code=405

diameter.MIP-Algorithm-Type  MIP-Algorithm-Type
  Unsigned 32-bit integer
  code=345

diameter.MIP-Auth-Input-Data-Length  MIP-Auth-Input-Data-Length
  Unsigned 32-bit integer
  code=338

diameter.MIP-Authenticator-Length  MIP-Authenticator-Length
  Unsigned 32-bit integer
  code=339

diameter.MIP-Authenticator-Offset  MIP-Authenticator-Offset
  Unsigned 32-bit integer
  code=340

diameter.MIP-FA-Challenge  MIP-FA-Challenge
  Byte array
  code=344

diameter.MIP-Feature-Vector  MIP-Feature-Vector
  Unsigned 32-bit integer
  code=337

diameter.MIP-Filter-Rule  MIP-Filter-Rule
  String
  code=347
```

```
diameter.MIP-Foreign-Agent-Host  MIP-Foreign-Agent-Host
    String
    code=330

diameter.MIP-Home-Agent-Address  MIP-Home-Agent-Address
    Byte array
    code=334

diameter.MIP-Home-Agent-Address.addr_family  MIP-Home-Agent-Address Address Fami
    Unsigned 16-bit integer

diameter.MIP-MN-AAA-Auth  MIP-MN-AAA-Auth
    Byte array
    code=322

diameter.MIP-MN-AAA-SPI  MIP-MN-AAA-SPI
    Unsigned 32-bit integer
    code=341

diameter.MIP-Mobile-Node-Address  MIP-Mobile-Node-Address
    Byte array
    code=333

diameter.MIP-Mobile-Node-Address.addr_family  MIP-Mobile-Node-Address Address Fa
    Unsigned 16-bit integer

diameter.MIP-Previous-FA-Addr  MIP-Previous-FA-Addr
    Byte array
    code=336

diameter.MIP-Previous-FA-Addr.addr_family  MIP-Previous-FA-Addr Address Family
    Unsigned 16-bit integer

diameter.MIP-Previous-FA-Host  MIP-Previous-FA-Host
    String
    code=335

diameter.MIP-Reg-Reply  MIP-Reg-Reply
    Byte array
    code=321

diameter.MIP-Replay-Mode  MIP-Replay-Mode
    Unsigned 32-bit integer
    code=346

diameter.MM-Content-Type  MM-Content-Type
    Byte array
    vendor=10415 code=1203

diameter.MMBox-Storage-Requested  MMBox-Storage-Requested
    Unsigned 32-bit integer
    vendor=10415 code=1248

diameter.MMS-Information  MMS-Information
    String
    vendor=10415 code=877

diameter.MSISDN  MSISDN
    Byte array
    vendor=10415 code=701
```

```
diameter.Mandatory-Capability  Mandatory-Capability
    Unsigned 32-bit integer
    vendor=10415 code=5

diameter.Max-Requested-Bandwidth-DL  Max-Requested-Bandwidth-DL
    Unsigned 32-bit integer
    vendor=10415 code=515

diameter.Max-Requested-Bandwidth-UL  Max-Requested-Bandwidth-UL
    Unsigned 32-bit integer
    vendor=10415 code=516

diameter.Maximum-Allowed-Bandwidth-DL  Maximum-Allowed-Bandwidth-DL
    Unsigned 32-bit integer
    vendor=13019 code=309

diameter.Maximum-Allowed-Bandwidth-UL  Maximum-Allowed-Bandwidth-UL
    Unsigned 32-bit integer
    vendor=13019 code=308

diameter.Media-Component-Description  Media-Component-Description
    Byte array
    vendor=10415 code=517

diameter.Media-Component-Number  Media-Component-Number
    Unsigned 32-bit integer
    vendor=10415 code=518

diameter.Media-Initiator-Flag  Media-Initiator-Flag
    Unsigned 32-bit integer
    vendor=10415 code=882

diameter.Media-Sub-Component  Media-Sub-Component
    Byte array
    vendor=10415 code=519

diameter.Media-Type  Media-Type
    Unsigned 32-bit integer
    vendor=10415 code=520

diameter.Message-Body  Message-Body
    Byte array
    vendor=10415 code=889

diameter.Message-Class  Message-Class
    Byte array
    vendor=10415 code=1213

diameter.Message-ID  Message-ID
    String
    vendor=10415 code=1210

diameter.Message-Size  Message-Size
    Unsigned 32-bit integer
    vendor=10415 code=1212

diameter.Message-Type  Message-Type
    Unsigned 32-bit integer
    vendor=10415 code=1211

diameter.Metering-Method  Metering-Method
    Unsigned 32-bit integer
    vendor=10415 code=1007
```



```
diameter.Multi-Round-Time-Out  Multi-Round-Time-Out
    Unsigned 32-bit integer
    code=272

diameter.Multiple-Services-Credit-Control  Multiple-Services-Credit-Control
    Byte array
    code=456

diameter.Multiple-Services-Indicator  Multiple-Services-Indicator
    Unsigned 32-bit integer
    code=455

diameter.NAF-Hostname  NAF-Hostname
    Byte array
    vendor=10415 code=402

diameter.NAS-Filter-Rule  NAS-Filter-Rule
    String
    code=400

diameter.NAS-IP-Address  NAS-IP-Address
    Byte array
    code=4

diameter.NAS-Identifier  NAS-Identifier
    Byte array
    code=32

diameter.NAS-Port  NAS-Port
    Signed 32-bit integer
    code=5

diameter.NAS-Port-Type  NAS-Port-Type
    Unsigned 32-bit integer
    code=61

diameter.Node-Functionality  Node-Functionality
    Unsigned 32-bit integer
    vendor=10415 code=862

diameter.Number-Of-Participants  Number-Of-Participants
    Signed 32-bit integer
    vendor=10415 code=885

diameter.Number-Of-Received-Talk-Bursts  Number-Of-Received-Talk-Bursts
    Unsigned 32-bit integer
    vendor=10415 code=1258

diameter.Number-Of-Talk-Burst  Number-Of-Talk-Burst
    Unsigned 32-bit integer
    vendor=10415 code=1249

diameter.OctetString  OctetString
    String
    code=405

diameter.Offline  Offline
    Unsigned 32-bit integer
    vendor=10415 code=1008

diameter.Online  Online
    Unsigned 32-bit integer
    code=1009
```

```
diameter.Optional-Capability  Optional-Capability
    Unsigned 32-bit integer
    vendor=10415 code=6

diameter.Origin-AAA-Protocol  Origin-AAA-Protocol
    Unsigned 32-bit integer
    code=408

diameter.Origin-Host  Origin-Host
    String
    code=264

diameter.Origin-Realm  Origin-Realm
    String
    code=296

diameter.Origin-State-Id  Origin-State-Id
    Unsigned 32-bit integer
    code=278

diameter.Originating-IOI  Originating-IOI
    String
    vendor=10415 code=839

diameter.Originating-Interface  Originating-Interface
    Unsigned 32-bit integer
    vendor=10415 code=1110

diameter.Originating-Request  Originating-Request
    Unsigned 32-bit integer
    vendor=10415 code=633

diameter.Originator  Originator
    Unsigned 32-bit integer
    vendor=10415 code=864

diameter.Outgoing-Trunk-Group-ID  Outgoing-Trunk-Group-ID
    String
    vendor=10415 code=853

diameter.PDG-Address  PDG-Address
    Byte array
    vendor=10415 code=895

diameter.PDG-Address.addr_family  PDG-Address Address Family
    Unsigned 16-bit integer

diameter.PDG-Charging-Id  PDG-Charging-Id
    Unsigned 32-bit integer
    vendor=10415 code=896

diameter.PDP-Address  PDP-Address
    Byte array
    vendor=10415 code=1227

diameter.PDP-Address.addr_family  PDP-Address Address Family
    Unsigned 16-bit integer

diameter.PDP-Context-Type  PDP-Context-Type
    Unsigned 32-bit integer
    vendor=10415 code=1247
```

```
diameter.PDP-Session-operation  PDP-Session-operation
  Unsigned 32-bit integer
  vendor=10415 code=1015

diameter.PS-Append-Free-Format-Data  PS-Append-Free-Format-Data
  Unsigned 32-bit integer
  vendor=10415 code=867

diameter.PS-Free-Format-Data  PS-Free-Format-Data
  Byte array
  vendor=10415 code=866

diameter.PS-Furnish-Charging-Information  PS-Furnish-Charging-Information
  Byte array
  vendor=10415 code=865

diameter.PS-Information  PS-Information
  Byte array
  vendor=10415 code=874

diameter.Participants-Involved  Participants-Involved
  String
  vendor=10415 code=887

diameter.Password-Retry  Password-Retry
  Signed 32-bit integer
  code=75

diameter.Physical-Access-ID  Physical-Access-ID
  String
  vendor=13019 code=313

diameter.Ping-Timestamp  Ping-Timestamp
  Byte array
  vendor=42 code=3

diameter.Ping-Timestamp-Secs  Ping-Timestamp-Secs
  Unsigned 32-bit integer
  vendor=42 code=1

diameter.Ping-Timestamp-Usecs  Ping-Timestamp-Usecs
  Unsigned 32-bit integer
  vendor=42 code=2

diameter.PoC-Change-Conditions  PoC-Change-Conditions
  Unsigned 32-bit integer
  vendor=10415 code=1261

diameter.PoC-Change-Time  PoC-Change-Time
  Unsigned 32-bit integer
  vendor=10415 code=1262

diameter.PoC-Controlling-Address  PoC-Controlling-Address
  String
  vendor=10415 code=858

diameter.PoC-Group-Name  PoC-Group-Name
  String
  vendor=10415 code=859

diameter.PoC-Information  PoC-Information
  Byte array
  vendor=10415 code=879
```

```
diameter.PoC-Server-Role  PoC-Server-Role
    Unsigned 32-bit integer
    vendor=10415 code=883

diameter.PoC-Session-Id  PoC-Session-Id
    String
    vendor=10415 code=1229

diameter.Port-Limit  Port-Limit
    Signed 32-bit integer
    code=62

diameter.Port-Number  Port-Number
    Unsigned 32-bit integer
    vendor=13019 code=455

diameter.Positioning-Data  Positioning-Data
    String
    vendor=10415 code=1245

diameter.Precedence  Precedence
    Unsigned 32-bit integer
    vendor=10415 code=1010

diameter.Primary-CCF-Address  Primary-CCF-Address
    String
    vendor=5535 code=1011

diameter.Primary-Charging-Collection-Function-Name  Primary-Charging-Collection-
    String
    vendor=10415 code=621

diameter.Primary-Event-Charging-Function-Name  Primary-Event-Charging-Function-N
    String
    vendor=10415 code=619

diameter.Primary-OCS-Address  Primary-OCS-Address
    String
    vendor=5535 code=1012

diameter.Priority  Priority
    Unsigned 32-bit integer
    vendor=10415 code=1209

diameter.Product-Name  Product-Name
    String
    code=269

diameter.Prompt  Prompt
    Signed 32-bit integer
    code=76

diameter.Proxy-Host  Proxy-Host
    String
    code=280

diameter.Proxy-Info  Proxy-Info
    Byte array
    code=284

diameter.Proxy-State  Proxy-State
    Byte array
    code=33
```

```
diameter.Public-Identity Public-Identity
    String
    vendor=10415 code=2
diameter.QoS-Filter-Rule QoS-Filter-Rule
    String
    code=407
diameter.QoS-Profile QoS-Profile
    Byte array
    vendor=13019 code=304
diameter.Quota-Consumption-Time Quota-Consumption-Time
    Unsigned 32-bit integer
    vendor=10415 code=881
diameter.Quota-Holding-Time Quota-Holding-Time
    Unsigned 32-bit integer
    vendor=10415 code=871
diameter.RACS-Contact-Point RACS-Contact-Point
    String
    vendor=13019 code=351
diameter.RAI RAI
    String
    vendor=10415 code=909
diameter.RR-Bandwidth RR-Bandwidth
    Unsigned 32-bit integer
    vendor=10415 code=521
diameter.RS-Bandwidth RS-Bandwidth
    Unsigned 32-bit integer
    vendor=10415 code=522
diameter.Rating-Group Rating-Group
    Unsigned 32-bit integer
    code=432
diameter.Re-Auth-Request-Type Re-Auth-Request-Type
    Unsigned 32-bit integer
    code=285
diameter.Read-Reply Read-Reply
    Unsigned 32-bit integer
    vendor=10415 code=1112
diameter.Read-Reply-Report-Requested Read-Reply-Report-Requested
    Unsigned 32-bit integer
    vendor=10415 code=1222
diameter.Reason-Code Reason-Code
    Unsigned 32-bit integer
    vendor=10415 code=17
diameter.Reason-Info Reason-Info
    String
    vendor=10415 code=18
diameter.Received-Talk-Burst-Time Received-Talk-Burst-Time
    Unsigned 32-bit integer
    vendor=10415 code=1260
```

```
diameter.Received-Talk-Burst-Volume  Received-Talk-Burst-Volume
    Unsigned 32-bit integer
    vendor=10415 code=1259

diameter.Recipient-Address  Recipient-Address
    String
    vendor=10415 code=1108

diameter.Redirect-Address-Type  Redirect-Address-Type
    Unsigned 32-bit integer
    code=433

diameter.Redirect-Host  Redirect-Host
    String
    code=292

diameter.Redirect-Host-Usage  Redirect-Host-Usage
    Unsigned 32-bit integer
    code=261

diameter.Redirect-Max-Cache-Time  Redirect-Max-Cache-Time
    Unsigned 32-bit integer
    code=262

diameter.Redirect-Server  Redirect-Server
    Byte array
    code=434

diameter.Redirect-Server-Address  Redirect-Server-Address
    String
    code=435

diameter.Reply-Applic-ID  Reply-Applic-ID
    String
    vendor=10415 code=1223

diameter.Reply-Message  Reply-Message
    Byte array
    code=18

diameter.Reporting-Level  Reporting-Level
    Unsigned 32-bit integer
    vendor=10415 code=1011

diameter.Requested-Action  Requested-Action
    Unsigned 32-bit integer
    code=436

diameter.Requested-Domain  Requested-Domain
    Unsigned 32-bit integer
    vendor=10415 code=706

diameter.Requested-Information  Requested-Information
    Unsigned 32-bit integer
    vendor=13019 code=353

diameter.Requested-Party-Address  Requested-Party-Address
    String
    vendor=10415 code=1251

diameter.Requested-Service-Unit  Requested-Service-Unit
    Byte array
    code=437
```

```
diameter.Required-MBMSBearer-Capabilities Required-MBMSBearer-Capabilities
String
vendor=10415 code=901

diameter.Reservation-Class Reservation-Class
Unsigned 32-bit integer
vendor=13019 code=456

diameter.Reservation-priority Reservation-priority
Unsigned 32-bit integer
vendor=13019 code=458

diameter.Restricted-Filter-Rule Restricted-Filter-Rule
String
code=438

diameter.Result-Code Result-Code
Unsigned 32-bit integer
code=268

diameter.Result-Recipient-Address Result-Recipient-Address
Byte array
vendor=10415 code=1106

diameter.Role-Of-Node Role-Of-Node
Unsigned 32-bit integer
vendor=10415 code=829

diameter.Route-Record Route-Record
String
code=282

diameter.Routeing-Address Routeing-Address
String
vendor=10415 code=1109

diameter.Routeing-Address-Resolution Routeing-Address-Resolution
Unsigned 32-bit integer
vendor=10415 code=1119

diameter.SDP-Media-Description SDP-Media-Description
String
vendor=10415 code=845

diameter.SDP-Media-Name SDP-Media-Name
String
vendor=10415 code=844

diameter.SDP-Media-components SDP-Media-components
Byte array
vendor=10415 code=843

diameter.SDP-Session-Description SDP-Session-Description
String
vendor=10415 code=842

diameter.SGSN-Address SGSN-Address
Byte array
vendor=10415 code=1228

diameter.SGSN-Address.addr_family SGSN-Address Address Family
Unsigned 16-bit integer
```

```
diameter.SIP-Accounting-Information  SIP-Accounting-Information
  Byte array
  code=368

diameter.SIP-Accounting-Server-URI  SIP-Accounting-Server-URI
  String
  vendor=10415 code=369

diameter.SIP-Auth-Data-Item  SIP-Auth-Data-Item
  Byte array
  vendor=10415 code=13

diameter.SIP-Authenticate  SIP-Authenticate
  Byte array
  vendor=10415 code=10

diameter.SIP-Authentication-Context  SIP-Authentication-Context
  Byte array
  vendor=10415 code=12

diameter.SIP-Authentication-Info  SIP-Authentication-Info
  Byte array
  code=381

diameter.SIP-Authentication-Scheme  SIP-Authentication-Scheme
  String
  vendor=10415 code=9

diameter.SIP-Authorization  SIP-Authorization
  Byte array
  vendor=10415 code=11

diameter.SIP-Credit-Control-Server-URI  SIP-Credit-Control-Server-URI
  String
  vendor=10415 code=370

diameter.SIP-Deregistration-Reason  SIP-Deregistration-Reason
  Byte array
  code=383

diameter.SIP-Forking-Indication  SIP-Forking-Indication
  Unsigned 32-bit integer
  vendor=10415 code=523

diameter.SIP-Item-Number  SIP-Item-Number
  Unsigned 32-bit integer
  vendor=10415 code=14

diameter.SIP-Mandatory-Capability  SIP-Mandatory-Capability
  Unsigned 32-bit integer
  code=373

diameter.SIP-Method  SIP-Method
  String
  vendor=10415 code=824

diameter.SIP-Number-Auth-Items  SIP-Number-Auth-Items
  Unsigned 32-bit integer
  vendor=10415 code=8

diameter.SIP-Optional-Capability  SIP-Optional-Capability
  Unsigned 32-bit integer
  code=374
```



```
diameter.SIP-Reason-Code  SIP-Reason-Code
    Unsigned 32-bit integer
    code=384

diameter.SIP-Reason-Info  SIP-Reason-Info
    String
    vendor=10415 code=385

diameter.SIP-Request-Timestamp  SIP-Request-Timestamp
    Unsigned 32-bit integer
    vendor=10415 code=834

diameter.SIP-Response-Timestamp  SIP-Response-Timestamp
    Unsigned 32-bit integer
    vendor=10415 code=835

diameter.SIP-Server-Assignment-Type  SIP-Server-Assignment-Type
    Unsigned 32-bit integer
    code=375

diameter.SIP-Server-Capabilities  SIP-Server-Capabilities
    Byte array
    code=372

diameter.SIP-Server-URI  SIP-Server-URI
    String
    vendor=10415 code=371

diameter.SIP-Supported-User-Data-Type  SIP-Supported-User-Data-Type
    String
    vendor=10415 code=388

diameter.SIP-User-Authorization-Type  SIP-User-Authorization-Type
    Unsigned 32-bit integer
    code=387

diameter.SIP-User-Data  SIP-User-Data
    Byte array
    code=389

diameter.SIP-User-Data-Already-Available  SIP-User-Data-Already-Available
    Unsigned 32-bit integer
    code=392

diameter.SIP-User-Data-Contents  SIP-User-Data-Contents
    Byte array
    vendor=10415 code=391

diameter.SIP-User-Data-Type  SIP-User-Data-Type
    String
    vendor=10415 code=390

diameter.SIP-Visited-Network-Id  SIP-Visited-Network-Id
    String
    vendor=10415 code=386

diameter.Secondary-CCF-Address  Secondary-CCF-Address
    String
    vendor=5535 code=1015

diameter.Secondary-Charging-Collection-Function-Name  Secondary-Charging-Collect
    String
    vendor=10415 code=622
```

```

diameter.Secondary-Event-Charging-Function-Name  Secondary-Event-Charging-Functi
String
vendor=10415 code=620
diameter.Secondary-OCS-Address  Secondary-OCS-Address
String
vendor=5535 code=1016
diameter.Sender-Address  Sender-Address
String
vendor=10415 code=1104
diameter.Sender-Visibility  Sender-Visibility
Unsigned 32-bit integer
vendor=10415 code=1113
diameter.Sequence-Number  Sequence-Number
Unsigned 32-bit integer
vendor=10415 code=1107
diameter.Served-Party-IP-Address  Served-Party-IP-Address
Byte array
vendor=10415 code=848
diameter.Served-Party-IP-Address.addr_family  Served-Party-IP-Address Address Fa
Unsigned 16-bit integer
diameter.Served-User-Identity  Served-User-Identity
Byte array
vendor=10415 code=1100
diameter.Server-Assignment-Type  Server-Assignment-Type
Unsigned 32-bit integer
vendor=10415 code=15
diameter.Server-Capabilities  Server-Capabilities
Byte array
vendor=10415 code=4
diameter.Server-Name  Server-Name
String
vendor=10415 code=3
diameter.Service-Class  Service-Class
String
vendor=13019 code=459
diameter.Service-Context-Id  Service-Context-Id
String
code=461
diameter.Service-ID  Service-ID
String
vendor=10415 code=855
diameter.Service-Identifier  Service-Identifier
Unsigned 32-bit integer
code=439
diameter.Service-Indication  Service-Indication
Byte array
vendor=10415 code=704

```

```
diameter.Service-Information  Service-Information
  Byte array
  vendor=10415 code=873

diameter.Service-Key  Service-Key
  String
  vendor=10415 code=1114

diameter.Service-Parameter-Info  Service-Parameter-Info
  Byte array
  code=440

diameter.Service-Parameter-Type  Service-Parameter-Type
  Unsigned 32-bit integer
  code=441

diameter.Service-Parameter-Value  Service-Parameter-Value
  Byte array
  code=442

diameter.Service-Specific-Data  Service-Specific-Data
  String
  vendor=10415 code=863

diameter.Service-Type  Service-Type
  Unsigned 32-bit integer
  code=6

diameter.Session-Binding  Session-Binding
  Unsigned 32-bit integer
  code=270

diameter.Session-Bundle-Id  Session-Bundle-Id
  Unsigned 32-bit integer
  vendor=13019 code=400

diameter.Session-Id  Session-Id
  String
  code=263

diameter.Session-Server-Failover  Session-Server-Failover
  Unsigned 32-bit integer
  code=271

diameter.Session-Timeout  Session-Timeout
  Unsigned 32-bit integer
  code=27

diameter.Signature  Signature
  Byte array
  code=80

diameter.Specific-Action  Specific-Action
  Unsigned 32-bit integer
  vendor=10415 code=513

diameter.State  State
  Byte array
  code=24

diameter.Status  Status
  Byte array
  vendor=10415 code=1116
```

```
diameter.Status-Code  Status-Code
  String
  vendor=10415 code=1117
diameter.Status-Text  Status-Text
  String
  vendor=10415 code=1118
diameter.Submission-Time  Submission-Time
  Unsigned 32-bit integer
  vendor=10415 code=1202
diameter.Subs-Req-Type  Subs-Req-Type
  Unsigned 32-bit integer
  vendor=10415 code=705
diameter.Subscription-Id  Subscription-Id
  Byte array
  code=443
diameter.Subscription-Id-Data  Subscription-Id-Data
  String
  code=444
diameter.Subscription-Id-Type  Subscription-Id-Type
  Unsigned 32-bit integer
  code=450
diameter.Supported-Applications  Supported-Applications
  Byte array
  vendor=10415 code=631
diameter.Supported-Features  Supported-Features
  Byte array
  vendor=10415 code=628
diameter.Supported-Vendor-Id  Supported-Vendor-Id
  Unsigned 32-bit integer
  code=265
diameter.TFT-Filter  TFT-Filter
  String
  code=1012
diameter.TFT-Packet-Filter-Information  TFT-Packet-Filter-Information
  Byte array
  vendor=10415 code=1013
diameter.TMGI  TMGI
  Byte array
  vendor=10415 code=900
diameter.Talk-Burst-Exchange  Talk-Burst-Exchange
  Byte array
  vendor=10415 code=1255
diameter.Talk-Burst-Time  Talk-Burst-Time
  Unsigned 32-bit integer
  vendor=10415 code=1257
diameter.Talk-Burst-Volume  Talk-Burst-Volume
  Unsigned 32-bit integer
  vendor=10415 code=1256
```

```
diameter.Tariff-Change-Usage  Tariff-Change-Usage
    Unsigned 32-bit integer
    code=452

diameter.Tariff-Time-Change  Tariff-Time-Change
    Unsigned 32-bit integer
    code=451

diameter.Terminal-Type  Terminal-Type
    Byte array
    vendor=13019 code=352

diameter.Terminating-IOI  Terminating-IOI
    String
    vendor=10415 code=840

diameter.Termination-Action  Termination-Action
    Unsigned 32-bit integer
    code=29

diameter.Termination-Cause  Termination-Cause
    Unsigned 32-bit integer
    code=295

diameter.Time-Quota-Threshold  Time-Quota-Threshold
    Unsigned 32-bit integer
    vendor=10415 code=868

diameter.Time-Stamps  Time-Stamps
    Byte array
    vendor=10415 code=833

diameter.ToS-Traffic-Class  ToS-Traffic-Class
    Byte array
    vendor=10415 code=1014

diameter.Token-Text  Token-Text
    String
    code=1215

diameter.Transaction-Identifier  Transaction-Identifier
    Byte array
    vendor=10415 code=401

diameter.Transport-Class  Transport-Class
    Unsigned 32-bit integer
    vendor=13019 code=311

diameter.Trigger  Trigger
    Byte array
    vendor=10415 code=1264

diameter.Trigger-Event  Trigger-Event
    Unsigned 32-bit integer
    vendor=10415 code=1103

diameter.Trigger-Type  Trigger-Type
    Unsigned 32-bit integer
    vendor=10415 code=870

diameter.Trunk-Group-ID  Trunk-Group-ID
    Byte array
    vendor=10415 code=851
```

```
diameter.Tunnel-Medium-Type  Tunnel-Medium-Type
    Unsigned 32-bit integer
    code=65

diameter.Tunnel-Password  Tunnel-Password
    Byte array
    code=69

diameter.Tunnel-Server-Endpoint  Tunnel-Server-Endpoint
    Byte array
    code=67

diameter.Tunnel-Type  Tunnel-Type
    Unsigned 32-bit integer
    code=64

diameter.Tunneling  Tunneling
    Byte array
    code=401

diameter.Type-Number  Type-Number
    Unsigned 32-bit integer
    vendor=10415 code=1204

diameter.UICC-Key-Material  UICC-Key-Material
    Byte array
    vendor=10415 code=406

diameter.Unit-Quota-Threshold  Unit-Quota-Threshold
    Unsigned 32-bit integer
    vendor=10415 code=1226

diameter.Unit-Value  Unit-Value
    Byte array
    code=445

diameter.Used-Service-Unit  Used-Service-Unit
    Byte array
    code=446

diameter.User-Authorization-Type  User-Authorization-Type
    Unsigned 32-bit integer
    vendor=10415 code=24

diameter.User-Data  User-Data
    Byte array
    vendor=10415 code=7

diameter.User-Data-Already-Available  User-Data-Already-Available
    Unsigned 32-bit integer
    vendor=10415 code=26

diameter.User-Data-Request-Type  User-Data-Request-Type
    Unsigned 32-bit integer
    vendor=10415 code=25

diameter.User-Equipment-Info  User-Equipment-Info
    Byte array
    code=458

diameter.User-Equipment-Info-Type  User-Equipment-Info-Type
    Unsigned 32-bit integer
    code=459
```

```
diameter.User-Equipment-Info-Value  User-Equipment-Info-Value
    Byte array
    code=460

diameter.User-Identity  User-Identity
    Byte array
    vendor=10415 code=700

diameter.User-Name  User-Name
    String
    code=1

diameter.User-Password  User-Password
    Byte array
    code=2

diameter.User-Session-Id  User-Session-Id
    String
    vendor=10415 code=830

diameter.V4-Transport-Address  V4-Transport-Address
    Byte array
    vendor=13019 code=454

diameter.V6-Transport-address  V6-Transport-address
    Byte array
    vendor=13019 code=453

diameter.VAS-ID  VAS-ID
    String
    vendor=10415 code=1102

diameter.VASP-ID  VASP-ID
    String
    vendor=10415 code=1101

diameter.Validity-Time  Validity-Time
    Unsigned 32-bit integer
    code=448

diameter.Value-Digits  Value-Digits
    Signed 64-bit integer
    code=447

diameter.Vendor-Id  Vendor-Id
    Unsigned 32-bit integer
    code=266

diameter.Vendor-Specific  Vendor-Specific
    Unsigned 32-bit integer
    code=26

diameter.Vendor-Specific-Application-Id  Vendor-Specific-Application-Id
    Byte array
    code=260

diameter.Visited-Network-Identifier  Visited-Network-Identifier
    Byte array
    vendor=10415 code=1

diameter.Volume-Quota-Threshold  Volume-Quota-Threshold
    Unsigned 32-bit integer
    vendor=10415 code=869
```

```
diameter.WAG-Address  WAG-Address
  Byte array
  vendor=10415 code=890
diameter.WAG-Address.addr_family  WAG-Address Address Family
  Unsigned 16-bit integer
diameter.WAG-PLMN-Id  WAG-PLMN-Id
  Byte array
  code=891
diameter.WLAN-Information  WLAN-Information
  String
  vendor=10415 code=875
diameter.WLAN-Radio-Container  WLAN-Radio-Container
  Byte array
  vendor=10415 code=892
diameter.WLAN-Session-Id  WLAN-Session-Id
  String
  vendor=10415 code=1246
diameter.WLAN-Technology  WLAN-Technology
  Unsigned 32-bit integer
  vendor=10415 code=893
diameter.WLAN-UE-Local-IPAddress  WLAN-UE-Local-IPAddress
  Byte array
  vendor=10415 code=894
diameter.WLAN-UE-Local-IPAddress.addr_family  WLAN-UE-Local-IPAddress Address Fa
  Unsigned 16-bit integer
diameter.Wildcarded-PSI  Wildcarded-PSI
  String
  vendor=10415 code=634
diameter.applicationId  ApplicationId
  Unsigned 32-bit integer
diameter.avp  AVP
  Byte array
diameter.avp.code  AVP Code
  Unsigned 32-bit integer
diameter.avp.flags  AVP Flags
  Unsigned 8-bit integer
diameter.avp.flags.protected  Protected
  Boolean
diameter.avp.flags.reserved3  Reserved
  Boolean
diameter.avp.flags.reserved4  Reserved
  Boolean
diameter.avp.flags.reserved5  Reserved
  Boolean
diameter.avp.flags.reserved6  Reserved
  Boolean
```



```
diameter.avp.flags.reserved7  Reserved
    Boolean
diameter.avp.invalid-data  Data
    Byte array
diameter.avp.len  AVP Length
    Unsigned 24-bit integer
diameter.avp.unknown  Value
    Byte array
diameter.avp.vendorId  AVP Vendor Id
    Unsigned 32-bit integer
diameter.cmd.code  Command Code
    Unsigned 32-bit integer
diameter.endtoendid  End-to-End Identifier
    Unsigned 32-bit integer
diameter.flags  Flags
    Unsigned 8-bit integer
diameter.flags.T  T(Potentially re-transmitted message)
    Boolean
diameter.flags.error  Error
    Boolean
diameter.flags.mandatory  Mandatory
    Boolean
diameter.flags.proxyable  Proxyable
    Boolean
diameter.flags.request  Request
    Boolean
diameter.flags.reserved4  Reserved
    Boolean
diameter.flags.reserved5  Reserved
    Boolean
diameter.flags.reserved6  Reserved
    Boolean
diameter.flags.reserved7  Reserved
    Boolean
diameter.flags.vendorspecific  Vendor-Specific
    Boolean
diameter.hopbyhopid  Hop-by-Hop Identifier
    Unsigned 32-bit integer
diameter.length  Length
    Unsigned 24-bit integer
diameter.vendorId  VendorId
    Unsigned 32-bit integer
diameter.version  Version
    Unsigned 8-bit integer
```

**Digital Audio Access Protocol (daap)**

daap.name Name  
String  
Tag Name

daap.size Size  
Unsigned 32-bit integer  
Tag Size

**Digital Private Signalling System No 1 (dpnss)**

dpnss.a\_b\_party\_addr A/B party Address  
String  
A/B party Address

dpnss.call\_idx Call Index  
String  
Call Index

dpnss.cc\_msg\_type Call Control Message Type  
Unsigned 8-bit integer  
Call Control Message Type

dpnss.clearing\_cause Clearing Cause  
Unsigned 8-bit integer  
Clearing Cause

dpnss.dest\_addr Destination Address  
String  
Destination Address

dpnss.e2e\_msg\_type END-TO-END Message Type  
Unsigned 8-bit integer  
END-TO-END Message Type

dpnss.ext\_bit Extension bit  
Boolean  
Extension bit

dpnss.ext\_bit\_notall Extension bit  
Boolean  
Extension bit

dpnss.lbl\_msg\_type LINK-BY-LINK Message Type  
Unsigned 8-bit integer  
LINK-BY-LINK Message Type

dpnss.maint\_act Maintenance action  
Unsigned 8-bit integer  
Maintenance action

dpnss.man\_code Manufacturer Code  
Unsigned 8-bit integer  
Manufacturer Code

dpnss.msg\_grp\_id Message Group Identifier  
Unsigned 8-bit integer  
Message Group Identifier

dpnss.rejection\_cause Rejection Cause  
Unsigned 8-bit integer  
Rejection Cause

```
dpnss.sic_details_data2  Data Rates
    Unsigned 8-bit integer
    Type of Data (011) : Data Rates

dpnss.sic_details_for_data1  Data Rates
    Unsigned 8-bit integer
    Type of Data (010) : Data Rates

dpnss.sic_details_for_speech  Details for Speech
    Unsigned 8-bit integer
    Details for Speech

dpnss.sic_oct2_async_data  Data Format
    Unsigned 8-bit integer
    Data Format

dpnss.sic_oct2_async_flow_ctrl  Flow Control
    Boolean
    Flow Control

dpnss.sic_oct2_data_type  Data Type
    Unsigned 8-bit integer
    Data Type

dpnss.sic_oct2_duplex  Data Type
    Boolean
    Data Type

dpnss.sic_oct2_sync_byte_timing  Byte Timing
    Boolean
    Byte Timing

dpnss.sic_oct2_sync_data_format  Network Independent Clock
    Boolean
    Network Independent Clock

dpnss.sic_type  Type of data
    Unsigned 8-bit integer
    Type of data

dpnss.subcode  Subcode
    Unsigned 8-bit integer
    Subcode
```

#### **Direct Message Profile (dmp)**

```
dmp.ack  Acknowledgement
    No value
    Acknowledgement

dmp.ack_diagnostic  Ack Diagnostic
    Unsigned 8-bit integer
    Diagnostic

dmp.ack_reason  Ack Reason
    Unsigned 8-bit integer
    Reason

dmp.ack_rec_list  Recipient List
    No value
    Recipient List
```

```
dmp.acp127recip  ACP127 Recipient
  String
  ACP 127 Recipient
dmp.acp127recip_len  ACP127 Recipient
  Unsigned 8-bit integer
  ACP 127 Recipient Length
dmp.action  Action
  Boolean
  Action
dmp.addr_encoding  Address Encoding
  Boolean
  Address Encoding
dmp.addr_ext  Address Extended
  Boolean
  Address Extended
dmp.addr_form  Address Form
  Unsigned 8-bit integer
  Address Form
dmp.addr_length  Address Length
  Unsigned 8-bit integer
  Address Length
dmp.addr_length1  Address Length (bits 4-0)
  Unsigned 8-bit integer
  Address Length (bits 4-0)
dmp.addr_length2  Address Length (bits 9-5)
  Unsigned 8-bit integer
  Address Length (bits 9-5)
dmp.addr_type  Address Type
  Unsigned 8-bit integer
  Address Type
dmp.addr_type_ext  Address Type Extended
  Unsigned 8-bit integer
  Address Type Extended
dmp.addr_unknown  Unknown encoded address
  Byte array
  Unknown encoded address
dmp.analysis.ack_first_sent_in  Retransmission of Acknowledgement sent in
  Frame number
  This Acknowledgement was first sent in this frame
dmp.analysis.ack_in  Acknowledgement in
  Frame number
  This packet has an Acknowledgement in this frame
dmp.analysis.ack_missing  Acknowledgement missing
  No value
  The acknowledgement for this packet is missing
dmp.analysis.ack_time  Acknowledgement Time
  Time duration
  The time between the Message and the Acknowledge
```

dmp.analysis.dup\_ack\_no Duplicate ACK #  
Unsigned 32-bit integer  
Duplicate Acknowledgement count

dmp.analysis.msg\_first\_sent\_in Retransmission of Message sent in  
Frame number  
This Message was first sent in this frame

dmp.analysis.msg\_in Message in  
Frame number  
This packet has a Message in this frame

dmp.analysis.msg\_missing Message missing  
No value  
The Message for this packet is missing

dmp.analysis.notif\_first\_sent\_in Retransmission of Notification sent in  
Frame number  
This Notification was first sent in this frame

dmp.analysis.notif\_in Notification in  
Frame number  
This packet has a Notification in this frame

dmp.analysis.notif\_time Notification Reply Time  
Time duration  
The time between the Message and the Notification

dmp.analysis.report\_first\_sent\_in Retransmission of Report sent in  
Frame number  
This Report was first sent in this frame

dmp.analysis.report\_in Report in  
Frame number  
This packet has a Report in this frame

dmp.analysis.report\_time Report Reply Time  
Time duration  
The time between the Message and the Report

dmp.analysis.retrans\_no Retransmission #  
Unsigned 32-bit integer  
Retransmission count

dmp.analysis.retrans\_time Retransmission Time  
Time duration  
The time between the last Message and this Message

dmp.analysis.total\_retrans\_time Total Retransmission Time  
Time duration  
The time between the first Message and this Message

dmp.analysis.total\_time Total Time  
Time duration  
The time between the first Message and the Acknowledge

dmp.asn1\_per ASN.1 PER-encoded OR-name  
Byte array  
ASN.1 PER-encoded OR-name

dmp.auth\_discarded Authorizing users discarded  
Boolean  
Authorizing users discarded

```
dmp.body Message Body
  No value
  Message Body

dmp.body.compression Compression
  Unsigned 8-bit integer
  Compression

dmp.body.data User data
  No value
  User data

dmp.body.eit EIT
  Unsigned 8-bit integer
  Encoded Information Type

dmp.body.id Structured Id
  Unsigned 8-bit integer
  Structured Body Id (1 byte)

dmp.body.plain Message Body
  String
  Message Body

dmp.body.structured Structured Body
  Byte array
  Structured Body

dmp.body.uncompressed Uncompressed User data
  No value
  Uncompressed User data

dmp.body_format Body format
  Unsigned 8-bit integer
  Body format

dmp.checksum Checksum
  Unsigned 16-bit integer
  Checksum

dmp.checksum_bad Bad
  Boolean
  True: checksum doesn't match packet content; False: matches content or not c

dmp.checksum_good Good
  Boolean
  True: checksum matches packet content; False: doesn't match content or not c

dmp.checksum_used Checksum
  Boolean
  Checksum Used

dmp.cont_id_discarded Content Identifier discarded
  Boolean
  Content identifier discarded

dmp.content_type Content Type
  Unsigned 8-bit integer
  Content Type

dmp.delivery_time Delivery Time
  Unsigned 8-bit integer
  Delivery Time
```

dmp.direct\_addr Direct Address  
Unsigned 8-bit integer  
Direct Address

dmp.direct\_addr1 Direct Address (bits 6-0)  
Unsigned 8-bit integer  
Direct Address (bits 6-0)

dmp.direct\_addr2 Direct Address (bits 12-7)  
Unsigned 8-bit integer  
Direct Address (bits 12-7)

dmp.direct\_addr3 Direct Address (bits 18-13)  
Unsigned 8-bit integer  
Direct Address (bits 18-13)

dmp.dl\_expansion\_prohib DL expansion prohibited  
Boolean  
DL expansion prohibited

dmp.dr Delivery Report  
No value  
Delivery Report

dmp.dtg DTG  
Unsigned 8-bit integer  
DTG

dmp.dtg.sign DTG in the  
Boolean  
Sign

dmp.dtg.val DTG Value  
Unsigned 8-bit integer  
DTG Value

dmp.envelope Envelope  
No value  
Envelope

dmp.envelope\_flags Flags  
Unsigned 8-bit integer  
Envelope Flags

dmp.expiry\_time Expiry Time  
Unsigned 8-bit integer  
Expiry Time

dmp.expiry\_time\_val Expiry Time Value  
Unsigned 8-bit integer  
Expiry Time Value

dmp.ext\_rec\_count Extended Recipient Count  
Unsigned 16-bit integer  
Extended Recipient Count

dmp.heading\_flags Heading Flags  
No value  
Heading Flags

dmp.hop\_count Hop Count  
Unsigned 8-bit integer  
Hop Count

dmp.id DMP Identifier  
Unsigned 16-bit integer  
DMP identifier

dmp.importance Importance  
Unsigned 8-bit integer  
Importance

dmp.info\_present Info Present  
Boolean  
Info Present

dmp.message Message Content  
No value  
Message Content

dmp.mission\_pol\_id Mission Policy Identifier  
Unsigned 8-bit integer  
Mission Policy Identifier

dmp.msg\_id Message Identifier  
Unsigned 16-bit integer  
Message identifier

dmp.msg\_type Message type  
Unsigned 8-bit integer  
Message type

dmp.nat\_pol\_id National Policy Identifier  
Unsigned 8-bit integer  
National Policy Identifier

dmp.ndr Non-Delivery Report  
No value  
Non-Delivery Report

dmp.not\_req Notification Request  
Unsigned 8-bit integer  
Notification Request

dmp.notif\_discard\_reason Discard Reason  
Unsigned 8-bit integer  
Discard Reason

dmp.notif\_non\_rec\_reason Non-Receipt Reason  
Unsigned 8-bit integer  
Non-Receipt Reason

dmp.notif\_on\_type ON Type  
Unsigned 8-bit integer  
ON Type

dmp.notif\_type Notification Type  
Unsigned 8-bit integer  
Notification Type

dmp.notification Notification Content  
No value  
Notification Content

dmp.nrn Non-Receipt Notification (NRN)  
No value  
Non-Receipt Notification (NRN)



```
dmp.on      Other Notification (ON)
           No value
           Other Notification (ON)

dmp.or_name ASN.1 BER-encoded OR-name
           No value
           ASN.1 BER-encoded OR-name

dmp.originator Originator
           No value
           Originator

dmp.precedence Precedence
           Unsigned 8-bit integer
           Precedence

dmp.protocol_id Protocol Identifier
           Unsigned 8-bit integer
           Protocol Identifier

dmp.rec_count Recipient Count
           Unsigned 8-bit integer
           Recipient Count

dmp.rec_no   Recipient Number
           Unsigned 32-bit integer
           Recipient Number Offset

dmp.rec_no_ext Recipient Number Extended
           Boolean
           Recipient Number Extended

dmp.rec_no_offset Recipient Number Offset
           Unsigned 8-bit integer
           Recipient Number Offset

dmp.rec_no_offset1 Recipient Number (bits 3-0)
           Unsigned 8-bit integer
           Recipient Number (bits 3-0) Offset

dmp.rec_no_offset2 Recipient Number (bits 9-4)
           Unsigned 8-bit integer
           Recipient Number (bits 9-4) Offset

dmp.rec_no_offset3 Recipient Number (bits 14-10)
           Unsigned 8-bit integer
           Recipient Number (bits 14-10) Offset

dmp.rec_present Recipient Present
           Boolean
           Recipient Present

dmp.receipt_time Receipt Time
           Unsigned 8-bit integer
           Receipt time

dmp.receipt_time_val Receipt Time Value
           Unsigned 8-bit integer
           Receipt Time Value

dmp.recip_reassign_prohib Recipient reassign prohibited
           Boolean
           Recipient Reassign prohibited
```

```
dmp.recipient  Recipient Number
  No value
  Recipient

dmp.rep_rec    Report Request
  Unsigned 8-bit integer
  Report Request

dmp.report     Report Content
  No value
  Report Content

dmp.report_diagnostic Diagnostic (X.411)
  Unsigned 8-bit integer
  Diagnostic

dmp.report_reason Reason (X.411)
  Unsigned 8-bit integer
  Reason

dmp.report_type Report Type
  Boolean
  Report Type

dmp.reporting_name Reporting Name Number
  No value
  Reporting Name

dmp.reserved   Reserved
  Unsigned 8-bit integer
  Reserved

dmp.rn        Receipt Notification (RN)
  No value
  Receipt Notification (RN)

dmp.sec_cat   Security Categories
  Unsigned 8-bit integer
  Security Categories

dmp.sec_cat.bit0 Bit 0
  Boolean
  Bit 0

dmp.sec_cat.bit1 Bit 1
  Boolean
  Bit 1

dmp.sec_cat.bit2 Bit 2
  Boolean
  Bit 2

dmp.sec_cat.bit3 Bit 3
  Boolean
  Bit 3

dmp.sec_cat.bit4 Bit 4
  Boolean
  Bit 4

dmp.sec_cat.bit5 Bit 5
  Boolean
  Bit 5
```

```
dmp.sec_cat.bit6  Bit 6
  Boolean
  Bit 6

dmp.sec_cat.bit7  Bit 7
  Boolean
  Bit 7

dmp.sec_cat.cl    Clear
  Boolean
  Clear

dmp.sec_cat.cs    Crypto Security
  Boolean
  Crypto Security

dmp.sec_cat.ex    Exclusive
  Boolean
  Exclusive

dmp.sec_cat.ne    National Eyes Only
  Boolean
  National Eyes Only

dmp.sec_class     Security Classification
  Unsigned 8-bit integer
  Security Classification

dmp.sec_pol       Security Policy
  Unsigned 8-bit integer
  Security Policy

dmp.sic           SIC
  String
  SIC

dmp.sic_bitmap    Length Bitmap (0 = 3 bytes, 1 = 4-8 bytes)
  Unsigned 8-bit integer
  SIC Length Bitmap

dmp.sic_bits      Bit 7-4
  Unsigned 8-bit integer
  SIC Bit 7-4, Characters [A-Z0-9] only

dmp.sic_bits_any  Bit 7-4
  Unsigned 8-bit integer
  SIC Bit 7-4, Any valid characters

dmp.sic_key       SICs
  No value
  SIC Content

dmp.sic_key.chars Valid Characters
  Boolean
  SIC Valid Characters

dmp.sic_key.num   Number of SICs
  Unsigned 8-bit integer
  Number of SICs

dmp.sic_key.type  Type
  Unsigned 8-bit integer
  SIC Content Type
```

```
dmp.sic_key.values  Content Byte
  Unsigned 8-bit integer
  SIC Content Byte

dmp.subj_id  Subject Message Identifier
  Unsigned 16-bit integer
  Subject Message Identifier

dmp.subject  Subject
  String
  Subject

dmp.subject_discarded  Subject discarded
  Boolean
  Subject discarded

dmp.subm_time  Submission Time
  Unsigned 16-bit integer
  Submission Time

dmp.subm_time_value  Submission Time Value
  Unsigned 16-bit integer
  Submission Time Value

dmp.suppl_info  Supplementary Information
  String
  Supplementary Information

dmp.suppl_info_len  Supplementary Information
  Unsigned 8-bit integer
  Supplementary Information Length

dmp.time_diff  Time Difference
  Unsigned 8-bit integer
  Time Difference

dmp.time_diff_present  Time Diff
  Boolean
  Time Diff Present

dmp.time_diff_value  Time Difference Value
  Unsigned 8-bit integer
  Time Difference Value

dmp.version  Protocol Version
  Unsigned 8-bit integer
  Protocol Version
```

#### **DirectPlay Protocol (dplay)**

```
dplay.command  DirectPlay command
  Unsigned 16-bit integer

dplay.command_2  DirectPlay second command
  Unsigned 16-bit integer

dplay.dialect.version  DirectPlay dialect version
  Unsigned 16-bit integer

dplay.dialect.version_2  DirectPlay second dialect version
  Unsigned 16-bit integer
```

```
dplay.dplay_str  DirectPlay action string
String

dplay.dplay_str_2  DirectPlay second action string
String

dplay.flags  DirectPlay session desc flags
Unsigned 32-bit integer

dplay.flags.acq_voice  acquire voice
Boolean
Acq Voice

dplay.flags.can_join  can join
Boolean
Can Join

dplay.flags.ignored  ignored
Boolean
Ignored

dplay.flags.migrate_host  migrate host flag
Boolean
Migrate Host

dplay.flags.no_create_players  no create players flag
Boolean
No Create Players

dplay.flags.no_player_updates  no player updates
Boolean
No Player Updates

dplay.flags.no_sess_desc  no session desc changes
Boolean
No Sess Desc Changes

dplay.flags.opt_latency  optimize for latency
Boolean
Opt Latency

dplay.flags.order  preserve order
Boolean
Order

dplay.flags.pass_req  password required
Boolean
Pass Req

dplay.flags.priv_sess  private session
Boolean
Priv Session

dplay.flags.reliable  use reliable protocol
Boolean
Reliable

dplay.flags.route  route via game host
Boolean
Route
```

```
dplay.flags.short_player_msg  short player message
    Boolean
    Short Player Msg

dplay.flags.srv_p_only  get server player only
    Boolean
    Svr Player Only

dplay.flags.unused  unused
    Boolean
    Unused

dplay.flags.use_auth  use authentication
    Boolean
    Use Auth

dplay.flags.use_ping  use ping
    Boolean
    Use Ping

dplay.game.guid  DirectPlay game GUID

dplay.instance.guid  DirectPlay instance guid

dplay.message.guid  Message GUID

dplay.multi.create_offset  Offset to PackedPlayer struct
    Unsigned 32-bit integer

dplay.multi.group_id  Group ID
    Byte array

dplay.multi.id_to  ID to
    Byte array

dplay.multi.password  Password
    String

dplay.multi.password_offset  Offset to password
    Unsigned 32-bit integer

dplay.multi.player_id  Player ID
    Byte array

dplay.ping.id_from  ID From
    Byte array

dplay.ping.tick_count  Tick Count
    Unsigned 32-bit integer

dplay.player_msg  DirectPlay Player to Player message
    Byte array

dplay.pp.dialect  PackedPlayer dialect version
    Unsigned 32-bit integer

dplay.pp.fixed_size  PackedPlayer fixed size
    Unsigned 32-bit integer

dplay.pp.flags  PackedPlayer flags
    Unsigned 32-bit integer

dplay.pp.flags.in_group  in group
    Boolean
```

```
dplay.pp.flags.nameserver  is name server
    Boolean
dplay.pp.flags.sending    sending player on local machine
    Boolean
dplay.pp.flags.sysplayer  is system player
    Boolean
dplay.pp.id               PackedPlayer ID
    Byte array
dplay.pp.long_name_len    PackedPlayer long name length
    Unsigned 32-bit integer
dplay.pp.parent_id       PackedPlayer parent ID
    Byte array
dplay.pp.player_count     PackedPlayer player count
    Unsigned 32-bit integer
dplay.pp.player_data      PackedPlayer player data
    Byte array
dplay.pp.player_data_size PackedPlayer player data size
    Unsigned 32-bit integer
dplay.pp.player_id       PackedPlayer player ID
    Byte array
dplay.pp.short_name       PackedPlayer short name
    String
dplay.pp.short_name_len   PackedPlayer short name length
    Unsigned 32-bit integer
dplay.pp.size             PackedPlayer size
    Unsigned 32-bit integer
dplay.pp.sp_data          PackedPlayer service provider data
    Byte array
dplay.pp.sp_data_size     PackedPlayer service provider data size
    Unsigned 32-bit integer
dplay.pp.sysplayer_id     PackedPlayer system player ID
    Byte array
dplay.pp.unknown_1       PackedPlayer unknown 1
    Byte array
dplay.saddr.af            DirectPlay s_addr_in address family
    Unsigned 16-bit integer
dplay.saddr.ip            DirectPlay s_addr_in ip address
    IPv4 address
dplay.saddr.padding       DirectPlay s_addr_in null padding
    Byte array
dplay.saddr.port          DirectPlay s_addr_in port
    Unsigned 16-bit integer
dplay.sd.capi             SecDesc CAPI provider ptr
    Byte array
```

```
dplay.sd.capi_type  SecDesc CAPI provider type
    Unsigned 32-bit integer
dplay.sd.enc_alg   SecDesc encryption algorithm
    Unsigned 32-bit integer
dplay.sd.flags    SecDesc flags
    Unsigned 32-bit integer
dplay.sd.size     SecDesc struct size
    Unsigned 32-bit integer
dplay.sd.sspi     SecDesc SSPI provider ptr
    Byte array
dplay.ssess_desc.curr_players  DirectPlay current players
    Unsigned 32-bit integer
dplay.ssess_desc.length  DirectPlay session desc length
    Unsigned 32-bit integer
dplay.ssess_desc.max_players  DirectPlay max players
    Unsigned 32-bit integer
dplay.ssess_desc.name_ptr  Session description name pointer placeholder
    Byte array
dplay.ssess_desc.pw_ptr   Session description password pointer placeholder
    Byte array
dplay.ssess_desc.res_1   Session description reserved 1
    Byte array
dplay.ssess_desc.res_2   Session description reserved 2
    Byte array
dplay.ssess_desc.user_1   Session description user defined 1
    Byte array
dplay.ssess_desc.user_2   Session description user defined 2
    Byte array
dplay.ssess_desc.user_3   Session description user defined 3
    Byte array
dplay.ssess_desc.user_4   Session description user defined 4
    Byte array
dplay.size           DirectPlay package size
    Unsigned 32-bit integer
dplay.spp.dialect    SuperPackedPlayer dialect version
    Unsigned 32-bit integer
dplay.spp.flags     SuperPackedPlayer flags
    Unsigned 32-bit integer
dplay.spp.flags.in_group  in group
    Boolean
dplay.spp.flags.nameserver  is name server
    Boolean
dplay.spp.flags.sending  sending player on local machine
    Boolean
```



```
dplay.spp.flags.sysplayer  is system player
    Boolean
dplay.spp.id               SuperPackedPlayer ID
    Byte array
dplay.spp.parent_id       SuperPackedPlayer parent ID
    Byte array
dplay.spp.pd_length       SuperPackedPlayer player data length
    Unsigned 32-bit integer
dplay.spp.pim             SuperPackedPlayer player info mask
    Unsigned 32-bit integer
dplay.spp.pim.long_name   SuperPackedPlayer have long name
    Unsigned 32-bit integer
dplay.spp.pim.parent_id   SuperPackedPlayer have parent ID
    Unsigned 32-bit integer
dplay.spp.pim.pd_length   SuperPackedPlayer player data length info
    Unsigned 32-bit integer
dplay.spp.pim.player_count SuperPackedPlayer player count info
    Unsigned 32-bit integer
dplay.spp.pim.short_name  SuperPackedPlayer have short name
    Unsigned 32-bit integer
dplay.spp.pim.shortcut_count SuperPackedPlayer shortcut count info
    Unsigned 32-bit integer
dplay.spp.pim.sp_length   SuperPackedPlayer service provider length info
    Unsigned 32-bit integer
dplay.spp.player_count    SuperPackedPlayer player count
    Unsigned 32-bit integer
dplay.spp.player_data     SuperPackedPlayer player data
    Byte array
dplay.spp.player_id       SuperPackedPlayer player ID
    Byte array
dplay.spp.short_name      SuperPackedPlayer short name
    String
dplay.spp.shortcut_count  SuperPackedPlayer shortcut count
    Unsigned 32-bit integer
dplay.spp.shortcut_id     SuperPackedPlayer shortcut ID
    Byte array
dplay.spp.size            SuperPackedPlayer size
    Unsigned 32-bit integer
dplay.spp.sp_data         SuperPackedPlayer service provider data
    Byte array
dplay.spp.sp_data_length  SuperPackedPlayer service provider data length
    Unsigned 32-bit integer
dplay.spp.sysplayer_id    SuperPackedPlayer system player ID
    Byte array
```

```
dplay.token    DirectPlay token
               Unsigned 32-bit integer

dplay.type02.all    Enumerate all sessions
                   Boolean
                   All

dplay.type02.flags    Enum Session flags
                     Unsigned 32-bit integer

dplay.type02.game.guid    DirectPlay game GUID

dplay.type02.joinable    Enumerate joinable sessions
                         Boolean
                         Joinable

dplay.type02.password    Session password
                         String

dplay.type02.password_offset    Enum Sessions password offset
                                 Unsigned 32-bit integer

dplay.type02.pw_req    Enumerate sessions requiring a password
                      Boolean
                      Password

dplay.type_01.game_name    Enum Session Reply game name
                          String

dplay.type_01.name_offs    Enum Session Reply name offset
                          Unsigned 32-bit integer

dplay.type_05.flags    Player ID request flags
                      Unsigned 32-bit integer

dplay.type_05.flags.local    is local player
                              Boolean

dplay.type_05.flags.name_server    is name server
                                    Boolean

dplay.type_05.flags.secure    is secure session
                              Boolean

dplay.type_05.flags.sys_player    is system player
                                   Boolean

dplay.type_05.flags.unknown    unknown
                               Boolean

dplay.type_07.capi    CAPI provider
                     String

dplay.type_07.capi_offset    CAPI provider offset
                             Unsigned 32-bit integer

dplay.type_07.dpid    DirectPlay ID
                     Byte array

dplay.type_07.hresult    Request player HRESULT
                       Unsigned 32-bit integer

dplay.type_07.sspi    SSPI provider
                     String
```

```
dplay.type_07.sspi_offset  SSPI provider offset
    Unsigned 32-bit integer
dplay.type_0f.data_offset  Data Offset
    Unsigned 32-bit integer
dplay.type_0f.id_to       ID to
    Byte array
dplay.type_0f.player_data  Player Data
    Byte array
dplay.type_0f.player_id   Player ID
    Byte array
dplay.type_13.create_offset  Create Offset
    Unsigned 32-bit integer
dplay.type_13.group_id     Group ID
    Byte array
dplay.type_13.id_to       ID to
    Byte array
dplay.type_13.password    Password
    String
dplay.type_13.password_offset  Password Offset
    Unsigned 32-bit integer
dplay.type_13.player_id   Player ID
    Byte array
dplay.type_13.tick_count  Tick count? Looks like an ID
    Byte array
dplay.type_15.data_size   Data Size
    Unsigned 32-bit integer
dplay.type_15.message.size  Message size
    Unsigned 32-bit integer
dplay.type_15.offset      Offset
    Unsigned 32-bit integer
dplay.type_15.packet_idx  Packet Index
    Unsigned 32-bit integer
dplay.type_15.packet_offset  Packet offset
    Unsigned 32-bit integer
dplay.type_15.total_packets  Total Packets
    Unsigned 32-bit integer
dplay.type_1a.id_to       ID From
    Byte array
dplay.type_1a.password    Password
    String
dplay.type_1a.password_offset  Password Offset
    Unsigned 32-bit integer
dplay.type_1a.ssess_name_ofs  Session Name Offset
    Unsigned 32-bit integer
```

```
dplay.type_1a.session_name  Session Name
    String

dplay.type_29.desc_offset   SuperEnumPlayers Reply description offset
    Unsigned 32-bit integer

dplay.type_29.game_name     SuperEnumPlayers Reply game name
    String

dplay.type_29.group_count   SuperEnumPlayers Reply group count
    Unsigned 32-bit integer

dplay.type_29.id           ID of the forwarded player
    Byte array

dplay.type_29.name_offset   SuperEnumPlayers Reply name offset
    Unsigned 32-bit integer

dplay.type_29.packed_offset SuperEnumPlayers Reply packed offset
    Unsigned 32-bit integer

dplay.type_29.pass_offset   SuperEnumPlayers Reply password offset
    Unsigned 32-bit integer

dplay.type_29.password     SuperEnumPlayers Reply Password
    String

dplay.type_29.player_count  SuperEnumPlayers Reply player count
    Unsigned 32-bit integer

dplay.type_29.shortcut_count SuperEnumPlayers Reply shortcut count
    Unsigned 32-bit integer
```

#### **Distance Vector Multicast Routing Protocol (dvmrp)**

```
dvmrp.afi  Address Family
    Unsigned 8-bit integer
    DVMRP Address Family Indicator

dvmrp.cap.genid  Genid
    Boolean
    Genid capability

dvmrp.cap.leaf  Leaf
    Boolean
    Leaf

dvmrp.cap.mtrace  Mtrace
    Boolean
    Mtrace capability

dvmrp.cap.netmask  Netmask
    Boolean
    Netmask capability

dvmrp.cap.prune  Prune
    Boolean
    Prune capability

dvmrp.cap.snmp  SNMP
    Boolean
    SNMP capability
```

```
dvmrp.capabilities  Capabilities
    No value
    DVMRP V3 Capabilities

dvmrp.checksum  Checksum
    Unsigned 16-bit integer
    DVMRP Checksum

dvmrp.checksum_bad  Bad Checksum
    Boolean
    Bad DVMRP Checksum

dvmrp.command  Command
    Unsigned 8-bit integer
    DVMRP V1 Command

dvmrp.commands  Commands
    No value
    DVMRP V1 Commands

dvmrp.count  Count
    Unsigned 8-bit integer
    Count

dvmrp.daddr  Dest Addr
    IPv4 address
    DVMRP Destination Address

dvmrp.dest_unreach  Destination Unreachable
    Boolean
    Destination Unreachable

dvmrp.flag.disabled  Disabled
    Boolean
    Administrative status down

dvmrp.flag.down  Down
    Boolean
    Operational status down

dvmrp.flag.leaf  Leaf
    Boolean
    No downstream neighbors on interface

dvmrp.flag.querier  Querier
    Boolean
    Querier for interface

dvmrp.flag.srcroute  Source Route
    Boolean
    Tunnel uses IP source routing

dvmrp.flag.tunnel  Tunnel
    Boolean
    Neighbor reached via tunnel

dvmrp.flags  Flags
    No value
    DVMRP Interface Flags

dvmrp.genid  Generation ID
    Unsigned 32-bit integer
    DVMRP Generation ID
```

```
dvmrp.hold    Hold Time
              Unsigned 32-bit integer
              DVMRP Hold Time in seconds

dvmrp.infinity Infinity
              Unsigned 8-bit integer
              DVMRP Infinity

dvmrp.lifetime Prune lifetime
              Unsigned 32-bit integer
              DVMRP Prune Lifetime

dvmrp.local   Local Addr
              IPv4 address
              DVMRP Local Address

dvmrp.maddr   Multicast Addr
              IPv4 address
              DVMRP Multicast Address

dvmrp.maj_ver Major Version
              Unsigned 8-bit integer
              DVMRP Major Version

dvmrp.metric  Metric
              Unsigned 8-bit integer
              DVMRP Metric

dvmrp.min_ver Minor Version
              Unsigned 8-bit integer
              DVMRP Minor Version

dvmrp.ncount  Neighbor Count
              Unsigned 8-bit integer
              DVMRP Neighbor Count

dvmrp.neighbor Neighbor Addr
              IPv4 address
              DVMRP Neighbor Address

dvmrp.netmask Netmask
              IPv4 address
              DVMRP Netmask

dvmrp.route   Route
              No value
              DVMRP V3 Route Report

dvmrp.saddr   Source Addr
              IPv4 address
              DVMRP Source Address

dvmrp.split_horiz Split Horizon
              Boolean
              Split Horizon concealed route

dvmrp.threshold Threshold
              Unsigned 8-bit integer
              DVMRP Interface Threshold

dvmrp.type    Type
              Unsigned 8-bit integer
              DVMRP Packet Type
```

```
dvmrp.v1.code Code
    Unsigned 8-bit integer
    DVMRP Packet Code

dvmrp.v3.code Code
    Unsigned 8-bit integer
    DVMRP Packet Code

dvmrp.version DVMRP Version
    Unsigned 8-bit integer
    DVMRP Version
```

**Distcc Distributed Compiler (distcc)**

```
distcc.argc ARGV
    Unsigned 32-bit integer
    Number of arguments

distcc.argv ARGV
    String
    ARGV argument

distcc.doti_source Source
    String
    DOTI Preprocessed Source File (.i)

distcc.doto_object Object
    Byte array
    DOTO Compiled object file (.o)

distcc.serr SERR
    String
    STDERR output

distcc.sout SOUT
    String
    STDOUT output

distcc.status Status
    Unsigned 32-bit integer
    Unix wait status for command completion

distcc.version DISTCC Version
    Unsigned 32-bit integer
    DISTCC Version
```

**Distributed Checksum Clearinghouse protocol (dcc)**

```
dcc.adminop Admin Op
    Unsigned 8-bit integer
    Admin Op

dcc.adminval Admin Value
    Unsigned 32-bit integer
    Admin Value

dcc.brand Server Brand
    String
    Server Brand
```

```
dcc.checksum.length Length
    Unsigned 8-bit integer
    Checksum Length

dcc.checksum.sum Sum
    Byte array
    Checksum

dcc.checksum.type Type
    Unsigned 8-bit integer
    Checksum Type

dcc.clientid Client ID
    Unsigned 32-bit integer
    Client ID

dcc.date Date
    Date/Time stamp
    Date

dcc.floodop Flood Control Operation
    Unsigned 32-bit integer
    Flood Control Operation

dcc.len Packet Length
    Unsigned 16-bit integer
    Packet Length

dcc.max_pkt_vers Maximum Packet Version
    Unsigned 8-bit integer
    Maximum Packet Version

dcc.op Operation Type
    Unsigned 8-bit integer
    Operation Type

dcc.opnums.host Host
    Unsigned 32-bit integer
    Host

dcc.opnums.pid Process ID
    Unsigned 32-bit integer
    Process ID

dcc.opnums.report Report
    Unsigned 32-bit integer
    Report

dcc.opnums.retrans Retransmission
    Unsigned 32-bit integer
    Retransmission

dcc.pkt_vers Packet Version
    Unsigned 16-bit integer
    Packet Version

dcc.qdelay_ms Client Delay
    Unsigned 16-bit integer
    Client Delay

dcc.signature Signature
    Byte array
    Signature
```



```
dcc.target Target
    Unsigned 32-bit integer
    Target

dcc.trace Trace Bits
    Unsigned 32-bit integer
    Trace Bits

dcc.trace.admin Admin Requests
    Boolean
    Admin Requests

dcc.trace.anon Anonymous Requests
    Boolean
    Anonymous Requests

dcc.trace.client Authenticated Client Requests
    Boolean
    Authenticated Client Requests

dcc.trace.flood Input/Output Flooding
    Boolean
    Input/Output Flooding

dcc.trace.query Queries and Reports
    Boolean
    Queries and Reports

dcc.trace.ridc RID Cache Messages
    Boolean
    RID Cache Messages

dcc.trace.rlim Rate-Limited Requests
    Boolean
    Rate-Limited Requests
```

### **Distributed Interactive Simulation (dis)**

#### **Distributed Lock Manager (dlm3)**

```
dlm.rl.lvb Lock Value Block
    Byte array

dlm.rl.name Name of Resource
    Byte array

dlm.rl.name_contents Contents actually occupying 'name' field
    String

dlm.rl.name_padding Padding
    Byte array

dlm3.h.cmd Command
    Unsigned 8-bit integer

dlm3.h.length Length
    Unsigned 16-bit integer

dlm3.h.lockspac Lockspace Global ID
    Unsigned 32-bit integer

dlm3.h.major_version Major Version
    Unsigned 16-bit integer
```

```
d3lm3.h.minor_version  Minor Version
    Unsigned 16-bit integer
d3lm3.h.nodeid        Sender Node ID
    Unsigned 32-bit integer
d3lm3.h.pad          Padding
    Unsigned 8-bit integer
d3lm3.h.version      Version
    Unsigned 32-bit integer
d3lm3.m.ast5         Asynchronous Traps
    Unsigned 32-bit integer
d3lm3.m.ast5.bast    Blocking
    Boolean
d3lm3.m.ast5.comp    Completion
    Boolean
d3lm3.m.bastmode     Mode requested by another node
    Signed 32-bit integer
d3lm3.m.exflags      External Flags
    Unsigned 32-bit integer
d3lm3.m.exflags.altcw  Try to grant the lock in 'concurrent read' mode
    Boolean
d3lm3.m.exflags.altpr  Try to grant the lock in 'protected read' mode
    Boolean
d3lm3.m.exflags.cancel  Cancel
    Boolean
d3lm3.m.exflags.convdeadlk  Forced down to NL to resolve a conversion deadlock
    Boolean
d3lm3.m.exflags.convert  Convert
    Boolean
d3lm3.m.exflags.expedite  Grant a NL lock immediately
    Boolean
d3lm3.m.exflags.forceunlock  Force unlock
    Boolean
d3lm3.m.exflags.headque  Add a lock to the head of the queue
    Boolean
d3lm3.m.exflags.ivvalblk  Invalidate the lock value block
    Boolean
d3lm3.m.exflags.nodlckblk  Nodlckblk
    Boolean
d3lm3.m.exflags.nodlckwt  Don't cancel the lock if it gets into conversion deadlo
    Boolean
d3lm3.m.exflags.noorder  Disregard the standard grant order rules
    Boolean
d3lm3.m.exflags.noqueue  Don't queue
    Boolean
```

d3lm3.m.exflags.noqueuebast Send blocking ASTs even for NOQUEUE operations  
Boolean

d3lm3.m.exflags.orphan Orphan  
Boolean

d3lm3.m.exflags.persistent Persistent  
Boolean

d3lm3.m.exflags.quecvf Force a conversion request to be queued  
Boolean

d3lm3.m.exflags.timeout Timeout  
Boolean

d3lm3.m.exflags.valblk Return the contents of the lock value block  
Boolean

d3lm3.m.extra Extra Message  
Byte array

d3lm3.m.flags Internal Flags  
Unsigned 32-bit integer

d3lm3.m.flags.orphan Orphaned lock  
Boolean

d3lm3.m.flags.user User space lock realted  
Boolean

d3lm3.m.grmode Granted Mode  
Signed 32-bit integer

d3lm3.m.hash Hash value  
Unsigned 32-bit integer

d3lm3.m.lkid Lock ID on Sender  
Unsigned 32-bit integer

d3lm3.m.lvbseq Lock Value Block Sequence Number  
Unsigned 32-bit integer

d3lm3.m.nodeid Receiver Node ID  
Unsigned 32-bit integer

d3lm3.m.parent\_lkid Parent Lock ID on Sender  
Unsigned 32-bit integer

d3lm3.m.parent\_remid Parent Lock ID on Receiver  
Unsigned 32-bit integer

d3lm3.m.pid Process ID of Lock Owner  
Unsigned 32-bit integer

d3lm3.m.remid Lock ID on Receiver  
Unsigned 32-bit integer

d3lm3.m.result Message Result(errno)  
Signed 32-bit integer

d3lm3.m.rqmode Request Mode  
Signed 32-bit integer

d3lm3.m.sbflags Status Block Flags  
Unsigned 32-bit integer

dlm3.m.sbflags.altmode Try to Grant in Alternative Mode  
Boolean

dlm3.m.sbflags.demoted Demoted for deadlock resolution  
Boolean

dlm3.m.sbflags.valnotvalid Lock Value Block Is Invalid  
Boolean

dlm3.m.status Status  
Signed 32-bit integer

dlm3.m.type Message Type  
Unsigned 32-bit integer

dlm3.rc.buf Recovery Buffer  
Byte array

dlm3.rc.id Recovery Command ID  
Unsigned 64-bit integer

dlm3.rc.result Recovery Command Result  
Signed 32-bit integer

dlm3.rc.seq Recovery Command Sequence Number of Sender  
Unsigned 64-bit integer

dlm3.rc.seq\_reply Recovery Command Sequence Number of Receiver  
Unsigned 64-bit integer

dlm3.rc.type Recovery Command Type  
Unsigned 32-bit integer

dlm3.rf.lsflags External Flags  
Unsigned 32-bit integer

dlm3.rf.lsflags.altcw Try to grant the lock in 'concurrent read' mode  
Boolean

dlm3.rf.lsflags.altpr Try to grant the lock in 'protected read' mode  
Boolean

dlm3.rf.lsflags.cancel Cancel  
Boolean

dlm3.rf.lsflags.convdeadlk Forced down to NL to resolve a conversion deadlock  
Boolean

dlm3.rf.lsflags.convert Convert  
Boolean

dlm3.rf.lsflags.expedite Grant a NL lock immediately  
Boolean

dlm3.rf.lsflags.forceunlock Force unlock  
Boolean

dlm3.rf.lsflags.headque Add a lock to the head of the queue  
Boolean

dlm3.rf.lsflags.ivvalblk Invalidate the lock value block  
Boolean

dlm3.rf.lsflags.nodlckblk Nodlckblk  
Boolean

dlm3.rf.lsflags.nodlckwt Don't cancel the lock if it gets into conversion deadl  
Boolean

dlm3.rf.lsflags.noorder Disregard the standard grant order rules  
Boolean

dlm3.rf.lsflags.noqueue Don't queue  
Boolean

dlm3.rf.lsflags.noqueuebast Send blocking ASTs even for NOQUEUE operations  
Boolean

dlm3.rf.lsflags.orphan Orphan  
Boolean

dlm3.rf.lsflags.persistent Persistent  
Boolean

dlm3.rf.lsflags.quecvl Force a conversion request to be queued  
Boolean

dlm3.rf.lsflags.timeout Timeout  
Boolean

dlm3.rf.lsflags.unused Unused area  
Unsigned 64-bit integer

dlm3.rf.lsflags.valblk Return the contents of the lock value block  
Boolean

dlm3.rf.lvblen Lock Value Block Length  
Unsigned 32-bit integer

dlm3.rl.asts Asynchronous Traps  
Unsigned 8-bit integer

dlm3.rl.asts.bast Blocking  
Boolean

dlm3.rl.asts.comp Completion  
Boolean

dlm3.rl.exflags External Flags  
Unsigned 32-bit integer

dlm3.rl.exflags.altcw Try to grant the lock in 'concurrent read' mode  
Boolean

dlm3.rl.exflags.altpr Try to grant the lock in 'protected read' mode  
Boolean

dlm3.rl.exflags.cancel Cancel  
Boolean

dlm3.rl.exflags.convdeadlk Forced down to NL to resolve a conversion deadlock  
Boolean

dlm3.rl.exflags.convert Convert  
Boolean

dlm3.rl.exflags.expedite Grant a NL lock immediately  
Boolean

dlm3.rl.exflags.forceunlock Force unlock  
Boolean

d1m3.rl.exflags.headque Add a lock to the head of the queue  
Boolean

d1m3.rl.exflags.ivvalblk Invalidate the lock value block  
Boolean

d1m3.rl.exflags.nodlckblk Nodlckblk  
Boolean

d1m3.rl.exflags.nodlckwt Don't cancel the lock if it gets into conversion deadl  
Boolean

d1m3.rl.exflags.noorder Disregard the standard grant order rules  
Boolean

d1m3.rl.exflags.noqueue Don't queue  
Boolean

d1m3.rl.exflags.noqueuebast Send blocking ASTs even for NOQUEUE operations  
Boolean

d1m3.rl.exflags.orphan Orphan  
Boolean

d1m3.rl.exflags.persistent Persistent  
Boolean

d1m3.rl.exflags.quecvl Force a conversion request to be queued  
Boolean

d1m3.rl.exflags.timeout Timeout  
Boolean

d1m3.rl.exflags.valblk Return the contents of the lock value block  
Boolean

d1m3.rl.flags Internal Flags  
Unsigned 32-bit integer

d1m3.rl.flags.orphan Orphaned lock  
Boolean

d1m3.rl.flags.user User space lock realted  
Boolean

d1m3.rl.grmode Granted Mode  
Signed 8-bit integer

d1m3.rl.lkid Lock ID on Sender  
Unsigned 32-bit integer

d1m3.rl.lvbseq Lock Value Block Sequence Number  
Unsigned 32-bit integer

d1m3.rl.namelen Length of 'name' field  
Unsigned 16-bit integer

d1m3.rl.ownpid Process ID of Lock Owner  
Unsigned 32-bit integer

d1m3.rl.parent\_lkid Parent Lock ID on Sender  
Unsigned 32-bit integer

d1m3.rl.parent\_remid Parent Lock ID on Receiver  
Unsigned 32-bit integer

d1m3.rl.remid Lock ID on Receiver  
Unsigned 32-bit integer

d1m3.rl.result Result of Recovering master copy  
Signed 32-bit integer

d1m3.rl.rqmode Request Mode  
Signed 8-bit integer

d1m3.rl.status Status  
Signed 8-bit integer

d1m3.rl.wait\_type Message Type the waiter waiting for  
Unsigned 16-bit integer

### **Distributed Network Protocol 3.0 (dnp3)**

dnp3.al.2bit Value (two bit)  
Unsigned 8-bit integer  
Digital Value (2 bit)

dnp3.al.aiq.b0 Online  
Boolean

dnp3.al.aiq.b1 Restart  
Boolean

dnp3.al.aiq.b2 Comm Fail  
Boolean

dnp3.al.aiq.b3 Remote Force  
Boolean

dnp3.al.aiq.b4 Local Force  
Boolean

dnp3.al.aiq.b5 Over-Range  
Boolean

dnp3.al.aiq.b6 Reference Check  
Boolean

dnp3.al.aiq.b7 Reserved  
Boolean

dnp3.al.ana Value (16 bit)  
Unsigned 16-bit integer  
Analog Value (16 bit)

dnp3.al.anaout Output Value (16 bit)  
Unsigned 16-bit integer  
Output Value (16 bit)

dnp3.al.aoq.b0 Online  
Boolean

dnp3.al.aoq.b1 Restart  
Boolean

dnp3.al.aoq.b2 Comm Fail  
Boolean

dnp3.al.aoq.b3 Remote Force  
Boolean

dnp3.al.aoq.b4	Local Force
Boolean	
dnp3.al.aoq.b5	Reserved
Boolean	
dnp3.al.aoq.b6	Reserved
Boolean	
dnp3.al.aoq.b7	Reserved
Boolean	
dnp3.al.biq.b0	Online
Boolean	
dnp3.al.biq.b1	Restart
Boolean	
dnp3.al.biq.b2	Comm Fail
Boolean	
dnp3.al.biq.b3	Remote Force
Boolean	
dnp3.al.biq.b4	Local Force
Boolean	
dnp3.al.biq.b5	Chatter Filter
Boolean	
dnp3.al.biq.b6	Reserved
Boolean	
dnp3.al.biq.b7	Point Value
Boolean	
dnp3.al.bit	Value (bit)
Boolean	
Digital Value (1 bit)	
dnp3.al.boq.b0	Online
Boolean	
dnp3.al.boq.b1	Restart
Boolean	
dnp3.al.boq.b2	Comm Fail
Boolean	
dnp3.al.boq.b3	Remote Force
Boolean	
dnp3.al.boq.b4	Local Force
Boolean	
dnp3.al.boq.b5	Reserved
Boolean	
dnp3.al.boq.b6	Reserved
Boolean	
dnp3.al.boq.b7	Point Value
Boolean	



```
dnp3.al.cnt Counter (16 bit)
    Unsigned 16-bit integer
    Counter Value (16 bit)

dnp3.al.con Confirm
    Boolean

dnp3.alctl Application Control
    Unsigned 8-bit integer
    Application Layer Control Byte

dnp3.al.ctrlstatus Control Status
    Unsigned 8-bit integer
    Control Status

dnp3.al.ctrq.b0 Online
    Boolean

dnp3.al.ctrq.b1 Restart
    Boolean

dnp3.al.ctrq.b2 Comm Fail
    Boolean

dnp3.al.ctrq.b3 Remote Force
    Boolean

dnp3.al.ctrq.b4 Local Force
    Boolean

dnp3.al.ctrq.b5 Roll-Over
    Boolean

dnp3.al.ctrq.b6 Discontinuity
    Boolean

dnp3.al.ctrq.b7 Reserved
    Boolean

dnp3.al.fin Final
    Boolean

dnp3.al.fir First
    Boolean

dnp3.al.fragment DNP 3.0 AL Fragment
    Frame number
    DNP 3.0 Application Layer Fragment

dnp3.al.fragment.error Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments

dnp3.al.fragment.multipletails Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet

dnp3.al.fragment.overlap Fragment overlap
    Boolean
    Fragment overlaps with other fragments

dnp3.al.fragment.overlap.conflict Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
```

```
dnp3.al.fragment.reassembled_in  Reassembled PDU In Frame
    Frame number
    This PDU is reassembled in this frame
dnp3.al.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet
dnp3.al.fragments  DNP 3.0 AL Fragments
    No value
    DNP 3.0 Application Layer Fragments
dnp3.al.func  Application Layer Function Code
    Unsigned 8-bit integer
    Application Function Code
dnp3.al.iin  Application Layer IIN bits
    Unsigned 16-bit integer
    Application Layer IIN
dnp3.al.iin.bmsg  Broadcast Msg Rx
    Boolean
dnp3.al.iin.cc  Configuration Corrupt
    Boolean
dnp3.al.iin.cls1d  Class 1 Data Available
    Boolean
dnp3.al.iin.cls2d  Class 2 Data Available
    Boolean
dnp3.al.iin.cls3d  Class 3 Data Available
    Boolean
dnp3.al.iin.dol  Digital Outputs in Local
    Boolean
dnp3.al.iin.dt  Device Trouble
    Boolean
dnp3.al.iin.ebo  Event Buffer Overflow
    Boolean
dnp3.al.iin.oae  Operation Already Executing
    Boolean
dnp3.al.iin.obju  Requested Objects Unknown
    Boolean
dnp3.al.iin.poor  Parameters Invalid or Out of Range
    Boolean
dnp3.al.iin.rst  Device Restart
    Boolean
dnp3.al.iin.tsr  Time Sync Required
    Boolean
dnp3.al.index  Index (8 bit)
    Unsigned 8-bit integer
    Object Index
```

```
dnp3.al.obj  Object
             Unsigned 16-bit integer
             Application Layer Object

dnp3.al.objq.code  Qualifier Code
                  Unsigned 8-bit integer
                  Object Qualifier Code

dnp3.al.objq.index  Index Prefix
                   Unsigned 8-bit integer
                   Object Index Prefixing

dnp3.al.ptnum  Object Point Number
              Unsigned 16-bit integer
              Object Point Number

dnp3.al.range.abs  Address (8 bit)
                  Unsigned 8-bit integer
                  Object Absolute Address

dnp3.al.range.quantity  Quantity (8 bit)
                        Unsigned 8-bit integer
                        Object Quantity

dnp3.al.range.start  Start (8 bit)
                    Unsigned 8-bit integer
                    Object Start Index

dnp3.al.range.stop  Stop (8 bit)
                   Unsigned 8-bit integer
                   Object Stop Index

dnp3.al.reltimestamp  Relative Timestamp
                      Time duration
                      Object Relative Timestamp

dnp3.al.seq  Sequence
            Unsigned 8-bit integer
            Frame Sequence Number

dnp3.al.timestamp  Timestamp
                  Date/Time stamp
                  Object Timestamp

dnp3ctl  Control
        Unsigned 8-bit integer
        Frame Control Byte

dnp3ctl.dfc  Data Flow Control
            Boolean

dnp3ctl.dir  Direction
            Boolean

dnp3ctl.fcb  Frame Count Bit
            Boolean

dnp3ctl.fcv  Frame Count Valid
            Boolean

dnp3ctl.prifunc  Control Function Code
                Unsigned 8-bit integer
                Frame Control Function Code
```

dnp3ctl.prm Primary  
Boolean

dnp3ctl.secfunc Control Function Code  
Unsigned 8-bit integer  
Frame Control Function Code

dnp3dst Destination  
Unsigned 16-bit integer  
Destination Address

dnp3hdr.CRC CRC  
Unsigned 16-bit integer

dnp3hdr.CRC\_bad Bad CRC  
Boolean

dnp3len Length  
Unsigned 8-bit integer  
Frame Data Length

dnp3src Source  
Unsigned 16-bit integer  
Source Address

dnp3start Start Bytes  
Unsigned 16-bit integer  
Start Bytes

dnp3trctl Transport Control  
Unsigned 8-bit integer  
Transport Layer Control Byte

dnp3trfin Final  
Boolean

dnp3trfir First  
Boolean

dnp3trseq Sequence  
Unsigned 8-bit integer  
Frame Sequence Number

#### **Domain Name Service (dns)**

dns.count.add\_rr Additional RRs  
Unsigned 16-bit integer  
Number of additional records in packet

dns.count.answers Answer RRs  
Unsigned 16-bit integer  
Number of answers in packet

dns.count.auth\_rr Authority RRs  
Unsigned 16-bit integer  
Number of authoritative records in packet

dns.count.prerequisites Prerequisites  
Unsigned 16-bit integer  
Number of prerequisites in packet

```
dns.count.queries  Questions
    Unsigned 16-bit integer
    Number of queries in packet

dns.count.updates  Updates
    Unsigned 16-bit integer
    Number of updates records in packet

dns.count.zones    Zones
    Unsigned 16-bit integer
    Number of zones in packet

dns.flags  Flags
    Unsigned 16-bit integer

dns.flags.authenticated  Answer authenticated
    Boolean
    Was the reply data authenticated by the server?

dns.flags.authoritative  Authoritative
    Boolean
    Is the server is an authority for the domain?

dns.flags.checkdisable  Non-authenticated data OK
    Boolean
    Is non-authenticated data acceptable?

dns.flags.opcode  Opcode
    Unsigned 16-bit integer
    Operation code

dns.flags.rcode  Reply code
    Unsigned 16-bit integer
    Reply code

dns.flags.recavail  Recursion available
    Boolean
    Can the server do recursive queries?

dns.flags.recdesired  Recursion desired
    Boolean
    Do query recursively?

dns.flags.response  Response
    Boolean
    Is the message a response?

dns.flags.truncated  Truncated
    Boolean
    Is the message truncated?

dns.flags.z  Z
    Boolean
    Z flag

dns.id  Transaction ID
    Unsigned 16-bit integer
    Identification of transaction

dns.length  Length
    Unsigned 16-bit integer
    Length of DNS-over-TCP request or response
```

```
dns.qry.class  Class
  Unsigned 16-bit integer
  Query Class

dns.qry.name  Name
  String
  Query Name

dns.qry.qu    "QU" question
  Boolean
  QU flag

dns.qry.type  Type
  Unsigned 16-bit integer
  Query Type

dns.resp.cache_flush  Cache flush
  Boolean
  Cache flush flag

dns.resp.class  Class
  Unsigned 16-bit integer
  Response Class

dns.resp.len  Data length
  Unsigned 32-bit integer
  Response Length

dns.resp.name  Name
  String
  Response Name

dns.resp.ttl  Time to live
  Unsigned 32-bit integer
  Response TTL

dns.resp.type  Type
  Unsigned 16-bit integer
  Response Type

dns.response_in  Response In
  Frame number
  The response to this DNS query is in this frame

dns.response_to  Request In
  Frame number
  This is a response to the DNS query in this frame

dns.time  Time
  Time duration
  The time between the Query and the Response

dns.tsig.algorithm_name  Algorithm Name
  String
  Name of algorithm used for the MAC

dns.tsig.error  Error
  Unsigned 16-bit integer
  Expanded RCODE for TSIG

dns.tsig.fudge  Fudge
  Unsigned 16-bit integer
  Number of bytes for the MAC
```

```
dns.tsig.mac    MAC
               No value
               MAC

dns.tsig.mac_size  MAC Size
               Unsigned 16-bit integer
               Number of bytes for the MAC

dns.tsig.original_id  Original Id
               Unsigned 16-bit integer
               Original Id

dns.tsig.other_data  Other Data
               Byte array
               Other Data

dns.tsig.other_len  Other Len
               Unsigned 16-bit integer
               Number of bytes for Other Data
```

**Dublin Core Metadata (DC) (dc)**

```
dc.contributor  contributor
               String

dc.coverage    coverage
               String

dc.creator     creator
               String

dc.date       date
               String

dc.dc         dc
               String

dc.description  description
               String

dc.format     format
               String

dc.identifier  identifier
               String

dc.language   language
               String

dc.publisher  publisher
               String

dc.relation   relation
               String

dc.rights    rights
               String

dc.source    source
               String

dc.subject   subject
               String
```

dc.title title  
String

dc.type type  
String

#### **Dynamic DNS Tools Protocol (ddtp)**

ddtp.encrypt Encryption  
Unsigned 32-bit integer  
Encryption type

ddtp.hostid Hostid  
Unsigned 32-bit integer  
Host ID

ddtp.ipaddr IP address  
IPv4 address  
IP address

ddtp.msgtype Message type  
Unsigned 32-bit integer  
Message Type

ddtp.opcode Opcode  
Unsigned 32-bit integer  
Update query opcode

ddtp.status Status  
Unsigned 32-bit integer  
Update reply status

ddtp.version Version  
Unsigned 32-bit integer  
Version

#### **Dynamic Trunking Protocol (dtp)**

dtp.neighbor Neighbor  
6-byte Hardware (MAC) Address  
MAC Address of neighbor

dtp.tlv\_len Length  
Unsigned 16-bit integer

dtp.tlv\_type Type  
Unsigned 16-bit integer

dtp.version Version  
Unsigned 8-bit integer

#### **EFS (pidl) (efs)**

efs.EFS\_CERTIFICATE\_BLOB.cbData Cbdata  
Unsigned 32-bit integer

efs.EFS\_CERTIFICATE\_BLOB.dwCertEncodingType Dwcertencodingtype  
Unsigned 32-bit integer

efs.EFS\_CERTIFICATE\_BLOB.pbData Pbdata  
Unsigned 8-bit integer



```
efs.EFS_HASH_BLOB.cbData  Cbdata
    Unsigned 32-bit integer
efs.EFS_HASH_BLOB.pbData  Pbdata
    Unsigned 8-bit integer
efs.ENCRYPTION_CERTIFICATE.TotalLength  Totallength
    Unsigned 32-bit integer
efs.ENCRYPTION_CERTIFICATE.pCertBlob  Pcertblob
    No value
efs.ENCRYPTION_CERTIFICATE.pUserSid  Pusersid
    No value
efs.ENCRYPTION_CERTIFICATE_HASH.cbTotalLength  Cbtotallength
    Unsigned 32-bit integer
efs.ENCRYPTION_CERTIFICATE_HASH.lpDisplayInformation  Lpdisplayinformation
    String
efs.ENCRYPTION_CERTIFICATE_HASH.pHash  Phash
    No value
efs.ENCRYPTION_CERTIFICATE_HASH.pUserSid  Pusersid
    No value
efs.ENCRYPTION_CERTIFICATE_HASH_LIST.nCert_Hash  Ncert Hash
    Unsigned 32-bit integer
efs.ENCRYPTION_CERTIFICATE_HASH_LIST.pUsers  Pusers
    No value
efs.EfsRpcAddUsersToFile.FileName  Filename
    String
efs.EfsRpcCloseRaw.pvContext  Pvcontext
    Byte array
efs.EfsRpcDecryptFileSrv.FileName  Filename
    String
efs.EfsRpcDecryptFileSrv.Reserved  Reserved
    Unsigned 32-bit integer
efs.EfsRpcEncryptFileSrv.FileName  Filename
    String
efs.EfsRpcOpenFileRaw.FileName  Filename
    String
efs.EfsRpcOpenFileRaw.Flags  Flags
    Unsigned 32-bit integer
efs.EfsRpcOpenFileRaw.pvContext  Pvcontext
    Byte array
efs.EfsRpcQueryRecoveryAgents.FileName  Filename
    String
efs.EfsRpcQueryRecoveryAgents.pRecoveryAgents  Precoveryagents
    No value
efs.EfsRpcQueryUsersOnFile.FileName  Filename
    String
```

```
efs.EfsRpcQueryUsersOnFile.pUsers  Pusers
    No value
efs.EfsRpcReadFileRaw.pvContext  Pvcontext
    Byte array
efs.EfsRpcRemoveUsersFromFile.FileName  Filename
    String
efs.EfsRpcSetFileEncryptionKey.pEncryptionCertificate  Pencryptioncertificate
    No value
efs.EfsRpcWriteFileRaw.pvContext  Pvcontext
    Byte array
efs.opnum  Operation
    Unsigned 16-bit integer
efs.werror  Windows Error
    Unsigned 32-bit integer
```

**ENEALINX (linx)**

```
linx.ackno  ACK Number
    Unsigned 32-bit integer
    ACK Number
linx.ackreq  ACK-request
    Unsigned 32-bit integer
    ACK-request
linx.bundle  Bundle
    Unsigned 32-bit integer
    Bundle
linx.cmd  Command
    Unsigned 32-bit integer
    Command
linx.connection  Connection
    Unsigned 32-bit integer
    Connection
linx.destmaddr_ether  Destination
    6-byte Hardware (MAC) Address
    Destination Media Address (ethernet)
linx.dstaddr  Receiver Address
    Unsigned 32-bit integer
    Receiver Address
linx.dstaddr32  Receiver Address
    Unsigned 32-bit integer
    Receiver Address
linx.feats_neg_str  Feature Negotiation String
    String
    Feature Negotiation String
linx.fragno  Fragment Number
    Unsigned 32-bit integer
    Fragment Number
```

```
linx.fragno2  Fragment Number
             Unsigned 32-bit integer
             Fragment Number

linx.morefr2  More Fragments
             Unsigned 32-bit integer
             More Fragments

linx.morefra  More Fragments
             Unsigned 32-bit integer
             More fragments follow

linx.nack_count  Count
                Unsigned 32-bit integer
                Count

linx.nack_reserv  Reserved
                 Unsigned 32-bit integer
                 Nack Hdr Reserved

linx.nack_seqno  Sequence Number
                Unsigned 32-bit integer
                Sequence Number

linx.nexthdr  Next Header
             Unsigned 32-bit integer
             Next Header

linx.pcksize  Package Size
             Unsigned 32-bit integer
             Package Size

linx.publclid  Publish Conn ID
              Unsigned 32-bit integer
              Publish Conn ID

linx.reserved1  Reserved
               Unsigned 32-bit integer
               Main Hdr Reserved

linx.reserved3  Reserved
               Unsigned 32-bit integer
               Conn Hdr Reserved

linx.reserved5  Reserved
               Unsigned 32-bit integer
               Udata Hdr Reserved

linx.reserved6  Reserved
               Unsigned 32-bit integer
               Frag Hdr Reserved

linx.reserved7  Reserved
               Unsigned 32-bit integer
               ACK Hdr Reserved

linx.rlnh_feat_neg_str  RLNH Feature Negotiation String
                       String
                       RLNH Feature Negotiation String

linx.rlnh_linkaddr  RLNH linkaddr
                   Unsigned 32-bit integer
                   RLNH linkaddress
```

```
linx.rlnh_msg_reserved  RLNH msg reserved
    Unsigned 32-bit integer
    RLNH message reserved

linx.rlnh_msg_type      RLNH msg type
    Unsigned 32-bit integer
    RLNH message type

linx.rlnh_msg_type8     RLNH msg type
    Unsigned 32-bit integer
    RLNH message type

linx.rlnh_name          RLNH name
    String
    RLNH name

linx.rlnh_peer_linkaddr RLNH peer linkaddr
    Unsigned 32-bit integer
    RLNH peer linkaddress

linx.rlnh_src_linkaddr  RLNH src linkaddr
    Unsigned 32-bit integer
    RLNH source linkaddress

linx.rlnh_status        RLNH reply
    Unsigned 32-bit integer
    RLNH reply

linx.rlnh_version       RLNH version
    Unsigned 32-bit integer
    RLNH version

linx.seqno              Sequence Number
    Unsigned 32-bit integer
    Sequence Number

linx.signo              Signal Number
    Unsigned 32-bit integer
    Signal Number

linx.size               Size
    Unsigned 32-bit integer
    Size

linx.srcaddr            Sender Address
    Unsigned 32-bit integer
    Sender Address

linx.srcaddr32          Sender Address
    Unsigned 32-bit integer
    Sender Address

linx.srcmaddr_ether     Source
    6-byte Hardware (MAC) Address
    Source Media Address (ethernet)

linx.version            Version
    Unsigned 32-bit integer
    LINX Version

linx.winsize            WinSize
    Unsigned 32-bit integer
    Window Size
```

**ENTTEC (enttec)**

```
enttec.dmx_data.data    DMX Data
    No value
    DMX Data

enttec.dmx_data.data_filter  DMX Data
    Byte array
    DMX Data

enttec.dmx_data.dmx_data    DMX Data
    No value
    DMX Data

enttec.dmx_data.size    Data Size
    Unsigned 16-bit integer
    Data Size

enttec.dmx_data.start_code  Start Code
    Unsigned 8-bit integer
    Start Code

enttec.dmx_data.type    Data Type
    Unsigned 8-bit integer
    Data Type

enttec.dmx_data.universe  Universe
    Unsigned 8-bit integer
    Universe

enttec.head    Head
    Unsigned 32-bit integer
    Head

enttec.poll_reply_type  Reply Type
    Unsigned 8-bit integer
    Reply Type

enttec.poll_reply.mac    MAC
    6-byte Hardware (MAC) Address
    MAC

enttec.poll_reply.name    Name
    String
    Name

enttec.poll_reply.node_type  Node Type
    Unsigned 16-bit integer
    Node Type

enttec.poll_reply.option_field  Option Field
    Unsigned 8-bit integer
    Option Field

enttec.poll_reply.switch_settings  Switch settings
    Unsigned 8-bit integer
    Switch settings

enttec.poll_reply.tos    TOS
    Unsigned 8-bit integer
    TOS
```

```
enttec.poll_reply.ttl  TTL
    Unsigned 8-bit integer
    TTL
enttec.poll_reply.version  Version
    Unsigned 8-bit integer
    Version
```

**EPMD Protocol (epmd)**

```
epmd.creation  Creation
    Unsigned 16-bit integer
    Creation
epmd.dist_high  Dist High
    Unsigned 16-bit integer
    Dist High
epmd.dist_low  Dist Low
    Unsigned 16-bit integer
    Dist Low
epmd.edata  Edata
    Byte array
    Extra Data
epmd.elen  Elen
    Unsigned 16-bit integer
    Extra Length
epmd.len  Length
    Unsigned 16-bit integer
    Message Length
epmd.name  Name
    String
    Name
epmd.name_len  Name Length
    Unsigned 16-bit integer
    Name Length
epmd.names  Names
    Byte array
    List of names
epmd.result  Result
    Unsigned 8-bit integer
    Result
epmd.tcp_port  TCP Port
    Unsigned 16-bit integer
    TCP Port
epmd.type  Type
    Unsigned 8-bit integer
    Message Type
```

**ER Switch Packet Analysis (erspan)**

```
erspan.direction  Direction
                  Unsigned 16-bit integer
erspan.priority   Priority
                  Unsigned 16-bit integer
erspan.spanid     SpanID
                  Unsigned 16-bit integer
erspan.unknown1   Unknown1
                  Unsigned 16-bit integer
erspan.unknown2   Unknown2
                  Unsigned 16-bit integer
erspan.unknown3   Unknown3
                  Unsigned 16-bit integer
erspan.unknown4   Unknown4
                  Byte array
erspan.vlan       Vlan
                  Unsigned 16-bit integer
```

**ETHERNET Powerlink V1.0 (epl\_v1)**

```
epl_v1.ainv.channel  Channel
                    Unsigned 8-bit integer
epl_v1.asnd.channel  Channel
                    Unsigned 8-bit integer
epl_v1.asnd.data     Data
                    Byte array
epl_v1.asnd.device.variant  Device Variant
                    Unsigned 32-bit integer
epl_v1.asnd.firmware.version  Firmware Version
                    Unsigned 32-bit integer
epl_v1.asnd.hardware.revision  Hardware Revision
                    Unsigned 32-bit integer
epl_v1.asnd.node_id  NodeID
                    Unsigned 32-bit integer
epl_v1.asnd.poll.in.size  Poll IN Size
                    Unsigned 32-bit integer
epl_v1.asnd.poll.out.size  Poll OUT Size
                    Unsigned 32-bit integer
epl_v1.asnd.size       Size
                    Unsigned 16-bit integer
epl_v1.dest            Destination
                    Unsigned 8-bit integer
epl_v1.eoc.netcommand  Net Command
                    Unsigned 16-bit integer
epl_v1.preq.data       OUT Data
                    Byte array
```

```
epl_v1.preq.ms  MS (Multiplexed Slot)
    Unsigned 8-bit integer
epl_v1.preq.pollsize  Poll Size OUT
    Unsigned 16-bit integer
epl_v1.preq.rd  RD (Ready)
    Unsigned 8-bit integer
epl_v1.pres.data  IN Data
    Byte array
epl_v1.pres.er  ER (Error)
    Unsigned 8-bit integer
epl_v1.pres.ex  EX (Exception)
    Unsigned 8-bit integer
epl_v1.pres.ms  MS (Multiplexed)
    Unsigned 8-bit integer
epl_v1.pres.pollsize  Poll Size IN
    Unsigned 16-bit integer
epl_v1.pres.rd  RD (Ready)
    Unsigned 8-bit integer
epl_v1.pres.rs  RS (Request to Send)
    Unsigned 8-bit integer
epl_v1.pres.wa  WA (Warning)
    Unsigned 8-bit integer
epl_v1.service  Service
    Unsigned 8-bit integer
epl_v1.soa.netcommand.parameter  Net Command Parameter
    Byte array
epl_v1.soc.cycletime  Cycle Time
    Unsigned 32-bit integer
epl_v1.soc.ms  MS (Multiplexed Slot)
    Unsigned 8-bit integer
epl_v1.soc.netcommand  Net Command
    Unsigned 16-bit integer
epl_v1.soc.netcommand.parameter  Net Command Parameter
    Byte array
epl_v1.soc.nettime  Net Time
    Unsigned 32-bit integer
epl_v1.soc.ps  PS (Prescaled Slot)
    Unsigned 8-bit integer
epl_v1.src  Source
    Unsigned 8-bit integer
```

**ETHERNET Powerlink v2 (ep1)**

```
epl.asnd.data  Data
    Byte array
```



```
ep1.asnd.ires.appswdate  applicationSwDate
                          Unsigned 32-bit integer
ep1.asnd.ires.appswtime  applicationSwTime
                          Unsigned 32-bit integer
ep1.asnd.ires.confdate   VerifyConfigurationDate
                          Unsigned 32-bit integer
ep1.asnd.ires.conftime   VerifyConfigurationTime
                          Unsigned 32-bit integer
ep1.asnd.ires.devicetype DeviceType
                          String
ep1.asnd.ires.ec         EC (Exception Clear)
                          Boolean
ep1.asnd.ires.en         EN (Exception New)
                          Boolean
ep1.asnd.ires.eplver     EPLVersion
                          String
ep1.asnd.ires.features   FeatureFlags
                          Unsigned 32-bit integer
ep1.asnd.ires.features.bit0  Isochronous
                          Boolean
ep1.asnd.ires.features.bit1  SDO by UDP/IP
                          Boolean
ep1.asnd.ires.features.bit2  SDO by ASnd
                          Boolean
ep1.asnd.ires.features.bit3  SDO by PDO
                          Boolean
ep1.asnd.ires.features.bit4  NMT Info Services
                          Boolean
ep1.asnd.ires.features.bit5  Ext. NMT State Commands
                          Boolean
ep1.asnd.ires.features.bit6  Dynamic PDO Mapping
                          Boolean
ep1.asnd.ires.features.bit7  NMT Service by UDP/IP
                          Boolean
ep1.asnd.ires.features.bit8  Configuration Manager
                          Boolean
ep1.asnd.ires.features.bit9  Multiplexed Access
                          Boolean
ep1.asnd.ires.features.bitA  NodeID setup by SW
                          Boolean
ep1.asnd.ires.features.bitB  MN Basic Ethernet Mode
                          Boolean
ep1.asnd.ires.features.bitC  Routing Type 1 Support
                          Boolean
```

```
epl.asnd.ires.features.bitD Routing Type 2 Support
  Boolean
epl.asnd.ires.gateway DefaultGateway
  IPv4 address
epl.asnd.ires.hostname HostName
  String
epl.asnd.ires.ip IPAddress
  IPv4 address
epl.asnd.ires.mtu MTU
  Unsigned 16-bit integer
epl.asnd.ires.pollinsize PollInSize
  Unsigned 16-bit integer
epl.asnd.ires.polloutsizes PollOutSize
  Unsigned 16-bit integer
epl.asnd.ires.pr PR (Priority)
  Unsigned 8-bit integer
epl.asnd.ires.productcode ProductCode
  Unsigned 32-bit integer
epl.asnd.ires.profile Profile
  Unsigned 16-bit integer
epl.asnd.ires.resptime ResponseTime
  Unsigned 32-bit integer
epl.asnd.ires.revisionno RevisionNumber
  Unsigned 32-bit integer
epl.asnd.ires.rs RS (RequestToSend)
  Unsigned 8-bit integer
epl.asnd.ires.serialno SerialNumber
  Unsigned 32-bit integer
epl.asnd.ires.state NMTStatus
  Unsigned 8-bit integer
epl.asnd.ires.subnet SubnetMask
  IPv4 address
epl.asnd.ires.vendorext1 VendorSpecificExtension1
  Unsigned 64-bit integer
epl.asnd.ires.vendorext2 VendorSpecificExtension2
  Byte array
epl.asnd.ires.vendorid VendorId
  Unsigned 32-bit integer
epl.asnd.nmtcommand.cdat NMTCommandData
  Byte array
epl.asnd.nmtcommand.cid NMTCommandId
  Unsigned 8-bit integer
epl.asnd.nmtcommand.nmtflusharpenry.nid NodeID
  Unsigned 8-bit integer
```

```
ep1.asnd.nmtcommand.nmtnethostnameset.hn  HostName
    Byte array
ep1.asnd.nmtcommand.nmtpublishtime.dt  DateTime
    Byte array
ep1.asnd.nmtrequest.rcd  NMTRequestedCommandData
    Byte array
ep1.asnd.nmtrequest.rcid  NMTRequestedCommandID
    Unsigned 8-bit integer
ep1.asnd.nmtrequest.rct  NMTRequestedCommandTarget
    Unsigned 8-bit integer
ep1.asnd.res.seb.bit0  Generic error
    Unsigned 8-bit integer
ep1.asnd.res.seb.bit1  Current
    Unsigned 8-bit integer
ep1.asnd.res.seb.bit2  Voltage
    Unsigned 8-bit integer
ep1.asnd.res.seb.bit3  Temperature
    Unsigned 8-bit integer
ep1.asnd.res.seb.bit4  Communication error
    Unsigned 8-bit integer
ep1.asnd.res.seb.bit5  Device profile specific
    Unsigned 8-bit integer
ep1.asnd.res.seb.bit7  Manufacturer specific
    Unsigned 8-bit integer
ep1.asnd.res.seb.devicespecific_err  Device profile specific
    Byte array
ep1.asnd.sdo.cmd.abort  SDO Abort
    Unsigned 8-bit integer
ep1.asnd.sdo.cmd.abort.code  SDO Transfer Abort
    Unsigned 8-bit integer
ep1.asnd.sdo.cmd.command.id  SDO Command ID
    Unsigned 8-bit integer
ep1.asnd.sdo.cmd.data.size  SDO Data size
    Unsigned 8-bit integer
ep1.asnd.sdo.cmd.read.by.index.data  Payload
    Byte array
ep1.asnd.sdo.cmd.read.by.index.index  SDO Read by Index, Index
    Unsigned 16-bit integer
ep1.asnd.sdo.cmd.read.by.index.subindex  SDO Read by Index, SubIndex
    Unsigned 8-bit integer
ep1.asnd.sdo.cmd.response  SDO Response
    Unsigned 8-bit integer
ep1.asnd.sdo.cmd.segment.size  SDO Segment size
    Unsigned 8-bit integer
```

```
epl.asnd.sdo.cmd.segmentation  SDO Segmentation
    Unsigned 8-bit integer
epl.asnd.sdo.cmd.transaction.id  SDO Transaction ID
    Unsigned 8-bit integer
epl.asnd.sdo.cmd.write.by.index.data  Payload
    Byte array
epl.asnd.sdo.cmd.write.by.index.index  SDO Write by Index, Index
    Unsigned 16-bit integer
epl.asnd.sdo.cmd.write.by.index.subindex  SDO Write by Index, SubIndex
    Unsigned 8-bit integer
epl.asnd.sdo.seq.receive.con  ReceiveCon
    Unsigned 8-bit integer
epl.asnd.sdo.seq.receive.sequence.number  ReceiveSequenceNumber
    Unsigned 8-bit integer
epl.asnd.sdo.seq.send.con  SendCon
    Unsigned 8-bit integer
epl.asnd.sdo.seq.send.sequence.number  SendSequenceNumber
    Unsigned 8-bit integer
epl.asnd.sres.ec  EC (Exception Clear)
    Boolean
epl.asnd.sres.el  ErrorsCodeList
    Byte array
epl.asnd.sres.el.entry  Entry
    Byte array
epl.asnd.sres.el.entry.add  Additional Information
    Unsigned 64-bit integer
epl.asnd.sres.el.entry.code  Error Code
    Unsigned 16-bit integer
epl.asnd.sres.el.entry.time  Time Stamp
    Unsigned 64-bit integer
epl.asnd.sres.el.entry.type  Entry Type
    Unsigned 16-bit integer
epl.asnd.sres.el.entry.type.bit14  Bit14
    Unsigned 16-bit integer
epl.asnd.sres.el.entry.type.bit15  Bit15
    Unsigned 16-bit integer
epl.asnd.sres.el.entry.type.mode  Mode
    Unsigned 16-bit integer
epl.asnd.sres.el.entry.type.profile  Profile
    Unsigned 16-bit integer
epl.asnd.sres.en  EN (Exception New)
    Boolean
epl.asnd.sres.pr  PR (Priority)
    Unsigned 8-bit integer
```

```
ep1.asnd.sres.rs  RS (RequestToSend)
                  Unsigned 8-bit integer
ep1.asnd.sres.seb  StaticErrorBitField
                  Byte array
ep1.asnd.sres.stat NMTStatus
                  Unsigned 8-bit integer
ep1.asnd.svid     ServiceID
                  Unsigned 8-bit integer
ep1.dest         Destination
                  Unsigned 8-bit integer
ep1.mtyp         MessageType
                  Unsigned 8-bit integer
ep1.preq.ea      EA (Exception Acknowledge)
                  Boolean
ep1.preq.ms      MS (Multiplexed Slot)
                  Boolean
ep1.preq.pdov    PDOVersion
                  String
ep1.preq.pl      Payload
                  Byte array
ep1.preq.rd      RD (Ready)
                  Boolean
ep1.preq.size    Size
                  Unsigned 16-bit integer
ep1.pres.en      EN (Exception New)
                  Boolean
ep1.pres.ms      MS (Multiplexed Slot)
                  Boolean
ep1.pres.pdov    PDOVersion
                  String
ep1.pres.pl      Payload
                  Byte array
ep1.pres.pr      PR (Priority)
                  Unsigned 8-bit integer
ep1.pres.rd      RD (Ready)
                  Boolean
ep1.pres.rs      RS (RequestToSend)
                  Unsigned 8-bit integer
ep1.pres.size    Size
                  Unsigned 16-bit integer
ep1.pres.stat    NMTStatus
                  Unsigned 8-bit integer
ep1.soa.ea       EA (Exception Acknowledge)
                  Boolean
```

```

epl.soa.eplv  EPLVersion
              String
epl.soa.er    ER (Exception Reset)
              Boolean
epl.soa.stat  NMTStatus
              Unsigned 8-bit integer
epl.soa.svid  RequestedServiceID
              Unsigned 8-bit integer
epl.soa.svtg  RequestedServiceTarget
              Unsigned 8-bit integer
epl.soc.mc    MC (Multiplexed Cycle Completed)
              Boolean
epl.soc.nettime  NetTime
              Date/Time stamp
epl.soc.ps    PS (Prescaled Slot)
              Boolean
epl.soc.relativetime  RelativeTime
              Unsigned 64-bit integer
epl.src      Source
              Unsigned 8-bit integer

```

#### **ETSI Distribution & Communication Protocol (for DRM) (dcp-etsi)**

```

dcp-etsi.sync  sync
               String
               AF or PF

```

#### **EUTRAN X2 Application Protocol (X2AP) (x2ap)**

```

x2ap.Bearers_Admitted_Item  Bearers-Admitted-Item
                             No value
                             x2ap.Bearers_Admitted_Item
x2ap.Bearers_Admitted_List  Bearers-Admitted-List
                             Unsigned 32-bit integer
                             x2ap.Bearers_Admitted_List
x2ap.Bearers_Admitted_List_item  Item
                             No value
                             x2ap.ProtocolIE_Single_Container
x2ap.Bearers_NotAdmitted_Item  Bearers-NotAdmitted-Item
                             No value
                             x2ap.Bearers_NotAdmitted_Item
x2ap.Bearers_NotAdmitted_List  Bearers-NotAdmitted-List
                             Unsigned 32-bit integer
                             x2ap.Bearers_NotAdmitted_List
x2ap.Bearers_NotAdmitted_List_item  Item
                             No value
                             x2ap.ProtocolIE_Single_Container

```

```

x2ap.Bearers_SubjectToStatusTransfer_Item  Bearers-SubjectToStatusTransfer-Item
    No value
    x2ap.Bearers_SubjectToStatusTransfer_Item
x2ap.Bearers_SubjectToStatusTransfer_List  Bearers-SubjectToStatusTransfer-List
    Unsigned 32-bit integer
    x2ap.Bearers_SubjectToStatusTransfer_List
x2ap.Bearers_SubjectToStatusTransfer_List_item  Item
    No value
    x2ap.ProtocolIE_Single_Container
x2ap.Bearers_ToBeSetup_Item  Bearers-ToBeSetup-Item
    No value
    x2ap.Bearers_ToBeSetup_Item
x2ap.Bearers_ToBeSetup_List_item  Item
    No value
    x2ap.ProtocolIE_Single_Container
x2ap.BroadcastPLMNs_Item_item  Item
    Byte array
    x2ap.PLMN_Identity
x2ap.CGI  CGI
    No value
    x2ap.CGI
x2ap.Cause  Cause
    Unsigned 32-bit integer
    x2ap.Cause
x2ap.CellInformation_Item  CellInformation-Item
    No value
    x2ap.CellInformation_Item
x2ap.CellInformation_List  CellInformation-List
    Unsigned 32-bit integer
    x2ap.CellInformation_List
x2ap.CellInformation_List_item  Item
    No value
    x2ap.ProtocolIE_Single_Container
x2ap.CriticalityDiagnostics  CriticalityDiagnostics
    No value
    x2ap.CriticalityDiagnostics
x2ap.CriticalityDiagnostics_IE_List_item  Item
    No value
    x2ap.CriticalityDiagnostics_IE_List_item
x2ap.ENB_ID  ENB-ID
    Unsigned 32-bit integer
    x2ap.ENB_ID
x2ap.EPLMNs_item  Item
    Byte array
    x2ap.PLMN_Identity
x2ap.ErrorIndication  ErrorIndication
    No value
    x2ap.ErrorIndication

```

```
x2ap.ForbiddenLACs_item  Item
    Byte array
    x2ap.LAC

x2ap.ForbiddenLAs_item  Item
    No value
    x2ap.ForbiddenLAs_Item

x2ap.ForbiddenTAIs_item  Item
    Byte array
    x2ap.TAI

x2ap.ForbiddenTAs_item  Item
    No value
    x2ap.ForbiddenTAs_Item

x2ap.HandoverCancel  HandoverCancel
    No value
    x2ap.HandoverCancel

x2ap.HandoverPreparationFailure  HandoverPreparationFailure
    No value
    x2ap.HandoverPreparationFailure

x2ap.HandoverRequest  HandoverRequest
    No value
    x2ap.HandoverRequest

x2ap.HandoverRequestAcknowledge  HandoverRequestAcknowledge
    No value
    x2ap.HandoverRequestAcknowledge

x2ap.InterfacesToTrace_Item  InterfacesToTrace-Item
    No value
    x2ap.InterfacesToTrace_Item

x2ap.InterfacesToTrace_item  Item
    No value
    x2ap.ProtocolIE_Single_Container

x2ap.LoadInformation  LoadInformation
    No value
    x2ap.LoadInformation

x2ap.PDCP_SNofULSDUsNotToBeRetransmitted_List_item  Item
    Signed 32-bit integer
    x2ap.PDCP_SN

x2ap.PrivateIE_Container_item  Item
    No value
    x2ap.PrivateIE_Field

x2ap.ProtocolExtensionContainer_item  Item
    No value
    x2ap.ProtocolExtensionField

x2ap.ProtocolIE_Container_item  Item
    No value
    x2ap.ProtocolIE_Field

x2ap.ReleaseResource  ReleaseResource
    No value
    x2ap.ReleaseResource
```



```

x2ap.ResetResponse  ResetResponse
    No value
    x2ap.ResetResponse

x2ap.SNStatusTransfer  SNStatusTransfer
    No value
    x2ap.SNStatusTransfer

x2ap.ServedCells  ServedCells
    Unsigned 32-bit integer
    x2ap.ServedCells

x2ap.ServedCells_item  Item
    No value
    x2ap.ServedCell_Information

x2ap.TargeteNBtoSource_eNBTransparentContainer  TargeteNBtoSource-eNBTransparent
    Byte array
    x2ap.TargeteNBtoSource_eNBTransparentContainer

x2ap.TimeToWait  TimeToWait
    Byte array
    x2ap.TimeToWait

x2ap.TraceActivation  TraceActivation
    No value
    x2ap.TraceActivation

x2ap.UE_ContextInformation  UE-ContextInformation
    No value
    x2ap.UE_ContextInformation

x2ap.UE_HistoryInformation  UE-HistoryInformation
    Unsigned 32-bit integer
    x2ap.UE_HistoryInformation

x2ap.UE_HistoryInformation_item  Item
    No value
    x2ap.LastVisitedCell_Item

x2ap.UE_X2AP_ID  UE-X2AP-ID
    Unsigned 32-bit integer
    x2ap.UE_X2AP_ID

x2ap.X2AP_PDU  X2AP-PDU
    Unsigned 32-bit integer
    x2ap.X2AP_PDU

x2ap.X2SetupFailure  X2SetupFailure
    No value
    x2ap.X2SetupFailure

x2ap.X2SetupRequest  X2SetupRequest
    No value
    x2ap.X2SetupRequest

x2ap.X2SetupResponse  X2SetupResponse
    No value
    x2ap.X2SetupResponse

x2ap.aggregateMaximumBitRate  aggregateMaximumBitRate
    No value
    x2ap.AggregateMaximumBitRate

```

```

x2ap.aggregateMaximumBitRateDownlink aggregateMaximumBitRateDownlink
    Unsigned 32-bit integer
    x2ap.SAE_Bearer_BitRate

x2ap.aggregateMaximumBitRateUplink aggregateMaximumBitRateUplink
    Unsigned 32-bit integer
    x2ap.SAE_Bearer_BitRate

x2ap.allocationAndRetentionPriority allocationAndRetentionPriority
    Byte array
    x2ap.OCTET_STRING

x2ap.bearer_ID bearer-ID
    Byte array
    x2ap.Bearer_ID

x2ap.bearers_ToBeSetup_List bearers-ToBeSetup-List
    Unsigned 32-bit integer
    x2ap.Bearers_ToBeSetup_List

x2ap.broadcastPLMNs broadcastPLMNs
    Unsigned 32-bit integer
    x2ap.BroadcastPLMNs_Item

x2ap.cI cI
    Byte array
    x2ap.CI

x2ap.cause cause
    Unsigned 32-bit integer
    x2ap.Cause

x2ap.cellId cellId
    Byte array
    x2ap.CellId

x2ap.cellType cellType
    Unsigned 32-bit integer
    x2ap.CellType

x2ap.criticality criticality
    Unsigned 32-bit integer
    x2ap.Criticality

x2ap.dL_Forwarding dL-Forwarding
    Unsigned 32-bit integer
    x2ap.DL_Forwarding

x2ap.dL_GTP_TunnelEndpoint dL-GTP-TunnelEndpoint
    No value
    x2ap.GTPtunnelEndpoint

x2ap.dL_PDCP_SN_NextToAssign dL-PDCP-SN-NextToAssign
    Signed 32-bit integer
    x2ap.PDCP_SN

x2ap.equivalentPLMNs equivalentPLMNs
    Unsigned 32-bit integer
    x2ap.EPLMNs

x2ap.extensionValue extensionValue
    No value
    x2ap.T_extensionValue

```

```
x2ap.forbiddenInterRATs  forbiddenInterRATs
    Unsigned 32-bit integer
    x2ap.ForbiddenInterRATs

x2ap.forbiddenLACs  forbiddenLACs
    Unsigned 32-bit integer
    x2ap.ForbiddenLACs

x2ap.forbiddenLAs  forbiddenLAs
    Unsigned 32-bit integer
    x2ap.ForbiddenLAs

x2ap.forbiddenTAIs  forbiddenTAIs
    Unsigned 32-bit integer
    x2ap.ForbiddenTAIs

x2ap.forbiddenTAs  forbiddenTAs
    Unsigned 32-bit integer
    x2ap.ForbiddenTAs

x2ap.frequency  frequency
    Byte array
    x2ap.Frequency

x2ap.gTP_TEID  gTP-TEID
    Byte array
    x2ap.GTP_TEI

x2ap.global  global
    x2ap.OBJECT_IDENTIFIER

x2ap.global_Cell_ID  global-Cell-ID
    No value
    x2ap.CGI

x2ap.handoverRestrictionList  handoverRestrictionList
    No value
    x2ap.HandoverRestrictionList

x2ap.iECriticality  iECriticality
    Unsigned 32-bit integer
    x2ap.Criticality

x2ap.iE_Extensions  iE-Extensions
    Unsigned 32-bit integer
    x2ap.ProtocolExtensionContainer

x2ap.iE_ID  iE-ID
    Unsigned 32-bit integer
    x2ap.ProtocolIE_ID

x2ap.iEsCriticalityDiagnostics  iEsCriticalityDiagnostics
    Unsigned 32-bit integer
    x2ap.CriticalityDiagnostics_IE_List

x2ap.id  id
    Unsigned 32-bit integer
    x2ap.ProtocolIE_ID

x2ap.initiatingMessage  initiatingMessage
    No value
    x2ap.InitiatingMessage
```

```
x2ap.interfacesToTrace  interfacesToTrace
    Unsigned 32-bit integer
    x2ap.InterfacesToTrace

x2ap.interferenceOverloadIndication  interferenceOverloadIndication
    Byte array
    x2ap.InterferenceOverloadIndication

x2ap.lAC  lAC
    Byte array
    x2ap.LAC

x2ap.label  label
    Unsigned 32-bit integer
    x2ap.INTEGER_1_256

x2ap.local  local
    Unsigned 32-bit integer
    x2ap.INTEGER_0_maxPrivateIEs

x2ap.mME_UE_S1AP_ID  mME-UE-S1AP-ID
    Unsigned 32-bit integer
    x2ap.UE_S1AP_ID

x2ap.misc  misc
    Unsigned 32-bit integer
    x2ap.CauseMisc

x2ap.pDCP_SNoFULSDUsNotToBeRetransmitted_List  pDCP-SNoFULSDUsNotToBeRetransmitt
    Unsigned 32-bit integer
    x2ap.PDCP_SNoFULSDUsNotToBeRetransmitted_List

x2ap.pLMN_Identity  pLMN-Identity
    Byte array
    x2ap.PLMN_Identity

x2ap.phyCID  phyCID
    Byte array
    x2ap.PhyCID

x2ap.privateIEs  privateIEs
    Unsigned 32-bit integer
    x2ap.PrivateIE_Container

x2ap.procedureCode  procedureCode
    Unsigned 32-bit integer
    x2ap.ProcedureCode

x2ap.procedureCriticality  procedureCriticality
    Unsigned 32-bit integer
    x2ap.Criticality

x2ap.protocol  protocol
    Unsigned 32-bit integer
    x2ap.CauseProtocol

x2ap.protocolIEs  protocolIEs
    Unsigned 32-bit integer
    x2ap.ProtocolIE_Container

x2ap.rB_type  rB-type
    Signed 32-bit integer
    x2ap.RB_type
```

```

x2ap.rRC_Context  rRC-Context
    Byte array
    x2ap.RRC_Context

x2ap.radioNetwork  radioNetwork
    Unsigned 32-bit integer
    x2ap.CauseRadioNetwork

x2ap.sAE_BearerLevel_QoS_Parameters  sAE-BearerLevel-QoS-Parameters
    No value
    x2ap.SAE_BearerLevel_QoS_Parameters

x2ap.sAE_BearerType  sAE-BearerType
    Unsigned 32-bit integer
    x2ap.SAE_BearerType

x2ap.sAE_Bearer_GuaranteedBitrateDL  sAE-Bearer-GuaranteedBitrateDL
    Unsigned 32-bit integer
    x2ap.SAE_Bearer_BitRate

x2ap.sAE_Bearer_GuaranteedBitrateUL  sAE-Bearer-GuaranteedBitrateUL
    Unsigned 32-bit integer
    x2ap.SAE_Bearer_BitRate

x2ap.sAE_Bearer_ID  sAE-Bearer-ID
    Byte array
    x2ap.Bearer_ID

x2ap.sAE_Bearer_MaximumBitrateDL  sAE-Bearer-MaximumBitrateDL
    Unsigned 32-bit integer
    x2ap.SAE_Bearer_BitRate

x2ap.sAE_Bearer_MaximumBitrateUL  sAE-Bearer-MaximumBitrateUL
    Unsigned 32-bit integer
    x2ap.SAE_Bearer_BitRate

x2ap.sAE_GBR_bearer  sAE-GBR-bearer
    No value
    x2ap.SAE_GBR_Bearer

x2ap.sAE_non_GBR_Bearer_Type  sAE-non-GBR-Bearer-Type
    Unsigned 32-bit integer
    x2ap.T_sAE_non_GBR_Bearer_Type

x2ap.sAE_non_GBR_bearer  sAE-non-GBR-bearer
    No value
    x2ap.SAE_Non_GBR_Bearer

x2ap.servingPLMN  servingPLMN
    Byte array
    x2ap.PLMN_Identity

x2ap.successfulOutcome  successfulOutcome
    No value
    x2ap.SuccessfulOutcome

x2ap.tAI  tAI
    Byte array
    x2ap.TAI

x2ap.time_UE_StayedInCell  time-UE-StayedInCell
    Signed 32-bit integer
    x2ap.Time_UE_StayedInCell

```

```

x2ap.traceDepth  traceDepth
    Unsigned 32-bit integer
    x2ap.TraceDepth

x2ap.traceInterface  traceInterface
    Unsigned 32-bit integer
    x2ap.TraceInterface

x2ap.traceReference  traceReference
    Byte array
    x2ap.TraceReference

x2ap.transport  transport
    Unsigned 32-bit integer
    x2ap.CauseTransport

x2ap.transportLayerAddress  transportLayerAddress
    Byte array
    x2ap.TransportLayerAddress

x2ap.triggeringMessage  triggeringMessage
    Unsigned 32-bit integer
    x2ap.TriggeringMessage

x2ap.typeOfError  typeOfError
    Unsigned 32-bit integer
    x2ap.TypeOfError

x2ap.uL_GTP_TunnelEndpoint  uL-GTP-TunnelEndpoint
    No value
    x2ap.GTPTunnelEndpoint

x2ap.uL_GTPtunnelEndpoint  uL-GTPtunnelEndpoint
    No value
    x2ap.GTPTunnelEndpoint

x2ap.uL_PDCP_SN_NextInSequenceExpected  uL-PDCP-SN-NextInSequenceExpected
    Signed 32-bit integer
    x2ap.PDCP_SN

x2ap.unsuccessfulOutcome  unsuccessfulOutcome
    No value
    x2ap.UnsuccessfulOutcome

x2ap.value  value
    No value
    x2ap.ProtocolIE_Field_value

```

**Echo (echo)**

```

echo.data  Echo data
    Byte array
    Echo data

echo.request  Echo request
    Boolean
    Echo data

echo.response  Echo response
    Boolean
    Echo data

```

**Encapsulating Security Payload (esp)**

```
esp.iv    ESP IV
          Byte array
          IP Encapsulating Security Payload

esp.pad_len  ESP Pad Length
            Unsigned 8-bit integer
            IP Encapsulating Security Payload Pad Length

esp.protocol  ESP Next Header
            Unsigned 8-bit integer
            IP Encapsulating Security Payload Next Header

esp.sequence  ESP Sequence
            Unsigned 32-bit integer
            IP Encapsulating Security Payload Sequence Number

esp.spi    ESP SPI
          Unsigned 32-bit integer
          IP Encapsulating Security Payload Security Parameters Index
```

**Endpoint Handlespace Redundancy Protocol (enrp)**

```
enrp.cause_code  Cause code
                Unsigned 16-bit integer

enrp.cause_info  Cause info
                Byte array

enrp.cause_length  Cause length
                  Unsigned 16-bit integer

enrp.cause_padding  Padding
                    Byte array

enrp.cookie  Cookie
            Byte array

enrp.ipv4_address  IP Version 4 address
                  IPv4 address

enrp.ipv6_address  IP Version 6 address
                  IPv6 address

enrp.m_bit  M bit
            Boolean

enrp.message_flags  Flags
                    Unsigned 8-bit integer

enrp.message_length  Length
                     Unsigned 16-bit integer

enrp.message_type  Type
                   Unsigned 8-bit integer

enrp.message_value  Value
                    Byte array

enrp.parameter_length  Parameter length
                       Unsigned 16-bit integer

enrp.parameter_padding  Padding
                         Byte array
```

```
enrp.parameter_type  Parameter Type
    Unsigned 16-bit integer
enrp.parameter_value  Parameter value
    Byte array
enrp.pe_checksum  PE checksum
    Unsigned 16-bit integer
enrp.pe_identifier  PE identifier
    Unsigned 32-bit integer
enrp.pool_element_home_enrp_server_identifier  Home ENRP server identifier
    Unsigned 32-bit integer
enrp.pool_element_pe_identifier  PE identifier
    Unsigned 32-bit integer
enrp.pool_element_registration_life  Registration life
    Signed 32-bit integer
enrp.pool_handle_pool_handle  Pool handle
    Byte array
enrp.r_bit  R bit
    Boolean
enrp.receiver_servers_id  Receiver server's ID
    Unsigned 32-bit integer
enrp.reserved  Reserved
    Unsigned 16-bit integer
enrp.sctp_transport_port  Port
    Unsigned 16-bit integer
enrp.sender_servers_id  Sender server's ID
    Unsigned 32-bit integer
enrp.server_information_server_identifier  Server identifier
    Unsigned 32-bit integer
enrp.target_servers_id  Target server's ID
    Unsigned 32-bit integer
enrp.tcp_transport_port  Port
    Unsigned 16-bit integer
enrp.transport_use  Transport use
    Unsigned 16-bit integer
enrp.udp_transport_port  Port
    Unsigned 16-bit integer
enrp.udp_transport_reserved  Reserved
    Unsigned 16-bit integer
enrp.update_action  Update action
    Unsigned 16-bit integer
enrp.w_bit  W bit
    Boolean
```



**Enhanced Interior Gateway Routing Protocol (eigrp)**

eigrp.as Autonomous System  
Unsigned 16-bit integer  
Autonomous System number

eigrp.opcode Opcode  
Unsigned 8-bit integer  
Opcode number

eigrp.tlv Entry  
Unsigned 16-bit integer  
Type/Length/Value

**EtherCAT Mailbox Protocol (ecat\_mailbox)**

ecat\_mailbox.address Address  
Unsigned 16-bit integer

ecat\_mailbox.coe CoE  
Byte array

ecat\_mailbox.coe.dsoldata Data  
Byte array

ecat\_mailbox.coe.number Number  
Unsigned 16-bit integer

ecat\_mailbox.coe.sdoccsds Download Segment  
Unsigned 8-bit integer

ecat\_mailbox.coe.sdoccsds.lastseg Last Segment  
Boolean

ecat\_mailbox.coe.sdoccsds.size Size  
Unsigned 8-bit integer

ecat\_mailbox.coe.sdoccsds.toggle Toggle Bit  
Boolean

ecat\_mailbox.coe.sdoccsid Initiate Download  
Unsigned 8-bit integer

ecat\_mailbox.coe.sdoccsid.complete Access  
Boolean

ecat\_mailbox.coe.sdoccsid.expedited Expedited  
Boolean

ecat\_mailbox.coe.sdoccsid.size0 Bytes  
Boolean

ecat\_mailbox.coe.sdoccsid.size1 Bytes  
Boolean

ecat\_mailbox.coe.sdoccsid.sizeind Size Ind.  
Boolean

ecat\_mailbox.coe.sdoccsiu Init Upload  
Unsigned 8-bit integer

ecat\_mailbox.coe.sdoccsiu\_complete Toggle Bit  
Boolean

ecat\_mailbox.coe.sdoccsus Upload Segment  
Unsigned 8-bit integer

```
ecat_mailbox.coe.sdoccsus_toggle  Toggle Bit
    Boolean
ecat_mailbox.coe.sdodata  Data
    Unsigned 32-bit integer
ecat_mailbox.coe.sdoerror  SDO Error
    Unsigned 32-bit integer
ecat_mailbox.coe.sdoidx  Index
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfobitlen  Info Bit Len
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfodatatype  Info Data Type
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfodefualtvalue  Info Default Val
    No value
ecat_mailbox.coe.sdoinfoerrorcode  Info Error Code
    Unsigned 32-bit integer
ecat_mailbox.coe.sdoinfofrag  Info Frag Left
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfoindex  Info Obj Index
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfofolist  Info List
    No value
ecat_mailbox.coe.sdoinfofolisttype  Info List Type
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfofomaxsub  Info Max SubIdx
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoinfofomaxvalue  Info Max Val
    No value
ecat_mailbox.coe.sdoinfofominvalue  Info Min Val
    No value
ecat_mailbox.coe.sdoinfofonaame  Info Name
    String
ecat_mailbox.coe.sdoinfoobjaccess  Info Obj Access
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfoobjcode  Info Obj Code
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoinfoopcode  Info OpCode
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoinfosubindex  Info Obj SubIdx
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoinfofounitttype  Info Data Type
    Unsigned 16-bit integer
ecat_mailbox.coe.sdoinfovalueinfo  Info Obj SubIdx
    Unsigned 8-bit integer
```

```
ecat_mailbox.coe.sdolength  Length
    Unsigned 32-bit integer
ecat_mailbox.coe.sdoreq    SDO Req
    Unsigned 8-bit integer
ecat_mailbox.coe.sdores    SDO Res
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoscsds  Download Segment Response
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoscsds_toggle  Toggle Bit
    Boolean
ecat_mailbox.coe.sdoscsiu  Initiate Upload Response
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoscsiu_complete  Access
    Boolean
ecat_mailbox.coe.sdoscsiu_expedited  Expedited
    Boolean
ecat_mailbox.coe.sdoscsiu_size0  Bytes
    Boolean
ecat_mailbox.coe.sdoscsiu_size1  Bytes
    Boolean
ecat_mailbox.coe.sdoscsiu_sizeind  Size Ind.
    Boolean
ecat_mailbox.coe.sdoscsus  Upload Segment
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoscsus_bytes  Bytes
    Unsigned 8-bit integer
ecat_mailbox.coe.sdoscsus_lastseg  Last Segment
    Boolean
ecat_mailbox.coe.sdoscsus_toggle  Toggle Bit
    Boolean
ecat_mailbox.coe.sdosub  SubIndex
    Unsigned 8-bit integer
ecat_mailbox.coe.type  Type
    Unsigned 16-bit integer
ecat_mailbox.data  MB Data
    No value
ecat_mailbox.eoe  EoE Fragment
    Byte array
ecat_mailbox.eoe.fraghead  Eoe Frag Header
    Byte array
ecat_mailbox.eoe.fragment  EoE Frag Data
    Byte array
ecat_mailbox.eoe.fragno  EoE
    Unsigned 32-bit integer
```

```
ecat_mailbox.eoe.frame    EoE
    Unsigned 32-bit integer
ecat_mailbox.eoe.init    Init
    No value
ecat_mailbox.eoe.init.append_timestamp AppendTimeStamp
    Boolean
ecat_mailbox.eoe.init.contains_defaultgateway DefaultGateway
    Boolean
ecat_mailbox.eoe.init.contains_dnsname    DnsName
    Boolean
ecat_mailbox.eoe.init.contains_dnsserver  DnsServer
    Boolean
ecat_mailbox.eoe.init.contains_ipaddr    IpAddr
    Boolean
ecat_mailbox.eoe.init.contains_macaddr    MacAddr
    Boolean
ecat_mailbox.eoe.init.contains_subnetmask SubnetMask
    Boolean
ecat_mailbox.eoe.init.defaultgateway    Default Gateway
    IPv4 address
ecat_mailbox.eoe.init.dnsname    Dns Name
    String
ecat_mailbox.eoe.init.dnsserver    Dns Server
    IPv4 address
ecat_mailbox.eoe.init.ipaddr    Ip Addr
    IPv4 address
ecat_mailbox.eoe.init.macaddr    Mac Addr
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.init.subnetmask    Subnet Mask
    IPv4 address
ecat_mailbox.eoe.last    Last Fragment
    Unsigned 32-bit integer
ecat_mailbox.eoe.macfilter    Mac Filter
    Byte array
ecat_mailbox.eoe.macfilter.filter    Filter
    Byte array
ecat_mailbox.eoe.macfilter.filter0    Filter 0
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter1    Filter 1
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter10    Filter 10
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter11    Filter 11
    6-byte Hardware (MAC) Address
```

```

ecat_mailbox.eoe.macfilter.filter12  Filter 12
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter13  Filter 13
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter14  Filter 14
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter15  Filter 15
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter2   Filter 2
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter3   Filter 3
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter4   Filter 4
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter5   Filter 5
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter6   Filter 6
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter7   Filter 7
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter8   Filter 8
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filter9   Filter 9
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filtermask Filter Mask
    Byte array
ecat_mailbox.eoe.macfilter.filtermask0 Mask 0
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filtermask1 Mask 1
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filtermask2 Mask 2
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.filtermask3 Mask 3
    6-byte Hardware (MAC) Address
ecat_mailbox.eoe.macfilter.macfiltercount Mac Filter Count
    Unsigned 8-bit integer
ecat_mailbox.eoe.macfilter.maskcount  Mac Filter Mask Count
    Unsigned 8-bit integer
ecat_mailbox.eoe.macfilter.nobroadcasts No Broadcasts
    Boolean
ecat_mailbox.eoe.offset  EoE
    Unsigned 32-bit integer
ecat_mailbox.eoe.timestamp Time Stamp
    Unsigned 32-bit integer

```

```
ecat_mailbox.eoe.timestampapp  Last Fragment
    Unsigned 32-bit integer
ecat_mailbox.eoe.timestampreq  Last Fragment
    Unsigned 32-bit integer
ecat_mailbox.eoe.type          EoE
    Unsigned 32-bit integer
ecat_mailbox.foe               Foe
    Byte array
ecat_mailbox.foe.efw           Firmware
    Byte array
ecat_mailbox.foe.efw.addresshw AddressHW
    Unsigned 16-bit integer
ecat_mailbox.foe.efw.addresslw AddressLW
    Unsigned 16-bit integer
ecat_mailbox.foe.efw.cmd       Cmd
    Unsigned 16-bit integer
ecat_mailbox.foe.efw.data      Data
    Byte array
ecat_mailbox.foe.efw.size      Size
    Unsigned 16-bit integer
ecat_mailbox.foe_busydata      Foe Data
    Byte array
ecat_mailbox.foe_busydone      Foe BusyDone
    Unsigned 16-bit integer
ecat_mailbox.foe_busyentire    Foe BusyEntire
    Unsigned 16-bit integer
ecat_mailbox.foe_errcode       Foe ErrorCode
    Unsigned 32-bit integer
ecat_mailbox.foe_errtext       Foe ErrorString
    String
ecat_mailbox.foe_filelength    Foe FileLength
    Unsigned 32-bit integer
ecat_mailbox.foe_filename      Foe FileName
    String
ecat_mailbox.foe_opmode        Foe OpMode
    Unsigned 8-bit integer
    Op modes
ecat_mailbox.foe_packetno      Foe PacketNo
    Unsigned 16-bit integer
ecat_mailbox.length            Length
    Unsigned 16-bit integer
ecat_mailbox.soe               Soe
    Byte array
ecat_mailbox.soe_data          SoE Data
    Byte array
```

```

ecat_mailbox.soe_error  SoE Error
    Unsigned 16-bit integer
ecat_mailbox.soe_frag  SoE FragLeft
    Unsigned 16-bit integer
ecat_mailbox.soe_header  Soe Header
    Unsigned 16-bit integer
ecat_mailbox.soe_header_attribute  Attribute
    Boolean
ecat_mailbox.soe_header_datastate  Datastate
    Boolean
ecat_mailbox.soe_header_driveno  Drive No
    Unsigned 16-bit integer
ecat_mailbox.soe_header_error  Error
    Boolean
ecat_mailbox.soe_header_incomplete  More Follows...
    Boolean
ecat_mailbox.soe_header_max  Max
    Boolean
ecat_mailbox.soe_header_min  Min
    Boolean
ecat_mailbox.soe_header_name  Name
    Boolean
ecat_mailbox.soe_header_reserved  Reserved
    Boolean
ecat_mailbox.soe_header_unit  Unit
    Boolean
ecat_mailbox.soe_header_value  Value
    Boolean
ecat_mailbox.soe_idn  SoE IDN
    Unsigned 16-bit integer
ecat_mailbox.soe_opcode  SoE OpCode
    Unsigned 16-bit integer

```

**EtherCAT datagram(s) (ecat)**

```

ecat.ado  Offset Addr
    Unsigned 16-bit integer
ecat.adp  Slave Addr
    Unsigned 16-bit integer
ecat.cmd  Command
    Unsigned 8-bit integer
ecat.cnt  Working Cnt
    Unsigned 16-bit integer
    The working counter is increased once for each addressed device if at least
ecat.data  Data
    Byte array

```

```
ecat.dc.dif.ba  DC B-A
    Unsigned 32-bit integer
ecat.dc.dif.bd  DC B-D
    Unsigned 32-bit integer
ecat.dc.dif.ca  DC C-A
    Unsigned 32-bit integer
ecat.dc.dif.cb  DC C-B
    Unsigned 32-bit integer
ecat.dc.dif.cd  DC C-D
    Unsigned 32-bit integer
ecat.dc.dif.da  DC D-A
    Unsigned 32-bit integer
ecat.fmmu  FMMU
    Byte array
ecat.fmmu.active  FMMU Active
    Unsigned 8-bit integer
ecat.fmmu.active0  Active
    Boolean
ecat.fmmu.lendbit  Log EndBit
    Unsigned 8-bit integer
ecat.fmmu.llen  Log Length
    Unsigned 16-bit integer
ecat.fmmu.lstart  Log Start
    Unsigned 32-bit integer
ecat.fmmu.lstartbit  Log StartBit
    Unsigned 8-bit integer
ecat.fmmu.pstart  Phys Start
    Unsigned 8-bit integer
ecat.fmmu.pstartbit  Phys StartBit
    Unsigned 8-bit integer
ecat.fmmu.type  FMMU Type
    Unsigned 8-bit integer
ecat.fmmu.typeread  Type
    Boolean
ecat.fmmu.typewrite  Type
    Boolean
ecat.header  Header
    Byte array
ecat.idx  Index
    Unsigned 8-bit integer
ecat.int  Interrupt
    Unsigned 16-bit integer
ecat.lad  Log Addr
    Unsigned 32-bit integer
```



```
ecat.len Length
    Unsigned 16-bit integer
ecat.sub EtherCAT Frame
    Byte array
ecat.sub1.ado Offset Addr
    Unsigned 16-bit integer
ecat.sub1.adp Slave Addr
    Unsigned 16-bit integer
ecat.sub1.cmd Command
    Unsigned 8-bit integer
ecat.sub1.cnt Working Cnt
    Unsigned 16-bit integer
ecat.sub1.data Data
    Byte array
ecat.sub1.dc.dif.ba DC B-A
    Unsigned 32-bit integer
ecat.sub1.dc.dif.bd DC B-C
    Unsigned 32-bit integer
ecat.sub1.dc.dif.ca DC C-A
    Unsigned 32-bit integer
ecat.sub1.dc.dif.cb DC C-B
    Unsigned 32-bit integer
ecat.sub1.dc.dif.cd DC C-D
    Unsigned 32-bit integer
ecat.sub1.dc.dif.da DC D-A
    Unsigned 32-bit integer
ecat.sub1.idx Index
    Unsigned 8-bit integer
ecat.sub1.lad Log Addr
    Unsigned 32-bit integer
ecat.sub10.ado Offset Addr
    Unsigned 16-bit integer
ecat.sub10.adp Slave Addr
    Unsigned 16-bit integer
ecat.sub10.cmd Command
    Unsigned 8-bit integer
ecat.sub10.cnt Working Cnt
    Unsigned 16-bit integer
ecat.sub10.data Data
    Byte array
ecat.sub10.dc.dif.ba DC B-A
    Unsigned 32-bit integer
ecat.sub10.dc.dif.bd DC B-D
    Unsigned 32-bit integer
```

```
ecat.sub10.dc.dif.ca  DC C-A
    Unsigned 32-bit integer
ecat.sub10.dc.dif.cb  DC C-B
    Unsigned 32-bit integer
ecat.sub10.dc.dif.cd  DC C-D
    Unsigned 32-bit integer
ecat.sub10.dc.dif.da  DC D-A
    Unsigned 32-bit integer
ecat.sub10.idx  Index
    Unsigned 8-bit integer
ecat.sub10.lad  Log Addr
    Unsigned 32-bit integer
ecat.sub2.ado  Offset Addr
    Unsigned 16-bit integer
ecat.sub2.adp  Slave Addr
    Unsigned 16-bit integer
ecat.sub2.cmd  Command
    Unsigned 8-bit integer
ecat.sub2.cnt  Working Cnt
    Unsigned 16-bit integer
ecat.sub2.data  Data
    Byte array
ecat.sub2.dc.dif.ba  DC B-A
    Unsigned 32-bit integer
ecat.sub2.dc.dif.bd  DC B-C
    Unsigned 32-bit integer
ecat.sub2.dc.dif.ca  DC C-A
    Unsigned 32-bit integer
ecat.sub2.dc.dif.cb  DC C-B
    Unsigned 32-bit integer
ecat.sub2.dc.dif.cd  DC C-D
    Unsigned 32-bit integer
ecat.sub2.dc.dif.da  DC D-A
    Unsigned 32-bit integer
ecat.sub2.idx  Index
    Unsigned 8-bit integer
ecat.sub2.lad  Log Addr
    Unsigned 32-bit integer
ecat.sub3.ado  Offset Addr
    Unsigned 16-bit integer
ecat.sub3.adp  Slave Addr
    Unsigned 16-bit integer
ecat.sub3.cmd  Command
    Unsigned 8-bit integer
```

```
ecat.sub3.cnt  Working Cnt
               Unsigned 16-bit integer
ecat.sub3.data  Data
               Byte array
ecat.sub3.dc.dif.ba  DC B-A
                  Unsigned 32-bit integer
ecat.sub3.dc.dif.bd  DC B-C
                  Unsigned 32-bit integer
ecat.sub3.dc.dif.ca  DC C-A
                  Unsigned 32-bit integer
ecat.sub3.dc.dif.cb  DC C-B
                  Unsigned 32-bit integer
ecat.sub3.dc.dif.cd  DC C-D
                  Unsigned 32-bit integer
ecat.sub3.dc.dif.da  DC D-A
                  Unsigned 32-bit integer
ecat.sub3.idx  Index
               Unsigned 8-bit integer
ecat.sub3.lad  Log Addr
               Unsigned 32-bit integer
ecat.sub4.ado  Offset Addr
               Unsigned 16-bit integer
ecat.sub4.adp  Slave Addr
               Unsigned 16-bit integer
ecat.sub4.cmd  Command
               Unsigned 8-bit integer
ecat.sub4.cnt  Working Cnt
               Unsigned 16-bit integer
ecat.sub4.data  Data
               Byte array
ecat.sub4.dc.dif.ba  DC B-A
                  Unsigned 32-bit integer
ecat.sub4.dc.dif.bd  DC B-C
                  Unsigned 32-bit integer
ecat.sub4.dc.dif.ca  DC C-A
                  Unsigned 32-bit integer
ecat.sub4.dc.dif.cb  DC C-B
                  Unsigned 32-bit integer
ecat.sub4.dc.dif.cd  DC C-D
                  Unsigned 32-bit integer
ecat.sub4.dc.dif.da  DC D-A
                  Unsigned 32-bit integer
ecat.sub4.idx  Index
               Unsigned 8-bit integer
```

```
ecat.sub4.lad  Log Addr
               Unsigned 32-bit integer
ecat.sub5.ado  Offset Addr
               Unsigned 16-bit integer
ecat.sub5.adp  Slave Addr
               Unsigned 16-bit integer
ecat.sub5.cmd  Command
               Unsigned 8-bit integer
ecat.sub5.cnt  Working Cnt
               Unsigned 16-bit integer
ecat.sub5.data Data
               Byte array
ecat.sub5.dc.dif.ba  DC B-A
                    Unsigned 32-bit integer
ecat.sub5.dc.dif.bd  DC B-C
                    Unsigned 32-bit integer
ecat.sub5.dc.dif.ca  DC C-A
                    Unsigned 32-bit integer
ecat.sub5.dc.dif.cb  DC C-B
                    Unsigned 32-bit integer
ecat.sub5.dc.dif.cd  DC C-D
                    Unsigned 32-bit integer
ecat.sub5.dc.dif.da  DC D-A
                    Unsigned 32-bit integer
ecat.sub5.idx  Index
               Unsigned 8-bit integer
ecat.sub5.lad  Log Addr
               Unsigned 32-bit integer
ecat.sub6.ado  Offset Addr
               Unsigned 16-bit integer
ecat.sub6.adp  Slave Addr
               Unsigned 16-bit integer
ecat.sub6.cmd  Command
               Unsigned 8-bit integer
ecat.sub6.cnt  Working Cnt
               Unsigned 16-bit integer
ecat.sub6.data Data
               Byte array
ecat.sub6.dc.dif.ba  DC B-A
                    Unsigned 32-bit integer
ecat.sub6.dc.dif.bd  DC B-C
                    Unsigned 32-bit integer
ecat.sub6.dc.dif.ca  DC C-A
                    Unsigned 32-bit integer
```

```
ecat.sub6.dc.dif.cb  DC C-B
    Unsigned 32-bit integer
ecat.sub6.dc.dif.cd  DC C-D
    Unsigned 32-bit integer
ecat.sub6.dc.dif.da  DC D-A
    Unsigned 32-bit integer
ecat.sub6.idx  Index
    Unsigned 8-bit integer
ecat.sub6.lad  Log Addr
    Unsigned 32-bit integer
ecat.sub7.ado  Offset Addr
    Unsigned 16-bit integer
ecat.sub7.adp  Slave Addr
    Unsigned 16-bit integer
ecat.sub7.cmd  Command
    Unsigned 8-bit integer
ecat.sub7.cnt  Working Cnt
    Unsigned 16-bit integer
ecat.sub7.data  Data
    Byte array
ecat.sub7.dc.dif.ba  DC B-A
    Unsigned 32-bit integer
ecat.sub7.dc.dif.bd  DC B-C
    Unsigned 32-bit integer
ecat.sub7.dc.dif.ca  DC C-A
    Unsigned 32-bit integer
ecat.sub7.dc.dif.cb  DC C-B
    Unsigned 32-bit integer
ecat.sub7.dc.dif.cd  DC C-D
    Unsigned 32-bit integer
ecat.sub7.dc.dif.da  DC D-A
    Unsigned 32-bit integer
ecat.sub7.idx  Index
    Unsigned 8-bit integer
ecat.sub7.lad  Log Addr
    Unsigned 32-bit integer
ecat.sub8.ado  Offset Addr
    Unsigned 16-bit integer
ecat.sub8.adp  Slave Addr
    Unsigned 16-bit integer
ecat.sub8.cmd  Command
    Unsigned 8-bit integer
ecat.sub8.cnt  Working Cnt
    Unsigned 16-bit integer
```

```
ecat.sub8.data  Data
    Byte array
ecat.sub8.dc.dif.ba  DC B-A
    Unsigned 32-bit integer
ecat.sub8.dc.dif.bd  DC B-C
    Unsigned 32-bit integer
ecat.sub8.dc.dif.ca  DC C-A
    Unsigned 32-bit integer
ecat.sub8.dc.dif.cb  DC C-B
    Unsigned 32-bit integer
ecat.sub8.dc.dif.cd  DC C-D
    Unsigned 32-bit integer
ecat.sub8.dc.dif.da  DC D-A
    Unsigned 32-bit integer
ecat.sub8.idx  Index
    Unsigned 8-bit integer
ecat.sub8.lad  Log Addr
    Unsigned 32-bit integer
ecat.sub9.ado  Offset Addr
    Unsigned 16-bit integer
ecat.sub9.adp  Slave Addr
    Unsigned 16-bit integer
ecat.sub9.cmd  Command
    Unsigned 8-bit integer
ecat.sub9.cnt  Working Cnt
    Unsigned 16-bit integer
ecat.sub9.data  Data
    Byte array
ecat.sub9.dc.dif.ba  DC B-A
    Unsigned 32-bit integer
ecat.sub9.dc.dif.bd  DC B-C
    Unsigned 32-bit integer
ecat.sub9.dc.dif.ca  DC C-A
    Unsigned 32-bit integer
ecat.sub9.dc.dif.cb  DC C-B
    Unsigned 32-bit integer
ecat.sub9.dc.dif.cd  DC C-D
    Unsigned 32-bit integer
ecat.sub9.dc.dif.da  DC D-A
    Unsigned 32-bit integer
ecat.sub9.idx  Index
    Unsigned 8-bit integer
ecat.sub9.lad  Log Addr
    Unsigned 32-bit integer
```

```
ecat.subframe.circulating Round trip
    Unsigned 16-bit integer
ecat.subframe.length Length
    Unsigned 16-bit integer
ecat.subframe.more Last indicator
    Unsigned 16-bit integer
ecat.subframe.pad_bytes Pad bytes
    Byte array
ecat.subframe.reserved Reserved
    Unsigned 16-bit integer
ecat.syncman SyncManager
    Byte array
ecat.syncman.flags SM Flags
    Unsigned 32-bit integer
ecat.syncman.len SM Length
    Unsigned 16-bit integer
ecat.syncman.start Start Addr
    Unsigned 16-bit integer
ecat.syncman_flag0 SM Flag0
    Boolean
ecat.syncman_flag1 SM Flag1
    Boolean
ecat.syncman_flag10 SM Flag10
    Boolean
ecat.syncman_flag11 SM Flag11
    Boolean
ecat.syncman_flag12 SM Flag12
    Boolean
ecat.syncman_flag13 SM Flag13
    Boolean
ecat.syncman_flag16 SM Flag16
    Boolean
ecat.syncman_flag2 SM Flag2
    Boolean
ecat.syncman_flag4 SM Flag4
    Boolean
ecat.syncman_flag5 SM Flag5
    Boolean
ecat.syncman_flag8 SM Flag8
    Boolean
ecat.syncman_flag9 SM Flag9
    Boolean
```

**EtherCAT frame header (ethercat)**

```

ecatf.length Length
        Unsigned 16-bit integer

ecatf.reserved Reserved
        Unsigned 16-bit integer

ecatf.type Type
        Unsigned 16-bit integer
        E88A4 Types

```

**EtherNet/IP (Industrial Protocol) (enip)**

```

enip.command Command
        Unsigned 16-bit integer
        Encapsulation command

enip.context Sender Context
        Byte array
        Information pertinent to the sender

enip.cpf.sai.connid Connection ID
        Unsigned 32-bit integer
        Common Packet Format: Sequenced Address Item, Connection Identifier

enip.cpf.sai.seq Sequence Number
        Unsigned 32-bit integer
        Common Packet Format: Sequenced Address Item, Sequence Number

enip.cpf.typeid Type ID
        Unsigned 16-bit integer
        Common Packet Format: Type of encapsulated item

enip.lir.devtype Device Type
        Unsigned 16-bit integer
        ListIdentity Reply: Device Type

enip.lir.name Product Name
        String
        ListIdentity Reply: Product Name

enip.lir.prodcode Product Code
        Unsigned 16-bit integer
        ListIdentity Reply: Product Code

enip.lir.sa.sinaddr sin_addr
        IPv4 address
        ListIdentity Reply: Socket Address.Sin Addr

enip.lir.sa.sinfamily sin_family
        Unsigned 16-bit integer
        ListIdentity Reply: Socket Address.Sin Family

enip.lir.sa.sinport sin_port
        Unsigned 16-bit integer
        ListIdentity Reply: Socket Address.Sin Port

enip.lir.sa.sinzero sin_zero
        Byte array
        ListIdentity Reply: Socket Address.Sin Zero

```



```
enip.lir.serial  Serial Number
  Unsigned 32-bit integer
  ListIdentity Reply: Serial Number

enip.lir.state  State
  Unsigned 8-bit integer
  ListIdentity Reply: State

enip.lir.status  Status
  Unsigned 16-bit integer
  ListIdentity Reply: Status

enip.lir.vendor  Vendor ID
  Unsigned 16-bit integer
  ListIdentity Reply: Vendor ID

enip.lsr.capaflags.tcp  Supports CIP Encapsulation via TCP
  Unsigned 16-bit integer
  ListServices Reply: Supports CIP Encapsulation via TCP

enip.lsr.capaflags.udp  Supports CIP Class 0 or 1 via UDP
  Unsigned 16-bit integer
  ListServices Reply: Supports CIP Class 0 or 1 via UDP

enip.options  Options
  Unsigned 32-bit integer
  Options flags

enip.session  Session Handle
  Unsigned 32-bit integer
  Session identification

enip.srrd.iface  Interface Handle
  Unsigned 32-bit integer
  SendRRData: Interface handle

enip.status  Status
  Unsigned 32-bit integer
  Status code

enip.sud.iface  Interface Handle
  Unsigned 32-bit integer
  SendUnitData: Interface handle
```

**Etheric (etheric)**

```
etheric.address_presentation_restricted_indicator  Address presentation restrict
  Unsigned 8-bit integer

etheric.called_party_even_address_signal_digit  Address signal digit
  Unsigned 8-bit integer

etheric.called_party_nature_of_address_indicator  Nature of address indicator
  Unsigned 8-bit integer

etheric.called_party_odd_address_signal_digit  Address signal digit
  Unsigned 8-bit integer

etheric.calling_party_even_address_signal_digit  Address signal digit
  Unsigned 8-bit integer

etheric.calling_party_nature_of_address_indicator  Nature of address indicator
  Unsigned 8-bit integer
```

```
etheric.calling_party_odd_address_signal_digit  Address signal digit
  Unsigned 8-bit integer
etheric.calling_partys_category  Calling Party's category
  Unsigned 8-bit integer
etheric.cause_indicator  Cause indicator
  Unsigned 8-bit integer
etheric.cic  CIC
  Unsigned 16-bit integer
  Etheric CIC
etheric.event_ind  Event indicator
  Unsigned 8-bit integer
etheric.event_presentation_restr_ind  Event presentation restricted indicator
  Boolean
etheric.forw_call_isdn_access_indicator  ISDN access indicator
  Boolean
etheric.inband_information_ind  In-band information indicator
  Boolean
etheric.inn_indicator  INN indicator
  Boolean
etheric.isdn_odd_even_indicator  Odd/even indicator
  Boolean
etheric.mandatory_variable_parameter_pointer  Pointer to Parameter
  Unsigned 8-bit integer
etheric.message.length  Message length
  Unsigned 8-bit integer
  Etheric Message length
etheric.message.type  Message type
  Unsigned 8-bit integer
  Etheric message types
etheric.ni_indicator  NI indicator
  Boolean
etheric.numbering_plan_indicator  Numbering plan indicator
  Unsigned 8-bit integer
etheric.optional_parameter_part_pointer  Pointer to optional parameter part
  Unsigned 8-bit integer
etheric.parameter_length  Parameter Length
  Unsigned 8-bit integer
etheric.parameter_type  Parameter Type
  Unsigned 8-bit integer
etheric.protocol_version  Protocol version
  Unsigned 8-bit integer
  Etheric protocol version
etheric.screening_indicator  Screening indicator
  Unsigned 8-bit integer
etheric.transmission_medium_requirement  Transmission medium requirement
  Unsigned 8-bit integer
```

**Ethernet (eth)**

```

eth.addr  Address
          6-byte Hardware (MAC) Address
          Source or Destination Hardware Address

eth.dst  Destination
          6-byte Hardware (MAC) Address
          Destination Hardware Address

eth.ig  IG bit
        Boolean
        Specifies if this is an individual (unicast) or group (broadcast/multicast)

eth.len  Length
        Unsigned 16-bit integer

eth.lg  LG bit
        Boolean
        Specifies if this is a locally administered or globally unique (IEEE assigned)

eth.src  Source
          6-byte Hardware (MAC) Address
          Source Hardware Address

eth.trailer  Trailer
            Byte array
            Ethernet Trailer or Checksum

eth.type  Type
          Unsigned 16-bit integer

```

**Ethernet over IP (etherip)**

```

etherip.ver  Version
            Unsigned 8-bit integer

```

**Event Logger (eventlog)**

```

eventlog.Record  Record
                No value

eventlog.Record.computer_name  Computer Name
                                String

eventlog.Record.length  Record Length
                        Unsigned 32-bit integer

eventlog.Record.source_name  Source Name
                              String

eventlog.Record.string  string
                        String

eventlog.eventlogEventTypes.EVENTLOG_AUDIT_FAILURE  Eventlog Audit Failure
                                                    Boolean

eventlog.eventlogEventTypes.EVENTLOG_AUDIT_SUCCESS  Eventlog Audit Success
                                                    Boolean

eventlog.eventlogEventTypes.EVENTLOG_ERROR_TYPE  Eventlog Error Type
                                                    Boolean

eventlog.eventlogEventTypes.EVENTLOG_INFORMATION_TYPE  Eventlog Information Type
                                                        Boolean

```

```
eventlog.eventlogEventTypes.EVENTLOG_SUCCESS  Eventlog Success
Boolean
eventlog.eventlogEventTypes.EVENTLOG_WARNING_TYPE  Eventlog Warning Type
Boolean
eventlog.eventlogReadFlags.EVENTLOG_BACKWARDS_READ  Eventlog Backwards Read
Boolean
eventlog.eventlogReadFlags.EVENTLOG_FORWARDS_READ  Eventlog Forwards Read
Boolean
eventlog.eventlogReadFlags.EVENTLOG_SEEK_READ  Eventlog Seek Read
Boolean
eventlog.eventlogReadFlags.EVENTLOG_SEQUENTIAL_READ  Eventlog Sequential Read
Boolean
eventlog.eventlog_BackupEventLogW.backupfilename  Backupfilename
No value
eventlog.eventlog_BackupEventLogW.handle  Handle
Byte array
eventlog.eventlog_ChangeNotify.handle  Handle
Byte array
eventlog.eventlog_ChangeNotify.unknown2  Unknown2
No value
eventlog.eventlog_ChangeNotify.unknown3  Unknown3
Unsigned 32-bit integer
eventlog.eventlog_ChangeUnknown0.unknown0  Unknown0
Unsigned 32-bit integer
eventlog.eventlog_ChangeUnknown0.unknown1  Unknown1
Unsigned 32-bit integer
eventlog.eventlog_ClearEventLogW.backupfilename  Backupfilename
No value
eventlog.eventlog_ClearEventLogW.handle  Handle
Byte array
eventlog.eventlog_CloseEventLog.handle  Handle
Byte array
eventlog.eventlog_DeregisterEventSource.handle  Handle
Byte array
eventlog.eventlog_FlushEventLog.handle  Handle
Byte array
eventlog.eventlog_GetLogIntormation.cbBufSize  Cbufsize
Unsigned 32-bit integer
eventlog.eventlog_GetLogIntormation.cbBytesNeeded  Cbytesneeded
Signed 32-bit integer
eventlog.eventlog_GetLogIntormation.dwInfoLevel  Dwinfolevel
Unsigned 32-bit integer
eventlog.eventlog_GetLogIntormation.handle  Handle
Byte array
```

```

eventlog.eventlog_GetLogIntormation.lpBuffer  Lpbuffer
    Unsigned 8-bit integer
eventlog.eventlog_GetNumRecords.handle  Handle
    Byte array
eventlog.eventlog_GetNumRecords.number  Number
    Unsigned 32-bit integer
eventlog.eventlog_GetOldestRecord.handle  Handle
    Byte array
eventlog.eventlog_GetOldestRecord.oldest  Oldest
    Unsigned 32-bit integer
eventlog.eventlog_OpenBackupEventLogW.handle  Handle
    Byte array
eventlog.eventlog_OpenBackupEventLogW.logname  Logname
    No value
eventlog.eventlog_OpenBackupEventLogW.unknown0  Unknown0
    No value
eventlog.eventlog_OpenBackupEventLogW.unknown2  Unknown2
    Unsigned 32-bit integer
eventlog.eventlog_OpenBackupEventLogW.unknown3  Unknown3
    Unsigned 32-bit integer
eventlog.eventlog_OpenEventLogW.handle  Handle
    Byte array
eventlog.eventlog_OpenEventLogW.logname  Logname
    No value
eventlog.eventlog_OpenEventLogW.servername  Servername
    No value
eventlog.eventlog_OpenEventLogW.unknown0  Unknown0
    No value
eventlog.eventlog_OpenEventLogW.unknown2  Unknown2
    Unsigned 32-bit integer
eventlog.eventlog_OpenEventLogW.unknown3  Unknown3
    Unsigned 32-bit integer
eventlog.eventlog_OpenUnknown0.unknown0  Unknown0
    Unsigned 16-bit integer
eventlog.eventlog_OpenUnknown0.unknown1  Unknown1
    Unsigned 16-bit integer
eventlog.eventlog_ReadEventLogW.data  Data
    Unsigned 8-bit integer
eventlog.eventlog_ReadEventLogW.flags  Flags
    Unsigned 32-bit integer
eventlog.eventlog_ReadEventLogW.handle  Handle
    Byte array
eventlog.eventlog_ReadEventLogW.number_of_bytes  Number Of Bytes
    Unsigned 32-bit integer

```

```
eventlog.eventlog_ReadEventLogW.offset  Offset
    Unsigned 32-bit integer
eventlog.eventlog_ReadEventLogW.real_size  Real Size
    Unsigned 32-bit integer
eventlog.eventlog_ReadEventLogW.sent_size  Sent Size
    Unsigned 32-bit integer
eventlog.eventlog_Record.closing_record_number  Closing Record Number
    Unsigned 32-bit integer
eventlog.eventlog_Record.computer_name  Computer Name
    No value
eventlog.eventlog_Record.data_length  Data Length
    Unsigned 32-bit integer
eventlog.eventlog_Record.data_offset  Data Offset
    Unsigned 32-bit integer
eventlog.eventlog_Record.event_category  Event Category
    Unsigned 16-bit integer
eventlog.eventlog_Record.event_id  Event Id
    Unsigned 32-bit integer
eventlog.eventlog_Record.event_type  Event Type
    Unsigned 16-bit integer
eventlog.eventlog_Record.num_of_strings  Num Of Strings
    Unsigned 16-bit integer
eventlog.eventlog_Record.raw_data  Raw Data
    No value
eventlog.eventlog_Record.record_number  Record Number
    Unsigned 32-bit integer
eventlog.eventlog_Record.reserved  Reserved
    Unsigned 32-bit integer
eventlog.eventlog_Record.reserved_flags  Reserved Flags
    Unsigned 16-bit integer
eventlog.eventlog_Record.sid_length  Sid Length
    Unsigned 32-bit integer
eventlog.eventlog_Record.sid_offset  Sid Offset
    Unsigned 32-bit integer
eventlog.eventlog_Record.size  Size
    Unsigned 32-bit integer
eventlog.eventlog_Record.source_name  Source Name
    No value
eventlog.eventlog_Record.stringoffset  Stringoffset
    Unsigned 32-bit integer
eventlog.eventlog_Record.strings  Strings
    No value
eventlog.eventlog_Record.time_generated  Time Generated
    Unsigned 32-bit integer
```

```
eventlog.eventlog_Record.time_written  Time Written
    Unsigned 32-bit integer
eventlog.eventlog_RegisterEventSourceW.handle  Handle
    Byte array
eventlog.eventlog_RegisterEventSourceW.logname  Logname
    No value
eventlog.eventlog_RegisterEventSourceW.servername  Servername
    No value
eventlog.eventlog_RegisterEventSourceW.unknown0  Unknown0
    No value
eventlog.eventlog_RegisterEventSourceW.unknown2  Unknown2
    Unsigned 32-bit integer
eventlog.eventlog_RegisterEventSourceW.unknown3  Unknown3
    Unsigned 32-bit integer
eventlog.opnum  Operation
    Unsigned 16-bit integer
eventlog.status  NT Error
    Unsigned 32-bit integer
```

**Event Notification for Resource Lists (RFC 4662) (list)**

```
list.cid  cid
    String
list.fullstate  fullstate
    String
list.instance  instance
    String
list.instance.cid  cid
    String
list.instance.id  id
    String
list.instance.reason  reason
    String
list.instance.state  state
    String
list.name  name
    String
list.name.lang  lang
    String
list.resource  resource
    String
list.resource.instance  instance
    String
list.resource.instance.cid  cid
    String
```

```

list.resource.instance.id id
    String
list.resource.instance.reason reason
    String
list.resource.instance.state state
    String
list.resource.name name
    String
list.resource.name.lang lang
    String
list.resource.uri uri
    String
list.uri uri
    String
list.version version
    String
list.xmlns xmlns
    String

```

#### Exchange 5.5 Name Service Provider (nspi)

```

nspi.FILETIME.dwHighDateTime Dwhighdatetime
    Unsigned 32-bit integer
nspi.FILETIME.dwLowDateTime Dwlowdatetime
    Unsigned 32-bit integer
nspi.LPSTR.lpszA Lppsza
    No value
nspi.MAPINAMEID.lid Lid
    Unsigned 32-bit integer
nspi.MAPINAMEID.lpguid Lpguid
    No value
nspi.MAPINAMEID.ulKind Ulkind
    Unsigned 32-bit integer
nspi.MAPISTATUS_status MAPISTATUS
    Unsigned 32-bit integer
nspi.MAPIUID.ab Ab
    Unsigned 8-bit integer
nspi.MAPI_SETTINGS.codepage Codepage
    Unsigned 32-bit integer
nspi.MAPI_SETTINGS.flag Flag
    Unsigned 32-bit integer
nspi.MAPI_SETTINGS.handle Handle
    Unsigned 32-bit integer
nspi.MAPI_SETTINGS.input_locale Input Locale
    No value

```



```

nspi.MAPI_SETTINGS.service_provider  Service Provider
    No value
nspi.MV_LONG_STRUCT.cValues  Cvalues
    Unsigned 32-bit integer
nspi.MV_LONG_STRUCT.lpl  Lpl
    Unsigned 32-bit integer
nspi.MV_UNICODE_STRUCT.cValues  Cvalues
    Unsigned 32-bit integer
nspi.MV_UNICODE_STRUCT.lpi  Lpi
    Unsigned 32-bit integer
nspi.NAME_STRING.str  Str
    String
nspi.NspiBind.mapiuid  Mapiuid
nspi.NspiBind.settings  Settings
    No value
nspi.NspiBind.unknown  Unknown
    Unsigned 32-bit integer
nspi.NspiDNTToEph.flag  Flag
    Unsigned 32-bit integer
nspi.NspiDNTToEph.instance_key  Instance Key
    No value
nspi.NspiDNTToEph.server_dn  Server Dn
    No value
nspi.NspiDNTToEph.size  Size
    Unsigned 32-bit integer
nspi.NspiGetHierarchyInfo.RowSet  Rowset
    No value
nspi.NspiGetHierarchyInfo.settings  Settings
    No value
nspi.NspiGetHierarchyInfo.unknown1  Unknown1
    Unsigned 32-bit integer
nspi.NspiGetHierarchyInfo.unknown2  Unknown2
    Unsigned 32-bit integer
nspi.NspiGetMatches.PropTagArray  Proptagarray
    No value
nspi.NspiGetMatches.REQ_properties  Req Properties
    No value
nspi.NspiGetMatches.RowSet  Rowset
    No value
nspi.NspiGetMatches.instance_key  Instance Key
    No value
nspi.NspiGetMatches.restrictions  Restrictions
    No value
nspi.NspiGetMatches.settings  Settings
    No value

```

```

nspi.NspiGetMatches.unknown1  Unknown1
    Unsigned 32-bit integer
nspi.NspiGetMatches.unknown2  Unknown2
    Unsigned 32-bit integer
nspi.NspiGetMatches.unknown3  Unknown3
    Unsigned 32-bit integer
nspi.NspiGetProps.REPL_values  Repl Values
    No value
nspi.NspiGetProps.REQ_properties  Req Properties
    No value
nspi.NspiGetProps.flag  Flag
    Unsigned 32-bit integer
nspi.NspiGetProps.settings  Settings
    No value
nspi.NspiQueryRows.REQ_properties  Req Properties
    No value
nspi.NspiQueryRows.RowSet  Rowset
    No value
nspi.NspiQueryRows.flag  Flag
    Unsigned 32-bit integer
nspi.NspiQueryRows.instance_key  Instance Key
    Unsigned 32-bit integer
nspi.NspiQueryRows.lRows  Lrows
    Unsigned 32-bit integer
nspi.NspiQueryRows.settings  Settings
    No value
nspi.NspiQueryRows.unknown  Unknown
    Unsigned 32-bit integer
nspi.NspiUnbind.status  Status
    Unsigned 32-bit integer
nspi.SAndRestriction.cRes  Cres
    Unsigned 32-bit integer
nspi.SAndRestriction.lpRes  Lpres
    No value
nspi.SBinary.cb  Cb
    Unsigned 32-bit integer
nspi.SBinary.lpb  Lpb
    Unsigned 8-bit integer
nspi.SBinaryArray.cValues  Cvalues
    Unsigned 32-bit integer
nspi.SBinaryArray.lpbin  Lpbin
    No value
nspi.SDateTimeArray.cValues  Cvalues
    Unsigned 32-bit integer

```

```
nspi.SDateTimeArray.lpft  Lpft
    No value
nspi.SGuidArray.cValues  Cvalues
    Unsigned 32-bit integer
nspi.SGuidArray.lpguid  Lpguid
    Unsigned 32-bit integer
nspi.SLPSTRArray.cValues  Cvalues
    Unsigned 32-bit integer
nspi.SLPSTRArray.strings  Strings
    No value
nspi.SPropTagArray.aulPropTag  Aulproptag
    Unsigned 32-bit integer
nspi.SPropTagArray.cValues  Cvalues
    Unsigned 32-bit integer
nspi.SPropValue.dwAlignPad  Dwalignpad
    Unsigned 32-bit integer
nspi.SPropValue.ulPropTag  Ulproptag
    Unsigned 32-bit integer
nspi.SPropValue.value  Value
    Unsigned 32-bit integer
nspi.SPropValue_CTR.MVbin  Mvbin
    No value
nspi.SPropValue_CTR.MVft  Mvft
    No value
nspi.SPropValue_CTR.MVguid  Mvguid
    No value
nspi.SPropValue_CTR.MVi  Mvi
    No value
nspi.SPropValue_CTR.MVl  Mvl
    No value
nspi.SPropValue_CTR.MVszA  Mvsza
    No value
nspi.SPropValue_CTR.MVszW  Mvszw
    No value
nspi.SPropValue_CTR.b  B
    Unsigned 16-bit integer
nspi.SPropValue_CTR.bin  Bin
    No value
nspi.SPropValue_CTR.err  Err
    Unsigned 32-bit integer
nspi.SPropValue_CTR.ft  Ft
    No value
nspi.SPropValue_CTR.i  I
    Unsigned 16-bit integer
```

```
nspi.SPropValue_CTR.l L
    Unsigned 32-bit integer
nspi.SPropValue_CTR.lpguid Lpguid
    No value
nspi.SPropValue_CTR.lpszA Lpsza
    String
nspi.SPropValue_CTR.lpszW Lpszw
    String
nspi.SPropValue_CTR.null Null
    Unsigned 32-bit integer
nspi.SPropValue_CTR.object Object
    Unsigned 32-bit integer
nspi.SPropertyRestriction.lpProp Lpprop
    No value
nspi.SPropertyRestriction.relop Relop
    Unsigned 32-bit integer
nspi.SPropertyRestriction.ulPropTag Ulproptag
    Unsigned 32-bit integer
nspi.SRestriction_CTR.resAnd Resand
    No value
nspi.SRestriction_CTR.resProperty Resproperty
    No value
nspi.SRow.cValues Cvalues
    Unsigned 32-bit integer
nspi.SRow.lpProps Lpprops
    No value
nspi.SRow.ulAdrEntryPad Uladrenentrypad
    Unsigned 32-bit integer
nspi.SRowSet.aRow Arow
    No value
nspi.SRowSet.cRows Crows
    Unsigned 32-bit integer
nspi.SShortArray.cValues Cvalues
    Unsigned 32-bit integer
nspi.SShortArray.lpi Lpi
    Unsigned 16-bit integer
nspi.SSortOrder.ulOrder Ulorder
    Unsigned 32-bit integer
nspi.SSortOrder.ulPropTag Ulproptag
    Unsigned 32-bit integer
nspi.SSortOrderSet.aSort Asort
    No value
nspi.SSortOrderSet.cCategories Ccategories
    Unsigned 32-bit integer
```

```

nspi.SSortOrderSet.cExpanded  Cexpanded
    Unsigned 32-bit integer
nspi.SSortOrderSet.cSorts  Csorts
    Unsigned 32-bit integer
nspi.handle  Handle
    Byte array
nspi.input_locale.language  Language
    Unsigned 32-bit integer
nspi.input_locale.method  Method
    Unsigned 32-bit integer
nspi.instance_key.cValues  Cvalues
    Unsigned 32-bit integer
nspi.instance_key.value  Value
    Unsigned 32-bit integer
nspi.opnum  Operation
    Unsigned 16-bit integer
nspi.property_type  Restriction Type
    Unsigned 32-bit integer

```

#### Extended Security Services (ess)

```

ess.ContentHints  ContentHints
    No value
    ess.ContentHints
ess.ContentIdentifier  ContentIdentifier
    Byte array
    ess.ContentIdentifier
ess.ContentReference  ContentReference
    No value
    ess.ContentReference
ess.ESSSecurityLabel  ESSSecurityLabel
    No value
    ess.ESSSecurityLabel
ess.EnumeratedTag  EnumeratedTag
    No value
    ess.EnumeratedTag
ess.EquivalentLabels  EquivalentLabels
    Unsigned 32-bit integer
    ess.EquivalentLabels
ess.EquivalentLabels_item  Item
    No value
    ess.ESSSecurityLabel
ess.InformativeTag  InformativeTag
    No value
    ess.InformativeTag
ess.MLExpansionHistory  MLExpansionHistory
    Unsigned 32-bit integer
    ess.MLExpansionHistory

```

```
ess.MLExpansionHistory_item  Item
    No value
    ess.MLData
ess.MsgSigDigest  MsgSigDigest
    Byte array
    ess.MsgSigDigest
ess.PermissiveTag  PermissiveTag
    No value
    ess.PermissiveTag
ess.Receipt  Receipt
    No value
    ess.Receipt
ess.ReceiptRequest  ReceiptRequest
    No value
    ess.ReceiptRequest
ess.RestrictiveTag  RestrictiveTag
    No value
    ess.RestrictiveTag
ess.SecurityCategories_item  Item
    No value
    ess.SecurityCategory
ess.SigningCertificate  SigningCertificate
    No value
    ess.SigningCertificate
ess.allOrFirstTier  allOrFirstTier
    Signed 32-bit integer
    ess.AllOrFirstTier
ess.attributeFlags  attributeFlags
    Byte array
    ess.BIT_STRING
ess.attributeList  attributeList
    Unsigned 32-bit integer
    ess.SET_OF_SecurityAttribute
ess.attributeList_item  Item
    Signed 32-bit integer
    ess.SecurityAttribute
ess.attributes  attributes
    Unsigned 32-bit integer
    ess.FreeFormField
ess.bitSetAttributes  bitSetAttributes
    Byte array
    ess.BIT_STRING
ess.certHash  certHash
    Byte array
    ess.Hash
ess.certs  certs
    Unsigned 32-bit integer
    ess.SEQUENCE_OF_ESSCertID
```

```
ess.certs_item  Item
    No value
    ess.ESSCertID

ess.contentDescription  contentDescription
    String
    ess.UTF8String

ess.contentType  contentType
    cms.ContentType

ess.expansionTime  expansionTime
    String
    ess.GeneralizedTime

ess.inAdditionTo  inAdditionTo
    Unsigned 32-bit integer
    ess.SEQUENCE_OF_GeneralNames

ess.inAdditionTo_item  Item
    Unsigned 32-bit integer
    x509ce.GeneralNames

ess.insteadOf  insteadoF
    Unsigned 32-bit integer
    ess.SEQUENCE_OF_GeneralNames

ess.insteadOf_item  Item
    Unsigned 32-bit integer
    x509ce.GeneralNames

ess.issuer  issuer
    Unsigned 32-bit integer
    x509ce.GeneralNames

ess.issuerAndSerialNumber  issuerAndSerialNumber
    No value
    cms.IssuerAndSerialNumber

ess.issuerSerial  issuerSerial
    No value
    ess.IssuerSerial

ess.mailListIdentifier  mailListIdentifier
    Unsigned 32-bit integer
    ess.EntityIdentifier

ess.mlReceiptPolicy  mlReceiptPolicy
    Unsigned 32-bit integer
    ess.MLReceiptPolicy

ess.none  none
    No value
    ess.NULL

ess.originatorSignatureValue  originatorSignatureValue
    Byte array
    ess.OCTET_STRING

ess.pString  pString
    String
    ess.PrintableString
```

```
ess.policies policies
    Unsigned 32-bit integer
    ess.SEQUENCE_OF_PolicyInformation

ess.policies_item Item
    No value
    x509ce.PolicyInformation

ess.privacy_mark privacy-mark
    Unsigned 32-bit integer
    ess.ESSPrivacyMark

ess.receiptList receiptList
    Unsigned 32-bit integer
    ess.SEQUENCE_OF_GeneralNames

ess.receiptList_item Item
    Unsigned 32-bit integer
    x509ce.GeneralNames

ess.receiptsFrom receiptsFrom
    Unsigned 32-bit integer
    ess.ReceiptsFrom

ess.receiptsTo receiptsTo
    Unsigned 32-bit integer
    ess.SEQUENCE_OF_GeneralNames

ess.receiptsTo_item Item
    Unsigned 32-bit integer
    x509ce.GeneralNames

ess.securityAttributes securityAttributes
    Unsigned 32-bit integer
    ess.SET_OF_SecurityAttribute

ess.securityAttributes_item Item
    Signed 32-bit integer
    ess.SecurityAttribute

ess.security_categories security-categories
    Unsigned 32-bit integer
    ess.SecurityCategories

ess.security_classification security-classification
    Signed 32-bit integer
    ess.SecurityClassification

ess.security_policy_identifier security-policy-identifier
    ess.SecurityPolicyIdentifier

ess.serialNumber serialNumber
    Signed 32-bit integer
    x509af.CertificateSerialNumber

ess.signedContentIdentifier signedContentIdentifier
    Byte array
    ess.ContentIdentifier

ess.subjectKeyIdentifier subjectKeyIdentifier
    Byte array
    x509ce.SubjectKeyIdentifier
```



```
ess.tagName  tagName
             ess.OBJECT_IDENTIFIER
ess.type     type
             ess.T_type
ess.type_OID type
             String
             Type of Security Category
ess.utf8String utf8String
             String
             ess.UTF8String
ess.value    value
             No value
             ess.T_value
ess.version  version
             Signed 32-bit integer
             ess.ESSVersion
```

#### **Extensible Authentication Protocol (eap)**

```
eap.code     Code
             Unsigned 8-bit integer
eap.desired_type Desired Auth Type
             Unsigned 8-bit integer
eap.ext.vendor_id Vendor Id
             Unsigned 16-bit integer
eap.ext.vendor_type Vendor Type
             Unsigned 8-bit integer
eap.id       Id
             Unsigned 8-bit integer
eap.len      Length
             Unsigned 16-bit integer
eap.type     Type
             Unsigned 8-bit integer
eaptls.fragment EAP-TLS Fragment
             Frame number
             EAP-TLS Fragment
eaptls.fragment.error Defragmentation error
             Frame number
             Defragmentation error due to illegal fragments
eaptls.fragment.multipletails Multiple tail fragments found
             Boolean
             Several tails were found when defragmenting the packet
eaptls.fragment.overlap Fragment overlap
             Boolean
             Fragment overlaps with other fragments
```

```
eaptls.fragment.overlap.conflict  Conflicting data in fragment overlap
  Boolean
  Overlapping fragments contained conflicting data
eaptls.fragment.toolongfragment  Fragment too long
  Boolean
  Fragment contained data past end of packet
eaptls.fragments  EAP-TLS Fragments
  No value
  EAP-TLS Fragments
```

**Extensible Record Format (erf)**

```
erf.eth.off  offset
  Unsigned 8-bit integer
erf.eth.res1  reserved
  Unsigned 8-bit integer
erf.flags  flags
  Unsigned 8-bit integer
erf.flags.cap  capture interface
  Unsigned 8-bit integer
erf.flags.dse  ds error
  Unsigned 8-bit integer
erf.flags.res  reserved
  Unsigned 8-bit integer
erf.flags.rxe  rx error
  Unsigned 8-bit integer
erf.flags.trunc  truncated
  Unsigned 8-bit integer
erf.flags.vlen  varying record length
  Unsigned 8-bit integer
erf.lctr  loss counter
  Unsigned 16-bit integer
erf.mcaal2.cid  Channel Identification Number
  Unsigned 8-bit integer
erf.mcaal2.cn  connection number
  Unsigned 16-bit integer
erf.mcaal2.crc10  Length error
  Unsigned 8-bit integer
erf.mcaal2.hec  MAAL error
  Unsigned 8-bit integer
erf.mcaal2.lbe  first cell received
  Unsigned 8-bit integer
erf.mcaal2.mul  reserved for type
  Unsigned 16-bit integer
erf.mcaal2.port  physical port
  Unsigned 8-bit integer
```

```
erf.mcaal2.res1 reserved for extra connection
    Unsigned 16-bit integer
erf.mcaal2.res2 reserved
    Unsigned 8-bit integer
erf.mcaal5.cn connection number
    Unsigned 16-bit integer
erf.mcaal5.crcck CRC checked
    Unsigned 8-bit integer
erf.mcaal5.crce CRC error
    Unsigned 8-bit integer
erf.mcaal5.first First record
    Unsigned 8-bit integer
erf.mcaal5.lenck Length checked
    Unsigned 8-bit integer
erf.mcaal5.lene Length error
    Unsigned 8-bit integer
erf.mcaal5.port physical port
    Unsigned 8-bit integer
erf.mcaal5.res1 reserved
    Unsigned 16-bit integer
erf.mcaal5.res2 reserved
    Unsigned 8-bit integer
erf.mcaal5.res3 reserved
    Unsigned 8-bit integer
erf.mcatm.cn connection number
    Unsigned 16-bit integer
erf.mcatm.crc10 OAM Cell CRC10 Error (not implemented)
    Unsigned 8-bit integer
erf.mcatm.first First record
    Unsigned 8-bit integer
erf.mcatm.hec HEC corrected
    Unsigned 8-bit integer
erf.mcatm.lbe Lost Byte Error
    Unsigned 8-bit integer
erf.mcatm.mul multiplexed
    Unsigned 16-bit integer
erf.mcatm.oamcell OAM Cell
    Unsigned 8-bit integer
erf.mcatm.port physical port
    Unsigned 8-bit integer
erf.mcatm.res1 reserved
    Unsigned 16-bit integer
erf.mcatm.res2 reserved
    Unsigned 8-bit integer
```

```
erf.mcatm.res3 reserved
    Unsigned 8-bit integer
erf.mchdlc.afe Aborted frame error
    Unsigned 8-bit integer
erf.mchdlc.cn connection number
    Unsigned 16-bit integer
erf.mchdlc.fcse FCS error
    Unsigned 8-bit integer
erf.mchdlc.first First record
    Unsigned 8-bit integer
erf.mchdlc.lbe Lost byte error
    Unsigned 8-bit integer
erf.mchdlc.lre Long record error
    Unsigned 8-bit integer
erf.mchdlc.octet Octet error
    Unsigned 8-bit integer
erf.mchdlc.res1 reserved
    Unsigned 16-bit integer
erf.mchdlc.res2 reserved
    Unsigned 8-bit integer
erf.mchdlc.res3 reserved
    Unsigned 8-bit integer
erf.mchdlc.sre Short record error
    Unsigned 8-bit integer
erf.mcrow.first First record
    Unsigned 8-bit integer
erf.mcrow.int physical interface
    Unsigned 8-bit integer
erf.mcrow.lbe Lost byte error
    Unsigned 8-bit integer
erf.mcrow.lre Long record error
    Unsigned 8-bit integer
erf.mcrow.res1 reserved
    Unsigned 8-bit integer
erf.mcrow.res2 reserved
    Unsigned 16-bit integer
erf.mcrow.res3 reserved
    Unsigned 8-bit integer
erf.mcrow.res4 reserved
    Unsigned 8-bit integer
erf.mcrow.res5 reserved
    Unsigned 8-bit integer
erf.mcrow.sre Short record error
    Unsigned 8-bit integer
```

```
erf.mcrawl.cn    connection number
                 Unsigned 8-bit integer
erf.mcrawl.first First record
                 Unsigned 8-bit integer
erf.mcrawl.lbe  Lost byte error
                 Unsigned 8-bit integer
erf.mcrawl.res1 reserved
                 Unsigned 16-bit integer
erf.mcrawl.res2 reserved
                 Unsigned 8-bit integer
erf.mcrawl.res5 reserved
                 Unsigned 8-bit integer
erf.rlen        record length
                 Unsigned 16-bit integer
erf.ts          Timestamp
                 Unsigned 64-bit integer
erf.type        type
                 Unsigned 8-bit integer
erf.wlen        wire length
                 Unsigned 16-bit integer
```

#### **Extreme Discovery Protocol (edp)**

```
edp.checksum    EDP checksum
                 Unsigned 16-bit integer
edp.checksum_bad Bad
                 Boolean
                 True: checksum doesn't match packet content; False: matches content or not c
edp.checksum_good Good
                 Boolean
                 True: checksum matches packet content; False: doesn't match content or not c
edp.display     Display
                 Protocol
                 Display element
edp.display.string Name
                 String
                 MIB II display string
edp.eaps        EAPS
                 Protocol
                 Ethernet Automatic Protection Switching element
edp.eaps.fail   Fail
                 Unsigned 16-bit integer
                 Fail timer
edp.eaps.hello  Hello
                 Unsigned 16-bit integer
                 Hello timer
```

```
edp.eaps.helloseq  Helloseq
    Unsigned 16-bit integer
    Hello sequence

edp.eaps.reserved0  Reserved0
    Byte array

edp.eaps.reserved1  Reserved1
    Byte array

edp.eaps.reserved2  Reserved2
    Byte array

edp.eaps.state     State
    Unsigned 8-bit integer

edp.eaps.sysmac    Sys MAC
    6-byte Hardware (MAC) Address
    System MAC address

edp.eaps.type      Type
    Unsigned 8-bit integer

edp.eaps.ver       Version
    Unsigned 8-bit integer

edp.eaps.vlanid    Vlan ID
    Unsigned 16-bit integer
    Control Vlan ID

edp.elrp           ELRP
    Protocol
    Extreme Loop Recognition Protocol element

edp.elrp.unknown   Unknown
    Byte array

edp.elsm           ELSM
    Protocol
    Extreme Link Status Monitoring element

edp.elsm.type      Type
    Unsigned 8-bit integer

edp.elsm.unknown   Subtype
    Unsigned 8-bit integer

edp.esl           ESL
    Protocol
    EAPS shared link

edp.esl.failed1    Failed ID 1
    Unsigned 16-bit integer
    Failed link ID 1

edp.esl.failed2    Failed ID 2
    Unsigned 16-bit integer
    Failed link ID 2

edp.esl.linkid1    Link ID 1
    Unsigned 16-bit integer
    Shared link ID 1
```

```
edp.esl.linkid2  Link ID 2
  Unsigned 16-bit integer
  Shared link ID 2

edp.esl.linklist  Link List
  Unsigned 16-bit integer
  List of Shared Link IDs

edp.esl.numlinks  Num Shared Links
  Unsigned 16-bit integer
  Number of shared links in the network

edp.esl.reserved0  Reserved0
  Byte array

edp.esl.reserved1  Reserved1
  Byte array

edp.esl.reserved4  Reserved4
  Byte array

edp.esl.reserved5  Reserved5
  Byte array

edp.esl.rest  Rest
  Byte array

edp.esl.role  Role
  Unsigned 8-bit integer

edp.esl.state  State
  Unsigned 8-bit integer

edp.esl.sysmac  Sys MAC
  6-byte Hardware (MAC) Address
  System MAC address

edp.esl.type  Type
  Unsigned 8-bit integer

edp.esl.ver  Version
  Unsigned 8-bit integer

edp.esl.vlanid  Vlan ID
  Unsigned 16-bit integer
  Control Vlan ID

edp.esrp  ESRP
  Protocol
  Extreme Standby Router Protocol element

edp.esrp.group  Group
  Unsigned 8-bit integer

edp.esrp.hello  Hello
  Unsigned 16-bit integer
  Hello timer

edp.esrp.ports  Ports
  Unsigned 16-bit integer
  Number of active ports

edp.esrp.prio  Prio
  Unsigned 16-bit integer
```

```
edp.esrp.proto Protocol
    Unsigned 8-bit integer
edp.esrp.reserved Reserved
    Byte array
edp.esrp.state State
    Unsigned 16-bit integer
edp.esrp.sysmac Sys MAC
    6-byte Hardware (MAC) Address
    System MAC address
edp.esrp.virtip VirtIP
    IPv4 address
    Virtual IP address
edp.info Info
    Protocol
    Info element
edp.info.port Port
    Unsigned 16-bit integer
    Originating port #
edp.info.reserved Reserved
    Byte array
edp.info.slot Slot
    Unsigned 16-bit integer
    Originating slot #
edp.info.vchassconn Connections
    Byte array
    Virtual chassis connections
edp.info.vchassid Virt chassis
    Unsigned 16-bit integer
    Virtual chassis ID
edp.info.version Version
    Unsigned 32-bit integer
    Software version
edp.info.version.internal Version (internal)
    Unsigned 8-bit integer
    Software version (internal)
edp.info.version.major1 Version (major1)
    Unsigned 8-bit integer
    Software version (major1)
edp.info.version.major2 Version (major2)
    Unsigned 8-bit integer
    Software version (major2)
edp.info.version.sustaining Version (sustaining)
    Unsigned 8-bit integer
    Software version (sustaining)
edp.length Data length
    Unsigned 16-bit integer
```



```
edp.midmac Machine MAC
    6-byte Hardware (MAC) Address
edp.midtype Machine ID type
    Unsigned 16-bit integer
edp.null End
    Protocol
    Last element
edp.reserved Reserved
    Unsigned 8-bit integer
edp.seqno Sequence number
    Unsigned 16-bit integer
edp.tlv.length TLV length
    Unsigned 16-bit integer
edp.tlv.marker TLV Marker
    Unsigned 8-bit integer
edp.tlv.type TLV type
    Unsigned 8-bit integer
edp.unknown Unknown
    Protocol
    Element unknown to Wireshark
edp.unknown.data Unknown
    Byte array
edp.version Version
    Unsigned 8-bit integer
edp.vlan Vlan
    Protocol
    Vlan element
edp.vlan.flags Flags
    Unsigned 8-bit integer
edp.vlan.flags.ip Flags-IP
    Boolean
    Vlan has IP address configured
edp.vlan.flags.reserved Flags-reserved
    Unsigned 8-bit integer
edp.vlan.flags.unknown Flags-Unknown
    Boolean
edp.vlan.id Vlan ID
    Unsigned 16-bit integer
edp.vlan.ip IP addr
    IPv4 address
    VLAN IP address
edp.vlan.name Name
    String
    VLAN name
edp.vlan.reserved1 Reserved1
    Byte array
```

edp.vlan.reserved2 Reserved2  
Byte array

#### **FC Extended Link Svc (fcels)**

fcels.alpa AL\_PA Map  
Byte array

fcels.cbind.addr\_mode Addressing Mode  
Unsigned 8-bit integer  
Addressing Mode

fcels.cbind.dnpname Destination N\_Port Port\_Name  
String

fcels.cbind.handle Connection Handle  
Unsigned 16-bit integer  
Cbind/Unbind connection handle

fcels.cbind.ifcp\_version iFCP version  
Unsigned 8-bit integer  
Version of iFCP protocol

fcels.cbind.liveness Liveness Test Interval  
Unsigned 16-bit integer  
Liveness Test Interval in seconds

fcels.cbind.snpname Source N\_Port Port\_Name  
String

fcels.cbind.status Status  
Unsigned 16-bit integer  
Cbind status

fcels.cbind.userinfo UserInfo  
Unsigned 32-bit integer  
Userinfo token

fcels.cls.cns Class Supported  
Boolean

fcels.cls.nzctl Non-zero CS\_CTL  
Boolean

fcels.cls.prio Priority  
Boolean

fcels.cls.sdr Delivery Mode  
Boolean

fcels.cmn.bbb B2B Credit Mgmt  
Boolean

fcels.cmn.broadcast Broadcast  
Boolean

fcels.cmn.cios Cont. Incr. Offset Supported  
Boolean

fcels.cmn.clk Clk Sync  
Boolean

fcels.cmn.dhd DHD Capable  
Boolean

```
fcels.cmn.e_d_tov  E_D_TOV
  Boolean

fcels.cmn.multicast  Multicast
  Boolean

fcels.cmn.payload  Payload Len
  Boolean

fcels.cmn.rro  RRO Supported
  Boolean

fcels.cmn.security  Security
  Boolean

fcels.cmn.seqcnt  SEQCNT
  Boolean

fcels.cmn.simplex  Simplex
  Boolean

fcels.cmn.vvv  Valid Vendor Version
  Boolean

fcels.edtov  E_D_TOV
  Unsigned 16-bit integer

fcels.faddr  Fabric Address
  String

fcels.faildrcvr  Failed Receiver AL_PA
  Unsigned 8-bit integer

fcels.fcpflags  FCP Flags
  Unsigned 32-bit integer

fcels.fcpflags.ccomp  Comp
  Boolean

fcels.fcpflags.datao  Data Overlay
  Boolean

fcels.fcpflags.initiator  Initiator
  Boolean

fcels.fcpflags.rdxr  Rd Xfer_Rdy Dis
  Boolean

fcels.fcpflags.retry  Retry
  Boolean

fcels.fcpflags.target  Target
  Boolean

fcels.fcpflags.trirep  Task Retry Ident
  Boolean

fcels.fcpflags.trireq  Task Retry Ident
  Boolean

fcels.fcpflags.wrxr  Wr Xfer_Rdy Dis
  Boolean

fcels.flacompliance  FC-FLA Compliance
  Unsigned 8-bit integer
```

```
fcels.flag      Flag
                Unsigned 8-bit integer
fcels.fnname    Fabric/Node Name
                String
fcels.fpname    Fabric Port Name
                String
fcels.hrdaddr   Hard Address of Originator
                String
fcels.logi.b2b  B2B Credit
                Unsigned 8-bit integer
fcels.logi.bbnum BB_SC Number
                Unsigned 8-bit integer
fcels.logi.cls1param Class 1 Svc Param
                Byte array
fcels.logi.cls2param Class 2 Svc Param
                Byte array
fcels.logi.cls3param Class 3 Svc Param
                Byte array
fcels.logi.cls4param Class 4 Svc Param
                Byte array
fcels.logi.clsflags Service Options
                Unsigned 16-bit integer
fcels.logi.clsrcvsize Class Recv Size
                Unsigned 16-bit integer
fcels.logi.cmnfeatures Common Svc Parameters
                Unsigned 16-bit integer
fcels.logi.e2e  End2End Credit
                Unsigned 16-bit integer
fcels.logi.initctl Initiator Ctl
                Unsigned 16-bit integer
fcels.logi.initctl.ack0 ACK0 Capable
                Boolean
fcels.logi.initctl.ackgaa ACK GAA
                Boolean
fcels.logi.initctl.initial_pa Initial P_A
                Unsigned 16-bit integer
fcels.logi.initctl.sync Clock Sync
                Boolean
fcels.logi.maxconseq Max Concurrent Seq
                Unsigned 16-bit integer
fcels.logi.openseq  Open Seq Per Exchg
                Unsigned 8-bit integer
fcels.logi.rcptctl  Recipient Ctl
                Unsigned 16-bit integer
```

```
fcels.logi.rcptctl.ack  ACK0
    Boolean
fcels.logi.rcptctl.category  Category
    Unsigned 16-bit integer
fcels.logi.rcptctl.interlock  X_ID Interlock
    Boolean
fcels.logi.rcptctl.policy  Policy
    Unsigned 16-bit integer
fcels.logi.rcptctl.sync  Clock Sync
    Boolean
fcels.logi.rcvsize  Receive Size
    Unsigned 16-bit integer
fcels.logi.reloff  Relative Offset By Info Cat
    Unsigned 16-bit integer
fcels.logi.svcavail  Services Availability
    Byte array
fcels.logi.totconseq  Total Concurrent Seq
    Unsigned 8-bit integer
fcels.logi.vendvers  Vendor Version
    Byte array
fcels.loopstate  Loop State
    Unsigned 8-bit integer
fcels.matchcp  Match Address Code Points
    Unsigned 8-bit integer
fcels.npname  N_Port Port_Name
    String
fcels.opcode  Cmd Code
    Unsigned 8-bit integer
fcels.oxid  OXID
    Unsigned 16-bit integer
fcels.portid  Originator S_ID
    String
fcels.portnum  Physical Port Number
    Unsigned 32-bit integer
fcels.portstatus  Port Status
    Unsigned 16-bit integer
fcels.prliloflags  PRLILO Flags
    Unsigned 8-bit integer
fcels.prliloflags.eip  Est Image Pair
    Boolean
fcels.prliloflags.ipe  Image Pair Estd
    Boolean
fcels.prliloflags.opav  Orig PA Valid
    Boolean
```

```
fcels.pubdev_bmap  Public Loop Device Bitmap
                   Byte array
fcels.pvtdev_bmap  Private Loop Device Bitmap
                   Byte array
fcels.rcovqual     Recovery Qualifier
                   Unsigned 8-bit integer
fcels.reqipaddr    Requesting IP Address
                   IPv6 address
fcels.respaction   Responder Action
                   Unsigned 8-bit integer
fcels.respipaddr   Responding IP Address
                   IPv6 address
fcels.respname     Responding Port Name
                   String
fcels.respnname    Responding Node Name
                   String
fcels.resportid    Responding Port ID
                   String
fcels.rjt.detail   Reason Explanation
                   Unsigned 8-bit integer
fcels.rjt.reason   Reason Code
                   Unsigned 8-bit integer
fcels.rjt.vnduniq  Vendor Unique
                   Unsigned 8-bit integer
fcels.rnft.fc4type FC-4 Type
                   Unsigned 8-bit integer
fcels.rnid.asstype Associated Type
                   Unsigned 32-bit integer
fcels.rnid.attnodes Number of Attached Nodes
                   Unsigned 32-bit integer
fcels.rnid.ip      IP Address
                   IPv6 address
fcels.rnid.ipvers  IP Version
                   Unsigned 8-bit integer
fcels.rnid.nodeidfmt Node Identification Format
                   Unsigned 8-bit integer
fcels.rnid.nodemgmt Node Management
                   Unsigned 8-bit integer
fcels.rnid.physport Physical Port Number
                   Unsigned 32-bit integer
fcels.rnid.spidlen Specific Id Length
                   Unsigned 8-bit integer
fcels.rnid.tcppport TCP/UDP Port Number
                   Unsigned 16-bit integer
```

```
fcels.rnid.vendorsp  Vendor Specific
                    Unsigned 16-bit integer
fcels.rnid.vendoruniq  Vendor Unique
                    Byte array
fcels.rscn.addrfmt  Address Format
                    Unsigned 8-bit integer
fcels.rscn.area  Affected Area
                    Unsigned 8-bit integer
fcels.rscn.domain  Affected Domain
                    Unsigned 8-bit integer
fcels.rscn.evqual  Event Qualifier
                    Unsigned 8-bit integer
fcels.rscn.port  Affected Port
                    Unsigned 8-bit integer
fcels.rxid  RXID
            Unsigned 16-bit integer
fcels.scr.regn  Registration Function
                Unsigned 8-bit integer
fcels.speedflags  Port Speed Capabilities
                  Unsigned 16-bit integer
fcels.speedflags.10gb  10Gb Support
                       Boolean
fcels.speedflags.1gb  1Gb Support
                      Boolean
fcels.speedflags.2gb  2Gb Support
                      Boolean
fcels.speedflags.4gb  4Gb Support
                      Boolean
fcels.tprloflags.gprlo  Global PRL0
                        Boolean
fcels.tprloflags.npv  3rd Party N_Port Valid
                       Boolean
fcels.tprloflags.opav  3rd Party Orig PA Valid
                       Boolean
fcels.tprloflags.rpav  Resp PA Valid
                       Boolean
fcels.unbind.status  Status
                    Unsigned 16-bit integer
                    Unbind status
```

#### **FC Fabric Configuration Server (fcs)**

```
fcs.err.vendor  Vendor Unique Reject Code
                Unsigned 8-bit integer
fcs.fcsmask  Subtype Capability Bitmask
            Unsigned 32-bit integer
```

```
fcs.gssubtype  Management GS Subtype
               Unsigned 8-bit integer

fcs.ie.domainid  Interconnect Element Domain ID
                Unsigned 8-bit integer

fcs.ie.fname    Interconnect Element Fabric Name
                String

fcs.ie.logname  Interconnect Element Logical Name
                String

fcs.ie.mgmtaddr Interconnect Element Mgmt. Address
                String

fcs.ie.mgmtid   Interconnect Element Mgmt. ID
                String

fcs.ie.name     Interconnect Element Name
                String

fcs.ie.type     Interconnect Element Type
                Unsigned 8-bit integer

fcs.maxres_size Maximum/Residual Size
                Unsigned 16-bit integer

fcs.modelname   Model Name/Number
                String

fcs.numcap     Number of Capabilities
                Unsigned 32-bit integer

fcs.opcode     Opcode
                Unsigned 16-bit integer

fcs.platform.mgmtaddr  Management Address
                String

fcs.platform.name  Platform Name
                Byte array

fcs.platform.nodename  Platform Node Name
                String

fcs.platform.type  Platform Type
                Unsigned 8-bit integer

fcs.port.flags    Port Flags
                Boolean

fcs.port.moduletype  Port Module Type
                Unsigned 8-bit integer

fcs.port.name     Port Name
                String

fcs.port.physportnum  Physical Port Number
                Byte array

fcs.port.state    Port State
                Unsigned 8-bit integer

fcs.port.txtype   Port TX Type
                Unsigned 8-bit integer
```



```
fcs.port.type   Port Type
                Unsigned 8-bit integer

fcs.reason      Reason Code
                Unsigned 8-bit integer

fcs.reasondet   Reason Code Explanantion
                Unsigned 8-bit integer

fcs.releasecode Release Code
                String

fcs.unsmask     Subtype Capability Bitmask
                Unsigned 32-bit integer

fcs.vbitmask    Vendor Unique Capability Bitmask
                Unsigned 24-bit integer

fcs.vendorname  Vendor Name
                String
```

**FCIP (fcip)**

```
fcip.conncode   Connection Usage Code
                Unsigned 16-bit integer

fcip.connflags  Connection Usage Flags
                Unsigned 8-bit integer

fcip.dstwwn     Destination Fabric WWN
                String

fcip.encap_crc  CRC
                Unsigned 32-bit integer

fcip.encap_word1 FCIP Encapsulation Word1
                Unsigned 32-bit integer

fcip.eof        EOF
                Unsigned 8-bit integer

fcip.eofc       EOF (1's Complement)
                Unsigned 8-bit integer

fcip.flags      Flags
                Unsigned 8-bit integer

fcip.flagsc     Flags (1's Complement)
                Unsigned 8-bit integer

fcip.framehlen  Frame Length (in Words)
                Unsigned 16-bit integer

fcip.framehlenc Frame Length (1's Complement)
                Unsigned 16-bit integer

fcip.katov      K_A_TOV
                Unsigned 32-bit integer

fcip.nonce      Connection Nonce
                Byte array

fcip.pflags.ch  Changed Flag
                Boolean
```

```

fcip.pflags.sf  Special Frame Flag
                Boolean

fcip.pflagsc  Pflags (1's Complement)
                Unsigned 8-bit integer

fcip.proto  Protocol
                Unsigned 8-bit integer
                Protocol

fcip.protoc  Protocol (1's Complement)
                Unsigned 8-bit integer
                Protocol (1's Complement)

fcip.sof  SOF
                Unsigned 8-bit integer

fcip.sofc  SOF (1's Complement)
                Unsigned 8-bit integer

fcip.srcid  FC/FCIP Entity Id
                Byte array

fcip.srcwwn  Source Fabric WWN
                String

fcip.tsec  Time (secs)
                Unsigned 32-bit integer

fcip.tusec  Time (fraction)
                Unsigned 32-bit integer

fcip.version  Version
                Unsigned 8-bit integer

fcip.versionc  Version (1's Complement)
                Unsigned 8-bit integer

```

**FOUNDATION Fieldbus (ff)**

```

ff.fda  FDA Session Management Service
        Boolean

ff.fda.idle  FDA Idle
            Boolean

ff.fda.idle.err  FDA Idle Error
                Boolean

ff.fda.idle.err.additional_code  Additional Code
                                Signed 16-bit integer

ff.fda.idle.err.additional_desc  Additional Description
                                String

ff.fda.idle.err.err_class  Error Class
                            Unsigned 8-bit integer

ff.fda.idle.err.err_code  Error Code
                            Unsigned 8-bit integer

ff.fda.idle.req  FDA Idle Request
                Boolean

ff.fda.idle.rsp  FDA Idle Response
                Boolean

```

```
ff.fda.open_sess  FDA Open Session
  Boolean
ff.fda.open_sess.err  FDA Open Session Error
  Boolean
ff.fda.open_sess.err.additional_code  Additional Code
  Signed 16-bit integer
ff.fda.open_sess.err.additional_desc  Additional Description
  String
ff.fda.open_sess.err.err_class  Error Class
  Unsigned 8-bit integer
ff.fda.open_sess.err.err_code  Error Code
  Unsigned 8-bit integer
ff.fda.open_sess.req  FDA Open Session Request
  Boolean
ff.fda.open_sess.req.inactivity_close_time  Inactivity Close Time
  Unsigned 16-bit integer
ff.fda.open_sess.req.max_buf_siz  Max Buffer Size
  Unsigned 32-bit integer
ff.fda.open_sess.req.max_msg_len  Max Message Length
  Unsigned 32-bit integer
ff.fda.open_sess.req.nma_conf_use  NMA Configuration Use
  Unsigned 8-bit integer
ff.fda.open_sess.req.pd_tag  PD Tag
  String
ff.fda.open_sess.req.reserved  Reserved
  Unsigned 8-bit integer
ff.fda.open_sess.req.sess_idx  Session Index
  Unsigned 32-bit integer
ff.fda.open_sess.req.transmit_delay_time  Transmit Delay Time
  Unsigned 32-bit integer
ff.fda.open_sess.rsp  FDA Open Session Response
  Boolean
ff.fda.open_sess.rsp.inactivity_close_time  Inactivity Close Time
  Unsigned 16-bit integer
ff.fda.open_sess.rsp.max_buf_siz  Max Buffer Size
  Unsigned 32-bit integer
ff.fda.open_sess.rsp.max_msg_len  Max Message Length
  Unsigned 32-bit integer
ff.fda.open_sess.rsp.nma_conf_use  NMA Configuration Use
  Unsigned 8-bit integer
ff.fda.open_sess.rsp.pd_tag  PD Tag
  String
ff.fda.open_sess.rsp.reserved  Reserved
  Unsigned 8-bit integer
```

```
ff.fda.open_sess.rsp.sess_idx  Session Index
    Unsigned 32-bit integer
ff.fda.open_sess.rsp.transmit_delay_time  Transmit Delay Time
    Unsigned 32-bit integer
ff.fms  FMS Service
    Boolean
ff.fms.abort  FMS Abort
    Boolean
ff.fms.abort.req  FMS Abort Request
    Boolean
ff.fms.abort.req.abort_id  Abort Identifier
    Unsigned 8-bit integer
ff.fms.abort.req.reason_code  Reason Code
    Unsigned 8-bit integer
ff.fms.abort.req.reserved  Reserved
    Unsigned 16-bit integer
ff.fms.ack_ev_notification  FMS Acknowledge Event Notification
    Boolean
ff.fms.ack_ev_notification.err  FMS Acknowledge Event Notification Error
    Boolean
ff.fms.ack_ev_notification.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.ack_ev_notification.err.additional_desc  Additional Description
    String
ff.fms.ack_ev_notification.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.ack_ev_notification.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.ack_ev_notification.req  FMS Acknowledge Event Notification Request
    Boolean
ff.fms.ack_ev_notification.req.ev_num  Event Number
    Unsigned 32-bit integer
ff.fms.ack_ev_notification.req.idx  Index
    Unsigned 32-bit integer
ff.fms.ack_ev_notification.rsp  FMS Acknowledge Event Notification Response
    Boolean
ff.fms.alter_ev_condition_monitoring  FMS Alter Event Condition Monitoring
    Boolean
ff.fms.alter_ev_condition_monitoring.err  FMS Alter Event Condition Monitoring Error
    Boolean
ff.fms.alter_ev_condition_monitoring.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.alter_ev_condition_monitoring.err.additional_desc  Additional Description
    String
```

```
ff.fms.alter_ev_condition_monitoring.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.alter_ev_condition_monitoring.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.alter_ev_condition_monitoring.req          FMS Alter Event Condition Monitoring
    Boolean
ff.fms.alter_ev_condition_monitoring.req.enabled  Enabled
    Unsigned 8-bit integer
ff.fms.alter_ev_condition_monitoring.req.idx     Index
    Unsigned 32-bit integer
ff.fms.alter_ev_condition_monitoring.rsp        FMS Alter Event Condition Monitoring R
    Boolean
ff.fms.create_pi                                FMS Create Program Invocation
    Boolean
ff.fms.create_pi.err                            FMS Create Program Invocation Error
    Boolean
ff.fms.create_pi.err.additional_code           Additional Code
    Signed 16-bit integer
ff.fms.create_pi.err.additional_desc          Additional Description
    String
ff.fms.create_pi.err.err_class                Error Class
    Unsigned 8-bit integer
ff.fms.create_pi.err.err_code                 Error Code
    Unsigned 8-bit integer
ff.fms.create_pi.req                           FMS Create Program Invocation Request
    Boolean
ff.fms.create_pi.req.list_of_dom_idxes.dom_idx  Domain Index
    Unsigned 32-bit integer
ff.fms.create_pi.req.num_of_dom_idxes         Number of Domain Indexes
    Unsigned 16-bit integer
ff.fms.create_pi.req.reserved                 Reserved
    Unsigned 8-bit integer
ff.fms.create_pi.req.reusable                 Reusable
    Unsigned 8-bit integer
ff.fms.create_pi.rsp                           FMS Create Program Invocation Response
    Boolean
ff.fms.create_pi.rsp.idx                       Index
    Unsigned 32-bit integer
ff.fms.def_variable_list                       FMS Define Variable List
    Boolean
ff.fms.def_variable_list.err                   FMS Define Variable List Error
    Boolean
ff.fms.def_variable_list.err.additional_code   Additional Code
    Signed 16-bit integer
```

```
ff.fms.def_variable_list.err.additional_desc  Additional Description
String
ff.fms.def_variable_list.err.err_class  Error Class
Unsigned 8-bit integer
ff.fms.def_variable_list.err.err_code  Error Code
Unsigned 8-bit integer
ff.fms.def_variable_list.req  FMS Define Variable List Request
Boolean
ff.fms.def_variable_list.req.idx  Index
Unsigned 32-bit integer
ff.fms.def_variable_list.req.num_of_idxes  Number of Indexes
Unsigned 32-bit integer
ff.fms.def_variable_list.rsp  FMS Define Variable List Response
Boolean
ff.fms.def_variable_list.rsp.idx  Index
Unsigned 32-bit integer
ff.fms.del_pi  FMS Delete Program Invocation
Boolean
ff.fms.del_pi.err  FMS Delete Program Invocation Error
Boolean
ff.fms.del_pi.err.additional_code  Additional Code
Signed 16-bit integer
ff.fms.del_pi.err.additional_desc  Additional Description
String
ff.fms.del_pi.err.err_class  Error Class
Unsigned 8-bit integer
ff.fms.del_pi.err.err_code  Error Code
Unsigned 8-bit integer
ff.fms.del_pi.req  FMS Delete Program Invocation Request
Boolean
ff.fms.del_pi.req.idx  Index
Unsigned 32-bit integer
ff.fms.del_pi.rsp  FMS Delete Program Invocation Response
Boolean
ff.fms.del_variable_list  FMS Delete Variable List
Boolean
ff.fms.del_variable_list.err  FMS Delete Variable List Error
Boolean
ff.fms.del_variable_list.err.additional_code  Additional Code
Signed 16-bit integer
ff.fms.del_variable_list.err.additional_desc  Additional Description
String
ff.fms.del_variable_list.err.err_class  Error Class
Unsigned 8-bit integer
```

```
ff.fms.del_variable_list.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.del_variable_list.req  FMS Delete Variable List Request
    Boolean
ff.fms.del_variable_list.req.idx  Index
    Unsigned 32-bit integer
ff.fms.del_variable_list.rsp  FMS Delete Variable List Response
    Boolean
ff.fms.download_seg  FMS Download Segment
    Boolean
ff.fms.download_seg.err  FMS Download Segment Error
    Boolean
ff.fms.download_seg.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.download_seg.err.additional_desc  Additional Description
    String
ff.fms.download_seg.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.download_seg.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.download_seg.req  FMS Download Segment Request
    Boolean
ff.fms.download_seg.req.idx  Index
    Unsigned 8-bit integer
ff.fms.download_seg.rsp  FMS Download Segment Response
    Boolean
ff.fms.download_seg.rsp.more_follows  Final Result
    Unsigned 8-bit integer
ff.fms.ev_notification  FMS Event Notification
    Boolean
ff.fms.ev_notification.req  FMS Event Notification Request
    Boolean
ff.fms.ev_notification.req.ev_num  Event Number
    Unsigned 32-bit integer
ff.fms.ev_notification.req.idx  Index
    Unsigned 32-bit integer
ff.fms.gen_download_seg  FMS Generic Download Segment
    Boolean
ff.fms.gen_download_seg.err  FMS Generic Download Segment Error
    Boolean
ff.fms.gen_download_seg.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.gen_download_seg.err.additional_desc  Additional Description
    String
```

```
ff.fms.gen_download_seg.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.gen_download_seg.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.gen_download_seg.req  FMS Generic Download Segment Request
    Boolean
ff.fms.gen_download_seg.req.idx  Index
    Unsigned 8-bit integer
ff.fms.gen_download_seg.req.more_follows  More Follows
    Unsigned 8-bit integer
ff.fms.gen_download_seg.rsp  FMS Generic Download Segment Response
    Boolean
ff.fms.gen_init_download_seq  FMS Generic Initiate Download Sequence
    Boolean
ff.fms.gen_init_download_seq.err  FMS Generic Initiate Download Sequence Error
    Boolean
ff.fms.gen_init_download_seq.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.gen_init_download_seq.err.additional_desc  Additional Description
    String
ff.fms.gen_init_download_seq.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.gen_init_download_seq.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.gen_init_download_seq.req  FMS Generic Initiate Download Sequence Request
    Boolean
ff.fms.gen_init_download_seq.req.idx  Index
    Unsigned 16-bit integer
ff.fms.gen_init_download_seq.rsp  FMS Generic Initiate Download Sequence Response
    Boolean
ff.fms.gen_terminate_download_seq  FMS Generic Terminate Download Sequence
    Boolean
ff.fms.gen_terminate_download_seq.err  FMS Generic Terminate Download Sequence Error
    Boolean
ff.fms.gen_terminate_download_seq.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.gen_terminate_download_seq.err.additional_desc  Additional Description
    String
ff.fms.gen_terminate_download_seq.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.gen_terminate_download_seq.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.gen_terminate_download_seq.req  FMS Generic Terminate Download Sequence Request
    Boolean
```



```
ff.fms.gen_terminate_download_seq.req.idx  Index
      Unsigned 8-bit integer
ff.fms.gen_terminate_download_seq.rsp  FMS Generic Terminate Download Sequence R
      Boolean
ff.fms.gen_terminate_download_seq.rsp.final_result  Final Result
      Unsigned 8-bit integer
ff.fms.get_od  FMS Get OD
      Boolean
ff.fms.get_od.err  FMS Get OD Error
      Boolean
ff.fms.get_od.err.additional_code  Additional Code
      Signed 16-bit integer
ff.fms.get_od.err.additional_desc  Additional Description
      String
ff.fms.get_od.err.err_class  Error Class
      Unsigned 8-bit integer
ff.fms.get_od.err.err_code  Error Code
      Unsigned 8-bit integer
ff.fms.get_od.req  FMS Get OD Request
      Boolean
ff.fms.get_od.req.all_attrs  All Attributes
      Unsigned 8-bit integer
ff.fms.get_od.req.idx  Index
      Unsigned 32-bit integer
ff.fms.get_od.req.reserved  Reserved
      Unsigned 16-bit integer
ff.fms.get_od.req.start_idx_flag  Start Index Flag
      Unsigned 8-bit integer
ff.fms.get_od.rsp  FMS Get OD Response
      Boolean
ff.fms.get_od.rsp.more_follows  More Follows
      Unsigned 8-bit integer
ff.fms.get_od.rsp.num_of_obj_desc  Number of Object Descriptions
      Unsigned 8-bit integer
ff.fms.get_od.rsp.reserved  Reserved
      Unsigned 16-bit integer
ff.fms.id  FMS Identify
      Boolean
ff.fms.id.err  FMS Identify Error
      Boolean
ff.fms.id.err.additional_code  Additional Code
      Signed 16-bit integer
ff.fms.id.err.additional_desc  Additional Description
      String
```

```
ff.fms.id.err.err_class  Error Class
                          Unsigned 8-bit integer
ff.fms.id.err.err_code  Error Code
                          Unsigned 8-bit integer
ff.fms.id.req           FMS Identify Request
                          Boolean
ff.fms.id.rsp          FMS Identify Response
                          Boolean
ff.fms.id.rsp.model_name  Model Name
                          String
ff.fms.id.rsp.revision  Revision
                          String
ff.fms.id.rsp.vendor_name  Vendor Name
                          String
ff.fms.info_report      FMS Information Report
                          Boolean
ff.fms.info_report.req  FMS Information Report Request
                          Boolean
ff.fms.info_report.req.idx  Index
                          Unsigned 32-bit integer
ff.fms.info_report_on_change  FMS Information Report On Change with Subindex
                          Boolean
ff.fms.info_report_on_change.req  FMS Information Report On Change with Subindex
                          Boolean
ff.fms.info_report_on_change.req.idx  Index
                          Unsigned 32-bit integer
ff.fms.info_report_on_change_with_subidx  FMS Information Report On Change
                          Boolean
ff.fms.info_report_on_change_with_subidx.req  FMS Information Report On Change R
                          Boolean
ff.fms.info_report_on_change_with_subidx.req.idx  Index
                          Unsigned 32-bit integer
ff.fms.info_report_on_change_with_subidx.req.subidx  Subindex
                          Unsigned 32-bit integer
ff.fms.info_report_with_subidx  FMS Information Report with Subindex
                          Boolean
ff.fms.info_report_with_subidx.req  FMS Information Report with Subindex Request
                          Boolean
ff.fms.info_report_with_subidx.req.idx  Index
                          Unsigned 32-bit integer
ff.fms.info_report_with_subidx.req.subidx  Subindex
                          Unsigned 32-bit integer
ff.fms.init            FMS Initiate
                          Boolean
```

```
ff.fms.init.err    FMS Initiate Error
                  Boolean
ff.fms.init.err.additional_code  Additional Code
                  Signed 16-bit integer
ff.fms.init.err.additional_desc  Additional Description
                  String
ff.fms.init.err.err_class  Error Class
                  Unsigned 8-bit integer
ff.fms.init.err.err_code  Error Code
                  Unsigned 8-bit integer
ff.fms.init.req    FMS Initiate Request
                  Boolean
ff.fms.init.req.access_protection_supported_calling  Access Protection Supported
                  Unsigned 8-bit integer
ff.fms.init.req.conn_opt  Connect Option
                  Unsigned 8-bit integer
ff.fms.init.req.passwd_and_access_grps_calling  Password and Access Groups Calli
                  Unsigned 16-bit integer
ff.fms.init.req.pd_tag  PD Tag
                  String
ff.fms.init.req.prof_num_calling  Profile Number Calling
                  Unsigned 16-bit integer
ff.fms.init.req.ver_od_calling  Version OD Calling
                  Signed 16-bit integer
ff.fms.init.rsp    FMS Initiate Response
                  Boolean
ff.fms.init.rsp.prof_num_called  Profile Number Called
                  Unsigned 16-bit integer
ff.fms.init.rsp.ver_od_called  Version OD Called
                  Signed 16-bit integer
ff.fms.init_download_seq  FMS Initiate Download Sequence
                  Boolean
ff.fms.init_download_seq.err  FMS Initiate Download Sequence Error
                  Boolean
ff.fms.init_download_seq.err.additional_code  Additional Code
                  Signed 16-bit integer
ff.fms.init_download_seq.err.additional_desc  Additional Description
                  String
ff.fms.init_download_seq.err.err_class  Error Class
                  Unsigned 8-bit integer
ff.fms.init_download_seq.err.err_code  Error Code
                  Unsigned 8-bit integer
ff.fms.init_download_seq.req  FMS Initiate Download Sequence Request
                  Boolean
```

```
ff.fms.init_download_seq.req.idx  Index
    Unsigned 8-bit integer
ff.fms.init_download_seq.rsp  FMS Initiate Download Sequence Response
    Boolean
ff.fms.init_put_od  FMS Initiate Put OD
    Boolean
ff.fms.init_put_od.err  FMS Initiate Put OD Error
    Boolean
ff.fms.init_put_od.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.init_put_od.err.additional_desc  Additional Description
    String
ff.fms.init_put_od.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.init_put_od.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.init_put_od.req  FMS Initiate Put OD Request
    Boolean
ff.fms.init_put_od.req.consequence  Consequence
    Unsigned 16-bit integer
ff.fms.init_put_od.req.reserved  Reserved
    Unsigned 16-bit integer
ff.fms.init_put_od.rsp  FMS Initiate Put OD Response
    Boolean
ff.fms.init_upload_seq  FMS Initiate Upload Sequence
    Boolean
ff.fms.init_upload_seq.err  FMS Initiate Upload Sequence Error
    Boolean
ff.fms.init_upload_seq.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.init_upload_seq.err.additional_desc  Additional Description
    String
ff.fms.init_upload_seq.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.init_upload_seq.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.init_upload_seq.req  FMS Initiate Upload Sequence Request
    Boolean
ff.fms.init_upload_seq.req.idx  Index
    Unsigned 32-bit integer
ff.fms.init_upload_seq.rsp  FMS Initiate Upload Sequence Response
    Boolean
ff.fms.kill  FMS Kill
    Boolean
```

```
ff.fms.kill.err    FMS Kill Error
                  Boolean
ff.fms.kill.err.additional_code  Additional Code
                  Signed 16-bit integer
ff.fms.kill.err.additional_desc  Additional Description
                  String
ff.fms.kill.err.err_class  Error Class
                  Unsigned 8-bit integer
ff.fms.kill.err.err_code   Error Code
                  Unsigned 8-bit integer
ff.fms.kill.req    FMS Kill Request
                  Boolean
ff.fms.kill.req.idx  Index
                  Unsigned 32-bit integer
ff.fms.kill.rsp    FMS Kill Response
                  Boolean
ff.fms.put_od     FMS Put OD
                  Boolean
ff.fms.put_od.err  FMS Put OD Error
                  Boolean
ff.fms.put_od.err.additional_code  Additional Code
                  Signed 16-bit integer
ff.fms.put_od.err.additional_desc  Additional Description
                  String
ff.fms.put_od.err.err_class  Error Class
                  Unsigned 8-bit integer
ff.fms.put_od.err.err_code   Error Code
                  Unsigned 8-bit integer
ff.fms.put_od.req  FMS Put OD Request
                  Boolean
ff.fms.put_od.req.num_of_obj_desc  Number of Object Descriptions
                  Unsigned 8-bit integer
ff.fms.put_od.rsp  FMS Put OD Response
                  Boolean
ff.fms.read       FMS Read
                  Boolean
ff.fms.read.err   FMS Read Error
                  Boolean
ff.fms.read.err.additional_code  Additional Code
                  Signed 16-bit integer
ff.fms.read.err.additional_desc  Additional Description
                  String
ff.fms.read.err.err_class  Error Class
                  Unsigned 8-bit integer
```

```
ff.fms.read.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.read.req  FMS Read Request
    Boolean
ff.fms.read.req.idx  Index
    Unsigned 32-bit integer
ff.fms.read.rsp  FMS Read Response
    Boolean
ff.fms.read_with_subidx  FMS Read with Subindex
    Boolean
ff.fms.read_with_subidx.err  FMS Read with Subindex Error
    Boolean
ff.fms.read_with_subidx.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.read_with_subidx.err.additional_desc  Additional Description
    String
ff.fms.read_with_subidx.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.read_with_subidx.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.read_with_subidx.req  FMS Read with Subindex Request
    Boolean
ff.fms.read_with_subidx.req.idx  Index
    Unsigned 32-bit integer
ff.fms.read_with_subidx.req.subidx  Index
    Unsigned 32-bit integer
ff.fms.read_with_subidx.rsp  FMS Read with Subindex Response
    Boolean
ff.fms.req_dom_download  FMS Request Domain Download
    Boolean
ff.fms.req_dom_download.err  FMS Request Domain Download Error
    Boolean
ff.fms.req_dom_download.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.req_dom_download.err.additional_desc  Additional Description
    String
ff.fms.req_dom_download.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.req_dom_download.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.req_dom_download.req  FMS Request Domain Download Request
    Boolean
ff.fms.req_dom_download.req.additional_info  Additional Description
    String
```

```
ff.fms.req_dom_download.req.idx  Index
    Unsigned 32-bit integer
ff.fms.req_dom_download.rsp  FMS Request Domain Download Response
    Boolean
ff.fms.req_dom_upload  FMS Request Domain Upload
    Boolean
ff.fms.req_dom_upload.err  FMS Request Domain Upload Error
    Boolean
ff.fms.req_dom_upload.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.req_dom_upload.err.additional_desc  Additional Description
    String
ff.fms.req_dom_upload.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.req_dom_upload.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.req_dom_upload.req  FMS Request Domain Upload Request
    Boolean
ff.fms.req_dom_upload.req.additional_info  Additional Description
    String
ff.fms.req_dom_upload.req.idx  Index
    Unsigned 32-bit integer
ff.fms.req_dom_upload.rsp  FMS Request Domain Upload Response
    Boolean
ff.fms.reset  FMS Reset
    Boolean
ff.fms.reset.err  FMS Reset Error
    Boolean
ff.fms.reset.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.reset.err.additional_desc  Additional Description
    String
ff.fms.reset.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.reset.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.reset.err.pi_state  Pi State
    Unsigned 8-bit integer
ff.fms.reset.req  FMS Reset Request
    Boolean
ff.fms.reset.req.idx  Index
    Unsigned 32-bit integer
ff.fms.reset.rsp  FMS Reset Response
    Boolean
```

```
ff.fms.resume    FMS Resume
                  Boolean

ff.fms.resume.err  FMS Resume Error
                  Boolean

ff.fms.resume.err.additional_code  Additional Code
                  Signed 16-bit integer

ff.fms.resume.err.additional_desc  Additional Description
                  String

ff.fms.resume.err.err_class  Error Class
                  Unsigned 8-bit integer

ff.fms.resume.err.err_code  Error Code
                  Unsigned 8-bit integer

ff.fms.resume.err.pi_state  Pi State
                  Unsigned 8-bit integer

ff.fms.resume.req  FMS Resume Request
                  Boolean

ff.fms.resume.req.idx  Index
                  Unsigned 32-bit integer

ff.fms.resume.rsp  FMS Resume Response
                  Boolean

ff.fms.start    FMS Start
                  Boolean

ff.fms.start.err  FMS Start Error
                  Boolean

ff.fms.start.err.additional_code  Additional Code
                  Signed 16-bit integer

ff.fms.start.err.additional_desc  Additional Description
                  String

ff.fms.start.err.err_class  Error Class
                  Unsigned 8-bit integer

ff.fms.start.err.err_code  Error Code
                  Unsigned 8-bit integer

ff.fms.start.err.pi_state  Pi State
                  Unsigned 8-bit integer

ff.fms.start.req  FMS Start Request
                  Boolean

ff.fms.start.req.idx  Index
                  Unsigned 32-bit integer

ff.fms.start.rsp  FMS Start Response
                  Boolean

ff.fms.status    FMS Status
                  Boolean

ff.fms.status.err  FMS Status Error
                  Boolean
```



```
ff.fms.status.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.status.err.additional_desc  Additional Description
    String
ff.fms.status.err.err_class        Error Class
    Unsigned 8-bit integer
ff.fms.status.err.err_code         Error Code
    Unsigned 8-bit integer
ff.fms.status.req                  FMS Status Request
    Boolean
ff.fms.status.rsp                  FMS Status Response
    Boolean
ff.fms.status.rsp.logical_status   Logical Status
    Unsigned 8-bit integer
ff.fms.status.rsp.physical_status  Physical Status
    Unsigned 8-bit integer
ff.fms.status.rsp.reserved         Reserved
    Unsigned 16-bit integer
ff.fms.stop                         FMS Stop
    Boolean
ff.fms.stop.err                    FMS Stop Error
    Boolean
ff.fms.stop.err.additional_code    Additional Code
    Signed 16-bit integer
ff.fms.stop.err.additional_desc    Additional Description
    String
ff.fms.stop.err.err_class          Error Class
    Unsigned 8-bit integer
ff.fms.stop.err.err_code           Error Code
    Unsigned 8-bit integer
ff.fms.stop.err.pi_state           Pi State
    Unsigned 8-bit integer
ff.fms.stop.req                    FMS Stop Request
    Boolean
ff.fms.stop.req.idx                Index
    Unsigned 32-bit integer
ff.fms.stop.rsp                    FMS Stop Response
    Boolean
ff.fms.terminate_download_seq      FMS Terminate Download Sequence
    Boolean
ff.fms.terminate_download_seq.err  FMS Terminate Download Sequence Error
    Boolean
ff.fms.terminate_download_seq.err.additional_code  Additional Code
    Signed 16-bit integer
```

```
ff.fms.terminate_download_seq.err.additional_desc  Additional Description
String
ff.fms.terminate_download_seq.err.err_class  Error Class
Unsigned 8-bit integer
ff.fms.terminate_download_seq.err.err_code  Error Code
Unsigned 8-bit integer
ff.fms.terminate_download_seq.req  FMS Terminate Download Sequence Request
Boolean
ff.fms.terminate_download_seq.req.final_result  Final Result
Unsigned 32-bit integer
ff.fms.terminate_download_seq.req.idx  Index
Unsigned 32-bit integer
ff.fms.terminate_download_seq.rsp  FMS Terminate Download Sequence Response
Boolean
ff.fms.terminate_put_od  FMS Terminate Put OD
Boolean
ff.fms.terminate_put_od.err  FMS Terminate Put OD Error
Boolean
ff.fms.terminate_put_od.err.additional_code  Additional Code
Signed 16-bit integer
ff.fms.terminate_put_od.err.additional_desc  Additional Description
String
ff.fms.terminate_put_od.err.err_class  Error Class
Unsigned 8-bit integer
ff.fms.terminate_put_od.err.err_code  Error Code
Unsigned 8-bit integer
ff.fms.terminate_put_od.err.index  Index
Unsigned 32-bit integer
ff.fms.terminate_put_od.req  FMS Terminate Put OD Request
Boolean
ff.fms.terminate_put_od.rsp  FMS Terminate Put OD Response
Boolean
ff.fms.terminate_upload_seq  FMS Terminate Upload Sequence
Boolean
ff.fms.terminate_upload_seq.err  FMS Terminate Upload Sequence Error
Boolean
ff.fms.terminate_upload_seq.err.additional_code  Additional Code
Signed 16-bit integer
ff.fms.terminate_upload_seq.err.additional_desc  Additional Description
String
ff.fms.terminate_upload_seq.err.err_class  Error Class
Unsigned 8-bit integer
ff.fms.terminate_upload_seq.err.err_code  Error Code
Unsigned 8-bit integer
```

```
ff.fms.terminate_upload_seq.req  FMS Terminate Upload Sequence Request
    Boolean
ff.fms.terminate_upload_seq.req.idx  Index
    Unsigned 32-bit integer
ff.fms.terminate_upload_seq.rsp  FMS Terminate Upload Sequence Response
    Boolean
ff.fms.unsolicited_status  FMS Unsolicited Status
    Boolean
ff.fms.unsolicited_status.req  FMS Unsolicited Status Request
    Boolean
ff.fms.unsolicited_status.req.logical_status  Logical Status
    Unsigned 8-bit integer
ff.fms.unsolicited_status.req.physical_status  Physical Status
    Unsigned 8-bit integer
ff.fms.unsolicited_status.req.reserved  Reserved
    Unsigned 16-bit integer
ff.fms.upload_seg  FMS Upload Segment
    Boolean
ff.fms.upload_seg.err  FMS Upload Segment Error
    Boolean
ff.fms.upload_seg.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.upload_seg.err.additional_desc  Additional Description
    String
ff.fms.upload_seg.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.upload_seg.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.upload_seg.req  FMS Upload Segment Request
    Boolean
ff.fms.upload_seg.req.idx  Index
    Unsigned 32-bit integer
ff.fms.upload_seg.rsp  FMS Upload Segment Response
    Boolean
ff.fms.upload_seg.rsp.more_follows  More Follows
    Unsigned 32-bit integer
ff.fms.write  FMS Write
    Boolean
ff.fms.write.err  FMS Write Error
    Boolean
ff.fms.write.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.write.err.additional_desc  Additional Description
    String
```

```
ff.fms.write.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.write.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.write.req  FMS Write Request
    Boolean
ff.fms.write.req.idx  Index
    Unsigned 32-bit integer
ff.fms.write.rsp  FMS Write Response
    Boolean
ff.fms.write_with_subidx  FMS Write with Subindex
    Boolean
ff.fms.write_with_subidx.err  FMS Write with Subindex Error
    Boolean
ff.fms.write_with_subidx.err.additional_code  Additional Code
    Signed 16-bit integer
ff.fms.write_with_subidx.err.additional_desc  Additional Description
    String
ff.fms.write_with_subidx.err.err_class  Error Class
    Unsigned 8-bit integer
ff.fms.write_with_subidx.err.err_code  Error Code
    Unsigned 8-bit integer
ff.fms.write_with_subidx.req  FMS Write with Subindex Request
    Boolean
ff.fms.write_with_subidx.req.idx  Index
    Unsigned 32-bit integer
ff.fms.write_with_subidx.req.subidx  Index
    Unsigned 32-bit integer
ff.fms.write_with_subidx.rsp  FMS Write with Subindex Response
    Boolean
ff.hdr  Message Header
    Boolean
ff.hdr.fda_addr  FDA Address
    Unsigned 32-bit integer
ff.hdr.len  Message Length
    Unsigned 32-bit integer
ff.hdr.ver  FDA Message Version
    Unsigned 8-bit integer
ff.lr  LAN Redundancy Service
    Boolean
ff.lr.diagnostic_msg.req.dev_idx  Device Index
    Unsigned 16-bit integer
ff.lr.diagnostic_msg.req.diagnostic_msg_intvl  Diagnostic Message Interval
    Unsigned 32-bit integer
```

```

ff.lr.diagnostic_msg.req.if_a_to_a_status  Interface AtoA Status
      Unsigned 32-bit integer
ff.lr.diagnostic_msg.req.if_a_to_b_status  Interface AtoB Status
      Unsigned 32-bit integer
ff.lr.diagnostic_msg.req.if_b_to_a_status  Interface BtoA Status
      Unsigned 32-bit integer
ff.lr.diagnostic_msg.req.if_b_to_b_status  Interface BtoB Status
      Unsigned 32-bit integer
ff.lr.diagnostic_msg.req.num_of_if_statuses  Number of Interface Statuses
      Unsigned 32-bit integer
ff.lr.diagnostic_msg.req.num_of_network_ifs  Number of Network Interfaces
      Unsigned 8-bit integer
ff.lr.diagnostic_msg.req.pd_tag  PD Tag
      String
ff.lr.diagnostic_msg.req.reserved  Reserved
      Unsigned 8-bit integer
ff.lr.diagnostic_msg.req.transmission_if  Transmission Interface
      Unsigned 8-bit integer
ff.lr.get_info.err.additional_code  Additional Code
      Signed 16-bit integer
ff.lr.get_info.err.additional_desc  Additional Description
      String
ff.lr.get_info.err.err_class  Error Class
      Unsigned 8-bit integer
ff.lr.get_info.err.err_code  Error Code
      Unsigned 8-bit integer
ff.lr.get_info.rsp.aging_time  Aging Time
      Unsigned 32-bit integer
ff.lr.get_info.rsp.diagnostic_msg_if_a_rcv_addr  Diagnostic Message Interface A
      IPv6 address
ff.lr.get_info.rsp.diagnostic_msg_if_a_send_addr  Diagnostic Message Interface A
      IPv6 address
ff.lr.get_info.rsp.diagnostic_msg_if_b_rcv_addr  Diagnostic Message Interface B
      IPv6 address
ff.lr.get_info.rsp.diagnostic_msg_if_b_send_addr  Diagnostic Message Interface B
      IPv6 address
ff.lr.get_info.rsp.diagnostic_msg_intvl  Diagnostic Message Interval
      Unsigned 32-bit integer
ff.lr.get_info.rsp.lr_attr_ver  LAN Redundancy Attributes Version
      Unsigned 32-bit integer
ff.lr.get_info.rsp.max_msg_num_diff  Max Message Number Difference
      Unsigned 8-bit integer
ff.lr.get_info.rsp.reserved  Reserved
      Unsigned 16-bit integer

```

```
ff.lr.get_statistics.err.additional_code  Additional Code
Signed 16-bit integer

ff.lr.get_statistics.err.additional_desc  Additional Description
String

ff.lr.get_statistics.err.err_class  Error Class
Unsigned 8-bit integer

ff.lr.get_statistics.err.err_code  Error Code
Unsigned 8-bit integer

ff.lr.get_statistics.rsp.num_diag_svr_ind_miss_a  Error Code
Unsigned 32-bit integer

ff.lr.get_statistics.rsp.num_diag_svr_ind_miss_b  Error Code
Unsigned 32-bit integer

ff.lr.get_statistics.rsp.num_diag_svr_ind_recv_a  Error Code
Unsigned 32-bit integer

ff.lr.get_statistics.rsp.num_diag_svr_ind_recv_b  Error Code
Unsigned 32-bit integer

ff.lr.get_statistics.rsp.num_rem_dev_diag_recv_fault_a  Error Code
Unsigned 32-bit integer

ff.lr.get_statistics.rsp.num_rem_dev_diag_recv_fault_b  Error Code
Unsigned 32-bit integer

ff.lr.get_statistics.rsp.num_x_cable_stat  Error Code
Unsigned 32-bit integer

ff.lr.get_statistics.rsp.x_cable_stat  Error Code
Unsigned 32-bit integer

ff.lr.lr.diagnostic_msg  Diagnostic Message
Boolean

ff.lr.lr.get_info  LAN Redundancy Get Information
Boolean

ff.lr.lr.get_info.err  LAN Redundancy Get Information Error
Boolean

ff.lr.lr.get_info.req  LAN Redundancy Get Information Request
Boolean

ff.lr.lr.get_info.rsp  LAN Redundancy Get Information Response
Boolean

ff.lr.lr.get_statistics  LAN Redundancy Get Statistics
Boolean

ff.lr.lr.get_statistics.err  LAN Redundancy Get Statistics Error
Boolean

ff.lr.lr.get_statistics.req  LAN Redundancy Get Statistics Request
Boolean

ff.lr.lr.get_statistics.rsp  LAN Redundancy Get Statistics Response
Boolean

ff.lr.lr.put_info  LAN Redundancy Put Information
Boolean
```

```

ff.lr.lr.put_info.err LAN Redundancy Put Information Error
    Boolean
ff.lr.lr.put_info.req LAN Redundancy Put Information Request
    Boolean
ff.lr.lr.put_info.rsp LAN Redundancy Put Information Response
    Boolean
ff.lr.put_info.err.additional_code Additional Code
    Signed 16-bit integer
ff.lr.put_info.err.additional_desc Additional Description
    String
ff.lr.put_info.err.err_class Error Class
    Unsigned 8-bit integer
ff.lr.put_info.err.err_code Error Code
    Unsigned 8-bit integer
ff.lr.put_info.req.aging_time Aging Time
    Unsigned 32-bit integer
ff.lr.put_info.req.diagnostic_msg_if_a_rcv_addr Diagnostic Message Interface A
    IPv6 address
ff.lr.put_info.req.diagnostic_msg_if_a_send_addr Diagnostic Message Interface A
    IPv6 address
ff.lr.put_info.req.diagnostic_msg_if_b_rcv_addr Diagnostic Message Interface B
    IPv6 address
ff.lr.put_info.req.diagnostic_msg_if_b_send_addr Diagnostic Message Interface B
    IPv6 address
ff.lr.put_info.req.diagnostic_msg_intvl Diagnostic Message Interval
    Unsigned 32-bit integer
ff.lr.put_info.req.lr_attrs_ver LAN Redundancy Attributes Version
    Unsigned 32-bit integer
ff.lr.put_info.req.max_msg_num_diff Max Message Number Difference
    Unsigned 8-bit integer
ff.lr.put_info.req.reserved Reserved
    Unsigned 16-bit integer
ff.lr.put_info.rsp.aging_time Aging Time
    Unsigned 32-bit integer
ff.lr.put_info.rsp.diagnostic_msg_if_a_rcv_addr Diagnostic Message Interface A
    IPv6 address
ff.lr.put_info.rsp.diagnostic_msg_if_a_send_addr Diagnostic Message Interface A
    IPv6 address
ff.lr.put_info.rsp.diagnostic_msg_if_b_rcv_addr Diagnostic Message Interface B
    IPv6 address
ff.lr.put_info.rsp.diagnostic_msg_if_b_send_addr Diagnostic Message Interface B
    IPv6 address
ff.lr.put_info.rsp.diagnostic_msg_intvl Diagnostic Message Interval
    Unsigned 32-bit integer

```

```
ff.lr.put_info.rsp.lr_attrs_ver  LAN Redundancy Attributes Version
    Unsigned 32-bit integer
ff.lr.put_info.rsp.max_msg_num_diff  Max Message Number Difference
    Unsigned 8-bit integer
ff.lr.put_info.rsp.reserved  Reserved
    Unsigned 16-bit integer
ff.sm  SM Service
    Boolean
ff.sm.clear_addr  SM Clear Address
    Boolean
ff.sm.clear_addr.err  SM Clear Address Error
    Boolean
ff.sm.clear_addr.err.additional_code  Additional Code
    Signed 16-bit integer
ff.sm.clear_addr.err.additional_desc  Additional Description
    String
ff.sm.clear_addr.err.err_class  Error Class
    Unsigned 8-bit integer
ff.sm.clear_addr.err.err_code  Error Code
    Unsigned 8-bit integer
ff.sm.clear_addr.req  SM Clear Address Request
    Boolean
ff.sm.clear_addr.req.dev_id  Device ID
    String
ff.sm.clear_addr.req.interface_to_clear  Interface to Clear
    Unsigned 8-bit integer
ff.sm.clear_addr.req.pd_tag  PD Tag
    String
ff.sm.clear_addr.rsp  SM Clear Address Response
    Boolean
ff.sm.clear_assign_info  SM Clear Assignment Info
    Boolean
ff.sm.clear_assign_info.err  SM Clear Assignment Info Error
    Boolean
ff.sm.clear_assign_info.err.additional_code  Additional Code
    Signed 16-bit integer
ff.sm.clear_assign_info.err.additional_desc  Additional Description
    String
ff.sm.clear_assign_info.err.err_class  Error Class
    Unsigned 8-bit integer
ff.sm.clear_assign_info.err.err_code  Error Code
    Unsigned 8-bit integer
ff.sm.clear_assign_info.req  SM Clear Assignment Info Request
    Boolean
```



```
ff.sm.clear_assign_info.req.dev_id  Device ID
    String
ff.sm.clear_assign_info.req.pd_tag  PD Tag
    String
ff.sm.clear_assign_info.rsp  SM Clear Assignment Info Response
    Boolean
ff.sm.dev_annunc  SM Device Annunciation
    Boolean
ff.sm.dev_annunc.req  SM Device Annunciation Request
    Boolean
ff.sm.dev_annunc.req.annunc_ver_num  Annunciation Version Number
    Unsigned 32-bit integer
ff.sm.dev_annunc.req.dev_id  Device ID
    String
ff.sm.dev_annunc.req.dev_idx  Device Index
    Unsigned 16-bit integer
ff.sm.dev_annunc.req.h1_live_list.h1_link_id  H1 Link Id
    Unsigned 16-bit integer
ff.sm.dev_annunc.req.h1_live_list.reserved  Reserved
    Unsigned 8-bit integer
ff.sm.dev_annunc.req.h1_live_list.ver_num  Version Number
    Unsigned 8-bit integer
ff.sm.dev_annunc.req.h1_node_addr_ver_num.h1_node_addr  H1 Node Address
    Unsigned 8-bit integer
ff.sm.dev_annunc.req.h1_node_addr_ver_num.ver_num  Version Number
    Unsigned 8-bit integer
ff.sm.dev_annunc.req.hse_dev_ver_num  HSE Device Version Number
    Unsigned 32-bit integer
ff.sm.dev_annunc.req.hse_repeat_time  HSE Repeat Time
    Unsigned 32-bit integer
ff.sm.dev_annunc.req.lr_port  LAN Redundancy Port
    Unsigned 16-bit integer
ff.sm.dev_annunc.req.max_dev_idx  Max Device Index
    Unsigned 16-bit integer
ff.sm.dev_annunc.req.num_of_entries  Number of Entries in Version Number List
    Unsigned 32-bit integer
ff.sm.dev_annunc.req.operational_ip_addr  Operational IP Address
    IPv6 address
ff.sm.dev_annunc.req.pd_tag  PD Tag
    String
ff.sm.dev_annunc.req.reserved  Reserved
    Unsigned 16-bit integer
ff.sm.find_tag_query  SM Find Tag Query
    Boolean
```

```
ff.sm.find_tag_query.req SM Find Tag Query Request
    Boolean
ff.sm.find_tag_query.req.idx Element Id or VFD Reference or Device Index
    Unsigned 32-bit integer
ff.sm.find_tag_query.req.query_type Query Type
    Unsigned 8-bit integer
ff.sm.find_tag_query.req.tag PD Tag or Function Block Tag
    String
ff.sm.find_tag_query.req.vfd_tag VFD Tag
    String
ff.sm.find_tag_reply SM Find Tag Reply
    Boolean
ff.sm.find_tag_reply.req SM Find Tag Reply Request
    Boolean
ff.sm.find_tag_reply.req.dev_id Queried Object Device ID
    String
ff.sm.find_tag_reply.req.fda_addr_link_id Queried Object FDA Address Link Id
    Unsigned 16-bit integer
ff.sm.find_tag_reply.req.fda_addr_selector.fda_addr_selector FDA Address Select
    Unsigned 16-bit integer
ff.sm.find_tag_reply.req.h1_node_addr Queried Object H1 Node Address
    Unsigned 8-bit integer
ff.sm.find_tag_reply.req.ip_addr Queried Object IP Address
    IPv6 address
ff.sm.find_tag_reply.req.num_of_fda_addr_selectors Number Of FDA Address Select
    Unsigned 8-bit integer
ff.sm.find_tag_reply.req.od_idx Queried Object OD Index
    Unsigned 32-bit integer
ff.sm.find_tag_reply.req.od_ver Queried Object OD Version
    Unsigned 32-bit integer
ff.sm.find_tag_reply.req.pd_tag Queried Object PD Tag
    String
ff.sm.find_tag_reply.req.query_type Query Type
    Unsigned 8-bit integer
ff.sm.find_tag_reply.req.reserved Reserved
    Unsigned 8-bit integer
ff.sm.find_tag_reply.req.vfd_ref Queried Object VFD Reference
    Unsigned 32-bit integer
ff.sm.id SM Identify
    Boolean
ff.sm.id.err SM Identify Error
    Boolean
ff.sm.id.err.additional_code Additional Code
    Signed 16-bit integer
```

```
ff.sm.id.err.additional_desc  Additional Description
    String
ff.sm.id.err.err_class      Error Class
    Unsigned 8-bit integer
ff.sm.id.err.err_code      Error Code
    Unsigned 8-bit integer
ff.sm.id.req               SM Identify Request
    Boolean
ff.sm.id.rsp              SM Identify Response
    Boolean
ff.sm.id.rsp.annunc_ver_num  Annunciation Version Number
    Unsigned 32-bit integer
ff.sm.id.rsp.dev_id       Device ID
    String
ff.sm.id.rsp.dev_idx      Device Index
    Unsigned 16-bit integer
ff.sm.id.rsp.h1_live_list.h1_link_id  H1 Link Id
    Unsigned 16-bit integer
ff.sm.id.rsp.h1_live_list.reserved  Reserved
    Unsigned 8-bit integer
ff.sm.id.rsp.h1_live_list.ver_num  Version Number
    Unsigned 8-bit integer
ff.sm.id.rsp.h1_node_addr_ver_num.h1_node_addr  H1 Node Address
    Unsigned 8-bit integer
ff.sm.id.rsp.h1_node_addr_ver_num.ver_num  Version Number
    Unsigned 8-bit integer
ff.sm.id.rsp.hse_dev_ver_num  HSE Device Version Number
    Unsigned 32-bit integer
ff.sm.id.rsp.hse_repeat_time  HSE Repeat Time
    Unsigned 32-bit integer
ff.sm.id.rsp.lr_port        LAN Redundancy Port
    Unsigned 16-bit integer
ff.sm.id.rsp.max_dev_idx    Max Device Index
    Unsigned 16-bit integer
ff.sm.id.rsp.num_of_entries  Number of Entries in Version Number List
    Unsigned 32-bit integer
ff.sm.id.rsp.operational_ip_addr  Operational IP Address
    IPv6 address
ff.sm.id.rsp.pd_tag        PD Tag
    String
ff.sm.id.rsp.reserved      Reserved
    Unsigned 16-bit integer
ff.sm.set_assign_info      SM Set Assignment Info
    Boolean
```

```
ff.sm.set_assign_info.err    SM Set Assignment Info Error
    Boolean
ff.sm.set_assign_info.err.additional_code  Additional Code
    Signed 16-bit integer
ff.sm.set_assign_info.err.additional_desc  Additional Description
    String
ff.sm.set_assign_info.err.err_class  Error Class
    Unsigned 8-bit integer
ff.sm.set_assign_info.err.err_code  Error Code
    Unsigned 8-bit integer
ff.sm.set_assign_info.req    SM Set Assignment Info Request
    Boolean
ff.sm.set_assign_info.req.dev_id  Device ID
    String
ff.sm.set_assign_info.req.dev_idx  Device Index
    Unsigned 16-bit integer
ff.sm.set_assign_info.req.hl_new_addr  H1 New Address
    Unsigned 8-bit integer
ff.sm.set_assign_info.req.hse_repeat_time  HSE Repeat Time
    Unsigned 32-bit integer
ff.sm.set_assign_info.req.lr_port  LAN Redundancy Port
    Unsigned 16-bit integer
ff.sm.set_assign_info.req.max_dev_idx  Max Device Index
    Unsigned 16-bit integer
ff.sm.set_assign_info.req.operational_ip_addr  Operational IP Address
    IPv6 address
ff.sm.set_assign_info.req.pd_tag  PD Tag
    String
ff.sm.set_assign_info.rsp    SM Set Assignment Info Response
    Boolean
ff.sm.set_assign_info.rsp.hse_repeat_time  HSE Repeat Time
    Unsigned 32-bit integer
ff.sm.set_assign_info.rsp.max_dev_idx  Max Device Index
    Unsigned 16-bit integer
ff.sm.set_assign_info.rsp.reserved  Reserved
    Unsigned 16-bit integer
ff.trailer  Message Trailer
    Boolean
ff.trailer.extended_control_field  Extended Control Field
    Unsigned 32-bit integer
ff.trailer.invoke_id  Invoke Id
    Unsigned 32-bit integer
ff.trailer.msg_num  Message Number
    Unsigned 32-bit integer
```

ff.trailer.time\_stamp Time Stamp  
Unsigned 64-bit integer

**FP (fp)**

fp.activation-cfn Activation CFN  
Unsigned 8-bit integer  
Activation Connection Frame Number

fp.cell-portion-id Cell Portion ID  
Unsigned 8-bit integer  
Cell Portion ID

fp.cfn CFN  
Unsigned 8-bit integer  
Connection Frame Number

fp.cfn-control CFN control  
Unsigned 8-bit integer  
Connection Frame Number Control

fp.channel-type Channel Type  
Unsigned 8-bit integer  
Channel Type

fp.channel-with-zero-tbs No TBs for channel  
Unsigned 32-bit integer  
Channel with 0 TBs

fp.cmch-pi CmCH-PI  
Unsigned 8-bit integer  
Common Transport Channel Priority Indicator

fp.code-number Code number  
Unsigned 8-bit integer  
Code number

fp.common.control.frame-type Control Frame Type  
Unsigned 8-bit integer  
Common Control Frame Type

fp.common.control.rx-timing-deviation Rx Timing Deviation  
Unsigned 8-bit integer  
Common Rx Timing Deviation

fp.congestion-status Congestion Status  
Unsigned 8-bit integer  
Congestion Status

fp.cpch.tfi TFI  
Unsigned 8-bit integer  
CPCH Transport Format Indicator

fp.crci CRCI  
Unsigned 8-bit integer  
CRC correctness indicator

fp.crcis CRCIs  
Byte array  
CRC Indicators for uplink TBs

```
fp.data Data
  Byte array
  Data

fp.dch.control.frame-type Control Frame Type
  Unsigned 8-bit integer
  DCH Control Frame Type

fp.dch.control.rx-timing-deviation Rx Timing Deviation
  Unsigned 8-bit integer
  DCH Rx Timing Deviation

fp.dch.quality-estimate Quality Estimate
  Unsigned 8-bit integer
  Quality Estimate

fp.direction Direction
  Unsigned 8-bit integer
  Link direction

fp.dpc-mode DPC Mode
  Unsigned 8-bit integer
  DPC Mode to be applied in the uplink

fp.edch-data-padding Padding
  Unsigned 8-bit integer
  E-DCH padding before PDU

fp.edch-tsn TSN
  Unsigned 8-bit integer
  E-DCH Transmission Sequence Number

fp.edch.ddi DDI
  Unsigned 8-bit integer
  E-DCH Data Description Indicator

fp.edch.fsn FSN
  Unsigned 8-bit integer
  E-DCH Frame Sequence Number

fp.edch.header-crc E-DCH Header CRC
  Unsigned 16-bit integer
  E-DCH Header CRC

fp.edch.mac-es-pdu MAC-es PDU
  No value
  MAC-es PDU

fp.edch.no-of-harq-retransmissions No of HARQ Retransmissions
  Unsigned 8-bit integer
  E-DCH Number of HARQ retransmissions

fp.edch.no-of-subframes No of subframes
  Unsigned 8-bit integer
  E-DCH Number of subframes

fp.edch.number-of-mac-d-pdus Number of Mac-d PDUs
  Unsigned 8-bit integer
  Number of Mac-d PDUs

fp.edch.number-of-mac-es-pdus Number of Mac-es PDUs
  Unsigned 8-bit integer
  Number of Mac-es PDUs
```

```
fp.edch.subframe  Subframe
  String
  EDCH Subframe

fp.edch.subframe-header  Subframe header
  String
  EDCH Subframe header

fp.edch.subframe-number  Subframe number
  Unsigned 8-bit integer
  E-DCH Subframe number

fp.fach.tfi  TFI
  Unsigned 8-bit integer
  FACH Transport Format Indicator

fp.ft  Frame Type
  Unsigned 8-bit integer
  Frame Type

fp.header-crc  Header CRC
  Unsigned 8-bit integer
  Header CRC

fp.hsdSCH-calculated-rate  Calculated rate allocation (bps)
  Unsigned 32-bit integer
  Calculated rate RNC is allowed to send in bps

fp.hsdSCH-credits  HS-DSCH Credits
  Unsigned 16-bit integer
  HS-DSCH Credits

fp.hsdSCH-data-padding  Padding
  Unsigned 8-bit integer
  HS-DSCH Repetition Period in milliseconds

fp.hsdSCH-interval  HS-DSCH Interval in milliseconds
  Unsigned 8-bit integer
  HS-DSCH Interval in milliseconds

fp.hsdSCH-repetition-period  HS-DSCH Repetition Period
  Unsigned 8-bit integer
  HS-DSCH Repetition Period in milliseconds

fp.hsdSCH-unlimited-rate  Unlimited rate
  No value
  No restriction on rate at which data may be sent

fp.hsdSCH.drt  DRT
  Unsigned 8-bit integer
  Delay Reference Time

fp.hsdSCH.mac-d-pdu-len  MAC-d PDU Length
  Unsigned 16-bit integer
  MAC-d PDU Length in bits

fp.hsdSCH.max-macd-pdu-len  Max MAC-d PDU Length
  Unsigned 16-bit integer
  Maximum MAC-d PDU Length in bits

fp.hsdSCH.new-ie-flag  DRT IE present
  Unsigned 8-bit integer
  DRT IE present
```

```
fp.hsdSCH.new-ie-flags  New IEs flags
    String
    New IEs flags

fp.hsdSCH.new-ie-flags-byte  Another new IE flags byte
    Unsigned 8-bit integer
    Another new IE flagsbyte

fp.hsdSCH.num-of-pdu  Number of PDUs
    Unsigned 8-bit integer
    Number of PDUs in the payload

fp.mac-d-pdu  MAC-d PDU
    Byte array
    MAC-d PDU

fp.max-ue-tx-pow  MAX_UE_TX_POW
    Signed 8-bit integer
    Max UE TX POW (dBm)

fp.mc-info  MC info
    Unsigned 8-bit integer
    MC info

fp.multiple-rl-sets-indicator  Multiple RL sets indicator
    Unsigned 8-bit integer
    Multiple RL sets indicator

fp.payload-crc  Payload CRC
    Unsigned 16-bit integer
    Payload CRC

fp.pch.cfn  CFN (PCH)
    Unsigned 16-bit integer
    PCH Connection Frame Number

fp.pch.pi  Paging Indication
    Unsigned 8-bit integer
    Indicates if the PI Bitmap is present

fp.pch.pi-bitmap  Paging Indications bitmap
    No value
    Paging Indication bitmap

fp.pch.tfi  TFI
    Unsigned 8-bit integer
    PCH Transport Format Indicator

fp.pch.toa  ToA (PCH)
    Signed 24-bit integer
    PCH Time of Arrival

fp.pdsch-set-id  PDSCH Set Id
    Unsigned 8-bit integer
    A pointer to the PDSCH Set which shall be used to transmit

fp.power-offset  Power offset
    Power offset (in dB)

fp.propagation-delay  Propagation Delay
    Unsigned 8-bit integer
    Propagation Delay
```



fp.pusch-set-id PUSCH Set Id  
Unsigned 8-bit integer  
Identifies PUSCH Set from those configured in NodeB

fp.rach.new-ie-flag New IE present  
Unsigned 8-bit integer  
New IE present

fp.rach.new-ie-flags New IEs flags  
String  
New IEs flags

fp.rach.new-ie-flags-byte Another new IE flags byte  
Unsigned 8-bit integer  
Another new IE flags byte

fp.radio-interface-param.cfn-valid CFN valid  
Unsigned 16-bit integer  
CFN valid

fp.radio-interface-param.dpc-mode-valid DPC mode valid  
Unsigned 16-bit integer  
DPC mode valid

fp.radio-interface-param.max-ue-tx-pow-valid MAX\_UE\_TX\_POW valid  
Unsigned 16-bit integer  
MAX UE TX POW valid

fp.radio-interface-param.tpc-po-valid TPC PO valid  
Unsigned 16-bit integer  
TPC PO valid

fp.radio-interface\_param.rl-sets-indicator-valid RL sets indicator valid  
Unsigned 16-bit integer  
RI valid

fp.rx-sync-ul-timing-deviation Received SYNC UL Timing Deviation  
Unsigned 8-bit integer  
Received SYNC UL Timing Deviation

fp.spare-extension Spare Extension  
No value  
Spare Extension

fp.spreading-factor Spreading factor  
Unsigned 8-bit integer  
Spreading factor

fp.t1 T1  
Unsigned 24-bit integer  
RNC frame number indicating time it sends frame

fp.t2 T2  
Unsigned 24-bit integer  
NodeB frame number indicating time it received DL Sync

fp.t3 T3  
Unsigned 24-bit integer  
NodeB frame number indicating time it sends frame

fp.tb TB  
Byte array  
Transport Block

```
fp.tfi TFI
    Unsigned 8-bit integer
    Transport Format Indicator

fp.timing-advance Timing advance
    Unsigned 8-bit integer
    Timing advance in chips

fp.tpc-po TPC PO
    Unsigned 8-bit integer
    TPC PO

fp.transmit-power-level Transmit Power Level
    Transmit Power Level (dB)

fp.ul-sir-target UL_SIR_TARGET
    Value (in dB) of the SIR target to be used by the UL inner loop power control

fp.usch.tfi TFI
    Unsigned 8-bit integer
    USCH Transport Format Indicator

fp.user-buffer-size User buffer size
    Unsigned 16-bit integer
    User buffer size in octets
```

#### **FTP Data (ftp-data)**

#### **FTServer Operations (ftserver)**

```
ftserver.opnum Operation
    Unsigned 16-bit integer
    Operation
```

#### **Fiber Distributed Data Interface (fddi)**

```
fddi.addr Source or Destination Address
    6-byte Hardware (MAC) Address
    Source or Destination Hardware Address

fddi.dst Destination
    6-byte Hardware (MAC) Address
    Destination Hardware Address

fddi.fc Frame Control
    Unsigned 8-bit integer

fddi.fc.clf Class/Length/Format
    Unsigned 8-bit integer

fddi.fc.mac_subtype MAC Subtype
    Unsigned 8-bit integer

fddi.fc.prio Priority
    Unsigned 8-bit integer

fddi.fc.smt_subtype SMT Subtype
    Unsigned 8-bit integer

fddi.src Source
    6-byte Hardware (MAC) Address
```

**Fibre Channel (fc)**

```
fc.bls_hseqcnt  High SEQCNT
                Unsigned 16-bit integer

fc.bls_lastseqid  Last Valid SEQID
                Unsigned 8-bit integer

fc.bls_lseqcnt  Low SEQCNT
                Unsigned 16-bit integer

fc.bls_oxid  OXID
                Unsigned 16-bit integer

fc.bls_reason  Reason
                Unsigned 8-bit integer

fc.bls_rjtdetail  Reason Explanantion
                Unsigned 8-bit integer

fc.bls_rxid  RXID
                Unsigned 16-bit integer

fc.bls_seqidvld  SEQID Valid
                Unsigned 8-bit integer

fc.bls_vnduniq  Vendor Unique Reason
                Unsigned 8-bit integer

fc.cs_ctl  CS_CTL
                Unsigned 8-bit integer
                CS_CTL

fc.d_id  Dest Addr
                String
                Destination Address

fc.df_ctl  DF_CTL
                Unsigned 8-bit integer

fc.exchange_first_frame  Exchange First In
                Frame number
                The first frame of this exchange is in this frame

fc.exchange_last_frame  Exchange Last In
                Frame number
                The last frame of this exchange is in this frame

fc.f_ctl  F_CTL
                Unsigned 24-bit integer

fc.fctl.abts_ack  AA
                Unsigned 24-bit integer
                ABTS ACK values

fc.fctl.abts_not_ack  AnA
                Unsigned 24-bit integer
                ABTS not ACK vals

fc.fctl.ack_0_1  A01
                Unsigned 24-bit integer
                Ack 0/1 value
```

```
fc.fctl.exchange_first  ExgFst
    Boolean
    First Exchange?
fc.fctl.exchange_last  ExgLst
    Boolean
    Last Exchange?
fc.fctl.exchange_responder  ExgRpd
    Boolean
    Exchange Responder?
fc.fctl.last_data_frame  LDF
    Unsigned 24-bit integer
    Last Data Frame?
fc.fctl.priority  Pri
    Boolean
    Priority
fc.fctl.rel_offset  RelOff
    Boolean
    rel offset
fc.fctl.rexmitted_seq  RetSeq
    Boolean
    Retransmitted Sequence
fc.fctl.seq_last  SeqLst
    Boolean
    Last Sequence?
fc.fctl.seq_recipient  SeqRec
    Boolean
    Seq Recipient?
fc.fctl.transfer_seq_initiative  TSI
    Boolean
    Transfer Seq Initiative
fc.ftype  Frame type
    Unsigned 8-bit integer
    Derived Type
fc.id  Addr
    String
    Source or Destination Address
fc.nethdr.da  Network DA
    String
fc.nethdr.sa  Network SA
    String
fc.ox_id  OX_ID
    Unsigned 16-bit integer
    Originator ID
fc.parameter  Parameter
    Unsigned 32-bit integer
    Parameter
```

```
fc.r_ctl  R_CTL
    Unsigned 8-bit integer
    R_CTL

fc.reassembled  Reassembled Frame
    Boolean

fc.relative_offset  Relative Offset
    Unsigned 32-bit integer
    Relative offset of data

fc.rx_id  RX_ID
    Unsigned 16-bit integer
    Receiver ID

fc.s_id  Src Addr
    String
    Source Address

fc.seq_cnt  SEQ_CNT
    Unsigned 16-bit integer
    Sequence Count

fc.seq_id  SEQ_ID
    Unsigned 8-bit integer
    Sequence ID

fc.time  Time from Exchange First
    Time duration
    Time since the first frame of the Exchange

fc.type  Type
    Unsigned 8-bit integer

fc.vft  VFT Header
    Unsigned 16-bit integer
    VFT Header

fc.vft.hop_ct  HopCT
    Unsigned 8-bit integer
    Hop Count

fc.vft.rctl  R_CTL
    Unsigned 8-bit integer
    R_CTL

fc.vft.type  Type
    Unsigned 8-bit integer
    Type of tagged frame

fc.vft.ver  Version
    Unsigned 8-bit integer
    Version of VFT header

fc.vft.vf_id  VF_ID
    Unsigned 16-bit integer
    Virtual Fabric ID
```

**Fibre Channel Common Transport (fcct)**

fcct.ext\_authblk Auth Hash Blk  
Byte array

fcct.ext\_reqnm Requestor Port Name  
Byte array

fcct.ext\_said Auth SAID  
Unsigned 32-bit integer

fcct.ext\_tid Transaction ID  
Unsigned 32-bit integer

fcct.ext\_tstamp Timestamp  
Byte array

fcct.gssubtype GS Subtype  
Unsigned 8-bit integer

fcct.gstype GS Type  
Unsigned 8-bit integer

fcct.in\_id IN\_ID  
String

fcct.options Options  
Unsigned 8-bit integer

fcct.revision Revision  
Unsigned 8-bit integer

fcct.server Server  
Unsigned 8-bit integer  
Derived from GS Type & Subtype fields

**Fibre Channel Fabric Zone Server (fcfzs)**

fcfzs.gest.vendor Vendor Specific State  
Unsigned 32-bit integer

fcfzs.gzc.flags Capabilities  
Unsigned 8-bit integer

fcfzs.gzc.flags.hard\_zones Hard Zones  
Boolean

fcfzs.gzc.flags.soft\_zones Soft Zones  
Boolean

fcfzs.gzc.flags.zoneset\_db ZoneSet Database  
Boolean

fcfzs.gzc.vendor Vendor Specific Flags  
Unsigned 32-bit integer

fcfzs.hard\_zone\_set.enforced Hard Zone Set  
Boolean

fcfzs.maxres\_size Maximum/Residual Size  
Unsigned 16-bit integer

fcfzs.opcode Opcode  
Unsigned 16-bit integer

```
fcfzs.reason Reason Code
    Unsigned 8-bit integer
fcfzs.rjtdetail Reason Code Explanation
    Unsigned 8-bit integer
fcfzs.rjtvendor Vendor Specific Reason
    Unsigned 8-bit integer
fcfzs.soft_zone_set.enforced Soft Zone Set
    Boolean
fcfzs.zone.lun LUN
    Byte array
fcfzs.zone.mbrid Zone Member Identifier
    String
fcfzs.zone.name Zone Name
    String
fcfzs.zone.namelen Zone Name Length
    Unsigned 8-bit integer
fcfzs.zone.numattrs Number of Zone Attribute Entries
    Unsigned 32-bit integer
fcfzs.zone.nummbrs Number of Zone Members
    Unsigned 32-bit integer
fcfzs.zone.state Zone State
    Unsigned 8-bit integer
fcfzs.zonembr.idlen Zone Member Identifier Length
    Unsigned 8-bit integer
fcfzs.zonembr.idtype Zone Member Identifier Type
    Unsigned 8-bit integer
fcfzs.zonembr.numattrs Number of Zone Member Attribute Entries
    Unsigned 32-bit integer
fcfzs.zoneset.name Zone Set Name
    String
fcfzs.zoneset.namelen Zone Set Name Length
    Unsigned 8-bit integer
fcfzs.zoneset.numattrs Number of Zone Set Attribute Entries
    Unsigned 32-bit integer
fcfzs.zoneset.numzones Number of Zones
    Unsigned 32-bit integer
```

#### **Fibre Channel Name Server (fcdns)**

```
fcdns.cos.1 1
    Boolean
fcdns.cos.2 2
    Boolean
fcdns.cos.3 3
    Boolean
```

```
fcdns.cos.4 4
  Boolean

fcdns.cos.6 6
  Boolean

fcdns.cos.f F
  Boolean

fcdns.entry.numfc4desc  Number of FC4 Descriptors Registered
  Unsigned 8-bit integer

fcdns.entry.objfmt  Name Entry Object Format
  Unsigned 8-bit integer

fcdns.fc4features  FC-4 Feature Bits
  Unsigned 8-bit integer

fcdns.fc4features.i  I
  Boolean

fcdns.fc4features.t  T
  Boolean

fcdns.fc4types.fcp  FCP
  Boolean

fcdns.fc4types.gs3  GS3
  Boolean

fcdns.fc4types.ip  IP
  Boolean

fcdns.fc4types.llc_snap  LLC/SNAP
  Boolean

fcdns.fc4types.snmp  SNMP
  Boolean

fcdns.fc4types.swils  SW_ILS
  Boolean

fcdns.fc4types.vi  VI
  Boolean

fcdns.gssubtype  GS_Subtype
  Unsigned 8-bit integer

fcdns.maxres_size  Maximum/Residual Size
  Unsigned 16-bit integer

fcdns.opcode  Opcode
  Unsigned 16-bit integer

fcdns.portip  Port IP Address
  IPv4 address

fcdns.reply.cos  Class of Service Supported
  Unsigned 32-bit integer

fcdns.req.areasid  Area ID Scope
  Unsigned 8-bit integer

fcdns.req.class  Requested Class of Service
  Unsigned 32-bit integer
```



```
fcdns.req.domainid  Domain ID Scope
                    Unsigned 8-bit integer
fcdns.req.fc4desc   FC-4 Descriptor
                    String
fcdns.req.fc4desclen  FC-4 Descriptor Length
                    Unsigned 8-bit integer
fcdns.req.fc4type   FC-4 Type
                    Unsigned 8-bit integer
fcdns.req.fc4types  FC-4 Types Supported
                    No value
fcdns.req.ip       IP Address
                    IPv6 address
fcdns.req.nname    Node Name
                    String
fcdns.req.portid   Port Identifier
                    String
fcdns.req.portname  Port Name
                    String
fcdns.req.porttype  Port Type
                    Unsigned 8-bit integer
fcdns.req.sname    Symbolic Port Name
                    String
fcdns.req.snamelen  Symbolic Name Length
                    Unsigned 8-bit integer
fcdns.req.spname   Symbolic Port Name
                    String
fcdns.req.spsnamelen  Symbolic Port Name Length
                    Unsigned 8-bit integer
fcdns.rply.fc4desc  FC-4 Descriptor
                    Byte array
fcdns.rply.fc4desclen  FC-4 Descriptor Length
                    Unsigned 8-bit integer
fcdns.rply.fc4type  FC-4 Descriptor Type
                    Unsigned 8-bit integer
fcdns.rply.fpname   Fabric Port Name
                    String
fcdns.rply.hrdaddr  Hard Address
                    String
fcdns.rply.ipa     Initial Process Associator
                    Byte array
fcdns.rply.ipnode   Node IP Address
                    IPv6 address
fcdns.rply.ipport   Port IP Address
                    IPv6 address
```

```
fcdns.rply.nname  Node Name
String

fcdns.rply.ownerid  Owner Id
String

fcdns.rply.pname  Port Name
String

fcdns.rply.portid  Port Identifier
String

fcdns.rply.porttype  Port Type
Unsigned 8-bit integer

fcdns.rply.reason  Reason Code
Unsigned 8-bit integer

fcdns.rply.reasondet  Reason Code Explanantion
Unsigned 8-bit integer

fcdns.rply.sname  Symbolic Node Name
String

fcdns.rply.snamelen  Symbolic Node Name Length
Unsigned 8-bit integer

fcdns.rply.spname  Symbolic Port Name
String

fcdns.rply.spnamelen  Symbolic Port Name Length
Unsigned 8-bit integer

fcdns.rply.vendor  Vendor Unique Reject Code
Unsigned 8-bit integer

fcdns.zone.mbrid  Member Identifier
String

fcdns.zone.mbrtype  Zone Member Type
Unsigned 8-bit integer

fcdns.zonename  Zone Name
String
```

#### **Fibre Channel Protocol for SCSI (fcp)**

```
fcp.addlcdblen  Additional CDB Length
Unsigned 8-bit integer

fcp.bidir_dl  FCP_BIDIRECTIONAL_READ_DL
Unsigned 32-bit integer

fcp.bidir_resid  Bidirectional Read Resid
Unsigned 32-bit integer

fcp.burstlen  Burst Length
Unsigned 32-bit integer

fcp.crn  Command Ref Num
Unsigned 8-bit integer

fcp.data_ro  FCP_DATA_RO
Unsigned 32-bit integer
```

```
fcf.dl    FCP_DL
          Unsigned 32-bit integer

fcf.lun   LUN
          Unsigned 8-bit integer

fcf.mgmt.flags.abort_task_set  Abort Task Set
                                Boolean

fcf.mgmt.flags.clear_aca      Clear ACA
                                Boolean

fcf.mgmt.flags.clear_task_set  Clear Task Set
                                Boolean

fcf.mgmt.flags.lu_reset      LU Reset
                                Boolean

fcf.mgmt.flags.obsolete      Obsolete
                                Boolean

fcf.mgmt.flags.rsvd          Rsvd
                                Boolean

fcf.mgmt.flags.target_reset  Target Reset
                                Boolean

fcf.multilun  Multi-Level LUN
              Byte array

fcf.rddata    RDDATA
              Boolean

fcf.request_in  Request In
              Frame number
              The frame number for the request

fcf.resid     FCP_RESID
              Unsigned 32-bit integer

fcf.response_in  Response In
              Frame number
              The frame number of the response

fcf.rsp.flags.bidi  Bidi Rsp
                    Boolean

fcf.rsp.flags.bidi_rro  Bidi Read Resid Over
                        Boolean

fcf.rsp.flags.bidi_rru  Bidi Read Resid Under
                        Boolean

fcf.rsp.flags.conf_req  Conf Req
                        Boolean

fcf.rsp.flags.res_vld  RES Vld
                        Boolean

fcf.rsp.flags.resid_over  Resid Over
                          Boolean

fcf.rsp.flags.resid_under  Resid Under
                          Boolean
```

```
fcf.rsp.flags.sns_vld  SNS Vld
                        Boolean

fcf.rsp.retry_delay_timer  Retry Delay Timer
                        Unsigned 16-bit integer

fcf.rspcode  RSP_CODE
            Unsigned 8-bit integer

fcf.rspflags  FCF_RSP Flags
            Unsigned 8-bit integer

fcf.rsplen  FCF_RSP_LEN
            Unsigned 32-bit integer

fcf.snslen  FCF_SNS_LEN
            Unsigned 32-bit integer

fcf.status  SCSI Status
            Unsigned 8-bit integer

fcf.taskattr  Task Attribute
            Unsigned 8-bit integer

fcf.taskmgmt  Task Management Flags
            Unsigned 8-bit integer

fcf.time  Time from FCF_CMND
         Time duration
         Time since the FCF_CMND frame

fcf.type  Field to branch off to SCSI
         Unsigned 8-bit integer

fcf.wrdata  WRDATA
         Boolean
```

**Fibre Channel SW\_ILS (swils)**

```
swils.aca.domainid  Known Domain ID
                   Unsigned 8-bit integer

swils.dia.sname  Switch Name
                String

swils.efp.aliastok  Alias Token
                   Byte array

swils.efp.domid  Domain ID
                Unsigned 8-bit integer

swils.efp.mcastno  Mcast Grp#
                   Unsigned 8-bit integer

swils.efp.payloadlen  Payload Len
                   Unsigned 16-bit integer

swils.efp.psname  Principal Switch Name
                 String

swils.efp.psprio  Principal Switch Priority
                 Unsigned 8-bit integer

swils.efp.recordlen  Record Len
                   Unsigned 8-bit integer
```

```
swils.efp.rectype  Record Type
                  Unsigned 8-bit integer
swils.efp.sname   Switch Name
                  String
swils.elp.b2b     B2B Credit
                  Unsigned 32-bit integer
swils.elp.cfe2e   Class F E2E Credit
                  Unsigned 16-bit integer
swils.elp.cls1p   Class 1 Svc Param
                  Byte array
swils.elp.cls1rsz Class 1 Frame Size
                  Unsigned 16-bit integer
swils.elp.cls2p   Class 2 Svc Param
                  Byte array
swils.elp.cls3p   Class 3 Svc Param
                  Byte array
swils.elp.clsfcs  Class F Max Concurrent Seq
                  Unsigned 16-bit integer
swils.elp.clsfp   Class F Svc Param
                  Byte array
swils.elp.clsfrsz Max Class F Frame Size
                  Unsigned 16-bit integer
swils.elp.compat1 Compatability Param 1
                  Unsigned 32-bit integer
swils.elp.compat2 Compatability Param 2
                  Unsigned 32-bit integer
swils.elp.compat3 Compatability Param 3
                  Unsigned 32-bit integer
swils.elp.compat4 Compatability Param 4
                  Unsigned 32-bit integer
swils.elp.edtov   E_D_TOV
                  Unsigned 32-bit integer
swils.elp.fcmode  ISL Flow Ctrl Mode
                  String
swils.elp.fcplen  Flow Ctrl Param Len
                  Unsigned 16-bit integer
swils.elp.flag    Flag
                  Byte array
swils.elp.oseq    Class F Max Open Seq
                  Unsigned 16-bit integer
swils.elp.ratov   R_A_TOV
                  Unsigned 32-bit integer
swils.elp.reqepn  Req Eport Name
                  String
```

```

swils.elp.reqesn  Req Switch Name
    String
swils.elp.rev    Revision
    Unsigned 8-bit integer
swils.esc.protocol  Protocol ID
    Unsigned 16-bit integer
swils.esc.swvendor  Switch Vendor ID
    String
swils.esc.vendorid  Vendor ID
    String
swils.ess.capability.dns.obj0h  Name Server Entry Object 00h Support
    Boolean
swils.ess.capability.dns.obj1h  Name Server Entry Object 01h Support
    Boolean
swils.ess.capability.dns.obj2h  Name Server Entry Object 02h Support
    Boolean
swils.ess.capability.dns.obj3h  Name Server Entry Object 03h Support
    Boolean
swils.ess.capability.dns.vendor  Vendor Specific Flags
    Unsigned 32-bit integer
swils.ess.capability.dns.zlacc  GE_PT Zero Length Accepted
    Boolean
swils.ess.capability.fcs.basic  Basic Configuration Services
    Boolean
swils.ess.capability.fcs.enhanced  Enhanced Configuration Services
    Boolean
swils.ess.capability.fcs.platform  Platform Configuration Services
    Boolean
swils.ess.capability.fcs.topology  Topology Discovery Services
    Boolean
swils.ess.capability.fctlr.rscn  SW_RSCN Supported
    Boolean
swils.ess.capability.fctlr.vendor  Vendor Specific Flags
    Unsigned 32-bit integer
swils.ess.capability.fzs.adcsupp  Active Direct Command Supported
    Boolean
swils.ess.capability.fzs.defzone  Default Zone Setting
    Boolean
swils.ess.capability.fzs.ezoneena  Enhanced Zoning Enabled
    Boolean
swils.ess.capability.fzs.ezonesupp  Enhanced Zoning Supported
    Boolean
swils.ess.capability.fzs.hardzone  Hard Zoning Supported
    Boolean

```

```
swils.ess.capability.fzs.mr Merge Control Setting
  Boolean
swils.ess.capability.fzs.zsdbena Zoneset Database Enabled
  Boolean
swils.ess.capability.fzs.zsdbsupp Zoneset Database Supported
  Boolean
swils.ess.capability.length Length
  Unsigned 8-bit integer
swils.ess.capability.numentries Number of Entries
  Unsigned 8-bit integer
swils.ess.capability.service Service Name
  Unsigned 8-bit integer
swils.ess.capability.subtype Subtype
  Unsigned 8-bit integer
swils.ess.capability.t10id T10 Vendor ID
  String
swils.ess.capability.type Type
  Unsigned 8-bit integer
swils.ess.capability.vendorobj Vendor-Specific Info
  Byte array
swils.ess.leb Payload Length
  Unsigned 32-bit integer
swils.ess.listlen List Length
  Unsigned 8-bit integer
swils.ess.modelname Model Name
  String
swils.ess.numobj Number of Capability Objects
  Unsigned 16-bit integer
swils.ess.relcode Release Code
  String
swils.ess.revision Revision
  Unsigned 32-bit integer
swils.ess.vendorname Vendor Name
  String
swils.ess.vendorspecific Vendor Specific
  String
swils.fspf.arnum AR Number
  Unsigned 8-bit integer
swils.fspf.auth Authentication
  Byte array
swils.fspf.authtype Authentication Type
  Unsigned 8-bit integer
swils.fspf.cmd Command:
  Unsigned 8-bit integer
```

```
swils.fspf.origdomid  Originating Domain ID
    Unsigned 8-bit integer
swils.fspf.ver  Version
    Unsigned 8-bit integer
swils.hlo.deadint  Dead Interval (secs)
    Unsigned 32-bit integer
swils.hlo.hloint  Hello Interval (secs)
    Unsigned 32-bit integer
swils.hlo.options  Options
    Byte array
swils.hlo.origpidx  Originating Port Idx
    Unsigned 24-bit integer
swils.hlo.rcvdomid  Recipient Domain ID
    Unsigned 8-bit integer
swils.ldr.linkcost  Link Cost
    Unsigned 16-bit integer
swils.ldr.linkid  Link ID
    String
swils.ldr.linktype  Link Type
    Unsigned 8-bit integer
swils.ldr.nbr_portidx  Neighbor Port Idx
    Unsigned 24-bit integer
swils.ldr.out_portidx  Output Port Idx
    Unsigned 24-bit integer
swils.ls.id  Link State Id
    Unsigned 8-bit integer
swils.lsr.advdomid  Advertising Domain Id
    Unsigned 8-bit integer
swils.lsr.incid  LS Incarnation Number
    Unsigned 32-bit integer
swils.lsr.type  LSR Type
    Unsigned 8-bit integer
swils.mr.activezonesetname  Active Zoneset Name
    String
swils.mrra.reply  MRRA Response
    Unsigned 32-bit integer
swils.mrra.replysize  Maximum Resources Available
    Unsigned 32-bit integer
swils.mrra.revision  Revision
    Unsigned 32-bit integer
swils.mrra.size  Merge Request Size
    Unsigned 32-bit integer
swils.mrra.vendorid  Vendor ID
    String
```



```
swils.mrra.vendorinfo  Vendor-Specific Info
    Byte array
swils.mrra.waittime    Waiting Period (secs)
    Unsigned 32-bit integer
swils.opcode           Cmd Code
    Unsigned 8-bit integer
swils.rdi.len          Payload Len
    Unsigned 16-bit integer
swils.rdi.reqsn        Req Switch Name
    String
swils.rjt.reason       Reason Code
    Unsigned 8-bit integer
swils.rjt.reasonexpl   Reason Code Explanantion
    Unsigned 8-bit integer
swils.rjt.vendor       Vendor Unique Error Code
    Unsigned 8-bit integer
swils.rscn.addrfmt     Address Format
    Unsigned 8-bit integer
swils.rscn.affectedport  Affected Port ID
    String
swils.rscn.detectfn    Detection Function
    Unsigned 32-bit integer
swils.rscn.evtype      Event Type
    Unsigned 8-bit integer
swils.rscn.nwwn        Node WWN
    String
swils.rscn.portid      Port Id
    String
swils.rscn.portstate   Port State
    Unsigned 8-bit integer
swils.rscn.pwwn        Port WWN
    String
swils.sfc.opcode       Operation Request
    Unsigned 8-bit integer
swils.sfc.zonename     Zone Set Name
    String
swils.zone.lun         LUN
    Byte array
swils.zone.mbrid       Member Identifier
    String
swils.zone.mbrtype     Zone Member Type
    Unsigned 8-bit integer
swils.zone.protocol    Zone Protocol
    Unsigned 8-bit integer
```

```

swils.zone.reason  Zone Command Reason Code
    Unsigned 8-bit integer
    Applies to MR, ACA, RCA, SFC, UFC
swils.zone.status  Zone Command Status
    Unsigned 8-bit integer
    Applies to MR, ACA, RCA, SFC, UFC
swils.zone.zoneobjname  Zone Object Name
    String
swils.zone.zoneobjtype  Zone Object Type
    Unsigned 8-bit integer

```

### **Fibre Channel Security Protocol (fcsp)**

```

fcsp.dhchap.challen  Challenge Value Length
    Unsigned 32-bit integer
fcsp.dhchap.chalval  Challenge Value
    Byte array
fcsp.dhchap.dhgid    DH Group
    Unsigned 32-bit integer
fcsp.dhchap.dhvalue  DH Value
    Byte array
fcsp.dhchap.groupid  DH Group Identifier
    Unsigned 32-bit integer
fcsp.dhchap.hashid   Hash Identifier
    Unsigned 32-bit integer
fcsp.dhchap.hashtype Hash Algorithm
    Unsigned 32-bit integer
fcsp.dhchap.paramlen Parameter Length
    Unsigned 16-bit integer
fcsp.dhchap.paramtype Parameter Tag
    Unsigned 16-bit integer
fcsp.dhchap.rsplen   Response Value Length
    Unsigned 32-bit integer
fcsp.dhchap.rspval   Response Value
    Byte array
fcsp.dhchap.vallen   DH Value Length
    Unsigned 32-bit integer
fcsp.flags           Flags
    Unsigned 8-bit integer
fcsp.initname        Initiator Name (Unknown Type)
    Byte array
fcsp.initnamelen     Initiator Name Length
    Unsigned 16-bit integer
fcsp.initnametype    Initiator Name Type
    Unsigned 16-bit integer
fcsp.initwwn         Initiator Name (WWN)
    String

```

```
fcsp.len    Packet Length
            Unsigned 32-bit integer

fcsp.opcode Message Code
            Unsigned 8-bit integer

fcsp.proto  Authentication Protocol Type
            Unsigned 32-bit integer

fcsp.protoparamlen Protocol Parameters Length
            Unsigned 32-bit integer

fcsp.rjtcode Reason Code
            Unsigned 8-bit integer

fcsp.rjtcodet Reason Code Explanation
            Unsigned 8-bit integer

fcsp.rspname Responder Name (Unknown Type)
            Byte array

fcsp.rspnamelen Responder Name Type
            Unsigned 16-bit integer

fcsp.rspnametype Responder Name Type
            Unsigned 16-bit integer

fcsp.rspwwn Responder Name (WWN)
            String

fcsp.tid    Transaction Identifier
            Unsigned 32-bit integer

fcsp.usableproto Number of Usable Protocols
            Unsigned 32-bit integer

fcsp.version Protocol Version
            Unsigned 8-bit integer
```

### **Fibre Channel Single Byte Command (sb3)**

```
sbccs.ccw  CCW Number
            Unsigned 16-bit integer

sbccs.cwcmd  CCW Command
            Unsigned 8-bit integer

sbccs.cwcnt  CCW Count
            Unsigned 16-bit integer

sbccs.cwflags  CCW Control Flags
            Unsigned 8-bit integer

sbccs.cwflags.cc  CC
            Boolean

sbccs.cwflags.cd  CD
            Boolean

sbccs.cwflags.crr  CRR
            Boolean

sbccs.cwflags.sli  SLI
            Boolean
```

```
sbccs.chid Channel Image ID
    Unsigned 8-bit integer
sbccs.cmdflags Command Flags
    Unsigned 8-bit integer
sbccs.cmdflags.coc COC
    Boolean
sbccs.cmdflags.du DU
    Boolean
sbccs.cmdflags.rex REX
    Boolean
sbccs.cmdflags.sss SSS
    Boolean
sbccs.cmdflags.syr SYR
    Boolean
sbccs.ctcctr CTC Counter
    Unsigned 16-bit integer
sbccs.ctlfn Control Function
    Unsigned 8-bit integer
sbccs.ctlparam Control Parameters
    Unsigned 24-bit integer
sbccs.ctlparam.rc RC
    Boolean
sbccs.ctlparam.ro RO
    Boolean
sbccs.ctlparam.ru RU
    Boolean
sbccs.cuid Control Unit Image ID
    Unsigned 8-bit integer
sbccs.databytecnt DIB Data Byte Count
    Unsigned 16-bit integer
sbccs.devaddr Device Address
    Unsigned 16-bit integer
sbccs.dhflags DH Flags
    Unsigned 8-bit integer
sbccs.dhflags.chaining Chaining
    Boolean
sbccs.dhflags.earlyend Early End
    Boolean
sbccs.dhflags.end End
    Boolean
sbccs.dhflags.nocrc No CRC
    Boolean
sbccs.dip.xcpcode Device Level Exception Code
    Unsigned 8-bit integer
```

```
sbccs.dtu   Defer-Time Unit
            Unsigned 16-bit integer
sbccs.dtuf  Defer-Time Unit Function
            Unsigned 8-bit integer
sbccs.ioprio I/O Priority
            Unsigned 8-bit integer
sbccs.iucnt DIB IU Count
            Unsigned 8-bit integer
sbccs.iui   Information Unit Identifier
            Unsigned 8-bit integer
sbccs.iui.as AS
            Boolean
sbccs.iui.es ES
            Boolean
sbccs.iui.val Val
            Unsigned 8-bit integer
sbccs.iupacing IU Pacing
            Unsigned 8-bit integer
sbccs.linkctlnfn Link Control Function
            Unsigned 8-bit integer
sbccs.linkctlinfo Link Control Information
            Unsigned 16-bit integer
sbccs.linkctlinfo.ctc_conn CTC Conn
            Boolean
sbccs.linkctlinfo.ecrcg Enhanced CRC Generation
            Boolean
sbccs.lprcode LPR Reason Code
            Unsigned 8-bit integer
sbccs.lrc LRC
            Unsigned 32-bit integer
sbccs.lrjcode LRJ Reaspn Code
            Unsigned 8-bit integer
sbccs.purgepathcode Purge Path Error Code
            Unsigned 8-bit integer
sbccs.purgepathrspcode Purge Path Response Error Code
            Unsigned 8-bit integer
sbccs.qtu Queue-Time Unit
            Unsigned 16-bit integer
sbccs.qtuf Queue-Time Unit Factor
            Unsigned 8-bit integer
sbccs.residualcnt Residual Count
            Unsigned 8-bit integer
sbccs.status Status
            Unsigned 8-bit integer
```

```
sbccs.status.attention  Attention
    Boolean

sbccs.status.busy      Busy
    Boolean

sbccs.status.channel_end  Channel End
    Boolean

sbccs.status.cue      Control-Unit End
    Boolean

sbccs.status.device_end  Device End
    Boolean

sbccs.status.modifier  Status Modifier
    Boolean

sbccs.status.unit_check  Unit Check
    Boolean

sbccs.status.unitexception  Unit Exception
    Boolean

sbccs.statusflags  Status Flags
    Unsigned 8-bit integer

sbccs.statusflags.ci  CI
    Boolean

sbccs.statusflags.cr  CR
    Boolean

sbccs.statusflags.ffc  FFC
    Unsigned 8-bit integer

sbccs.statusflags.lri  LRI
    Boolean

sbccs.statusflags.rv  RV
    Boolean

sbccs.tinimageidcnt  TIN Image ID
    Unsigned 8-bit integer

sbccs.token  Token
    Unsigned 24-bit integer
```

**Fibre Channel over Ethernet (fcoe)**

```
fcoe.crc  CRC
    Unsigned 32-bit integer

fcoe.crc_bad  CRC bad
    Boolean
    True: CRC doesn't match packet content; False: matches or not checked.

fcoe.crc_good  CRC good
    Boolean
    True: CRC matches packet content; False: doesn't match or not checked.

fcoe.eof  EOF
    Unsigned 8-bit integer

fcoe.len  Frame length
    Unsigned 32-bit integer
```

```
fcoe.sof  SOF
          Unsigned 8-bit integer
fcoe.ver  Version
          Unsigned 32-bit integer
```

### **File Mapping Protocol (fmp)**

```
fmp.Path  Mount Path
          String
          Mount Path
fmp.btime  Boot Time
          Date/Time stamp
          Machine Boot Time
fmp.btime.nsec  nano seconds
          Unsigned 32-bit integer
          Nano-seconds
fmp.btime.sec  seconds
          Unsigned 32-bit integer
          Seconds
fmp.cmd  Command
          Unsigned 32-bit integer
          command
fmp.cookie  Cookie
          Unsigned 32-bit integer
          Cookie for FMP_REQUEST_QUEUED Resp
fmp.cursor  number of volumes
          Unsigned 32-bit integer
          number of volumes
fmp.description  Error Description
          String
          Client Error Description
fmp.devSig  Signature DATA
          String
          Signature DATA
fmp.dsi.ds.dsList.dskSigLst_val.dse.dskSigEnt_val  Celerra Signature
          String
          Celerra Signature
fmp.dsi.ds.sig_offset  Sig Offset
          Unsigned 64-bit integer
          Sig Offset
fmp.eof  EOF
          Unsigned 64-bit integer
          End Of File
fmp.extentList_len  Extent List Length
          Unsigned 32-bit integer
          FMP Extent List Length
fmp.extentState  Extent State
          Unsigned 32-bit integer
          FMP Extent State
```

```
fmp.fileSize  File Size
  Unsigned 64-bit integer
  File Size

fmp.firstLogBlk  firstLogBlk
  Unsigned 32-bit integer
  First Logical File Block

fmp.firstLogBlk64  First Logical Block
  Unsigned 64-bit integer

fmp.fmpFHandle  FMP File Handle
  Byte array
  FMP File Handle

fmp.fsBlkSz  FS Block Size
  Unsigned 32-bit integer
  File System Block Size

fmp.fsID  File System ID
  Unsigned 32-bit integer
  File System ID

fmp.hostID  Host ID
  String
  Host ID

fmp.minBlks  Minimum Blocks to Grant
  Unsigned 32-bit integer
  Minimum Blocks to Grant

fmp.mount_path  Native Protocol: PATH
  String
  Absoulte path from the root on the server side

fmp.msgNum  Message Number
  Unsigned 32-bit integer
  FMP Message Number

fmp.nfsFHandle  NFS File Handle
  Byte array
  NFS File Handle

fmp.nfsv3Attr_fileid  File ID
  Unsigned 64-bit integer
  fileid

fmp.nfsv3Attr_fsid  fsid
  Unsigned 64-bit integer
  fsid

fmp.nfsv3Attr_gid  gid
  Unsigned 32-bit integer
  GID

fmp.nfsv3Attr_mod  Mode
  Unsigned 32-bit integer
  Mode

fmp.nfsv3Attr_nlink  nlink
  Unsigned 32-bit integer
  nlink
```



```
fmp.nfsv3Attr_rdev  rdev
  Unsigned 64-bit integer
  rdev

fmp.nfsv3Attr_type  Type
  Unsigned 32-bit integer
  NFSV3 Attr Type

fmp.nfsv3Attr_uid   uid
  Unsigned 32-bit integer
  UID

fmp.nfsv3Attr_used  Used
  Unsigned 64-bit integer
  used

fmp.notifyPort     Notify Port
  Unsigned 32-bit integer
  FMP Notify Port

fmp.numBlks        Number Blocks
  Unsigned 32-bit integer
  Number of Blocks

fmp.numBlksReq     Extent Length
  Unsigned 32-bit integer
  Extent Length

fmp.offset64       offset
  Unsigned 64-bit integer
  offset

fmp.os_build       OS Build
  Unsigned 32-bit integer
  OS Build

fmp.os_major       OS Major
  Unsigned 32-bit integer
  FMP OS Major

fmp.os_minor       OS Minor
  Unsigned 32-bit integer
  FMP OS Minor

fmp.os_name        OS Name
  String
  OS Name

fmp.os_patch       OS Path
  Unsigned 32-bit integer
  OS Path

fmp.plugin         Plug In Args
  Byte array
  FMP Plug In Arguments

fmp.pluginID       Plug In Cmd ID
  Byte array
  Plug In Command ID

fmp.procedure      Procedure
  Unsigned 32-bit integer
  Procedure
```

```
fmp.server_version_string  Server Version String
    String
    Server Version String
fmp.sessHandle  Session Handle
    Byte array
    FMP Session Handle
fmp.slice_size  size of the slice
    Unsigned 64-bit integer
    size of the slice
fmp.startOffset  Start Offset
    Unsigned 32-bit integer
    FMP Start Offset
fmp.start_offset64  Start offset
    Unsigned 64-bit integer
    Start Offset of extentEx
fmp.status  Status
    Unsigned 32-bit integer
    Reply Status
fmp.stripeSize  size of the stripe
    Unsigned 64-bit integer
    size of the stripe
fmp.topVolumeId  Top Volume ID
    Unsigned 32-bit integer
    Top Volume ID
fmp.volHandle  Volume Handle
    String
    FMP Volume Handle
fmp.volID  Volume ID inside DART
    Unsigned 32-bit integer
    FMP Volume ID inside DART
fmp.volume  Volume ID's
    Unsigned 32-bit integer
    FMP Volume ID's
```

#### **File Mapping Protocol Notify (fmp\_notify)**

```
fmp_notify.cookie  Cookie
    Unsigned 32-bit integer
    Cookie for FMP_REQUEST_QUEUED Resp
fmp_notify.fileSize  File Size
    Unsigned 64-bit integer
    File Size
fmp_notify.firstLogBlk  First Logical Block
    Unsigned 32-bit integer
    First Logical File Block
fmp_notify.fmpFHandle  FMP File Handle
    Byte array
    FMP File Handle
```

```

fmp_notify.fmp_notify_procedure Procedure
    Unsigned 32-bit integer
    Procedure

fmp_notify.fsBlkSz FS Block Size
    Unsigned 32-bit integer
    File System Block Size

fmp_notify.fsID File System ID
    Unsigned 32-bit integer
    File System ID

fmp_notify.handleListLength Number File Handles
    Unsigned 32-bit integer
    Number of File Handles

fmp_notify.msgNum Message Number
    Unsigned 32-bit integer
    FMP Message Number

fmp_notify.numBlksReq Number Blocks Requested
    Unsigned 32-bit integer
    Number Blocks Requested

fmp_notify.sessHandle Session Handle
    Byte array
    FMP Session Handle

fmp_notify.status Status
    Unsigned 32-bit integer
    Reply Status

```

### **File Transfer Protocol (FTP) (ftp)**

```

ftp.active.cip Active IP address
    IPv4 address
    Active FTP client IP address

ftp.active.nat Active IP NAT
    Boolean
    NAT is active

ftp.active.port Active port
    Unsigned 16-bit integer
    Active FTP client port

ftp.passive.ip Passive IP address
    IPv4 address
    Passive IP address (check NAT)

ftp.passive.nat Passive IP NAT
    Boolean
    NAT is active SIP and passive IP different

ftp.passive.port Passive port
    Unsigned 16-bit integer
    Passive FTP server port

ftp.request Request
    Boolean
    TRUE if FTP request

```

```
ftp.request.arg Request arg
String
ftp.request.command Request command
String
ftp.response Response
Boolean
TRUE if FTP response
ftp.response.arg Response arg
String
ftp.response.code Response code
Unsigned 32-bit integer
```

### **Financial Information eXchange Protocol (fix)**

```
fix.Account Account (1)
String
Account
fix.AccountType AccountType (581)
String
AccountType
fix.AccruedInterestAmt AccruedInterestAmt (159)
String
AccruedInterestAmt
fix.AccruedInterestRate AccruedInterestRate (158)
String
AccruedInterestRate
fix.Adjustment Adjustment (334)
String
Adjustment
fix.AdvId AdvId (2)
String
AdvId
fix.AdvRefID AdvRefID (3)
String
AdvRefID
fix.AdvSide AdvSide (4)
String
AdvSide
fix.AdvTransType AdvTransType (5)
String
AdvTransType
fix.AffectedOrderID AffectedOrderID (535)
String
AffectedOrderID
fix.AffectedSecondaryOrderID AffectedSecondaryOrderID (536)
String
AffectedSecondaryOrderID
```

```
fix.AggregatedBook AggregatedBook (266)
    String
    AggregatedBook
fix.AllocAccount AllocAccount (79)
    String
    AllocAccount
fix.AllocAvgPx AllocAvgPx (153)
    String
    AllocAvgPx
fix.AllocHandlInst AllocHandlInst (209)
    String
    AllocHandlInst
fix.AllocID AllocID (70)
    String
    AllocID
fix.AllocLinkID AllocLinkID (196)
    String
    AllocLinkID
fix.AllocLinkType AllocLinkType (197)
    String
    AllocLinkType
fix.AllocNetMoney AllocNetMoney (154)
    String
    AllocNetMoney
fix.AllocPrice AllocPrice (366)
    String
    AllocPrice
fix.AllocQty AllocQty (80)
    String
    AllocQty
fix.AllocRejCode AllocRejCode (88)
    String
    AllocRejCode
fix.AllocReportRefID AllocReportRefID (795)
    String
    AllocReportRefID
fix.AllocStatus AllocStatus (87)
    String
    AllocStatus
fix.AllocText AllocText (161)
    String
    AllocText
fix.AllocTransType AllocTransType (71)
    String
    AllocTransType
fix.AllocType AllocType (626)
    String
    AllocType
```

```
fix.AvgPrxPrecision  AvgPrxPrecision (74)
    String
    AvgPrxPrecision
fix.AvgPx  AvgPx (6)
    String
    AvgPx
fix.BasisFeatureDate  BasisFeatureDate (259)
    String
    BasisFeatureDate
fix.BasisFeaturePrice  BasisFeaturePrice (260)
    String
    BasisFeaturePrice
fix.BasisPxType  BasisPxType (419)
    String
    BasisPxType
fix.BeginSeqNo  BeginSeqNo (7)
    String
    BeginSeqNo
fix.BeginString  BeginString (8)
    String
    BeginString
fix.Benchmark  Benchmark (219)
    String
    Benchmark
fix.BenchmarkCurveCurrency  BenchmarkCurveCurrency (220)
    String
    BenchmarkCurveCurrency
fix.BenchmarkCurveName  BenchmarkCurveName (221)
    String
    BenchmarkCurveName
fix.BenchmarkCurvePoint  BenchmarkCurvePoint (222)
    String
    BenchmarkCurvePoint
fix.BenchmarkPrice  BenchmarkPrice (662)
    String
    BenchmarkPrice
fix.BenchmarkPriceType  BenchmarkPriceType (663)
    String
    BenchmarkPriceType
fix.BenchmarkSecurityID  BenchmarkSecurityID (699)
    String
    BenchmarkSecurityID
fix.BenchmarkSecurityIDSource  BenchmarkSecurityIDSource (761)
    String
    BenchmarkSecurityIDSource
fix.BidDescriptor  BidDescriptor (400)
    String
    BidDescriptor
```

```
fix.BidDescriptorType BidDescriptorType (399)
    String
    BidDescriptorType
fix.BidForwardPoints BidForwardPoints (189)
    String
    BidForwardPoints
fix.BidForwardPoints2 BidForwardPoints2 (642)
    String
    BidForwardPoints2
fix.BidID BidID (390)
    String
    BidID
fix.BidPx BidPx (132)
    String
    BidPx
fix.BidRequestTransType BidRequestTransType (374)
    String
    BidRequestTransType
fix.BidSize BidSize (134)
    String
    BidSize
fix.BidSpotRate BidSpotRate (188)
    String
    BidSpotRate
fix.BidType BidType (394)
    String
    BidType
fix.BidYield BidYield (632)
    String
    BidYield
fix.BodyLength BodyLength (9)
    String
    BodyLength
fix.BookingRefID BookingRefID (466)
    String
    BookingRefID
fix.BookingUnit BookingUnit (590)
    String
    BookingUnit
fix.BrokerOfCredit BrokerOfCredit (92)
    String
    BrokerOfCredit
fix.BusinessRejectReason BusinessRejectReason (380)
    String
    BusinessRejectReason
fix.BusinessRejectRefID BusinessRejectRefID (379)
    String
    BusinessRejectRefID
```

```
fix.BuyVolume BuyVolume (330)
    String
    BuyVolume
fix.CFICode CFICode (461)
    String
    CFICode
fix.CancellationRights CancellationRights (480)
    String
    CancellationRights
fix.CardExpDate CardExpDate (490)
    String
    CardExpDate
fix.CardHolderName CardHolderName (488)
    String
    CardHolderName
fix.CardIssNo CardIssNo (491)
    String
    CardIssNo
fix.CardNumber CardNumber (489)
    String
    CardNumber
fix.CardStartDate CardStartDate (503)
    String
    CardStartDate
fix.CashDistribAgentAcctName CashDistribAgentAcctName (502)
    String
    CashDistribAgentAcctName
fix.CashDistribAgentAcctNumber CashDistribAgentAcctNumber (500)
    String
    CashDistribAgentAcctNumber
fix.CashDistribAgentCode CashDistribAgentCode (499)
    String
    CashDistribAgentCode
fix.CashDistribAgentName CashDistribAgentName (498)
    String
    CashDistribAgentName
fix.CashDistribCurr CashDistribCurr (478)
    String
    CashDistribCurr
fix.CashDistribPayRef CashDistribPayRef (501)
    String
    CashDistribPayRef
fix.CashMargin CashMargin (544)
    String
    CashMargin
fix.CashOrderQty CashOrderQty (152)
    String
    CashOrderQty
```



```
fix.CashSettlAgentAcctName  CashSettlAgentAcctName (185)
    String
    CashSettlAgentAcctName
fix.CashSettlAgentAcctNum  CashSettlAgentAcctNum (184)
    String
    CashSettlAgentAcctNum
fix.CashSettlAgentCode  CashSettlAgentCode (183)
    String
    CashSettlAgentCode
fix.CashSettlAgentContactName  CashSettlAgentContactName (186)
    String
    CashSettlAgentContactName
fix.CashSettlAgentContactPhone  CashSettlAgentContactPhone (187)
    String
    CashSettlAgentContactPhone
fix.CashSettlAgentName  CashSettlAgentName (182)
    String
    CashSettlAgentName
fix.CheckSum  CheckSum (10)
    String
    CheckSum
fix.ClOrdID  ClOrdID (11)
    String
    ClOrdID
fix.ClOrdLinkID  ClOrdLinkID (583)
    String
    ClOrdLinkID
fix.ClearingAccount  ClearingAccount (440)
    String
    ClearingAccount
fix.ClearingFeeIndicator  ClearingFeeIndicator (635)
    String
    ClearingFeeIndicator
fix.ClearingFirm  ClearingFirm (439)
    String
    ClearingFirm
fix.ClearingInstruction  ClearingInstruction (577)
    String
    ClearingInstruction
fix.ClientBidID  ClientBidID (391)
    String
    ClientBidID
fix.ClientID  ClientID (109)
    String
    ClientID
fix.CommCurrency  CommCurrency (479)
    String
    CommCurrency
```

```
fix.CommType      CommType (13)
  String
  CommType

fix.Commission    Commission (12)
  String
  Commission

fix.ComplianceID  ComplianceID (376)
  String
  ComplianceID

fix.Concession    Concession (238)
  String
  Concession

fix.ContAmtCurr   ContAmtCurr (521)
  String
  ContAmtCurr

fix.ContAmtType   ContAmtType (519)
  String
  ContAmtType

fix.ContAmtValue  ContAmtValue (520)
  String
  ContAmtValue

fix.ContraBroker  ContraBroker (375)
  String
  ContraBroker

fix.ContraLegRefID  ContraLegRefID (655)
  String
  ContraLegRefID

fix.ContraTradeQty  ContraTradeQty (437)
  String
  ContraTradeQty

fix.ContraTradeTime  ContraTradeTime (438)
  String
  ContraTradeTime

fix.ContraTrader   ContraTrader (337)
  String
  ContraTrader

fix.ContractMultiplier  ContractMultiplier (231)
  String
  ContractMultiplier

fix.CorporateAction  CorporateAction (292)
  String
  CorporateAction

fix.Country        Country (421)
  String
  Country

fix.CountryOfIssue  CountryOfIssue (470)
  String
  CountryOfIssue
```

```
fix.CouponPaymentDate  CouponPaymentDate (224)
    String
    CouponPaymentDate

fix.CouponRate  CouponRate (223)
    String
    CouponRate

fix.CoveredOrUncovered  CoveredOrUncovered (203)
    String
    CoveredOrUncovered

fix.CreditRating  CreditRating (255)
    String
    CreditRating

fix.CrossID  CrossID (548)
    String
    CrossID

fix.CrossPercent  CrossPercent (413)
    String
    CrossPercent

fix.CrossPrioritization  CrossPrioritization (550)
    String
    CrossPrioritization

fix.CrossType  CrossType (549)
    String
    CrossType

fix.CumQty  CumQty (14)
    String
    CumQty

fix.Currency  Currency (15)
    String
    Currency

fix.CustOrderCapacity  CustOrderCapacity (582)
    String
    CustOrderCapacity

fix.CustomerOrFirm  CustomerOrFirm (204)
    String
    CustomerOrFirm

fix.CxlQty  CxlQty (84)
    String
    CxlQty

fix.CxlRejReason  CxlRejReason (102)
    String
    CxlRejReason

fix.CxlRejResponseTo  CxlRejResponseTo (434)
    String
    CxlRejResponseTo

fix.CxlType  CxlType (125)
    String
    CxlType
```

```
fix.DKReason    DKReason (127)
    String
    DKReason

fix.DateOfBirth DateOfBirth (486)
    String
    DateOfBirth

fix.DayAvgPx    DayAvgPx (426)
    String
    DayAvgPx

fix.DayBookingInst DayBookingInst (589)
    String
    DayBookingInst

fix.DayCumQty   DayCumQty (425)
    String
    DayCumQty

fix.DayOrderQty DayOrderQty (424)
    String
    DayOrderQty

fix.DefBidSize  DefBidSize (293)
    String
    DefBidSize

fix.DefOfferSize DefOfferSize (294)
    String
    DefOfferSize

fix.DeleteReason DeleteReason (285)
    String
    DeleteReason

fix.DeliverToCompID DeliverToCompID (128)
    String
    DeliverToCompID

fix.DeliverToLocationID DeliverToLocationID (145)
    String
    DeliverToLocationID

fix.DeliverToSubID DeliverToSubID (129)
    String
    DeliverToSubID

fix.Designation Designation (494)
    String
    Designation

fix.DeskID      DeskID (284)
    String
    DeskID

fix.DiscretionInst DiscretionInst (388)
    String
    DiscretionInst

fix.DiscretionOffset DiscretionOffset (389)
    String
    DiscretionOffset
```

```
fix.DistribPaymentMethod  DistribPaymentMethod (477)
    String
    DistribPaymentMethod
fix.DistribPercentage  DistribPercentage (512)
    String
    DistribPercentage
fix.DlvyInst  DlvyInst (86)
    String
    DlvyInst
fix.DueToRelated  DueToRelated (329)
    String
    DueToRelated
fix.EFPTrackingError  EFPTrackingError (405)
    String
    EFPTrackingError
fix.EffectiveTime  EffectiveTime (168)
    String
    EffectiveTime
fix.EmailThreadID  EmailThreadID (164)
    String
    EmailThreadID
fix.EmailType  EmailType (94)
    String
    EmailType
fix.EncodedAllocText  EncodedAllocText (361)
    String
    EncodedAllocText
fix.EncodedAllocTextLen  EncodedAllocTextLen (360)
    String
    EncodedAllocTextLen
fix.EncodedHeadline  EncodedHeadline (359)
    String
    EncodedHeadline
fix.EncodedHeadlineLen  EncodedHeadlineLen (358)
    String
    EncodedHeadlineLen
fix.EncodedIssuer  EncodedIssuer (349)
    String
    EncodedIssuer
fix.EncodedIssuerLen  EncodedIssuerLen (348)
    String
    EncodedIssuerLen
fix.EncodedLegIssuer  EncodedLegIssuer (619)
    String
    EncodedLegIssuer
fix.EncodedLegIssuerLen  EncodedLegIssuerLen (618)
    String
    EncodedLegIssuerLen
```

```
fix.EncodedLegSecurityDesc  EncodedLegSecurityDesc (622)
    String
    EncodedLegSecurityDesc
fix.EncodedLegSecurityDescLen  EncodedLegSecurityDescLen (621)
    String
    EncodedLegSecurityDescLen
fix.EncodedListExecInst  EncodedListExecInst (353)
    String
    EncodedListExecInst
fix.EncodedListExecInstLen  EncodedListExecInstLen (352)
    String
    EncodedListExecInstLen
fix.EncodedListStatusText  EncodedListStatusText (446)
    String
    EncodedListStatusText
fix.EncodedListStatusTextLen  EncodedListStatusTextLen (445)
    String
    EncodedListStatusTextLen
fix.EncodedSecurityDesc  EncodedSecurityDesc (351)
    String
    EncodedSecurityDesc
fix.EncodedSecurityDescLen  EncodedSecurityDescLen (350)
    String
    EncodedSecurityDescLen
fix.EncodedSubject  EncodedSubject (357)
    String
    EncodedSubject
fix.EncodedSubjectLen  EncodedSubjectLen (356)
    String
    EncodedSubjectLen
fix.EncodedText  EncodedText (355)
    String
    EncodedText
fix.EncodedTextLen  EncodedTextLen (354)
    String
    EncodedTextLen
fix.EncodedUnderlyingIssuer  EncodedUnderlyingIssuer (363)
    String
    EncodedUnderlyingIssuer
fix.EncodedUnderlyingIssuerLen  EncodedUnderlyingIssuerLen (362)
    String
    EncodedUnderlyingIssuerLen
fix.EncodedUnderlyingSecurityDesc  EncodedUnderlyingSecurityDesc (365)
    String
    EncodedUnderlyingSecurityDesc
fix.EncodedUnderlyingSecurityDescLen  EncodedUnderlyingSecurityDescLen (364)
    String
    EncodedUnderlyingSecurityDescLen
```

```
fix.EncryptMethod  EncryptMethod (98)
    String
    EncryptMethod
fix.EndSeqNo      EndSeqNo (16)
    String
    EndSeqNo
fix.ExDate        ExDate (230)
    String
    ExDate
fix.ExDestination ExDestination (100)
    String
    ExDestination
fix.ExchangeForPhysical ExchangeForPhysical (411)
    String
    ExchangeForPhysical
fix.ExecBroker    ExecBroker (76)
    String
    ExecBroker
fix.ExecID        ExecID (17)
    String
    ExecID
fix.ExecInst      ExecInst (18)
    String
    ExecInst
fix.ExecPriceAdjustment ExecPriceAdjustment (485)
    String
    ExecPriceAdjustment
fix.ExecPriceType ExecPriceType (484)
    String
    ExecPriceType
fix.ExecRefID     ExecRefID (19)
    String
    ExecRefID
fix.ExecRestatementReason ExecRestatementReason (378)
    String
    ExecRestatementReason
fix.ExecTransType ExecTransType (20)
    String
    ExecTransType
fix.ExecType      ExecType (150)
    String
    ExecType
fix.ExecValuationPoint ExecValuationPoint (515)
    String
    ExecValuationPoint
fix.ExpireDate    ExpireDate (432)
    String
    ExpireDate
```

```
fix.ExpireTime  ExpireTime (126)
    String
    ExpireTime
fix.Factor      Factor (228)
    String
    Factor
fix.FairValue   FairValue (406)
    String
    FairValue
fix.FinancialStatus  FinancialStatus (291)
    String
    FinancialStatus
fix.ForexReq    ForexReq (121)
    String
    ForexReq
fix.FundRenewWaiv  FundRenewWaiv (497)
    String
    FundRenewWaiv
fix.FutSettDate  FutSettDate (64)
    String
    FutSettDate
fix.FutSettDate2  FutSettDate2 (193)
    String
    FutSettDate2
fix.GTBookingInst  GTBookingInst (427)
    String
    GTBookingInst
fix.GapFillFlag   GapFillFlag (123)
    String
    GapFillFlag
fix.GrossTradeAmt  GrossTradeAmt (381)
    String
    GrossTradeAmt
fix.HaltReason    HaltReason (327)
    String
    HaltReason
fix.HandlInst     HandlInst (21)
    String
    HandlInst
fix.Headline      Headline (148)
    String
    Headline
fix.HeartBtInt    HeartBtInt (108)
    String
    HeartBtInt
fix.HighPx       HighPx (332)
    String
    HighPx
```



```
fix.HopCompID HopCompID (628)
    String
    HopCompID
fix.HopRefID HopRefID (630)
    String
    HopRefID
fix.HopSendingTime HopSendingTime (629)
    String
    HopSendingTime
fix.IOINaturalFlag IOINaturalFlag (130)
    String
    IOINaturalFlag
fix.IOIOthSvc IOIOthSvc (24)
    String
    IOIOthSvc
fix.IOIQtyInd IOIQtyInd (25)
    String
    IOIQtyInd
fix.IOIQty IOIQty (27)
    String
    IOIQty
fix.IOIQualifier IOIQualifier (104)
    String
    IOIQualifier
fix.IOIRefID IOIRefID (26)
    String
    IOIRefID
fix.IOITransType IOITransType (28)
    String
    IOITransType
fix.IOIid IOIid (23)
    String
    IOIid
fix.InViewOfCommon InViewOfCommon (328)
    String
    InViewOfCommon
fix.IncTaxInd IncTaxInd (416)
    String
    IncTaxInd
fix.IndividualAllocID IndividualAllocID (467)
    String
    IndividualAllocID
fix.InstrAttribType InstrAttribType (871)
    String
    InstrAttribType
fix.InstrAttribValue InstrAttribValue (872)
    String
    InstrAttribValue
```

```
fix.InstrRegistry InstrRegistry (543)
    String
    InstrRegistry
fix.InvestorCountryOfResidence InvestorCountryOfResidence (475)
    String
    InvestorCountryOfResidence
fix.IssueDate IssueDate (225)
    String
    IssueDate
fix.Issuer Issuer (106)
    String
    Issuer
fix.LastCapacity LastCapacity (29)
    String
    LastCapacity
fix.LastForwardPoints LastForwardPoints (195)
    String
    LastForwardPoints
fix.LastForwardPoints2 LastForwardPoints2 (641)
    String
    LastForwardPoints2
fix.LastFragment LastFragment (893)
    String
    LastFragment
fix.LastMkt LastMkt (30)
    String
    LastMkt
fix.LastMsgSeqNumProcessed LastMsgSeqNumProcessed (369)
    String
    LastMsgSeqNumProcessed
fix.LastPx LastPx (31)
    String
    LastPx
fix.LastQty LastQty (32)
    String
    LastQty
fix.LastSpotRate LastSpotRate (194)
    String
    LastSpotRate
fix.LeavesQty LeavesQty (151)
    String
    LeavesQty
fix.LegCFICode LegCFICode (608)
    String
    LegCFICode
fix.LegContractMultiplier LegContractMultiplier (614)
    String
    LegContractMultiplier
```

```
fix.LegCountryOfIssue LegCountryOfIssue (596)
    String
    LegCountryOfIssue
fix.LegCouponPaymentDate LegCouponPaymentDate (248)
    String
    LegCouponPaymentDate
fix.LegCouponRate LegCouponRate (615)
    String
    LegCouponRate
fix.LegCoveredOrUncovered LegCoveredOrUncovered (565)
    String
    LegCoveredOrUncovered
fix.LegCreditRating LegCreditRating (257)
    String
    LegCreditRating
fix.LegCurrency LegCurrency (556)
    String
    LegCurrency
fix.LegFactor LegFactor (253)
    String
    LegFactor
fix.LegFutSettDate LegFutSettDate (588)
    String
    LegFutSettDate
fix.LegInstrRegistry LegInstrRegistry (599)
    String
    LegInstrRegistry
fix.LegIssueDate LegIssueDate (249)
    String
    LegIssueDate
fix.LegIssuer LegIssuer (617)
    String
    LegIssuer
fix.LegLastPx LegLastPx (637)
    String
    LegLastPx
fix.LegLocaleOfIssue LegLocaleOfIssue (598)
    String
    LegLocaleOfIssue
fix.LegMaturityDate LegMaturityDate (611)
    String
    LegMaturityDate
fix.LegMaturityMonthYear LegMaturityMonthYear (610)
    String
    LegMaturityMonthYear
fix.LegOptAttribute LegOptAttribute (613)
    String
    LegOptAttribute
```

```
fix.LegPositionEffect LegPositionEffect (564)
    String
    LegPositionEffect
fix.LegPrice LegPrice (566)
    String
    LegPrice
fix.LegProduct LegProduct (607)
    String
    LegProduct
fix.LegRatioQty LegRatioQty (623)
    String
    LegRatioQty
fix.LegRedemptionDate LegRedemptionDate (254)
    String
    LegRedemptionDate
fix.LegRefID LegRefID (654)
    String
    LegRefID
fix.LegRepoCollateralSecurityType LegRepoCollateralSecurityType (250)
    String
    LegRepoCollateralSecurityType
fix.LegRepurchaseRate LegRepurchaseRate (252)
    String
    LegRepurchaseRate
fix.LegRepurchaseTerm LegRepurchaseTerm (251)
    String
    LegRepurchaseTerm
fix.LegSecurityAltID LegSecurityAltID (605)
    String
    LegSecurityAltID
fix.LegSecurityAltIDSource LegSecurityAltIDSource (606)
    String
    LegSecurityAltIDSource
fix.LegSecurityDesc LegSecurityDesc (620)
    String
    LegSecurityDesc
fix.LegSecurityExchange LegSecurityExchange (616)
    String
    LegSecurityExchange
fix.LegSecurityID LegSecurityID (602)
    String
    LegSecurityID
fix.LegSecurityIDSource LegSecurityIDSource (603)
    String
    LegSecurityIDSource
fix.LegSecurityType LegSecurityType (609)
    String
    LegSecurityType
```

```
fix.LegSettlmntTyp  LegSettlmntTyp (587)
    String
    LegSettlmntTyp
fix.LegSide  LegSide (624)
    String
    LegSide
fix.LegStateOrProvinceOfIssue  LegStateOrProvinceOfIssue (597)
    String
    LegStateOrProvinceOfIssue
fix.LegStrikePrice  LegStrikePrice (612)
    String
    LegStrikePrice
fix.LegSymbol  LegSymbol (600)
    String
    LegSymbol
fix.LegSymbolSfx  LegSymbolSfx (601)
    String
    LegSymbolSfx
fix.LegalConfirm  LegalConfirm (650)
    String
    LegalConfirm
fix.LinesOfText  LinesOfText (33)
    String
    LinesOfText
fix.LiquidityIndType  LiquidityIndType (409)
    String
    LiquidityIndType
fix.LiquidityNumSecurities  LiquidityNumSecurities (441)
    String
    LiquidityNumSecurities
fix.LiquidityPctHigh  LiquidityPctHigh (403)
    String
    LiquidityPctHigh
fix.LiquidityPctLow  LiquidityPctLow (402)
    String
    LiquidityPctLow
fix.LiquidityValue  LiquidityValue (404)
    String
    LiquidityValue
fix.ListExecInst  ListExecInst (69)
    String
    ListExecInst
fix.ListExecInstType  ListExecInstType (433)
    String
    ListExecInstType
fix.ListID  ListID (66)
    String
    ListID
```

```
fix.ListName ListName (392)
    String
    ListName
fix.ListOrderStatus ListOrderStatus (431)
    String
    ListOrderStatus
fix.ListSeqNo ListSeqNo (67)
    String
    ListSeqNo
fix.ListStatusText ListStatusText (444)
    String
    ListStatusText
fix.ListStatusType ListStatusType (429)
    String
    ListStatusType
fix.LocaleOfIssue LocaleOfIssue (472)
    String
    LocaleOfIssue
fix.LocateReqd LocateReqd (114)
    String
    LocateReqd
fix.LocationID LocationID (283)
    String
    LocationID
fix.LowPx LowPx (333)
    String
    LowPx
fix.MDEntryBuyer MDEntryBuyer (288)
    String
    MDEntryBuyer
fix.MDEntryDate MDEntryDate (272)
    String
    MDEntryDate
fix.MDEntryID MDEntryID (278)
    String
    MDEntryID
fix.MDEntryOriginator MDEntryOriginator (282)
    String
    MDEntryOriginator
fix.MDEntryPositionNo MDEntryPositionNo (290)
    String
    MDEntryPositionNo
fix.MDEntryPx MDEntryPx (270)
    String
    MDEntryPx
fix.MDEntryRefID MDEntryRefID (280)
    String
    MDEntryRefID
```

```
fix.MDEntrySeller MDEntrySeller (289)
    String
    MDEntrySeller
fix.MDEntrySize MDEntrySize (271)
    String
    MDEntrySize
fix.MDEntryTime MDEntryTime (273)
    String
    MDEntryTime
fix.MDEntryType MDEntryType (269)
    String
    MDEntryType
fix.MDImplicitDelete MDImplicitDelete (547)
    String
    MDImplicitDelete
fix.MDMkt MDMkt (275)
    String
    MDMkt
fix.MDReqID MDReqID (262)
    String
    MDReqID
fix.MDReqRejReason MDReqRejReason (281)
    String
    MDReqRejReason
fix.MDUpdateAction MDUpdateAction (279)
    String
    MDUpdateAction
fix.MDUpdateType MDUpdateType (265)
    String
    MDUpdateType
fix.MailingDtls MailingDtls (474)
    String
    MailingDtls
fix.MailingInst MailingInst (482)
    String
    MailingInst
fix.MarketDepth MarketDepth (264)
    String
    MarketDepth
fix.MassCancelRejectReason MassCancelRejectReason (532)
    String
    MassCancelRejectReason
fix.MassCancelRequestType MassCancelRequestType (530)
    String
    MassCancelRequestType
fix.MassCancelResponse MassCancelResponse (531)
    String
    MassCancelResponse
```

```
fix.MassStatusReqID  MassStatusReqID (584)
    String
    MassStatusReqID

fix.MassStatusReqType  MassStatusReqType (585)
    String
    MassStatusReqType

fix.MatchStatus  MatchStatus (573)
    String
    MatchStatus

fix.MatchType  MatchType (574)
    String
    MatchType

fix.MaturityDate  MaturityDate (541)
    String
    MaturityDate

fix.MaturityDay  MaturityDay (205)
    String
    MaturityDay

fix.MaturityMonthYear  MaturityMonthYear (200)
    String
    MaturityMonthYear

fix.MaxFloor  MaxFloor (111)
    String
    MaxFloor

fix.MaxMessageSize  MaxMessageSize (383)
    String
    MaxMessageSize

fix.MaxShow  MaxShow (210)
    String
    MaxShow

fix.MessageEncoding  MessageEncoding (347)
    String
    MessageEncoding

fix.MidPx  MidPx (631)
    String
    MidPx

fix.MidYield  MidYield (633)
    String
    MidYield

fix.MinBidSize  MinBidSize (647)
    String
    MinBidSize

fix.MinOfferSize  MinOfferSize (648)
    String
    MinOfferSize

fix.MinQty  MinQty (110)
    String
    MinQty
```



```
fix.MinTradeVol  MinTradeVol (562)
  String
  MinTradeVol
fix.MiscFeeAmt  MiscFeeAmt (137)
  String
  MiscFeeAmt
fix.MiscFeeCurr  MiscFeeCurr (138)
  String
  MiscFeeCurr
fix.MiscFeeType  MiscFeeType (139)
  String
  MiscFeeType
fix.MktBidPx  MktBidPx (645)
  String
  MktBidPx
fix.MktOfferPx  MktOfferPx (646)
  String
  MktOfferPx
fix.MoneyLaunderingStatus  MoneyLaunderingStatus (481)
  String
  MoneyLaunderingStatus
fix.MsgDirection  MsgDirection (385)
  String
  MsgDirection
fix.MsgSeqNum  MsgSeqNum (34)
  String
  MsgSeqNum
fix.MsgType  MsgType (35)
  String
  MsgType
fix.MultiLegReportingType  MultiLegReportingType (442)
  String
  MultiLegReportingType
fix.MultiLegRptTypeReq  MultiLegRptTypeReq (563)
  String
  MultiLegRptTypeReq
fix.NestedPartyID  NestedPartyID (524)
  String
  NestedPartyID
fix.NestedPartyIDSource  NestedPartyIDSource (525)
  String
  NestedPartyIDSource
fix.NestedPartyRole  NestedPartyRole (538)
  String
  NestedPartyRole
fix.NestedPartySubID  NestedPartySubID (545)
  String
  NestedPartySubID
```

```
fix.NetChgPrevDay NetChgPrevDay (451)
    String
    NetChgPrevDay
fix.NetGrossInd NetGrossInd (430)
    String
    NetGrossInd
fix.NetMoney NetMoney (118)
    String
    NetMoney
fix.NewSeqNo NewSeqNo (36)
    String
    NewSeqNo
fix.NoAffectedOrders NoAffectedOrders (534)
    String
    NoAffectedOrders
fix.NoAllocs NoAllocs (78)
    String
    NoAllocs
fix.NoBidComponents NoBidComponents (420)
    String
    NoBidComponents
fix.NoBidDescriptors NoBidDescriptors (398)
    String
    NoBidDescriptors
fix.NoClearingInstructions NoClearingInstructions (576)
    String
    NoClearingInstructions
fix.NoContAmts NoContAmts (518)
    String
    NoContAmts
fix.NoContraBrokers NoContraBrokers (382)
    String
    NoContraBrokers
fix.NoDates NoDates (580)
    String
    NoDates
fix.NoDistribInsts NoDistribInsts (510)
    String
    NoDistribInsts
fix.NoDlvyInst NoDlvyInst (85)
    String
    NoDlvyInst
fix.NoExecs NoExecs (124)
    String
    NoExecs
fix.NoHops NoHops (627)
    String
    NoHops
```

```
fix.NoIOIQualifiers NoIOIQualifiers (199)
    String
    NoIOIQualifiers
fix.NoInstrAttrib NoInstrAttrib (870)
    String
    NoInstrAttrib
fix.NoLegSecurityAltID NoLegSecurityAltID (604)
    String
    NoLegSecurityAltID
fix.NoLegs NoLegs (555)
    String
    NoLegs
fix.NoMDEntries NoMDEntries (268)
    String
    NoMDEntries
fix.NoMDEntryTypes NoMDEntryTypes (267)
    String
    NoMDEntryTypes
fix.NoMiscFees NoMiscFees (136)
    String
    NoMiscFees
fix.NoMsgTypes NoMsgTypes (384)
    String
    NoMsgTypes
fix.NoNestedPartyIDs NoNestedPartyIDs (539)
    String
    NoNestedPartyIDs
fix.NoOrders NoOrders (73)
    String
    NoOrders
fix.NoPartyIDs NoPartyIDs (453)
    String
    NoPartyIDs
fix.NoQuoteEntries NoQuoteEntries (295)
    String
    NoQuoteEntries
fix.NoQuoteQualifiers NoQuoteQualifiers (735)
    String
    NoQuoteQualifiers
fix.NoQuoteSets NoQuoteSets (296)
    String
    NoQuoteSets
fix.NoRegistDtls NoRegistDtls (473)
    String
    NoRegistDtls
fix.NoRelatedSym NoRelatedSym (146)
    String
    NoRelatedSym
```

```
fix.NoRoutingIDs  NoRoutingIDs (215)
    String
    NoRoutingIDs
fix.NoRpts  NoRpts (82)
    String
    NoRpts
fix.NoSecurityAltID  NoSecurityAltID (454)
    String
    NoSecurityAltID
fix.NoSecurityTypes  NoSecurityTypes (558)
    String
    NoSecurityTypes
fix.NoSides  NoSides (552)
    String
    NoSides
fix.NoStipulations  NoStipulations (232)
    String
    NoStipulations
fix.NoStrikes  NoStrikes (428)
    String
    NoStrikes
fix.NoTradingSessions  NoTradingSessions (386)
    String
    NoTradingSessions
fix.NoUnderlyingSecurityAltID  NoUnderlyingSecurityAltID (457)
    String
    NoUnderlyingSecurityAltID
fix.NotifyBrokerOfCredit  NotifyBrokerOfCredit (208)
    String
    NotifyBrokerOfCredit
fix.NumBidders  NumBidders (417)
    String
    NumBidders
fix.NumDaysInterest  NumDaysInterest (157)
    String
    NumDaysInterest
fix.NumTickets  NumTickets (395)
    String
    NumTickets
fix.NumberOfOrders  NumberOfOrders (346)
    String
    NumberOfOrders
fix.OddLot  OddLot (575)
    String
    OddLot
fix.OfferForwardPoints  OfferForwardPoints (191)
    String
    OfferForwardPoints
```

```
fix.OfferForwardPoints2 OfferForwardPoints2 (643)
    String
    OfferForwardPoints2
fix.OfferPx OfferPx (133)
    String
    OfferPx
fix.OfferSize OfferSize (135)
    String
    OfferSize
fix.OfferSpotRate OfferSpotRate (190)
    String
    OfferSpotRate
fix.OfferYield OfferYield (634)
    String
    OfferYield
fix.OnBehalfOfCompID OnBehalfOfCompID (115)
    String
    OnBehalfOfCompID
fix.OnBehalfOfLocationID OnBehalfOfLocationID (144)
    String
    OnBehalfOfLocationID
fix.OnBehalfOfSendingTime OnBehalfOfSendingTime (370)
    String
    OnBehalfOfSendingTime
fix.OnBehalfOfSubID OnBehalfOfSubID (116)
    String
    OnBehalfOfSubID
fix.OpenCloseSettleFlag OpenCloseSettleFlag (286)
    String
    OpenCloseSettleFlag
fix.OptAttribute OptAttribute (206)
    String
    OptAttribute
fix.OrdRejReason OrdRejReason (103)
    String
    OrdRejReason
fix.OrdStatus OrdStatus (39)
    String
    OrdStatus
fix.OrdType OrdType (40)
    String
    OrdType
fix.OrderCapacity OrderCapacity (528)
    String
    OrderCapacity
fix.OrderID OrderID (37)
    String
    OrderID
```

```
fix.OrderPercent  OrderPercent (516)
    String
    OrderPercent
fix.OrderQty      OrderQty (38)
    String
    OrderQty
fix.OrderQty2     OrderQty2 (192)
    String
    OrderQty2
fix.OrderRestrictions  OrderRestrictions (529)
    String
    OrderRestrictions
fix.OrigClOrdID   OrigClOrdID (41)
    String
    OrigClOrdID
fix.OrigCrossID   OrigCrossID (551)
    String
    OrigCrossID
fix.OrigOrdModTime  OrigOrdModTime (586)
    String
    OrigOrdModTime
fix.OrigSendingTime  OrigSendingTime (122)
    String
    OrigSendingTime
fix.OrigTime       OrigTime (42)
    String
    OrigTime
fix.OutMainCntryUIndex  OutMainCntryUIndex (412)
    String
    OutMainCntryUIndex
fix.OutsideIndexPct  OutsideIndexPct (407)
    String
    OutsideIndexPct
fix.OwnerType      OwnerType (522)
    String
    OwnerType
fix.OwnershipType   OwnershipType (517)
    String
    OwnershipType
fix.PartyID         PartyID (448)
    String
    PartyID
fix.PartyIDSource   PartyIDSource (447)
    String
    PartyIDSource
fix.PartyRole       PartyRole (452)
    String
    PartyRole
```

```
fix.PartySubID PartySubID (523)
    String
    PartySubID
fix.Password Password (554)
    String
    Password
fix.PaymentDate PaymentDate (504)
    String
    PaymentDate
fix.PaymentMethod PaymentMethod (492)
    String
    PaymentMethod
fix.PaymentRef PaymentRef (476)
    String
    PaymentRef
fix.PaymentRemitterID PaymentRemitterID (505)
    String
    PaymentRemitterID
fix.PegDifference PegDifference (211)
    String
    PegDifference
fix.Pool Pool (691)
    String
    Pool
fix.PositionEffect PositionEffect (77)
    String
    PositionEffect
fix.PossDupFlag PossDupFlag (43)
    String
    PossDupFlag
fix.PossResend PossResend (97)
    String
    PossResend
fix.PreallocMethod PreallocMethod (591)
    String
    PreallocMethod
fix.PrevClosePx PrevClosePx (140)
    String
    PrevClosePx
fix.PreviouslyReported PreviouslyReported (570)
    String
    PreviouslyReported
fix.Price Price (44)
    String
    Price
fix.Price2 Price2 (640)
    String
    Price2
```

```
fix.PriceImprovement  PriceImprovement (639)
    String
    PriceImprovement
fix.PriceType  PriceType (423)
    String
    PriceType
fix.PriorityIndicator  PriorityIndicator (638)
    String
    PriorityIndicator
fix.ProcessCode  ProcessCode (81)
    String
    ProcessCode
fix.Product  Product (460)
    String
    Product
fix.ProgPeriodInterval  ProgPeriodInterval (415)
    String
    ProgPeriodInterval
fix.ProgRptReqs  ProgRptReqs (414)
    String
    ProgRptReqs
fix.PutOrCall  PutOrCall (201)
    String
    PutOrCall
fix.Quantity  Quantity (53)
    String
    Quantity
fix.QuantityType  QuantityType (465)
    String
    QuantityType
fix.QuoteCancelType  QuoteCancelType (298)
    String
    QuoteCancelType
fix.QuoteCondition  QuoteCondition (276)
    String
    QuoteCondition
fix.QuoteEntryID  QuoteEntryID (299)
    String
    QuoteEntryID
fix.QuoteEntryRejectReason  QuoteEntryRejectReason (368)
    String
    QuoteEntryRejectReason
fix.QuoteID  QuoteID (117)
    String
    QuoteID
fix.QuoteQualifier  QuoteQualifier (695)
    String
    QuoteQualifier
```



```
fix.QuoteRejectReason  QuoteRejectReason (300)
    String
    QuoteRejectReason
fix.QuoteReqID  QuoteReqID (131)
    String
    QuoteReqID
fix.QuoteRequestRejectReason  QuoteRequestRejectReason (658)
    String
    QuoteRequestRejectReason
fix.QuoteRequestType  QuoteRequestType (303)
    String
    QuoteRequestType
fix.QuoteRespID  QuoteRespID (693)
    String
    QuoteRespID
fix.QuoteRespType  QuoteRespType (694)
    String
    QuoteRespType
fix.QuoteResponseLevel  QuoteResponseLevel (301)
    String
    QuoteResponseLevel
fix.QuoteSetID  QuoteSetID (302)
    String
    QuoteSetID
fix.QuoteSetValidUntilTime  QuoteSetValidUntilTime (367)
    String
    QuoteSetValidUntilTime
fix.QuoteStatus  QuoteStatus (297)
    String
    QuoteStatus
fix.QuoteStatusReqID  QuoteStatusReqID (649)
    String
    QuoteStatusReqID
fix.QuoteType  QuoteType (537)
    String
    QuoteType
fix.RFQReqID  RFQReqID (644)
    String
    RFQReqID
fix.RatioQty  RatioQty (319)
    String
    RatioQty
fix.RawData  RawData (96)
    String
    RawData
fix.RawDataLength  RawDataLength (95)
    String
    RawDataLength
```

```
fix.RedemptionDate  RedemptionDate (240)
    String
    RedemptionDate
fix.RefAllocID  RefAllocID (72)
    String
    RefAllocID
fix.RefMsgType  RefMsgType (372)
    String
    RefMsgType
fix.RefSeqNum  RefSeqNum (45)
    String
    RefSeqNum
fix.RefTagID  RefTagID (371)
    String
    RefTagID
fix.RegistAcctType  RegistAcctType (493)
    String
    RegistAcctType
fix.RegistDetls  RegistDetls (509)
    String
    RegistDetls
fix.RegistEmail  RegistEmail (511)
    String
    RegistEmail
fix.RegistID  RegistID (513)
    String
    RegistID
fix.RegistRefID  RegistRefID (508)
    String
    RegistRefID
fix.RegistRejReasonCode  RegistRejReasonCode (507)
    String
    RegistRejReasonCode
fix.RegistRejReasonText  RegistRejReasonText (496)
    String
    RegistRejReasonText
fix.RegistStatus  RegistStatus (506)
    String
    RegistStatus
fix.RegistTransType  RegistTransType (514)
    String
    RegistTransType
fix.RelatdSym  RelatdSym (46)
    String
    RelatdSym
fix.RepoCollateralSecurityType  RepoCollateralSecurityType (239)
    String
    RepoCollateralSecurityType
```

```
fix.ReportToExch  ReportToExch (113)
    String
    ReportToExch
fix.RepurchaseRate  RepurchaseRate (227)
    String
    RepurchaseRate
fix.RepurchaseTerm  RepurchaseTerm (226)
    String
    RepurchaseTerm
fix.ReservedAllocated  ReservedAllocated (261)
    String
    ReservedAllocated
fix.ResetSeqNumFlag  ResetSeqNumFlag (141)
    String
    ResetSeqNumFlag
fix.RoundLot  RoundLot (561)
    String
    RoundLot
fix.RoundingDirection  RoundingDirection (468)
    String
    RoundingDirection
fix.RoundingModulus  RoundingModulus (469)
    String
    RoundingModulus
fix.RoutingID  RoutingID (217)
    String
    RoutingID
fix.RoutingType  RoutingType (216)
    String
    RoutingType
fix.RptSeq  RptSeq (83)
    String
    RptSeq
fix.Rule80A  Rule80A (47)
    String
    Rule80A
fix.Scope  Scope (546)
    String
    Scope
fix.SecDefStatus  SecDefStatus (653)
    String
    SecDefStatus
fix.SecondaryClOrdID  SecondaryClOrdID (526)
    String
    SecondaryClOrdID
fix.SecondaryExecID  SecondaryExecID (527)
    String
    SecondaryExecID
```

```
fix.SecondaryOrderID  SecondaryOrderID (198)
    String
    SecondaryOrderID
fix.SecureData  SecureData (91)
    String
    SecureData
fix.SecureDataLen  SecureDataLen (90)
    String
    SecureDataLen
fix.SecurityAltID  SecurityAltID (455)
    String
    SecurityAltID
fix.SecurityAltIDSource  SecurityAltIDSource (456)
    String
    SecurityAltIDSource
fix.SecurityDesc  SecurityDesc (107)
    String
    SecurityDesc
fix.SecurityExchange  SecurityExchange (207)
    String
    SecurityExchange
fix.SecurityID  SecurityID (48)
    String
    SecurityID
fix.SecurityIDSource  SecurityIDSource (22)
    String
    SecurityIDSource
fix.SecurityListRequestType  SecurityListRequestType (559)
    String
    SecurityListRequestType
fix.SecurityReqID  SecurityReqID (320)
    String
    SecurityReqID
fix.SecurityRequestResult  SecurityRequestResult (560)
    String
    SecurityRequestResult
fix.SecurityRequestType  SecurityRequestType (321)
    String
    SecurityRequestType
fix.SecurityResponseID  SecurityResponseID (322)
    String
    SecurityResponseID
fix.SecurityResponseType  SecurityResponseType (323)
    String
    SecurityResponseType
fix.SecuritySettlAgentAcctName  SecuritySettlAgentAcctName (179)
    String
    SecuritySettlAgentAcctName
```

```
fix.SecuritySettlAgentAcctNum SecuritySettlAgentAcctNum (178)
    String
    SecuritySettlAgentAcctNum
fix.SecuritySettlAgentCode SecuritySettlAgentCode (177)
    String
    SecuritySettlAgentCode
fix.SecuritySettlAgentContactName SecuritySettlAgentContactName (180)
    String
    SecuritySettlAgentContactName
fix.SecuritySettlAgentContactPhone SecuritySettlAgentContactPhone (181)
    String
    SecuritySettlAgentContactPhone
fix.SecuritySettlAgentName SecuritySettlAgentName (176)
    String
    SecuritySettlAgentName
fix.SecurityStatusReqID SecurityStatusReqID (324)
    String
    SecurityStatusReqID
fix.SecuritySubType SecuritySubType (762)
    String
    SecuritySubType
fix.SecurityTradingStatus SecurityTradingStatus (326)
    String
    SecurityTradingStatus
fix.SecurityType SecurityType (167)
    String
    SecurityType
fix.SellVolume SellVolume (331)
    String
    SellVolume
fix.SellerDays SellerDays (287)
    String
    SellerDays
fix.SenderCompID SenderCompID (49)
    String
    SenderCompID
fix.SenderLocationID SenderLocationID (142)
    String
    SenderLocationID
fix.SenderSubID SenderSubID (50)
    String
    SenderSubID
fix.SendingDate SendingDate (51)
    String
    SendingDate
fix.SendingTime SendingTime (52)
    String
    SendingTime
```

```
fix.SessionRejectReason  SessionRejectReason (373)
    String
    SessionRejectReason
fix.SettlBrkrCode  SettlBrkrCode (174)
    String
    SettlBrkrCode
fix.SettlCurrAmt  SettlCurrAmt (119)
    String
    SettlCurrAmt
fix.SettlCurrBidFxRate  SettlCurrBidFxRate (656)
    String
    SettlCurrBidFxRate
fix.SettlCurrFxRate  SettlCurrFxRate (155)
    String
    SettlCurrFxRate
fix.SettlCurrFxRateCalc  SettlCurrFxRateCalc (156)
    String
    SettlCurrFxRateCalc
fix.SettlCurrOfferFxRate  SettlCurrOfferFxRate (657)
    String
    SettlCurrOfferFxRate
fix.SettlCurrency  SettlCurrency (120)
    String
    SettlCurrency
fix.SettlDeliveryType  SettlDeliveryType (172)
    String
    SettlDeliveryType
fix.SettlDepositoryCode  SettlDepositoryCode (173)
    String
    SettlDepositoryCode
fix.SettlInstCode  SettlInstCode (175)
    String
    SettlInstCode
fix.SettlInstID  SettlInstID (162)
    String
    SettlInstID
fix.SettlInstMode  SettlInstMode (160)
    String
    SettlInstMode
fix.SettlInstRefID  SettlInstRefID (214)
    String
    SettlInstRefID
fix.SettlInstSource  SettlInstSource (165)
    String
    SettlInstSource
fix.SettlInstTransType  SettlInstTransType (163)
    String
    SettlInstTransType
```

```
fix.SettlLocation  SettlLocation (166)
    String
    SettlLocation
fix.SettlmntTyp  SettlmntTyp (63)
    String
    SettlmntTyp
fix.Side  Side (54)
    String
    Side
fix.SideComplianceID  SideComplianceID (659)
    String
    SideComplianceID
fix.SideValue1  SideValue1 (396)
    String
    SideValue1
fix.SideValue2  SideValue2 (397)
    String
    SideValue2
fix.SideValueInd  SideValueInd (401)
    String
    SideValueInd
fix.Signature  Signature (89)
    String
    Signature
fix.SignatureLength  SignatureLength (93)
    String
    SignatureLength
fix.SolicitedFlag  SolicitedFlag (377)
    String
    SolicitedFlag
fix.Spread  Spread (218)
    String
    Spread
fix.StandInstDbID  StandInstDbID (171)
    String
    StandInstDbID
fix.StandInstDbName  StandInstDbName (170)
    String
    StandInstDbName
fix.StandInstDbType  StandInstDbType (169)
    String
    StandInstDbType
fix.StateOrProvinceOfIssue  StateOrProvinceOfIssue (471)
    String
    StateOrProvinceOfIssue
fix.StipulationType  StipulationType (233)
    String
    StipulationType
```

```
fix.StipulationValue  StipulationValue (234)
    String
    StipulationValue
fix.StopPx  StopPx (99)
    String
    StopPx
fix.StrikePrice  StrikePrice (202)
    String
    StrikePrice
fix.StrikeTime  StrikeTime (443)
    String
    StrikeTime
fix.Subject  Subject (147)
    String
    Subject
fix.SubscriptionRequestType  SubscriptionRequestType (263)
    String
    SubscriptionRequestType
fix.Symbol  Symbol (55)
    String
    Symbol
fix.SymbolsSfx  SymbolsSfx (65)
    String
    SymbolsSfx
fix.TargetCompID  TargetCompID (56)
    String
    TargetCompID
fix.TargetLocationID  TargetLocationID (143)
    String
    TargetLocationID
fix.TargetSubID  TargetSubID (57)
    String
    TargetSubID
fix.TaxAdvantageType  TaxAdvantageType (495)
    String
    TaxAdvantageType
fix.TestMessageIndicator  TestMessageIndicator (464)
    String
    TestMessageIndicator
fix.TestReqID  TestReqID (112)
    String
    TestReqID
fix.Text  Text (58)
    String
    Text
fix.TickDirection  TickDirection (274)
    String
    TickDirection
```



```
fix.TimeInForce TimeInForce (59)
    String
    TimeInForce
fix.TotNoOrders TotNoOrders (68)
    String
    TotNoOrders
fix.TotNoStrikes TotNoStrikes (422)
    String
    TotNoStrikes
fix.TotQuoteEntries TotQuoteEntries (304)
    String
    TotQuoteEntries
fix.TotalAccruedInterestAmt TotalAccruedInterestAmt (540)
    String
    TotalAccruedInterestAmt
fix.TotalAffectedOrders TotalAffectedOrders (533)
    String
    TotalAffectedOrders
fix.TotalNumSecurities TotalNumSecurities (393)
    String
    TotalNumSecurities
fix.TotalNumSecurityTypes TotalNumSecurityTypes (557)
    String
    TotalNumSecurityTypes
fix.TotalTakedown TotalTakedown (237)
    String
    TotalTakedown
fix.TotalVolumeTraded TotalVolumeTraded (387)
    String
    TotalVolumeTraded
fix.TotalVolumeTradedDate TotalVolumeTradedDate (449)
    String
    TotalVolumeTradedDate
fix.TotalVolumeTradedTime TotalVolumeTradedTime (450)
    String
    TotalVolumeTradedTime
fix.TradSesCloseTime TradSesCloseTime (344)
    String
    TradSesCloseTime
fix.TradSesEndTime TradSesEndTime (345)
    String
    TradSesEndTime
fix.TradSesMethod TradSesMethod (338)
    String
    TradSesMethod
fix.TradSesMode TradSesMode (339)
    String
    TradSesMode
```

```
fix.TradSesOpenTime TradSesOpenTime (342)
    String
    TradSesOpenTime
fix.TradSesPreCloseTime TradSesPreCloseTime (343)
    String
    TradSesPreCloseTime
fix.TradSesReqID TradSesReqID (335)
    String
    TradSesReqID
fix.TradSesStartTime TradSesStartTime (341)
    String
    TradSesStartTime
fix.TradSesStatus TradSesStatus (340)
    String
    TradSesStatus
fix.TradSesStatusRejReason TradSesStatusRejReason (567)
    String
    TradSesStatusRejReason
fix.TradeCondition TradeCondition (277)
    String
    TradeCondition
fix.TradeDate TradeDate (75)
    String
    TradeDate
fix.TradeInputDevice TradeInputDevice (579)
    String
    TradeInputDevice
fix.TradeInputSource TradeInputSource (578)
    String
    TradeInputSource
fix.TradeOriginationDate TradeOriginationDate (229)
    String
    TradeOriginationDate
fix.TradeReportID TradeReportID (571)
    String
    TradeReportID
fix.TradeReportRefID TradeReportRefID (572)
    String
    TradeReportRefID
fix.TradeReportTransType TradeReportTransType (487)
    String
    TradeReportTransType
fix.TradeRequestID TradeRequestID (568)
    String
    TradeRequestID
fix.TradeRequestType TradeRequestType (569)
    String
    TradeRequestType
```

```
fix.TradeType TradeType (418)
    String
    TradeType
fix.TradedFlatSwitch TradedFlatSwitch (258)
    String
    TradedFlatSwitch
fix.TradingSessionID TradingSessionID (336)
    String
    TradingSessionID
fix.TradingSessionSubID TradingSessionSubID (625)
    String
    TradingSessionSubID
fix.TransBkdTime TransBkdTime (483)
    String
    TransBkdTime
fix.TransactTime TransactTime (60)
    String
    TransactTime
fix.URLLink URLLink (149)
    String
    URLLink
fix.Underlying Underlying (318)
    String
    Underlying
fix.UnderlyingCFICode UnderlyingCFICode (463)
    String
    UnderlyingCFICode
fix.UnderlyingContractMultiplier UnderlyingContractMultiplier (436)
    String
    UnderlyingContractMultiplier
fix.UnderlyingCountryOfIssue UnderlyingCountryOfIssue (592)
    String
    UnderlyingCountryOfIssue
fix.UnderlyingCouponPaymentDate UnderlyingCouponPaymentDate (241)
    String
    UnderlyingCouponPaymentDate
fix.UnderlyingCouponRate UnderlyingCouponRate (435)
    String
    UnderlyingCouponRate
fix.UnderlyingCreditRating UnderlyingCreditRating (256)
    String
    UnderlyingCreditRating
fix.UnderlyingFactor UnderlyingFactor (246)
    String
    UnderlyingFactor
fix.UnderlyingInstrRegistry UnderlyingInstrRegistry (595)
    String
    UnderlyingInstrRegistry
```

```
fix.UnderlyingIssueDate UnderlyingIssueDate (242)
    String
    UnderlyingIssueDate
fix.UnderlyingIssuer UnderlyingIssuer (306)
    String
    UnderlyingIssuer
fix.UnderlyingLastPx UnderlyingLastPx (651)
    String
    UnderlyingLastPx
fix.UnderlyingLastQty UnderlyingLastQty (652)
    String
    UnderlyingLastQty
fix.UnderlyingLocaleOfIssue UnderlyingLocaleOfIssue (594)
    String
    UnderlyingLocaleOfIssue
fix.UnderlyingMaturityDate UnderlyingMaturityDate (542)
    String
    UnderlyingMaturityDate
fix.UnderlyingMaturityDay UnderlyingMaturityDay (314)
    String
    UnderlyingMaturityDay
fix.UnderlyingMaturityMonthYear UnderlyingMaturityMonthYear (313)
    String
    UnderlyingMaturityMonthYear
fix.UnderlyingOptAttribute UnderlyingOptAttribute (317)
    String
    UnderlyingOptAttribute
fix.UnderlyingProduct UnderlyingProduct (462)
    String
    UnderlyingProduct
fix.UnderlyingPutOrCall UnderlyingPutOrCall (315)
    String
    UnderlyingPutOrCall
fix.UnderlyingRedemptionDate UnderlyingRedemptionDate (247)
    String
    UnderlyingRedemptionDate
fix.UnderlyingRepoCollateralSecurityType UnderlyingRepoCollateralSecurityType (
    String
    UnderlyingRepoCollateralSecurityType
fix.UnderlyingRepurchaseRate UnderlyingRepurchaseRate (245)
    String
    UnderlyingRepurchaseRate
fix.UnderlyingRepurchaseTerm UnderlyingRepurchaseTerm (244)
    String
    UnderlyingRepurchaseTerm
fix.UnderlyingSecurityAltID UnderlyingSecurityAltID (458)
    String
    UnderlyingSecurityAltID
```

```
fix.UnderlyingSecurityAltIDSource UnderlyingSecurityAltIDSource (459)
    String
    UnderlyingSecurityAltIDSource
fix.UnderlyingSecurityDesc UnderlyingSecurityDesc (307)
    String
    UnderlyingSecurityDesc
fix.UnderlyingSecurityExchange UnderlyingSecurityExchange (308)
    String
    UnderlyingSecurityExchange
fix.UnderlyingSecurityID UnderlyingSecurityID (309)
    String
    UnderlyingSecurityID
fix.UnderlyingSecurityIDSource UnderlyingSecurityIDSource (305)
    String
    UnderlyingSecurityIDSource
fix.UnderlyingSecurityType UnderlyingSecurityType (310)
    String
    UnderlyingSecurityType
fix.UnderlyingStateOrProvinceOfIssue UnderlyingStateOrProvinceOfIssue (593)
    String
    UnderlyingStateOrProvinceOfIssue
fix.UnderlyingStrikePrice UnderlyingStrikePrice (316)
    String
    UnderlyingStrikePrice
fix.UnderlyingSymbol UnderlyingSymbol (311)
    String
    UnderlyingSymbol
fix.UnderlyingSymbolSfx UnderlyingSymbolSfx (312)
    String
    UnderlyingSymbolSfx
fix.UnsolicitedIndicator UnsolicitedIndicator (325)
    String
    UnsolicitedIndicator
fix.Urgency Urgency (61)
    String
    Urgency
fix.Username Username (553)
    String
    Username
fix.ValidUntilTime ValidUntilTime (62)
    String
    ValidUntilTime
fix.ValueOfFutures ValueOfFutures (408)
    String
    ValueOfFutures
fix.WaveNo WaveNo (105)
    String
    WaveNo
```

```

fix.WorkingIndicator WorkingIndicator (636)
    String
    WorkingIndicator
fix.WtAverageLiquidity WtAverageLiquidity (410)
    String
    WtAverageLiquidity
fix.XmlData XmlData (213)
    String
    XmlData
fix.XmlDataLen XmlDataLen (212)
    String
    XmlDataLen
fix.Yield Yield (236)
    String
    Yield
fix.YieldType YieldType (235)
    String
    YieldType

```

#### **Firebird SQL Database Remote Protocol (gdsdb)**

```

gdsdb.accept.arch Architecture
    Unsigned 32-bit integer
gdsdb.accept.version Version
    Unsigned 32-bit integer
gdsdb.attach.database Database
    Unsigned 32-bit integer
gdsdb.attach.dpblength Database parameter block
    Unsigned 32-bit integer
gdsdb.attach.filename Filename
    String
gdsdb.compile.blr BLR
    String
gdsdb.compile.filename Database
    Unsigned 32-bit integer
gdsdb.connect.client Client Architecture
    Unsigned 32-bit integer
gdsdb.connect.count Version option count
    Unsigned 32-bit integer
gdsdb.connect.filename Filename
    String
gdsdb.connect.object Object
    Unsigned 32-bit integer
gdsdb.connect.operation Operation
    Unsigned 32-bit integer
gdsdb.connect.partner Partner
    Unsigned 64-bit integer

```

```
gdsdb.connect.pref    Preferred version
                      No value
gdsdb.connect.pref.arch Architecture
                      Unsigned 32-bit integer
gdsdb.connect.pref.maxtype Maximum type
                      Unsigned 32-bit integer
gdsdb.connect.pref.mintype Minimum type
                      Unsigned 32-bit integer
gdsdb.connect.pref.version Version
                      Unsigned 32-bit integer
gdsdb.connect.pref.weight Preference weight
                      Unsigned 32-bit integer
gdsdb.connect.type    Type
                      Unsigned 32-bit integer
gdsdb.connect.userid  User ID
                      String
gdsdb.connect.version Version
                      Unsigned 32-bit integer
gdsdb.cursor.statement Statement
                      Unsigned 32-bit integer
gdsdb.cursor.type     Type
                      Unsigned 32-bit integer
gdsdb.ddl.blr         BLR
                      String
gdsdb.ddl.database    Database
                      Unsigned 32-bit integer
gdsdb.ddl.transaction Transaction
                      Unsigned 32-bit integer
gdsdb.event.arg       Argument to ast routine
                      Unsigned 32-bit integer
gdsdb.event.ast       ast routine
                      Unsigned 32-bit integer
gdsdb.event.database  Database
                      Unsigned 32-bit integer
gdsdb.event.id        ID
                      Unsigned 32-bit integer
gdsdb.event.items     Event description block
                      String
gdsdb.execute.messagenumber Message number
                      Unsigned 32-bit integer
gdsdb.execute.messages Number of messages
                      Unsigned 32-bit integer
gdsdb.execute.outblr  Output BLR
                      Unsigned 32-bit integer
```

```
gdsdb.execute.outmsgnr  Output Message number
    Unsigned 32-bit integer
gdsdb.execute.statement  Statement
    Unsigned 32-bit integer
gdsdb.execute.transaction  Transaction
    Unsigned 32-bit integer
gdsdb.fetch.messagenr  Message number
    Unsigned 32-bit integer
gdsdb.fetch.messages  Number of messages
    Unsigned 32-bit integer
gdsdb.fetch.statement  Statement
    Unsigned 32-bit integer
gdsdb.fetchresponse.messages  Number of messages
    Unsigned 32-bit integer
gdsdb.fetchresponse.option  Option
    Unsigned 32-bit integer
gdsdb.fetchresponse.statement  Statement
    Unsigned 32-bit integer
gdsdb.fetchresponse.status  Status
    Unsigned 32-bit integer
gdsdb.info.bufferlength  Buffer length
    Unsigned 32-bit integer
gdsdb.info.items  Items
    String
gdsdb.info.object  Object
    Unsigned 32-bit integer
gdsdb.insert.messagenr  Message number
    Unsigned 32-bit integer
gdsdb.insert.messages  Number of messages
    Unsigned 32-bit integer
gdsdb.insert.statement  Statement
    Unsigned 32-bit integer
gdsdb.opcode  Opcode
    Unsigned 32-bit integer
gdsdb.openblob.id  ID
    Unsigned 64-bit integer
gdsdb.openblob2.bpb  Blob parameter block
    String
gdsdb.openblob2.transaction  Transaction
    Unsigned 32-bit integer
gdsdb.prepare.blr  BLR
    Unsigned 32-bit integer
gdsdb.prepare.bufferlen  Prepare, Bufferlength
    Unsigned 32-bit integer
```



```
gdsdb.prepare.dialect Prepare, Dialect
    Unsigned 32-bit integer
gdsdb.prepare.items Prepare, Information items
    Unsigned 32-bit integer
gdsdb.prepare.querystr Prepare, Query
    String
gdsdb.prepare.statement Prepare, Statement
    Unsigned 32-bit integer
gdsdb.prepare.transaction Prepare, Transaction
    Unsigned 32-bit integer
gdsdb.prepare2.message number Message number
    Unsigned 32-bit integer
gdsdb.prepare2.messages Number of messages
    Unsigned 32-bit integer
gdsdb.prepare2.outblr Output BLR
    Unsigned 32-bit integer
gdsdb.prepare2.outmsgnr Output Message number
    Unsigned 32-bit integer
gdsdb.prepare2.transaction Transaction
    Unsigned 32-bit integer
gdsdb.receive.direction Scroll direction
    Unsigned 32-bit integer
gdsdb.receive.incarnation Incarnation
    Unsigned 32-bit integer
gdsdb.receive.msgcount Message Count
    Unsigned 32-bit integer
gdsdb.receive.msgnr Message number
    Unsigned 32-bit integer
gdsdb.receive.offset Scroll offset
    Unsigned 32-bit integer
gdsdb.receive.request Request
    Unsigned 32-bit integer
gdsdb.receive.transation Transaction
    Unsigned 32-bit integer
gdsdb.reconnect.database Database
    Unsigned 32-bit integer
gdsdb.release.object Object
    Unsigned 32-bit integer
gdsdb.response.blobid Blob ID
    Unsigned 64-bit integer
gdsdb.response.data Data
    String
gdsdb.response.object Response object
    Unsigned 32-bit integer
```

```
gdsdb.response.status  Status vector
    No value
gdsdb.seekblob.blob    Blob
    Unsigned 32-bit integer
gdsdb.seekblob.mode    Mode
    Unsigned 32-bit integer
gdsdb.segment.blob     Blob
    Unsigned 32-bit integer
gdsdb.segment.length   Length
    Unsigned 32-bit integer
gdsdb.segment.segment  Segment
    String
gdsdb.send.incarnation Send request
    Unsigned 32-bit integer
gdsdb.send.messages   Send request
    Unsigned 32-bit integer
gdsdb.send.msgnr      Send request
    Unsigned 32-bit integer
gdsdb.send.request     Send request
    Unsigned 32-bit integer
gdsdb.send.transaction Send request
    Unsigned 32-bit integer
gdsdb.slice.id         ID
    Unsigned 64-bit integer
gdsdb.slice.parameters Parameters
    Unsigned 32-bit integer
gdsdb.slice.sdl        Slice description language
    String
gdsdb.slice.transaction Transaction
    Unsigned 32-bit integer
gdsdb.sliceresponse.length Length
    Unsigned 32-bit integer
gdsdb.sqlresponse.msgcount SQL Response, Message Count
    Unsigned 32-bit integer
gdsdb.transact.database Database
    Unsigned 32-bit integer
gdsdb.transact.messages Messages
    Unsigned 32-bit integer
gdsdb.transact.transaction Database
    Unsigned 32-bit integer
gdsdb.transactresponse.messages Messages
    Unsigned 32-bit integer
```

**Fractal Generator Protocol (fractalgeneratorprotocol)**

```

fractalgeneratorprotocol.buffer    Buffer
    Byte array
fractalgeneratorprotocol.data_points    Points
    Unsigned 32-bit integer
fractalgeneratorprotocol.data_start_x    StartX
    Unsigned 32-bit integer
fractalgeneratorprotocol.data_start_y    StartY
    Unsigned 32-bit integer
fractalgeneratorprotocol.message_flags    Flags
    Unsigned 8-bit integer
fractalgeneratorprotocol.message_length    Length
    Unsigned 16-bit integer
fractalgeneratorprotocol.message_type    Type
    Unsigned 8-bit integer
fractalgeneratorprotocol.parameter_algorithmid    AlgorithmID
    Unsigned 32-bit integer
fractalgeneratorprotocol.parameter_climag    C1Imag
    Double-precision floating point
fractalgeneratorprotocol.parameter_clreal    C1Real
    Double-precision floating point
fractalgeneratorprotocol.parameter_c2imag    C2Imag
    Double-precision floating point
fractalgeneratorprotocol.parameter_c2real    C2Real
    Double-precision floating point
fractalgeneratorprotocol.parameter_height    Height
    Unsigned 32-bit integer
fractalgeneratorprotocol.parameter_maxiterations    MaxIterations
    Unsigned 32-bit integer
fractalgeneratorprotocol.parameter_n    N
    Double-precision floating point
fractalgeneratorprotocol.parameter_width    Width
    Unsigned 32-bit integer

```

**Frame (frame)**

```

frame.cap_len    Frame length stored into the capture file
    Unsigned 32-bit integer
frame.coloring_rule.name    Coloring Rule Name
    String
    The frame matched the coloring rule with this name
frame.coloring_rule.string    Coloring Rule String
    String
    The frame matched this coloring rule string
frame.file_off    File Offset
    Signed 64-bit integer

```

frame.len Frame length on the wire  
Unsigned 32-bit integer

frame.link\_nr Link Number  
Unsigned 16-bit integer

frame.marked Frame is marked  
Boolean  
Frame is marked in the GUI

frame.number Frame Number  
Unsigned 32-bit integer

frame.p2p\_dir Point-to-Point Direction  
Unsigned 8-bit integer

frame.pkt\_len Frame length on the wire  
Unsigned 32-bit integer

frame.protocols Protocols in frame  
String  
Protocols carried by this frame

frame.ref\_time This is a Time Reference frame  
No value  
This frame is a Time Reference frame

frame.time Arrival Time  
Date/Time stamp  
Absolute time when this frame was captured

frame.time\_delta Time delta from previous captured frame  
Time duration  
Time delta from previous captured frame

frame.time\_delta\_displayed Time delta from previous displayed frame  
Time duration  
Time delta from previous displayed frame

frame.time\_invalid Arrival Timestamp invalid  
No value  
The timestamp from the capture is out of the valid range

frame.time\_relative Time since reference or first frame  
Time duration  
Time relative to time reference or first frame

**Frame Relay (fr)**

fr.becn BECN  
Boolean  
Backward Explicit Congestion Notification

fr.chdlctype Type  
Unsigned 16-bit integer  
Frame Relay Cisco HDLC Encapsulated Protocol

fr.control Control Field  
Unsigned 8-bit integer  
Control field

fr.control.f Final  
Boolean

```
fr.control.ftype  Frame type
                  Unsigned 16-bit integer
fr.control.n_r    N(R)
                  Unsigned 16-bit integer
fr.control.n_s    N(S)
                  Unsigned 16-bit integer
fr.control.p      Poll
                  Boolean
fr.control.s_ftype  Supervisory frame type
                  Unsigned 16-bit integer
fr.control.u_modifier_cmd  Command
                  Unsigned 8-bit integer
fr.control.u_modifier_resp  Response
                  Unsigned 8-bit integer
fr.cr             CR
                  Boolean
                  Command/Response
fr.dc             DC
                  Boolean
                  Address/Control
fr.de             DE
                  Boolean
                  Discard Eligibility
fr.dlci          DLCI
                  Unsigned 32-bit integer
                  Data-Link Connection Identifier
fr.dlcore_control  DL-CORE Control
                  Unsigned 8-bit integer
                  DL-Core control bits
fr.ea            EA
                  Boolean
                  Extended Address
fr.fecn          FECN
                  Boolean
                  Forward Explicit Congestion Notification
fr.lower_dlci    Lower DLCI
                  Unsigned 8-bit integer
                  Lower bits of DLCI
fr.nlpid         NLPID
                  Unsigned 8-bit integer
                  Frame Relay Encapsulated Protocol NLPID
fr.second_dlci   Second DLCI
                  Unsigned 8-bit integer
                  Bits below upper bits of DLCI
fr.snap.oui      Organization Code
                  Unsigned 24-bit integer
```

```
fr.snap.pid Protocol ID
    Unsigned 16-bit integer

fr.snaptype Type
    Unsigned 16-bit integer
    Frame Relay SNAP Encapsulated Protocol

fr.third_dlci Third DLCI
    Unsigned 8-bit integer
    Additional bits of DLCI

fr.upper_dlci Upper DLCI
    Unsigned 8-bit integer
    Upper bits of DLCI
```

**G.723 (g723)**

```
g723.frame_size_and_codec Frame size and codec type
    Unsigned 8-bit integer
    RATEFLAG_B0

g723.lpc.b5b0 LPC_B5...LPC_B0
    Unsigned 8-bit integer
    LPC_B5...LPC_B0
```

**GARP Multicast Registration Protocol (gmrp)**

```
gmrp.attribute_event Event
    Unsigned 8-bit integer

gmrp.attribute_length Length
    Unsigned 8-bit integer

gmrp.attribute_type Type
    Unsigned 8-bit integer

gmrp.attribute_value_group_membership Value
    6-byte Hardware (MAC) Address

gmrp.attribute_value_service_requirement Value
    Unsigned 8-bit integer

gmrp.protocol_id Protocol ID
    Unsigned 16-bit integer
```

**GARP VLAN Registration Protocol (gvrp)**

```
gvrp.attribute_event Event
    Unsigned 8-bit integer

gvrp.attribute_length Length
    Unsigned 8-bit integer

gvrp.attribute_type Type
    Unsigned 8-bit integer

gvrp.attribute_value Value
    Unsigned 16-bit integer

gvrp.protocol_id Protocol ID
    Unsigned 16-bit integer
```

**GPRS Network service (gprs\_ns)**

```
gprs_ns.bvci   BVCI
  Unsigned 16-bit integer
  Cell ID

gprs_ns.cause  Cause
  Unsigned 8-bit integer
  Cause

gprs_ns.ielength  IE Length
  Unsigned 16-bit integer
  IE Length

gprs_ns.ietype  IE Type
  Unsigned 8-bit integer
  IE Type

gprs_ns.nsei   NSEI
  Unsigned 16-bit integer
  Network Service Entity Id

gprs_ns.nsvci  NSVCI
  Unsigned 16-bit integer
  Network Service Virtual Connection id

gprs_ns.pdutype  PDU Type
  Unsigned 8-bit integer
  NS Command

gprs_ns.spare  Spare octet
  Unsigned 8-bit integer
```

**GPRS Tunneling Protocol (gtp)**

```
gtp.apn  APN
  String
  Access Point Name

gtp.bssgp_cause  BSSGP Cause
  Unsigned 8-bit integer
  BSSGP Cause

gtp.cause  Cause
  Unsigned 8-bit integer
  Cause of operation

gtp.chrg_char  Charging characteristics
  Unsigned 16-bit integer
  Charging characteristics

gtp.chrg_char_f  Flat rate charging
  Unsigned 16-bit integer
  Flat rate charging

gtp.chrg_char_h  Hot billing charging
  Unsigned 16-bit integer
  Hot billing charging

gtp.chrg_char_n  Normal charging
  Unsigned 16-bit integer
  Normal charging
```

```
gtp.chrg_char_p  Prepaid charging
  Unsigned 16-bit integer
  Prepaid charging

gtp.chrg_char_r  Reserved
  Unsigned 16-bit integer
  Reserved

gtp.chrg_char_s  Spare
  Unsigned 16-bit integer
  Spare

gtp.chrg_id      Charging ID
  Unsigned 32-bit integer
  Charging ID

gtp.chrg_ipv4    CG address IPv4
  IPv4 address
  Charging Gateway address IPv4

gtp.chrg_ipv6    CG address IPv6
  IPv6 address
  Charging Gateway address IPv6

gtp.cksn_ksi     Ciphering Key Sequence Number (CKSN)/Key Set Identifier (KSI)
  Unsigned 8-bit integer
  CKSN/KSI

gtp.cmn_flg.mbs_cnt_inf  MBMS Counting Information
  Boolean
  MBMS Counting Information

gtp.cmn_flg.mbs_srv_type  MBMS Service Type
  Boolean
  MBMS Service Type

gtp.cmn_flg.no_qos_neg    No QoS negotiation
  Boolean
  No QoS negotiation

gtp.cmn_flg.nrsn          NRSN bit field
  Boolean
  NRSN bit field

gtp.cmn_flg.ppc           Prohibit Payload Compression
  Boolean
  Prohibit Payload Compression

gtp.cmn_flg.ran_pcd_rd    RAN Procedures Ready
  Boolean
  RAN Procedures Ready

gtp.ext_apn_res           Restriction Type
  Unsigned 8-bit integer
  Restriction Type

gtp.ext_flow_label        Flow Label Data I
  Unsigned 16-bit integer
  Flow label data

gtp.ext_geo_loc_type      Geographic Location Type
  Unsigned 8-bit integer
  Geographic Location Type
```



```
gtp.ext_id  Extension identifier
            Unsigned 16-bit integer
            Extension Identifier

gtp.ext_imei_sv  IMEI(SV)
                String
                IMEI(SV)

gtp.ext_length  Length
                Unsigned 16-bit integer
                IE Length

gtp.ext_rat_type  RAT Type
                  Unsigned 8-bit integer
                  RAT Type

gtp.ext_sac  SAC
             Unsigned 16-bit integer
             SAC

gtp.ext_val  Extension value
             Byte array
             Extension Value

gtp.flags  Flags
           Unsigned 8-bit integer
           Ver/PT/Spare...

gtp.flags.e  Is Next Extension Header present?
             Boolean
             Is Next Extension Header present? (1 = yes, 0 = no)

gtp.flags.payload  Protocol type
                   Unsigned 8-bit integer
                   Protocol Type

gtp.flags.pn  Is N-PDU number present?
              Boolean
              Is N-PDU number present? (1 = yes, 0 = no)

gtp.flags.reserved  Reserved
                    Unsigned 8-bit integer
                    Reserved (shall be sent as '111' )

gtp.flags.s  Is Sequence Number present?
             Boolean
             Is Sequence Number present? (1 = yes, 0 = no)

gtp.flags.snn  Is SNDCP N-PDU included?
               Boolean
               Is SNDCP N-PDU LLC Number included? (1 = yes, 0 = no)

gtp.flags.version  Version
                   Unsigned 8-bit integer
                   GTP Version

gtp.flow_label  Flow label
                Unsigned 16-bit integer
                Downlink flow label data

gtp.flow_label  Flow label
                Unsigned 16-bit integer
                Flow label
```

```
gtp.flow_sig  Flow label Signalling
  Unsigned 16-bit integer
  Flow label signalling

gtp.gsn_addr_len  GSN Address Length
  Unsigned 8-bit integer
  GSN Address Length

gtp.gsn_addr_type  GSN Address Type
  Unsigned 8-bit integer
  GSN Address Type

gtp.gsn_ipv4  GSN address IPv4
  IPv4 address
  GSN address IPv4

gtp.gsn_ipv6  GSN address IPv6
  IPv6 address
  GSN address IPv6

gtp.imsi  IMSI
  String
  International Mobile Subscriber Identity number

gtp.lac  LAC
  Unsigned 16-bit integer
  Location Area Code

gtp.length  Length
  Unsigned 16-bit integer
  Length (i.e. number of octets after TID or TEID)

gtp.map_cause  MAP cause
  Unsigned 8-bit integer
  MAP cause

gtp.mbms_sa_code  MBMS service area code
  Unsigned 16-bit integer
  MBMS service area code

gtp.mbms_ses_dur_days  Estimated session duration days
  Unsigned 8-bit integer
  Estimated session duration days

gtp.mbms_ses_dur_s  Estimated session duration seconds
  Unsigned 24-bit integer
  Estimated session duration seconds

gtp.mbs_2g_3g_ind  MBMS 2G/3G Indicator
  Unsigned 8-bit integer
  MBMS 2G/3G Indicator

gtp.mcc  MCC
  Unsigned 16-bit integer
  Mobile Country Code

gtp.message  Message Type
  Unsigned 8-bit integer
  GTP Message Type

gtp.mnc  MNC
  Unsigned 8-bit integer
  Mobile Network Code
```

gtp.ms\_reason MS not reachable reason  
Unsigned 8-bit integer  
MS Not Reachable Reason

gtp.ms\_valid MS validated  
Boolean  
MS validated

gtp.msisdn MSISDN  
String  
MS international PSTN/ISDN number

gtp.next Next extension header type  
Unsigned 8-bit integer  
Next Extension Header Type

gtp.no\_of\_mbms\_sa\_codes Number of MBMS service area codes  
Unsigned 8-bit integer  
Number N of MBMS service area codes

gtp.no\_of\_vectors No of Vectors  
Unsigned 8-bit integer  
No of Vectors

gtp.node\_ipv4 Node address IPv4  
IPv4 address  
Recommended node address IPv4

gtp.node\_ipv6 Node address IPv6  
IPv6 address  
Recommended node address IPv6

gtp.npdu\_number N-PDU Number  
Unsigned 8-bit integer  
N-PDU Number

gtp.nsapi NSAPI  
Unsigned 8-bit integer  
Network layer Service Access Point Identifier

gtp.pkt\_flow\_id Packet Flow ID  
Unsigned 8-bit integer  
Packet Flow ID

gtp.ptmsi P-TMSI  
Unsigned 32-bit integer  
Packet-Temporary Mobile Subscriber Identity

gtp.ptmsi\_sig P-TMSI Signature  
Unsigned 24-bit integer  
P-TMSI Signature

gtp.qos\_al\_ret\_priority Allocation/Retention priority  
Unsigned 8-bit integer  
Allocation/Retention Priority

gtp.qos\_del\_err\_sdu Delivery of erroneous SDU  
Unsigned 8-bit integer  
Delivery of Erroneous SDU

gtp.qos\_del\_order Delivery order  
Unsigned 8-bit integer  
Delivery Order

```
gtp.qos_delay  QoS delay
  Unsigned 8-bit integer
  Quality of Service Delay Class

gtp.qos_guar_dl  Guaranteed bit rate for downlink
  Unsigned 8-bit integer
  Guaranteed bit rate for downlink

gtp.qos_guar_ul  Guaranteed bit rate for uplink
  Unsigned 8-bit integer
  Guaranteed bit rate for uplink

gtp.qos_max_dl  Maximum bit rate for downlink
  Unsigned 8-bit integer
  Maximum bit rate for downlink

gtp.qos_max_sdu_size  Maximum SDU size
  Unsigned 8-bit integer
  Maximum SDU size

gtp.qos_max_ul  Maximum bit rate for uplink
  Unsigned 8-bit integer
  Maximum bit rate for uplink

gtp.qos_mean  QoS mean
  Unsigned 8-bit integer
  Quality of Service Mean Throughput

gtp.qos_peak  QoS peak
  Unsigned 8-bit integer
  Quality of Service Peak Throughput

gtp.qos_precedence  QoS precedence
  Unsigned 8-bit integer
  Quality of Service Precedence Class

gtp.qos_reliabilty  QoS reliability
  Unsigned 8-bit integer
  Quality of Service Reliability Class

gtp.qos_res_ber  Residual BER
  Unsigned 8-bit integer
  Residual Bit Error Rate

gtp.qos_sdu_err_ratio  SDU Error ratio
  Unsigned 8-bit integer
  SDU Error Ratio

gtp.qos_spare1  Spare
  Unsigned 8-bit integer
  Spare (shall be sent as '00' )

gtp.qos_spare2  Spare
  Unsigned 8-bit integer
  Spare (shall be sent as 0)

gtp.qos_spare3  Spare
  Unsigned 8-bit integer
  Spare (shall be sent as '000' )

gtp.qos_traf_class  Traffic class
  Unsigned 8-bit integer
  Traffic Class
```

```
gtp.qos_traf_handl_prio  Traffic handling priority
    Unsigned 8-bit integer
    Traffic Handling Priority

gtp.qos_trans_delay     Transfer delay
    Unsigned 8-bit integer
    Transfer Delay

gtp.qos_version         Version
    String
    Version of the QoS Profile

gtp.rab_gtp_dn          Downlink GTP-U seq number
    Unsigned 16-bit integer
    Downlink GTP-U sequence number

gtp.rab_gtp_up          Uplink GTP-U seq number
    Unsigned 16-bit integer
    Uplink GTP-U sequence number

gtp.rab_pdu_dn          Downlink next PDCP-PDU seq number
    Unsigned 16-bit integer
    Downlink next PDCP-PDU sequence number

gtp.rab_pdu_up          Uplink next PDCP-PDU seq number
    Unsigned 16-bit integer
    Uplink next PDCP-PDU sequence number

gtp.rac                 RAC
    Unsigned 8-bit integer
    Routing Area Code

gtp.ranap_cause         RANAP cause
    Unsigned 8-bit integer
    RANAP cause

gtp.recovery            Recovery
    Unsigned 8-bit integer
    Restart counter

gtp.reorder             Reordering required
    Boolean
    Reordering required

gtp.rnc_ipv4            RNC address IPv4
    IPv4 address
    Radio Network Controller address IPv4

gtp.rnc_ipv6            RNC address IPv6
    IPv6 address
    Radio Network Controller address IPv6

gtp.rp                  Radio Priority
    Unsigned 8-bit integer
    Radio Priority for uplink tx

gtp.rp_nsapi            NSAPI in Radio Priority
    Unsigned 8-bit integer
    Network layer Service Access Point Identifier in Radio Priority

gtp.rp_sms              Radio Priority SMS
    Unsigned 8-bit integer
    Radio Priority for MO SMS
```

```
gtp.rp_spare  Reserved
  Unsigned 8-bit integer
  Spare bit

gtp.security_mode  Security Mode
  Unsigned 8-bit integer
  Security Mode

gtp.sel_mode  Selection mode
  Unsigned 8-bit integer
  Selection Mode

gtp.seq_number  Sequence number
  Unsigned 16-bit integer
  Sequence Number

gtp.sndcp_number  SNDCP N-PDU LLC Number
  Unsigned 8-bit integer
  SNDCP N-PDU LLC Number

gtp.targetid  TargetID
  Unsigned 32-bit integer
  TargetID

gtp.tear_ind  Teardown Indicator
  Boolean
  Teardown Indicator

gtp.teid  TEID
  Unsigned 32-bit integer
  Tunnel Endpoint Identifier

gtp.teid_cp  TEID Control Plane
  Unsigned 32-bit integer
  Tunnel Endpoint Identifier Control Plane

gtp.teid_data  TEID Data I
  Unsigned 32-bit integer
  Tunnel Endpoint Identifier Data I

gtp.teid_ii  TEID Data II
  Unsigned 32-bit integer
  Tunnel Endpoint Identifier Data II

gtp.tft_code  TFT operation code
  Unsigned 8-bit integer
  TFT operation code

gtp.tft_eval  Evaluation precedence
  Unsigned 8-bit integer
  Evaluation precedence

gtp.tft_number  Number of packet filters
  Unsigned 8-bit integer
  Number of packet filters

gtp.tft_spare  TFT spare bit
  Unsigned 8-bit integer
  TFT spare bit

gtp.tid  TID
  String
  Tunnel Identifier
```

```
gtp.time_2_dta_tr  Time to MBMS Data Transfer
  Unsigned 8-bit integer
  Time to MBMS Data Transfer

gtp.tlli  TLLI
  Unsigned 32-bit integer
  Temporary Logical Link Identity

gtp.tr_comm  Packet transfer command
  Unsigned 8-bit integer
  Packet transfer command

gtp.trace_ref  Trace reference
  Unsigned 16-bit integer
  Trace reference

gtp.trace_type  Trace type
  Unsigned 16-bit integer
  Trace type

gtp.ulink_teid_cp  Uplink TEID Control Plane
  Unsigned 32-bit integer
  Uplink Tunnel Endpoint Identifier Control Plane

gtp.ulink_teid_data  Uplink TEID Data I
  Unsigned 32-bit integer
  Uplink Tunnel Endpoint Identifier Data I

gtp.unknown  Unknown data (length)
  Unsigned 16-bit integer
  Unknown data

gtp.user_addr_pdp_org  PDP type organization
  Unsigned 8-bit integer
  PDP type organization

gtp.user_addr_pdp_type  PDP type number
  Unsigned 8-bit integer
  PDP type

gtp.user_ipv4  End user address IPv4
  IPv4 address
  End user address IPv4

gtp.user_ipv6  End user address IPv6
  IPv6 address
  End user address IPv6
```

#### **GSM A-I/F BSSMAP (gsm\_a\_bssmap)**

```
gsm_a.A5_2_algorithm_sup  A5/2 algorithm supported
  Unsigned 8-bit integer
  A5/2 algorithm supported

gsm_a.A5_3_algorithm_sup  A5/3 algorithm supported
  Unsigned 8-bit integer
  A5/3 algorithm supported

gsm_a.CM3  CM3
  Unsigned 8-bit integer
  CM3
```

```
gsm_a.CMSP    CMSP: CM Service Prompt
              Unsigned 8-bit integer
              CMSP: CM Service Prompt

gsm_a.FC_frequency_cap  FC Frequency Capability
              Unsigned 8-bit integer
              FC Frequency Capability

gsm_a.L3_protocol_discriminator  Protocol discriminator
              Unsigned 8-bit integer
              Protocol discriminator

gsm_a.LCS_VA_cap  LCS VA capability (LCS value added location request notificati
              Unsigned 8-bit integer
              LCS VA capability (LCS value added location request notification capability)

gsm_a.MSC2_rev  Revision Level
              Unsigned 8-bit integer
              Revision level

gsm_a.SM_cap  SM capability (MT SMS pt to pt capability)
              Unsigned 8-bit integer
              SM capability (MT SMS pt to pt capability)

gsm_a.SS_screening_indicator  SS Screening Indicator
              Unsigned 8-bit integer
              SS Screening Indicator

gsm_a.SoLSA  SoLSA
              Unsigned 8-bit integer
              SoLSA

gsm_a.UCS2_treatment  UCS2 treatment
              Unsigned 8-bit integer
              UCS2 treatment

gsm_a.VBS_notification_rec  VBS notification reception
              Unsigned 8-bit integer
              VBS notification reception

gsm_a.VGCS_notification_rec  VGCS notification reception
              Unsigned 8-bit integer
              VGCS notification reception

gsm_a.algorithm_identifier  Algorithm identifier
              Unsigned 8-bit integer
              Algorithm_identifier

gsm_a.apdu_protocol_id  Protocol ID
              Unsigned 8-bit integer
              APDU embedded protocol id

gsm_a.bcc  BCC
              Unsigned 8-bit integer
              BCC

gsm_a.bcch_arfcn  BCCH ARFCN(RF channel number)
              Unsigned 16-bit integer
              BCCH ARFCN

gsm_a.be.cell_id_disc  Cell identification discriminator
              Unsigned 8-bit integer
              Cell identificationdiscriminator
```



```
gsm_a.be.rnc_id  RNC-ID
  Unsigned 16-bit integer
  RNC-ID

gsm_a.bssmap_msgtype  BSSMAP Message Type
  Unsigned 8-bit integer

gsm_a.call_prio  Call priority
  Unsigned 8-bit integer
  Call priority

gsm_a.cell_ci  Cell CI
  Unsigned 16-bit integer

gsm_a.cell_lac  Cell LAC
  Unsigned 16-bit integer

gsm_a.cld_party_bcd_num  Called Party BCD Number
  String

gsm_a.clg_party_bcd_num  Calling Party BCD Number
  String

gsm_a.dtap_msg_cc_type  DTAP Call Control Message Type
  Unsigned 8-bit integer

gsm_a.dtap_msg_gmm_type  DTAP GPRS Mobility Management Message Type
  Unsigned 8-bit integer

gsm_a.dtap_msg_mm_type  DTAP Mobility Management Message Type
  Unsigned 8-bit integer

gsm_a.dtap_msg_rr_type  DTAP Radio Resources Management Message Type
  Unsigned 8-bit integer

gsm_a.dtap_msg_sm_type  DTAP GPRS Session Management Message Type
  Unsigned 8-bit integer

gsm_a.dtap_msg_sms_type  DTAP Short Message Service Message Type
  Unsigned 8-bit integer

gsm_a.dtap_msg_ss_type  DTAP Non call Supplementary Service Message Type
  Unsigned 8-bit integer

gsm_a.extension  Extension
  Boolean
  Extension

gsm_a.gmm.cn_spec_drx_cycle_len_coef  CN Specific DRX cycle length coefficient
  Unsigned 8-bit integer
  CN Specific DRX cycle length coefficient

gsm_a.gmm.non_drx_timer  Non-DRX timer
  Unsigned 8-bit integer
  Non-DRX timer

gsm_a.gmm.split_on_ccch  SPLIT on CCCH
  Boolean
  SPLIT on CCCH

gsm_a.ie.mobileid.type  Mobile Identity Type
  Unsigned 8-bit integer
  Mobile Identity Type
```

```
gsm_a.imei   IMEI
             String

gsm_a.imeisv IMEISV
             String

gsm_a.imsi   IMSI
             String

gsm_a.len    Length
             Unsigned 8-bit integer

gsm_a.lsa_id LSA Identifier
             Unsigned 24-bit integer
             LSA Identifier

gsm_a.mbs_service_id MBMS Service ID
                     Byte array
                     MBMS Service ID

gsm_a.ncc    NCC
             Unsigned 8-bit integer
             NCC

gsm_a.none   Sub tree
             No value

gsm_a.numbering_plan_id Numbering plan identification
                       Unsigned 8-bit integer
                       Numbering plan identification

gsm_a.oddevenind Odd/even indication
                 Unsigned 8-bit integer
                 Mobile Identity

gsm_a.ps_sup_cap PS capability (pseudo-synchronization capability)
                 Unsigned 8-bit integer
                 PS capability (pseudo-synchronization capability)

gsm_a.ptmsi_sig P-TMSI Signature
                 Unsigned 24-bit integer
                 P-TMSI Signature

gsm_a.ptmsi_sig2 P-TMSI Signature 2
                 Unsigned 24-bit integer
                 P-TMSI Signature 2

gsm_a.qos.ber  Residual Bit Error Rate (BER)
               Unsigned 8-bit integer
               Residual Bit Error Rate (BER)

gsm_a.qos.del_of_err_sdu Delivery of erroneous SDUs
                       Unsigned 8-bit integer
                       Delivery of erroneous SDUs

gsm_a.qos.del_order Delivery order
                    Unsigned 8-bit integer
                    Delivery order

gsm_a.qos.delay_cls Delay class
                    Unsigned 8-bit integer
                    Quality of Service Delay Class
```

```
gsm_a.qos.sdu_err_rat  SDU error ratio
    Unsigned 8-bit integer
    SDU error ratio

gsm_a.qos.traff_hdl_pri  Traffic handling priority
    Unsigned 8-bit integer
    Traffic handling priority

gsm_a.qos.traffic_cls  Traffic class
    Unsigned 8-bit integer
    Traffic class

gsm_a.rp_msg_type  RP Message Type
    Unsigned 8-bit integer

gsm_a.rr.Group_cipher_key_number  Group cipher key number
    Unsigned 8-bit integer
    Group cipher key number

gsm_a.rr.ICMI  ICMI: Initial Codec Mode Indicator
    Unsigned 8-bit integer
    ICMI: Initial Codec Mode Indicator

gsm_a.rr.MBMS_broadcast  MBMS Broadcast
    Boolean
    MBMS Broadcast

gsm_a.rr.MBMS_multicast  MBMS Multicast
    Boolean
    MBMS Multicast

gsm_a.rr.NCSB  NSCB: Noise Suppression Control Bit
    Unsigned 8-bit integer
    NSCB: Noise Suppression Control Bit

gsm_a.rr.RRcause  RR cause value
    Unsigned 8-bit integer
    RR cause value

gsm_a.rr.SC  SC
    Unsigned 8-bit integer
    SC

gsm_a.rr.T1prim  T1'
    Unsigned 8-bit integer
    T1'

gsm_a.rr.T2  T2
    Unsigned 8-bit integer
    T2

gsm_a.rr.T3  T3
    Unsigned 16-bit integer
    T3

gsm_a.rr.channel_mode  Channel Mode
    Unsigned 8-bit integer
    Channel Mode

gsm_a.rr.channel_mode2  Channel Mode 2
    Unsigned 8-bit integer
    Channel Mode 2
```

```

gsm_a.rr.dedicated_mode_or_tbf  Dedicated mode or TBF
    Unsigned 8-bit integer
    Dedicated mode or TBF

gsm_a.rr.ho_ref_val  Handover reference value
    Unsigned 8-bit integer
    Handover reference value

gsm_a.rr.last_segment  Last Segment
    Boolean
    Last Segment

gsm_a.rr.multirate_speech_ver  Multirate speech version
    Unsigned 8-bit integer
    Multirate speech version

gsm_a.rr.page_mode  Page Mode
    Unsigned 8-bit integer
    Page Mode

gsm_a.rr.pow_cmd_atc  Spare
    Boolean
    Spare

gsm_a.rr.pow_cmd_epc  EPC_mode
    Boolean
    EPC_mode

gsm_a.rr.pow_cmd_fpcepc  FPC_EPC
    Boolean
    FPC_EPC

gsm_a.rr.pow_cmd_pow  POWER LEVEL
    Unsigned 8-bit integer
    POWER LEVEL

gsm_a.rr.rr_2_pseudo_len  L2 Pseudo Length value
    Unsigned 8-bit integer
    L2 Pseudo Length value

gsm_a.rr.set_of_amr_codec_modes_v1b1  4,75 kbit/s codec rate
    Boolean
    4,75 kbit/s codec rate

gsm_a.rr.set_of_amr_codec_modes_v1b2  5,15 kbit/s codec rate
    Boolean
    5,15 kbit/s codec rate

gsm_a.rr.set_of_amr_codec_modes_v1b3  5,90 kbit/s codec rate
    Boolean
    5,90 kbit/s codec rate

gsm_a.rr.set_of_amr_codec_modes_v1b4  6,70 kbit/s codec rate
    Boolean
    6,70 kbit/s codec rate

gsm_a.rr.set_of_amr_codec_modes_v1b5  7,40 kbit/s codec rate
    Boolean
    7,40 kbit/s codec rate

gsm_a.rr.set_of_amr_codec_modes_v1b6  7,95 kbit/s codec rate
    Boolean
    7,95 kbit/s codec rate

```

```

gsm_a.rr.set_of_amr_codec_modes_v1b7  10,2 kbit/s codec rate
Boolean
10,2 kbit/s codec rate
gsm_a.rr.set_of_amr_codec_modes_v1b8  12,2 kbit/s codec rate
Boolean
12,2 kbit/s codec rate
gsm_a.rr.set_of_amr_codec_modes_v2b1  6,60 kbit/s codec rate
Boolean
6,60 kbit/s codec rate
gsm_a.rr.set_of_amr_codec_modes_v2b2  8,85 kbit/s codec rate
Boolean
8,85 kbit/s codec rate
gsm_a.rr.set_of_amr_codec_modes_v2b3  12,65 kbit/s codec rate
Boolean
12,65 kbit/s codec rate
gsm_a.rr.set_of_amr_codec_modes_v2b4  15,85 kbit/s codec rate
Boolean
15,85 kbit/s codec rate
gsm_a.rr.set_of_amr_codec_modes_v2b5  23,85 kbit/s codec rate
Boolean
23,85 kbit/s codec rate
gsm_a.rr.start_mode  Start Mode
Unsigned 8-bit integer
Start Mode
gsm_a.rr.suspension_cause  Suspension cause value
Unsigned 8-bit integer
Suspension cause value
gsm_a.rr.sync_ind_nci  Normal cell indication(NCI)
Boolean
Normal cell indication(NCI)
gsm_a.rr.sync_ind_rot  Report Observed Time Difference(ROT)
Boolean
Report Observed Time Difference(ROT)
gsm_a.rr.target_mode  Target mode
Unsigned 8-bit integer
Target mode
gsm_a.rr.time_diff  Time difference value
Unsigned 8-bit integer
Time difference value
gsm_a.rr.timing_adv  Timing advance value
Unsigned 8-bit integer
Timing advance value
gsm_a.rr.tlli  TLLI
Unsigned 32-bit integer
TLLI
gsm_a.rr_cdma200_cm_cng_msg_req  CDMA2000 CLASSMARK CHANGE
Boolean
CDMA2000 CLASSMARK CHANGE

```

```
gsm_a.rr_chnl_needed_ch1  Channel 1
    Unsigned 8-bit integer
    Channel 1

gsm_a.rr_cm_cng_msg_req  CLASSMARK CHANGE
    Boolean
    CLASSMARK CHANGE

gsm_a.rr_format_id  Format Identifier
    Unsigned 8-bit integer
    Format Identifier

gsm_a.rr_geran_iu_cm_cng_msg_req  GERAN IU MODE CLASSMARK CHANGE
    Boolean
    GERAN IU MODE CLASSMARK CHANGE

gsm_a.rr_sync_ind_si  Synchronization indication(SI)
    Unsigned 8-bit integer
    Synchronization indication(SI)

gsm_a.rr_utran_cm_cng_msg_req  UTRAN CLASSMARK CHANGE
    Unsigned 8-bit integer
    UTRAN CLASSMARK CHANGE

gsm_a.skip.ind  Skip Indicator
    Unsigned 8-bit integer
    Skip Indicator

gsm_a.spareb7  Spare
    Unsigned 8-bit integer
    Spare

gsm_a.spareb8  Spare
    Unsigned 8-bit integer
    Spare

gsm_a.tft.e_bit  E bit
    Boolean
    E bit

gsm_a.tft.flow  IPv6 flow label
    Unsigned 24-bit integer
    IPv6 flow label

gsm_a.tft.ip4_address  IPv4 address
    IPv4 address
    IPv4 address

gsm_a.tft.ip4_mask  IPv4 address mask
    IPv4 address
    IPv4 address mask

gsm_a.tft.ip6_address  IPv6 address
    IPv6 address
    IPv6 address

gsm_a.tft.ip6_mask  IPv6 address mask
    IPv6 address
    IPv6 address mask

gsm_a.tft.op_code  TFT operation code
    Unsigned 8-bit integer
    TFT operation code
```

`gsm_a.tft.pktflt` Number of packet filters  
Unsigned 8-bit integer  
Number of packet filters

`gsm_a.tft.port` Port  
Unsigned 16-bit integer  
Port

`gsm_a.tft.port_high` High limit port  
Unsigned 16-bit integer  
High limit port

`gsm_a.tft.port_low` Low limit port  
Unsigned 16-bit integer  
Low limit port

`gsm_a.tft.protocol_header` Protocol/header  
Unsigned 8-bit integer  
Protocol/header

`gsm_a.tft.security` IPsec security parameter index  
Unsigned 32-bit integer  
IPsec security parameter index

`gsm_a.tft.traffic_mask` Mask field  
Unsigned 8-bit integer  
Mask field

`gsm_a.tngi_mcc_mnc_ind` MCC/MNC indication  
Boolean  
MCC/MNC indication

`gsm_a.tmsi` TMSI/P-TMSI  
Unsigned 32-bit integer

`gsm_a.type_of_number` Type of number  
Unsigned 8-bit integer  
Type of number

`gsm_a_bssmap.cause` BSSMAP Cause  
Unsigned 8-bit integer

`gsm_a_bssmap.elem_id` Element ID  
Unsigned 8-bit integer

`gsm_a_dtap.cause` DTAP Cause  
Unsigned 8-bit integer

`gsm_a_dtap.elem_id` Element ID  
Unsigned 8-bit integer

`gsm_a_rr_ra` Random Access Information (RA)  
Unsigned 8-bit integer  
Random Access Information (RA)

**GSM A-I/F DTAP (`gsm_a_dtap`)****GSM A-I/F RP (`gsm_a_rp`)**

**GSM CCCH (gsm\_a\_ccch)****GSM Mobile Application (gsm\_map)**

```

Remote-Operations-Information-Objects.global  global
    Remote_Operations_Information_Objects.OBJECT_IDENTIFIER
Remote-Operations-Information-Objects.local  local
    Signed 32-bit integer
    Remote_Operations_Information_Objects.INTEGER
gsm_map.HLR_List_item  Item
    Byte array
    gsm_map.HLR_Id
gsm_map.PlmnContainer  PlmnContainer
    No value
    gsm_map.PlmnContainer
gsm_map.PrivateExtensionList_item  Item
    No value
    gsm_map.PrivateExtension
gsm_map.accessNetworkProtocolId  accessNetworkProtocolId
    Unsigned 32-bit integer
    gsm_map.AccessNetworkProtocolId
gsm_map.address.digits  Address digits
    String
    Address digits
gsm_map.bearerService  bearerService
    Unsigned 8-bit integer
    gsm_map.BearerServiceCode
gsm_map.cbs.cbs_coding_grp15_mess_code  Message coding
    Unsigned 8-bit integer
    Message coding
gsm_map.cbs.coding_grp  Coding Group
    Unsigned 8-bit integer
    Coding Group
gsm_map.cbs.coding_grp0_lang  Language
    Unsigned 8-bit integer
    Language
gsm_map.cbs.coding_grp1_lang  Language
    Unsigned 8-bit integer
    Language
gsm_map.cbs.coding_grp2_lang  Language
    Unsigned 8-bit integer
    Language
gsm_map.cbs.coding_grp3_lang  Language
    Unsigned 8-bit integer
    Language
gsm_map.cbs.coding_grp4_7_char_set  Character set being used
    Unsigned 8-bit integer
    Character set being used

```



```

gsm_map.cbs.coding_grp4_7_class  Message Class
    Unsigned 8-bit integer
    Message Class

gsm_map.cbs.coding_grp4_7_class_ind  Message Class present
    Boolean
    Message Class present

gsm_map.cbs.coding_grp4_7_comp  Compressed indicator
    Boolean
    Compressed indicator

gsm_map.cbs.gsm_map_cbs_coding_grp15_class  Message Class
    Unsigned 8-bit integer
    Message Class

gsm_map.cellGlobalIdOrServiceAreaIdFixedLength  cellGlobalIdOrServiceAreaIdFixed
    Byte array
    gsm_map.CellGlobalIdOrServiceAreaIdFixedLength

gsm_map.ch.additionalSignalInfo  additionalSignalInfo
    No value
    gsm_map.Ext_ExternalSignalInfo

gsm_map.ch.alertingPattern  alertingPattern
    Byte array
    gsm_map.AlertingPattern

gsm_map.ch.allInformationSent  allInformationSent
    No value
    gsm_map_ch.NULL

gsm_map.ch.allowedServices  allowedServices
    Byte array
    gsm_map_ch.AllowedServices

gsm_map.ch.basicService  basicService
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode

gsm_map.ch.basicService2  basicService2
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode

gsm_map.ch.basicServiceGroup  basicServiceGroup
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode

gsm_map.ch.basicServiceGroup2  basicServiceGroup2
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode

gsm_map.ch.callDiversionTreatmentIndicator  callDiversionTreatmentIndicator
    Byte array
    gsm_map_ch.CallDiversionTreatmentIndicator

gsm_map.ch.callInfo  callInfo
    No value
    gsm_map.ExternalSignalInfo

gsm_map.ch.callOutcome  callOutcome
    Unsigned 32-bit integer
    gsm_map_ch.CallOutcome

```

```
gsm_map.ch.callReferenceNumber  callReferenceNumber
    Byte array
    gsm_map_ch.CallReferenceNumber

gsm_map.ch.callReportdata  callReportdata
    No value
    gsm_map_ch.CallReportData

gsm_map.ch.callTerminationIndicator  callTerminationIndicator
    Unsigned 32-bit integer
    gsm_map_ch.CallTerminationIndicator

gsm_map.ch.camelInfo  camelInfo
    No value
    gsm_map_ch.CamelInfo

gsm_map.ch.camelRoutingInfo  camelRoutingInfo
    No value
    gsm_map_ch.CamelRoutingInfo

gsm_map.ch.ccbs_Call  ccbs-Call
    No value
    gsm_map_ch.NULL

gsm_map.ch.ccbs_Feature  ccbs-Feature
    No value
    gsm_map_ss.CCBS_Feature

gsm_map.ch.ccbs_Indicators  ccbs-Indicators
    No value
    gsm_map_ch.CCBS_Indicators

gsm_map.ch.ccbs_Monitoring  ccbs-Monitoring
    Unsigned 32-bit integer
    gsm_map_ch.ReportingState

gsm_map.ch.ccbs_Possible  ccbs-Possible
    No value
    gsm_map_ch.NULL

gsm_map.ch.ccbs_SubscriberStatus  ccbs-SubscriberStatus
    Unsigned 32-bit integer
    gsm_map_ch.CCBS_SubscriberStatus

gsm_map.ch.cugSubscriptionFlag  cugSubscriptionFlag
    No value
    gsm_map_ch.NULL

gsm_map.ch.cug_CheckInfo  cug-CheckInfo
    No value
    gsm_map_ch.CUG_CheckInfo

gsm_map.ch.cug_Interlock  cug-Interlock
    Byte array
    gsm_map_ms.CUG_Interlock

gsm_map.ch.cug_OutgoingAccess  cug-OutgoingAccess
    No value
    gsm_map_ch.NULL

gsm_map.ch.d_csi  d-csi
    No value
    gsm_map_ms.D_CSI
```

```
gsm_map.ch.eventReportData  eventReportData
    No value
    gsm_map_ch.EventReportData
gsm_map.ch.extendedRoutingInfo  extendedRoutingInfo
    Unsigned 32-bit integer
    gsm_map_ch.ExtendedRoutingInfo
gsm_map.ch.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer
gsm_map.ch.firstServiceAllowed  firstServiceAllowed
    Boolean
gsm_map.ch.forwardedToNumber  forwardedToNumber
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.ch.forwardedToSubaddress  forwardedToSubaddress
    Byte array
    gsm_map.ISDN_SubaddressString
gsm_map.ch.forwardingData  forwardingData
    No value
    gsm_map_ch.ForwardingData
gsm_map.ch.forwardingInterrogationRequired  forwardingInterrogationRequired
    No value
    gsm_map_ch.NULL
gsm_map.ch.forwardingOptions  forwardingOptions
    Byte array
    gsm_map_ss.ForwardingOptions
gsm_map.ch.forwardingReason  forwardingReason
    Unsigned 32-bit integer
    gsm_map_ch.ForwardingReason
gsm_map.ch.gsmcCamelSubscriptionInfo  gsmcCamelSubscriptionInfo
    No value
    gsm_map_ch.GsmcCamelSubscriptionInfo
gsm_map.ch.gsmc_Address  gsmc-Address
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.ch.gsmc_OrGsmSCF_Address  gsmc-OrGsmSCF-Address
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.ch.gsmSCF_InitiatedCall  gsmSCF-InitiatedCall
    No value
    gsm_map_ch.NULL
gsm_map.ch.gsm_BearerCapability  gsm-BearerCapability
    No value
    gsm_map.ExternalSignalInfo
gsm_map.ch.imsi  imsi
    Byte array
    gsm_map.IMSI
```

```
gsm_map.ch.interrogationType  interrogationType
    Unsigned 32-bit integer
    gsm_map_ch.InterrogationType

gsm_map.ch.istAlertTimer  istAlertTimer
    Unsigned 32-bit integer
    gsm_map_ms.IST_AlertTimerValue

gsm_map.ch.istInformationWithdraw  istInformationWithdraw
    No value
    gsm_map_ch.NULL

gsm_map.ch.istSupportIndicator  istSupportIndicator
    Unsigned 32-bit integer
    gsm_map_ms.IST_SupportIndicator

gsm_map.ch.keepCCBS_CallIndicator  keepCCBS-CallIndicator
    No value
    gsm_map_ch.NULL

gsm_map.ch.lmsi  lmsi
    Byte array
    gsm_map.LMSI

gsm_map.ch.longFTN_Supported  longFTN-Supported
    No value
    gsm_map_ch.NULL

gsm_map.ch.longForwardedToNumber  longForwardedToNumber
    Byte array
    gsm_map.FTN_AddressString

gsm_map.ch.monitoringMode  monitoringMode
    Unsigned 32-bit integer
    gsm_map_ch.MonitoringMode

gsm_map.ch.msc_Number  msc-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ch.msisdn  msisdn
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ch.msrn  msrn
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ch.mtRoamingRetry  mtRoamingRetry
    No value
    gsm_map_ch.NULL

gsm_map.ch.mtRoamingRetrySupported  mtRoamingRetrySupported
    No value
    gsm_map_ch.NULL

gsm_map.ch.naea_PreferredCI  naea-PreferredCI
    No value
    gsm_map.NAEA_PreferredCI

gsm_map.ch.networkSignalInfo  networkSignalInfo
    No value
    gsm_map.ExternalSignalInfo
```

```

gsm_map.ch.networkSignalInfo2  networkSignalInfo2
    No value
    gsm_map.ExternalSignalInfo
gsm_map.ch.numberOfForwarding  numberOfForwarding
    Unsigned 32-bit integer
    gsm_map_ch.NumberOfForwarding
gsm_map.ch.numberPortabilityStatus  numberPortabilityStatus
    Unsigned 32-bit integer
    gsm_map_ms.NumberPortabilityStatus
gsm_map.ch.o_BcsmCamelTDPCriteriaList  o-BcsmCamelTDPCriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.O_BcsmCamelTDPCriteriaList
gsm_map.ch.o_BcsmCamelTDP_CriteriaList  o-BcsmCamelTDP-CriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.O_BcsmCamelTDPCriteriaList
gsm_map.ch.o_CSI  o-CSI
    No value
    gsm_map_ms.O_CSI
gsm_map.ch.offeredCamel4CSIs  offeredCamel4CSIs
    Byte array
    gsm_map_ms.OfferedCamel4CSIs
gsm_map.ch.offeredCamel4CSIsInInterrogatingNode  offeredCamel4CSIsInInterrogatingNode
    Byte array
    gsm_map_ms.OfferedCamel4CSIs
gsm_map.ch.offeredCamel4CSIsInVMSC  offeredCamel4CSIsInVMSC
    Byte array
    gsm_map_ms.OfferedCamel4CSIs
gsm_map.ch.orNotSupportedInGMSC  orNotSupportedInGMSC
    No value
    gsm_map_ch.NULL
gsm_map.ch.or_Capability  or-Capability
    Unsigned 32-bit integer
    gsm_map_ch.OR_Phase
gsm_map.ch.or_Interrogation  or-Interrogation
    No value
    gsm_map_ch.NULL
gsm_map.ch.pre_pagingSupported  pre-pagingSupported
    No value
    gsm_map_ch.NULL
gsm_map.ch.releaseResourcesSupported  releaseResourcesSupported
    No value
    gsm_map_ch.NULL
gsm_map.ch.replaceB_Number  replaceB-Number
    No value
    gsm_map_ch.NULL
gsm_map.ch.roamingNumber  roamingNumber
    Byte array
    gsm_map.ISDN_AddressString

```

```

gsm_map.ch.routingInfo routingInfo
    Unsigned 32-bit integer
    gsm_map_ch.RoutingInfo

gsm_map.ch.routingInfo2 routingInfo2
    Unsigned 32-bit integer
    gsm_map_ch.RoutingInfo

gsm_map.ch.ruf_Outcome ruf-Outcome
    Unsigned 32-bit integer
    gsm_map_ch.RUF_Outcome

gsm_map.ch.secondServiceAllowed secondServiceAllowed
    Boolean

gsm_map.ch.ss_List ss-List
    Unsigned 32-bit integer
    gsm_map_ss.SS_List

gsm_map.ch.ss_List2 ss-List2
    Unsigned 32-bit integer
    gsm_map_ss.SS_List

gsm_map.ch.subscriberInfo subscriberInfo
    No value
    gsm_map_ms.SubscriberInfo

gsm_map.ch.supportedCCBS_Phase supportedCCBS-Phase
    Unsigned 32-bit integer
    gsm_map_ch.SupportedCCBS_Phase

gsm_map.ch.supportedCamelPhases supportedCamelPhases
    Byte array
    gsm_map_ms.SupportedCamelPhases

gsm_map.ch.supportedCamelPhasesInInterrogatingNode supportedCamelPhasesInInterrogatingNode
    Byte array
    gsm_map_ms.SupportedCamelPhases

gsm_map.ch.supportedCamelPhasesInVMSC supportedCamelPhasesInVMSC
    Byte array
    gsm_map_ms.SupportedCamelPhases

gsm_map.ch.suppressCCBS suppressCCBS
    Boolean

gsm_map.ch.suppressCUG suppressCUG
    Boolean

gsm_map.ch.suppressIncomingCallBarring suppressIncomingCallBarring
    No value
    gsm_map_ch.NULL

gsm_map.ch.suppressMTSS suppressMTSS
    Byte array
    gsm_map_ch.SuppressMTSS

gsm_map.ch.suppress_T_CSI suppress-T-CSI
    No value
    gsm_map_ch.NULL

```

```
gsm_map.ch.suppress_VT_CSI  suppress-VT-CSI
  No value
  gsm_map_ch.NULL

gsm_map.ch.suppressionOfAnnouncement  suppressionOfAnnouncement
  No value
  gsm_map_ch.SuppressionOfAnnouncement

gsm_map.ch.t_BCSM_CAMEL_TDP_CriteriaList  t-BCSM-CAMEL-TDP-CriteriaList
  Unsigned 32-bit integer
  gsm_map_ms.T_BCSM_CAMEL_TDP_CriteriaList

gsm_map.ch.t_CSI  t-CSI
  No value
  gsm_map_ms.T_CSI

gsm_map.ch.translatedB_Number  translatedB-Number
  Byte array
  gsm_map.ISDN_AddressString

gsm_map.ch.unavailabilityCause  unavailabilityCause
  Unsigned 32-bit integer
  gsm_map_ch.UnavailabilityCause

gsm_map.ch.uuIndicator  uuIndicator
  Byte array
  gsm_map_ch.UUIndicator

gsm_map.ch.uu_Data  uu-Data
  No value
  gsm_map_ch.UU_Data

gsm_map.ch.uui  uui
  Byte array
  gsm_map_ch.UUI

gsm_map.ch.uusCFInteraction  uusCFInteraction
  No value
  gsm_map_ch.NULL

gsm_map.ch.vmsc_Address  vmsc-Address
  Byte array
  gsm_map.ISDN_AddressString

gsm_map.currentPassword  currentPassword
  String

gsm_map.defaultPriority  defaultPriority
  Unsigned 32-bit integer
  gsm_map.EMLPP_Priority

gsm_map.dialogue.MAP_DialoguePDU  MAP-DialoguePDU
  Unsigned 32-bit integer
  gsm_map_dialogue.MAP_DialoguePDU

gsm_map.dialogue.alternativeApplicationContext  alternativeApplicationContext
  gsm_map_dialogue.OBJECT_IDENTIFIER

gsm_map.dialogue.applicationProcedureCancellation  applicationProcedureCancellation
  Unsigned 32-bit integer
  gsm_map_dialogue.ProcedureCancellationReason
```

```
gsm_map.dialogue.destinationReference destinationReference
    Byte array
    gsm_map.AddressString
gsm_map.dialogue.extensionContainer extensionContainer
    No value
    gsm_map.ExtensionContainer
gsm_map.dialogue.map_ProviderAbortReason map-ProviderAbortReason
    Unsigned 32-bit integer
    gsm_map_dialogue.MAP_ProviderAbortReason
gsm_map.dialogue.map_UserAbortChoice map-UserAbortChoice
    Unsigned 32-bit integer
    gsm_map_dialogue.MAP_UserAbortChoice
gsm_map.dialogue.map_accept map-accept
    No value
    gsm_map_dialogue.MAP_AcceptInfo
gsm_map.dialogue.map_close map-close
    No value
    gsm_map_dialogue.MAP_CloseInfo
gsm_map.dialogue.map_open map-open
    No value
    gsm_map_dialogue.MAP_OpenInfo
gsm_map.dialogue.map_providerAbort map-providerAbort
    No value
    gsm_map_dialogue.MAP_ProviderAbortInfo
gsm_map.dialogue.map_refuse map-refuse
    No value
    gsm_map_dialogue.MAP_RefuseInfo
gsm_map.dialogue.map_userAbort map-userAbort
    No value
    gsm_map_dialogue.MAP_UserAbortInfo
gsm_map.dialogue.originationReference originationReference
    Byte array
    gsm_map.AddressString
gsm_map.dialogue.reason reason
    Unsigned 32-bit integer
    gsm_map_dialogue.Reason
gsm_map.dialogue.resourceUnavailable resourceUnavailable
    Unsigned 32-bit integer
    gsm_map_dialogue.ResourceUnavailableReason
gsm_map.dialogue.userResourceLimitation userResourceLimitation
    No value
    gsm_map_dialogue.NULL
gsm_map.dialogue.userSpecificReason userSpecificReason
    No value
    gsm_map_dialogue.NULL
gsm_map.er.absentSubscriberDiagnosticSM absentSubscriberDiagnosticSM
    Unsigned 32-bit integer
    gsm_map_er.AbsentSubscriberDiagnosticSM
```



```

gsm_map.er.absentSubscriberReason  absentSubscriberReason
    Unsigned 32-bit integer
    gsm_map_er.AbsentSubscriberReason

gsm_map.er.additionalAbsentSubscriberDiagnosticSM  additionalAbsentSubscriberDia
    Unsigned 32-bit integer
    gsm_map_er.AbsentSubscriberDiagnosticSM

gsm_map.er.additionalNetworkResource  additionalNetworkResource
    Unsigned 32-bit integer
    gsm_map.AdditionalNetworkResource

gsm_map.er.additionalRoamingNotAllowedCause  additionalRoamingNotAllowedCause
    Unsigned 32-bit integer
    gsm_map_er.AdditionalRoamingNotAllowedCause

gsm_map.er.basicService  basicService
    Unsigned 32-bit integer
    gsm_map.BasicServiceCode

gsm_map.er.callBarringCause  callBarringCause
    Unsigned 32-bit integer
    gsm_map_er.CallBarringCause

gsm_map.er.ccbs_Busy  ccbs-Busy
    No value
    gsm_map_er.NULL

gsm_map.er.ccbs_Possible  ccbs-Possible
    No value
    gsm_map_er.NULL

gsm_map.er.cug_RejectCause  cug-RejectCause
    Unsigned 32-bit integer
    gsm_map_er.CUG_RejectCause

gsm_map.er.diagnosticInfo  diagnosticInfo
    Byte array
    gsm_map.SignalInfo

gsm_map.er.extensibleCallBarredParam  extensibleCallBarredParam
    No value
    gsm_map_er.ExtensibleCallBarredParam

gsm_map.er.extensibleSystemFailureParam  extensibleSystemFailureParam
    No value
    gsm_map_er.ExtensibleSystemFailureParam

gsm_map.er.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer

gsm_map.er.failureCauseParam  failureCauseParam
    Unsigned 32-bit integer
    gsm_map_er.FailureCauseParam

gsm_map.er.gprsConnectionSuspended  gprsConnectionSuspended
    No value
    gsm_map_er.NULL

gsm_map.er.neededLcsCapabilityNotSupportedInServingNode  neededLcsCapabilityNotS
    No value
    gsm_map_er.NULL

```

```

gsm_map.er.networkResource  networkResource
    Unsigned 32-bit integer
    gsm_map.NetworkResource

gsm_map.er.positionMethodFailure_Diagnostic  positionMethodFailure-Diagnostic
    Unsigned 32-bit integer
    gsm_map_er.PositionMethodFailure_Diagnostic

gsm_map.er.roamingNotAllowedCause  roamingNotAllowedCause
    Unsigned 32-bit integer
    gsm_map_er.RoamingNotAllowedCause

gsm_map.er.shapeOfLocationEstimateNotSupported  shapeOfLocationEstimateNotSupport
    No value
    gsm_map_er.NULL

gsm_map.er.sm_EnumeratedDeliveryFailureCause  sm-EnumeratedDeliveryFailureCause
    Unsigned 32-bit integer
    gsm_map_er.SM_EnumeratedDeliveryFailureCause

gsm_map.er.ss_Code  ss-Code
    Unsigned 8-bit integer
    gsm_map.SS_Code

gsm_map.er.ss_Status  ss-Status
    Byte array
    gsm_map_ss.SS_Status

gsm_map.er.unauthorisedMessageOriginator  unauthorisedMessageOriginator
    No value
    gsm_map_er.NULL

gsm_map.er.unauthorizedLCSCClient_Diagnostic  unauthorizedLCSCClient-Diagnostic
    Unsigned 32-bit integer
    gsm_map_er.UnauthorizedLCSCClient_Diagnostic

gsm_map.er.unknownSubscriberDiagnostic  unknownSubscriberDiagnostic
    Unsigned 32-bit integer
    gsm_map_er.UnknownSubscriberDiagnostic

gsm_map.extId  extId
    gsm_map.T_extId

gsm_map.extType  extType
    No value
    gsm_map.T_extType

gsm_map.ext_BearerService  ext-BearerService
    Unsigned 8-bit integer
    gsm_map.Ext_BearerServiceCode

gsm_map.ext_ProtocolId  ext-ProtocolId
    Unsigned 32-bit integer
    gsm_map.Ext_ProtocolId

gsm_map.ext_Teleservice  ext-Teleservice
    Unsigned 8-bit integer
    gsm_map.Ext_TeleserviceCode

gsm_map.ext_qos_subscribed_pri  Allocation/Retention priority
    Unsigned 8-bit integer
    Allocation/Retention priority

```

```
gsm_map.extension      Extension
  Boolean
  Extension

gsm_map.extensionContainer  extensionContainer
  No value
  gsm_map.ExtensionContainer

gsm_map.externalAddress  externalAddress
  Byte array
  gsm_map.ISDN_AddressString

gsm_map.forwarding_reason  Forwarding reason
  Unsigned 8-bit integer
  forwarding reason

gsm_map.gad.D  D: Direction of Altitude
  Unsigned 16-bit integer
  D: Direction of Altitude

gsm_map.gad.altitude  Altitude in meters
  Unsigned 16-bit integer
  Altitude

gsm_map.gad.confidence  Confidence(%)
  Unsigned 8-bit integer
  Confidence(%)

gsm_map.gad.included_angle  Included angle
  Unsigned 8-bit integer
  Included angle

gsm_map.gad.location_estimate  Location estimate
  Unsigned 8-bit integer
  Location estimate

gsm_map.gad.no_of_points  Number of points
  Unsigned 8-bit integer
  Number of points

gsm_map.gad.offset_angle  Offset angle
  Unsigned 8-bit integer
  Offset angle

gsm_map.gad.orientation_of_major_axis  Orientation of major axis
  Unsigned 8-bit integer
  Orientation of major axis

gsm_map.gad.sign_of_latitude  Sign of latitude
  Unsigned 8-bit integer
  Sign of latitude

gsm_map.gad.sign_of_longitude  Degrees of longitude
  Unsigned 24-bit integer
  Degrees of longitude

gsm_map.gad.uncertainty_altitude  Uncertainty Altitude
  Unsigned 8-bit integer
  Uncertainty Altitude

gsm_map.gad.uncertainty_code  Uncertainty code
  Unsigned 8-bit integer
  Uncertainty code
```

```

gsm_map.gad.uncertainty_semi_major  Uncertainty semi-major
    Unsigned 8-bit integer
    Uncertainty semi-major

gsm_map.gad.uncertainty_semi_minor  Uncertainty semi-minor
    Unsigned 8-bit integer
    Uncertainty semi-minor

gsm_map.gr.additionalInfo  additionalInfo
    Byte array
    gsm_map_ms.AdditionalInfo

gsm_map.gr.additionalSubscriptions  additionalSubscriptions
    Byte array
    gsm_map_ms.AdditionalSubscriptions

gsm_map.gr.an_APDU  an-APDU
    No value
    gsm_map.AccessNetworkSignalInfo

gsm_map.gr.anchorMSC_Address  anchorMSC-Address
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.gr.asciCallReference  asciCallReference
    Byte array
    gsm_map.ASCI_CallReference

gsm_map.gr.callOriginator  callOriginator
    No value
    gsm_map_gr.NULL

gsm_map.gr.cellId  cellId
    Byte array
    gsm_map.GlobalCellId

gsm_map.gr.cipheringAlgorithm  cipheringAlgorithm
    Byte array
    gsm_map_gr.CipheringAlgorithm

gsm_map.gr.cksn  cksn
    Byte array
    gsm_map_ms.Cksn

gsm_map.gr.codec_Info  codec-Info
    Byte array
    gsm_map_gr.CODEC_Info

gsm_map.gr.downlinkAttached  downlinkAttached
    No value
    gsm_map_gr.NULL

gsm_map.gr.dualCommunication  dualCommunication
    No value
    gsm_map_gr.NULL

gsm_map.gr.emergencyModeResetCommandFlag  emergencyModeResetCommandFlag
    No value
    gsm_map_gr.NULL

gsm_map.gr.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer

```

```

gsm_map.gr.groupCallNumber  groupCallNumber
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.gr.groupId  groupId
    Byte array
    gsm_map_ms.Long_GroupId
gsm_map.gr.groupKey  groupKey
    Byte array
    gsm_map_ms.Kc
gsm_map.gr.groupKeyNumber_Vk_Id  groupKeyNumber-Vk-Id
    Unsigned 32-bit integer
    gsm_map_gr.GroupKeyNumber
gsm_map.gr.imsi  imsi
    Byte array
    gsm_map.IMSI
gsm_map.gr.kc  kc
    Byte array
    gsm_map_ms.Kc
gsm_map.gr.priority  priority
    Unsigned 32-bit integer
    gsm_map.EMLPP_Priority
gsm_map.gr.releaseGroupCall  releaseGroupCall
    No value
    gsm_map_gr.NULL
gsm_map.gr.requestedInfo  requestedInfo
    Unsigned 32-bit integer
    gsm_map_gr.RequestedInfo
gsm_map.gr.sm_RP_UI  sm-RP-UI
    Byte array
    gsm_map.SignalInfo
gsm_map.gr.stateAttributes  stateAttributes
    No value
    gsm_map_gr.StateAttributes
gsm_map.gr.talkerChannelParameter  talkerChannelParameter
    No value
    gsm_map_gr.NULL
gsm_map.gr.talkerPriority  talkerPriority
    Unsigned 32-bit integer
    gsm_map_gr.TalkerPriority
gsm_map.gr.teleservice  teleservice
    Unsigned 8-bit integer
    gsm_map.Ext_TeleserviceCode
gsm_map.gr.tmsi  tmsi
    Byte array
    gsm_map.TMSI
gsm_map.gr.uplinkAttached  uplinkAttached
    No value
    gsm_map_gr.NULL

```

```
gsm_map.gr.uplinkFree    uplinkFree
    No value
    gsm_map_gr.NULL

gsm_map.gr.uplinkRejectCommand  uplinkRejectCommand
    No value
    gsm_map_gr.NULL

gsm_map.gr.uplinkReleaseCommand  uplinkReleaseCommand
    No value
    gsm_map_gr.NULL

gsm_map.gr.uplinkReleaseIndication  uplinkReleaseIndication
    No value
    gsm_map_gr.NULL

gsm_map.gr.uplinkRequest  uplinkRequest
    No value
    gsm_map_gr.NULL

gsm_map.gr.uplinkRequestAck  uplinkRequestAck
    No value
    gsm_map_gr.NULL

gsm_map.gr.uplinkSeizedCommand  uplinkSeizedCommand
    No value
    gsm_map_gr.NULL

gsm_map.gr.vstk    vstk
    Byte array
    gsm_map_gr.VSTK

gsm_map.gr.vstk_rand  vstk-rand
    Byte array
    gsm_map_gr.VSTK_RAND

gsm_map.gsnaddress_ipv4  GSN-Address IPv4
    IPv4 address
    IPAddress IPv4

gsm_map.gsnaddress_ipv6  GSN Address IPv6
    IPv4 address
    IPAddress IPv6

gsm_map.ietf_pdp_type_number  PDP Type Number
    Unsigned 8-bit integer
    IETF PDP Type Number

gsm_map.imsi    imsi
    Byte array
    gsm_map.IMSI

gsm_map.imsi_WithLMSI  imsi-WithLMSI
    No value
    gsm_map.IMSI_WithLMSI

gsm_map.imsi_digits  IMSI digits
    String
    IMSI digits

gsm_map.isdn.address.digits  ISDN Address digits
    String
    ISDN Address digits
```

```
gsm_map.laiFixedLength  laiFixedLength
    Byte array
    gsm_map.LAIFixedLength

gsm_map.lcs.AreaList_item  Item
    No value
    gsm_map_lcs.Area

gsm_map.lcs.PLMNList_item  Item
    No value
    gsm_map_lcs.ReportingPLMN

gsm_map.lcs.accuracyFulfilmentIndicator  accuracyFulfilmentIndicator
    Unsigned 32-bit integer
    gsm_map_lcs.AccuracyFulfilmentIndicator

gsm_map.lcs.add_LocationEstimate  add-LocationEstimate
    Byte array
    gsm_map_lcs.Add_GeographicalInformation

gsm_map.lcs.additional_LCS_CapabilitySets  additional-LCS-CapabilitySets
    Byte array
    gsm_map_ms.SupportedLCS_CapabilitySets

gsm_map.lcs.additional_Number  additional-Number
    Unsigned 32-bit integer
    gsm_map_sm.Additional_Number

gsm_map.lcs.additional_v_gmlc_Address  additional-v-gmlc-Address
    Byte array
    gsm_map_ms.GSN_Address

gsm_map.lcs.ageOfLocationEstimate  ageOfLocationEstimate
    Unsigned 32-bit integer
    gsm_map.AgeOfLocationInformation

gsm_map.lcs.areaDefinition  areaDefinition
    No value
    gsm_map_lcs.AreaDefinition

gsm_map.lcs.areaEventInfo  areaEventInfo
    No value
    gsm_map_lcs.AreaEventInfo

gsm_map.lcs.areaIdentification  areaIdentification
    Byte array
    gsm_map_lcs.AreaIdentification

gsm_map.lcs.areaList  areaList
    Unsigned 32-bit integer
    gsm_map_lcs.AreaList

gsm_map.lcs.areaType  areaType
    Unsigned 32-bit integer
    gsm_map_lcs.AreaType

gsm_map.lcs.beingInsideArea  beingInsideArea
    Boolean

gsm_map.lcs.callSessionRelated  callSessionRelated
    Unsigned 32-bit integer
    gsm_map_lcs.PrivacyCheckRelatedAction
```

```

gsm_map.lcs.callSessionUnrelated  callSessionUnrelated
    Unsigned 32-bit integer
    gsm_map_lcs.PrivacyCheckRelatedAction
gsm_map.lcs.cellIdOrSai  cellIdOrSai
    Unsigned 32-bit integer
    gsm_map.CellGlobalIdOrServiceAreaIdOrLAI
gsm_map.lcs.dataCodingScheme  dataCodingScheme
    Byte array
    gsm_map_ss.USSD_DataCodingScheme
gsm_map.lcs.deferredLocationEventType  deferredLocationEventType
    Byte array
    gsm_map_lcs.DeferredLocationEventType
gsm_map.lcs.deferredmt_lrData  deferredmt-lrData
    No value
    gsm_map_lcs.Deferredmt_lrData
gsm_map.lcs.deferredmt_lrResponseIndicator  deferredmt-lrResponseIndicator
    No value
    gsm_map_lcs.NULL
gsm_map.lcs.ellipsoidArc  ellipsoidArc
    Boolean
gsm_map.lcs.ellipsoidPoint  ellipsoidPoint
    Boolean
gsm_map.lcs.ellipsoidPointWithAltitude  ellipsoidPointWithAltitude
    Boolean
gsm_map.lcs.ellipsoidPointWithAltitudeAndUncertaintyElipsoid  ellipsoidPointWith
    Boolean
gsm_map.lcs.ellipsoidPointWithUncertaintyCircle  ellipsoidPointWithUncertaintyCi
    Boolean
gsm_map.lcs.ellipsoidPointWithUncertaintyEllipse  ellipsoidPointWithUncertaintyE
    Boolean
gsm_map.lcs.enteringIntoArea  enteringIntoArea
    Boolean
gsm_map.lcs.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer
gsm_map.lcs.geranPositioningData  geranPositioningData
    Byte array
    gsm_map_lcs.PositioningDataInformation
gsm_map.lcs.gprsNodeIndicator  gprsNodeIndicator
    No value
    gsm_map_lcs.NULL
gsm_map.lcs.h_gmlc_Address  h-gmlc-Address
    Byte array
    gsm_map_ms.GSN_Address
gsm_map.lcs.horizontal_accuracy  horizontal-accuracy
    Byte array
    gsm_map_lcs.Horizontal_Accuracy

```



```

gsm_map.lcs.imei imei
    Byte array
    gsm_map.IMEI
gsm_map.lcs.imsi imsi
    Byte array
    gsm_map.IMSI
gsm_map.lcs.intervalTime intervalTime
    Unsigned 32-bit integer
    gsm_map_lcs.IntervalTime
gsm_map.lcs.lcsAPN lcsAPN
    Byte array
    gsm_map_ms.APN
gsm_map.lcs.lcsClientDialedByMS lcsClientDialedByMS
    Byte array
    gsm_map.AddressString
gsm_map.lcs.lcsClientExternalID lcsClientExternalID
    No value
    gsm_map.LCSClientExternalID
gsm_map.lcs.lcsClientInternalID lcsClientInternalID
    Unsigned 32-bit integer
    gsm_map.LCSClientInternalID
gsm_map.lcs.lcsClientName lcsClientName
    No value
    gsm_map_lcs.LCSClientName
gsm_map.lcs.lcsClientType lcsClientType
    Unsigned 32-bit integer
    gsm_map_lcs.LCSClientType
gsm_map.lcs.lcsCodeword lcsCodeword
    No value
    gsm_map_lcs.LCSCodeword
gsm_map.lcs.lcsCodewordString lcsCodewordString
    Byte array
    gsm_map_lcs.LCSCodewordString
gsm_map.lcs.lcsLocationInfo lcsLocationInfo
    No value
    gsm_map_lcs.LCSLocationInfo
gsm_map.lcs.lcsRequestorID lcsRequestorID
    No value
    gsm_map_lcs.LCSRequestorID
gsm_map.lcs.lcsServiceTypeID lcsServiceTypeID
    Unsigned 32-bit integer
    gsm_map.LCSServiceTypeID
gsm_map.lcs.lcs_ClientID lcs-ClientID
    No value
    gsm_map_lcs.LCS_ClientID
gsm_map.lcs.lcs_Event lcs-Event
    Unsigned 32-bit integer
    gsm_map_lcs.LCS_Event

```

```
gsm_map.lcs.lcs_FormatIndicator  lcs-FormatIndicator
    Unsigned 32-bit integer
    gsm_map_lcs.LCS_FormatIndicator
gsm_map.lcs.lcs_Priority  lcs-Priority
    Byte array
    gsm_map_lcs.LCS_Priority
gsm_map.lcs.lcs_PrivacyCheck  lcs-PrivacyCheck
    No value
    gsm_map_lcs.LCS_PrivacyCheck
gsm_map.lcs.lcs_QoS  lcs-QoS
    No value
    gsm_map_lcs.LCS_QoS
gsm_map.lcs.lcs_ReferenceNumber  lcs-ReferenceNumber
    Byte array
    gsm_map_lcs.LCS_ReferenceNumber
gsm_map.lcs.leavingFromArea  leavingFromArea
    Boolean
gsm_map.lcs.lmsi  lmsi
    Byte array
    gsm_map.LMSI
gsm_map.lcs.locationEstimate  locationEstimate
    Byte array
    gsm_map_lcs.Ext_GeographicalInformation
gsm_map.lcs.locationEstimateType  locationEstimateType
    Unsigned 32-bit integer
    gsm_map_lcs.LocationEstimateType
gsm_map.lcs.locationType  locationType
    No value
    gsm_map_lcs.LocationType
gsm_map.lcs.mlcNumber  mlcNumber
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.lcs.mlc_Number  mlc-Number
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.lcs.mo_lrShortCircuitIndicator  mo-lrShortCircuitIndicator
    No value
    gsm_map_lcs.NULL
gsm_map.lcs.msAvailable  msAvailable
    Boolean
gsm_map.lcs.msisdn  msisdn
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.lcs.na_ESRD  na-ESRD
    Byte array
    gsm_map.ISDN_AddressString
```

```
gsm_map.lcs.na_ESRK na-ESRK
  Byte array
  gsm_map.ISDN_AddressString
gsm_map.lcs.nameString nameString
  Byte array
  gsm_map_lcs.NameString
gsm_map.lcs.networkNode_Number networkNode-Number
  Byte array
  gsm_map.ISDN_AddressString
gsm_map.lcs.occurrenceInfo occurrenceInfo
  Unsigned 32-bit integer
  gsm_map_lcs.OccurrenceInfo
gsm_map.lcs.periodicLDR periodicLDR
  Boolean
gsm_map.lcs.periodicLDRInfo periodicLDRInfo
  No value
  gsm_map_lcs.PeriodicLDRInfo
gsm_map.lcs.plmn_Id plmn-Id
  Byte array
  gsm_map.PLMN_Id
gsm_map.lcs.plmn_List plmn-List
  Unsigned 32-bit integer
  gsm_map_lcs.PLMNList
gsm_map.lcs.plmn_ListPrioritized plmn-ListPrioritized
  No value
  gsm_map_lcs.NULL
gsm_map.lcs.polygon polygon
  Boolean
gsm_map.lcs.ppr_Address ppr-Address
  Byte array
  gsm_map_ms.GSN_Address
gsm_map.lcs.privacyOverride privacyOverride
  No value
  gsm_map_lcs.NULL
gsm_map.lcs.pseudonymIndicator pseudonymIndicator
  No value
  gsm_map_lcs.NULL
gsm_map.lcs.ran_PeriodicLocationSupport ran-PeriodicLocationSupport
  No value
  gsm_map_lcs.NULL
gsm_map.lcs.ran_Technology ran-Technology
  Unsigned 32-bit integer
  gsm_map_lcs.RAN_Technology
gsm_map.lcs.reportingAmount reportingAmount
  Unsigned 32-bit integer
  gsm_map_lcs.ReportingAmount
```

```

gsm_map.lcs.reportingInterval  reportingInterval
    Unsigned 32-bit integer
    gsm_map_lcs.ReportingInterval

gsm_map.lcs.reportingPLMNList  reportingPLMNList
    No value
    gsm_map_lcs.ReportingPLMNList

gsm_map.lcs.requestorIDString  requestorIDString
    Byte array
    gsm_map_lcs.RequestorIDString

gsm_map.lcs.responseTime      responseTime
    No value
    gsm_map_lcs.ResponseTime

gsm_map.lcs.responseTimeCategory  responseTimeCategory
    Unsigned 32-bit integer
    gsm_map_lcs.ResponseTimeCategory

gsm_map.lcs.sai_Present      sai-Present
    No value
    gsm_map_lcs.NULL

gsm_map.lcs.sequenceNumber    sequenceNumber
    Unsigned 32-bit integer
    gsm_map_lcs.SequenceNumber

gsm_map.lcs.slr_ArgExtensionContainer  slr-ArgExtensionContainer
    No value
    gsm_map.SLR_ArgExtensionContainer

gsm_map.lcs.supportedGADShapes  supportedGADShapes
    Byte array
    gsm_map_lcs.SupportedGADShapes

gsm_map.lcs.supportedLCS_CapabilitySets  supportedLCS-CapabilitySets
    Byte array
    gsm_map_ms.SupportedLCS_CapabilitySets

gsm_map.lcs.targetMS          targetMS
    Unsigned 32-bit integer
    gsm_map.SubscriberIdentity

gsm_map.lcs.terminationCause  terminationCause
    Unsigned 32-bit integer
    gsm_map_lcs.TerminationCause

gsm_map.lcs.utranPositioningData  utranPositioningData
    Byte array
    gsm_map_lcs.UtranPositioningDataInfo

gsm_map.lcs.v_gmlc_Address      v-gmlc-Address
    Byte array
    gsm_map_ms.GSN_Address

gsm_map.lcs.velocityEstimate    velocityEstimate
    Byte array
    gsm_map_lcs.VelocityEstimate

gsm_map.lcs.velocityRequest     velocityRequest
    No value
    gsm_map_lcs.NULL

```

```
gsm_map.lcs.verticalCoordinateRequest  verticalCoordinateRequest
    No value
    gsm_map_lcs.NULL

gsm_map.lcs.vertical_accuracy  vertical-accuracy
    Byte array
    gsm_map_lcs.Vertical_Accuracy

gsm_map.lmsi  lmsi
    Byte array
    gsm_map.LMSI

gsm_map.maximumentitledPriority  maximumentitledPriority
    Unsigned 32-bit integer
    gsm_map.EMLPP_Priority

gsm_map.ms.BSSMAP_ServiceHandoverList_item  Item
    No value
    gsm_map_ms.BSSMAP_ServiceHandoverInfo

gsm_map.ms.BasicServiceCriteria_item  Item
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode

gsm_map.ms.BasicServiceList_item  Item
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode

gsm_map.ms.BearerServiceList_item  Item
    Unsigned 8-bit integer
    gsm_map.Ext_BearerServiceCode

gsm_map.ms.CUG_FeatureList_item  Item
    No value
    gsm_map_ms.CUG_Feature

gsm_map.ms.CUG_SubscriptionList_item  Item
    No value
    gsm_map_ms.CUG_Subscription

gsm_map.ms.ContextIdList_item  Item
    Unsigned 32-bit integer
    gsm_map_ms.ContextId

gsm_map.ms.DP_AnalysedInfoCriteriaList_item  Item
    No value
    gsm_map_ms.DP_AnalysedInfoCriterium

gsm_map.ms.DestinationNumberLengthList_item  Item
    Unsigned 32-bit integer
    gsm_map_ms.INTEGER_1_maxNumOfISDN_AddressDigits

gsm_map.ms.DestinationNumberList_item  Item
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.Ext_BasicServiceGroupList_item  Item
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode

gsm_map.ms.Ext_CallBarFeatureList_item  Item
    No value
    gsm_map_ms.Ext_CallBarringFeature
```

```
gsm_map.ms.Ext_ExternalClientList_item  Item
    No value
    gsm_map_ms.ExternalClient
gsm_map.ms.Ext_ForwFeatureList_item  Item
    No value
    gsm_map_ms.Ext_ForwFeature
gsm_map.ms.Ext_SS_InfoList_item  Item
    Unsigned 32-bit integer
    gsm_map_ms.Ext_SS_Info
gsm_map.ms.ExternalClientList_item  Item
    No value
    gsm_map_ms.ExternalClient
gsm_map.ms.GMLC_List_item  Item
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.ms.GPRSDataList_item  Item
    No value
    gsm_map_ms.PDP_Context
gsm_map.ms.GPRS_CamelTDPDataList_item  Item
    No value
    gsm_map_ms.GPRS_CamelTDPData
gsm_map.ms.LCS_PrivacyExceptionList_item  Item
    No value
    gsm_map_ms.LCS_PrivacyClass
gsm_map.ms.LSADataList_item  Item
    No value
    gsm_map_ms.LSAData
gsm_map.ms.LSAIdentityList_item  Item
    Byte array
    gsm_map_ms.LSAIdentity
gsm_map.ms.MOLR_List_item  Item
    No value
    gsm_map_ms.MOLR_Class
gsm_map.ms.MSISDN_BS_List_item  Item
    No value
    gsm_map_ms.MSISDN_BS
gsm_map.ms.MT_smsCAMELTDP_CriteriaList_item  Item
    No value
    gsm_map_ms.MT_smsCAMELTDP_Criteria
gsm_map.ms.MobilityTriggers_item  Item
    Byte array
    gsm_map_ms.MM_Code
gsm_map.ms.O_BcsmCamelTDPCriteriaList_item  Item
    No value
    gsm_map_ms.O_BcsmCamelTDP_Criteria
gsm_map.ms.O_BcsmCamelTDPDataList_item  Item
    No value
    gsm_map_ms.O_BcsmCamelTDPData
```

```
gsm_map.ms.O_CauseValueCriteria_item  Item
    Byte array
    gsm_map_ms.CauseValue

gsm_map.ms.PDP_ContextInfoList_item  Item
    No value
    gsm_map_ms.PDP_ContextInfo

gsm_map.ms.PLMNClientList_item  Item
    Unsigned 32-bit integer
    gsm_map.LCSClientInternalID

gsm_map.ms.QuintupletList_item  Item
    No value
    gsm_map_ms.AuthenticationQuintuplet

gsm_map.ms.RadioResourceList_item  Item
    No value
    gsm_map_ms.RadioResource

gsm_map.ms.RelocationNumberList_item  Item
    No value
    gsm_map_ms.RelocationNumber

gsm_map.ms.SMS_CAMEL_TDP_DataList_item  Item
    No value
    gsm_map_ms.SMS_CAMEL_TDP_Data

gsm_map.ms.SS_EventList_item  Item
    Unsigned 8-bit integer
    gsm_map.SS_Code

gsm_map.ms.ServiceTypeList_item  Item
    No value
    gsm_map_ms.ServiceType

gsm_map.ms.TPDU_TypeCriterion_item  Item
    Unsigned 32-bit integer
    gsm_map_ms.MT_SMS_TPDU_Type

gsm_map.ms.T_BCSM_CAMEL_TDP_CriteriaList_item  Item
    No value
    gsm_map_ms.T_BCSM_CAMEL_TDP_Criteria

gsm_map.ms.T_BcsmCamelTDPDataList_item  Item
    No value
    gsm_map_ms.T_BcsmCamelTDPData

gsm_map.ms.T_CauseValueCriteria_item  Item
    Byte array
    gsm_map_ms.CauseValue

gsm_map.ms.TeleserviceList_item  Item
    Unsigned 8-bit integer
    gsm_map.Ext_TeleserviceCode

gsm_map.ms.TripletList_item  Item
    No value
    gsm_map_ms.AuthenticationTriplet

gsm_map.ms.VBSDataList_item  Item
    No value
    gsm_map_ms.VoiceBroadcastData
```

```
gsm_map.ms.VGCSDataList_item  Item
    No value
    gsm_map_ms.VoiceGroupCallData
gsm_map.ms.ZoneCodeList_item  Item
    Byte array
    gsm_map_ms.ZoneCode
gsm_map.ms.accessRestrictionData  accessRestrictionData
    Byte array
    gsm_map_ms.AccessRestrictionData
gsm_map.ms.accessType  accessType
    Unsigned 32-bit integer
    gsm_map_ms.AccessType
gsm_map.ms.add_Capability  add-Capability
    No value
    gsm_map_ms.NULL
gsm_map.ms.add_info  add-info
    No value
    gsm_map_ms.ADD_Info
gsm_map.ms.add_lcs_PrivacyExceptionList  add-lcs-PrivacyExceptionList
    Unsigned 32-bit integer
    gsm_map_ms.LCS_PrivacyExceptionList
gsm_map.ms.additionalInfo  additionalInfo
    Byte array
    gsm_map_ms.AdditionalInfo
gsm_map.ms.additionalRequestedCAMEL_SubscriptionInfo  additionalRequestedCAMEL-S
    Unsigned 32-bit integer
    gsm_map_ms.AdditionalRequestedCAMEL_SubscriptionInfo
gsm_map.ms.additionalSubscriptions  additionalSubscriptions
    Byte array
    gsm_map_ms.AdditionalSubscriptions
gsm_map.ms.ageOfLocationInformation  ageOfLocationInformation
    Unsigned 32-bit integer
    gsm_map.AgeOfLocationInformation
gsm_map.ms.alertingDP  alertingDP
    Boolean
gsm_map.ms.allECT-Barred  allECT-Barred
    Boolean
gsm_map.ms.allGPRSData  allGPRSData
    No value
    gsm_map_ms.NULL
gsm_map.ms.allIC-CallsBarred  allIC-CallsBarred
    Boolean
gsm_map.ms.allInformationSent  allInformationSent
    No value
    gsm_map_ms.NULL
```



```
gsm_map.ms.allLSAData    allLSAData
    No value
    gsm_map_ms.NULL

gsm_map.ms.allOG-CallsBarred    allOG-CallsBarred
    Boolean

gsm_map.ms.allPacketOrientedServicesBarred    allPacketOrientedServicesBarred
    Boolean

gsm_map.ms.allowedGSM_Algorithms    allowedGSM-Algorithms
    Byte array
    gsm_map_ms.AllowedGSM_Algorithms

gsm_map.ms.allowedUMTS_Algorithms    allowedUMTS-Algorithms
    No value
    gsm_map_ms.AllowedUMTS_Algorithms

gsm_map.ms.alternativeChannelType    alternativeChannelType
    Byte array
    gsm_map_ms.RadioResourceInformation

gsm_map.ms.an_APDU    an-APDU
    No value
    gsm_map.AccessNetworkSignalInfo

gsm_map.ms.apn    apn
    Byte array
    gsm_map_ms.APN

gsm_map.ms.apn_InUse    apn-InUse
    Byte array
    gsm_map_ms.APN

gsm_map.ms.apn_Subscribed    apn-Subscribed
    Byte array
    gsm_map_ms.APN

gsm_map.ms.asciCallReference    asciCallReference
    Byte array
    gsm_map.ASCI_CallReference

gsm_map.ms.assumedIdle    assumedIdle
    No value
    gsm_map_ms.NULL

gsm_map.ms.authenticationSetList    authenticationSetList
    Unsigned 32-bit integer
    gsm_map_ms.AuthenticationSetList

gsm_map.ms.autn    autn
    Byte array
    gsm_map_ms.AUTN

gsm_map.ms.auts    auts
    Byte array
    gsm_map_ms.AUTS

gsm_map.ms.basicService    basicService
    Unsigned 32-bit integer
    gsm_map.Ext_BasicServiceCode
```

```
gsm_map.ms.basicServiceCriteria  basicServiceCriteria
    Unsigned 32-bit integer
    gsm_map_ms.BasicServiceCriteria

gsm_map.ms.basicServiceGroupList  basicServiceGroupList
    Unsigned 32-bit integer
    gsm_map_ms.Ext_BasicServiceGroupList

gsm_map.ms.basicServiceList  basicServiceList
    Unsigned 32-bit integer
    gsm_map_ms.BasicServiceList

gsm_map.ms.bearerServiceList  bearerServiceList
    Unsigned 32-bit integer
    gsm_map_ms.BearerServiceList

gsm_map.ms.bmuef  bmuef
    No value
    gsm_map_ms.UESBI_Iu

gsm_map.ms.broadcastInitEntitlementment  broadcastInitEntitlementment
    No value
    gsm_map_ms.NULL

gsm_map.ms.bssmap_ServiceHandover  bssmap-ServiceHandover
    Byte array
    gsm_map_ms.BSSMAP_ServiceHandover

gsm_map.ms.bssmap_ServiceHandoverList  bssmap-ServiceHandoverList
    Unsigned 32-bit integer
    gsm_map_ms.BSSMAP_ServiceHandoverList

gsm_map.ms.callBarringData  callBarringData
    No value
    gsm_map_ms.CallBarringData

gsm_map.ms.callBarringFeatureList  callBarringFeatureList
    Unsigned 32-bit integer
    gsm_map_ms.Ext_CallBarFeatureList

gsm_map.ms.callBarringInfo  callBarringInfo
    No value
    gsm_map_ms.Ext_CallBarInfo

gsm_map.ms.callBarringInfoFor_CSE  callBarringInfoFor-CSE
    No value
    gsm_map_ms.Ext_CallBarringInfoFor_CSE

gsm_map.ms.callForwardingData  callForwardingData
    No value
    gsm_map_ms.CallForwardingData

gsm_map.ms.callTypeCriteria  callTypeCriteria
    Unsigned 32-bit integer
    gsm_map_ms.CallTypeCriteria

gsm_map.ms.camelBusy  camelBusy
    No value
    gsm_map_ms.NULL

gsm_map.ms.camelCapabilityHandling  camelCapabilityHandling
    Unsigned 32-bit integer
    gsm_map_ms.CamelCapabilityHandling
```

```
gsm_map.ms.camelSubscriptionInfoWithdraw camelSubscriptionInfoWithdraw
  No value
  gsm_map_ms.NULL

gsm_map.ms.camel_SubscriptionInfo camel-SubscriptionInfo
  No value
  gsm_map_ms.CAMEL_SubscriptionInfo

gsm_map.ms.cancellationType cancellationType
  Unsigned 32-bit integer
  gsm_map_ms.CancellationType

gsm_map.ms.category category
  Byte array
  gsm_map_ms.Category

gsm_map.ms.cellGlobalIdOrServiceAreaIdOrLAI cellGlobalIdOrServiceAreaIdOrLAI
  Unsigned 32-bit integer
  gsm_map.CellGlobalIdOrServiceAreaIdOrLAI

gsm_map.ms.cf-Enhancements cf-Enhancements
  Boolean

gsm_map.ms.changeOfPositionDP changeOfPositionDP
  Boolean

gsm_map.ms.chargeableECT-Barred chargeableECT-Barred
  Boolean

gsm_map.ms.chargingCharacteristics chargingCharacteristics
  Unsigned 16-bit integer
  gsm_map_ms.ChargingCharacteristics

gsm_map.ms.chargingCharacteristicsWithdraw chargingCharacteristicsWithdraw
  No value
  gsm_map_ms.NULL

gsm_map.ms.chargingId chargingId
  Byte array
  gsm_map_ms.GPRSChargingID

gsm_map.ms.chargingIndicator chargingIndicator
  Boolean

gsm_map.ms.chosenChannelInfo chosenChannelInfo
  Byte array
  gsm_map_ms.ChosenChannelInfo

gsm_map.ms.chosenRadioResourceInformation chosenRadioResourceInformation
  No value
  gsm_map_ms.ChosenRadioResourceInformation

gsm_map.ms.chosenSpeechVersion chosenSpeechVersion
  Byte array
  gsm_map_ms.ChosenSpeechVersion

gsm_map.ms.ck ck
  Byte array
  gsm_map_ms.CK

gsm_map.ms.cksn cksn
  Byte array
  gsm_map_ms.Cksn
```

```
gsm_map.ms.clientIdentity  clientIdentity
    No value
    gsm_map.LCSClientExternalID

gsm_map.ms.codec1  codec1
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.codec2  codec2
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.codec3  codec3
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.codec4  codec4
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.codec5  codec5
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.codec6  codec6
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.codec7  codec7
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.codec8  codec8
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.collectInformation  collectInformation
    Boolean

gsm_map.ms.completeDataListIncluded  completeDataListIncluded
    No value
    gsm_map_ms.NULL

gsm_map.ms.contextIdList  contextIdList
    Unsigned 32-bit integer
    gsm_map_ms.ContextIdList

gsm_map.ms.criteriaForChangeOfPositionDP  criteriaForChangeOfPositionDP
    Boolean

gsm_map.ms.cs_AllocationRetentionPriority  cs-AllocationRetentionPriority
    Byte array
    gsm_map_ms.CS_AllocationRetentionPriority

gsm_map.ms.cs_LCS_NotSupportedByUE  cs-LCS-NotSupportedByUE
    No value
    gsm_map_ms.NULL

gsm_map.ms.csiActive  csiActive
    No value
    gsm_map_ms.NULL
```

```
gsm_map.ms.csi_Active    csi-Active
    No value
    gsm_map_ms.NULL

gsm_map.ms.cug_FeatureList  cug-FeatureList
    Unsigned 32-bit integer
    gsm_map_ms.CUG_FeatureList

gsm_map.ms.cug_Index    cug-Index
    Unsigned 32-bit integer
    gsm_map_ms.CUG_Index

gsm_map.ms.cug_Info    cug-Info
    No value
    gsm_map_ms.CUG_Info

gsm_map.ms.cug_Interlock  cug-Interlock
    Byte array
    gsm_map_ms.CUG_Interlock

gsm_map.ms.cug_SubscriptionList  cug-SubscriptionList
    Unsigned 32-bit integer
    gsm_map_ms.CUG_SubscriptionList

gsm_map.ms.currentLocation  currentLocation
    No value
    gsm_map_ms.NULL

gsm_map.ms.currentLocationRetrieved  currentLocationRetrieved
    No value
    gsm_map_ms.NULL

gsm_map.ms.currentSecurityContext  currentSecurityContext
    Unsigned 32-bit integer
    gsm_map_ms.CurrentSecurityContext

gsm_map.ms.currentlyUsedCodec  currentlyUsedCodec
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.d-IM-CSI    d-IM-CSI
    Boolean

gsm_map.ms.d-csi    d-csi
    Boolean

gsm_map.ms.d_CSI    d-CSI
    No value
    gsm_map_ms.D_CSI

gsm_map.ms.d_IM_CSI    d-IM-CSI
    No value
    gsm_map_ms.D_CSI

gsm_map.ms.defaultCallHandling  defaultCallHandling
    Unsigned 32-bit integer
    gsm_map_ms.DefaultCallHandling

gsm_map.ms.defaultSMS_Handling  defaultSMS-Handling
    Unsigned 32-bit integer
    gsm_map_ms.DefaultSMS_Handling
```

```
gsm_map.ms.defaultSessionHandling defaultSessionHandling
    Unsigned 32-bit integer
    gsm_map_ms.DefaultGPRS_Handling

gsm_map.ms.destinationNumberCriteria destinationNumberCriteria
    No value
    gsm_map_ms.DestinationNumberCriteria

gsm_map.ms.destinationNumberLengthList destinationNumberLengthList
    Unsigned 32-bit integer
    gsm_map_ms.DestinationNumberLengthList

gsm_map.ms.destinationNumberList destinationNumberList
    Unsigned 32-bit integer
    gsm_map_ms.DestinationNumberList

gsm_map.ms.dfc-WithArgument dfc-WithArgument
    Boolean

gsm_map.ms.dialledNumber dialledNumber
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.disconnectLeg disconnectLeg
    Boolean

gsm_map.ms.doublyChargeableECT-Barred doublyChargeableECT-Barred
    Boolean

gsm_map.ms.dp_AnalysedInfoCriteriaList dp-AnalysedInfoCriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.DP_AnalysedInfoCriteriaList

gsm_map.ms.dtmf-MidCall dtmf-MidCall
    Boolean

gsm_map.ms.emergencyReset emergencyReset
    Boolean

gsm_map.ms.emergencyUplinkRequest emergencyUplinkRequest
    Boolean

gsm_map.ms.emlpp_Info emlpp-Info
    No value
    gsm_map.EMLPP_Info

gsm_map.ms.encryptionAlgorithm encryptionAlgorithm
    Byte array
    gsm_map_ms.ChosenEncryptionAlgorithm

gsm_map.ms.encryptionAlgorithms encryptionAlgorithms
    Byte array
    gsm_map_ms.PermittedEncryptionAlgorithms

gsm_map.ms.encryptionInfo encryptionInfo
    Byte array
    gsm_map_ms.EncryptionInformation

gsm_map.ms.entityReleased entityReleased
    Boolean

gsm_map.ms.equipmentStatus equipmentStatus
    Unsigned 32-bit integer
    gsm_map_ms.EquipmentStatus
```

```
gsm_map.ms.eventMet    eventMet
    Byte array
    gsm_map_ms.MM_Code

gsm_map.ms.ext2_QoS_Subscribed    ext2-QoS-Subscribed
    Byte array
    gsm_map_ms.Ext2_QoS_Subscribed

gsm_map.ms.ext3_QoS_Subscribed    ext3-QoS-Subscribed
    Byte array
    gsm_map_ms.Ext3_QoS_Subscribed

gsm_map.ms.ext_QoS_Subscribed    ext-QoS-Subscribed
    Byte array
    gsm_map_ms.Ext_QoS_Subscribed

gsm_map.ms.ext_externalClientList    ext-externalClientList
    Unsigned 32-bit integer
    gsm_map_ms.Ext_ExternalClientList

gsm_map.ms.extensionContainer    extensionContainer
    No value
    gsm_map.ExtensionContainer

gsm_map.ms.externalClientList    externalClientList
    Unsigned 32-bit integer
    gsm_map_ms.ExternalClientList

gsm_map.ms.failureCause    failureCause
    Unsigned 32-bit integer
    gsm_map_ms.FailureCause

gsm_map.ms.forwardedToNumber    forwardedToNumber
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.forwardedToSubaddress    forwardedToSubaddress
    Byte array
    gsm_map.ISDN_SubaddressString

gsm_map.ms.forwardingFeatureList    forwardingFeatureList
    Unsigned 32-bit integer
    gsm_map_ms.Ext_ForwFeatureList

gsm_map.ms.forwardingInfo    forwardingInfo
    No value
    gsm_map_ms.Ext_ForwInfo

gsm_map.ms.forwardingInfoFor_CSE    forwardingInfoFor-CSE
    No value
    gsm_map_ms.Ext_ForwardingInfoFor_CSE

gsm_map.ms.forwardingOptions    forwardingOptions
    Byte array
    gsm_map_ms.T_forwardingOptions

gsm_map.ms.freezeP_TMSI    freezeP-TMSI
    No value
    gsm_map_ms.NULL

gsm_map.ms.freezeTMSI    freezeTMSI
    No value
    gsm_map_ms.NULL
```

```
gsm_map.ms.geodeticInformation geodeticInformation
  Byte array
  gsm_map_ms.GeodeticInformation
gsm_map.ms.geographicalInformation geographicalInformation
  Byte array
  gsm_map_ms.GeographicalInformation
gsm_map.ms.geran geran
  Boolean
gsm_map.ms.geranCodecList geranCodecList
  No value
  gsm_map_ms.CodecList
gsm_map.ms.geranNotAllowed geranNotAllowed
  Boolean
gsm_map.ms.geran_classmark geran-classmark
  Byte array
  gsm_map_ms.GERAN_Classmark
gsm_map.ms.ggsn_Address ggsn-Address
  Byte array
  gsm_map_ms.GSN_Address
gsm_map.ms.ggsn_Number ggsn-Number
  Byte array
  gsm_map.ISDN_AddressString
gsm_map.ms.gmlc_List gmlc-List
  Unsigned 32-bit integer
  gsm_map_ms.GMLC_List
gsm_map.ms.gmlc_ListWithdraw gmlc-ListWithdraw
  No value
  gsm_map_ms.NULL
gsm_map.ms.gmlc_Restriction gmlc-Restriction
  Unsigned 32-bit integer
  gsm_map_ms.GMLC_Restriction
gsm_map.ms.gprs-csi gprs-csi
  Boolean
gsm_map.ms.gprsDataList gprsDataList
  Unsigned 32-bit integer
  gsm_map_ms.GPRSDataList
gsm_map.ms.gprsEnhancementsSupportIndicator gprsEnhancementsSupportIndicator
  No value
  gsm_map_ms.NULL
gsm_map.ms.gprsSubscriptionData gprsSubscriptionData
  No value
  gsm_map_ms.GPRSSubscriptionData
gsm_map.ms.gprsSubscriptionDataWithdraw gprsSubscriptionDataWithdraw
  Unsigned 32-bit integer
  gsm_map_ms.GPRSSubscriptionDataWithdraw
```



```

gsm_map.ms.gprs_CSI    gprs-CSI
    No value
    gsm_map_ms.GPRS_CSI

gsm_map.ms.gprs_CamelTDPDataList  gprs-CamelTDPDataList
    Unsigned 32-bit integer
    gsm_map_ms.GPRS_CamelTDPDataList

gsm_map.ms.gprs_MS_Class  gprs-MS-Class
    No value
    gsm_map_ms.GPRSMSCClass

gsm_map.ms.gprs_TriggerDetectionPoint  gprs-TriggerDetectionPoint
    Unsigned 32-bit integer
    gsm_map_ms.GPRS_TriggerDetectionPoint

gsm_map.ms.groupId  groupId
    Byte array
    gsm_map_ms.GroupId

gsm_map.ms.groupid  groupid
    Byte array
    gsm_map_ms.GroupId

gsm_map.ms.gsmSCF_Address  gsmSCF-Address
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.gsm_SecurityContextData  gsm-SecurityContextData
    No value
    gsm_map_ms.GSM_SecurityContextData

gsm_map.ms.handoverNumber  handoverNumber
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.hlr_List  hlr-List
    Unsigned 32-bit integer
    gsm_map.HLR_List

gsm_map.ms.hlr_Number  hlr-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.ho_NumberNotRequired  ho-NumberNotRequired
    No value
    gsm_map_ms.NULL

gsm_map.ms.hopCounter  hopCounter
    Unsigned 32-bit integer
    gsm_map_ms.HopCounter

gsm_map.ms.iUSelectedCodec  iUSelectedCodec
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.identity  identity
    Unsigned 32-bit integer
    gsm_map.Identity

gsm_map.ms.ik  ik
    Byte array
    gsm_map_ms.IK

```

```

gsm_map.ms.imei imei
    Byte array
    gsm_map.IMEI
gsm_map.ms.imeisv imeisv
    Byte array
    gsm_map.IMEI
gsm_map.ms.immediateResponsePreferred immediateResponsePreferred
    No value
    gsm_map_ms.NULL
gsm_map.ms.imsi imsi
    Byte array
    gsm_map.IMSI
gsm_map.ms.informPreviousNetworkEntity informPreviousNetworkEntity
    No value
    gsm_map_ms.NULL
gsm_map.ms.initiateCallAttempt initiateCallAttempt
    Boolean
gsm_map.ms.integrityProtectionAlgorithm integrityProtectionAlgorithm
    Byte array
    gsm_map_ms.ChosenIntegrityProtectionAlgorithm
gsm_map.ms.integrityProtectionAlgorithms integrityProtectionAlgorithms
    Byte array
    gsm_map_ms.PermittedIntegrityProtectionAlgorithms
gsm_map.ms.integrityProtectionInfo integrityProtectionInfo
    Byte array
    gsm_map_ms.IntegrityProtectionInformation
gsm_map.ms.interCUG_Restrictions interCUG-Restrictions
    Byte array
    gsm_map_ms.InterCUG_Restrictions
gsm_map.ms.internationalECT-Barred internationalECT-Barred
    Boolean
gsm_map.ms.internationalOGCallsBarred internationalOGCallsBarred
    Boolean
gsm_map.ms.internationalOGCallsNotToHPLMN-CountryBarred internationalOGCallsNot
    Boolean
gsm_map.ms.interzonalECT-Barred interzonalECT-Barred
    Boolean
gsm_map.ms.interzonalOGCallsAndInternationalOGCallsNotToHPLMN-CountryBarred int
    Boolean
gsm_map.ms.interzonalOGCallsBarred interzonalOGCallsBarred
    Boolean
gsm_map.ms.interzonalOGCallsNotToHPLMN-CountryBarred interzonalOGCallsNotToHPLM
    Boolean
gsm_map.ms.intraCUG_Options intraCUG-Options
    Unsigned 32-bit integer
    gsm_map_ms.IntraCUG_Options

```

```
gsm_map.ms.istAlertTimer  istAlertTimer
    Unsigned 32-bit integer
    gsm_map_ms.IST_AlertTimerValue

gsm_map.ms.istInformationWithdraw  istInformationWithdraw
    No value
    gsm_map_ms.NULL

gsm_map.ms.istSupportIndicator  istSupportIndicator
    Unsigned 32-bit integer
    gsm_map_ms.IST_SupportIndicator

gsm_map.ms.iuAvailableCodecsList  iuAvailableCodecsList
    No value
    gsm_map_ms.CodecList

gsm_map.ms.iuCurrentlyUsedCodec  iuCurrentlyUsedCodec
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.iuSelectedCodec  iuSelectedCodec
    Byte array
    gsm_map_ms.Codec

gsm_map.ms.iuSupportedCodecsList  iuSupportedCodecsList
    No value
    gsm_map_ms.SupportedCodecsList

gsm_map.ms.kc  kc
    Byte array
    gsm_map_ms.Kc

gsm_map.ms.keyStatus  keyStatus
    Unsigned 32-bit integer
    gsm_map_ms.KeyStatus

gsm_map.ms.ksi  ksi
    Byte array
    gsm_map_ms.KSI

gsm_map.ms.lcsCapabilitySet1  lcsCapabilitySet1
    Boolean

gsm_map.ms.lcsCapabilitySet2  lcsCapabilitySet2
    Boolean

gsm_map.ms.lcsCapabilitySet3  lcsCapabilitySet3
    Boolean

gsm_map.ms.lcsCapabilitySet4  lcsCapabilitySet4
    Boolean

gsm_map.ms.lcsCapabilitySet5  lcsCapabilitySet5
    Boolean

gsm_map.ms.lcsInformation  lcsInformation
    No value
    gsm_map_ms.LCSInformation

gsm_map.ms.lcs_PrivacyExceptionList  lcs-PrivacyExceptionList
    Unsigned 32-bit integer
    gsm_map_ms.LCS_PrivacyExceptionList
```

```
gsm_map.ms.lmsi lmsi
  Byte array
  gsm_map.LMSI

gsm_map.ms.lmu_Indicator lmu-Indicator
  No value
  gsm_map_ms.NULL

gsm_map.ms.locationAtAlerting locationAtAlerting
  Boolean

gsm_map.ms.locationInformation locationInformation
  No value
  gsm_map_ms.LocationInformation

gsm_map.ms.locationInformationGPRS locationInformationGPRS
  No value
  gsm_map_ms.LocationInformationGPRS

gsm_map.ms.locationNumber locationNumber
  Byte array
  gsm_map_ms.LocationNumber

gsm_map.ms.longFTN_Supported longFTN-Supported
  No value
  gsm_map_ms.NULL

gsm_map.ms.longForwardedToNumber longForwardedToNumber
  Byte array
  gsm_map.FTN_AddressString

gsm_map.ms.longGroupID_Supported longGroupID-Supported
  No value
  gsm_map_ms.NULL

gsm_map.ms.longGroupId longGroupId
  Byte array
  gsm_map_ms.Long_GroupId

gsm_map.ms.lsaActiveModeIndicator lsaActiveModeIndicator
  No value
  gsm_map_ms.NULL

gsm_map.ms.lsaAttributes lsaAttributes
  Byte array
  gsm_map_ms.LSAAttributes

gsm_map.ms.lsaDataList lsaDataList
  Unsigned 32-bit integer
  gsm_map_ms.LSADataList

gsm_map.ms.lsaIdentity lsaIdentity
  Byte array
  gsm_map_ms.LSAIdentity

gsm_map.ms.lsaIdentityList lsaIdentityList
  Unsigned 32-bit integer
  gsm_map_ms.LSAIdentityList

gsm_map.ms.lsaInformation lsaInformation
  No value
  gsm_map_ms.LSAInformation
```

```
gsm_map.ms.lsaInformationWithdraw lsaInformationWithdraw
    Unsigned 32-bit integer
    gsm_map_ms.LSAInformationWithdraw

gsm_map.ms.lsaOnlyAccessIndicator lsaOnlyAccessIndicator
    Unsigned 32-bit integer
    gsm_map_ms.LSAOnlyAccessIndicator

gsm_map.ms.m-csi m-csi
    Boolean

gsm_map.ms.mSNetworkCapability mSNetworkCapability
    Byte array
    gsm_map_ms.MSNetworkCapability

gsm_map.ms.mSRadioAccessCapability mSRadioAccessCapability
    Byte array
    gsm_map_ms.MSRadioAccessCapability

gsm_map.ms.m_CSI m-CSI
    No value
    gsm_map_ms.M_CSI

gsm_map.ms.matchType matchType
    Unsigned 32-bit integer
    gsm_map_ms.MatchType

gsm_map.ms.mc_SS_Info mc-SS-Info
    No value
    gsm_map_ms.MC_SS_Info

gsm_map.ms.mg-csi mg-csi
    Boolean

gsm_map.ms.mg_csi mg-csi
    No value
    gsm_map_ms.MG_CSI

gsm_map.ms.mnpInfoRes mnpInfoRes
    No value
    gsm_map_ms.MNPInfoRes

gsm_map.ms.mnpRequestedInfo mnpRequestedInfo
    No value
    gsm_map_ms.NULL

gsm_map.ms.mo-sms-csi mo-sms-csi
    Boolean

gsm_map.ms.mo_sms_CSI mo-sms-CSI
    No value
    gsm_map_ms.SMS_CSI

gsm_map.ms.mobileNotReachableReason mobileNotReachableReason
    Unsigned 32-bit integer
    gsm_map_er.AbsentSubscriberDiagnosticSM

gsm_map.ms.mobilityTriggers mobilityTriggers
    Unsigned 32-bit integer
    gsm_map_ms.MobilityTriggers
```

```
gsm_map.ms.modificationRequestFor_CB_Info  modificationRequestFor-CB-Info
  No value
  gsm_map_ms.ModificationRequestFor_CB_Info
gsm_map.ms.modificationRequestFor_CF_Info  modificationRequestFor-CF-Info
  No value
  gsm_map_ms.ModificationRequestFor_CF_Info
gsm_map.ms.modificationRequestFor_CSI  modificationRequestFor-CSI
  No value
  gsm_map_ms.ModificationRequestFor_CSI
gsm_map.ms.modificationRequestFor_IP_SM_GW_Data  modificationRequestFor-IP-SM-GW
  No value
  gsm_map_ms.ModificationRequestFor_IP_SM_GW_Data
gsm_map.ms.modificationRequestFor_ODB_data  modificationRequestFor-ODB-data
  No value
  gsm_map_ms.ModificationRequestFor_ODB_data
gsm_map.ms.modifyCSI_State  modifyCSI-State
  Unsigned 32-bit integer
  gsm_map_ms.ModificationInstruction
gsm_map.ms.modifyNotificationToCSE  modifyNotificationToCSE
  Unsigned 32-bit integer
  gsm_map_ms.ModificationInstruction
gsm_map.ms.modifyRegistrationStatus  modifyRegistrationStatus
  Unsigned 32-bit integer
  gsm_map_ms.ModificationInstruction
gsm_map.ms.molr_List  molr-List
  Unsigned 32-bit integer
  gsm_map_ms.MOLR_List
gsm_map.ms.moveLeg  moveLeg
  Boolean
gsm_map.ms.msNotReachable  msNotReachable
  No value
  gsm_map_ms.NULL
gsm_map.ms.ms_Classmark2  ms-Classmark2
  Byte array
  gsm_map_ms.MS_Classmark2
gsm_map.ms.ms_classmark  ms-classmark
  No value
  gsm_map_ms.NULL
gsm_map.ms.msc_Number  msc-Number
  Byte array
  gsm_map.ISDN_AddressString
gsm_map.ms.msisdn  msisdn
  Byte array
  gsm_map.ISDN_AddressString
gsm_map.ms.msisdn_BS_List  msisdn-BS-List
  Unsigned 32-bit integer
  gsm_map_ms.MSISDN_BS_List
```

```
gsm_map.ms.mt-sms-csi    mt-sms-csi
    Boolean

gsm_map.ms.mt_smsCAMELTDP_CriteriaList    mt-smsCAMELTDP-CriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.MT_smsCAMELTDP_CriteriaList

gsm_map.ms.mt_sms_CSI    mt-sms-CSI
    No value
    gsm_map_ms.SMS_CSI

gsm_map.ms.multicallBearerInfo    multicallBearerInfo
    Unsigned 32-bit integer
    gsm_map_ms.MulticallBearerInfo

gsm_map.ms.multipleBearerNotSupported    multipleBearerNotSupported
    No value
    gsm_map_ms.NULL

gsm_map.ms.multipleBearerRequested    multipleBearerRequested
    No value
    gsm_map_ms.NULL

gsm_map.ms.multipleECT-Barred    multipleECT-Barred
    Boolean

gsm_map.ms.naea_PreferredCI    naea-PreferredCI
    No value
    gsm_map_ms.NAEA_PreferredCI

gsm_map.ms.netDetNotReachable    netDetNotReachable
    Unsigned 32-bit integer
    gsm_map_ms.NotReachableReason

gsm_map.ms.networkAccessMode    networkAccessMode
    Unsigned 32-bit integer
    gsm_map_ms.NetworkAccessMode

gsm_map.ms.noReplyConditionTime    noReplyConditionTime
    Unsigned 32-bit integer
    gsm_map_ms.Ext_NoRepCondTime

gsm_map.ms.notProvidedFromSGSN    notProvidedFromSGSN
    No value
    gsm_map_ms.NULL

gsm_map.ms.notProvidedFromVLR    notProvidedFromVLR
    No value
    gsm_map_ms.NULL

gsm_map.ms.notificationToCSE    notificationToCSE
    No value
    gsm_map_ms.NULL

gsm_map.ms.notificationToMSUser    notificationToMSUser
    Unsigned 32-bit integer
    gsm_map_ms.NotificationToMSUser

gsm_map.ms.nsapi    nsapi
    Unsigned 32-bit integer
    gsm_map_ms.NSAPI
```

```

gsm_map.ms.numberOfRequestedVectors  numberOfRequestedVectors
    Unsigned 32-bit integer
    gsm_map_ms.NumberOfRequestedVectors

gsm_map.ms.numberPortabilityStatus  numberPortabilityStatus
    Unsigned 32-bit integer
    gsm_map_ms.NumberPortabilityStatus

gsm_map.ms.o-IM-CSI  o-IM-CSI
    Boolean

gsm_map.ms.o-csi  o-csi
    Boolean

gsm_map.ms.o_BcsmCamelTDPDataList  o-BcsmCamelTDPDataList
    Unsigned 32-bit integer
    gsm_map_ms.O_BcsmCamelTDPDataList

gsm_map.ms.o_BcsmCamelTDP_CriteriaList  o-BcsmCamelTDP-CriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.O_BcsmCamelTDPCriteriaList

gsm_map.ms.o_BcsmTriggerDetectionPoint  o-BcsmTriggerDetectionPoint
    Unsigned 32-bit integer
    gsm_map_ms.O_BcsmTriggerDetectionPoint

gsm_map.ms.o_CSI  o-CSI
    No value
    gsm_map_ms.O_CSI

gsm_map.ms.o_CauseValueCriteria  o-CauseValueCriteria
    Unsigned 32-bit integer
    gsm_map_ms.O_CauseValueCriteria

gsm_map.ms.o_IM_BcsmCamelTDP_CriteriaList  o-IM-BcsmCamelTDP-CriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.O_BcsmCamelTDPCriteriaList

gsm_map.ms.o_IM_CSI  o-IM-CSI
    No value
    gsm_map_ms.O_CSI

gsm_map.ms.odb  odb
    No value
    gsm_map_ms.NULL

gsm_map.ms.odb_Data  odb-Data
    No value
    gsm_map_ms.ODB_Data

gsm_map.ms.odb_GeneralData  odb-GeneralData
    Byte array
    gsm_map_ms.ODB_GeneralData

gsm_map.ms.odb_HPLMN_Data  odb-HPLMN-Data
    Byte array
    gsm_map_ms.ODB_HPLMN_Data

gsm_map.ms.odb_Info  odb-Info
    No value
    gsm_map_ms.ODB_Info

```



```
gsm_map.ms.odb_data   odb-data
    No value
    gsm_map_ms.ODB_Data

gsm_map.ms.offeredCamel4CSIs   offeredCamel4CSIs
    Byte array
    gsm_map_ms.OfferedCamel4CSIs

gsm_map.ms.offeredCamel4CSIsInSGSN   offeredCamel4CSIsInSGSN
    Byte array
    gsm_map_ms.OfferedCamel4CSIs

gsm_map.ms.offeredCamel4CSIsInVLR   offeredCamel4CSIsInVLR
    Byte array
    gsm_map_ms.OfferedCamel4CSIs

gsm_map.ms.offeredCamel4Functionalities   offeredCamel4Functionalities
    Byte array
    gsm_map_ms.OfferedCamel4Functionalities

gsm_map.ms.or-Interactions   or-Interactions
    Boolean

gsm_map.ms.password   password
    String
    gsm_map_ss.Password

gsm_map.ms.pdp_Address   pdp-Address
    Byte array
    gsm_map_ms.PDP_Address

gsm_map.ms.pdp_ChargingCharacteristics   pdp-ChargingCharacteristics
    Unsigned 16-bit integer
    gsm_map_ms.ChargingCharacteristics

gsm_map.ms.pdp_ContextActive   pdp-ContextActive
    No value
    gsm_map_ms.NULL

gsm_map.ms.pdp_ContextId   pdp-ContextId
    Unsigned 32-bit integer
    gsm_map_ms.ContextId

gsm_map.ms.pdp_ContextIdentifier   pdp-ContextIdentifier
    Unsigned 32-bit integer
    gsm_map_ms.ContextId

gsm_map.ms.pdp_Type   pdp-Type
    Byte array
    gsm_map_ms.PDP_Type

gsm_map.ms.phase1   phase1
    Boolean

gsm_map.ms.phase2   phase2
    Boolean

gsm_map.ms.phase3   phase3
    Boolean

gsm_map.ms.phase4   phase4
    Boolean
```

```

gsm_map.ms.playTone    playTone
    Boolean

gsm_map.ms.plmn-SpecificBarringType1    plmn-SpecificBarringType1
    Boolean

gsm_map.ms.plmn-SpecificBarringType2    plmn-SpecificBarringType2
    Boolean

gsm_map.ms.plmn-SpecificBarringType3    plmn-SpecificBarringType3
    Boolean

gsm_map.ms.plmn-SpecificBarringType4    plmn-SpecificBarringType4
    Boolean

gsm_map.ms.plmnClientList    plmnClientList
    Unsigned 32-bit integer
    gsm_map_ms.PLMNClientList

gsm_map.ms.preferentialCUG_Indicator    preferentialCUG-Indicator
    Unsigned 32-bit integer
    gsm_map_ms.CUG_Index

gsm_map.ms.premiumRateEntertainmentOGCallsBarred    premiumRateEntertainmentOGCa
    Boolean

gsm_map.ms.premiumRateInformationOGCallsBarred    premiumRateInformationOGCallsBar
    Boolean

gsm_map.ms.previous_LAI    previous-LAI
    Byte array
    gsm_map.LAIFixedLength

gsm_map.ms.privilegedUplinkRequest    privilegedUplinkRequest
    Boolean

gsm_map.ms.provisionedSS    provisionedSS
    Unsigned 32-bit integer
    gsm_map_ms.Ext_SS_InfoList

gsm_map.ms.ps_AttachedNotReachableForPaging    ps-AttachedNotReachableForPaging
    No value
    gsm_map_ms.NULL

gsm_map.ms.ps_AttachedReachableForPaging    ps-AttachedReachableForPaging
    No value
    gsm_map_ms.NULL

gsm_map.ms.ps_Detached    ps-Detached
    No value
    gsm_map_ms.NULL

gsm_map.ms.ps_LCS_NotSupportedByUE    ps-LCS-NotSupportedByUE
    No value
    gsm_map_ms.NULL

gsm_map.ms.ps_PDP_ActiveNotReachableForPaging    ps-PDP-ActiveNotReachableForPagin
    Unsigned 32-bit integer
    gsm_map_ms.PDP_ContextInfoList

gsm_map.ms.ps_PDP_ActiveReachableForPaging    ps-PDP-ActiveReachableForPaging
    Unsigned 32-bit integer
    gsm_map_ms.PDP_ContextInfoList

```

```
gsm_map.ms.ps_SubscriberState  ps-SubscriberState
    Unsigned 32-bit integer
    gsm_map_ms.PS_SubscriberState

gsm_map.ms.psi-enhancements  psi-enhancements
    Boolean

gsm_map.ms.qos2_Negotiated  qos2-Negotiated
    Byte array
    gsm_map_ms.Ext2_QoS_Subscribed

gsm_map.ms.qos2_Requested  qos2-Requested
    Byte array
    gsm_map_ms.Ext2_QoS_Subscribed

gsm_map.ms.qos2_Subscribed  qos2-Subscribed
    Byte array
    gsm_map_ms.Ext2_QoS_Subscribed

gsm_map.ms.qos3_Negotiated  qos3-Negotiated
    Byte array
    gsm_map_ms.Ext3_QoS_Subscribed

gsm_map.ms.qos3_Requested  qos3-Requested
    Byte array
    gsm_map_ms.Ext3_QoS_Subscribed

gsm_map.ms.qos3_Subscribed  qos3-Subscribed
    Byte array
    gsm_map_ms.Ext3_QoS_Subscribed

gsm_map.ms.qos_Negotiated  qos-Negotiated
    Byte array
    gsm_map_ms.Ext_QoS_Subscribed

gsm_map.ms.qos_Requested  qos-Requested
    Byte array
    gsm_map_ms.Ext_QoS_Subscribed

gsm_map.ms.qos_Subscribed  qos-Subscribed
    Byte array
    gsm_map_ms.QoS_Subscribed

gsm_map.ms.quintupletList  quintupletList
    Unsigned 32-bit integer
    gsm_map_ms.QuintupletList

gsm_map.ms.rab_ConfigurationIndicator  rab-ConfigurationIndicator
    No value
    gsm_map_ms.NULL

gsm_map.ms.rab_Id  rab-Id
    Unsigned 32-bit integer
    gsm_map_ms.RAB_Id

gsm_map.ms.radioResourceInformation  radioResourceInformation
    Byte array
    gsm_map_ms.RadioResourceInformation

gsm_map.ms.radioResourceList  radioResourceList
    Unsigned 32-bit integer
    gsm_map_ms.RadioResourceList
```

```
gsm_map.ms.ranap_ServiceHandover  ranap-ServiceHandover
    Byte array
    gsm_map_ms.RANAP_ServiceHandover

gsm_map.ms.rand  rand
    Byte array
    gsm_map_ms.RAND

gsm_map.ms.re_attempt  re-attempt
    Boolean
    gsm_map_ms.BOOLEAN

gsm_map.ms.re_synchronisationInfo  re-synchronisationInfo
    No value
    gsm_map_ms.Re_synchronisationInfo

gsm_map.ms.regionalSubscriptionData  regionalSubscriptionData
    Unsigned 32-bit integer
    gsm_map_ms.ZoneCodeList

gsm_map.ms.regionalSubscriptionIdentifier  regionalSubscriptionIdentifier
    Byte array
    gsm_map_ms.ZoneCode

gsm_map.ms.regionalSubscriptionResponse  regionalSubscriptionResponse
    Unsigned 32-bit integer
    gsm_map_ms.RegionalSubscriptionResponse

gsm_map.ms.registrationAllCF-Barred  registrationAllCF-Barred
    Boolean

gsm_map.ms.registrationCFNotToHPLMN-Barred  registrationCFNotToHPLMN-Barred
    Boolean

gsm_map.ms.registrationInternationalCF-Barred  registrationInternationalCF-Barred
    Boolean

gsm_map.ms.registrationInterzonalCF-Barred  registrationInterzonalCF-Barred
    Boolean

gsm_map.ms.registrationInterzonalCFNotToHPLMN-Barred  registrationInterzonalCFNotToHPLMN-Barred
    Boolean

gsm_map.ms.relocationNumberList  relocationNumberList
    Unsigned 32-bit integer
    gsm_map_ms.RelocationNumberList

gsm_map.ms.requestedCAMEL_SubscriptionInfo  requestedCAMEL-SubscriptionInfo
    Unsigned 32-bit integer
    gsm_map_ms.RequestedCAMEL_SubscriptionInfo

gsm_map.ms.requestedCamel_SubscriptionInfo  requestedCamel-SubscriptionInfo
    Unsigned 32-bit integer
    gsm_map_ms.RequestedCAMEL_SubscriptionInfo

gsm_map.ms.requestedDomain  requestedDomain
    Unsigned 32-bit integer
    gsm_map_ms.DomainType

gsm_map.ms.requestedEquipmentInfo  requestedEquipmentInfo
    Byte array
    gsm_map_ms.RequestedEquipmentInfo
```

```

gsm_map.ms.requestedInfo requestedInfo
    No value
    gsm_map_ms.RequestedInfo
gsm_map.ms.requestedSS_Info requestedSS-Info
    No value
    gsm_map_ss.SS_ForBS_Code
gsm_map.ms.requestedSubscriptionInfo requestedSubscriptionInfo
    No value
    gsm_map_ms.RequestedSubscriptionInfo
gsm_map.ms.requestingNodeType requestingNodeType
    Unsigned 32-bit integer
    gsm_map_ms.RequestingNodeType
gsm_map.ms.requestingPLMN_Id requestingPLMN-Id
    Byte array
    gsm_map.PLMN_Id
gsm_map.ms.rnc_Address rnc-Address
    Byte array
    gsm_map_ms.GSN_Address
gsm_map.ms.roamerAccessToHPLMN-AP-Barred roamerAccessToHPLMN-AP-Barred
    Boolean
gsm_map.ms.roamerAccessToVPLMN-AP-Barred roamerAccessToVPLMN-AP-Barred
    Boolean
gsm_map.ms.roamingOutsidePLMN-Barred roamingOutsidePLMN-Barred
    Boolean
gsm_map.ms.roamingOutsidePLMN-CountryBarred roamingOutsidePLMN-CountryBarred
    Boolean
gsm_map.ms.roamingOutsidePLMNIC-CallsBarred roamingOutsidePLMNIC-CallsBarred
    Boolean
gsm_map.ms.roamingOutsidePLMNICountryIC-CallsBarred roamingOutsidePLMNICountryIC-CallsBarred
    Boolean
gsm_map.ms.roamingOutsidePLMNOG-CallsBarred roamingOutsidePLMNOG-CallsBarred
    Boolean
gsm_map.ms.roamingRestrictedInSgsnDueToUnsupportedFeature roamingRestrictedInSgsnDueToUnsupportedFeature
    No value
    gsm_map_ms.NULL
gsm_map.ms.roamingRestrictedInSgsnDueToUnsupportedFeature roamingRestrictedInSgsnDueToUnsupportedFeature
    No value
    gsm_map_ms.NULL
gsm_map.ms.roamingRestrictionDueToUnsupportedFeature roamingRestrictionDueToUnsupportedFeature
    No value
    gsm_map_ms.NULL
gsm_map.ms.routeingAreaIdentity routeingAreaIdentity
    Byte array
    gsm_map_ms.RAIdentity
gsm_map.ms.routeingNumber routeingNumber
    Byte array
    gsm_map_ms.RouteingNumber

```

```
gsm_map.ms.sai_Present    sai-Present
    No value
    gsm_map_ms.NULL

gsm_map.ms.segmentationProhibited    segmentationProhibited
    No value
    gsm_map_ms.NULL

gsm_map.ms.selectedGSM_Algorithm    selectedGSM-Algorithm
    Byte array
    gsm_map_ms.SelectedGSM_Algorithm

gsm_map.ms.selectedLSAIdentity    selectedLSAIdentity
    Byte array
    gsm_map_ms.LSAIdentity

gsm_map.ms.selectedLSA_Id    selectedLSA-Id
    Byte array
    gsm_map_ms.LSAIdentity

gsm_map.ms.selectedRab_Id    selectedRab-Id
    Unsigned 32-bit integer
    gsm_map_ms.RAB_Id

gsm_map.ms.selectedUMTS_Algorithms    selectedUMTS-Algorithms
    No value
    gsm_map_ms.SelectedUMTS_Algorithms

gsm_map.ms.sendSubscriberData    sendSubscriberData
    No value
    gsm_map_ms.NULL

gsm_map.ms.serviceChangedDP    serviceChangedDP
    Boolean

gsm_map.ms.serviceKey    serviceKey
    Unsigned 32-bit integer
    gsm_map_ms.ServiceKey

gsm_map.ms.serviceTypeIdentity    serviceTypeIdentity
    Unsigned 32-bit integer
    gsm_map.LCSServiceTypeID

gsm_map.ms.serviceTypeList    serviceTypeList
    Unsigned 32-bit integer
    gsm_map_ms.ServiceTypeList

gsm_map.ms.servingNetworkEnhancedDialledServices    servingNetworkEnhancedDialledS
    Boolean

gsm_map.ms.sgsn_Address    sgsn-Address
    Byte array
    gsm_map_ms.GSN_Address

gsm_map.ms.sgsn_CAMEL_SubscriptionInfo    sgsn-CAMEL-SubscriptionInfo
    No value
    gsm_map_ms.SGSN_CAMEL_SubscriptionInfo

gsm_map.ms.sgsn_Capability    sgsn-Capability
    No value
    gsm_map_ms.SGSN_Capability
```

```
gsm_map.ms.sgsn_Number    sgsn-Number
    Byte array
    gsm_map.ISDN_AddressString
gsm_map.ms.skipSubscriberDataUpdate    skipSubscriberDataUpdate
    No value
    gsm_map_ms.NULL
gsm_map.ms.smsCallBarringSupportIndicator    smsCallBarringSupportIndicator
    No value
    gsm_map_ms.NULL
gsm_map.ms.sms_CAMEL_TDP_DataList    sms-CAMEL-TDP-DataList
    Unsigned 32-bit integer
    gsm_map_ms.SMS_CAMEL_TDP_DataList
gsm_map.ms.sms_TriggerDetectionPoint    sms-TriggerDetectionPoint
    Unsigned 32-bit integer
    gsm_map_ms.SMS_TriggerDetectionPoint
gsm_map.ms.solsaSupportIndicator    solsaSupportIndicator
    No value
    gsm_map_ms.NULL
gsm_map.ms.specificCSIDeletedList    specificCSIDeletedList
    Byte array
    gsm_map_ms.SpecificCSI_Withdraw
gsm_map.ms.specificCSI_Withdraw    specificCSI-Withdraw
    Byte array
    gsm_map_ms.SpecificCSI_Withdraw
gsm_map.ms.splitLeg    splitLeg
    Boolean
gsm_map.ms.sres    sres
    Byte array
    gsm_map_ms.SRES
gsm_map.ms.ss-AccessBarred    ss-AccessBarred
    Boolean
gsm_map.ms.ss-csi    ss-csi
    Boolean
gsm_map.ms.ss_CSI    ss-CSI
    No value
    gsm_map_ms.SS_CSI
gsm_map.ms.ss_CamelData    ss-CamelData
    No value
    gsm_map_ms.SS_CamelData
gsm_map.ms.ss_Code    ss-Code
    Unsigned 8-bit integer
    gsm_map.SS_Code
gsm_map.ms.ss_Data    ss-Data
    No value
    gsm_map_ms.Ext_SS_Data
```

```

gsm_map.ms.ss_EventList  ss-EventList
    Unsigned 32-bit integer
    gsm_map_ms.SS_EventList

gsm_map.ms.ss_InfoFor_CSE  ss-InfoFor-CSE
    Unsigned 32-bit integer
    gsm_map_ms.Ext_SS_InfoFor_CSE

gsm_map.ms.ss_List  ss-List
    Unsigned 32-bit integer
    gsm_map_ms.SS_List

gsm_map.ms.ss_Status  ss-Status
    Byte array
    gsm_map.Ext_SS_Status

gsm_map.ms.ss_SubscriptionOption  ss-SubscriptionOption
    Unsigned 32-bit integer
    gsm_map_ms.SS_SubscriptionOption

gsm_map.ms.subscribedEnhancedDialledServices  subscribedEnhancedDialledServices
    Boolean

gsm_map.ms.subscriberDataStored  subscriberDataStored
    Byte array
    gsm_map_ms.AgeIndicator

gsm_map.ms.subscriberIdentity  subscriberIdentity
    Unsigned 32-bit integer
    gsm_map.SubscriberIdentity

gsm_map.ms.subscriberInfo  subscriberInfo
    No value
    gsm_map_ms.SubscriberInfo

gsm_map.ms.subscriberState  subscriberState
    Unsigned 32-bit integer
    gsm_map_ms.SubscriberState

gsm_map.ms.subscriberStatus  subscriberStatus
    Unsigned 32-bit integer
    gsm_map_ms.SubscriberStatus

gsm_map.ms.superChargerSupportedInHLR  superChargerSupportedInHLR
    Byte array
    gsm_map_ms.AgeIndicator

gsm_map.ms.superChargerSupportedInServingNetworkEntity  superChargerSupportedInS
    Unsigned 32-bit integer
    gsm_map_ms.SuperChargerInfo

gsm_map.ms.supportedCAMELPhases  supportedCAMELPhases
    Byte array
    gsm_map_ms.SupportedCamelPhases

gsm_map.ms.supportedCamelPhases  supportedCamelPhases
    Byte array
    gsm_map_ms.SupportedCamelPhases

gsm_map.ms.supportedLCS_CapabilitySets  supportedLCS-CapabilitySets
    Byte array
    gsm_map_ms.SupportedLCS_CapabilitySets

```



```

gsm_map.ms.supportedRAT_TypesIndicator  supportedRAT-TypesIndicator
    Byte array
    gsm_map_ms.SupportedRAT_Types

gsm_map.ms.supportedSGSN_CAMEL_Phases  supportedSGSN-CAMEL-Phases
    Byte array
    gsm_map_ms.SupportedCamelPhases

gsm_map.ms.supportedVLR_CAMEL_Phases  supportedVLR-CAMEL-Phases
    Byte array
    gsm_map_ms.SupportedCamelPhases

gsm_map.ms.t-csi  t-csi
    Boolean

gsm_map.ms.t_BCSM_CAMEL_TDP_CriteriaList  t-BCSM-CAMEL-TDP-CriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.T_BCSM_CAMEL_TDP_CriteriaList

gsm_map.ms.t_BCSM_TriggerDetectionPoint  t-BCSM-TriggerDetectionPoint
    Unsigned 32-bit integer
    gsm_map_ms.T_BcsmTriggerDetectionPoint

gsm_map.ms.t_BcsmCamelTDPDataList  t-BcsmCamelTDPDataList
    Unsigned 32-bit integer
    gsm_map_ms.T_BcsmCamelTDPDataList

gsm_map.ms.t_BcsmTriggerDetectionPoint  t-BcsmTriggerDetectionPoint
    Unsigned 32-bit integer
    gsm_map_ms.T_BcsmTriggerDetectionPoint

gsm_map.ms.t_CSI  t-CSI
    No value
    gsm_map_ms.T_CSI

gsm_map.ms.t_CauseValueCriteria  t-CauseValueCriteria
    Unsigned 32-bit integer
    gsm_map_ms.T_CauseValueCriteria

gsm_map.ms.targetCellId  targetCellId
    Byte array
    gsm_map.GlobalCellId

gsm_map.ms.targetMSC_Number  targetMSC-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.targetRNCId  targetRNCId
    Byte array
    gsm_map_ms.RNCId

gsm_map.ms.teid_ForGnAndGp  teid-ForGnAndGp
    Byte array
    gsm_map_ms.TEID

gsm_map.ms.teid_ForIu  teid-ForIu
    Byte array
    gsm_map_ms.TEID

gsm_map.ms.teleserviceList  teleserviceList
    Unsigned 32-bit integer
    gsm_map_ms.TeleserviceList

```

```
gsm_map.ms.tif-csi    tif-csi
  Boolean

gsm_map.ms.tif_CSI    tif-CSI
  No value
  gsm_map_ms.NULL

gsm_map.ms.tif_CSI_NotificationToCSE  tif-CSI-NotificationToCSE
  No value
  gsm_map_ms.NULL

gsm_map.ms.tmsi    tmsi
  Byte array
  gsm_map.TMSI

gsm_map.ms.tpdu_TypeCriterion  tpdu-TypeCriterion
  Unsigned 32-bit integer
  gsm_map_ms.TPDU_TypeCriterion

gsm_map.ms.tracePropagationList  tracePropagationList
  No value
  gsm_map_ms.TracePropagationList

gsm_map.ms.transactionId  transactionId
  Byte array
  gsm_map_ms.TransactionId

gsm_map.ms.tripletList  tripletList
  Unsigned 32-bit integer
  gsm_map_ms.TripletList

gsm_map.ms.uesbi_Iu    uesbi-Iu
  No value
  gsm_map_ms.UESBI_Iu

gsm_map.ms.uesbi_IuA    uesbi-IuA
  Byte array
  gsm_map_ms.UESBI_IuA

gsm_map.ms.uesbi_IuB    uesbi-IuB
  Byte array
  gsm_map_ms.UESBI_IuB

gsm_map.ms.umts_SecurityContextData  umts-SecurityContextData
  No value
  gsm_map_ms.UMTS_SecurityContextData

gsm_map.ms.utran    utran
  Boolean

gsm_map.ms.utranCodecList  utranCodecList
  No value
  gsm_map_ms.CodecList

gsm_map.ms.utranNotAllowed  utranNotAllowed
  Boolean

gsm_map.ms.v_gmlc_Address  v-gmlc-Address
  Byte array
  gsm_map_ms.GSN_Address
```

```

gsm_map.ms.vbsGroupIndication  vbsGroupIndication
    No value
    gsm_map_ms.NULL

gsm_map.ms.vbsSubscriptionData  vbsSubscriptionData
    Unsigned 32-bit integer
    gsm_map_ms.VBSDataList

gsm_map.ms.vgcsGroupIndication  vgcsGroupIndication
    No value
    gsm_map_ms.NULL

gsm_map.ms.vgcsSubscriptionData  vgcsSubscriptionData
    Unsigned 32-bit integer
    gsm_map_ms.VGCSDataList

gsm_map.ms.vlrCamelSubscriptionInfo  vlrCamelSubscriptionInfo
    No value
    gsm_map_ms.VlrCamelSubscriptionInfo

gsm_map.ms.vlr_Capability  vlr-Capability
    No value
    gsm_map_ms.VLR_Capability

gsm_map.ms.vlr_Number  vlr-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.vlr_number  vlr-number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ms.vplmnAddressAllowed  vplmnAddressAllowed
    No value
    gsm_map_ms.NULL

gsm_map.ms.vt-IM-CSI  vt-IM-CSI
    Boolean

gsm_map.ms.vt-csi  vt-csi
    Boolean

gsm_map.ms.vt_BCSM_CAMEL_TDP_CriteriaList  vt-BCSM-CAMEL-TDP-CriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.T_BCSM_CAMEL_TDP_CriteriaList

gsm_map.ms.vt_CSI  vt-CSI
    No value
    gsm_map_ms.T_CSI

gsm_map.ms.vt_IM_BCSM_CAMEL_TDP_CriteriaList  vt-IM-BCSM-CAMEL-TDP-CriteriaList
    Unsigned 32-bit integer
    gsm_map_ms.T_BCSM_CAMEL_TDP_CriteriaList

gsm_map.ms.vt_IM_CSI  vt-IM-CSI
    No value
    gsm_map_ms.T_CSI

gsm_map.ms.warningToneEnhancements  warningToneEnhancements
    Boolean

```

```
gsm_map.ms.wrongPasswordAttemptsCounter  wrongPasswordAttemptsCounter
    Unsigned 32-bit integer
    gsm_map_ms.WrongPasswordAttemptsCounter

gsm_map.ms.xres  xres
    Byte array
    gsm_map_ms.XRES

gsm_map.ms.isdn  msisdn
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.na_ESRK_Request  na-ESRK-Request
    No value
    gsm_map.NULL

gsm_map.naea_PREFERRED_CIC  naea-PreferredCIC
    Byte array
    gsm_map.NAEA_CIC

gsm_map.nature_of_number  Nature of number
    Unsigned 8-bit integer
    Nature of number

gsm_map.nbrSB  nbrSB
    Unsigned 32-bit integer
    gsm_map.MaxMC_Bearers

gsm_map.nbrUser  nbrUser
    Unsigned 32-bit integer
    gsm_map.MC_Bearers

gsm_map.notification_to_calling_party  Notification to calling party
    Boolean
    Notification to calling party

gsm_map.notification_to_forwarding_party  Notification to forwarding party
    Boolean
    Notification to forwarding party

gsm_map.number_plan  Number plan
    Unsigned 8-bit integer
    Number plan

gsm_map.old.Component  Component
    Unsigned 32-bit integer
    gsm_map.old.Component

gsm_map.om.a  a
    Boolean

gsm_map.om.bm-sc  bm-sc
    Boolean

gsm_map.om.bmsc_List  bmsc-List
    Byte array
    gsm_map_om.BMSC_InterfaceList

gsm_map.om.bmsc_TraceDepth  bmsc-TraceDepth
    Unsigned 32-bit integer
    gsm_map_om.TraceDepth
```

```
gsm_map.om.cap    cap
  Boolean

gsm_map.om.context context
  Boolean

gsm_map.om.extensionContainer extensionContainer
  No value
  gsm_map.ExtensionContainer

gsm_map.om.gb    gb
  Boolean

gsm_map.om.ge    ge
  Boolean

gsm_map.om.ggsn  ggsn
  Boolean

gsm_map.om.ggsn_List ggsn-List
  Byte array
  gsm_map_om.GGSN_InterfaceList

gsm_map.om.ggsn_TraceDepth ggsn-TraceDepth
  Unsigned 32-bit integer
  gsm_map_om.TraceDepth

gsm_map.om.gi    gi
  Boolean

gsm_map.om.gmb   gmb
  Boolean

gsm_map.om.gn    gn
  Boolean

gsm_map.om.gs    gs
  Boolean

gsm_map.om.handovers handovers
  Boolean

gsm_map.om.imsi  imsi
  Byte array
  gsm_map.IMSI

gsm_map.om.iu    iu
  Boolean

gsm_map.om.iu-up iu-up
  Boolean

gsm_map.om.iub   iub
  Boolean

gsm_map.om.iur   iur
  Boolean

gsm_map.om.lu-imsiAttach-imsiDetach lu-imsiAttach-imsiDetach
  Boolean

gsm_map.om.map-b map-b
  Boolean

gsm_map.om.map-c map-c
  Boolean
```

```
gsm_map.om.map-d map-d
  Boolean
gsm_map.om.map-e map-e
  Boolean
gsm_map.om.map-f map-f
  Boolean
gsm_map.om.map-g map-g
  Boolean
gsm_map.om.map-gd map-gd
  Boolean
gsm_map.om.map-gf map-gf
  Boolean
gsm_map.om.map-gr map-gr
  Boolean
gsm_map.om.mbmsContext mbmsContext
  Boolean
gsm_map.om.mbmsMulticastServiceActivation mbmsMulticastServiceActivation
  Boolean
gsm_map.om.mc mc
  Boolean
gsm_map.om.mgw mgw
  Boolean
gsm_map.om.mgw_EventList mgw-EventList
  Byte array
  gsm_map_om.MGW_EventList
gsm_map.om.mgw_InterfaceList mgw-InterfaceList
  Byte array
  gsm_map_om.MGW_InterfaceList
gsm_map.om.mgw_List mgw-List
  Byte array
  gsm_map_om.MGW_InterfaceList
gsm_map.om.mgw_TraceDepth mgw-TraceDepth
  Unsigned 32-bit integer
  gsm_map_om.TraceDepth
gsm_map.om.mo-mt-sms mo-mt-sms
  Boolean
gsm_map.om.mo-mtCall mo-mtCall
  Boolean
gsm_map.om.msc-s msc-s
  Boolean
gsm_map.om.msc_s_EventList msc-s-EventList
  Byte array
  gsm_map_om.MSC_S_EventList
gsm_map.om.msc_s_InterfaceList msc-s-InterfaceList
  Byte array
  gsm_map_om.MSC_S_InterfaceList
```

```
gsm_map.om.msc_s_List  msc-s-List
    Byte array
    gsm_map_om.MSC_S_InterfaceList

gsm_map.om.msc_s_TraceDepth  msc-s-TraceDepth
    Unsigned 32-bit integer
    gsm_map_om.TraceDepth

gsm_map.om.nb-up  nb-up
    Boolean

gsm_map.om.omc_Id  omc-Id
    Byte array
    gsm_map.AddressString

gsm_map.om.pdpContext  pdpContext
    Boolean

gsm_map.om.rau-gprsAttach-gprsDetach  rau-gprsAttach-gprsDetach
    Boolean

gsm_map.om.rnc  rnc
    Boolean

gsm_map.om.rnc_InterfaceList  rnc-InterfaceList
    Byte array
    gsm_map_om.RNC_InterfaceList

gsm_map.om.rnc_List  rnc-List
    Byte array
    gsm_map_om.RNC_InterfaceList

gsm_map.om.rnc_TraceDepth  rnc-TraceDepth
    Unsigned 32-bit integer
    gsm_map_om.TraceDepth

gsm_map.om.sgsn  sgsn
    Boolean

gsm_map.om.sgsn_List  sgsn-List
    Byte array
    gsm_map_om.SGSN_InterfaceList

gsm_map.om.sgsn_TraceDepth  sgsn-TraceDepth
    Unsigned 32-bit integer
    gsm_map_om.TraceDepth

gsm_map.om.ss  ss
    Boolean

gsm_map.om.traceDepthList  traceDepthList
    No value
    gsm_map_om.TraceDepthList

gsm_map.om.traceEventList  traceEventList
    No value
    gsm_map_om.TraceEventList

gsm_map.om.traceInterfaceList  traceInterfaceList
    No value
    gsm_map_om.TraceInterfaceList
```

```

gsm_map.om.traceNE_TypeList  traceNE-TypeList
    Byte array
    gsm_map_om.TraceNE_TypeList

gsm_map.om.traceRecordingSessionReference  traceRecordingSessionReference
    Byte array
    gsm_map_om.TraceRecordingSessionReference

gsm_map.om.traceReference  traceReference
    Byte array
    gsm_map_om.TraceReference

gsm_map.om.traceReference2  traceReference2
    Byte array
    gsm_map_om.TraceReference2

gsm_map.om.traceSupportIndicator  traceSupportIndicator
    No value
    gsm_map_om.NULL

gsm_map.om.traceType  traceType
    Unsigned 32-bit integer
    gsm_map_om.TraceType

gsm_map.om.uu  uu
    Boolean

gsm_map.pcs_Extensions  pcs-Extensions
    No value
    gsm_map.PCS_Extensions

gsm_map.pdp_type_org  PDP Type Organization
    Unsigned 8-bit integer
    PDP Type Organization

gsm_map.privateExtensionList  privateExtensionList
    Unsigned 32-bit integer
    gsm_map.PrivateExtensionList

gsm_map.protocolId  protocolId
    Unsigned 32-bit integer
    gsm_map.ProtocolId

gsm_map.qos.ber  Residual Bit Error Rate (BER)
    Unsigned 8-bit integer
    Residual Bit Error Rate (BER)

gsm_map.qos.brates_dlink  Guaranteed bit rate for downlink in kbit/s
    Unsigned 32-bit integer
    Guaranteed bit rate for downlink

gsm_map.qos.brates_ulink  Guaranteed bit rate for uplink in kbit/s
    Unsigned 32-bit integer
    Guaranteed bit rate for uplink

gsm_map.qos.del_of_err_sdu  Delivery of erroneous SDUs
    Unsigned 8-bit integer
    Delivery of erroneous SDUs

gsm_map.qos.del_order  Delivery order
    Unsigned 8-bit integer
    Delivery order

```



```

gsm_map.qos.max_brake_dlink  Maximum bit rate for downlink in kbit/s
    Unsigned 32-bit integer
    Maximum bit rate for downlink

gsm_map.qos.max_brake_ulink  Maximum bit rate for uplink in kbit/s
    Unsigned 32-bit integer
    Maximum bit rate for uplink

gsm_map.qos.max_sdu  Maximum SDU size
    Unsigned 32-bit integer
    Maximum SDU size

gsm_map.qos.sdu_err_rat  SDU error ratio
    Unsigned 8-bit integer
    SDU error ratio

gsm_map.qos.traff_hdl_pri  Traffic handling priority
    Unsigned 8-bit integer
    Traffic handling priority

gsm_map.qos.traffic_cls  Traffic class
    Unsigned 8-bit integer
    Traffic class

gsm_map.qos.transfer_delay  Transfer delay (Raw data see TS 24.008 for interpret
    Unsigned 8-bit integer
    Transfer delay

gsm_map.ranap.EncryptionInformation  EncryptionInformation
    No value
    gsm_map.ranap.EncryptionInformation

gsm_map.ranap.IntegrityProtectionInformation  IntegrityProtectionInformation
    No value
    gsm_map.ranap.IntegrityProtectionInformation

gsm_map.ranap.service_Handover  service-Handover
    Unsigned 32-bit integer
    gsm_map.ranap.Service_Handover

gsm_map.redirecting_presentation  Redirecting presentation
    Boolean
    Redirecting presentation

gsm_map.servicecentreaddress_digits  ServiceCentreAddress digits
    String
    ServiceCentreAddress digits

gsm_map.signalInfo  signalInfo
    Byte array
    gsm_map.SignalInfo

gsm_map.slr_Arg_PCS_Extensions  slr-Arg-PCS-Extensions
    No value
    gsm_map.SLR_Arg_PCS_Extensions

gsm_map.sm.DispatcherList_item  Item
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.sm.absentSubscriberDiagnosticSM  absentSubscriberDiagnosticSM
    Unsigned 32-bit integer
    gsm_map_er.AbsentSubscriberDiagnosticSM

```

```

gsm_map.sm.additionalAbsentSubscriberDiagnosticSM  additionalAbsentSubscriberDia
    Unsigned 32-bit integer
    gsm_map_er.AbsentSubscriberDiagnosticSM

gsm_map.sm.additionalAlertReasonIndicator  additionalAlertReasonIndicator
    No value
    gsm_map_sm.NULL

gsm_map.sm.additionalSM_DeliveryOutcome  additionalSM-DeliveryOutcome
    Unsigned 32-bit integer
    gsm_map_sm.SM_DeliveryOutcome

gsm_map.sm.additional_Number  additional-Number
    Unsigned 32-bit integer
    gsm_map_sm.Additional_Number

gsm_map.sm.alertReason  alertReason
    Unsigned 32-bit integer
    gsm_map_sm.AlertReason

gsm_map.sm.alertReasonIndicator  alertReasonIndicator
    No value
    gsm_map_sm.NULL

gsm_map.sm.asciCallReference  asciCallReference
    Byte array
    gsm_map.ASCII_CallReference

gsm_map.sm.deliveryOutcomeIndicator  deliveryOutcomeIndicator
    No value
    gsm_map_sm.NULL

gsm_map.sm.dispatcherList  dispatcherList
    Unsigned 32-bit integer
    gsm_map_sm.DispatcherList

gsm_map.sm.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer

gsm_map.sm.gprsNodeIndicator  gprsNodeIndicator
    No value
    gsm_map_sm.NULL

gsm_map.sm.gprsSupportIndicator  gprsSupportIndicator
    No value
    gsm_map_sm.NULL

gsm_map.sm.imsi  imsi
    Byte array
    gsm_map.IMSI

gsm_map.sm.ip_sm_gw_Indicator  ip-sm-gw-Indicator
    No value
    gsm_map_sm.NULL

gsm_map.sm.ip_sm_gw_absentSubscriberDiagnosticSM  ip-sm-gw-absentSubscriberDiagn
    Unsigned 32-bit integer
    gsm_map_er.AbsentSubscriberDiagnosticSM

gsm_map.sm.ip_sm_gw_sm_deliveryOutcome  ip-sm-gw-sm-deliveryOutcome
    Unsigned 32-bit integer
    gsm_map_sm.SM_DeliveryOutcome

```

```

gsm_map.sm.lmsi    lmsi
    Byte array
    gsm_map.LMSI

gsm_map.sm.locationInfoWithLMSI  locationInfoWithLMSI
    No value
    gsm_map_sm.LocationInfoWithLMSI

gsm_map.sm.mcef-Set  mcef-Set
    Boolean

gsm_map.sm.mnrf-Set  mnrf-Set
    Boolean

gsm_map.sm.mnrg-Set  mnrg-Set
    Boolean

gsm_map.sm.moreMessagesToSend  moreMessagesToSend
    No value
    gsm_map_sm.NULL

gsm_map.sm.msc_Number  msc-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.sm.msisdn  msisdn
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.sm.mw_Status  mw-Status
    Byte array
    gsm_map_sm.MW_Status

gsm_map.sm.networkNode_Number  networkNode-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.sm.noSM_RP_DA  noSM-RP-DA
    No value
    gsm_map_sm.NULL

gsm_map.sm.noSM_RP_OA  noSM-RP-OA
    No value
    gsm_map_sm.NULL

gsm_map.sm.ongoingCall  ongoingCall
    No value
    gsm_map_sm.NULL

gsm_map.sm.sc-AddressNotIncluded  sc-AddressNotIncluded
    Boolean

gsm_map.sm.serviceCentreAddress  serviceCentreAddress
    Byte array
    gsm_map.AddressString

gsm_map.sm.serviceCentreAddressDA  serviceCentreAddressDA
    Byte array
    gsm_map.AddressString

gsm_map.sm.serviceCentreAddressOA  serviceCentreAddressOA
    Byte array
    gsm_map_sm.T_serviceCentreAddressOA

```

```

gsm_map.sm.sgsn_Number    sgsn-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.sm.sm_DeliveryOutcome    sm-DeliveryOutcome
    Unsigned 32-bit integer
    gsm_map_sm.SM_DeliveryOutcome

gsm_map.sm.sm_RP_DA    sm-RP-DA
    Unsigned 32-bit integer
    gsm_map_sm.SM_RP_DA

gsm_map.sm.sm_RP_MTI    sm-RP-MTI
    Unsigned 32-bit integer
    gsm_map_sm.SM_RP_MTI

gsm_map.sm.sm_RP_OA    sm-RP-OA
    Unsigned 32-bit integer
    gsm_map_sm.SM_RP_OA

gsm_map.sm.sm_RP_PRI    sm-RP-PRI
    Boolean
    gsm_map_sm.BOOLEAN

gsm_map.sm.sm_RP_SMEA    sm-RP-SMEA
    Byte array
    gsm_map_sm.SM_RP_SMEA

gsm_map.sm.sm_RP_UI    sm-RP-UI
    Byte array
    gsm_map.SignalInfo

gsm_map.sm.sm_deliveryNotIntended    sm-deliveryNotIntended
    Unsigned 32-bit integer
    gsm_map_sm.SM_DeliveryNotIntended

gsm_map.sm.storedMSISDN    storedMSISDN
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ss.BasicServiceGroupList_item    Item
    Unsigned 32-bit integer
    gsm_map.BasicServiceCode

gsm_map.ss.CCBS_FeatureList_item    Item
    No value
    gsm_map_ss.CCBS_Feature

gsm_map.ss.CallBarringFeatureList_item    Item
    No value
    gsm_map_ss.CallBarringFeature

gsm_map.ss.ForwardingFeatureList_item    Item
    No value
    gsm_map_ss.ForwardingFeature

gsm_map.ss.SS_EventSpecification_item    Item
    Byte array
    gsm_map.AddressString

gsm_map.ss.SS_InfoList_item    Item
    Unsigned 32-bit integer
    gsm_map_ss.SS_Info

```

```
gsm_map.ss.SS_List_item  Item
    Unsigned 8-bit integer
    gsm_map.SS_Code

gsm_map.ss.alertingPattern  alertingPattern
    Byte array
    gsm_map.AlertingPattern

gsm_map.ss.b_subscriberNumber  b-subscriberNumber
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ss.b_subscriberSubaddress  b-subscriberSubaddress
    Byte array
    gsm_map.ISDN_SubaddressString

gsm_map.ss.basicService  basicService
    Unsigned 32-bit integer
    gsm_map.BasicServiceCode

gsm_map.ss.basicServiceGroup  basicServiceGroup
    Unsigned 32-bit integer
    gsm_map.BasicServiceCode

gsm_map.ss.basicServiceGroupList  basicServiceGroupList
    Unsigned 32-bit integer
    gsm_map_ss.BasicServiceGroupList

gsm_map.ss.callBarringFeatureList  callBarringFeatureList
    Unsigned 32-bit integer
    gsm_map_ss.CallBarringFeatureList

gsm_map.ss.callBarringInfo  callBarringInfo
    No value
    gsm_map_ss.CallBarringInfo

gsm_map.ss.callInfo  callInfo
    No value
    gsm_map.ExternalSignalInfo

gsm_map.ss.camel-invoked  camel-invoked
    Boolean

gsm_map.ss.ccbs_Data  ccbs-Data
    No value
    gsm_map_ss.CCBS_Data

gsm_map.ss.ccbs_Feature  ccbs-Feature
    No value
    gsm_map_ss.CCBS_Feature

gsm_map.ss.ccbs_FeatureList  ccbs-FeatureList
    Unsigned 32-bit integer
    gsm_map_ss.CCBS_FeatureList

gsm_map.ss.ccbs_Index  ccbs-Index
    Unsigned 32-bit integer
    gsm_map_ss.CCBS_Index

gsm_map.ss.ccbs_RequestState  ccbs-RequestState
    Unsigned 32-bit integer
    gsm_map_ss.CCBS_RequestState
```

```
gsm_map.ss.cliRestrictionOption  cliRestrictionOption
    Unsigned 32-bit integer
    gsm_map_ss.CliRestrictionOption

gsm_map.ss.clir-invoked  clir-invoked
    Boolean

gsm_map.ss.defaultPriority  defaultPriority
    Unsigned 32-bit integer
    gsm_map.EMLPP_Priority

gsm_map.ss.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer

gsm_map.ss.forwardedToNumber  forwardedToNumber
    Byte array
    gsm_map.AddressString

gsm_map.ss.forwardedToSubaddress  forwardedToSubaddress
    Byte array
    gsm_map.ISDN_SubaddressString

gsm_map.ss.forwardingFeatureList  forwardingFeatureList
    Unsigned 32-bit integer
    gsm_map_ss.ForwardingFeatureList

gsm_map.ss.forwardingInfo  forwardingInfo
    No value
    gsm_map_ss.ForwardingInfo

gsm_map.ss.forwardingOptions  forwardingOptions
    Byte array
    gsm_map_ss.ForwardingOptions

gsm_map.ss.genericServiceInfo  genericServiceInfo
    No value
    gsm_map_ss.GenericServiceInfo

gsm_map.ss.imsi  imsi
    Byte array
    gsm_map.IMSI

gsm_map.ss.longFTN_Supported  longFTN-Supported
    No value
    gsm_map_ss.NULL

gsm_map.ss.longForwardedToNumber  longForwardedToNumber
    Byte array
    gsm_map.FTN_AddressString

gsm_map.ss.maximumEntitledPriority  maximumEntitledPriority
    Unsigned 32-bit integer
    gsm_map.EMLPP_Priority

gsm_map.ss.msisdn  msisdn
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ss.nbrSB  nbrSB
    Unsigned 32-bit integer
    gsm_map.MaxMC_Bearers
```

```
gsm_map.ss.nbrSN    nbrSN
    Unsigned 32-bit integer
    gsm_map.MC_Bearers

gsm_map.ss.nbrUser  nbrUser
    Unsigned 32-bit integer
    gsm_map.MC_Bearers

gsm_map.ss.networkSignalInfo  networkSignalInfo
    No value
    gsm_map.ExternalSignalInfo

gsm_map.ss.noReplyConditionTime  noReplyConditionTime
    Unsigned 32-bit integer
    gsm_map_ss.NoReplyConditionTime

gsm_map.ss.overrideCategory  overrideCategory
    Unsigned 32-bit integer
    gsm_map_ss.OverrideCategory

gsm_map.ss.serviceIndicator  serviceIndicator
    Byte array
    gsm_map_ss.ServiceIndicator

gsm_map.ss.ss_Code  ss-Code
    Unsigned 8-bit integer
    gsm_map.SS_Code

gsm_map.ss.ss_Data  ss-Data
    No value
    gsm_map_ss.SS_Data

gsm_map.ss.ss_Event  ss-Event
    Unsigned 8-bit integer
    gsm_map.SS_Code

gsm_map.ss.ss_EventSpecification  ss-EventSpecification
    Unsigned 32-bit integer
    gsm_map_ss.SS_EventSpecification

gsm_map.ss.ss_Status  ss-Status
    Byte array
    gsm_map_ss.SS_Status

gsm_map.ss.ss_SubscriptionOption  ss-SubscriptionOption
    Unsigned 32-bit integer
    gsm_map_ss.SS_SubscriptionOption

gsm_map.ss.translatedB_Number  translatedB-Number
    Byte array
    gsm_map.ISDN_AddressString

gsm_map.ss.uspd_DataCodingScheme  uspd-DataCodingScheme
    Byte array
    gsm_map_ss.USSD_DataCodingScheme

gsm_map.ss.uspd_String  uspd-String
    Byte array
    gsm_map_ss.USSD_String

gsm_map.ss_Code  ss-Code
    Unsigned 8-bit integer
    gsm_map.SS_Code
```

```
gsm_map.ss_Status    ss-Status
    Byte array
    gsm_map.Ext_SS_Status

gsm_map.ss_status_a_bit  A bit
    Boolean
    A bit

gsm_map.ss_status_p_bit  P bit
    Boolean
    P bit

gsm_map.ss_status_q_bit  Q bit
    Boolean
    Q bit

gsm_map.ss_status_r_bit  R bit
    Boolean
    R bit

gsm_map.teleservice    teleservice
    Unsigned 8-bit integer
    gsm_map.TeleserviceCode

gsm_map.tmsi    tmsi
    Byte array
    gsm_map.TMSI

gsm_map.unused    Unused
    Unsigned 8-bit integer
    Unused

gsm_old.SendAuthenticationInfoResOld_item  Item
    No value
    gsm_old.SendAuthenticationInfoResOld_item

gsm_old.TripletListold_item  Item
    No value
    gsm_old.AuthenticationTriplet_v2

gsm_old.b_Subscriber_Address  b-Subscriber-Address
    Byte array
    gsm_map.ISDN_AddressString

gsm_old.basicService    basicService
    Unsigned 32-bit integer
    gsm_map.BasicServiceCode

gsm_old.bss_APDU    bss-APDU
    No value
    gsm_old.Bss_APDU

gsm_old.call_Direction    call-Direction
    Byte array
    gsm_old.CallDirection

gsm_old.category    category
    Byte array
    gsm_old.Category

gsm_old.channelType    channelType
    No value
    gsm_map.ExternalSignalInfo
```



```
gsm_old.chosenChannel  chosenChannel
    No value
    gsm_map.ExternalSignalInfo
gsm_old.cug_CheckInfo  cug-CheckInfo
    No value
    gsm_map_ch.CUG_CheckInfo
gsm_old.derivable  derivable
    Signed 32-bit integer
    gsm_old.InvokeIdType
gsm_old.errorCode  errorCode
    Unsigned 32-bit integer
    gsm_old.MAP_ERROR
gsm_old.extensionContainer  extensionContainer
    No value
    gsm_map.ExtensionContainer
gsm_old.generalProblem  generalProblem
    Signed 32-bit integer
    gsm_old.GeneralProblem
gsm_old.globalValue  globalValue
    gsm_old.OBJECT_IDENTIFIER
gsm_old.gsm_BearerCapability  gsm-BearerCapability
    No value
    gsm_map.ExternalSignalInfo
gsm_old.handoverNumber  handoverNumber
    Byte array
    gsm_map.ISDN_AddressString
gsm_old.highLayerCompatibility  highLayerCompatibility
    No value
    gsm_map.ExternalSignalInfo
gsm_old.ho_NumberNotRequired  ho-NumberNotRequired
    No value
    gsm_old.NULL
gsm_old.imsi  imsi
    Byte array
    gsm_map.IMSI
gsm_old.initialisationVector  initialisationVector
    Byte array
    gsm_old.InitialisationVector
gsm_old.invoke  invoke
    No value
    gsm_old.Invoke
gsm_old.invokeID  invokeID
    Signed 32-bit integer
    gsm_old.InvokeIdType
gsm_old.invokeIDRej  invokeIDRej
    Unsigned 32-bit integer
    gsm_old.T_invokeIDRej
```

```
gsm_old.invokeProblem invokeProblem
    Signed 32-bit integer
    gsm_old.InvokeProblem

gsm_old.invokeparameter invokeparameter
    No value
    gsm_old.InvokeParameter

gsm_old.isdn_BearerCapability isdn-BearerCapability
    No value
    gsm_map.ExternalSignalInfo

gsm_old.kc kc
    Byte array
    gsm_old.Kc

gsm_old.linkedID linkedID
    Signed 32-bit integer
    gsm_old.InvokeIdType

gsm_old.lmsi lmsi
    Byte array
    gsm_map.LMSI

gsm_old.localValue localValue
    Signed 32-bit integer
    gsm_old.OperationLocalvalue

gsm_old.lowerLayerCompatibility lowerLayerCompatibility
    No value
    gsm_map.ExternalSignalInfo

gsm_old.moreMessagesToSend moreMessagesToSend
    No value
    gsm_old.NULL

gsm_old.msisdn msisdn
    Byte array
    gsm_map.ISDN_AddressString

gsm_old.networkSignalInfo networkSignalInfo
    No value
    gsm_map.ExternalSignalInfo

gsm_old.noSM_RP_DA noSM-RP-DA
    No value
    gsm_old.NULL

gsm_old.noSM_RP_OA noSM-RP-OA
    No value
    gsm_old.NULL

gsm_old.not_derivable not-derivable
    No value
    gsm_old.NULL

gsm_old.numberOfForwarding numberOfForwarding
    Unsigned 32-bit integer
    gsm_map_ch.NumberOfForwarding

gsm_old.opCode opCode
    Unsigned 32-bit integer
    gsm_old.MAP_OPERATION
```

```
gsm_old.operationCode  operationCode
    Unsigned 32-bit integer
    gsm_old.OperationCode

gsm_old.operatorSS_Code  operatorSS-Code
    Unsigned 32-bit integer
    gsm_old.T_operatorSS_Code

gsm_old.operatorSS_Code_item  Item
    Byte array
    gsm_old.OCTET_STRING_SIZE_1

gsm_old.originalComponentIdentifier  originalComponentIdentifier
    Unsigned 32-bit integer
    gsm_old.OriginalComponentIdentifier

gsm_old.parameter  parameter
    No value
    gsm_old.ReturnErrorParameter

gsm_old.problem  problem
    Unsigned 32-bit integer
    gsm_old.T_problem

gsm_old.protectedPayload  protectedPayload
    Byte array
    gsm_old.ProtectedPayload

gsm_old.protocolId  protocolId
    Unsigned 32-bit integer
    gsm_map.ProtocolId

gsm_old.rand  rand
    Byte array
    gsm_old.RAND

gsm_old.reject  reject
    No value
    gsm_old.Reject

gsm_old.resultretres  resultretres
    No value
    gsm_old.T_resultretres

gsm_old.returnError  returnError
    No value
    gsm_old.ReturnError

gsm_old.returnErrorProblem  returnErrorProblem
    Signed 32-bit integer
    gsm_old.ReturnErrorProblem

gsm_old.returnResultLast  returnResultLast
    No value
    gsm_old.ReturnResult

gsm_old.returnResultNotLast  returnResultNotLast
    No value
    gsm_old.ReturnResult

gsm_old.returnResultProblem  returnResultProblem
    Signed 32-bit integer
    gsm_old.ReturnResultProblem
```

```

gsm_old.returnparameter  returnparameter
    No value
    gsm_old.ReturnResultParameter

gsm_old.routingInfo  routingInfo
    Unsigned 32-bit integer
    gsm_map_ch.RoutingInfo

gsm_old.sIWFSNumber  sIWFSNumber
    Byte array
    gsm_map.ISDN_AddressString

gsm_old.securityHeader  securityHeader
    No value
    gsm_old.SecurityHeader

gsm_old.securityParametersIndex  securityParametersIndex
    Byte array
    gsm_old.SecurityParametersIndex

gsm_old.serviceCentreAddressDA  serviceCentreAddressDA
    Byte array
    gsm_map.AddressString

gsm_old.serviceCentreAddressOA  serviceCentreAddressOA
    Byte array
    gsm_old.T_serviceCentreAddressOA

gsm_old.signalInfo  signalInfo
    Byte array
    gsm_map.SignalInfo

gsm_old.sm_RP_DA  sm-RP-DA
    Unsigned 32-bit integer
    gsm_old.SM_RP_DAold

gsm_old.sm_RP_OA  sm-RP-OA
    Unsigned 32-bit integer
    gsm_old.SM_RP_OAold

gsm_old.sm_RP_UI  sm-RP-UI
    Byte array
    gsm_map.SignalInfo

gsm_old.sres  sres
    Byte array
    gsm_old.SRES

gsm_old.targetCellId  targetCellId
    Byte array
    gsm_map.GlobalCellId

gsm_old.tripletList  tripletList
    Unsigned 32-bit integer
    gsm_old.TripletListold

gsm_old.userInfo  userInfo
    No value
    gsm_old.NULL

gsm_old.vlr_Number  vlr-Number
    Byte array
    gsm_map.ISDN_AddressString

```

```
gsm_ss.SS_UserData  SS-UserData
  String
  gsm_map.ss.SS_UserData

gsm_ss.add_LocationEstimate  add-LocationEstimate
  Byte array
  gsm_map_lcs.Add_GeographicalInformation

gsm_ss.ageOfLocationInfo  ageOfLocationInfo
  Unsigned 32-bit integer
  gsm_map.AgeOfLocationInformation

gsm_ss.alertingPattern  alertingPattern
  Byte array
  gsm_map.AlertingPattern

gsm_ss.areaEventInfo  areaEventInfo
  No value
  gsm_map_lcs.AreaEventInfo

gsm_ss.callIsWaiting_Indicator  callIsWaiting-Indicator
  No value
  gsm_ss.NULL

gsm_ss.callOnHold_Indicator  callOnHold-Indicator
  Unsigned 32-bit integer
  gsm_ss.CallOnHold_Indicator

gsm_ss.callingName  callingName
  Unsigned 32-bit integer
  gsm_ss.Name

gsm_ss.ccbs_Feature  ccbs-Feature
  No value
  gsm_map_ss.CCBS_Feature

gsm_ss.chargingInformation  chargingInformation
  No value
  gsm_ss.ChargingInformation

gsm_ss.clirSuppressionRejected  clirSuppressionRejected
  No value
  gsm_ss.NULL

gsm_ss.cug_Index  cug-Index
  Unsigned 32-bit integer
  gsm_map_ms.CUG_Index

gsm_ss.dataCodingScheme  dataCodingScheme
  Byte array
  gsm_map_ss.USSD_DataCodingScheme

gsm_ss.decipheringKeys  decipheringKeys
  Byte array
  gsm_ss.DecipheringKeys

gsm_ss.deferredLocationEventType  deferredLocationEventType
  Byte array
  gsm_map_lcs.DeferredLocationEventType

gsm_ss.deflectedToNumber  deflectedToNumber
  Byte array
  gsm_map.AddressString
```

```
gsm_ss.deflectedToSubaddress  deflectedToSubaddress
    Byte array
    gsm_map.ISDN_SubaddressString

gsm_ss.e1  e1
    Unsigned 32-bit integer
    gsm_ss.E1

gsm_ss.e2  e2
    Unsigned 32-bit integer
    gsm_ss.E2

gsm_ss.e3  e3
    Unsigned 32-bit integer
    gsm_ss.E3

gsm_ss.e4  e4
    Unsigned 32-bit integer
    gsm_ss.E4

gsm_ss.e5  e5
    Unsigned 32-bit integer
    gsm_ss.E5

gsm_ss.e6  e6
    Unsigned 32-bit integer
    gsm_ss.E6

gsm_ss.e7  e7
    Unsigned 32-bit integer
    gsm_ss.E7

gsm_ss.ect_CallState  ect-CallState
    Unsigned 32-bit integer
    gsm_ss.ECT_CallState

gsm_ss.ect_Indicator  ect-Indicator
    No value
    gsm_ss.ECT_Indicator

gsm_ss.ganssAssistanceData  ganssAssistanceData
    Byte array
    gsm_ss.GANSSAssistanceData

gsm_ss.gpsAssistanceData  gpsAssistanceData
    Byte array
    gsm_ss.GPSAssistanceData

gsm_ss.h_gmlc_address  h-gmlc-address
    Byte array
    gsm_map_ms.GSN_Address

gsm_ss.lcsClientExternalID  lcsClientExternalID
    No value
    gsm_map.LCSClientExternalID

gsm_ss.lcsClientName  lcsClientName
    No value
    gsm_map_lcs.LCSClientName

gsm_ss.lcsCodeword  lcsCodeword
    No value
    gsm_map_lcs.LCSCodeword
```

```
gsm_ss.lcsRequestorID  lcsRequestorID
    No value
    gsm_map_lcs.LCSRequestorID
gsm_ss.lcsServiceTypeID  lcsServiceTypeID
    Unsigned 32-bit integer
    gsm_map.LCSServiceTypeID
gsm_ss.lcs_QoS  lcs-QoS
    No value
    gsm_map_lcs.LCS_QoS
gsm_ss.lengthInCharacters  lengthInCharacters
    Signed 32-bit integer
    gsm_ss.INTEGER
gsm_ss.locationEstimate  locationEstimate
    Byte array
    gsm_map_lcs.Ext_GeographicalInformation
gsm_ss.locationMethod  locationMethod
    Unsigned 32-bit integer
    gsm_ss.LocationMethod
gsm_ss.locationType  locationType
    No value
    gsm_map_lcs.LocationType
gsm_ss.locationUpdateRequest  locationUpdateRequest
    No value
    gsm_ss.NULL
gsm_ss.mlc_Number  mlc-Number
    Byte array
    gsm_map.ISDN_AddressString
gsm_ss.mo_lrShortCircuit  mo-lrShortCircuit
    No value
    gsm_ss.NULL
gsm_ss.molr_Type  molr-Type
    Unsigned 32-bit integer
    gsm_ss.MOLR_Type
gsm_ss.mpty_Indicator  mpty-Indicator
    No value
    gsm_ss.NULL
gsm_ss.multicall_Indicator  multicall-Indicator
    Unsigned 32-bit integer
    gsm_ss.Multicall_Indicator
gsm_ss.nameIndicator  nameIndicator
    No value
    gsm_ss.NameIndicator
gsm_ss.namePresentationAllowed  namePresentationAllowed
    No value
    gsm_ss.NameSet
gsm_ss.namePresentationRestricted  namePresentationRestricted
    No value
    gsm_ss.NameSet
```

```
gsm_ss.nameString  nameString
    Byte array
    gsm_map_ss.USSD_String

gsm_ss.nameUnavailable  nameUnavailable
    No value
    gsm_ss.NULL

gsm_ss.notificationType  notificationType
    Unsigned 32-bit integer
    gsm_map_ms.NotificationToMSUser

gsm_ss.numberNotAvailableDueToInterworking  numberNotAvailableDueToInterworking
    No value
    gsm_ss.NULL

gsm_ss.partyNumber  partyNumber
    Byte array
    gsm_map.ISDN_AddressString

gsm_ss.partyNumberSubaddress  partyNumberSubaddress
    Byte array
    gsm_map.ISDN_SubaddressString

gsm_ss.periodicLDRInfo  periodicLDRInfo
    No value
    gsm_map_lcs.PeriodicLDRInfo

gsm_ss.presentationAllowedAddress  presentationAllowedAddress
    No value
    gsm_ss.RemotePartyNumber

gsm_ss.presentationRestricted  presentationRestricted
    No value
    gsm_ss.NULL

gsm_ss.presentationRestrictedAddress  presentationRestrictedAddress
    No value
    gsm_ss.RemotePartyNumber

gsm_ss.pseudonymIndicator  pseudonymIndicator
    No value
    gsm_ss.NULL

gsm_ss.qoS  qoS
    No value
    gsm_map_lcs.LCS_QoS

gsm_ss.rdn  rdn
    Unsigned 32-bit integer
    gsm_ss.RDN

gsm_ss.referenceNumber  referenceNumber
    Byte array
    gsm_map_lcs.LCS_ReferenceNumber

gsm_ss.reportingPLMNList  reportingPLMNList
    No value
    gsm_map_lcs.ReportingPLMNList

gsm_ss.sequenceNumber  sequenceNumber
    Unsigned 32-bit integer
    gsm_map_lcs.SequenceNumber
```



```

gsm_ss.ss_Code    ss-Code
    Unsigned 8-bit integer
    gsm_map.SS_Code

gsm_ss.ss_Notification  ss-Notification
    Byte array
    gsm_ss.SS_Notification

gsm_ss.ss_Status    ss-Status
    Byte array
    gsm_map_ss.SS_Status

gsm_ss.supportedGADShapes  supportedGADShapes
    Byte array
    gsm_map_lcs.SupportedGADShapes

gsm_ss.suppressOA    suppressOA
    No value
    gsm_ss.NULL

gsm_ss.suppressPrefCUG  suppressPrefCUG
    No value
    gsm_ss.NULL

gsm_ss.terminationCause  terminationCause
    Unsigned 32-bit integer
    gsm_ss.TerminationCause

gsm_ss.uUS_Required    uUS-Required
    Boolean
    gsm_ss.BOOLEAN

gsm_ss.uUS_Service    uUS-Service
    Unsigned 32-bit integer
    gsm_ss.UUS_Service

gsm_ss.velocityEstimate  velocityEstimate
    Byte array
    gsm_map_lcs.VelocityEstimate

gsm_ss.verificationResponse  verificationResponse
    Unsigned 32-bit integer
    gsm_ss.VerificationResponse

```

#### **GSM SMS TPDU (GSM 03.40) (gsm\_sms)**

```

gsm_sms.coding_group_bits2  Coding Group Bits
    Unsigned 8-bit integer
    Coding Group Bits

gsm_sms.coding_group_bits4  Coding Group Bits
    Unsigned 8-bit integer
    Coding Group Bits

```

#### **GSM Short Message Service User Data (gsm-sms-ud)**

```

gsm-sms-ud.fragment  Short Message fragment
    Frame number
    GSM Short Message fragment

```

`gsm-sms-ud.fragment.error` Short Message defragmentation error  
Frame number  
GSM Short Message defragmentation error due to illegal fragments

`gsm-sms-ud.fragment.multiple_tails` Short Message has multiple tail fragments  
Boolean  
GSM Short Message fragment has multiple tail fragments

`gsm-sms-ud.fragment.overlap` Short Message fragment overlap  
Boolean  
GSM Short Message fragment overlaps with other fragment(s)

`gsm-sms-ud.fragment.overlap.conflicts` Short Message fragment overlapping with c  
Boolean  
GSM Short Message fragment overlaps with conflicting data

`gsm-sms-ud.fragment.too_long_fragment` Short Message fragment too long  
Boolean  
GSM Short Message fragment data goes beyond the packet end

`gsm-sms-ud.fragments` Short Message fragments  
No value  
GSM Short Message fragments

`gsm-sms-ud.reassembled.in` Reassembled in  
Frame number  
GSM Short Message has been reassembled in this packet.

`gsm-sms-ud.udh.iei` IE Id  
Unsigned 8-bit integer  
Name of the User Data Header Information Element.

`gsm-sms-ud.udh.len` UDH Length  
Unsigned 8-bit integer  
Length of the User Data Header (bytes)

`gsm-sms-ud.udh.mm` Multiple messages UDH  
No value  
Multiple messages User Data Header

`gsm-sms-ud.udh.mm.msg_id` Message identifier  
Unsigned 16-bit integer  
Identification of the message

`gsm-sms-ud.udh.mm.msg_part` Message part number  
Unsigned 8-bit integer  
Message part (fragment) sequence number

`gsm-sms-ud.udh.mm.msg_parts` Message parts  
Unsigned 8-bit integer  
Total number of message parts (fragments)

`gsm-sms-ud.udh.ports` Port number UDH  
No value  
Port number User Data Header

`gsm-sms-ud.udh.ports.dst` Destination port  
Unsigned 8-bit integer  
Destination port

`gsm-sms-ud.udh.ports.src` Source port  
Unsigned 8-bit integer  
Source port

**GSS-API Generic Security Service Application Program Interface (gss-api)**

gss-api.OID   OID  
String  
This is a GSS-API Object Identifier

gss-api.reassembled\_in   Reassembled In  
Frame number  
The frame where this pdu is reassembled

gss-api.segment   GSSAPI Segment  
Frame number  
GSSAPI Segment

gss-api.segment.error   Defragmentation error  
Frame number  
Defragmentation error due to illegal fragments

gss-api.segment.multipletails   Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

gss-api.segment.overlap   Fragment overlap  
Boolean  
Fragment overlaps with other fragments

gss-api.segment.overlap.conflict   Conflicting data in fragment overlap  
Boolean  
Overlapping fragments contained conflicting data

gss-api.segment.segments   GSSAPI Segments  
No value  
GSSAPI Segments

gss-api.segment.toolongfragment   Fragment too long  
Boolean  
Fragment contained data past end of packet

**General Inter-ORB Protocol (giop)**

giop.TCKind   TypeCode enum  
Unsigned 32-bit integer

giop.compressed   ZIOP  
Unsigned 8-bit integer

giop.endianess   Endianess  
Unsigned 8-bit integer

giop.exceptionid   Exception id  
String

giop.iiop.host   IIOP::Profile\_host  
String

giop.iiop.port   IIOP::Profile\_port  
Unsigned 16-bit integer

giop.iiop.scid   SCID  
Unsigned 32-bit integer

giop.iiop.vscid   VSCID  
Unsigned 32-bit integer

```
giop.iiop_vmaj  IIOP Major Version
                Unsigned 8-bit integer
giop.iiop_vmin  IIOP Minor Version
                Unsigned 8-bit integer
giop.iioptag   IIOP Component TAG
                Unsigned 32-bit integer
giop.iortag    IOR Profile TAG
                Unsigned 8-bit integer
giop.len       Message size
                Unsigned 32-bit integer
giop.objektkey Object Key
                Byte array
giop.profid    Profile ID
                Unsigned 32-bit integer
giop.replystatus Reply status
                Unsigned 32-bit integer
giop.repoid    Repository ID
                String
giop.request_id Request id
                Unsigned 32-bit integer
giop.request_op Request operation
                String
giop.seqlen    Sequence Length
                Unsigned 32-bit integer
giop.strlen    String Length
                Unsigned 32-bit integer
giop.tcValueModifier ValueModifier
                Signed 16-bit integer
giop.tcVisibility Visibility
                Signed 16-bit integer
giop.tcboolean TypeCode boolean data
                Boolean
giop.tcchar    TypeCode char data
                Unsigned 8-bit integer
giop.tccount   TypeCode count
                Unsigned 32-bit integer
giop.tcdefault_used default_used
                Signed 32-bit integer
giop.tcdigits  Digits
                Unsigned 16-bit integer
giop.tcdouble  TypeCode double data
                Double-precision floating point
giop.tcenumdata TypeCode enum data
                Unsigned 32-bit integer
```

```
giop.tcfloat  TypeCode float data
              Double-precision floating point
giop.tclength Length
              Unsigned 32-bit integer
giop.tclongdata  TypeCode long data
              Signed 32-bit integer
giop.tcm maxlen  Maximum length
              Unsigned 32-bit integer
giop.tcmemname  TypeCode member name
              String
giop.tcname     TypeCode name
              String
giop.tcoctet   TypeCode octet data
              Unsigned 8-bit integer
giop.tcscale   Scale
              Signed 16-bit integer
giop.tcshortdata  TypeCode short data
              Signed 16-bit integer
giop.tcstring  TypeCode string data
              String
giop.tculongdata  TypeCode ulong data
              Unsigned 32-bit integer
giop.tcushortdata  TypeCode ushort data
              Unsigned 16-bit integer
giop.type      Message type
              Unsigned 8-bit integer
giop.typeid    IOR::type_id
              String
```

#### **Generic Routing Encapsulation (gre)**

```
gre.3gpp2_di   Duration Indicator
              Boolean
              Duration Indicator
gre.3gpp2_fci  Flow Control Indicator
              Boolean
              Flow Control Indicator
gre.3gpp2_sdi  SDI/DOS
              Boolean
              Short Data Indicator(SDI)/Data Over Signaling (DOS)
gre.gpp2_3gpp2_seg  Type
              Unsigned 16-bit integer
              Type
gre.gpp2_attrib_id  Type
              Unsigned 8-bit integer
              Type
```

```
gre.ggp2_attrib_length  Length
    Unsigned 8-bit integer
    Length
gre.ggp2_flow_disc      Flow ID
    Byte array
    Flow ID
gre.key                 GRE Key
    Unsigned 32-bit integer
gre.proto               Protocol Type
    Unsigned 16-bit integer
    The protocol that is GRE encapsulated
```

**Gnutella Protocol (gnutella)**

```
gnutella.header        Descriptor Header
    No value
    Gnutella Descriptor Header
gnutella.header.hops    Hops
    Unsigned 8-bit integer
    Gnutella Descriptor Hop Count
gnutella.header.id     ID
    Byte array
    Gnutella Descriptor ID
gnutella.header.payload Payload
    Unsigned 8-bit integer
    Gnutella Descriptor Payload
gnutella.header.size   Length
    Unsigned 8-bit integer
    Gnutella Descriptor Payload Length
gnutella.header.ttl    TTL
    Unsigned 8-bit integer
    Gnutella Descriptor Time To Live
gnutella.pong.files     Files Shared
    Unsigned 32-bit integer
    Gnutella Pong Files Shared
gnutella.pong.ip       IP
    IPv4 address
    Gnutella Pong IP Address
gnutella.pong.kbytes   KBytes Shared
    Unsigned 32-bit integer
    Gnutella Pong KBytes Shared
gnutella.pong.payload  Pong
    No value
    Gnutella Pong Payload
gnutella.pong.port     Port
    Unsigned 16-bit integer
    Gnutella Pong TCP Port
```

```
gnutella.push.index  Index
    Unsigned 32-bit integer
    Gnutella Push Index

gnutella.push.ip     IP
    IPv4 address
    Gnutella Push IP Address

gnutella.push.payload  Push
    No value
    Gnutella Push Payload

gnutella.push.port   Port
    Unsigned 16-bit integer
    Gnutella Push Port

gnutella.push.servent_id  Servent ID
    Byte array
    Gnutella Push Servent ID

gnutella.query.min_speed  Min Speed
    Unsigned 32-bit integer
    Gnutella Query Minimum Speed

gnutella.query.payload  Query
    No value
    Gnutella Query Payload

gnutella.query.search  Search
    String
    Gnutella Query Search

gnutella.queryhit.count  Count
    Unsigned 8-bit integer
    Gnutella QueryHit Count

gnutella.queryhit.extra  Extra
    Byte array
    Gnutella QueryHit Extra

gnutella.queryhit.hit  Hit
    No value
    Gnutella QueryHit

gnutella.queryhit.hit.extra  Extra
    Byte array
    Gnutella Query Extra

gnutella.queryhit.hit.index  Index
    Unsigned 32-bit integer
    Gnutella QueryHit Index

gnutella.queryhit.hit.name  Name
    String
    Gnutella Query Name

gnutella.queryhit.hit.size  Size
    Unsigned 32-bit integer
    Gnutella QueryHit Size

gnutella.queryhit.ip  IP
    IPv4 address
    Gnutella QueryHit IP Address
```

```

gnutella.queryhit.payload  QueryHit
    No value
    Gnutella QueryHit Payload

gnutella.queryhit.port  Port
    Unsigned 16-bit integer
    Gnutella QueryHit Port

gnutella.queryhit.servent_id  Servent ID
    Byte array
    Gnutella QueryHit Servent ID

gnutella.queryhit.speed  Speed
    Unsigned 32-bit integer
    Gnutella QueryHit Speed

gnutella.stream  Gnutella Upload / Download Stream
    No value
    Gnutella Upload / Download Stream

```

### H.248 3GPP (h2483gpp)

```

h248.package_3GCSD  CSD Package
    Byte array
    Circuit Switched Data Package

h248.package_3GCSD.actprot  Activate Protocol
    Byte array
    Activate the higher layer protocol

h248.package_3GCSD.actprot.localpeer  Local Peer Role
    Unsigned 32-bit integer
    It is used to inform the modem whether it should act as originating or termi

h248.package_3GCSD.gsmchancod  GSM channel coding
    Byte array
    Channel information needed for GSM

h248.package_3GCSD.plmnbcb  PLMN Bearer Capability
    Byte array
    The PLMN Bearer Capability

h248.package_3GCSD.protres  Protocol Negotiation Result
    Byte array
    This event is used to report the result of the protocol negotiation

h248.package_3GCSD.protres.cause  Possible Failure Cause
    Unsigned 32-bit integer
    indicates the possible failure cause

h248.package_3GCSD.protres.result  Negotiation Result
    Unsigned 32-bit integer
    reports whether the protocol negotiation has been successful

h248.package_3GCSD.ratechg  Rate Change
    Byte array
    This event is used to report a rate change

h248.package_3GCSD.ratechg.rate  New Rate
    Unsigned 32-bit integer
    reports the new rate for the termination

```



h248.package\_3GTFO Tandem Free Operation  
Byte array  
This package defines events and properties for Tandem Free Operation (TFO) c

h248.package\_3GTFO.codec\_modify Optimal Codec Event  
Byte array  
The event is used to notify the MGC that TFO negotiation has resulted in an

h248.package\_3GTFO.codec\_modify.optimalcodec Optimal Codec Type  
Byte array  
indicates which is the proposed codec type for TFO

h248.package\_3GTFO.codeclist TFO Codec List  
Byte array  
List of codecs for use in TFO protocol

h248.package\_3GTFO.distant\_codec\_list Codec List Event  
Byte array  
The event is used to notify the MGC of the distant TFO partner's supported c

h248.package\_3GTFO.distant\_codec\_list.distlist Distant Codec List  
Byte array  
indicates the codec list for TFO

h248.package\_3GTFO.status TFO Status Event  
Byte array  
The event is used to notify the MGC that a TFO link has been established or

h248.package\_3GTFO.status.tfostatus TFO Status  
Boolean  
reports whether TFO has been established or broken

h248.package\_3GTFO.tfoenable TFO Activity Control  
Unsigned 32-bit integer  
Defines if TFO is enabled or not

h248.package\_3GUP.Mode Mode  
Unsigned 32-bit integer  
Mode

h248.package\_3GUP.delerrrsdu Delivery of erroneous SDUs  
Unsigned 32-bit integer  
Delivery of erroneous SDUs

h248.package\_3GUP.initdir Initialisation Direction  
Unsigned 32-bit integer  
Initialisation Direction

h248.package\_3GUP.interface Interface  
Unsigned 32-bit integer  
Interface

h248.package\_3GUP.upversions UPversions  
Unsigned 32-bit integer  
UPversions

#### **H.248 Annex C (h248c)**

h248.pkg.annexc.ACodec ACodec  
Byte array  
ACodec

```
h248.pkg.annexc.BIR  BIR
    Byte array
    BIR

h248.pkg.annexc.Mediatx  Mediatx
    Unsigned 32-bit integer
    Mediatx

h248.pkg.annexc.NSAP  NSAP
    Byte array
    NSAP

h248.pkg.annexc.USI  USI
    Byte array
    User Service Information

h248.pkg.annexc.a2pcdv  A2PCDV
    Unsigned 24-bit integer
    Acceptable 2 point CDV

h248.pkg.annexc.aallst  AAL1ST
    Unsigned 8-bit integer
    AAL1 subtype

h248.pkg.annexc.aaltype  AALtype
    Unsigned 8-bit integer
    AAL Type

h248.pkg.annexc.aclr  ACLR
    Unsigned 8-bit integer
    Acceptable Cell Loss Ratio (Q.2965.2 ATMF UNI 4.0)

h248.pkg.annexc.addlayer3prot  addlayer3prot
    Unsigned 8-bit integer
    Additional User Information Layer 3 protocol

h248.pkg.annexc.aesa  AESA
    Byte array
    ATM End System Address

h248.pkg.annexc.alc  ALC
    Byte array
    AAL2 Link Characteristics

h248.pkg.annexc.appcdv  APPCDV
    Unsigned 24-bit integer
    Acceptable Point to Point CDV

h248.pkg.annexc.assign  llidnegot
    Unsigned 8-bit integer
    Assignor/Asignee

h248.pkg.annexc.atc  ATC
    Unsigned 32-bit integer
    ATM Traffic Capability

h248.pkg.annexc.bbtc  BBTC
    Unsigned 8-bit integer
    Broadband Transfer Capability

h248.pkg.annexc.bcob  BCOB
    Unsigned 8-bit integer
    Broadband Bearer Class
```

```
h248.pkg.annexc.bei  BEI
  Boolean
  Best Effort Indicator

h248.pkg.annexc.bit_rate  Bit Rate
  Unsigned 32-bit integer
  Bit Rate

h248.pkg.annexc.bmsdu  bmsdu
  Byte array
  bmsdu

h248.pkg.annexc.c2pcdv  C2PCDV
  Unsigned 24-bit integer
  Cumulative 2 point CDV

h248.pkg.annexc.cbrr  CBRR
  Unsigned 8-bit integer
  CBR rate

h248.pkg.annexc.ceetd  CEETD
  Unsigned 16-bit integer
  Cumulative End-to-End Transit Delay (Q.2965.2 ATMF UNI 4.0)

h248.pkg.annexc.cid  CID
  Unsigned 32-bit integer
  Channel-Id

h248.pkg.annexc.clc  CLC
  Byte array
  Close Logical Channel

h248.pkg.annexc.clcack  CLCack
  Byte array
  Close Logical Channel Acknowledge

h248.pkg.annexc.cppcdv  CPPCDV
  Unsigned 24-bit integer
  Cumulative Point to Point CDV

h248.pkg.annexc.databits  databits
  Unsigned 8-bit integer
  Number of stop bits

h248.pkg.annexc.dialedn  Dialed Number
  Byte array
  Dialed Number

h248.pkg.annexc.dialingn  Dialing Number
  Byte array
  Dialing Number

h248.pkg.annexc.dlci  DLCI
  Unsigned 32-bit integer
  Data Link Connection ID (FR)

h248.pkg.annexc.duplexmode  duplexmode
  Unsigned 8-bit integer
  Mode Duplex

h248.pkg.annexc.echoci  ECHOCI
  Byte array
  Not used
```

```
h248.pkg.annexc.ecm    ECM
    Unsigned 8-bit integer
    Error Correction Method

h248.pkg.annexc.encrypt_key  Encrypt Key
    Unsigned 32-bit integer
    Encryption Key

h248.pkg.annexc.encrypt_type  Encrypttype
    Byte array
    Encryption Type

h248.pkg.annexc.fd    FD
    Boolean
    Frame Discard

h248.pkg.annexc.flowcontrx  flowcontrx
    Unsigned 8-bit integer
    Flow Control on Reception

h248.pkg.annexc.flowconttx  flowconttx
    Unsigned 8-bit integer
    Flow Control on Transmission

h248.pkg.annexc.fmsdu  fmsdu
    Byte array
    FMSDU

h248.pkg.annexc.gain  Gain
    Unsigned 32-bit integer
    Gain (dB)

h248.pkg.annexc.h222  H222LogicalChannelParameters
    Byte array
    H222LogicalChannelParameters

h248.pkg.annexc.h223  H223LogicalChannelParameters
    Byte array
    H223LogicalChannelParameters

h248.pkg.annexc.h2250  H2250LogicalChannelParameters
    Byte array
    H2250LogicalChannelParameters

h248.pkg.annexc.inbandneg  inbandneg
    Unsigned 8-bit integer
    In-band/Out-band negotiation

h248.pkg.annexc.intrate  UPPC
    Unsigned 8-bit integer
    Intermediare Rate

h248.pkg.annexc.ipv4  IPv4
    IPv4 address
    IPv4 Address

h248.pkg.annexc.ipv6  IPv6
    IPv6 address
    IPv6 Address

h248.pkg.annexc.itc  ITC
    Unsigned 8-bit integer
    Information Transfer Capability
```

```
h248.pkg.annexc.jitterbuf  JitterBuff
    Unsigned 32-bit integer
    Jitter Buffer Size (ms)
h248.pkg.annexc.layer2prot  layer2prot
    Unsigned 8-bit integer
    Layer 2 protocol
h248.pkg.annexc.layer3prot  layer3prot
    Unsigned 8-bit integer
    Layer 3 protocol
h248.pkg.annexc.llidnegot  llidnegot
    Unsigned 8-bit integer
    Intermediare Rate
h248.pkg.annexc.maxcpssdu  Max CPS SDU
    Unsigned 8-bit integer
    Maximum Common Part Sublayer Service Data Unit size
h248.pkg.annexc.mbs0  MBS0
    Unsigned 24-bit integer
    Maximum Burst Size for CLP=0
h248.pkg.annexc.mbs1  MBS1
    Unsigned 24-bit integer
    Maximum Burst Size for CLP=1
h248.pkg.annexc.media  Media
    Unsigned 32-bit integer
    Media Type
h248.pkg.annexc.meetd  MEETD
    Unsigned 16-bit integer
    Maximum End-to-End Transit Delay (Q.2965.2 ATMF UNI 4.0)
h248.pkg.annexc.modem  modem
    Unsigned 8-bit integer
    Modem Type
h248.pkg.annexc.mult  Rate Multiplier
    Unsigned 8-bit integer
    Rate Multiplier
h248.pkg.annexc.multiframe  multiframe
    Unsigned 8-bit integer
    Multiple Frame establishment support in datalink
h248.pkg.annexc.nci  NCI
    Unsigned 8-bit integer
    Nature of Connection Indicator
h248.pkg.annexc.negotiation  UPPC
    Unsigned 8-bit integer
    Negotiation
h248.pkg.annexc.nicrx  nicrx
    Unsigned 8-bit integer
    Intermediare Rate
h248.pkg.annexc.nictx  nictx
    Unsigned 8-bit integer
    Intermediare Network indipendent clock in transmission
```

```
h248.pkg.annexc.num_of_channels  Number of Channels
    Unsigned 32-bit integer
    Number of Channels

h248.pkg.annexc.olc  OLC
    Byte array
    Open Logical Channel

h248.pkg.annexc.olcack  OLCack
    Byte array
    Open Logical Channel Acknowledge

h248.pkg.annexc.olccnf  OLCcnf
    Byte array
    Open Logical Channel CNF

h248.pkg.annexc.olcrej  OLCrej
    Byte array
    Open Logical Channel Reject

h248.pkg.annexc.opmode  OPMODE
    Unsigned 8-bit integer
    Mode of operation

h248.pkg.annexc.parity  parity
    Unsigned 8-bit integer
    Parity Information Bits

h248.pkg.annexc.pcr0  PCR0
    Unsigned 24-bit integer
    Peak Cell Rate for CLP=0

h248.pkg.annexc.pcr1  PCR1
    Unsigned 24-bit integer
    Peak Cell Rate for CLP=1

h248.pkg.annexc.pfci  PFCI
    Unsigned 8-bit integer
    Partially Filled Cells Identifier

h248.pkg.annexc.port  Port
    Unsigned 16-bit integer
    Port

h248.pkg.annexc.porttype  PortType
    Unsigned 32-bit integer
    Port Type

h248.pkg.annexc.ppt  PPT
    Unsigned 32-bit integer
    Primary Payload Type

h248.pkg.annexc.qosclass  QoSClass
    Unsigned 16-bit integer
    QoS Class (Q.2965.1)

h248.pkg.annexc.rateadapthdr  rateadapthdr
    Unsigned 8-bit integer
    Rate Adaptation Header/No-Header

h248.pkg.annexc.rtp_payload  RTP Payload type
    Unsigned 32-bit integer
    Payload type in RTP Profile
```

```
h248.pkg.annexc.samplepp  Samplepp
    Unsigned 32-bit integer
    Samplepp

h248.pkg.annexc.sampling_rate  Sampling Rate
    Unsigned 32-bit integer
    Sampling Rate

h248.pkg.annexc.sc  Service Class
    Unsigned 32-bit integer
    Service Class

h248.pkg.annexc.scr0  SCR0
    Unsigned 24-bit integer
    Sustained Cell Rate for CLP=0

h248.pkg.annexc.scr1  SCR1
    Unsigned 24-bit integer
    Sustained Cell Rate for CLP=1

h248.pkg.annexc.scri  SCRI
    Unsigned 8-bit integer
    Source Clock frequency Recovery method

h248.pkg.annexc.sdbt  SDBT
    Unsigned 16-bit integer
    Structured Data Transfer Blocksize

h248.pkg.annexc.sdp_a  sdp_a
    String
    SDP A

h248.pkg.annexc.sdp_b  sdp_b
    String
    SDP B

h248.pkg.annexc.sdp_c  sdp_c
    String
    SDP C

h248.pkg.annexc.sdp_e  sdp_e
    String
    SDP E

h248.pkg.annexc.sdp_i  sdp_i
    String
    SDP I

h248.pkg.annexc.sdp_k  sdp_k
    String
    SDP K

h248.pkg.annexc.sdp_m  sdp_m
    String
    SDP M

h248.pkg.annexc.sdp_o  sdp_o
    String
    SDP O

h248.pkg.annexc.sdp_p  sdp_p
    String
    SDP P
```

```

h248.pkg.annexc.sdp_r  sdp_r
    String
    SDP R

h248.pkg.annexc.sdp_s  sdp_s
    String
    SDP S

h248.pkg.annexc.sdp_t  sdp_t
    String
    SDP T

h248.pkg.annexc.sdp_u  sdp_u
    String
    SDP U

h248.pkg.annexc.sdp_v  sdp_v
    String
    SDP V

h248.pkg.annexc.sdp_z  sdp_z
    String
    SDP Z

h248.pkg.annexc.sid    SID
    Unsigned 32-bit integer
    Silence Insertion Descriptor

h248.pkg.annexc.silence_supp  SilenceSupp
    Boolean
    Silence Suppression

h248.pkg.annexc.sscs  sscs
    Byte array
    sscs

h248.pkg.annexc.stc    STC
    Unsigned 8-bit integer
    Susceptibility to Clipping

h248.pkg.annexc.stopbits  stopbits
    Unsigned 8-bit integer
    Number of stop bits

h248.pkg.annexc.sut    SUT
    Byte array
    Served User Transport

h248.pkg.annexc.syncasync  SyncAsync
    Unsigned 8-bit integer
    Synchronous/Asynchronous

h248.pkg.annexc.tci    TCI
    Boolean
    Test Connection Indicator

h248.pkg.annexc.ti     TI
    Boolean
    Tagging Indicator

h248.pkg.annexc.timer_cu  Timer CU
    Unsigned 32-bit integer
    Milliseconds to hold the partially filled cell before sending

```



```
h248.pkg.annexc.tmr  TMR
    Unsigned 8-bit integer
    Transmission Medium Requirement

h248.pkg.annexc.tmsr  TMSR
    Unsigned 8-bit integer
    Transmission Medium Requirement Subrate

h248.pkg.annexc.transmission_mode  Transmission Mode
    Unsigned 32-bit integer
    Transmission Mode

h248.pkg.annexc.transmode  TransMode
    Unsigned 8-bit integer
    Transfer Mode

h248.pkg.annexc.transrate  TransRate
    Unsigned 8-bit integer
    Transfer Rate

h248.pkg.annexc.uppc  UPPC
    Unsigned 8-bit integer
    User Plane Connection Configuration

h248.pkg.annexc.userrate  Userrate
    Unsigned 8-bit integer
    User Rate

h248.pkg.annexc.v76  V76LogicalChannelParameters
    Byte array
    V76LogicalChannelParameters

h248.pkg.annexc.vci  VCI
    Unsigned 16-bit integer
    Virtual Circuit Identifier

h248.pkg.annexc.vpi  VPI
    Unsigned 16-bit integer
    Virtual Path Identifier
```

#### **H.248 Annex E (h248e)**

```
h248.pkg.al  Analog Line Supervision Package
    Byte array

h248.pkg.al.ev.flashhook.mindur  Minimum duration in ms
    Unsigned 32-bit integer

h248.pkg.al.ev.offhook.strict  strict
    Unsigned 8-bit integer

h248.pkg.al.ev.onhook.init  init
    Boolean

h248.pkg.al.ev.onhook.strict  strict
    Unsigned 8-bit integer

h248.pkg.al.flashhook  flashhook
    Byte array

h248.pkg.al.offhook  offhook
    Byte array
```

```
h248.pkg.al.onhook  onhook
    Byte array
h248.pkg.generic  Generic Package
    Byte array
h248.pkg.generic.cause  Cause Event
    Byte array
h248.pkg.generic.cause.failurecause  Generic Cause
    String
h248.pkg.generic.cause.gencause  Generic Cause
    Unsigned 32-bit integer
h248.pkg.generic.sc  Signal Completion
    Byte array
h248.pkg.generic.sc.meth  Termination Method
    Unsigned 32-bit integer
h248.pkg.generic.sc.rid  Request ID
    Unsigned 32-bit integer
h248.pkg.generic.sc.sig_id  Signal Identity
    Byte array
h248.pkg.generic.sc.slid  Signal List ID
    Unsigned 32-bit integer
h248.pkg.rtp  RTP package
    Byte array
h248.pkg.rtp.stat.ps  Packets Sent
    Unsigned 64-bit integer
    Packets Sent
h248.pkg.tdmc  TDM Circuit Package
    Byte array
h248.pkg.tdmc.ec  Echo Cancellation
    Boolean
    Echo Cancellation
h248.pkg.tdmc.gain  Gain
    Unsigned 32-bit integer
    Gain
```

#### **H.248 MEGACO (h248)**

```
h248.EventBufferDescriptor_item  Item
    No value
    h248.EventSpec
h248.EventParamValues_item  Item
    Byte array
    h248.EventParamValue
h248.IndAudPropertyGroup_item  Item
    No value
    h248.IndAudPropertyParm
```

```
h248.PackagesDescriptor_item  Item
    No value
    h248.PackagesItem
h248.PropertyGroup_item  Item
    No value
    h248.PropertyParm
h248.SCreasonValue_item  Item
    Byte array
    h248.SCreasonValueOctetStr
h248.SigParamValues_item  Item
    Byte array
    h248.SigParamValue
h248.SignalsDescriptor_item  Item
    Unsigned 32-bit integer
    h248.SignalRequest
h248.StatisticsDescriptor_item  Item
    No value
    h248.StatisticsParameter
h248.TerminationAudit_item  Item
    Unsigned 32-bit integer
    h248.AuditReturnParameter
h248.TerminationIDList_item  Item
    No value
    h248.TerminationID
h248.TransactionResponseAck_item  Item
    No value
    h248.TransactionAck
h248.Value_item  Item
    Byte array
    h248.OCTET_STRING
h248.actionReplies  actionReplies
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_ActionReply
h248.actionReplies_item  Item
    No value
    h248.ActionReply
h248.actions  actions
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_ActionRequest
h248.actions_item  Item
    No value
    h248.ActionRequest
h248.ad  ad
    Byte array
    h248.AuthData
h248.addReply  addReply
    No value
    h248.T_addReply
```

```
h248.addReq    addReq
               No value
               h248.T_addReq

h248.address   address
               IPv4 address
               h248.OCTET_STRING_SIZE_4

h248.andAUDITSelect  andAUDITSelect
               No value
               h248.NULL

h248.auditCapReply  auditCapReply
               Unsigned 32-bit integer
               h248.T_auditCapReply

h248.auditCapRequest  auditCapRequest
               No value
               h248.T_auditCapRequest

h248.auditDescriptor  auditDescriptor
               No value
               h248.AuditDescriptor

h248.auditPropertyToken  auditPropertyToken
               Unsigned 32-bit integer
               h248.SEQUENCE_OF_IndAuditParameter

h248.auditPropertyToken_item  Item
               Unsigned 32-bit integer
               h248.IndAuditParameter

h248.auditResult  auditResult
               No value
               h248.AuditResult

h248.auditResultTermList  auditResultTermList
               No value
               h248.TermListAuditResult

h248.auditToken  auditToken
               Byte array
               h248.T_auditToken

h248.auditValueReply  auditValueReply
               Unsigned 32-bit integer
               h248.T_auditValueReply

h248.auditValueRequest  auditValueRequest
               No value
               h248.T_auditValueRequest

h248.authHeader  authHeader
               No value
               h248.AuthenticationHeader

h248.command  command
               Unsigned 32-bit integer
               h248.Command

h248.commandReply  commandReply
               Unsigned 32-bit integer
               h248.SEQUENCE_OF_CommandReply
```

```
h248.commandReply_item  Item
    Unsigned 32-bit integer
    h248.CommandReply

h248.commandRequests  commandRequests
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_CommandRequest

h248.commandRequests_item  Item
    No value
    h248.CommandRequest

h248.contextAttrAuditReq  contextAttrAuditReq
    No value
    h248.T_contextAttrAuditReq

h248.contextAuditResult  contextAuditResult
    Unsigned 32-bit integer
    h248.TerminationIDList

h248.contextId  contextId
    Unsigned 32-bit integer
    Context ID

h248.contextList  contextList
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_ContextIDinList

h248.contextList_item  Item
    Unsigned 32-bit integer
    h248.ContextIDinList

h248.contextProp  contextProp
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_PropertyParm

h248.contextPropAud  contextPropAud
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_IndAudPropertyParm

h248.contextPropAud_item  Item
    No value
    h248.IndAudPropertyParm

h248.contextProp_item  Item
    No value
    h248.PropertyParm

h248.contextReply  contextReply
    No value
    h248.ContextRequest

h248.contextRequest  contextRequest
    No value
    h248.ContextRequest

h248.ctx  Context
    Unsigned 32-bit integer

h248.ctx.cmd  Command in Frame
    Frame number
```

```
h248.ctx.term Termination
    String
h248.ctx.term.bir BIR
    String
h248.ctx.term.nsap NSAP
    String
h248.ctx.term.type Type
    Unsigned 32-bit integer
h248.data data
    Byte array
    h248.OCTET_STRING
h248.date date
    String
    h248.IA5String_SIZE_8
h248.descriptors descriptors
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_AmmDescriptor
h248.descriptors_item Item
    Unsigned 32-bit integer
    h248.AmmDescriptor
h248.deviceName deviceName
    String
    h248.PathName
h248.digitMapBody digitMapBody
    String
    h248.IA5String
h248.digitMapDescriptor digitMapDescriptor
    No value
    h248.DigitMapDescriptor
h248.digitMapName digitMapName
    Byte array
    h248.DigitMapName
h248.digitMapToken digitMapToken
    Boolean
h248.digitMapValue digitMapValue
    No value
    h248.DigitMapValue
h248.direction direction
    Unsigned 32-bit integer
    h248.SignalDirection
h248.domainName domainName
    No value
    h248.DomainName
h248.duration duration
    Unsigned 32-bit integer
    h248.INTEGER_0_65535
```

```
h248.durationTimer  durationTimer
    Unsigned 32-bit integer
    h248.INTEGER_0_99

h248.emergency  emergency
    Boolean
    h248.BOOLEAN

h248.emptyDescriptors  emptyDescriptors
    No value
    h248.AuditDescriptor

h248.error  error
    No value
    h248.ErrorDescriptor

h248.errorCode  errorCode
    Unsigned 32-bit integer
    ErrorDescriptor/errorCode

h248.errorDescriptor  errorDescriptor
    No value
    h248.ErrorDescriptor

h248.errorText  errorText
    String
    h248.ErrorText

h248.evParList  evParList
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_EventParameter

h248.evParList_item  Item
    No value
    h248.EventParameter

h248.eventAction  eventAction
    No value
    h248.RequestedActions

h248.eventBufferControl  eventBufferControl
    No value
    h248.NULL

h248.eventBufferDescriptor  eventBufferDescriptor
    Unsigned 32-bit integer
    h248.EventBufferDescriptor

h248.eventBufferToken  eventBufferToken
    Boolean

h248.eventDM  eventDM
    Unsigned 32-bit integer
    h248.EventDM

h248.eventList  eventList
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_RequestedEvent

h248.eventList_item  Item
    No value
    h248.RequestedEvent
```

```
h248.eventName  eventName
  Byte array
  h248.PkgdName

h248.eventParList  eventParList
  Unsigned 32-bit integer
  h248.SEQUENCE_OF_EventParameter

h248.eventParList_item  Item
  No value
  h248.EventParameter

h248.eventParamValue  eventParamValue
  Unsigned 32-bit integer
  h248.EventParamValues

h248.eventParameterName  eventParameterName
  Byte array
  h248.EventParameterName

h248.event_name  Package and Event name
  Unsigned 32-bit integer
  Package

h248.eventsDescriptor  eventsDescriptor
  No value
  h248.EventsDescriptor

h248.eventsToken  eventsToken
  Boolean

h248.experimental  experimental
  String
  h248.IA5String_SIZE_8

h248.extraInfo  extraInfo
  Unsigned 32-bit integer
  h248.EventPar_extraInfo

h248.firstAck  firstAck
  Unsigned 32-bit integer
  h248.TransactionId

h248.h221NonStandard  h221NonStandard
  No value
  h248.H221NonStandard

h248.id  id
  Unsigned 32-bit integer
  h248.INTEGER_0_65535

h248.iepscallind  iepscallind
  Boolean
  h248.Iepscallind_BOOL

h248.immAckRequired  immAckRequired
  No value
  h248.NULL

h248.indauddigitMapDescriptor  indauddigitMapDescriptor
  No value
  h248.IndAudDigitMapDescriptor
```



```
h248.indaudeventBufferDescriptor  indaudeventBufferDescriptor
    No value
    h248.IndAudEventBufferDescriptor
h248.indaudeventsDescriptor  indaudeventsDescriptor
    No value
    h248.IndAudEventsDescriptor
h248.indaudmediaDescriptor  indaudmediaDescriptor
    No value
    h248.IndAudMediaDescriptor
h248.indaudpackagesDescriptor  indaudpackagesDescriptor
    No value
    h248.IndAudPackagesDescriptor
h248.indaudsignalsDescriptor  indaudsignalsDescriptor
    Unsigned 32-bit integer
    h248.IndAudSignalsDescriptor
h248.indaudstatisticsDescriptor  indaudstatisticsDescriptor
    No value
    h248.IndAudStatisticsDescriptor
h248.intersigDelay  intersigDelay
    Unsigned 32-bit integer
    h248.INTEGER_0_65535
h248.ip4Address  ip4Address
    No value
    h248.IP4Address
h248.ip6Address  ip6Address
    No value
    h248.IP6Address
h248.keepActive  keepActive
    Boolean
    h248.BOOLEAN
h248.lastAck  lastAck
    Unsigned 32-bit integer
    h248.TransactionId
h248.localControlDescriptor  localControlDescriptor
    No value
    h248.IndAudLocalControlDescriptor
h248.localDescriptor  localDescriptor
    No value
    h248.IndAudLocalRemoteDescriptor
h248.longTimer  longTimer
    Unsigned 32-bit integer
    h248.INTEGER_0_99
h248.mId  mId
    Unsigned 32-bit integer
    h248.MId
h248.manufacturerCode  manufacturerCode
    Unsigned 32-bit integer
    h248.INTEGER_0_65535
```

```
h248.mediaDescriptor  mediaDescriptor
    No value
    h248.MediaDescriptor
h248.mediaToken  mediaToken
    Boolean
h248.mess  mess
    No value
    h248.Message
h248.messageBody  messageBody
    Unsigned 32-bit integer
    h248.T_messageBody
h248.messageError  messageError
    No value
    h248.ErrorDescriptor
h248.modReply  modReply
    No value
    h248.T_modReply
h248.modReq  modReq
    No value
    h248.T_modReq
h248.modemDescriptor  modemDescriptor
    No value
    h248.ModemDescriptor
h248.modemToken  modemToken
    Boolean
h248.moveReply  moveReply
    No value
    h248.T_moveReply
h248.moveReq  moveReq
    No value
    h248.T_moveReq
h248.mpl  mpl
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_PropertyParm
h248.mpl_item  Item
    No value
    h248.PropertyParm
h248.mtl  mtl
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_ModemType
h248.mtl_item  Item
    Unsigned 32-bit integer
    h248.ModemType
h248.mtpAddress  mtpAddress
    Byte array
    h248.MtpAddress
```

```
h248.mtpaddress.ni  NI
    Unsigned 32-bit integer
    NI
h248.mtpaddress.pc  PC
    Unsigned 32-bit integer
    PC
h248.multiStream  multiStream
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_IndAudStreamDescriptor
h248.multiStream_item  Item
    No value
    h248.IndAudStreamDescriptor
h248.muxDescriptor  muxDescriptor
    No value
    h248.MuxDescriptor
h248.muxToken  muxToken
    Boolean
h248.muxType  muxType
    Unsigned 32-bit integer
    h248.MuxType
h248.name  name
    String
    h248.IA5String
h248.neverNotify  neverNotify
    No value
    h248.NULL
h248.nonStandardData  nonStandardData
    No value
    h248.NonStandardData
h248.nonStandardIdentifier  nonStandardIdentifier
    Unsigned 32-bit integer
    h248.NonStandardIdentifier
h248.notifyBehaviour  notifyBehaviour
    Unsigned 32-bit integer
    h248.NotifyBehaviour
h248.notifyCompletion  notifyCompletion
    Byte array
    h248.NotifyCompletion
h248.notifyImmediate  notifyImmediate
    No value
    h248.NULL
h248.notifyRegulated  notifyRegulated
    No value
    h248.RegulatedEmbeddedDescriptor
h248.notifyReply  notifyReply
    No value
    h248.T_notifyReply
```

```
h248.notifyReq  notifyReq
  No value
  h248.T_notifyReq
h248.object  object
  h248.OBJECT_IDENTIFIER
h248.observedEventLst  observedEventLst
  Unsigned 32-bit integer
  h248.SEQUENCE_OF_ObservedEvent
h248.observedEventLst_item  Item
  No value
  h248.ObservedEvent
h248.observedEventsDescriptor  observedEventsDescriptor
  No value
  h248.ObservedEventsDescriptor
h248.observedEventsToken  observedEventsToken
  Boolean
h248.onInterruptByEvent  onInterruptByEvent
  Boolean
h248.onInterruptByNewSignalDescr  onInterruptByNewSignalDescr
  Boolean
h248.onIteration  onIteration
  Boolean
h248.onTimeOut  onTimeOut
  Boolean
h248.oneStream  oneStream
  No value
  h248.IndAudStreamParms
h248.optional  optional
  No value
  h248.NULL
h248.orAUDITSelect  orAUDITSelect
  No value
  h248.NULL
h248.otherReason  otherReason
  Boolean
h248.packageName  packageName
  Byte array
  h248.Name
h248.packageVersion  packageVersion
  Unsigned 32-bit integer
  h248.INTEGER_0_99
h248.package_bcp.BNCChar  BNCChar
  Unsigned 32-bit integer
  BNCChar
```

```
h248.package_eventid  Event ID
    Unsigned 16-bit integer
    Parameter ID

h248.package_name     Package
    Unsigned 16-bit integer
    Package

h248.package_paramid  Parameter ID
    Unsigned 16-bit integer
    Parameter ID

h248.package_signalid Signal ID
    Unsigned 16-bit integer
    Parameter ID

h248.packagesDescriptor packagesDescriptor
    Unsigned 32-bit integer
    h248.PackagesDescriptor

h248.packagesToken    packagesToken
    Boolean

h248.pkg.unknown      Unknown Package
    Byte array

h248.pkg.unknown.evt  Unknown Event
    Byte array

h248.pkg.unknown.param Parameter
    Byte array

h248.pkg.unknown.sig  Unknown Signal
    Byte array

h248.pkgdName         pkgdName
    Byte array
    h248.PkgdName

h248.portNumber       portNumber
    Unsigned 32-bit integer
    h248.INTEGER_0_65535

h248.priority         priority
    Unsigned 32-bit integer
    h248.INTEGER_0_15

h248.profileName     profileName
    String
    h248.IA5String_SIZE_1_67

h248.propGroupID     propGroupID
    Unsigned 32-bit integer
    h248.INTEGER_0_65535

h248.propGrps        propGrps
    Unsigned 32-bit integer
    h248.IndAudPropertyGroup

h248.propGrps_item   Item
    Unsigned 32-bit integer
    h248.PropertyGroup
```

```
h248.propertyName  propertyName
    Byte array
    h248.PropertyName

h248.propertyParms  propertyParms
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_IndAudPropertyParm

h248.propertyParms_item  Item
    No value
    h248.IndAudPropertyParm

h248.range  range
    Boolean
    h248.BOOLEAN

h248.relation  relation
    Unsigned 32-bit integer
    h248.Relation

h248.remoteDescriptor  remoteDescriptor
    No value
    h248.IndAudLocalRemoteDescriptor

h248.requestID  requestID
    Unsigned 32-bit integer
    h248.RequestID

h248.requestId  requestId
    Unsigned 32-bit integer
    h248.RequestID

h248.reserveGroup  reserveGroup
    No value
    h248.NULL

h248.reserveValue  reserveValue
    No value
    h248.NULL

h248.resetEventsDescriptor  resetEventsDescriptor
    No value
    h248.NULL

h248.secParmIndex  secParmIndex
    Byte array
    h248.SecurityParmIndex

h248.secondEvent  secondEvent
    No value
    h248.SecondEventsDescriptor

h248.segmentNumber  segmentNumber
    Unsigned 32-bit integer
    h248.SegmentNumber

h248.segmentReply  segmentReply
    No value
    h248.SegmentReply

h248.segmentationComplete  segmentationComplete
    No value
    h248.NULL
```

```
h248.selectLogic selectLogic
    Unsigned 32-bit integer
    h248.SelectLogic

h248.selectemergency selectemergency
    Boolean
    h248.BOOLEAN

h248.selectiepscallind selectiepscallind
    Boolean
    h248.BOOLEAN

h248.selectpriority selectpriority
    Unsigned 32-bit integer
    h248.INTEGER_0_15

h248.seqNum seqNum
    Byte array
    h248.SequenceNum

h248.seqSigList seqSigList
    No value
    h248.IndAudSeqSigList

h248.serviceChangeAddress serviceChangeAddress
    Unsigned 32-bit integer
    h248.ServiceChangeAddress

h248.serviceChangeDelay serviceChangeDelay
    Unsigned 32-bit integer
    h248.INTEGER_0_4294967295

h248.serviceChangeIncompleteFlag serviceChangeIncompleteFlag
    No value
    h248.NULL

h248.serviceChangeInfo serviceChangeInfo
    No value
    h248.AuditDescriptor

h248.serviceChangeMethod serviceChangeMethod
    Unsigned 32-bit integer
    h248.ServiceChangeMethod

h248.serviceChangeMgcId serviceChangeMgcId
    Unsigned 32-bit integer
    h248.MId

h248.serviceChangeParms serviceChangeParms
    No value
    h248.ServiceChangeParm

h248.serviceChangeProfile serviceChangeProfile
    No value
    h248.ServiceChangeProfile

h248.serviceChangeReason serviceChangeReason
    Unsigned 32-bit integer
    h248.SCreasonValue

h248.serviceChangeReasonstr ServiceChangeReasonStr
    String
    h248.IA5String
```

```
h248.serviceChangeReply  serviceChangeReply
    No value
    h248.ServiceChangeReply
h248.serviceChangeReq    serviceChangeReq
    No value
    h248.ServiceChangeRequest
h248.serviceChangeResParms  serviceChangeResParms
    No value
    h248.ServiceChangeResParm
h248.serviceChangeResult  serviceChangeResult
    Unsigned 32-bit integer
    h248.ServiceChangeResult
h248.serviceChangeVersion  serviceChangeVersion
    Unsigned 32-bit integer
    h248.INTEGER_0_99
h248.serviceState        serviceState
    No value
    h248.NULL
h248.serviceStateSel     serviceStateSel
    Unsigned 32-bit integer
    h248.ServiceState
h248.shortTimer          shortTimer
    Unsigned 32-bit integer
    h248.INTEGER_0_99
h248.sigParList          sigParList
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_SigParameter
h248.sigParList_item     Item
    No value
    h248.SigParameter
h248.sigParameterName    sigParameterName
    Byte array
    h248.SigParameterName
h248.sigType             sigType
    Unsigned 32-bit integer
    h248.SignalType
h248.signal              signal
    No value
    h248.IndAudSignal
h248.signalList          signalList
    No value
    h248.IndAudSignal
h248.signalList_item     Item
    No value
    h248.Signal
h248.signalName          signalName
    Byte array
    h248.PkgdName
```



```
h248.signalRequestID  signalRequestID
    Unsigned 32-bit integer
    h248.RequestID

h248.signal_name  Package and Signal name
    Unsigned 32-bit integer
    Package

h248.signalsDescriptor  signalsDescriptor
    Unsigned 32-bit integer
    h248.SignalsDescriptor

h248.signalsToken  signalsToken
    Boolean

h248.startTimer  startTimer
    Unsigned 32-bit integer
    h248.INTEGER_0_99

h248.statName  statName
    Byte array
    h248.PkgdName

h248.statValue  statValue
    Unsigned 32-bit integer
    h248.StatValue

h248.statisticsDescriptor  statisticsDescriptor
    Unsigned 32-bit integer
    h248.StatisticsDescriptor

h248.statsToken  statsToken
    Boolean

h248.streamID  streamID
    Unsigned 32-bit integer
    h248.StreamID

h248.streamMode  streamMode
    No value
    h248.NULL

h248.streamModeSel  streamModeSel
    Unsigned 32-bit integer
    h248.StreamMode

h248.streamParms  streamParms
    No value
    h248.IndAudStreamParms

h248.streams  streams
    Unsigned 32-bit integer
    h248.IndAudMediaDescriptorStreams

h248.sublist  sublist
    Boolean
    h248.BOOLEAN

h248.subtractReply  subtractReply
    No value
    h248.T_subtractReply
```

```
h248.subtractReq subtractReq
    No value
    h248.T_subtractReq
h248.t35CountryCode1 t35CountryCode1
    Unsigned 32-bit integer
    h248.INTEGER_0_255
h248.t35CountryCode2 t35CountryCode2
    Unsigned 32-bit integer
    h248.INTEGER_0_255
h248.t35Extension t35Extension
    Unsigned 32-bit integer
    h248.INTEGER_0_255
h248.term.wildcard.level Wildcarding Level
    Unsigned 8-bit integer
h248.term.wildcard.mode Wildcard Mode
    Unsigned 8-bit integer
h248.term.wildcard.pos Wildcarding Position
    Unsigned 8-bit integer
h248.termList termList
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_TerminationID
h248.termList_item Item
    No value
    h248.TerminationID
h248.termStateDescr termStateDescr
    No value
    h248.IndAudTerminationStateDescriptor
h248.terminationAudit terminationAudit
    Unsigned 32-bit integer
    h248.TerminationAudit
h248.terminationAuditResult terminationAuditResult
    Unsigned 32-bit integer
    h248.TerminationAudit
h248.terminationFrom terminationFrom
    No value
    h248.TerminationID
h248.terminationID terminationID
    Unsigned 32-bit integer
    h248.TerminationIDList
h248.terminationTo terminationTo
    No value
    h248.TerminationID
h248.time time
    String
    h248.IA5String_SIZE_8
```

```
h248.timeNotation  timeNotation
    No value
    h248.TimeNotation
h248.timeStamp  timeStamp
    No value
    h248.TimeNotation
h248.timestamp  timestamp
    No value
    h248.TimeNotation
h248.topology  topology
    No value
    h248.NULL
h248.topologyDirection  topologyDirection
    Unsigned 32-bit integer
    h248.T_topologyDirection
h248.topologyDirectionExtension  topologyDirectionExtension
    Unsigned 32-bit integer
    h248.T_topologyDirectionExtension
h248.topologyReq  topologyReq
    Unsigned 32-bit integer
    h248.T_topologyReq
h248.topologyReq_item  Item
    No value
    h248.TopologyRequest
h248.transactionError  transactionError
    No value
    h248.ErrorDescriptor
h248.transactionId  transactionId
    Unsigned 32-bit integer
    h248.T_transactionId
h248.transactionPending  transactionPending
    No value
    h248.TransactionPending
h248.transactionReply  transactionReply
    No value
    h248.TransactionReply
h248.transactionRequest  transactionRequest
    No value
    h248.TransactionRequest
h248.transactionResponseAck  transactionResponseAck
    Unsigned 32-bit integer
    h248.TransactionResponseAck
h248.transactionResult  transactionResult
    Unsigned 32-bit integer
    h248.T_transactionResult
h248.transactions  transactions
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_Transaction
```

```

h248.transactions_item  Item
    Unsigned 32-bit integer
    h248.Transaction

h248.value  value
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_PropertyID

h248.value_item  Item
    Byte array
    h248.PropertyID

h248.version  version
    Unsigned 32-bit integer
    h248.INTEGER_0_99

h248.wildcard  wildcard
    Unsigned 32-bit integer
    h248.SEQUENCE_OF_WildcardField

h248.wildcardReturn  wildcardReturn
    No value
    h248.NULL

h248.wildcard_item  Item
    Byte array
    h248.WildcardField

```

#### **H.248 Q.1950 Annex A (h248q1950)**

```

h248.pkg.BCP  BCP (Bearer characteristics package)
    Byte array

h248.pkg.BNCCT  BNCCT (Bearer network connection cut-through package)
    Byte array

h248.pkg.BT  BT (Bearer control Tunneling)
    Byte array

h248.pkg.BT.BIT  Bearer Information Transport
    Byte array

h248.pkg.BT.TIND  tind (Tunnel INDication)
    Byte array

h248.pkg.BT.TunOpt  Tunnelling Options
    Unsigned 32-bit integer

h248.pkg.GB  GB (Generic bearer connection)
    Byte array

h248.pkg.GB.BNCChang  BNCChange
    Byte array
    This event occurs whenever a change to a Bearer Network connection occurs

h248.pkg.GB.BNCChang.EstBNC  Type
    Byte array
    This signal triggers the bearer control function to send bearer establishment

h248.pkg.GB.BNCChang.RelBNC  RelBNC
    Byte array
    This signal triggers the bearer control function to send bearer release

```

h248.pkg.GB.BNCChang.RelBNC.Failurecause Failurecause  
Byte array  
The Release Cause is the value generated by the Released equipment

h248.pkg.GB.BNCChang.RelBNC.Generalcause Generalcause  
Unsigned 32-bit integer  
This indicates the general reason for the Release

h248.pkg.GB.BNCChang.Type Type  
Unsigned 32-bit integer

h248.pkg.RI RI (Reuse idle package)  
Byte array

h248.pkg.bcg.bcg (Basic call progress tones generator with directionality)  
Byte array

h248.pkg.bcg.bbt bbt (Busy tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bcr bcr (Call ringing tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bct bct (Congestion tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bcw bcw (Call waiting tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bdt bdt (Dial Tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bpt bpt (Payphone recognition tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bpy bpy (Pay tone)  
Unsigned 8-bit integer

h248.pkg.bcg.brt brt (Ringing tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bsit bsit (Special information tone)  
Unsigned 8-bit integer

h248.pkg.bcg.bwt bwt (Warning tone)  
Unsigned 8-bit integer

h248.pkg.bcp.bncchar BNCChar (BNC Characteristics)  
Unsigned 32-bit integer  
BNC Characteristics

h248.pkg.bcp.bncct Bearer network connection cut-through capability  
Unsigned 32-bit integer  
This property allows the MGC to ask the MG when the cut through of a bearer

h248.pkg.bcp.btd btd (Tone Direction)  
Unsigned 32-bit integer  
btd (Tone Direction)

h248.pkg.bcp.rii Reuse Idle Indication  
Unsigned 32-bit integer  
This property indicates that the provided bearer network connection relates

**H.248.10 (h248chp)**

h248.chp.mgcon MGCon

Byte array

This event occurs when the MG requires that the MGC start or finish load red

h248.chp.mgcon.reduction Reduction

Unsigned 32-bit integer

Percentage of the load that the MGC is requested to block

**H.248.7 (h248an)**

h248.an.apf Fixed Announcement Play

Byte array

Initiates the play of a fixed announcement

h248.an.apf.an Announcement name

Unsigned 32-bit integer

h248.an.apf.av Announcement Variant

String

h248.an.apf.di Announcement Direction

Unsigned 32-bit integer

h248.an.apf.noc Number of cycles

Unsigned 32-bit integer

h248.an.apv Fixed Announcement Play

Byte array

Initiates the play of a fixed announcement

h248.an.apv.an Announcement name

Unsigned 32-bit integer

h248.an.apv.av Announcement Variant

String

h248.an.apv.di Announcement Direction

Unsigned 32-bit integer

h248.an.apv.noc Number of cycles

Unsigned 32-bit integer

h248.an.apv.num Number

Unsigned 32-bit integer

h248.an.apv.sp Specific parameters

String

h248.an.apv.spi Specific parameters interpretation

Unsigned 32-bit integer

**H.264 (h264)**

h264.AdditionalModesSupported AdditionalModesSupported

Unsigned 8-bit integer

h264.ProfileIOP ProfileIOP

Unsigned 8-bit integer

h264.add\_mode\_sup Additional Modes Supported

Unsigned 8-bit integer

```
h264.add_mode_sup.rcdo    Reduced Complexity Decoding Operation (RCDO) support
                          Boolean

h264.aspect_ratio_idc    aspect_ratio_idc
                          Unsigned 8-bit integer
                          aspect_ratio_idc

h264.aspect_ratio_info_present_flag    aspect_ratio_info_present_flag
                          Unsigned 8-bit integer
                          aspect_ratio_info_present_flag

h264.bit_depth_chroma_minus8    bit_depth_chroma_minus8
                          Unsigned 32-bit integer
                          bit_depth_chroma_minus8

h264.bit_depth_luma_minus8    bit_depth_luma_minus8
                          Unsigned 32-bit integer
                          bit_depth_luma_minus8

h264.bit_rate_scale    bit_rate_scale
                          Unsigned 8-bit integer
                          bit_rate_scale

h264.bit_rate_value_minus1    bit_rate_value_minus1
                          Unsigned 32-bit integer
                          bit_rate_value_minus1

h264.bitstream_restriction_flag    bitstream_restriction_flag
                          Unsigned 8-bit integer
                          bitstream_restriction_flag

h264.cbr_flag    cbr_flag
                          Unsigned 8-bit integer
                          cbr_flag

h264.chroma_format_id    chroma_format_id
                          Unsigned 32-bit integer
                          chroma_format_id

h264.chroma_loc_info_present_flag    chroma_loc_info_present_flag
                          Unsigned 8-bit integer
                          chroma_loc_info_present_flag

h264.chroma_qp_index_offset    chroma_qp_index_offset
                          Signed 32-bit integer
                          chroma_qp_index_offset

h264.chroma_sample_loc_type_bottom_field    chroma_sample_loc_type_bottom_field
                          Unsigned 32-bit integer
                          chroma_sample_loc_type_bottom_field

h264.chroma_sample_loc_type_top_field    chroma_sample_loc_type_top_field
                          Unsigned 32-bit integer
                          chroma_sample_loc_type_top_field

h264.colour_description_present_flag    colour_description_present_flag
                          Unsigned 8-bit integer
                          colour_description_present_flag

h264.colour_primaries    colour_primaries
                          Unsigned 8-bit integer
                          colour_primaries
```

```
h264.constrained_intra_pred_flag  constrained_intra_pred_flag
    Unsigned 8-bit integer
    constrained_intra_pred_flag

h264.constraint_set0_flag  Constraint_set0_flag
    Unsigned 8-bit integer
    Constraint_set0_flag

h264.constraint_set1_flag  Constraint_set1_flag
    Unsigned 8-bit integer
    Constraint_set1_flag

h264.constraint_set2_flag  Constraint_set2_flag
    Unsigned 8-bit integer
    NRI

h264.constraint_set3_flag  Constraint_set3_flag
    Unsigned 8-bit integer
    Constraint_set3_flag

h264.cpb_cnt_minus1  cpb_cnt_minus1
    Unsigned 32-bit integer
    cpb_cnt_minus1

h264.cpb_removal_delay_length_minus1  cpb_removal_delay_length_minus1
    Unsigned 8-bit integer
    cpb_removal_delay_length_minus1

h264.cpb_size_scale  cpb_size_scale
    Unsigned 8-bit integer
    cpb_size_scale

h264.cpb_size_value_minus1  cpb_size_value_minus1
    Unsigned 32-bit integer
    cpb_size_value_minus1

h264.deblocking_filter_control_present_flag  deblocking_filter_control_present_f
    Unsigned 8-bit integer
    deblocking_filter_control_present_flag

h264.delta_pic_order_always_zero_flag  delta_pic_order_always_zero_flag
    Unsigned 8-bit integer
    delta_pic_order_always_zero_flag

h264.direct_8x8_inference_flag  direct_8x8_inference_flag
    Unsigned 8-bit integer
    direct_8x8_inference_flag

h264.dpb_output_delay_length_minus11  dpb_output_delay_length_minus11
    Unsigned 8-bit integer
    dpb_output_delay_length_minus11

h264.entropy_coding_mode_flag  entropy_coding_mode_flag
    Unsigned 8-bit integer
    entropy_coding_mode_flag

h264.f  F bit
    Boolean
    F bit

h264.first_mb_in_slice  first_mb_in_slice
    Unsigned 32-bit integer
    first_mb_in_slice
```



```
h264.fixed_frame_rate_flag  fixed_frame_rate_flag
    Unsigned 8-bit integer
    fixed_frame_rate_flag

h264.forbidden_zero_bit  Forbidden_zero_bit
    Unsigned 8-bit integer
    forbidden_zero_bit

h264.frame_crop_bottom_offset  frame_crop_bottom_offset
    Unsigned 32-bit integer
    frame_crop_bottom_offset

h264.frame_crop_left_offset  frame_crop_left_offset
    Unsigned 32-bit integer
    frame_crop_left_offset

h264.frame_crop_right_offset  frame_crop_left_offset
    Unsigned 32-bit integer
    frame_crop_right_offset

h264.frame_crop_top_offset  frame_crop_top_offset
    Unsigned 32-bit integer
    frame_crop_top_offset

h264.frame_cropping_flag  frame_cropping_flag
    Unsigned 8-bit integer
    frame_cropping_flag

h264.frame_mbs_only_flag  frame_mbs_only_flag
    Unsigned 8-bit integer
    frame_mbs_only_flag

h264.frame_num  frame_num
    Unsigned 8-bit integer
    frame_num

h264.gaps_in_frame_num_value_allowed_flag  gaps_in_frame_num_value_allowed_flag
    Unsigned 8-bit integer
    gaps_in_frame_num_value_allowed_flag

h264.initial_cpb_removal_delay_length_minus1  initial_cpb_removal_delay_length_m
    Unsigned 8-bit integer
    initial_cpb_removal_delay_length_minus1

h264.level_id  Level_id
    Unsigned 8-bit integer
    Level_id

h264.log2_max_frame_num_minus4  log2_max_frame_num_minus4
    Unsigned 32-bit integer
    log2_max_frame_num_minus4

h264.log2_max_mv_length_vertical  log2_max_mv_length_vertical
    Unsigned 32-bit integer
    log2_max_mv_length_vertical

h264.log2_max_pic_order_cnt_lsb_minus4  log2_max_pic_order_cnt_lsb_minus4
    Unsigned 32-bit integer
    log2_max_pic_order_cnt_lsb_minus4

h264.low_delay_hrd_flag  low_delay_hrd_flag
    Unsigned 8-bit integer
    low_delay_hrd_flag
```

```
h264.matrix_coefficients  matrix_coefficients
    Unsigned 8-bit integer
    matrix_coefficients

h264.max_bits_per_mb_denom  max_bits_per_mb_denom
    Unsigned 32-bit integer
    max_bits_per_mb_denom

h264.max_bytes_per_pic_denom  max_bytes_per_pic_denom
    Unsigned 32-bit integer
    max_bytes_per_pic_denom

h264.max_dec_frame_buffering  max_dec_frame_buffering
    Unsigned 32-bit integer
    max_dec_frame_buffering

h264.max_mv_length_horizontal  max_mv_length_horizontal
    Unsigned 32-bit integer
    max_mv_length_horizontal

h264.mb_adaptive_frame_field_flag  mb_adaptive_frame_field_flag
    Unsigned 8-bit integer
    mb_adaptive_frame_field_flag

h264.motion_vectors_over_pic_boundaries_flag  motion_vectors_over_pic_boundaries
    Unsigned 32-bit integer
    motion_vectors_over_pic_boundaries_flag

h264.nal_hrd_parameters_present_flag  nal_hrd_parameters_present_flag
    Unsigned 8-bit integer
    nal_hrd_parameters_present_flag

h264.nal_nri  Nal_ref_idc (NRI)
    Unsigned 8-bit integer
    NRI

h264.nal_ref_idc  Nal_ref_idc
    Unsigned 8-bit integer
    nal_ref_idc

h264.nal_unit  NAL unit
    Byte array
    NAL unit

h264.nal_unit_hdr  Type
    Unsigned 8-bit integer
    Type

h264.nal_unit_type  Nal_unit_type
    Unsigned 8-bit integer
    nal_unit_type

h264.num_ref_frames  num_ref_frames
    Unsigned 32-bit integer
    num_ref_frames

h264.num_ref_frames_in_pic_order_cnt_cycle  num_ref_frames_in_pic_order_cnt_cycl
    Unsigned 32-bit integer
    num_ref_frames_in_pic_order_cnt_cycle

h264.num_ref_idx_l0_active_minus1  num_ref_idx_l0_active_minus1
    Unsigned 32-bit integer
    num_ref_idx_l0_active_minus1
```

```
h264.num_ref_idx_l1_active_minus1  num_ref_idx_l1_active_minus1
    Unsigned 32-bit integer
    num_ref_idx_l1_active_minus1

h264.num_reorder_frames  num_reorder_frames
    Unsigned 32-bit integer
    num_reorder_frames

h264.num_slice_groups_minus1  num_slice_groups_minus1
    Unsigned 32-bit integer
    num_slice_groups_minus1

h264.num_units_in_tick  num_units_in_tick
    Unsigned 32-bit integer
    num_units_in_tick

h264.offset_for_non_ref_pic  offset_for_non_ref_pic
    Signed 32-bit integer
    offset_for_non_ref_pic

h264.offset_for_ref_frame  offset_for_ref_frame
    Signed 32-bit integer
    offset_for_ref_frame

h264.offset_for_top_to_bottom_field  offset_for_top_to_bottom_field
    Signed 32-bit integer
    offset_for_top_to_bottom_field

h264.overscan_appropriate_flag  overscan_appropriate_flag
    Unsigned 8-bit integer
    overscan_appropriate_flag

h264.overscan_info_present_flag  overscan_info_present_flag
    Unsigned 8-bit integer
    overscan_info_present_flag

h264.par.constraint_set0_flag  constraint_set0_flag
    Boolean

h264.par.constraint_set1_flag  constraint_set1_flag
    Boolean

h264.par.constraint_set2_flag  constraint_set2_flag
    Boolean

h264.pic_height_in_map_units_minus1  pic_height_in_map_units_minus1
    Unsigned 32-bit integer
    pic_height_in_map_units_minus1

h264.pic_init_qp_minus26  pic_init_qp_minus26
    Signed 32-bit integer
    pic_init_qp_minus26

h264.pic_init_qs_minus26  pic_init_qs_minus26
    Signed 32-bit integer
    pic_init_qs_minus26

h264.pic_order_cnt_type  pic_order_cnt_type
    Unsigned 32-bit integer
    pic_order_cnt_type
```

```
h264.pic_order_present_flag  pic_order_present_flag
    Unsigned 8-bit integer
    pic_order_present_flag

h264.pic_parameter_set_id  pic_parameter_set_id
    Unsigned 32-bit integer
    pic_parameter_set_id

h264.pic_scaling_matrix_present_flag  pic_scaling_matrix_present_flag
    Unsigned 8-bit integer
    pic_scaling_matrix_present_flag

h264.pic_struct_present_flag  pic_struct_present_flag
    Unsigned 8-bit integer
    pic_struct_present_flag

h264.pic_width_in_mbs_minus1  pic_width_in_mbs_minus1
    Unsigned 32-bit integer
    pic_width_in_mbs_minus1

h264.profile  Profile
    Byte array
    Profile

h264.profile.base  Baseline Profile
    Boolean

h264.profile.ext  Extended Profile.
    Boolean

h264.profile.high  High Profile
    Boolean

h264.profile.high10  High 10 Profile
    Boolean

h264.profile.high4_2_2  High 4:2:2 Profile
    Boolean

h264.profile.high4_4_4  High 4:4:4 Profile
    Boolean

h264.profile.main  Main Profile
    Boolean

h264.profile_idc  Profile_idc
    Unsigned 8-bit integer
    Profile_idc

h264.qpprime_y_zero_transform_bypass_flag  qpprime_y_zero_transform_bypass_flag
    Unsigned 32-bit integer
    qpprime_y_zero_transform_bypass_flag

h264.rbsp_stop_bit  rbsp_stop_bit
    Unsigned 8-bit integer
    rbsp_stop_bit

h264.rbsp_trailing_bits  rbsp_trailing_bits
    Unsigned 8-bit integer
    rbsp_trailing_bits

h264.redundant_pic_cnt_present_flag  redundant_pic_cnt_present_flag
    Unsigned 8-bit integer
    redundant_pic_cnt_present_flag
```

```
h264.reserved_zero_4bits  Reserved_zero_4bits
    Unsigned 8-bit integer
    Reserved_zero_4bits

h264.residual_colour_transform_flag  residual_colour_transform_flag
    Unsigned 8-bit integer
    residual_colour_transform_flag

h264.sar_height  sar_height
    Unsigned 16-bit integer
    sar_height

h264.sar_width  sar_width
    Unsigned 16-bit integer
    sar_width

h264.second_chroma_qp_index_offset  second_chroma_qp_index_offset
    Signed 32-bit integer
    second_chroma_qp_index_offset

h264.seq_parameter_set_id  seq_parameter_set_id
    Unsigned 32-bit integer
    seq_parameter_set_id

h264.seq_scaling_matrix_present_flag  seq_scaling_matrix_present_flag
    Unsigned 32-bit integer
    seq_scaling_matrix_present_flag

h264.slice_group_map_type  slice_group_map_type
    Unsigned 32-bit integer
    slice_group_map_type

h264.slice_id  slice_id
    Unsigned 32-bit integer
    slice_id

h264.slice_type  slice_type
    Unsigned 32-bit integer
    slice_type

h264.time_offset_length  time_offset_length
    Unsigned 8-bit integer
    time_offset_length

h264.time_scale  time_scale
    Unsigned 32-bit integer
    time_scale

h264.timing_info_present_flag  timing_info_present_flag
    Unsigned 8-bit integer
    timing_info_present_flag

h264.transfer_characteristics  transfer_characteristics
    Unsigned 8-bit integer
    transfer_characteristics

h264.transform_8x8_mode_flag  transform_8x8_mode_flag
    Unsigned 8-bit integer
    transform_8x8_mode_flag

h264.vcl_hrd_parameters_present_flag  vcl_hrd_parameters_present_flag
    Unsigned 8-bit integer
    vcl_hrd_parameters_present_flag
```

```
h264.video_format  video_format
    Unsigned 8-bit integer
    video_format

h264.video_full_range_flag  video_full_range_flag
    Unsigned 8-bit integer
    video_full_range_flag

h264.video_signal_type_present_flag  video_signal_type_present_flag
    Unsigned 8-bit integer
    video_signal_type_present_flag

h264.vui_parameters_present_flag  vui_parameters_present_flag
    Unsigned 8-bit integer
    vui_parameters_present_flag

h264.weighted_bipred_idc  weighted_bipred_idc
    Unsigned 8-bit integer
    weighted_bipred_idc

h264.weighted_pred_flag  weighted_pred_flag
    Unsigned 8-bit integer
    weighted_pred_flag
```

#### **H.282 Remote Device Control (rdc)**

```
h282.NonCollapsingCapabilities  NonCollapsingCapabilities
    Unsigned 32-bit integer
    h282.NonCollapsingCapabilities

h282.NonCollapsingCapabilities_item  Item
    No value
    h282.NonCollapsingCapabilities_item

h282.RDCPDU  RDCPDU
    Unsigned 32-bit integer
    h282.RDCPDU

h282.absolute  absolute
    No value
    h282.NULL

h282.accessoryTextLabel  accessoryTextLabel
    Unsigned 32-bit integer
    h282.T_accessoryTextLabel

h282.accessoryTextLabel_item  Item
    No value
    h282.T_accessoryTextLabel_item

h282.activate  activate
    No value
    h282.NULL

h282.active  active
    No value
    h282.NULL

h282.applicationData  applicationData
    Unsigned 32-bit integer
    h282.T_applicationData
```

```
h282.audioInputs  audioInputs
    No value
    h282.DeviceInputs
h282.audioInputsSupported  audioInputsSupported
    No value
    h282.AudioInputsCapability
h282.audioSinkFlag  audioSinkFlag
    Boolean
    h282.BOOLEAN
h282.audioSourceFlag  audioSourceFlag
    Boolean
    h282.BOOLEAN
h282.auto  auto
    No value
    h282.NULL
h282.autoSlideShowFinished  autoSlideShowFinished
    No value
    h282.NULL
h282.autoSlideShowFinishedSupported  autoSlideShowFinishedSupported
    No value
    h282.NULL
h282.automatic  automatic
    No value
    h282.NULL
h282.availableDevices  availableDevices
    Unsigned 32-bit integer
    h282.T_availableDevices
h282.availableDevices_item  Item
    No value
    h282.T_availableDevices_item
h282.backLight  backLight
    Unsigned 32-bit integer
    h282.BackLight
h282.backLightModeSupported  backLightModeSupported
    No value
    h282.NULL
h282.backLightSettingSupported  backLightSettingSupported
    Unsigned 32-bit integer
    h282.MaxBacklight
h282.calibrateWhiteBalance  calibrateWhiteBalance
    No value
    h282.NULL
h282.calibrateWhiteBalanceSupported  calibrateWhiteBalanceSupported
    No value
    h282.NULL
h282.camera  camera
    No value
    h282.NULL
```

```
h282.cameraFilterSupported cameraFilterSupported
  No value
  h282.CameraFilterCapability
h282.cameraFocusedToLimit cameraFocusedToLimit
  Unsigned 32-bit integer
  h282.CameraFocusedToLimit
h282.cameraFocusedToLimitSupported cameraFocusedToLimitSupported
  No value
  h282.NULL
h282.cameraLensSupported cameraLensSupported
  No value
  h282.CameraLensCapability
h282.cameraPanSpeedSupported cameraPanSpeedSupported
  No value
  h282.CameraPanSpeedCapability
h282.cameraPannedToLimit cameraPannedToLimit
  Unsigned 32-bit integer
  h282.CameraPannedToLimit
h282.cameraPannedToLimitSupported cameraPannedToLimitSupported
  No value
  h282.NULL
h282.cameraTiltSpeedSupported cameraTiltSpeedSupported
  No value
  h282.CameraTiltSpeedCapability
h282.cameraTiltedToLimit cameraTiltedToLimit
  Unsigned 32-bit integer
  h282.CameraTiltedToLimit
h282.cameraTiltedToLimitSupported cameraTiltedToLimitSupported
  No value
  h282.NULL
h282.cameraZoomedToLimit cameraZoomedToLimit
  Unsigned 32-bit integer
  h282.CameraZoomedToLimit
h282.cameraZoomedToLimitSupported cameraZoomedToLimitSupported
  No value
  h282.NULL
h282.capabilityID capabilityID
  Unsigned 32-bit integer
  h282.CapabilityID
h282.captureImage captureImage
  No value
  h282.NULL
h282.captureImageSupported captureImageSupported
  No value
  h282.NULL
h282.clearCameraLens clearCameraLens
  No value
  h282.NULL
```



```
h282.clearCameraLensSupported clearCameraLensSupported
  No value
  h282.NULL

h282.configurableAudioInputs configurableAudioInputs
  No value
  h282.DeviceInputs

h282.configurableAudioInputsSupported configurableAudioInputsSupported
  No value
  h282.AudioInputsCapability

h282.configurableVideoInputs configurableVideoInputs
  No value
  h282.DeviceInputs

h282.configurableVideoInputsSupported configurableVideoInputsSupported
  No value
  h282.VideoInputsCapability

h282.configureAudioInputs configureAudioInputs
  No value
  h282.DeviceInputs

h282.configureDeviceEventsRequest configureDeviceEventsRequest
  No value
  h282.ConfigureDeviceEventsRequest

h282.configureDeviceEventsResponse configureDeviceEventsResponse
  No value
  h282.ConfigureDeviceEventsResponse

h282.configureVideoInputs configureVideoInputs
  No value
  h282.DeviceInputs

h282.continue continue
  No value
  h282.NULL

h282.continuousFastForwardControl continuousFastForwardControl
  Boolean
  h282.BOOLEAN

h282.continuousFastForwardSupported continuousFastForwardSupported
  No value
  h282.NULL

h282.continuousPlayBackMode continuousPlayBackMode
  Boolean
  h282.BOOLEAN

h282.continuousPlayBackModeSupported continuousPlayBackModeSupported
  No value
  h282.NULL

h282.continuousRewindControl continuousRewindControl
  Boolean
  h282.BOOLEAN

h282.continuousRewindSupported continuousRewindSupported
  No value
  h282.NULL
```

```
h282.controlAttributeList controlAttributeList
    Unsigned 32-bit integer
    h282.SET_SIZE_1_8_OF_ControlAttribute
h282.controlAttributeList_item Item
    Unsigned 32-bit integer
    h282.ControlAttribute
h282.currentAudioOutputMute currentAudioOutputMute
    Unsigned 32-bit integer
    h282.CurrentAudioOutputMute
h282.currentAutoSlideDisplayTime currentAutoSlideDisplayTime
    Unsigned 32-bit integer
    h282.CurrentAutoSlideDisplayTime
h282.currentBackLight currentBackLight
    Unsigned 32-bit integer
    h282.CurrentBackLight
h282.currentBackLightMode currentBackLightMode
    Unsigned 32-bit integer
    h282.CurrentMode
h282.currentCameraFilter currentCameraFilter
    Unsigned 32-bit integer
    h282.CurrentCameraFilterNumber
h282.currentCameraLens currentCameraLens
    Unsigned 32-bit integer
    h282.CurrentCameraLensNumber
h282.currentCameraPanSpeed currentCameraPanSpeed
    Unsigned 32-bit integer
    h282.CurrentCameraPanSpeed
h282.currentCameraTiltSpeed currentCameraTiltSpeed
    Unsigned 32-bit integer
    h282.CurrentCameraTiltSpeed
h282.currentDay currentDay
    Unsigned 32-bit integer
    h282.T_currentDay
h282.currentDeviceDate currentDeviceDate
    No value
    h282.CurrentDeviceDate
h282.currentDeviceIsLocked currentDeviceIsLocked
    No value
    h282.NULL
h282.currentDevicePreset currentDevicePreset
    Unsigned 32-bit integer
    h282.CurrentDevicePreset
h282.currentDeviceTime currentDeviceTime
    No value
    h282.CurrentDeviceTime
h282.currentExternalLight currentExternalLight
    Unsigned 32-bit integer
    h282.CurrentExternalLight
```

```
h282.currentFocusMode  currentFocusMode
    Unsigned 32-bit integer
    h282.CurrentMode

h282.currentFocusPosition  currentFocusPosition
    Unsigned 32-bit integer
    h282.CurrentFocusPosition

h282.currentHour  currentHour
    Unsigned 32-bit integer
    h282.T_currentHour

h282.currentIrisMode  currentIrisMode
    Unsigned 32-bit integer
    h282.CurrentMode

h282.currentIrisPosition  currentIrisPosition
    Unsigned 32-bit integer
    h282.CurrentIrisPosition

h282.currentMinute  currentMinute
    Unsigned 32-bit integer
    h282.T_currentMinute

h282.currentMonth  currentMonth
    Unsigned 32-bit integer
    h282.T_currentMonth

h282.currentPanPosition  currentPanPosition
    Unsigned 32-bit integer
    h282.CurrentPanPosition

h282.currentPlaybackSpeed  currentPlaybackSpeed
    Unsigned 32-bit integer
    h282.CurrentPlaybackSpeed

h282.currentPointingMode  currentPointingMode
    Unsigned 32-bit integer
    h282.CurrentPointingMode

h282.currentProgramDuration  currentProgramDuration
    No value
    h282.ProgramDuration

h282.currentSelectedProgram  currentSelectedProgram
    Unsigned 32-bit integer
    h282.CurrentSelectedProgram

h282.currentSlide  currentSlide
    Unsigned 32-bit integer
    h282.CurrentSlide

h282.currentTiltPosition  currentTiltPosition
    Unsigned 32-bit integer
    h282.CurrentTiltPosition

h282.currentWhiteBalance  currentWhiteBalance
    Unsigned 32-bit integer
    h282.CurrentWhiteBalance

h282.currentWhiteBalanceMode  currentWhiteBalanceMode
    Unsigned 32-bit integer
    h282.CurrentMode
```

```
h282.currentYear  currentYear
    Unsigned 32-bit integer
    h282.T_currentYear

h282.currentZoomPosition  currentZoomPosition
    Unsigned 32-bit integer
    h282.CurrentZoomPosition

h282.currentdeviceState  currentdeviceState
    Unsigned 32-bit integer
    h282.CurrentDeviceState

h282.currentstreamPlayerState  currentstreamPlayerState
    Unsigned 32-bit integer
    h282.CurrentStreamPlayerState

h282.darker  darker
    No value
    h282.NULL

h282.data  data
    Byte array
    h282.OCTET_STRING

h282.day  day
    Unsigned 32-bit integer
    h282.Day

h282.deviceAlreadyLocked  deviceAlreadyLocked
    No value
    h282.NULL

h282.deviceAttributeError  deviceAttributeError
    No value
    h282.NULL

h282.deviceAttributeList  deviceAttributeList
    Unsigned 32-bit integer
    h282.SET_OF_DeviceAttribute

h282.deviceAttributeList_item  Item
    Unsigned 32-bit integer
    h282.DeviceAttribute

h282.deviceAttributeRequest  deviceAttributeRequest
    No value
    h282.DeviceAttributeRequest

h282.deviceAttributeResponse  deviceAttributeResponse
    No value
    h282.DeviceAttributeResponse

h282.deviceAvailabilityChanged  deviceAvailabilityChanged
    Boolean
    h282.BOOLEAN

h282.deviceAvailabilityChangedSupported  deviceAvailabilityChangedSupported
    No value
    h282.NULL

h282.deviceClass  deviceClass
    Unsigned 32-bit integer
    h282.DeviceClass
```

```
h282.deviceControlRequest deviceControlRequest
    No value
    h282.DeviceControlRequest
h282.deviceDateSupported deviceDateSupported
    No value
    h282.NULL
h282.deviceEventIdentifierList deviceEventIdentifierList
    Unsigned 32-bit integer
    h282.SET_OF_DeviceEventIdentifier
h282.deviceEventIdentifierList_item Item
    Unsigned 32-bit integer
    h282.DeviceEventIdentifier
h282.deviceEventList deviceEventList
    Unsigned 32-bit integer
    h282.SET_SIZE_1_8_OF_DeviceEvent
h282.deviceEventList_item Item
    Unsigned 32-bit integer
    h282.DeviceEvent
h282.deviceEventNotifyIndication deviceEventNotifyIndication
    No value
    h282.DeviceEventNotifyIndication
h282.deviceID deviceID
    Unsigned 32-bit integer
    h282.DeviceID
h282.deviceIdentifier deviceIdentifier
    Unsigned 32-bit integer
    h282.DeviceID
h282.deviceIncompatible deviceIncompatible
    No value
    h282.NULL
h282.deviceList deviceList
    Unsigned 32-bit integer
    h282.SET_SIZE_0_127_OF_DeviceProfile
h282.deviceList_item Item
    No value
    h282.DeviceProfile
h282.deviceLockChanged deviceLockChanged
    Boolean
    h282.BOOLEAN
h282.deviceLockEnquireRequest deviceLockEnquireRequest
    No value
    h282.DeviceLockEnquireRequest
h282.deviceLockEnquireResponse deviceLockEnquireResponse
    No value
    h282.DeviceLockEnquireResponse
h282.deviceLockRequest deviceLockRequest
    No value
    h282.DeviceLockRequest
```

```
h282.deviceLockResponse deviceLockResponse
  No value
  h282.DeviceLockResponse
h282.deviceLockStateChangedSupported deviceLockStateChangedSupported
  No value
  h282.NULL
h282.deviceLockTerminatedIndication deviceLockTerminatedIndication
  No value
  h282.DeviceLockTerminatedIndication
h282.deviceName deviceName
  String
  h282.TextString
h282.devicePresetSupported devicePresetSupported
  No value
  h282.DevicePresetCapability
h282.deviceState deviceState
  Unsigned 32-bit integer
  h282.DeviceState
h282.deviceStateSupported deviceStateSupported
  No value
  h282.NULL
h282.deviceStatusEnquireRequest deviceStatusEnquireRequest
  No value
  h282.DeviceStatusEnquireRequest
h282.deviceStatusEnquireResponse deviceStatusEnquireResponse
  No value
  h282.DeviceStatusEnquireResponse
h282.deviceTimeSupported deviceTimeSupported
  No value
  h282.NULL
h282.deviceUnavailable deviceUnavailable
  No value
  h282.NULL
h282.divisorFactors divisorFactors
  Unsigned 32-bit integer
  h282.T_divisorFactors
h282.divisorFactors_item Item
  Unsigned 32-bit integer
  h282.INTEGER_10_1000
h282.down down
  No value
  h282.NULL
h282.eventsNotSupported eventsNotSupported
  No value
  h282.NULL
h282.externalCameraLightSupported externalCameraLightSupported
  No value
  h282.ExternalCameraLightCapability
```

```
h282.far far
    No value
    h282.NULL

h282.fastForwarding fastForwarding
    No value
    h282.NULL

h282.filterNumber filterNumber
    Unsigned 32-bit integer
    h282.INTEGER_1_255

h282.filterTextLabel filterTextLabel
    Unsigned 32-bit integer
    h282.T_filterTextLabel

h282.filterTextLabel_item Item
    No value
    h282.T_filterTextLabel_item

h282.focusContinuous focusContinuous
    No value
    h282.FocusContinuous

h282.focusContinuousSupported focusContinuousSupported
    No value
    h282.NULL

h282.focusDirection focusDirection
    Unsigned 32-bit integer
    h282.T_focusDirection

h282.focusImage focusImage
    No value
    h282.NULL

h282.focusImageSupported focusImageSupported
    No value
    h282.NULL

h282.focusModeSupported focusModeSupported
    No value
    h282.NULL

h282.focusPosition focusPosition
    Signed 32-bit integer
    h282.FocusPosition

h282.focusPositionSupported focusPositionSupported
    Unsigned 32-bit integer
    h282.MinFocusPositionStepSize

h282.getAudioInputs getAudioInputs
    No value
    h282.NULL

h282.getAudioOutputState getAudioOutputState
    No value
    h282.NULL

h282.getAutoSlideDisplayTime getAutoSlideDisplayTime
    No value
    h282.NULL
```

```
h282.getBackLight    getBackLight
    No value
    h282.NULL

h282.getBackLightMode  getBackLightMode
    No value
    h282.NULL

h282.getBacklightMode  getBacklightMode
    No value
    h282.NULL

h282.getCameraFilter  getCameraFilter
    No value
    h282.NULL

h282.getCameraLens    getCameraLens
    No value
    h282.NULL

h282.getCameraPanSpeed  getCameraPanSpeed
    No value
    h282.NULL

h282.getCameraTiltSpeed  getCameraTiltSpeed
    No value
    h282.NULL

h282.getConfigurableAudioInputs  getConfigurableAudioInputs
    No value
    h282.NULL

h282.getConfigurableVideoInputs  getConfigurableVideoInputs
    No value
    h282.NULL

h282.getCurrentProgramDuration  getCurrentProgramDuration
    No value
    h282.NULL

h282.getDeviceDate    getDeviceDate
    No value
    h282.NULL

h282.getDeviceState  getDeviceState
    No value
    h282.NULL

h282.getDeviceTime    getDeviceTime
    No value
    h282.NULL

h282.getExternalLight  getExternalLight
    No value
    h282.NULL

h282.getFocusMode    getFocusMode
    No value
    h282.NULL

h282.getFocusPosition  getFocusPosition
    No value
    h282.NULL
```



```
h282.getIrisMode    getIrisMode
    No value
    h282.NULL

h282.getIrisPosition  getIrisPosition
    No value
    h282.NULL

h282.getNonStandardStatus  getNonStandardStatus
    Unsigned 32-bit integer
    h282.NonStandardIdentifier

h282.getPanPosition  getPanPosition
    No value
    h282.NULL

h282.getPlaybackSpeed  getPlaybackSpeed
    No value
    h282.NULL

h282.getPointingMode  getPointingMode
    No value
    h282.NULL

h282.getSelectedProgram  getSelectedProgram
    No value
    h282.NULL

h282.getSelectedSlide  getSelectedSlide
    No value
    h282.NULL

h282.getStreamPlayerState  getStreamPlayerState
    No value
    h282.NULL

h282.getTiltPosition  getTiltPosition
    No value
    h282.NULL

h282.getVideoInputs  getVideoInputs
    No value
    h282.NULL

h282.getWhiteBalance  getWhiteBalance
    No value
    h282.NULL

h282.getWhiteBalanceMode  getWhiteBalanceMode
    No value
    h282.NULL

h282.getZoomPosition  getZoomPosition
    No value
    h282.NULL

h282.getdevicePreset  getdevicePreset
    No value
    h282.NULL

h282.gotoHomePosition  gotoHomePosition
    No value
    h282.NULL
```

```
h282.gotoNormalPlayTimePoint gotoNormalPlayTimePoint
    No value
    h282.ProgramDuration

h282.gotoNormalPlayTimePointSupported gotoNormalPlayTimePointSupported
    No value
    h282.NULL

h282.h221NonStandard h221NonStandard
    Byte array
    h282.H221NonStandardIdentifier

h282.h221nonStandard h221nonStandard
    Byte array
    h282.H221NonStandardIdentifier

h282.homePositionSupported homePositionSupported
    No value
    h282.NULL

h282.hour hour
    Unsigned 32-bit integer
    h282.Hour

h282.hours hours
    Unsigned 32-bit integer
    h282.INTEGER_0_24

h282.inactive inactive
    No value
    h282.NULL

h282.indication indication
    Unsigned 32-bit integer
    h282.IndicationPDU

h282.inputDevices inputDevices
    Unsigned 32-bit integer
    h282.T_inputDevices

h282.inputDevices_item Item
    No value
    h282.T_inputDevices_item

h282.instanceNumber instanceNumber
    Unsigned 32-bit integer
    h282.INTEGER_0_255

h282.invalidStreamID invalidStreamID
    No value
    h282.NULL

h282.irisContinuousSupported irisContinuousSupported
    No value
    h282.NULL

h282.irisDirection irisDirection
    Unsigned 32-bit integer
    h282.T_irisDirection

h282.irisModeSupported irisModeSupported
    No value
    h282.NULL
```

```
h282.irisPosition  irisPosition
    Signed 32-bit integer
    h282.IrisPosition

h282.irisPositionSupported  irisPositionSupported
    Unsigned 32-bit integer
    h282.MinIrisPositionStepSize

h282.key  key
    Unsigned 32-bit integer
    h282.Key

h282.left  left
    No value
    h282.NULL

h282.lensNumber  lensNumber
    Unsigned 32-bit integer
    h282.INTEGER_1_255

h282.lensTextLabel  lensTextLabel
    Byte array
    h282.DeviceText

h282.lightLabel  lightLabel
    Byte array
    h282.DeviceText

h282.lightNumber  lightNumber
    Unsigned 32-bit integer
    h282.INTEGER_1_10

h282.lightSource  lightSource
    No value
    h282.NULL

h282.lightTextLabel  lightTextLabel
    Unsigned 32-bit integer
    h282.T_lightTextLabel

h282.lightTextLabel_item  Item
    No value
    h282.T_lightTextLabel_item

h282.lighter  lighter
    No value
    h282.NULL

h282.lockFlag  lockFlag
    Boolean
    h282.BOOLEAN

h282.lockNotRequired  lockNotRequired
    No value
    h282.NULL

h282.lockRequired  lockRequired
    No value
    h282.NULL

h282.lockingNotSupported  lockingNotSupported
    No value
    h282.NULL
```

```
h282.manual manual
  No value
  h282.NULL

h282.maxDown maxDown
  Signed 32-bit integer
  h282.INTEGER_M18000_0

h282.maxLeft maxLeft
  Signed 32-bit integer
  h282.INTEGER_M18000_0

h282.maxNumber maxNumber
  Unsigned 32-bit integer
  h282.PresetNumber

h282.maxNumberOfFilters maxNumberOfFilters
  Unsigned 32-bit integer
  h282.INTEGER_2_255

h282.maxNumberOfLens maxNumberOfLens
  Unsigned 32-bit integer
  h282.INTEGER_2_255

h282.maxRight maxRight
  Unsigned 32-bit integer
  h282.INTEGER_0_18000

h282.maxSpeed maxSpeed
  Unsigned 32-bit integer
  h282.CameraPanSpeed

h282.maxUp maxUp
  Unsigned 32-bit integer
  h282.INTEGER_0_18000

h282.microphone microphone
  No value
  h282.NULL

h282.microseconds microseconds
  Unsigned 32-bit integer
  h282.INTEGER_0_99999

h282.minSpeed minSpeed
  Unsigned 32-bit integer
  h282.CameraPanSpeed

h282.minStepSize minStepSize
  Unsigned 32-bit integer
  h282.INTEGER_1_18000

h282.minute minute
  Unsigned 32-bit integer
  h282.Minute

h282.minutes minutes
  Unsigned 32-bit integer
  h282.INTEGER_0_59

h282.mode mode
  Unsigned 32-bit integer
  h282.T_mode
```

```
h282.month month
    Unsigned 32-bit integer
    h282.Month

h282.multiplierFactors multiplierFactors
    Unsigned 32-bit integer
    h282.T_multiplierFactors

h282.multiplierFactors_item Item
    Unsigned 32-bit integer
    h282.INTEGER_10_1000

h282.multiplyFactor multiplyFactor
    Boolean
    h282.BOOLEAN

h282.mute mute
    Boolean
    h282.BOOLEAN

h282.near near
    No value
    h282.NULL

h282.next next
    No value
    h282.NULL

h282.nextProgramSelect nextProgramSelect
    Unsigned 32-bit integer
    h282.SelectDirection

h282.nextProgramSupported nextProgramSupported
    No value
    h282.NULL

h282.nonStandard nonStandard
    Unsigned 32-bit integer
    h282.Key

h282.nonStandardAttributeSupported nonStandardAttributeSupported
    No value
    h282.NonStandardParameter

h282.nonStandardControl nonStandardControl
    No value
    h282.NonStandardParameter

h282.nonStandardData nonStandardData
    No value
    h282.NonStandardParameter

h282.nonStandardDevice nonStandardDevice
    Unsigned 32-bit integer
    h282.NonStandardIdentifier

h282.nonStandardEvent nonStandardEvent
    No value
    h282.NonStandardParameter

h282.nonStandardIndication nonStandardIndication
    No value
    h282.NonStandardPDU
```

```
h282.nonStandardRequest  nonStandardRequest
    No value
    h282.NonStandardPDU

h282.nonStandardResponse  nonStandardResponse
    No value
    h282.NonStandardPDU

h282.nonStandardStatus  nonStandardStatus
    No value
    h282.NonStandardParameter

h282.none  none
    No value
    h282.NULL

h282.numberOfDeviceInputs  numberOfDeviceInputs
    Unsigned 32-bit integer
    h282.INTEGER_2_64

h282.numberOfDeviceRows  numberOfDeviceRows
    Unsigned 32-bit integer
    h282.INTEGER_1_64

h282.object  object
    h282.OBJECT_IDENTIFIER

h282.panContinuous  panContinuous
    No value
    h282.PanContinuous

h282.panContinuousSupported  panContinuousSupported
    No value
    h282.NULL

h282.panDirection  panDirection
    Unsigned 32-bit integer
    h282.T_panDirection

h282.panPosition  panPosition
    Signed 32-bit integer
    h282.PanPosition

h282.panPositionSupported  panPositionSupported
    No value
    h282.PanPositionCapability

h282.panViewSupported  panViewSupported
    No value
    h282.NULL

h282.pause  pause
    No value
    h282.NULL

h282.pauseSupported  pauseSupported
    No value
    h282.NULL

h282.pausedOnPlay  pausedOnPlay
    No value
    h282.NULL
```

```
h282.pausedOnRecord  pausedOnRecord
    No value
    h282.NULL

h282.play  play
    Boolean
    h282.BOOLEAN

h282.playAutoSlideShow  playAutoSlideShow
    Unsigned 32-bit integer
    h282.AutoSlideShowControl

h282.playSlideShowSupported  playSlideShowSupported
    No value
    h282.NULL

h282.playSupported  playSupported
    No value
    h282.NULL

h282.playToNormalPlayTimePoint  playToNormalPlayTimePoint
    No value
    h282.ProgramDuration

h282.playToNormalPlayTimePointSupported  playToNormalPlayTimePointSupported
    No value
    h282.NULL

h282.playbackSpeedSupported  playbackSpeedSupported
    No value
    h282.PlayBackSpeedCapability

h282.playing  playing
    No value
    h282.NULL

h282.pointingModeSupported  pointingModeSupported
    No value
    h282.NULL

h282.positioningMode  positioningMode
    Unsigned 32-bit integer
    h282.PositioningMode

h282.preset  preset
    Unsigned 32-bit integer
    h282.PresetNumber

h282.presetCapability  presetCapability
    Unsigned 32-bit integer
    h282.T_presetCapability

h282.presetCapability_item  Item
    No value
    h282.T_presetCapability_item

h282.presetNumber  presetNumber
    Unsigned 32-bit integer
    h282.PresetNumber

h282.presetTextLabel  presetTextLabel
    Byte array
    h282.DeviceText
```

```
h282.previous    previous
  No value
  h282.NULL

h282.program     program
  Unsigned 32-bit integer
  h282.ProgramNumber

h282.programUnavailable  programUnavailable
  No value
  h282.NULL

h282.readProgramDurationSupported  readProgramDurationSupported
  No value
  h282.NULL

h282.readStreamPlayerStateSupported  readStreamPlayerStateSupported
  No value
  h282.NULL

h282.record      record
  Boolean
  h282.BOOLEAN

h282.recordForDuration  recordForDuration
  No value
  h282.RecordForDuration

h282.recordForDurationSupported  recordForDurationSupported
  No value
  h282.NULL

h282.recordSupported  recordSupported
  No value
  h282.NULL

h282.recording      recording
  No value
  h282.NULL

h282.relative      relative
  No value
  h282.NULL

h282.remoteControlFlag  remoteControlFlag
  Boolean
  h282.BOOLEAN

h282.request        request
  Unsigned 32-bit integer
  h282.RequestPDU

h282.requestAutoSlideShowFinished  requestAutoSlideShowFinished
  No value
  h282.NULL

h282.requestCameraFocusedToLimit  requestCameraFocusedToLimit
  No value
  h282.NULL

h282.requestCameraPannedToLimit  requestCameraPannedToLimit
  No value
  h282.NULL
```



```
h282.requestCameraTiltedToLimit requestCameraTiltedToLimit
  No value
  h282.NULL

h282.requestCameraZoomedToLimit requestCameraZoomedToLimit
  No value
  h282.NULL

h282.requestDenied requestDenied
  No value
  h282.NULL

h282.requestDeviceAvailabilityChanged requestDeviceAvailabilityChanged
  No value
  h282.NULL

h282.requestDeviceLockChanged requestDeviceLockChanged
  No value
  h282.NULL

h282.requestHandle requestHandle
  Unsigned 32-bit integer
  h282.Handle

h282.requestNonStandardEvent requestNonStandardEvent
  Unsigned 32-bit integer
  h282.NonStandardIdentifier

h282.requestStreamPlayerProgramChange requestStreamPlayerProgramChange
  No value
  h282.NULL

h282.requestStreamPlayerStateChange requestStreamPlayerStateChange
  No value
  h282.NULL

h282.response response
  Unsigned 32-bit integer
  h282.ResponsePDU

h282.result result
  Unsigned 32-bit integer
  h282.T_result

h282.rewinding rewinding
  No value
  h282.NULL

h282.right right
  No value
  h282.NULL

h282.scaleFactor scaleFactor
  Unsigned 32-bit integer
  h282.INTEGER_10_1000

h282.searchBackwardsControl searchBackwardsControl
  Boolean
  h282.BOOLEAN

h282.searchBackwardsSupported searchBackwardsSupported
  No value
  h282.NULL
```

```
h282.searchForwardsControl  searchForwardsControl
  Boolean
  h282.BOOLEAN

h282.searchForwardsSupported  searchForwardsSupported
  No value
  h282.NULL

h282.searchingBackwards  searchingBackwards
  No value
  h282.NULL

h282.searchingForwards  searchingForwards
  No value
  h282.NULL

h282.seconds  seconds
  Unsigned 32-bit integer
  h282.INTEGER_0_59

h282.selectCameraFilter  selectCameraFilter
  Unsigned 32-bit integer
  h282.CameraFilterNumber

h282.selectCameraLens  selectCameraLens
  Unsigned 32-bit integer
  h282.CameraLensNumber

h282.selectExternalLight  selectExternalLight
  Unsigned 32-bit integer
  h282.SelectExternalLight

h282.selectNextSlide  selectNextSlide
  Unsigned 32-bit integer
  h282.SelectDirection

h282.selectNextSlideSupported  selectNextSlideSupported
  No value
  h282.NULL

h282.selectProgram  selectProgram
  Unsigned 32-bit integer
  h282.ProgramNumber

h282.selectProgramSupported  selectProgramSupported
  Unsigned 32-bit integer
  h282.MaxNumberOfPrograms

h282.selectSlide  selectSlide
  Unsigned 32-bit integer
  h282.SlideNumber

h282.selectSlideSupported  selectSlideSupported
  Unsigned 32-bit integer
  h282.MaxNumberOfSlides

h282.setAudioOutputMute  setAudioOutputMute
  Boolean
  h282.BOOLEAN

h282.setAudioOutputStateSupported  setAudioOutputStateSupported
  No value
  h282.NULL
```

```
h282.setAutoSlideDisplayTime  setAutoSlideDisplayTime
    Unsigned 32-bit integer
    h282.AutoSlideDisplayTime

h282.setBackLight  setBackLight
    Unsigned 32-bit integer
    h282.BackLight

h282.setBackLightMode  setBackLightMode
    Unsigned 32-bit integer
    h282.Mode

h282.setCameraPanSpeed  setCameraPanSpeed
    Unsigned 32-bit integer
    h282.CameraPanSpeed

h282.setCameraTiltSpeed  setCameraTiltSpeed
    Unsigned 32-bit integer
    h282.CameraTiltSpeed

h282.setDeviceDate  setDeviceDate
    No value
    h282.DeviceDate

h282.setDevicePreset  setDevicePreset
    No value
    h282.DevicePreset

h282.setDeviceState  setDeviceState
    Unsigned 32-bit integer
    h282.DeviceState

h282.setDeviceTime  setDeviceTime
    No value
    h282.DeviceTime

h282.setFocusMode  setFocusMode
    Unsigned 32-bit integer
    h282.Mode

h282.setFocusPosition  setFocusPosition
    No value
    h282.SetFocusPosition

h282.setIrisMode  setIrisMode
    Unsigned 32-bit integer
    h282.Mode

h282.setIrisPosition  setIrisPosition
    No value
    h282.SetIrisPosition

h282.setPanPosition  setPanPosition
    No value
    h282.SetPanPosition

h282.setPanView  setPanView
    Signed 32-bit integer
    h282.PanView

h282.setPlaybackSpeed  setPlaybackSpeed
    No value
    h282.PlaybackSpeed
```

```
h282.setPointingMode setPointingMode
    Unsigned 32-bit integer
    h282.PointingToggle

h282.setSlideDisplayTimeSupported setSlideDisplayTimeSupported
    Unsigned 32-bit integer
    h282.MaxSlideDisplayTime

h282.setTiltPosition setTiltPosition
    No value
    h282.SetTiltPosition

h282.setTiltView setTiltView
    Signed 32-bit integer
    h282.TiltView

h282.setWhiteBalance setWhiteBalance
    Unsigned 32-bit integer
    h282.WhiteBalance

h282.setWhiteBalanceMode setWhiteBalanceMode
    Unsigned 32-bit integer
    h282.Mode

h282.setZoomMagnification setZoomMagnification
    Unsigned 32-bit integer
    h282.ZoomMagnification

h282.setZoomPosition setZoomPosition
    No value
    h282.SetZoomPosition

h282.slide slide
    Unsigned 32-bit integer
    h282.SlideNumber

h282.slideProjector slideProjector
    No value
    h282.NULL

h282.slideShowModeSupported slideShowModeSupported
    No value
    h282.NULL

h282.sourceChangeEventIndication sourceChangeEventIndication
    No value
    h282.SourceChangeEventIndication

h282.sourceChangeFlag sourceChangeFlag
    Boolean
    h282.BOOLEAN

h282.sourceCombiner sourceCombiner
    No value
    h282.NULL

h282.sourceEventNotify sourceEventNotify
    Boolean
    h282.BOOLEAN

h282.sourceEventsRequest sourceEventsRequest
    No value
    h282.SourceEventsRequest
```

```
h282.sourceEventsResponse  sourceEventsResponse
    No value
    h282.SourceEventsResponse
h282.sourceSelectRequest  sourceSelectRequest
    No value
    h282.SourceSelectRequest
h282.sourceSelectResponse  sourceSelectResponse
    No value
    h282.SourceSelectResponse
h282.speed  speed
    Unsigned 32-bit integer
    h282.CameraPanSpeed
h282.speedStepSize  speedStepSize
    Unsigned 32-bit integer
    h282.CameraPanSpeed
h282.standard  standard
    Unsigned 32-bit integer
    h282.INTEGER_0_65535
h282.start  start
    No value
    h282.NULL
h282.state  state
    Unsigned 32-bit integer
    h282.StreamPlayerState
h282.statusAttributeIdentifierList  statusAttributeIdentifierList
    Unsigned 32-bit integer
    h282.SET_SIZE_1_16_OF_StatusAttributeIdentifier
h282.statusAttributeIdentifierList_item  Item
    Unsigned 32-bit integer
    h282.StatusAttributeIdentifier
h282.statusAttributeList  statusAttributeList
    Unsigned 32-bit integer
    h282.SET_SIZE_1_16_OF_StatusAttribute
h282.statusAttributeList_item  Item
    Unsigned 32-bit integer
    h282.StatusAttribute
h282.stop  stop
    No value
    h282.NULL
h282.stopped  stopped
    No value
    h282.NULL
h282.store  store
    No value
    h282.NULL
h282.storeModeSupported  storeModeSupported
    Boolean
    h282.BOOLEAN
```

```
h282.streamID streamID
    Unsigned 32-bit integer
    h282.StreamID

h282.streamIdentifier streamIdentifier
    Unsigned 32-bit integer
    h282.StreamID

h282.streamList streamList
    Unsigned 32-bit integer
    h282.SET_SIZE_0_127_OF_StreamProfile

h282.streamList_item Item
    No value
    h282.StreamProfile

h282.streamName streamName
    String
    h282.TextString

h282.streamPlayerProgramChange streamPlayerProgramChange
    Unsigned 32-bit integer
    h282.ProgramNumber

h282.streamPlayerProgramChangeSupported streamPlayerProgramChangeSupported
    No value
    h282.NULL

h282.streamPlayerRecorder streamPlayerRecorder
    No value
    h282.NULL

h282.streamPlayerStateChange streamPlayerStateChange
    Unsigned 32-bit integer
    h282.StreamPlayerState

h282.streamPlayerStateChangeSupported streamPlayerStateChangeSupported
    No value
    h282.NULL

h282.successful successful
    No value
    h282.NULL

h282.telescopic telescopic
    No value
    h282.NULL

h282.tiltContinuous tiltContinuous
    No value
    h282.TiltContinuous

h282.tiltContinuousSupported tiltContinuousSupported
    No value
    h282.NULL

h282.tiltDirection tiltDirection
    Unsigned 32-bit integer
    h282.T_tiltDirection

h282.tiltPosition tiltPosition
    Signed 32-bit integer
    h282.TiltPosition
```

```
h282.tiltPositionSupported  tiltPositionSupported
    No value
    h282.TiltPositionCapability
h282.tiltViewSupported  tiltViewSupported
    No value
    h282.NULL
h282.time  time
    Unsigned 32-bit integer
    h282.AutoSlideDisplayTime
h282.timeOut  timeOut
    Unsigned 32-bit integer
    h282.INTEGER_50_1000
h282.toggle  toggle
    No value
    h282.NULL
h282.unknown  unknown
    No value
    h282.NULL
h282.unknownDevice  unknownDevice
    No value
    h282.NULL
h282.up  up
    No value
    h282.NULL
h282.videoInputs  videoInputs
    No value
    h282.DeviceInputs
h282.videoInputsSupported  videoInputsSupported
    No value
    h282.VideoInputsCapability
h282.videoSinkFlag  videoSinkFlag
    Boolean
    h282.BOOLEAN
h282.videoSourceFlag  videoSourceFlag
    Boolean
    h282.BOOLEAN
h282.videoStreamFlag  videoStreamFlag
    Boolean
    h282.BOOLEAN
h282.whiteBalance  whiteBalance
    Unsigned 32-bit integer
    h282.WhiteBalance
h282.whiteBalanceModeSupported  whiteBalanceModeSupported
    No value
    h282.NULL
h282.whiteBalanceSettingSupported  whiteBalanceSettingSupported
    Unsigned 32-bit integer
    h282.MaxWhiteBalance
```

```

h282.wide wide
  No value
  h282.NULL

h282.year year
  Unsigned 32-bit integer
  h282.Year

h282.zoomContinuous zoomContinuous
  No value
  h282.ZoomContinuous

h282.zoomContinuousSupported zoomContinuousSupported
  No value
  h282.NULL

h282.zoomDirection zoomDirection
  Unsigned 32-bit integer
  h282.T_zoomDirection

h282.zoomMagnificationSupported zoomMagnificationSupported
  Unsigned 32-bit integer
  h282.MinZoomMagnificationStepSize

h282.zoomPosition zoomPosition
  Signed 32-bit integer
  h282.ZoomPosition

h282.zoomPositionSupported zoomPositionSupported
  Unsigned 32-bit integer
  h282.MinZoomPositionSetSize

```

### H.283 Logical Channel Transport (lct)

```

h283.LCTPDU LCTPDU
  No value
  h283.LCTPDU

h283.ack ack
  No value
  h283.NULL

h283.announceReq announceReq
  No value
  h283.NULL

h283.announceResp announceResp
  No value
  h283.NULL

h283.data data
  Byte array
  h283.OCTET_STRING

h283.dataType dataType
  Unsigned 32-bit integer
  h283.T_dataType

h283.deviceChange deviceChange
  No value
  h283.NULL

```



```
h283.deviceListReq  deviceListReq
    No value
    h283.NULL

h283.deviceListResp  deviceListResp
    Unsigned 32-bit integer
    h283.T_deviceListResp

h283.dstAddr  dstAddr
    No value
    h283.MTAddress

h283.h221NonStandard  h221NonStandard
    No value
    h283.H221NonStandard

h283.lctIndication  lctIndication
    Unsigned 32-bit integer
    h283.LCTIndication

h283.lctMessage  lctMessage
    Unsigned 32-bit integer
    h283.LCTMessage

h283.lctRequest  lctRequest
    Unsigned 32-bit integer
    h283.LCTRequest

h283.lctResponse  lctResponse
    Unsigned 32-bit integer
    h283.LCTResponse

h283.mAddress  mAddress
    Unsigned 32-bit integer
    h283.INTEGER_0_65535

h283.manufacturerCode  manufacturerCode
    Unsigned 32-bit integer
    h283.INTEGER_0_65535

h283.nonStandardIdentifier  nonStandardIdentifier
    Unsigned 32-bit integer
    h283.NonStandardIdentifier

h283.nonStandardMessage  nonStandardMessage
    No value
    h283.NonStandardMessage

h283.nonStandardParameters  nonStandardParameters
    Unsigned 32-bit integer
    h283.SEQUENCE_OF_NonStandardParameter

h283.nonStandardParameters_item  Item
    No value
    h283.NonStandardParameter

h283.object  object
    h283.OBJECT_IDENTIFIER

h283.pduType  pduType
    Unsigned 32-bit integer
    h283.T_pduType
```

```

h283.rdcData rdcData
  No value
  h283.RDCData
h283.rdcPDU rdcPDU
  Unsigned 32-bit integer
  h283.T_rdcPDU
h283.reliable reliable
  Boolean
  h283.BOOLEAN
h283.seqNumber seqNumber
  Unsigned 32-bit integer
  h283.INTEGER_0_65535
h283.srcAddr srcAddr
  No value
  h283.MTAddress
h283.t35CountryCode t35CountryCode
  Unsigned 32-bit integer
  h283.INTEGER_0_255
h283.t35Extension t35Extension
  Unsigned 32-bit integer
  h283.INTEGER_0_255
h283.tAddress tAddress
  Unsigned 32-bit integer
  h283.INTEGER_0_65535
h283.timestamp timestamp
  Unsigned 32-bit integer
  h283.INTEGER_0_4294967295

```

**H.323 (h323)**

```

h323.BackupCallSignalAddresses_item Item
  Unsigned 32-bit integer
  h323.BackupCallSignalAddresses_item
h323.RasTunnelledSignallingMessage RasTunnelledSignallingMessage
  No value
  h323.RasTunnelledSignallingMessage
h323.RobustnessData RobustnessData
  No value
  h323.RobustnessData
h323.alternateTransport alternateTransport
  No value
  h225.AlternateTransportAddresses
h323.backupCallSignalAddresses backupCallSignalAddresses
  Unsigned 32-bit integer
  h323.BackupCallSignalAddresses
h323.connectData connectData
  No value
  h323.Connect_RD
h323.endpointGuid endpointGuid

```

```
h323.GloballyUniqueIdentifier
h323.fastStart fastStart
    Unsigned 32-bit integer
    h323.T_fastStart
h323.fastStart_item Item
    Byte array
    h323.OCTET_STRING
h323.h245Address h245Address
    Unsigned 32-bit integer
    h225.TransportAddress
h323.hasSharedRepository hasSharedRepository
    No value
    h323.NULL
h323.includeFastStart includeFastStart
    No value
    h323.NULL
h323.irrFrequency irrFrequency
    Unsigned 32-bit integer
    h323.INTEGER_1_65535
h323.messageContent messageContent
    Unsigned 32-bit integer
    h323.T_messageContent
h323.messageContent_item Item
    Byte array
    h323.OCTET_STRING
h323.nonStandardData nonStandardData
    No value
    h225.NonStandardParameter
h323.rcfData rcfData
    No value
    h323.Rcf_RD
h323.resetH245 resetH245
    No value
    h323.NULL
h323.robustnessData robustnessData
    Unsigned 32-bit integer
    h323.T_robustnessData
h323.rrqData rrqData
    No value
    h323.Rrq_RD
h323.setupData setupData
    No value
    h323.Setup_RD
h323.statusData statusData
    No value
    h323.Status_RD
```

```

h323.statusInquiryData  statusInquiryData
    No value
    h323.StatusInquiry_RD

h323.tcp  tcp
    Unsigned 32-bit integer
    h225.TransportAddress

h323.timeToLive  timeToLive
    Unsigned 32-bit integer
    h225.TimeToLive

h323.tunnelledProtocolID  tunnelledProtocolID
    No value
    h225.TunnelledProtocol

h323.tunnellingRequired  tunnellingRequired
    No value
    h323.NULL

h323.versionID  versionID
    Unsigned 32-bit integer
    h323.INTEGER_1_256

```

**H.324/CCSRL (ccsrl)**

```

ccsrl.ls  Last Segment
    Unsigned 8-bit integer
    Last segment indicator

```

**H.324/SRP (srp)**

```

srp.crc  CRC
    Unsigned 16-bit integer
    CRC

srp.crc_bad  Bad CRC
    Boolean

srp.header  Header
    Unsigned 8-bit integer
    SRP header octet

srp.seqno  Sequence Number
    Unsigned 8-bit integer
    Sequence Number

```

**H.450 Remote Operations Apdus (h450.ros)**

```

h450.ros.argument  argument
    Byte array
    h450_ros.InvokeArgument

h450.ros.errcode  errcode
    Unsigned 32-bit integer
    h450_ros.Code

h450.ros.general  general
    Signed 32-bit integer
    h450_ros.GeneralProblem

h450.ros.global  global

```

```
    h450_ros.T_global
h450_ros.invoke invoke
    No value
    h450_ros.Invoke
h450_ros.invokeId invokeId
    Signed 32-bit integer
    h450_ros.T_invokeIdConstrained
h450_ros.linkedId linkedId
    Signed 32-bit integer
    h450_ros.InvokeId
h450_ros.local local
    Signed 32-bit integer
    h450_ros.T_local
h450_ros.opcode opcode
    Unsigned 32-bit integer
    h450_ros.Code
h450_ros.parameter parameter
    Byte array
    h450_ros.T_parameter
h450_ros.problem problem
    Unsigned 32-bit integer
    h450_ros.T_problem
h450_ros.reject reject
    No value
    h450_ros.Reject
h450_ros.result result
    No value
    h450_ros.T_result
h450_ros.returnError returnError
    No value
    h450_ros.ReturnError
h450_ros.returnResult returnResult
    No value
    h450_ros.ReturnResult
```

#### **H.450 Supplementary Services (h450)**

```
h450.10.CfbOvrOptArg CfbOvrOptArg
    No value
    h450_10.CfbOvrOptArg
h450.10.CoReqOptArg CoReqOptArg
    No value
    h450_10.CoReqOptArg
h450.10.RUAlertOptArg RUAlertOptArg
    No value
    h450_10.RUAlertOptArg
h450.10.extension extension
    Unsigned 32-bit integer
    h450_10.SEQUENCE_SIZE_0_255_OF_MixedExtension
```

```
h450.10.extension_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension

h450.11.CIFrcRelArg  CIFrcRelArg
    No value
    h450_11.CIFrcRelArg

h450.11.CIFrcRelOptRes  CIFrcRelOptRes
    No value
    h450_11.CIFrcRelOptRes

h450.11.CIGetCIPOptArg  CIGetCIPOptArg
    No value
    h450_11.CIGetCIPOptArg

h450.11.CIGetCIPLRes  CIGetCIPLRes
    No value
    h450_11.CIGetCIPLRes

h450.11.CIIsOptArg  CIIsOptArg
    No value
    h450_11.CIIsOptArg

h450.11.CIIsOptRes  CIIsOptRes
    No value
    h450_11.CIIsOptRes

h450.11.CINotificationArg  CINotificationArg
    No value
    h450_11.CINotificationArg

h450.11.CIRequestArg  CIRequestArg
    No value
    h450_11.CIRequestArg

h450.11.CIRequestRes  CIRequestRes
    No value
    h450_11.CIRequestRes

h450.11.CISilentArg  CISilentArg
    No value
    h450_11.CISilentArg

h450.11.CISilentOptRes  CISilentOptRes
    No value
    h450_11.CISilentOptRes

h450.11.CIWobOptArg  CIWobOptArg
    No value
    h450_11.CIWobOptArg

h450.11.CIWobOptRes  CIWobOptRes
    No value
    h450_11.CIWobOptRes

h450.11.argumentExtension  argumentExtension
    Unsigned 32-bit integer
    h450_11.SEQUENCE_SIZE_0_255_OF_MixedExtension

h450.11.argumentExtension_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
```

```
h450.11.callForceReleased  callForceReleased
    No value
    h450_11.NULL

h450.11.callIntruded  callIntruded
    No value
    h450_11.NULL

h450.11.callIntrusionComplete  callIntrusionComplete
    No value
    h450_11.NULL

h450.11.callIntrusionEnd  callIntrusionEnd
    No value
    h450_11.NULL

h450.11.callIntrusionImpending  callIntrusionImpending
    No value
    h450_11.NULL

h450.11.callIsolated  callIsolated
    No value
    h450_11.NULL

h450.11.ciCapabilityLevel  ciCapabilityLevel
    Unsigned 32-bit integer
    h450_11.CICapabilityLevel

h450.11.ciProtectionLevel  ciProtectionLevel
    Unsigned 32-bit integer
    h450_11.CIProtectionLevel

h450.11.ciStatusInformation  ciStatusInformation
    Unsigned 32-bit integer
    h450_11.CIStatusInformation

h450.11.resultExtension  resultExtension
    Unsigned 32-bit integer
    h450_11.SEQUENCE_SIZE_0_255_OF_MixedExtension

h450.11.resultExtension_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension

h450.11.silentMonitoringPermitted  silentMonitoringPermitted
    No value
    h450_11.NULL

h450.11.specificCall  specificCall
    No value
    h225.CallIdentifier

h450.12.CmnArg  CmnArg
    No value
    h450_12.CmnArg

h450.12.DummyArg  DummyArg
    No value
    h450_12.DummyArg

h450.12.extension  extension
    Unsigned 32-bit integer
    h450_12.SEQUENCE_SIZE_0_255_OF_MixedExtension
```

```
h450.12.extensionArg extensionArg
    Unsigned 32-bit integer
    h450_12.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.12.extensionArg_item Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.12.extension_item Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.12.featureControl featureControl
    No value
    h450_12.FeatureControl
h450.12.featureList featureList
    No value
    h450_12.FeatureList
h450.12.featureValues featureValues
    No value
    h450_12.FeatureValues
h450.12.partyCategory partyCategory
    Unsigned 32-bit integer
    h450_12.PartyCategory
h450.12.ssCCBSPossible ssCCBSPossible
    No value
    h450_12.NULL
h450.12.ssCCNRPossible ssCCNRPossible
    No value
    h450_12.NULL
h450.12.ssCFreRoutingSupported ssCFreRoutingSupported
    No value
    h450_12.NULL
h450.12.ssCHDoNotHold ssCHDoNotHold
    No value
    h450_12.NULL
h450.12.ssCHFarHoldSupported ssCHFarHoldSupported
    No value
    h450_12.NULL
h450.12.ssCIConferenceSupported ssCIConferenceSupported
    No value
    h450_12.NULL
h450.12.ssCIForcedReleaseSupported ssCIForcedReleaseSupported
    No value
    h450_12.NULL
h450.12.ssCIIIsolationSupported ssCIIIsolationSupported
    No value
    h450_12.NULL
h450.12.ssCISilentMonitorPermitted ssCISilentMonitorPermitted
    No value
    h450_12.NULL
```



```
h450.12.ssCISilentMonitoringSupported  ssCISilentMonitoringSupported
  No value
  h450_12.NULL

h450.12.ssCIWaitOnBusySupported  ssCIWaitOnBusySupported
  No value
  h450_12.NULL

h450.12.ssCIprotectionLevel  ssCIprotectionLevel
  Unsigned 32-bit integer
  h450_12.SSCIProtectionLevel

h450.12.ssCOSupported  ssCOSupported
  No value
  h450_12.NULL

h450.12.ssCPCallParkSupported  ssCPCallParkSupported
  No value
  h450_12.NULL

h450.12.ssCTDoNotTransfer  ssCTDoNotTransfer
  No value
  h450_12.NULL

h450.12.ssCTreRoutingSupported  ssCTreRoutingSupported
  No value
  h450_12.NULL

h450.12.ssMWICallbackCall  ssMWICallbackCall
  No value
  h450_12.NULL

h450.12.ssMWICallbackSupported  ssMWICallbackSupported
  No value
  h450_12.NULL

h450.2.CTActiveArg  CTActiveArg
  No value
  h450_2.CTActiveArg

h450.2.CTCompleteArg  CTCompleteArg
  No value
  h450_2.CTCompleteArg

h450.2.CTIdentifyRes  CTIdentifyRes
  No value
  h450_2.CTIdentifyRes

h450.2.CTInitiateArg  CTInitiateArg
  No value
  h450_2.CTInitiateArg

h450.2.CTSetupArg  CTSetupArg
  No value
  h450_2.CTSetupArg

h450.2.CTUpdateArg  CTUpdateArg
  No value
  h450_2.CTUpdateArg

h450.2.DummyArg  DummyArg
  Unsigned 32-bit integer
  h450_2.DummyArg
```

```
h450.2.DummyRes    DummyRes
    Unsigned 32-bit integer
    h450_2.DummyRes

h450.2.ExtensionSeq_item  Item
    No value
    h450.Extension

h450.2.PAR_unspecified  PAR-unspecified
    Unsigned 32-bit integer
    h450_2.PAR_unspecified

h450.2.SubaddressTransferArg  SubaddressTransferArg
    No value
    h450_2.SubaddressTransferArg

h450.2.argumentExtension  argumentExtension
    Unsigned 32-bit integer
    h450_2.T_cTInitiateArg_argumentExtension

h450.2.basicCallInfoElements  basicCallInfoElements
    Byte array
    h450.H225InformationElement

h450.2.callIdentity  callIdentity
    String
    h450_2.CallIdentity

h450.2.callStatus  callStatus
    Unsigned 32-bit integer
    h450_2.CallStatus

h450.2.connectedAddress  connectedAddress
    No value
    h450.EndpointAddress

h450.2.connectedInfo  connectedInfo
    String
    h450_2.BMPString_SIZE_1_128

h450.2.endDesignation  endDesignation
    Unsigned 32-bit integer
    h450_2.EndDesignation

h450.2.extension  extension
    No value
    h450.Extension

h450.2.extensionSeq  extensionSeq
    Unsigned 32-bit integer
    h450_2.ExtensionSeq

h450.2.nonStandard  nonStandard
    No value
    h225.NonStandardParameter

h450.2.nonStandardData  nonStandardData
    No value
    h225.NonStandardParameter

h450.2.redirectionInfo  redirectionInfo
    String
    h450_2.BMPString_SIZE_1_128
```

```
h450.2.redirectionNumber redirectionNumber
    No value
    h450.EndpointAddress
h450.2.redirectionSubaddress redirectionSubaddress
    Unsigned 32-bit integer
    h450.PartySubaddress
h450.2.reroutingNumber reroutingNumber
    No value
    h450.EndpointAddress
h450.2.resultExtension resultExtension
    Unsigned 32-bit integer
    h450_2.T_resultExtension
h450.2.transferringNumber transferringNumber
    No value
    h450.EndpointAddress
h450.3.ARG_activatedDiversionQ ARG-activatedDiversionQ
    No value
    h450_3.ARG_activatedDiversionQ
h450.3.ARG_callRerouting ARG-callRerouting
    No value
    h450_3.ARG_callRerouting
h450.3.ARG_cfnrDivertedLegFailed ARG-cfnrDivertedLegFailed
    Unsigned 32-bit integer
    h450_3.ARG_cfnrDivertedLegFailed
h450.3.ARG_checkRestriction ARG-checkRestriction
    No value
    h450_3.ARG_checkRestriction
h450.3.ARG_deactivatedDiversionQ ARG-deactivatedDiversionQ
    No value
    h450_3.ARG_deactivatedDiversionQ
h450.3.ARG_divertingLegInformation1 ARG-divertingLegInformation1
    No value
    h450_3.ARG_divertingLegInformation1
h450.3.ARG_divertingLegInformation2 ARG-divertingLegInformation2
    No value
    h450_3.ARG_divertingLegInformation2
h450.3.ARG_divertingLegInformation3 ARG-divertingLegInformation3
    No value
    h450_3.ARG_divertingLegInformation3
h450.3.ARG_divertingLegInformation4 ARG-divertingLegInformation4
    No value
    h450_3.ARG_divertingLegInformation4
h450.3.ARG_interrogatedDiversionQ ARG-interrogatedDiversionQ
    No value
    h450_3.ARG_interrogatedDiversionQ
h450.3.ExtensionSeq_item Item
    No value
    h450.Extension
```

```
h450.3.IntResultList  IntResultList
    Unsigned 32-bit integer
    h450_3.IntResultList

h450.3.IntResultList_item  Item
    No value
    h450_3.IntResult

h450.3.PAR_unspecified  PAR-unspecified
    Unsigned 32-bit integer
    h450_3.PAR_unspecified

h450.3.RES_activateDiversionQ  RES-activateDiversionQ
    Unsigned 32-bit integer
    h450_3.RES_activateDiversionQ

h450.3.RES_callRerouting  RES-callRerouting
    Unsigned 32-bit integer
    h450_3.RES_callRerouting

h450.3.RES_checkRestriction  RES-checkRestriction
    Unsigned 32-bit integer
    h450_3.RES_checkRestriction

h450.3.RES_deactivateDiversionQ  RES-deactivateDiversionQ
    Unsigned 32-bit integer
    h450_3.RES_deactivateDiversionQ

h450.3.activatingUserNr  activatingUserNr
    No value
    h450.EndpointAddress

h450.3.basicService  basicService
    Unsigned 32-bit integer
    h450_3.BasicService

h450.3.calledAddress  calledAddress
    No value
    h450.EndpointAddress

h450.3.callingInfo  callingInfo
    String
    h450_3.BMPString_SIZE_1_128

h450.3.callingNr  callingNr
    No value
    h450.EndpointAddress

h450.3.callingNumber  callingNumber
    No value
    h450.EndpointAddress

h450.3.callingPartySubaddress  callingPartySubaddress
    Unsigned 32-bit integer
    h450.PartySubaddress

h450.3.deactivatingUserNr  deactivatingUserNr
    No value
    h450.EndpointAddress

h450.3.diversionCounter  diversionCounter
    Unsigned 32-bit integer
    h450_3.INTEGER_1_15
```

```
h450.3.diversionReason diversionReason
    Unsigned 32-bit integer
    h450_3.DiversionReason

h450.3.divertedToAddress divertedToAddress
    No value
    h450.EndpointAddress

h450.3.divertedToNr divertedToNr
    No value
    h450.EndpointAddress

h450.3.divertingNr divertingNr
    No value
    h450.EndpointAddress

h450.3.extension extension
    Unsigned 32-bit integer
    h450_3.ActivateDiversionQArg_extension

h450.3.extensionSeq extensionSeq
    Unsigned 32-bit integer
    h450_3.ExtensionSeq

h450.3.h225InfoElement h225InfoElement
    Byte array
    h450.H225InformationElement

h450.3.interrogatingUserNr interrogatingUserNr
    No value
    h450.EndpointAddress

h450.3.lastReroutingNr lastReroutingNr
    No value
    h450.EndpointAddress

h450.3.nominatedInfo nominatedInfo
    String
    h450_3.BMPString_SIZE_1_128

h450.3.nominatedNr nominatedNr
    No value
    h450.EndpointAddress

h450.3.nonStandard nonStandard
    No value
    h225.NonStandardParameter

h450.3.nonStandardData nonStandardData
    No value
    h225.NonStandardParameter

h450.3.originalCalledInfo originalCalledInfo
    String
    h450_3.BMPString_SIZE_1_128

h450.3.originalCalledNr originalCalledNr
    No value
    h450.EndpointAddress

h450.3.originalDiversionReason originalDiversionReason
    Unsigned 32-bit integer
    h450_3.DiversionReason
```

```
h450.3.originalReroutingReason  originalReroutingReason
    Unsigned 32-bit integer
    h450_3.DiversionReason

h450.3.presentationAllowedIndicator  presentationAllowedIndicator
    Boolean
    h450.PresentationAllowedIndicator

h450.3.procedure  procedure
    Unsigned 32-bit integer
    h450_3.Procedure

h450.3.redirectingInfo  redirectingInfo
    String
    h450_3.BMPString_SIZE_1_128

h450.3.redirectingNr  redirectingNr
    No value
    h450.EndpointAddress

h450.3.redirectionInfo  redirectionInfo
    String
    h450_3.BMPString_SIZE_1_128

h450.3.redirectionNr  redirectionNr
    No value
    h450.EndpointAddress

h450.3.remoteEnabled  remoteEnabled
    Boolean
    h450_3.BOOLEAN

h450.3.reroutingReason  reroutingReason
    Unsigned 32-bit integer
    h450_3.DiversionReason

h450.3.servedUserNr  servedUserNr
    No value
    h450.EndpointAddress

h450.3.subscriptionOption  subscriptionOption
    Unsigned 32-bit integer
    h450_3.SubscriptionOption

h450.4.HoldNotificArg  HoldNotificArg
    No value
    h450_4.HoldNotificArg

h450.4.PAR_undefined  PAR-undefined
    Unsigned 32-bit integer
    h450_4.PAR_undefined

h450.4.PAR_undefined_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension

h450.4.RemoteHoldArg  RemoteHoldArg
    No value
    h450_4.RemoteHoldArg

h450.4.RemoteHoldRes  RemoteHoldRes
    No value
    h450_4.RemoteHoldRes
```

```
h450.4.RemoteRetrieveArg RemoteRetrieveArg
    No value
    h450_4.RemoteRetrieveArg
h450.4.RemoteRetrieveRes RemoteRetrieveRes
    No value
    h450_4.RemoteRetrieveRes
h450.4.RetrieveNotificArg RetrieveNotificArg
    No value
    h450_4.RetrieveNotificArg
h450.4.extension extension
    No value
    h450.Extension
h450.4.extensionArg extensionArg
    Unsigned 32-bit integer
    h450_4.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.4.extensionArg_item Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.4.extensionRes extensionRes
    Unsigned 32-bit integer
    h450_4.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.4.extensionRes_item Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.4.nonStandardData nonStandardData
    No value
    h225.NonStandardParameter
h450.5.CpNotifyArg CpNotifyArg
    No value
    h450_5.CpNotifyArg
h450.5.CpRequestArg CpRequestArg
    No value
    h450_5.CpRequestArg
h450.5.CpRequestRes CpRequestRes
    No value
    h450_5.CpRequestRes
h450.5.CpSetupArg CpSetupArg
    No value
    h450_5.CpSetupArg
h450.5.CpSetupRes CpSetupRes
    No value
    h450_5.CpSetupRes
h450.5.CpickupNotifyArg CppickupNotifyArg
    No value
    h450_5.CpickupNotifyArg
h450.5.GroupIndicationOffArg GroupIndicationOffArg
    No value
    h450_5.GroupIndicationOffArg
```

```
h450.5.GroupIndicationOffRes  GroupIndicationOffRes
    No value
    h450_5.GroupIndicationOffRes
h450.5.GroupIndicationOnArg  GroupIndicationOnArg
    No value
    h450_5.GroupIndicationOnArg
h450.5.GroupIndicationOnRes  GroupIndicationOnRes
    No value
    h450_5.GroupIndicationOnRes
h450.5.PAR_undefined  PAR-undefined
    Unsigned 32-bit integer
    h450_5.PAR_undefined
h450.5.PAR_undefined_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.5.PickExeArg  PickExeArg
    No value
    h450_5.PickExeArg
h450.5.PickExeRes  PickExeRes
    No value
    h450_5.PickExeRes
h450.5.PickrequArg  PickrequArg
    No value
    h450_5.PickrequArg
h450.5.PickrequRes  PickrequRes
    No value
    h450_5.PickrequRes
h450.5.PickupArg  PickupArg
    No value
    h450_5.PickupArg
h450.5.PickupRes  PickupRes
    No value
    h450_5.PickupRes
h450.5.callPickupId  callPickupId
    No value
    h225.CallIdentifier
h450.5.extensionArg  extensionArg
    Unsigned 32-bit integer
    h450_5.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.5.extensionArg_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.5.extensionRes  extensionRes
    Unsigned 32-bit integer
    h450_5.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.5.extensionRes_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
```



```
h450.5.groupMemberUserNr  groupMemberUserNr
    No value
    h450.EndpointAddress
h450.5.parkCondition  parkCondition
    Unsigned 32-bit integer
    h450_5.ParkCondition
h450.5.parkPosition  parkPosition
    Unsigned 32-bit integer
    h450_5.ParkedToPosition
h450.5.parkedNumber  parkedNumber
    No value
    h450.EndpointAddress
h450.5.parkedToNumber  parkedToNumber
    No value
    h450.EndpointAddress
h450.5.parkedToPosition  parkedToPosition
    Unsigned 32-bit integer
    h450_5.ParkedToPosition
h450.5.parkingNumber  parkingNumber
    No value
    h450.EndpointAddress
h450.5.partyToRetrieve  partyToRetrieve
    No value
    h450.EndpointAddress
h450.5.picking_upNumber  picking-upNumber
    No value
    h450.EndpointAddress
h450.5.retrieveAddress  retrieveAddress
    No value
    h450.EndpointAddress
h450.5.retrieveCallType  retrieveCallType
    Unsigned 32-bit integer
    h450_5.CallType
h450.6.CallWaitingArg  CallWaitingArg
    No value
    h450_6.CallWaitingArg
h450.6.extensionArg  extensionArg
    Unsigned 32-bit integer
    h450_6.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.6.extensionArg_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.6.nbOfAddWaitingCalls  nbOfAddWaitingCalls
    Unsigned 32-bit integer
    h450_6.INTEGER_0_255
h450.7.DummyRes  DummyRes
    Unsigned 32-bit integer
    h450_7.DummyRes
```

```
h450.7.DummyRes_item Item
    Unsigned 32-bit integer
    h450_4.MixedExtension

h450.7.MWIActivateArg MWIActivateArg
    No value
    h450_7.MWIActivateArg

h450.7.MWIDeactivateArg MWIDeactivateArg
    No value
    h450_7.MWIDeactivateArg

h450.7.MWIInterrogateArg MWIInterrogateArg
    No value
    h450_7.MWIInterrogateArg

h450.7.MWIInterrogateRes MWIInterrogateRes
    Unsigned 32-bit integer
    h450_7.MWIInterrogateRes

h450.7.MWIInterrogateRes_item Item
    No value
    h450_7.MWIInterrogateResElt

h450.7.PAR_undefined PAR-undefined
    Unsigned 32-bit integer
    h450_7.PAR_undefined

h450.7.PAR_undefined_item Item
    Unsigned 32-bit integer
    h450_4.MixedExtension

h450.7.basicService basicService
    Unsigned 32-bit integer
    h450_7.BasicService

h450.7.callbackReq callbackReq
    Boolean
    h450_7.BOOLEAN

h450.7.extensionArg extensionArg
    Unsigned 32-bit integer
    h450_7.SEQUENCE_SIZE_0_255_OF_MixedExtension

h450.7.extensionArg_item Item
    Unsigned 32-bit integer
    h450_4.MixedExtension

h450.7.integer integer
    Unsigned 32-bit integer
    h450_7.INTEGER_0_65535

h450.7.msgCentreId msgCentreId
    Unsigned 32-bit integer
    h450_7.MsgCentreId

h450.7.nbOfMessages nbOfMessages
    Unsigned 32-bit integer
    h450_7.NbOfMessages

h450.7.numericString numericString
    String
    h450_7.NumericString_SIZE_1_10
```

```
h450.7.originatingNr  originatingNr
    No value
    h450.EndpointAddress
h450.7.partyNumber  partyNumber
    No value
    h450.EndpointAddress
h450.7.priority  priority
    Unsigned 32-bit integer
    h450_7.INTEGER_0_9
h450.7.servedUserNr  servedUserNr
    No value
    h450.EndpointAddress
h450.7.timestamp  timestamp
    String
    h450_7.TimeStamp
h450.8.ARG_alertingName  ARG-alertingName
    No value
    h450_8.ARG_alertingName
h450.8.ARG_busyName  ARG-busyName
    No value
    h450_8.ARG_busyName
h450.8.ARG_callingName  ARG-callingName
    No value
    h450_8.ARG_callingName
h450.8.ARG_connectedName  ARG-connectedName
    No value
    h450_8.ARG_connectedName
h450.8.extendedName  extendedName
    String
    h450_8.ExtendedName
h450.8.extensionArg  extensionArg
    Unsigned 32-bit integer
    h450_8.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.8.extensionArg_item  Item
    Unsigned 32-bit integer
    h450_4.MixedExtension
h450.8.name  name
    Unsigned 32-bit integer
    h450_8.Name
h450.8.nameNotAvailable  nameNotAvailable
    No value
    h450_8.NULL
h450.8.namePresentationAllowed  namePresentationAllowed
    Unsigned 32-bit integer
    h450_8.NamePresentationAllowed
h450.8.namePresentationRestricted  namePresentationRestricted
    Unsigned 32-bit integer
    h450_8.NamePresentationRestricted
```

```
h450.8.restrictedNull restrictedNull
  No value
  h450_8.NULL
h450.8.simpleName simpleName
  Byte array
  h450_8.SimpleName
h450.9.CcArg CcArg
  Unsigned 32-bit integer
  h450_9.CcArg
h450.9.CcRequestArg CcRequestArg
  No value
  h450_9.CcRequestArg
h450.9.CcRequestRes CcRequestRes
  No value
  h450_9.CcRequestRes
h450.9.CcShortArg CcShortArg
  No value
  h450_9.CcShortArg
h450.9.can_retain_service can-retain-service
  Boolean
  h450_9.BOOLEAN
h450.9.ccIdentifier ccIdentifier
  No value
  h225.CallIdentifier
h450.9.extension extension
  Unsigned 32-bit integer
  h450_9.SEQUENCE_SIZE_0_255_OF_MixedExtension
h450.9.extension_item Item
  Unsigned 32-bit integer
  h450_4.MixedExtension
h450.9.longArg longArg
  No value
  h450_9.CcLongArg
h450.9.numberA numberA
  No value
  h450.EndpointAddress
h450.9.numberB numberB
  No value
  h450.EndpointAddress
h450.9.retain_service retain-service
  Boolean
  h450_9.BOOLEAN
h450.9.retain_sig_connection retain-sig-connection
  Boolean
  h450_9.BOOLEAN
h450.9.service service
  Unsigned 32-bit integer
  h450_7.BasicService
```

```
h450.9.shortArg  shortArg
    No value
    h450_9.CcShortArg
h450.H4501SupplementaryService  H4501SupplementaryService
    No value
    h450.H4501SupplementaryService
h450.anyEntity  anyEntity
    No value
    h450.NULL
h450.clearCallIfAnyInvokePduNotRecognized  clearCallIfAnyInvokePduNotRecognized
    No value
    h450.NULL
h450.destinationAddress  destinationAddress
    Unsigned 32-bit integer
    h450.SEQUENCE_OF_AliasAddress
h450.destinationAddressPresentationIndicator  destinationAddressPresentationIndi
    Unsigned 32-bit integer
    h225.PresentationIndicator
h450.destinationAddressScreeningIndicator  destinationAddressScreeningIndicator
    Unsigned 32-bit integer
    h225.ScreeningIndicator
h450.destinationAddress_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress
h450.destinationEntity  destinationEntity
    Unsigned 32-bit integer
    h450.EntityType
h450.destinationEntityAddress  destinationEntityAddress
    Unsigned 32-bit integer
    h450.AddressInformation
h450.discardAnyUnrecognizedInvokePdu  discardAnyUnrecognizedInvokePdu
    No value
    h450.NULL
h450.endpoint  endpoint
    No value
    h450.NULL
h450.error  Error
    Unsigned 8-bit integer
    Error
h450.extensionArgument  extensionArgument
    No value
    h450.T_extensionArgument
h450.extensionId  extensionId
    h450.OBJECT_IDENTIFIER
h450.interpretationA pdu  interpretationA pdu
    Unsigned 32-bit integer
    h450.InterpretationA pdu
```

```

h450.networkFacilityExtension  networkFacilityExtension
    No value
    h450.NetworkFacilityExtension
h450.nsapSubaddress  nsapSubaddress
    Byte array
    h450.NSAPSubaddress
h450.numberNotAvailableDueToInterworking  numberNotAvailableDueToInterworking
    No value
    h450.NULL
h450.oddCountIndicator  oddCountIndicator
    Boolean
    h450.BOOLEAN
h450.operation  Operation
    Unsigned 8-bit integer
    Operation
h450.partyNumber  partyNumber
    Unsigned 32-bit integer
    h225.PartyNumber
h450.partySubaddress  partySubaddress
    Unsigned 32-bit integer
    h450.PartySubaddress
h450.presentationAllowedAddress  presentationAllowedAddress
    No value
    h450.AddressScreened
h450.presentationRestricted  presentationRestricted
    No value
    h450.NULL
h450.presentationRestrictedAddress  presentationRestrictedAddress
    No value
    h450.AddressScreened
h450.rejectAnyUnrecognizedInvokePdu  rejectAnyUnrecognizedInvokePdu
    No value
    h450.NULL
h450.remoteExtensionAddress  remoteExtensionAddress
    Unsigned 32-bit integer
    h225.AliasAddress
h450.remoteExtensionAddressPresentationIndicator  remoteExtensionAddressPresenta
    Unsigned 32-bit integer
    h225.PresentationIndicator
h450.remoteExtensionAddressScreeningIndicator  remoteExtensionAddressScreeningIn
    Unsigned 32-bit integer
    h225.ScreeningIndicator
h450.rosApdus  rosApdus
    Unsigned 32-bit integer
    h450.T_rosApdus
h450.rosApdus_item  Item
    Unsigned 32-bit integer
    h450.T_rosApdus_item

```

```

h450.screeningIndicator  screeningIndicator
    Unsigned 32-bit integer
    h225.ScreeningIndicator

h450.serviceAdu  serviceAdu
    Unsigned 32-bit integer
    h450.ServiceAdu

h450.sourceEntity  sourceEntity
    Unsigned 32-bit integer
    h450.EntityType

h450.sourceEntityAddress  sourceEntityAddress
    Unsigned 32-bit integer
    h450.AddressInformation

h450.subaddressInformation  subaddressInformation
    Byte array
    h450.SubaddressInformation

h450.userSpecifiedSubaddress  userSpecifiedSubaddress
    No value
    h450.UserSpecifiedSubaddress

```

#### **H.460 Supplementary Services (h460)**

```

h460.10.CallPartyCategoryInfo  CallPartyCategoryInfo
    No value
    h460_10.CallPartyCategoryInfo

h460.10.callPartyCategory  callPartyCategory
    Unsigned 32-bit integer
    h460_10.CallPartyCategory

h460.10.originatingLineInfo  originatingLineInfo
    Unsigned 32-bit integer
    h460_10.OriginatingLineInfo

h460.14.MLPPInfo  MLPPInfo
    No value
    h460_14.MLPPInfo

h460.14.altID  altID
    Unsigned 32-bit integer
    h225.AliasAddress

h460.14.altTimer  altTimer
    Unsigned 32-bit integer
    h460_14.INTEGER_0_255

h460.14.alternateParty  alternateParty
    No value
    h460_14.AlternateParty

h460.14.mlppNotification  mlppNotification
    Unsigned 32-bit integer
    h460_14.MlppNotification

h460.14.mlppReason  mlppReason
    Unsigned 32-bit integer
    h460_14.MlppReason

```

```
h460.14.precedence precedence
    Unsigned 32-bit integer
    h460_14.MlppPrecedence

h460.14.preemptCallID preemptCallID
    No value
    h225.CallIdentifier

h460.14.preemptionComplete preemptionComplete
    No value
    h460_14.NULL

h460.14.preemptionEnd preemptionEnd
    No value
    h460_14.NULL

h460.14.preemptionInProgress preemptionInProgress
    No value
    h460_14.NULL

h460.14.preemptionPending preemptionPending
    No value
    h460_14.NULL

h460.14.releaseCall releaseCall
    No value
    h460_14.ReleaseCall

h460.14.releaseDelay releaseDelay
    Unsigned 32-bit integer
    h460_14.INTEGER_0_255

h460.14.releaseReason releaseReason
    Unsigned 32-bit integer
    h460_14.MlppReason

h460.15.SignallingChannelData SignallingChannelData
    No value
    h460_15.SignallingChannelData

h460.15.channelResumeAddress channelResumeAddress
    Unsigned 32-bit integer
    h460_15.SEQUENCE_OF_TransportAddress

h460.15.channelResumeAddress_item Item
    Unsigned 32-bit integer
    h225.TransportAddress

h460.15.channelResumeRequest channelResumeRequest
    No value
    h460_15.ChannelResumeRequest

h460.15.channelResumeResponse channelResumeResponse
    No value
    h460_15.ChannelResumeResponse

h460.15.channelSuspendCancel channelSuspendCancel
    No value
    h460_15.ChannelSuspendCancel

h460.15.channelSuspendConfirm channelSuspendConfirm
    No value
    h460_15.ChannelSuspendConfirm
```



```
h460.15.channelSuspendRequest  channelSuspendRequest
    No value
    h460_15.ChannelSuspendRequest
h460.15.channelSuspendResponse  channelSuspendResponse
    No value
    h460_15.ChannelSuspendResponse
h460.15.immediateResume  immediateResume
    Boolean
    h460_15.BOOLEAN
h460.15.okToSuspend  okToSuspend
    Boolean
    h460_15.BOOLEAN
h460.15.randomNumber  randomNumber
    Unsigned 32-bit integer
    h460_15.INTEGER_0_4294967295
h460.15.resetH245  resetH245
    No value
    h460_15.NULL
h460.15.signallingChannelData  signallingChannelData
    Unsigned 32-bit integer
    h460_15.T_signallingChannelData
h460.18.IncomingCallIndication  IncomingCallIndication
    No value
    h460_18.IncomingCallIndication
h460.18.LRQKeepAliveData  LRQKeepAliveData
    No value
    h460_18.LRQKeepAliveData
h460.18.callID  callID
    No value
    h225.CallIdentifier
h460.18.callSignallingAddress  callSignallingAddress
    Unsigned 32-bit integer
    h225.TransportAddress
h460.18.lrqKeepAliveInterval  lrqKeepAliveInterval
    Unsigned 32-bit integer
    h225.TimeToLive
h460.19.TraversalParameters  TraversalParameters
    No value
    h460_19.TraversalParameters
h460.19.keepAliveChannel  keepAliveChannel
    Unsigned 32-bit integer
    h245.TransportAddress
h460.19.keepAliveInterval  keepAliveInterval
    Unsigned 32-bit integer
    h225.TimeToLive
h460.19.keepAlivePayloadType  keepAlivePayloadType
    Unsigned 32-bit integer
    h460_19.INTEGER_0_127
```

```
h460.19.multiplexID multiplexID
  Unsigned 32-bit integer
  h460_19.INTEGER_0_4294967295

h460.19.multiplexedMediaChannel multiplexedMediaChannel
  Unsigned 32-bit integer
  h245.TransportAddress

h460.19.multiplexedMediaControlChannel multiplexedMediaControlChannel
  Unsigned 32-bit integer
  h245.TransportAddress

h460.2.NumberPortabilityInfo NumberPortabilityInfo
  Unsigned 32-bit integer
  h460_2.NumberPortabilityInfo

h460.2.addressTranslated addressTranslated
  No value
  h460_2.NULL

h460.2.aliasAddress aliasAddress
  Unsigned 32-bit integer
  h225.AliasAddress

h460.2.concatenatedNumber concatenatedNumber
  No value
  h460_2.NULL

h460.2.nUMBERPORTABILITYDATA nUMBERPORTABILITYDATA
  No value
  h460_2.T_nUMBERPORTABILITYDATA

h460.2.numberPortabilityRejectReason numberPortabilityRejectReason
  Unsigned 32-bit integer
  h460_2.NumberPortabilityRejectReason

h460.2.portabilityTypeOfNumber portabilityTypeOfNumber
  Unsigned 32-bit integer
  h460_2.PortabilityTypeOfNumber

h460.2.portedAddress portedAddress
  No value
  h460_2.PortabilityAddress

h460.2.portedNumber portedNumber
  No value
  h460_2.NULL

h460.2.privateTypeOfNumber privateTypeOfNumber
  Unsigned 32-bit integer
  h225.PrivateTypeOfNumber

h460.2.publicTypeOfNumber publicTypeOfNumber
  Unsigned 32-bit integer
  h225.PublicTypeOfNumber

h460.2.qorPortedNumber qorPortedNumber
  No value
  h460_2.NULL

h460.2.regionalData regionalData
  Byte array
  h460_2.OCTET_STRING
```

```
h460.2.regionalParams regionalParams
  No value
  h460_2.RegionalParameters
h460.2.routingAddress routingAddress
  No value
  h460_2.PortabilityAddress
h460.2.routingNumber routingNumber
  No value
  h460_2.NULL
h460.2.t35CountryCode t35CountryCode
  Unsigned 32-bit integer
  h460_2.INTEGER_0_255
h460.2.t35Extension t35Extension
  Unsigned 32-bit integer
  h460_2.INTEGER_0_255
h460.2.typeOfAddress typeOfAddress
  Unsigned 32-bit integer
  h460_2.NumberPortabilityTypeOfNumber
h460.2.unspecified unspecified
  No value
  h460_2.NULL
h460.2.variantIdentifier variantIdentifier
  Unsigned 32-bit integer
  h460_2.INTEGER_1_255
h460.21.CapabilityAdvertisement CapabilityAdvertisement
  No value
  h460_21.CapabilityAdvertisement
h460.21.MessageBroadcastGroups_item Item
  No value
  h460_21.GroupAttributes
h460.21.alertUser alertUser
  Boolean
  h460_21.BOOLEAN
h460.21.capabilities capabilities
  Unsigned 32-bit integer
  h460_21.SEQUENCE_SIZE_1_256_OF_Capability
h460.21.capabilities_item Item
  Unsigned 32-bit integer
  h245.Capability
h460.21.capability capability
  Unsigned 32-bit integer
  h245.Capability
h460.21.groupAddress groupAddress
  Unsigned 32-bit integer
  h245.MulticastAddress
h460.21.groupIdentifier groupIdentifier
  h460_21.GloballyUniqueID
```

```
h460.21.maxGroups maxGroups
    Unsigned 32-bit integer
    h460_21.INTEGER_1_65535

h460.21.priority priority
    Unsigned 32-bit integer
    h460_21.INTEGER_0_255

h460.21.receiveCapabilities receiveCapabilities
    No value
    h460_21.ReceiveCapabilities

h460.21.sourceAddress sourceAddress
    Unsigned 32-bit integer
    h245.UnicastAddress

h460.21.transmitCapabilities transmitCapabilities
    Unsigned 32-bit integer
    h460_21.SEQUENCE_SIZE_1_256_OF_TransmitCapabilities

h460.21.transmitCapabilities_item Item
    No value
    h460_21.TransmitCapabilities

h460.3.CircuitStatus CircuitStatus
    No value
    h460_3.CircuitStatus

h460.3.baseCircuitID baseCircuitID
    No value
    h225.CircuitIdentifier

h460.3.busyStatus busyStatus
    No value
    h460_3.NULL

h460.3.circuitStatusMap circuitStatusMap
    Unsigned 32-bit integer
    h460_3.SEQUENCE_OF_CircuitStatusMap

h460.3.circuitStatusMap_item Item
    No value
    h460_3.CircuitStatusMap

h460.3.range range
    Unsigned 32-bit integer
    h460_3.INTEGER_0_4095

h460.3.serviceStatus serviceStatus
    No value
    h460_3.NULL

h460.3.status status
    Byte array
    h460_3.OCTET_STRING

h460.3.statusType statusType
    Unsigned 32-bit integer
    h460_3.CircuitStatusType

h460.4.CallPriorityInfo CallPriorityInfo
    No value
    h460_4.CallPriorityInfo
```

```
h460.4.CountryInternationalNetworkCallOriginationIdentification CountryInternat
  No value
  h460_4.CountryInternationalNetworkCallOriginationIdentification
h460.4.countryCode countryCode
  String
  h460_4.X121CountryCode
h460.4.cryptoTokens cryptoTokens
  Unsigned 32-bit integer
  h460_4.SEQUENCE_OF_CryptoToken
h460.4.cryptoTokens_item Item
  Unsigned 32-bit integer
  h235.CryptoToken
h460.4.e164 e164
  No value
  h460_4.T_e164
h460.4.emergencyAuthorized emergencyAuthorized
  No value
  h460_4.NULL
h460.4.emergencyPublic emergencyPublic
  No value
  h460_4.NULL
h460.4.high high
  No value
  h460_4.NULL
h460.4.identificationCode identificationCode
  String
  h460_4.T_identificationCode
h460.4.normal normal
  No value
  h460_4.NULL
h460.4.numberingPlan numberingPlan
  Unsigned 32-bit integer
  h460_4.T_numberingPlan
h460.4.priorityExtension priorityExtension
  Unsigned 32-bit integer
  h460_4.INTEGER_0_255
h460.4.priorityUnauthorized priorityUnauthorized
  No value
  h460_4.NULL
h460.4.priorityUnavailable priorityUnavailable
  No value
  h460_4.NULL
h460.4.priorityValue priorityValue
  Unsigned 32-bit integer
  h460_4.T_priorityValue
h460.4.priorityValueUnknown priorityValueUnknown
  No value
  h460_4.NULL
```

```
h460.4.rejectReason rejectReason
    Unsigned 32-bit integer
    h460_4.T_rejectReason

h460.4.tokens tokens
    Unsigned 32-bit integer
    h460_4.SEQUENCE_OF_ClearToken

h460.4.tokens_item Item
    No value
    h235.ClearToken

h460.4.x121 x121
    No value
    h460_4.T_x121

h460.9.ExtendedRTPMetrics ExtendedRTPMetrics
    No value
    h460_9.ExtendedRTPMetrics

h460.9.QosMonitoringReportData QosMonitoringReportData
    Unsigned 32-bit integer
    h460_9.QosMonitoringReportData

h460.9.adaptive adaptive
    No value
    h460_9.NULL

h460.9.burstDuration burstDuration
    Unsigned 32-bit integer
    h460_9.INTEGER_0_65535

h460.9.burstLossDensity burstLossDensity
    Unsigned 32-bit integer
    h460_9.INTEGER_0_255

h460.9.burstMetrics burstMetrics
    No value
    h460_9.BurstMetrics

h460.9.callIdentifier callIdentifier
    No value
    h225.CallIdentifier

h460.9.callReferenceValue callReferenceValue
    Unsigned 32-bit integer
    h225.CallReferenceValue

h460.9.conferenceID conferenceID
    h225.ConferenceIdentifier

h460.9.cumulativeNumberOfPacketsLost cumulativeNumberOfPacketsLost
    Unsigned 32-bit integer
    h460_9.INTEGER_0_4294967295

h460.9.disabled disabled
    No value
    h460_9.NULL

h460.9.endSystemDelay endSystemDelay
    Unsigned 32-bit integer
    h460_9.INTEGER_0_65535
```

```
h460.9.enhanced enhanced
  No value
  h460_9.NULL

h460.9.estimatedMOSLQ estimatedMOSLQ
  Unsigned 32-bit integer
  h460_9.INTEGER_10_50

h460.9.estimatedMOSLQ estimatedMOSLQ
  Unsigned 32-bit integer
  h460_9.INTEGER_10_50

h460.9.estimatedThroughput estimatedThroughput
  Unsigned 32-bit integer
  h225.BandWidth

h460.9.extrRFactor extrRFactor
  Unsigned 32-bit integer
  h460_9.INTEGER_0_100

h460.9.extensionContent extensionContent
  Byte array
  h460_9.OCTET_STRING

h460.9.extensionId extensionId
  Unsigned 32-bit integer
  h225.GenericIdentifier

h460.9.extensions extensions
  Unsigned 32-bit integer
  h460_9.SEQUENCE_OF_Extension

h460.9.extensions_item Item
  No value
  h460_9.Extension

h460.9.final final
  No value
  h460_9.FinalQosMonReport

h460.9.fractionLostRate fractionLostRate
  Unsigned 32-bit integer
  h460_9.INTEGER_0_65535

h460.9.gapDuration gapDuration
  Unsigned 32-bit integer
  h460_9.INTEGER_0_65535

h460.9.gapLossDensity gapLossDensity
  Unsigned 32-bit integer
  h460_9.INTEGER_0_255

h460.9.gmin gmin
  Unsigned 32-bit integer
  h460_9.INTEGER_0_255

h460.9.interGK interGK
  No value
  h460_9.InterGKQosMonReport

h460.9.jitterBufferAbsoluteMax jitterBufferAbsoluteMax
  Unsigned 32-bit integer
  h460_9.INTEGER_0_65535
```

```
h460.9.jitterBufferAdaptRate  jitterBufferAdaptRate
    Unsigned 32-bit integer
    h460_9.INTEGER_0_15

h460.9.jitterBufferDiscardRate  jitterBufferDiscardRate
    Unsigned 32-bit integer
    h460_9.INTEGER_0_255

h460.9.jitterBufferMaxSize  jitterBufferMaxSize
    Unsigned 32-bit integer
    h460_9.INTEGER_0_65535

h460.9.jitterBufferNominalSize  jitterBufferNominalSize
    Unsigned 32-bit integer
    h460_9.INTEGER_0_65535

h460.9.jitterBufferParms  jitterBufferParms
    No value
    h460_9.JitterBufferParms

h460.9.jitterBufferType  jitterBufferType
    Unsigned 32-bit integer
    h460_9.JitterBufferTypes

h460.9.meanEstimatedEnd2EndDelay  meanEstimatedEnd2EndDelay
    Unsigned 32-bit integer
    h460_9.EstimatedEnd2EndDelay

h460.9.meanJitter  meanJitter
    Unsigned 32-bit integer
    h460_9.CalculatedJitter

h460.9.mediaChannelsQoS  mediaChannelsQoS
    Unsigned 32-bit integer
    h460_9.SEQUENCE_OF_RTCPMeasures

h460.9.mediaChannelsQoS_item  Item
    No value
    h460_9.RTCPMeasures

h460.9.mediaInfo  mediaInfo
    Unsigned 32-bit integer
    h460_9.SEQUENCE_OF_RTCPMeasures

h460.9.mediaInfo_item  Item
    No value
    h460_9.RTCPMeasures

h460.9.mediaReceiverMeasures  mediaReceiverMeasures
    No value
    h460_9.T_mediaReceiverMeasures

h460.9.mediaSenderMeasures  mediaSenderMeasures
    No value
    h460_9.T_mediaSenderMeasures

h460.9.networkPacketLossRate  networkPacketLossRate
    Unsigned 32-bit integer
    h460_9.INTEGER_0_255

h460.9.noiseLevel  noiseLevel
    Signed 32-bit integer
    h460_9.INTEGER_M127_0
```



```
h460.9.nonStandardData nonStandardData
  No value
  h225.NonStandardParameter
h460.9.nonadaptive nonadaptive
  No value
  h460_9.NULL
h460.9.packetLostRate packetLostRate
  Unsigned 32-bit integer
  h460_9.INTEGER_0_65535
h460.9.perCallInfo perCallInfo
  Unsigned 32-bit integer
  h460_9.SEQUENCE_OF_PerCallQoSReport
h460.9.perCallInfo_item Item
  No value
  h460_9.PerCallQoSReport
h460.9.periodic periodic
  No value
  h460_9.PeriodicQoSMonReport
h460.9.plcType plcType
  Unsigned 32-bit integer
  h460_9.PLCTypes
h460.9.rFactor rFactor
  Unsigned 32-bit integer
  h460_9.INTEGER_0_100
h460.9.reserved reserved
  No value
  h460_9.NULL
h460.9.residualEchoReturnLoss residualEchoReturnLoss
  Unsigned 32-bit integer
  h460_9.INTEGER_0_127
h460.9.rtcpAddress rtcpAddress
  No value
  h225.TransportChannelInfo
h460.9.rtcpRoundTripDelay rtcpRoundTripDelay
  Unsigned 32-bit integer
  h460_9.INTEGER_0_65535
h460.9.rtpAddress rtpAddress
  No value
  h225.TransportChannelInfo
h460.9.sessionId sessionId
  Unsigned 32-bit integer
  h460_9.INTEGER_1_255
h460.9.signalLevel signalLevel
  Signed 32-bit integer
  h460_9.INTEGER_M127_10
h460.9.standard standard
  No value
  h460_9.NULL
```

```

h460.9.unknown    unknown
                  No value
                  h460_9.NULL

h460.9.unspecified unspecified
                  No value
                  h460_9.NULL

h460.9.worstEstimatedEnd2EndDelay worstEstimatedEnd2EndDelay
                  Unsigned 32-bit integer
                  h460_9.EstimatedEnd2EndDelay

h460.9.worstJitter worstJitter
                  Unsigned 32-bit integer
                  h460_9.CalculatedJitter

```

### H.501 Mobility (h501)

```

h501.Message     Message
                  No value
                  h501.Message

h501.accessConfirmation accessConfirmation
                  No value
                  h501.AccessConfirmation

h501.accessRejection accessRejection
                  No value
                  h501.AccessRejection

h501.accessRequest accessRequest
                  No value
                  h501.AccessRequest

h501.accessToken  accessToken
                  Unsigned 32-bit integer
                  h501.SEQUENCE_OF_AccessToken

h501.accessToken_item Item
                  Unsigned 32-bit integer
                  h501.AccessToken

h501.accessTokens accessTokens
                  Unsigned 32-bit integer
                  h501.SEQUENCE_OF_AccessToken

h501.accessTokens_item Item
                  Unsigned 32-bit integer
                  h501.AccessToken

h501.added        added
                  No value
                  h501.NULL

h501.algorithmOIDs algorithmOIDs
                  Unsigned 32-bit integer
                  h501.T_algorithmOIDs

h501.algorithmOIDs_item Item
                  h501.OBJECT_IDENTIFIER

```

```
h501.aliasesInconsistent  aliasesInconsistent
    No value
    h501.NULL

h501.alternateIsPermanent  alternateIsPermanent
    Boolean
    h501.BOOLEAN

h501.alternatePE  alternatePE
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_AlternatePE

h501.alternatePE_item  Item
    No value
    h501.AlternatePE

h501.alternates  alternates
    No value
    h501.AlternatePEInfo

h501.amount  amount
    Unsigned 32-bit integer
    h501.INTEGER_0_4294967295

h501.annexGversion  annexGversion
    h501.ProtocolVersion

h501.applicationMessage  applicationMessage
    Byte array
    h501.ApplicationMessage

h501.authentication  authentication
    Unsigned 32-bit integer
    h235.AuthenticationMechanism

h501.authenticationConfirmation  authenticationConfirmation
    No value
    h501.AuthenticationConfirmation

h501.authenticationRejection  authenticationRejection
    No value
    h501.AuthenticationRejection

h501.authenticationRequest  authenticationRequest
    No value
    h501.AuthenticationRequest

h501.body  body
    Unsigned 32-bit integer
    h501.MessageBody

h501.bytes  bytes
    No value
    h501.NULL

h501.callEnded  callEnded
    No value
    h501.NULL

h501.callIdentifier  callIdentifier
    No value
    h225.CallIdentifier
```

```
h501.callInProgress callInProgress
    No value
    h501.NULL

h501.callInfo callInfo
    No value
    h501.CallInformation

h501.callSpecific callSpecific
    Boolean
    h501.BOOLEAN

h501.cannotSupportUsageSpec cannotSupportUsageSpec
    No value
    h501.NULL

h501.causeIE causeIE
    Unsigned 32-bit integer
    h501.INTEGER_1_65535

h501.changed changed
    No value
    h501.NULL

h501.circuitID circuitID
    No value
    h225.CircuitInfo

h501.common common
    No value
    h501.MessageCommonInfo

h501.conferenceID conferenceID
    h225.ConferenceIdentifier

h501.contactAddress contactAddress
    Unsigned 32-bit integer
    h225.AliasAddress

h501.contacts contacts
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_ContactInformation

h501.contacts_item Item
    No value
    h501.ContactInformation

h501.continue continue
    No value
    h501.NULL

h501.cryptoToken cryptoToken
    Unsigned 32-bit integer
    h225.CryptoH323Token

h501.cryptoTokens cryptoTokens
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_CryptoH323Token

h501.cryptoTokens_item Item
    Unsigned 32-bit integer
    h225.CryptoH323Token
```

```
h501.currency    currency
    String
    h501.IA5String_SIZE_3
h501.currencyScale    currencyScale
    Signed 32-bit integer
    h501.INTEGER_M127_127
h501.delay    delay
    Unsigned 32-bit integer
    h501.INTEGER_1_65535
h501.deleted    deleted
    No value
    h501.NULL
h501.descriptor    descriptor
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_Descriptor
h501.descriptorConfirmation    descriptorConfirmation
    No value
    h501.DescriptorConfirmation
h501.descriptorID    descriptorID
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_DescriptorID
h501.descriptorIDConfirmation    descriptorIDConfirmation
    No value
    h501.DescriptorIDConfirmation
h501.descriptorIDRejection    descriptorIDRejection
    No value
    h501.DescriptorIDRejection
h501.descriptorIDRequest    descriptorIDRequest
    No value
    h501.DescriptorIDRequest
h501.descriptorID_item    Item
    h501.DescriptorID
h501.descriptorInfo    descriptorInfo
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_DescriptorInfo
h501.descriptorInfo_item    Item
    No value
    h501.DescriptorInfo
h501.descriptorRejection    descriptorRejection
    No value
    h501.DescriptorRejection
h501.descriptorRequest    descriptorRequest
    No value
    h501.DescriptorRequest
h501.descriptorUpdate    descriptorUpdate
    No value
    h501.DescriptorUpdate
```

```
h501.descriptorUpdateAck  descriptorUpdateAck
    No value
    h501.DescriptorUpdateAck
h501.descriptor_item  Item
    No value
    h501.Descriptor
h501.desiredProtocols  desiredProtocols
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_SupportedProtocols
h501.desiredProtocols_item  Item
    Unsigned 32-bit integer
    h225.SupportedProtocols
h501.destAddress  destAddress
    No value
    h501.PartyInformation
h501.destination  destination
    No value
    h501.NULL
h501.destinationInfo  destinationInfo
    No value
    h501.PartyInformation
h501.destinationUnavailable  destinationUnavailable
    No value
    h501.NULL
h501.domainIdentifier  domainIdentifier
    Unsigned 32-bit integer
    h225.AliasAddress
h501.elementIdentifier  elementIdentifier
    String
    h501.ElementIdentifier
h501.end  end
    No value
    h501.NULL
h501.endOfRange  endOfRange
    Unsigned 32-bit integer
    h225.PartyNumber
h501.endTime  endTime
    Date/Time stamp
    h235.TimeStamp
h501.endpointType  endpointType
    No value
    h225.EndpointType
h501.expired  expired
    No value
    h501.NULL
h501.failures  failures
    No value
    h501.NULL
```

```
h501.featureSet featureSet
    No value
    h225.FeatureSet
h501.gatekeeperID gatekeeperID
    String
    h225.GatekeeperIdentifier
h501.genericData genericData
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_GenericData
h501.genericDataReason genericDataReason
    No value
    h501.NULL
h501.genericData_item Item
    No value
    h225.GenericData
h501.hopCount hopCount
    Unsigned 32-bit integer
    h501.INTEGER_1_255
h501.hopCountExceeded hopCountExceeded
    No value
    h501.NULL
h501.hoursFrom hoursFrom
    String
    h501.IA5String_SIZE_6
h501.hoursUntil hoursUntil
    String
    h501.IA5String_SIZE_6
h501.id id
    h501.OBJECT_IDENTIFIER
h501.illegalID illegalID
    No value
    h501.NULL
h501.incomplete incomplete
    No value
    h501.NULL
h501.incompleteAddress incompleteAddress
    No value
    h501.NULL
h501.initial initial
    No value
    h501.NULL
h501.integrity integrity
    Unsigned 32-bit integer
    h225.IntegrityMechanism
h501.integrityCheckValue integrityCheckValue
    No value
    h225.ICV
```

```
h501.invalidCall  invalidCall
    No value
    h501.NULL

h501.lastChanged  lastChanged
    String
    h501.GlobalTimeStamp

h501.logicalAddresses  logicalAddresses
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_AliasAddress

h501.logicalAddresses_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress

h501.maintenance  maintenance
    No value
    h501.NULL

h501.maximum  maximum
    No value
    h501.NULL

h501.messageType  messageType
    Unsigned 32-bit integer
    h501.T_messageType

h501.minimum  minimum
    No value
    h501.NULL

h501.missingDestInfo  missingDestInfo
    No value
    h501.NULL

h501.missingSourceInfo  missingSourceInfo
    No value
    h501.NULL

h501.multipleCalls  multipleCalls
    Boolean
    h501.BOOLEAN

h501.needCallInformation  needCallInformation
    No value
    h501.NULL

h501.neededFeature  neededFeature
    No value
    h501.NULL

h501.never  never
    No value
    h501.NULL

h501.noDescriptors  noDescriptors
    No value
    h501.NULL

h501.noMatch  noMatch
    No value
    h501.NULL
```



```
h501.noServiceRelationship noServiceRelationship
  No value
  h501.NULL

h501.nonExistent nonExistent
  No value
  h501.NULL

h501.nonStandard nonStandard
  Unsigned 32-bit integer
  h501.SEQUENCE_OF_NonStandardParameter

h501.nonStandardConfirmation nonStandardConfirmation
  No value
  h501.NonStandardConfirmation

h501.nonStandardData nonStandardData
  No value
  h225.NonStandardParameter

h501.nonStandardRejection nonStandardRejection
  No value
  h501.NonStandardRejection

h501.nonStandardRequest nonStandardRequest
  No value
  h501.NonStandardRequest

h501.nonStandard_item Item
  No value
  h225.NonStandardParameter

h501.notSupported notSupported
  No value
  h501.NULL

h501.notUnderstood notUnderstood
  No value
  h501.NULL

h501.originator originator
  No value
  h501.NULL

h501.outOfService outOfService
  No value
  h501.NULL

h501.packetSizeExceeded packetSizeExceeded
  No value
  h501.NULL

h501.packets packets
  No value
  h501.NULL

h501.partialResponse partialResponse
  Boolean
  h501.BOOLEAN

h501.pattern pattern
  Unsigned 32-bit integer
  h501.SEQUENCE_OF_Pattern
```

```
h501.pattern_item Item
    Unsigned 32-bit integer
    h501.Pattern

h501.period period
    Unsigned 32-bit integer
    h501.INTEGER_1_65535

h501.preConnect preConnect
    No value
    h501.NULL

h501.preferred preferred
    Unsigned 32-bit integer
    h501.T_preferred

h501.preferred_item Item
    h501.OBJECT_IDENTIFIER

h501.priceElement priceElement
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_PriceElement

h501.priceElement_item Item
    No value
    h501.PriceElement

h501.priceFormula priceFormula
    String
    h501.IA5String_SIZE_1_2048

h501.priceInfo priceInfo
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_PriceInfoSpec

h501.priceInfo_item Item
    No value
    h501.PriceInfoSpec

h501.priority priority
    Unsigned 32-bit integer
    h501.INTEGER_0_127

h501.quantum quantum
    Unsigned 32-bit integer
    h501.INTEGER_0_4294967295

h501.range range
    No value
    h501.T_range

h501.reason reason
    Unsigned 32-bit integer
    h501.ServiceRejectionReason

h501.registrationLost registrationLost
    No value
    h501.NULL

h501.releaseCompleteReason releaseCompleteReason
    Unsigned 32-bit integer
    h225.ReleaseCompleteReason
```

```
h501.replyAddress replyAddress
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_TransportAddress
h501.replyAddress_item Item
    Unsigned 32-bit integer
    h225.TransportAddress
h501.requestInProgress requestInProgress
    No value
    h501.RequestInProgress
h501.required required
    Unsigned 32-bit integer
    h501.T_required
h501.required_item Item
    h501.OBJECT_IDENTIFIER
h501.resourceUnavailable resourceUnavailable
    No value
    h501.NULL
h501.routeInfo routeInfo
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_RouteInformation
h501.routeInfo_item Item
    No value
    h501.RouteInformation
h501.seconds seconds
    No value
    h501.NULL
h501.security security
    No value
    h501.NULL
h501.securityIntegrityFailed securityIntegrityFailed
    No value
    h501.NULL
h501.securityMode securityMode
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_SecurityMode
h501.securityMode_item Item
    No value
    h501.SecurityMode
h501.securityReplay securityReplay
    No value
    h501.NULL
h501.securityWrongGeneralID securityWrongGeneralID
    No value
    h501.NULL
h501.securityWrongOID securityWrongOID
    No value
    h501.NULL
```

```
h501.securityWrongSendersID  securityWrongSendersID
    No value
    h501.NULL

h501.securityWrongSyncTime  securityWrongSyncTime
    No value
    h501.NULL

h501.security_item  Item
    No value
    h501.SecurityMode

h501.sendAccessRequest  sendAccessRequest
    No value
    h501.NULL

h501.sendSetup  sendSetup
    No value
    h501.NULL

h501.sendTo  sendTo
    String
    h501.ElementIdentifier

h501.sendToPEAddress  sendToPEAddress
    Unsigned 32-bit integer
    h225.AliasAddress

h501.sender  sender
    Unsigned 32-bit integer
    h225.AliasAddress

h501.senderRole  senderRole
    Unsigned 32-bit integer
    h501.Role

h501.sequenceNumber  sequenceNumber
    Unsigned 32-bit integer
    h501.INTEGER_0_65535

h501.serviceConfirmation  serviceConfirmation
    No value
    h501.ServiceConfirmation

h501.serviceControl  serviceControl
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_ServiceControlSession

h501.serviceControl_item  Item
    No value
    h225.ServiceControlSession

h501.serviceID  serviceID
    h501.ServiceID

h501.serviceRedirected  serviceRedirected
    No value
    h501.NULL

h501.serviceRejection  serviceRejection
    No value
    h501.ServiceRejection
```

```
h501.serviceRelease  serviceRelease
    No value
    h501.ServiceRelease
h501.serviceRequest  serviceRequest
    No value
    h501.ServiceRequest
h501.serviceUnavailable  serviceUnavailable
    No value
    h501.NULL
h501.sourceInfo  sourceInfo
    No value
    h501.PartyInformation
h501.specific  specific
    Unsigned 32-bit integer
    h225.AliasAddress
h501.srcInfo  srcInfo
    No value
    h501.PartyInformation
h501.start  start
    No value
    h501.NULL
h501.startOfRange  startOfRange
    Unsigned 32-bit integer
    h225.PartyNumber
h501.startTime  startTime
    Date/Time stamp
    h235.TimeStamp
h501.supportedCircuits  supportedCircuits
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_CircuitIdentifier
h501.supportedCircuits_item  Item
    No value
    h225.CircuitIdentifier
h501.supportedProtocols  supportedProtocols
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_SupportedProtocols
h501.supportedProtocols_item  Item
    Unsigned 32-bit integer
    h225.SupportedProtocols
h501.templates  templates
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_AddressTemplate
h501.templates_item  Item
    No value
    h501.AddressTemplate
h501.terminated  terminated
    No value
    h501.NULL
```

```
h501.terminationCause  terminationCause
    No value
    h501.TerminationCause
h501.timeToLive  timeToLive
    Unsigned 32-bit integer
    h501.INTEGER_1_4294967295
h501.timeZone  timeZone
    Signed 32-bit integer
    h501.TimeZone
h501.token  token
    No value
    h235.ClearToken
h501.tokenNotValid  tokenNotValid
    No value
    h501.NULL
h501.tokens  tokens
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_ClearToken
h501.tokens_item  Item
    No value
    h235.ClearToken
h501.transportAddress  transportAddress
    Unsigned 32-bit integer
    h225.AliasAddress
h501.transportQoS  transportQoS
    Unsigned 32-bit integer
    h225.TransportQOS
h501.type  type
    No value
    h225.EndpointType
h501.unavailable  unavailable
    No value
    h501.NULL
h501.undefined  undefined
    No value
    h501.NULL
h501.units  units
    Unsigned 32-bit integer
    h501.T_units
h501.unknownCall  unknownCall
    No value
    h501.NULL
h501.unknownMessage  unknownMessage
    Byte array
    h501.OCTET_STRING
h501.unknownMessageResponse  unknownMessageResponse
    No value
    h501.UnknownMessageResponse
```

```
h501.unknownServiceID  unknownServiceID
    No value
    h501.NULL

h501.unknownUsageSendTo  unknownUsageSendTo
    No value
    h501.NULL

h501.updateInfo  updateInfo
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_UpdateInformation

h501.updateInfo_item  Item
    No value
    h501.UpdateInformation

h501.updateType  updateType
    Unsigned 32-bit integer
    h501.T_updateType

h501.usageCallStatus  usageCallStatus
    Unsigned 32-bit integer
    h501.UsageCallStatus

h501.usageConfirmation  usageConfirmation
    No value
    h501.UsageConfirmation

h501.usageFields  usageFields
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_UsageField

h501.usageFields_item  Item
    No value
    h501.UsageField

h501.usageIndication  usageIndication
    No value
    h501.UsageIndication

h501.usageIndicationConfirmation  usageIndicationConfirmation
    No value
    h501.UsageIndicationConfirmation

h501.usageIndicationRejection  usageIndicationRejection
    No value
    h501.UsageIndicationRejection

h501.usageRejection  usageRejection
    No value
    h501.UsageRejection

h501.usageRequest  usageRequest
    No value
    h501.UsageRequest

h501.usageSpec  usageSpec
    No value
    h501.UsageSpecification

h501.usageUnavailable  usageUnavailable
    No value
    h501.NULL
```

```
h501.userAuthenticator userAuthenticator
    Unsigned 32-bit integer
    h501.SEQUENCE_OF_CryptoH323Token
h501.userAuthenticator_item Item
    Unsigned 32-bit integer
    h225.CryptoH323Token
h501.userIdentifier userIdentifier
    Unsigned 32-bit integer
    h225.AliasAddress
h501.userInfo userInfo
    No value
    h501.UserInformation
h501.validFrom validFrom
    String
    h501.GlobalTimeStamp
h501.validUntil validUntil
    String
    h501.GlobalTimeStamp
h501.validationConfirmation validationConfirmation
    No value
    h501.ValidationConfirmation
h501.validationRejection validationRejection
    No value
    h501.ValidationRejection
h501.validationRequest validationRequest
    No value
    h501.ValidationRequest
h501.value value
    Byte array
    h501.OCTET_STRING
h501.version version
    h501.ProtocolVersion
h501.when when
    No value
    h501.T_when
h501.wildcard wildcard
    Unsigned 32-bit integer
    h225.AliasAddress
```

**H221NonStandard (h221nonstd)****H235-SECURITY-MESSAGES (h235)**

```
h235.SrtpCryptoCapability SrtpCryptoCapability
    Unsigned 32-bit integer
    h235.SrtpCryptoCapability
```



```
h235.SrtpCryptoCapability_item  Item
    No value
    h235.SrtpCryptoInfo
h235.SrtpKeys_item  Item
    No value
    h235.SrtpKeyParameters
h235.algorithmOID  algorithmOID
    h235.OBJECT_IDENTIFIER
h235.allowMKI  allowMKI
    Boolean
    h235.BOOLEAN
h235.authenticationBES  authenticationBES
    Unsigned 32-bit integer
    h235.AuthenticationBES
h235.base  base
    No value
    h235.ECpoint
h235.bits  bits
    Byte array
    h235.BIT_STRING
h235.certProtectedKey  certProtectedKey
    No value
    h235.SIGNED
h235.certSign  certSign
    No value
    h235.NULL
h235.certificate  certificate
    Byte array
    h235.OCTET_STRING
h235.challenge  challenge
    Byte array
    h235.ChallengeString
h235.clearSalt  clearSalt
    Byte array
    h235.OCTET_STRING
h235.clearSaltingKey  clearSaltingKey
    Byte array
    h235.OCTET_STRING
h235.cryptoEncryptedToken  cryptoEncryptedToken
    No value
    h235.T_cryptoEncryptedToken
h235.cryptoHashedToken  cryptoHashedToken
    No value
    h235.T_cryptoHashedToken
h235.cryptoPwdEncr  cryptoPwdEncr
    No value
    h235.ENCRYPTED
```

```
h235.cryptoSignedToken  cryptoSignedToken
    No value
    h235.T_cryptoSignedToken
h235.cryptoSuite  cryptoSuite
    h235.OBJECT_IDENTIFIER
h235.data  data
    Unsigned 32-bit integer
    h235.OCTET_STRING
h235.default  default
    No value
    h235.NULL
h235.dhExch  dhExch
    No value
    h235.NULL
h235.dhkey  dhkey
    No value
    h235.DHset
h235.eckasdh2  eckasdh2
    No value
    h235.T_eckasdh2
h235.eckasdhkey  eckasdhkey
    Unsigned 32-bit integer
    h235.ECKASDH
h235.eckasdhp  eckasdhp
    No value
    h235.T_eckasdhp
h235.element  element
    Unsigned 32-bit integer
    h235.Element
h235.elementID  elementID
    Unsigned 32-bit integer
    h235.INTEGER_0_255
h235.encrptval  encrptval
    No value
    h235.ENCRYPTED
h235.encryptedData  encryptedData
    Byte array
    h235.OCTET_STRING
h235.encryptedSaltingKey  encryptedSaltingKey
    Byte array
    h235.OCTET_STRING
h235.encryptedSessionKey  encryptedSessionKey
    Byte array
    h235.OCTET_STRING
h235.fecAfterSrtp  fecAfterSrtp
    No value
    h235.NULL
```

```
h235.fecBeforeSrtp  fecBeforeSrtp
    No value
    h235.NULL

h235.fecOrder  fecOrder
    No value
    h235.FecOrder

h235.fieldSize  fieldSize
    Byte array
    h235.BIT_STRING_SIZE_0_511

h235.flag  flag
    Boolean
    h235.BOOLEAN

h235.generalID  generalID
    String
    h235.Identifier

h235.generalId  generalId
    String
    h235.Identifier

h235.generator  generator
    Byte array
    h235.BIT_STRING_SIZE_0_2048

h235.genericKeyMaterial  genericKeyMaterial
    Byte array
    h235.OCTET_STRING

h235.h235Key  h235Key
    Unsigned 32-bit integer
    h235.H235Key

h235.halfkey  halfkey
    Byte array
    h235.BIT_STRING_SIZE_0_2048

h235.hash  hash
    Byte array
    h235.BIT_STRING

h235.hashedExceptions  hashedExceptions
    No value
    h235.ClearToken

h235.integer  integer
    Signed 32-bit integer
    h235.INTEGER

h235.ipsec  ipsec
    No value
    h235.NULL

h235.iv  iv
    Byte array
    h235.OCTET_STRING

h235.iv16  iv16
    Byte array
    h235.IV16
```

```
h235.iv8 iv8
  Byte array
  h235.IV8

h235.kdr kdr
  Unsigned 32-bit integer
  h235.INTEGER_0_24

h235.keyDerivationOID keyDerivationOID
  h235.OBJECT_IDENTIFIER

h235.keyExch keyExch
  h235.OBJECT_IDENTIFIER

h235.keyMaterial keyMaterial
  Byte array
  h235.KeyMaterial

h235.length length
  Unsigned 32-bit integer
  h235.INTEGER_1_128

h235.lifetime lifetime
  Unsigned 32-bit integer
  h235.T_lifetime

h235.masterKey masterKey
  Byte array
  h235.OCTET_STRING

h235.masterSalt masterSalt
  Byte array
  h235.OCTET_STRING

h235.mki mki
  No value
  h235.T_mki

h235.modSize modSize
  Byte array
  h235.BIT_STRING_SIZE_0_2048

h235.modulus modulus
  Byte array
  h235.BIT_STRING_SIZE_0_511

h235.mrandom mrandom
  Signed 32-bit integer
  h235.RandomVal

h235.name name
  String
  h235.BMPString

h235.newParameter newParameter
  Unsigned 32-bit integer
  h235.SEQUENCE_OF_GenericData

h235.newParameter_item Item
  No value
  h225.GenericData
```

```
h235.nonStandard nonStandard
    No value
    h235.NonStandardParameter
h235.nonStandardIdentifier nonStandardIdentifier
    h235.OBJECT_IDENTIFIER
h235.octets octets
    Byte array
    h235.OCTET_STRING
h235.paramS paramS
    No value
    h235.Params
h235.paramSalt paramSalt
    No value
    h235.Params
h235.password password
    String
    h235.Password
h235.powerOfTwo powerOfTwo
    Signed 32-bit integer
    h235.INTEGER
h235.profileInfo profileInfo
    Unsigned 32-bit integer
    h235.SEQUENCE_OF_ProfileElement
h235.profileInfo_item Item
    No value
    h235.ProfileElement
h235.public_key public-key
    No value
    h235.ECpoint
h235.pwdHash pwdHash
    No value
    h235.NULL
h235.pwdSymEnc pwdSymEnc
    No value
    h235.NULL
h235.radius radius
    No value
    h235.NULL
h235.ranInt ranInt
    Signed 32-bit integer
    h235.INTEGER
h235.random random
    Signed 32-bit integer
    h235.RandomVal
h235.requestRandom requestRandom
    Signed 32-bit integer
    h235.RandomVal
```

```
h235.responseRandom responseRandom
    Signed 32-bit integer
    h235.RandomVal
h235.secureChannel secureChannel
    Byte array
    h235.KeyMaterial
h235.secureSharedSecret secureSharedSecret
    No value
    h235.V3KeySyncMaterial
h235.sendersID sendersID
    String
    h235.Identifier
h235.sessionParams sessionParams
    No value
    h235.SrtpSessionParameters
h235.sharedSecret sharedSecret
    No value
    h235.ENCRYPTED
h235.signature signature
    Byte array
    h235.BIT_STRING
h235.specific specific
    Signed 32-bit integer
    h235.INTEGER
h235.srandom srandom
    Signed 32-bit integer
    h235.RandomVal
h235.timeStamp timeStamp
    Date/Time stamp
    h235.TimeStamp
h235.tls tls
    No value
    h235.NULL
h235.toBeSigned toBeSigned
    No value
    xxx.ToBeSigned
h235.token token
    No value
    h235.ENCRYPTED
h235.tokenOID tokenOID
    h235.OBJECT_IDENTIFIER
h235.type type
    h235.OBJECT_IDENTIFIER
h235.unauthenticatedSrtp unauthenticatedSrtp
    Boolean
    h235.BOOLEAN
```

```
h235.unencryptedSrtcp  unencryptedSrtcp
  Boolean
  h235.BOOLEAN

h235.unencryptedSrtp  unencryptedSrtp
  Boolean
  h235.BOOLEAN

h235.value  value
  Byte array
  h235.OCTET_STRING

h235.weierstrassA  weierstrassA
  Byte array
  h235.BIT_STRING_SIZE_0_511

h235.weierstrassB  weierstrassB
  Byte array
  h235.BIT_STRING_SIZE_0_511

h235.windowSizeHint  windowSizeHint
  Unsigned 32-bit integer
  h235.INTEGER_64_65535

h235.x  x
  Byte array
  h235.BIT_STRING_SIZE_0_511

h235.y  y
  Byte array
  h235.BIT_STRING_SIZE_0_511
```

### **H323-MESSAGES (h225)**

```
h221.Manufacturer  H.221 Manufacturer
  Unsigned 32-bit integer
  H.221 Manufacturer

h225.DestinationInfo_item  Item
  Unsigned 32-bit integer
  h225.DestinationInfo_item

h225.ExtendedAliasAddress  ExtendedAliasAddress
  No value
  h225.ExtendedAliasAddress

h225.FastStart_item  Item
  Unsigned 32-bit integer
  h225.FastStart_item

h225.H245Control_item  Item
  Unsigned 32-bit integer
  h225.H245Control_item

h225.H323_UserInformation  H323-UserInformation
  No value
  h225.H323_UserInformation

h225.Language_item  Item
  String
  h225.IA5String_SIZE_1_32
```

```
h225.ParallelH245Control_item  Item
    Unsigned 32-bit integer
    h225.ParallelH245Control_item

h225.RasMessage  RasMessage
    Unsigned 32-bit integer
    h225.RasMessage

h225.abbreviatedNumber  abbreviatedNumber
    No value
    h225.NULL

h225.activeMC  activeMC
    Boolean
    h225.BOOLEAN

h225.adaptiveBusy  adaptiveBusy
    No value
    h225.NULL

h225.additionalSourceAddresses  additionalSourceAddresses
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_ExtendedAliasAddress

h225.additionalSourceAddresses_item  Item
    No value
    h225.ExtendedAliasAddress

h225.additiveRegistration  additiveRegistration
    No value
    h225.NULL

h225.additiveRegistrationNotSupported  additiveRegistrationNotSupported
    No value
    h225.NULL

h225.address  address
    String
    h225.IsupDigits

h225.addressNotAvailable  addressNotAvailable
    No value
    h225.NULL

h225.admissionConfirm  admissionConfirm
    No value
    h225.AdmissionConfirm

h225.admissionConfirmSequence  admissionConfirmSequence
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AdmissionConfirm

h225.admissionConfirmSequence_item  Item
    No value
    h225.AdmissionConfirm

h225.admissionReject  admissionReject
    No value
    h225.AdmissionReject

h225.admissionRequest  admissionRequest
    No value
    h225.AdmissionRequest
```



```
h225.alerting alerting
  No value
  h225.Alerting_UUIE
h225.alertingAddress alertingAddress
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_AliasAddress
h225.alertingAddress_item Item
  Unsigned 32-bit integer
  h225.AliasAddress
h225.alertingTime alertingTime
  Date/Time stamp
  h235.TimeStamp
h225.algorithmOID algorithmOID
  h225.OBJECT_IDENTIFIER
h225.algorithmOIDs algorithmOIDs
  Unsigned 32-bit integer
  h225.T_algorithmOIDs
h225.algorithmOIDs_item Item
  h225.OBJECT_IDENTIFIER
h225.alias alias
  Unsigned 32-bit integer
  h225.AliasAddress
h225.aliasAddress aliasAddress
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_AliasAddress
h225.aliasAddress_item Item
  Unsigned 32-bit integer
  h225.AliasAddress
h225.aliasInconsistent aliasInconsistent
  No value
  h225.NULL
h225.allowedBandWidth allowedBandWidth
  Unsigned 32-bit integer
  h225.BandWidth
h225.almostOutOfResources almostOutOfResources
  Boolean
  h225.BOOLEAN
h225.altGKInfo altGKInfo
  No value
  h225.AltGKInfo
h225.altGKisPermanent altGKisPermanent
  Boolean
  h225.BOOLEAN
h225.alternateEndpoints alternateEndpoints
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_Endpoint
```

```
h225.alternateEndpoints_item  Item
    No value
    h225.Endpoint

h225.alternateGatekeeper  alternateGatekeeper
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AlternateGK

h225.alternateGatekeeper_item  Item
    No value
    h225.AlternateGK

h225.alternateTransportAddresses  alternateTransportAddresses
    No value
    h225.AlternateTransportAddresses

h225.alternativeAddress  alternativeAddress
    Unsigned 32-bit integer
    h225.TransportAddress

h225.alternativeAliasAddress  alternativeAliasAddress
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress

h225.alternativeAliasAddress_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress

h225.amountString  amountString
    String
    h225.BMPString_SIZE_1_512

h225.annexE  annexE
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_TransportAddress

h225.annexE_item  Item
    Unsigned 32-bit integer
    h225.TransportAddress

h225.ansi_41_uim  ansi-41-uim
    No value
    h225.ANSI_41_UIM

h225.answerCall  answerCall
    Boolean
    h225.BOOLEAN

h225.answeredCall  answeredCall
    Boolean
    h225.BOOLEAN

h225.assignedGatekeeper  assignedGatekeeper
    No value
    h225.AlternateGK

h225.associatedSessionIds  associatedSessionIds
    Unsigned 32-bit integer
    h225.T_associatedSessionIds

h225.associatedSessionIds_item  Item
    Unsigned 32-bit integer
    h225.INTEGER_1_255
```

```
h225.audio audio
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_RTPSession

h225.audio_item Item
  No value
  h225.RTPSession

h225.authenticationCapability authenticationCapability
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_AuthenticationMechanism

h225.authenticationCapability_item Item
  Unsigned 32-bit integer
  h235.AuthenticationMechanism

h225.authenticationMode authenticationMode
  Unsigned 32-bit integer
  h235.AuthenticationMechanism

h225.authenticaton authenticaton
  Unsigned 32-bit integer
  h225.SecurityServiceMode

h225.auto auto
  No value
  h225.NULL

h225.bChannel bChannel
  No value
  h225.NULL

h225.badFormatAddress badFormatAddress
  No value
  h225.NULL

h225.bandWidth bandwidth
  Unsigned 32-bit integer
  h225.BandWidth

h225.bandwidth bandwidth
  Unsigned 32-bit integer
  h225.BandWidth

h225.bandwidthConfirm bandwidthConfirm
  No value
  h225.BandwidthConfirm

h225.bandwidthDetails bandwidthDetails
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_BandwidthDetails

h225.bandwidthDetails_item Item
  No value
  h225.BandwidthDetails

h225.bandwidthReject bandwidthReject
  No value
  h225.BandwidthReject

h225.bandwidthRequest bandwidthRequest
  No value
  h225.BandwidthRequest
```

```
h225.billingMode  billingMode
    Unsigned 32-bit integer
    h225.T_billingMode

h225.bonded_mode1  bonded-mode1
    No value
    h225.NULL

h225.bonded_mode2  bonded-mode2
    No value
    h225.NULL

h225.bonded_mode3  bonded-mode3
    No value
    h225.NULL

h225.bool  bool
    Boolean
    h225.BOOLEAN

h225.busyAddress  busyAddress
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress

h225.busyAddress_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress

h225.callCreditCapability  callCreditCapability
    No value
    h225.CallCreditCapability

h225.callCreditServiceControl  callCreditServiceControl
    No value
    h225.CallCreditServiceControl

h225.callDurationLimit  callDurationLimit
    Unsigned 32-bit integer
    h225.INTEGER_1_4294967295

h225.callEnd  callEnd
    No value
    h225.NULL

h225.callForwarded  callForwarded
    No value
    h225.NULL

h225.callIdentifier  callIdentifier
    No value
    h225.CallIdentifier

h225.callInProgress  callInProgress
    No value
    h225.NULL

h225.callIndependentSupplementaryService  callIndependentSupplementaryService
    No value
    h225.NULL

h225.callLinkage  callLinkage
    No value
    h225.CallLinkage
```

```
h225.callModel    callModel
    Unsigned 32-bit integer
    h225.CallModel

h225.callProceeding    callProceeding
    No value
    h225.CallProceeding_UUIE

h225.callReferenceValue    callReferenceValue
    Unsigned 32-bit integer
    h225.CallReferenceValue

h225.callServices    callServices
    No value
    h225.QseriesOptions

h225.callSignalAddress    callSignalAddress
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_TransportAddress

h225.callSignalAddress_item    Item
    Unsigned 32-bit integer
    h225.TransportAddress

h225.callSignaling    callSignaling
    No value
    h225.TransportChannelInfo

h225.callSpecific    callSpecific
    No value
    h225.T_callSpecific

h225.callStart    callStart
    No value
    h225.NULL

h225.callStartingPoint    callStartingPoint
    No value
    h225.RasUsageSpecificationcallStartingPoint

h225.callType    callType
    Unsigned 32-bit integer
    h225.CallType

h225.calledPartyNotRegistered    calledPartyNotRegistered
    No value
    h225.NULL

h225.callerNotRegistered    callerNotRegistered
    No value
    h225.NULL

h225.calls    calls
    Unsigned 32-bit integer
    h225.INTEGER_0_4294967295

h225.canDisplayAmountString    canDisplayAmountString
    Boolean
    h225.BOOLEAN

h225.canEnforceDurationLimit    canEnforceDurationLimit
    Boolean
    h225.BOOLEAN
```

```
h225.canMapAlias    canMapAlias
  Boolean
  h225.BOOLEAN

h225.canMapSrcAlias  canMapSrcAlias
  Boolean
  h225.BOOLEAN

h225.canOverlapSend  canOverlapSend
  Boolean
  h225.BOOLEAN

h225.canReportCallCapacity  canReportCallCapacity
  Boolean
  h225.BOOLEAN

h225.capability_negotiation  capability-negotiation
  No value
  h225.NULL

h225.capacity        capacity
  No value
  h225.CallCapacity

h225.capacityInfoRequested  capacityInfoRequested
  No value
  h225.NULL

h225.capacityReportingCapability  capacityReportingCapability
  No value
  h225.CapacityReportingCapability

h225.capacityReportingSpec  capacityReportingSpec
  No value
  h225.CapacityReportingSpecification

h225.carrier        carrier
  No value
  h225.CarrierInfo

h225.carrierIdentificationCode  carrierIdentificationCode
  Byte array
  h225.OCTET_STRING_SIZE_3_4

h225.carrierName    carrierName
  String
  h225.IA5String_SIZE_1_128

h225.channelMultiplier  channelMultiplier
  Unsigned 32-bit integer
  h225.INTEGER_1_256

h225.channelRate      channelRate
  Unsigned 32-bit integer
  h225.BandWidth

h225.cic              cic
  No value
  h225.CicInfo

h225.cic_item        Item
  Byte array
  h225.OCTET_STRING_SIZE_2_4
```

```
h225.circuitInfo  circuitInfo
    No value
    h225.CircuitInfo
h225.close  close
    No value
    h225.NULL
h225.cname  cname
    String
    h225.PrintableString
h225.collectDestination  collectDestination
    No value
    h225.NULL
h225.collectPIN  collectPIN
    No value
    h225.NULL
h225.complete  complete
    No value
    h225.NULL
h225.compound  compound
    Unsigned 32-bit integer
    h225.SEQUENCE_SIZE_1_512_OF_EnumeratedParameter
h225.compound_item  Item
    No value
    h225.EnumeratedParameter
h225.conferenceAlias  conferenceAlias
    Unsigned 32-bit integer
    h225.AliasAddress
h225.conferenceCalling  conferenceCalling
    Boolean
    h225.BOOLEAN
h225.conferenceGoal  conferenceGoal
    Unsigned 32-bit integer
    h225.T_conferenceGoal
h225.conferenceID  conferenceID
    h225.ConferenceIdentifier
h225.conferenceListChoice  conferenceListChoice
    No value
    h225.NULL
h225.conferences  conferences
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_ConferenceList
h225.conferences_item  Item
    No value
    h225.ConferenceList
h225.connect  connect
    No value
    h225.Connect_UUIE
```

```
h225.connectTime connectTime
    Date/Time stamp
    h235.TimeStamp

h225.connectedAddress connectedAddress
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress

h225.connectedAddress_item Item
    Unsigned 32-bit integer
    h225.AliasAddress

h225.connectionAggregation connectionAggregation
    Unsigned 32-bit integer
    h225.ScnConnectionAggregation

h225.connectionParameters connectionParameters
    No value
    h225.T_connectionParameters

h225.connectionType connectionType
    Unsigned 32-bit integer
    h225.ScnConnectionType

h225.content content
    Unsigned 32-bit integer
    h225.Content

h225.contents contents
    Unsigned 32-bit integer
    h225.ServiceControlDescriptor

h225.create create
    No value
    h225.NULL

h225.credit credit
    No value
    h225.NULL

h225.cryptoEPCert cryptoEPCert
    No value
    h235.SIGNED

h225.cryptoEPPwdEncr cryptoEPPwdEncr
    No value
    h235.ENCRYPTED

h225.cryptoEPPwdHash cryptoEPPwdHash
    No value
    h225.T_cryptoEPPwdHash

h225.cryptoFastStart cryptoFastStart
    No value
    h235.SIGNED

h225.cryptoGKCert cryptoGKCert
    No value
    h235.SIGNED

h225.cryptoGKPwdEncr cryptoGKPwdEncr
    No value
    h235.ENCRYPTED
```



```
h225.cryptoGKPwdHash  cryptoGKPwdHash
    No value
    h225.T_cryptoGKPwdHash
h225.cryptoTokens  cryptoTokens
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_CryptoH323Token
h225.cryptoTokens_item  Item
    Unsigned 32-bit integer
    h225.CryptoH323Token
h225.currentCallCapacity  currentCallCapacity
    No value
    h225.CallCapacityInfo
h225.data  data
    Unsigned 32-bit integer
    h225.T_nsp_data
h225.dataPartyNumber  dataPartyNumber
    String
    h225.NumberDigits
h225.dataRatesSupported  dataRatesSupported
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_DataRate
h225.dataRatesSupported_item  Item
    No value
    h225.DataRate
h225.data_item  Item
    No value
    h225.TransportChannelInfo
h225.debit  debit
    No value
    h225.NULL
h225.default  default
    No value
    h225.NULL
h225.delay  delay
    Unsigned 32-bit integer
    h225.INTEGER_1_65535
h225.desiredFeatures  desiredFeatures
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_FeatureDescriptor
h225.desiredFeatures_item  Item
    No value
    h225.FeatureDescriptor
h225.desiredProtocols  desiredProtocols
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_SupportedProtocols
h225.desiredProtocols_item  Item
    Unsigned 32-bit integer
    h225.SupportedProtocols
```

```
h225.desiredTunnelledProtocol  desiredTunnelledProtocol
    No value
    h225.TunnelledProtocol
h225.destAlternatives  destAlternatives
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_Endpoint
h225.destAlternatives_item  Item
    No value
    h225.Endpoint
h225.destCallSignalAddress  destCallSignalAddress
    Unsigned 32-bit integer
    h225.TransportAddress
h225.destExtraCRV  destExtraCRV
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_CallReferenceValue
h225.destExtraCRV_item  Item
    Unsigned 32-bit integer
    h225.CallReferenceValue
h225.destExtraCallInfo  destExtraCallInfo
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress
h225.destExtraCallInfo_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress
h225.destinationAddress  destinationAddress
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress
h225.destinationAddress_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress
h225.destinationCircuitID  destinationCircuitID
    No value
    h225.CircuitIdentifier
h225.destinationInfo  destinationInfo
    No value
    h225.EndpointType
h225.destinationRejection  destinationRejection
    No value
    h225.NULL
h225.destinationType  destinationType
    No value
    h225.EndpointType
h225.dialedDigits  dialedDigits
    String
    h225.DialedDigits
h225.digSig  digSig
    No value
    h225.NULL
```

```
h225.direct    direct
               No value
               h225.NULL

h225.discoveryComplete  discoveryComplete
               Boolean
               h225.BOOLEAN

h225.discoveryRequired  discoveryRequired
               No value
               h225.NULL

h225.disengageConfirm  disengageConfirm
               No value
               h225.DisengageConfirm

h225.disengageReason  disengageReason
               Unsigned 32-bit integer
               h225.DisengageReason

h225.disengageReject  disengageReject
               No value
               h225.DisengageReject

h225.disengageRequest  disengageRequest
               No value
               h225.DisengageRequest

h225.duplicateAlias  duplicateAlias
               Unsigned 32-bit integer
               h225.SEQUENCE_OF_AliasAddress

h225.duplicateAlias_item  Item
               Unsigned 32-bit integer
               h225.AliasAddress

h225.e164Number  e164Number
               No value
               h225.PublicPartyNumber

h225.email_ID  email-ID
               String
               h225.IA5String_SIZE_1_512

h225.empty  empty
               No value
               h225.T_empty_flg

h225.encryption  encryption
               Unsigned 32-bit integer
               h225.SecurityServiceMode

h225.end  end
               No value
               h225.NULL

h225.endOfRange  endOfRange
               Unsigned 32-bit integer
               h225.PartyNumber

h225.endTime  endTime
               No value
               h225.NULL
```

```
h225.endpointAlias endpointAlias
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress

h225.endpointAliasPattern endpointAliasPattern
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AddressPattern

h225.endpointAliasPattern_item Item
    Unsigned 32-bit integer
    h225.AddressPattern

h225.endpointAlias_item Item
    Unsigned 32-bit integer
    h225.AliasAddress

h225.endpointBased endpointBased
    No value
    h225.NULL

h225.endpointControlled endpointControlled
    No value
    h225.NULL

h225.endpointIdentifier endpointIdentifier
    String
    h225.EndpointIdentifier

h225.endpointType endpointType
    No value
    h225.EndpointType

h225.endpointVendor endpointVendor
    No value
    h225.VendorIdentifier

h225.enforceCallDurationLimit enforceCallDurationLimit
    Boolean
    h225.BOOLEAN

h225.enterpriseNumber enterpriseNumber
    h225.OBJECT_IDENTIFIER

h225.esn esn
    String
    h225.TBCD_STRING_SIZE_16

h225.exceedsCallCapacity exceedsCallCapacity
    No value
    h225.NULL

h225.facility facility
    No value
    h225.Facility_UUIE

h225.facilityCallDeflection facilityCallDeflection
    No value
    h225.NULL

h225.failed failed
    No value
    h225.NULL
```

```
h225.fastConnectRefused fastConnectRefused
    No value
    h225.NULL

h225.fastStart fastStart
    Unsigned 32-bit integer
    h225.FastStart

h225.featureServerAlias featureServerAlias
    Unsigned 32-bit integer
    h225.AliasAddress

h225.featureSet featureSet
    No value
    h225.FeatureSet

h225.featureSetUpdate featureSetUpdate
    No value
    h225.NULL

h225.forcedDrop forcedDrop
    No value
    h225.NULL

h225.forwardedElements forwardedElements
    No value
    h225.NULL

h225.fullRegistrationRequired fullRegistrationRequired
    No value
    h225.NULL

h225.gatekeeper gatekeeper
    No value
    h225.GatekeeperInfo

h225.gatekeeperBased gatekeeperBased
    No value
    h225.NULL

h225.gatekeeperConfirm gatekeeperConfirm
    No value
    h225.GatekeeperConfirm

h225.gatekeeperControlled gatekeeperControlled
    No value
    h225.NULL

h225.gatekeeperId gatekeeperId
    String
    h225.GatekeeperIdentifier

h225.gatekeeperIdentifier gatekeeperIdentifier
    String
    h225.GatekeeperIdentifier

h225.gatekeeperReject gatekeeperReject
    No value
    h225.GatekeeperReject

h225.gatekeeperRequest gatekeeperRequest
    No value
    h225.GatekeeperRequest
```

```
h225.gatekeeperResources  gatekeeperResources
    No value
    h225.NULL

h225.gatekeeperRouted  gatekeeperRouted
    No value
    h225.NULL

h225.gateway  gateway
    No value
    h225.GatewayInfo

h225.gatewayDataRate  gatewayDataRate
    No value
    h225.DataRate

h225.gatewayResources  gatewayResources
    No value
    h225.NULL

h225.genericData  genericData
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_GenericData

h225.genericDataReason  genericDataReason
    No value
    h225.NULL

h225.genericData_item  Item
    No value
    h225.GenericData

h225.globalCallId  globalCallId
    h225.GloballyUniqueID

h225.group  group
    String
    h225.IA5String_SIZE_1_128

h225.gsm_uim  gsm-uim
    No value
    h225.GSM_UIM

h225.guid  guid
    h225.T_guid

h225.h221  h221
    No value
    h225.NULL

h225.h221NonStandard  h221NonStandard
    No value
    h225.H221NonStandard

h225.h245  h245
    No value
    h225.TransportChannelInfo

h225.h245Address  h245Address
    Unsigned 32-bit integer
    h225.H245TransportAddress
```

```
h225.h245Control h245Control
  Unsigned 32-bit integer
  h225.H245Control

h225.h245SecurityCapability h245SecurityCapability
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_H245Security

h225.h245SecurityCapability_item Item
  Unsigned 32-bit integer
  h225.H245Security

h225.h245SecurityMode h245SecurityMode
  Unsigned 32-bit integer
  h225.H245Security

h225.h245Tunneling h245Tunneling
  Boolean
  h225.T_h245Tunneling

h225.h248Message h248Message
  Byte array
  h225.OCTET_STRING

h225.h310 h310
  No value
  h225.H310Caps

h225.h310GwCallsAvailable h310GwCallsAvailable
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_CallsAvailable

h225.h310GwCallsAvailable_item Item
  No value
  h225.CallsAvailable

h225.h320 h320
  No value
  h225.H320Caps

h225.h320GwCallsAvailable h320GwCallsAvailable
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_CallsAvailable

h225.h320GwCallsAvailable_item Item
  No value
  h225.CallsAvailable

h225.h321 h321
  No value
  h225.H321Caps

h225.h321GwCallsAvailable h321GwCallsAvailable
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_CallsAvailable

h225.h321GwCallsAvailable_item Item
  No value
  h225.CallsAvailable

h225.h322 h322
  No value
  h225.H322Caps
```

```
h225.h322GwCallsAvailable h322GwCallsAvailable
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_CallsAvailable
h225.h322GwCallsAvailable_item Item
    No value
    h225.CallsAvailable
h225.h323 h323
    No value
    h225.H323Caps
h225.h323GwCallsAvailable h323GwCallsAvailable
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_CallsAvailable
h225.h323GwCallsAvailable_item Item
    No value
    h225.CallsAvailable
h225.h323_ID h323-ID
    String
    h225.BMPString_SIZE_1_256
h225.h323_message_body h323-message-body
    Unsigned 32-bit integer
    h225.T_h323_message_body
h225.h323_uu_pdu h323-uu-pdu
    No value
    h225.H323_UU_PDU
h225.h323pdu h323pdu
    No value
    h225.H323_UU_PDU
h225.h324 h324
    No value
    h225.H324Caps
h225.h324GwCallsAvailable h324GwCallsAvailable
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_CallsAvailable
h225.h324GwCallsAvailable_item Item
    No value
    h225.CallsAvailable
h225.h4501SupplementaryService h4501SupplementaryService
    Unsigned 32-bit integer
    h225.T_h4501SupplementaryService
h225.h4501SupplementaryService_item Item
    Unsigned 32-bit integer
    h225.T_h4501SupplementaryService_item
h225.hMAC_MD5 hMAC-MD5
    No value
    h225.NULL
h225.hMAC_iso10118_2_1 hMAC-iso10118-2-1
    Unsigned 32-bit integer
    h225.EncryptIntAlg
```



```
h225.hMAC_iso10118_2_s hMAC-iso10118-2-s
    Unsigned 32-bit integer
    h225.EncryptIntAlg
h225.hMAC_iso10118_3 hMAC-iso10118-3
    h225.OBJECT_IDENTIFIER
h225.hopCount hopCount
    Unsigned 32-bit integer
    h225.INTEGER_1_31
h225.hopCountExceeded hopCountExceeded
    No value
    h225.NULL
h225.hplmn hplmn
    String
    h225.TBCD_STRING_SIZE_1_4
h225.hybrid1536 hybrid1536
    No value
    h225.NULL
h225.hybrid1920 hybrid1920
    No value
    h225.NULL
h225.hybrid2x64 hybrid2x64
    No value
    h225.NULL
h225.hybrid384 hybrid384
    No value
    h225.NULL
h225.icv icv
    Byte array
    h225.BIT_STRING
h225.id id
    Unsigned 32-bit integer
    h225.TunnelledProtocol_id
h225.imei imei
    String
    h225.TBCD_STRING_SIZE_15_16
h225.imsi imsi
    String
    h225.TBCD_STRING_SIZE_3_16
h225.inConf inConf
    No value
    h225.NULL
h225.inIrr inIrr
    No value
    h225.NULL
h225.incomplete incomplete
    No value
    h225.NULL
```

```
h225.incompleteAddress  incompleteAddress
    No value
    h225.NULL

h225.infoRequest  infoRequest
    No value
    h225.InfoRequest

h225.infoRequestAck  infoRequestAck
    No value
    h225.InfoRequestAck

h225.infoRequestNak  infoRequestNak
    No value
    h225.InfoRequestNak

h225.infoRequestResponse  infoRequestResponse
    No value
    h225.InfoRequestResponse

h225.information  information
    No value
    h225.Information_UUIE

h225.insufficientResources  insufficientResources
    No value
    h225.NULL

h225.integrity  integrity
    Unsigned 32-bit integer
    h225.SecurityServiceMode

h225.integrityCheckValue  integrityCheckValue
    No value
    h225.ICV

h225.integrity_item  Item
    Unsigned 32-bit integer
    h225.IntegrityMechanism

h225.internationalNumber  internationalNumber
    No value
    h225.NULL

h225.invalidAlias  invalidAlias
    No value
    h225.NULL

h225.invalidCID  invalidCID
    No value
    h225.NULL

h225.invalidCall  invalidCall
    No value
    h225.NULL

h225.invalidCallSignalAddress  invalidCallSignalAddress
    No value
    h225.NULL

h225.invalidConferenceID  invalidConferenceID
    No value
    h225.NULL
```

```
h225.invalidEndpointIdentifier  invalidEndpointIdentifier
    No value
    h225.NULL

h225.invalidPermission  invalidPermission
    No value
    h225.NULL

h225.invalidRASAddress  invalidRASAddress
    No value
    h225.NULL

h225.invalidRevision  invalidRevision
    No value
    h225.NULL

h225.invalidTerminalAliases  invalidTerminalAliases
    No value
    h225.T_invalidTerminalAliases

h225.invalidTerminalType  invalidTerminalType
    No value
    h225.NULL

h225.invite  invite
    No value
    h225.NULL

h225.ip  ip
    IPv4 address
    h225.T_h245Ip

h225.ip6Address  ip6Address
    No value
    h225.T_h245Ip6Address

h225.ipAddress  ipAddress
    No value
    h225.T_h245IpAddress

h225.ipSourceRoute  ipSourceRoute
    No value
    h225.T_h245IpSourceRoute

h225.ipsec  ipsec
    No value
    h225.SecurityCapabilities

h225.ipxAddress  ipxAddress
    No value
    h225.T_h245IpxAddress

h225.irrFrequency  irrFrequency
    Unsigned 32-bit integer
    h225.INTEGER_1_65535

h225.irrFrequencyInCall  irrFrequencyInCall
    Unsigned 32-bit integer
    h225.INTEGER_1_65535

h225.irrStatus  irrStatus
    Unsigned 32-bit integer
    h225.InfoRequestResponseStatus
```

```
h225.isText isText
  No value
  h225.NULL
h225.iso9797 iso9797
  h225.OBJECT_IDENTIFIER
h225.isoAlgorithm isoAlgorithm
  h225.OBJECT_IDENTIFIER
h225.isupNumber isupNumber
  Unsigned 32-bit integer
  h225.IsupNumber
h225.join join
  No value
  h225.NULL
h225.keepAlive keepAlive
  Boolean
  h225.BOOLEAN
h225.language language
  Unsigned 32-bit integer
  h225.Language
h225.level1RegionalNumber level1RegionalNumber
  No value
  h225.NULL
h225.level2RegionalNumber level2RegionalNumber
  No value
  h225.NULL
h225.localNumber localNumber
  No value
  h225.NULL
h225.locationConfirm locationConfirm
  No value
  h225.LocationConfirm
h225.locationReject locationReject
  No value
  h225.LocationReject
h225.locationRequest locationRequest
  No value
  h225.LocationRequest
h225.loose loose
  No value
  h225.NULL
h225.maintainConnection maintainConnection
  Boolean
  h225.BOOLEAN
h225.maintenance maintenance
  No value
  h225.NULL
```

```
h225.makeCall makeCall
  Boolean
  h225.BOOLEAN

h225.manufacturerCode manufacturerCode
  Unsigned 32-bit integer
  h225.T_manufacturerCode

h225.maximumCallCapacity maximumCallCapacity
  No value
  h225.CallCapacityInfo

h225.mc mc
  Boolean
  h225.BOOLEAN

h225.mcu mcu
  No value
  h225.McuInfo

h225.mcuCallsAvailable mcuCallsAvailable
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_CallsAvailable

h225.mcuCallsAvailable_item Item
  No value
  h225.CallsAvailable

h225.mdn mdn
  String
  h225.TBCD_STRING_SIZE_3_16

h225.mediaWaitForConnect mediaWaitForConnect
  Boolean
  h225.BOOLEAN

h225.member member
  Unsigned 32-bit integer
  h225.T_member

h225.member_item Item
  Unsigned 32-bit integer
  h225.INTEGER_0_65535

h225.messageContent messageContent
  Unsigned 32-bit integer
  h225.T_messageContent

h225.messageContent_item Item
  Unsigned 32-bit integer
  h225.T_messageContent_item

h225.messageNotUnderstood messageNotUnderstood
  Byte array
  h225.OCTET_STRING

h225.mid mid
  String
  h225.TBCD_STRING_SIZE_1_4

h225.min min
  String
  h225.TBCD_STRING_SIZE_3_16
```

```
h225.mobileUIM  mobileUIM
    Unsigned 32-bit integer
    h225.MobileUIM

h225.modifiedSrcInfo  modifiedSrcInfo
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress

h225.modifiedSrcInfo_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress

h225.mscid  mscid
    String
    h225.TBCD_STRING_SIZE_3_16

h225.msisdn  msisdn
    String
    h225.TBCD_STRING_SIZE_3_16

h225.multicast  multicast
    Boolean
    h225.BOOLEAN

h225.multipleCalls  multipleCalls
    Boolean
    h225.BOOLEAN

h225.multirate  multirate
    No value
    h225.NULL

h225.nToN  nToN
    No value
    h225.NULL

h225.nToOne  nToOne
    No value
    h225.NULL

h225.nakReason  nakReason
    Unsigned 32-bit integer
    h225.InfoRequestNakReason

h225.nationalNumber  nationalNumber
    No value
    h225.NULL

h225.nationalStandardPartyNumber  nationalStandardPartyNumber
    String
    h225.NumberDigits

h225.natureOfAddress  natureOfAddress
    Unsigned 32-bit integer
    h225.NatureOfAddress

h225.needResponse  needResponse
    Boolean
    h225.BOOLEAN

h225.needToRegister  needToRegister
    Boolean
    h225.BOOLEAN
```

```
h225.neededFeatureNotSupported  neededFeatureNotSupported
    No value
    h225.NULL

h225.neededFeatures  neededFeatures
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_FeatureDescriptor

h225.neededFeatures_item  Item
    No value
    h225.FeatureDescriptor

h225.nested  nested
    Unsigned 32-bit integer
    h225.SEQUENCE_SIZE_1_16_OF_GenericData

h225.nested_item  Item
    No value
    h225.GenericData

h225.nestedcryptoToken  nestedcryptoToken
    Unsigned 32-bit integer
    h235.CryptoToken

h225.netBios  netBios
    Byte array
    h225.OCTET_STRING_SIZE_16

h225.netnum  netnum
    Byte array
    h225.OCTET_STRING_SIZE_4

h225.networkSpecificNumber  networkSpecificNumber
    No value
    h225.NULL

h225.newConnectionNeeded  newConnectionNeeded
    No value
    h225.NULL

h225.newTokens  newTokens
    No value
    h225.NULL

h225.nextSegmentRequested  nextSegmentRequested
    Unsigned 32-bit integer
    h225.INTEGER_0_65535

h225.noBandwidth  noBandwidth
    No value
    h225.NULL

h225.noControl  noControl
    No value
    h225.NULL

h225.noH245  noH245
    No value
    h225.NULL

h225.noPermission  noPermission
    No value
    h225.NULL
```

```
h225.noRouteToDestination  noRouteToDestination
    No value
    h225.NULL

h225.noSecurity  noSecurity
    No value
    h225.NULL

h225.node  node
    Byte array
    h225.OCTET_STRING_SIZE_6

h225.nonIsoIM  nonIsoIM
    Unsigned 32-bit integer
    h225.NonIsoIntegrityMechanism

h225.nonStandard  nonStandard
    No value
    h225.NonStandardParameter

h225.nonStandardAddress  nonStandardAddress
    No value
    h225.NonStandardParameter

h225.nonStandardControl  nonStandardControl
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_NonStandardParameter

h225.nonStandardControl_item  Item
    No value
    h225.NonStandardParameter

h225.nonStandardData  nonStandardData
    No value
    h225.NonStandardParameter

h225.nonStandardIdentifier  nonStandardIdentifier
    Unsigned 32-bit integer
    h225.NonStandardIdentifier

h225.nonStandardMessage  nonStandardMessage
    No value
    h225.NonStandardMessage

h225.nonStandardProtocol  nonStandardProtocol
    No value
    h225.NonStandardProtocol

h225.nonStandardReason  nonStandardReason
    No value
    h225.NonStandardParameter

h225.nonStandardUsageFields  nonStandardUsageFields
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_NonStandardParameter

h225.nonStandardUsageFields_item  Item
    No value
    h225.NonStandardParameter

h225.nonStandardUsageTypes  nonStandardUsageTypes
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_NonStandardParameter
```



```
h225.nonStandardUsageTypes_item  Item
    No value
    h225.NonStandardParameter

h225.none  none
    No value
    h225.NULL

h225.normalDrop  normalDrop
    No value
    h225.NULL

h225.notAvailable  notAvailable
    No value
    h225.NULL

h225.notBound  notBound
    No value
    h225.NULL

h225.notCurrentlyRegistered  notCurrentlyRegistered
    No value
    h225.NULL

h225.notRegistered  notRegistered
    No value
    h225.NULL

h225.notify  notify
    No value
    h225.Notify_UUIE

h225.nsap  nsap
    Byte array
    h225.OCTET_STRING_SIZE_1_20

h225.number16  number16
    Unsigned 32-bit integer
    h225.INTEGER_0_65535

h225.number32  number32
    Unsigned 32-bit integer
    h225.INTEGER_0_4294967295

h225.number8  number8
    Unsigned 32-bit integer
    h225.INTEGER_0_255

h225.numberOfScnConnections  numberOfScnConnections
    Unsigned 32-bit integer
    h225.INTEGER_0_65535

h225.object  object
    h225.T_nsiOID

h225.oid  oid
    h225.T_oid

h225.oneToN  oneToN
    No value
    h225.NULL
```

```
h225.open open
  No value
  h225.NULL

h225.originator originator
  Boolean
  h225.BOOLEAN

h225.pISNSpecificNumber pISNSpecificNumber
  No value
  h225.NULL

h225.parallelH245Control parallelH245Control
  Unsigned 32-bit integer
  h225.ParallelH245Control

h225.parameters parameters
  Unsigned 32-bit integer
  h225.T_parameters

h225.parameters_item Item
  No value
  h225.T_parameters_item

h225.partyNumber partyNumber
  Unsigned 32-bit integer
  h225.PartyNumber

h225.pdu pdu
  Unsigned 32-bit integer
  h225.T_pdu

h225.pdu_item Item
  No value
  h225.T_pdu_item

h225.perCallInfo perCallInfo
  Unsigned 32-bit integer
  h225.T_perCallInfo

h225.perCallInfo_item Item
  No value
  h225.T_perCallInfo_item

h225.permissionDenied permissionDenied
  No value
  h225.NULL

h225.pointCode pointCode
  Byte array
  h225.OCTET_STRING_SIZE_2_5

h225.pointToPoint pointToPoint
  No value
  h225.NULL

h225.port port
  Unsigned 32-bit integer
  h225.T_h245IpPort

h225.preGrantedARQ preGrantedARQ
  No value
  h225.T_preGrantedARQ
```

```
h225.prefix prefix
    Unsigned 32-bit integer
    h225.AliasAddress

h225.presentationAllowed presentationAllowed
    No value
    h225.NULL

h225.presentationIndicator presentationIndicator
    Unsigned 32-bit integer
    h225.PresentationIndicator

h225.presentationRestricted presentationRestricted
    No value
    h225.NULL

h225.priority priority
    Unsigned 32-bit integer
    h225.INTEGER_0_127

h225.privateNumber privateNumber
    No value
    h225.PrivatePartyNumber

h225.privateNumberDigits privateNumberDigits
    String
    h225.NumberDigits

h225.privateTypeOfNumber privateTypeOfNumber
    Unsigned 32-bit integer
    h225.PrivateTypeOfNumber

h225.productId productId
    String
    h225.OCTET_STRING_SIZE_1_256

h225.progress progress
    No value
    h225.Progress_UUIE

h225.protocol protocol
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_SupportedProtocols

h225.protocolIdentifier protocolIdentifier
    h225.ProtocolIdentifier

h225.protocolType protocolType
    String
    h225.IA5String_SIZE_1_64

h225.protocolVariant protocolVariant
    String
    h225.IA5String_SIZE_1_64

h225.protocol_discriminator protocol-discriminator
    Unsigned 32-bit integer
    h225.INTEGER_0_255

h225.protocol_item Item
    Unsigned 32-bit integer
    h225.SupportedProtocols
```

```
h225.protocols protocols
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_SupportedProtocols
h225.protocols_item Item
  Unsigned 32-bit integer
  h225.SupportedProtocols
h225.provisionalRespToH245Tunneling provisionalRespToH245Tunneling
  No value
  h225.NULL
h225.publicNumberDigits publicNumberDigits
  String
  h225.NumberDigits
h225.publicTypeOfNumber publicTypeOfNumber
  Unsigned 32-bit integer
  h225.PublicTypeOfNumber
h225.q932Full q932Full
  Boolean
  h225.BOOLEAN
h225.q951Full q951Full
  Boolean
  h225.BOOLEAN
h225.q952Full q952Full
  Boolean
  h225.BOOLEAN
h225.q953Full q953Full
  Boolean
  h225.BOOLEAN
h225.q954Info q954Info
  No value
  h225.Q954Details
h225.q955Full q955Full
  Boolean
  h225.BOOLEAN
h225.q956Full q956Full
  Boolean
  h225.BOOLEAN
h225.q957Full q957Full
  Boolean
  h225.BOOLEAN
h225.qOSCapabilities qOSCapabilities
  Unsigned 32-bit integer
  h225.SEQUENCE_SIZE_1_256_OF_QOSCapability
h225.qOSCapabilities_item Item
  No value
  h245.QOSCapability
h225.qosControlNotSupported qosControlNotSupported
  No value
  h225.NULL
```

```
h225.qualificationInformationCode  qualificationInformationCode
    Byte array
    h225.OCTET_STRING_SIZE_1

h225.range  range
    No value
    h225.T_range

h225.ras.dup  Duplicate RAS Message
    Unsigned 32-bit integer
    Duplicate RAS Message

h225.ras.reqframe  RAS Request Frame
    Frame number
    RAS Request Frame

h225.ras.rspframe  RAS Response Frame
    Frame number
    RAS Response Frame

h225.ras.timedelta  RAS Service Response Time
    Time duration
    Timedelta between RAS-Request and RAS-Response

h225.rasAddress  rasAddress
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_TransportAddress

h225.rasAddress_item  Item
    Unsigned 32-bit integer
    h225.TransportAddress

h225.raw  raw
    Byte array
    h225.OCTET_STRING

h225.reason  reason
    Unsigned 32-bit integer
    h225.ReleaseCompleteReason

h225.recvAddress  recvAddress
    Unsigned 32-bit integer
    h225.TransportAddress

h225.refresh  refresh
    No value
    h225.NULL

h225.registerWithAssignedGK  registerWithAssignedGK
    No value
    h225.NULL

h225.registrationConfirm  registrationConfirm
    No value
    h225.RegistrationConfirm

h225.registrationReject  registrationReject
    No value
    h225.RegistrationReject

h225.registrationRequest  registrationRequest
    No value
    h225.RegistrationRequest
```

```
h225.rehomingModel rehomingModel
    Unsigned 32-bit integer
    h225.RehomingModel

h225.rejectReason rejectReason
    Unsigned 32-bit integer
    h225.GatekeeperRejectReason

h225.releaseComplete releaseComplete
    No value
    h225.ReleaseComplete_UUIE

h225.releaseCompleteCauseIE releaseCompleteCauseIE
    Byte array
    h225.OCTET_STRING_SIZE_2_32

h225.remoteExtensionAddress remoteExtensionAddress
    Unsigned 32-bit integer
    h225.AliasAddress

h225.remoteExtensionAddress_item Item
    Unsigned 32-bit integer
    h225.AliasAddress

h225.replaceWithConferenceInvite replaceWithConferenceInvite
    h225.ConferenceIdentifier

h225.replacementFeatureSet replacementFeatureSet
    Boolean
    h225.BOOLEAN

h225.replyAddress replyAddress
    Unsigned 32-bit integer
    h225.TransportAddress

h225.requestDenied requestDenied
    No value
    h225.NULL

h225.requestInProgress requestInProgress
    No value
    h225.RequestInProgress

h225.requestSeqNum requestSeqNum
    Unsigned 32-bit integer
    h225.RequestSeqNum

h225.requestToDropOther requestToDropOther
    No value
    h225.NULL

h225.required required
    No value
    h225.RasUsageInfoTypes

h225.reregistrationRequired reregistrationRequired
    No value
    h225.NULL

h225.resourceUnavailable resourceUnavailable
    No value
    h225.NULL
```

```
h225.resourcesAvailableConfirm resourcesAvailableConfirm
    No value
    h225.ResourcesAvailableConfirm
h225.resourcesAvailableIndicate resourcesAvailableIndicate
    No value
    h225.ResourcesAvailableIndicate
h225.restart restart
    No value
    h225.NULL
h225.result result
    Unsigned 32-bit integer
    h225.T_result
h225.route route
    Unsigned 32-bit integer
    h225.T_h245Route
h225.routeCallToGatekeeper routeCallToGatekeeper
    No value
    h225.NULL
h225.routeCallToMC routeCallToMC
    No value
    h225.NULL
h225.routeCallToSCN routeCallToSCN
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_PartyNumber
h225.routeCallToSCN_item Item
    Unsigned 32-bit integer
    h225.PartyNumber
h225.routeCalltoSCN routeCalltoSCN
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_PartyNumber
h225.routeCalltoSCN_item Item
    Unsigned 32-bit integer
    h225.PartyNumber
h225.route_item Item
    Byte array
    h225.OCTET_STRING_SIZE_4
h225.routing routing
    Unsigned 32-bit integer
    h225.T_h245Routing
h225.routingNumberNationalFormat routingNumberNationalFormat
    No value
    h225.NULL
h225.routingNumberNetworkSpecificFormat routingNumberNetworkSpecificFormat
    No value
    h225.NULL
h225.routingNumberWithCalledDirectoryNumber routingNumberWithCalledDirectoryNum
    No value
    h225.NULL
```

```
h225.rtcpAddress  rtcpAddress
  No value
  h225.TransportChannelInfo
h225.rtcpAddresses  rtcpAddresses
  No value
  h225.TransportChannelInfo
h225.rtpAddress  rtpAddress
  No value
  h225.TransportChannelInfo
h225.screeningIndicator  screeningIndicator
  Unsigned 32-bit integer
  h225.ScreeningIndicator
h225.sctp  sctp
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_TransportAddress
h225.sctp_item  Item
  Unsigned 32-bit integer
  h225.TransportAddress
h225.securityCertificateDateInvalid  securityCertificateDateInvalid
  No value
  h225.NULL
h225.securityCertificateExpired  securityCertificateExpired
  No value
  h225.NULL
h225.securityCertificateIncomplete  securityCertificateIncomplete
  No value
  h225.NULL
h225.securityCertificateMissing  securityCertificateMissing
  No value
  h225.NULL
h225.securityCertificateNotReadable  securityCertificateNotReadable
  No value
  h225.NULL
h225.securityCertificateRevoked  securityCertificateRevoked
  No value
  h225.NULL
h225.securityCertificateSignatureInvalid  securityCertificateSignatureInvalid
  No value
  h225.NULL
h225.securityDHmismatch  securityDHmismatch
  No value
  h225.NULL
h225.securityDenial  securityDenial
  No value
  h225.NULL
h225.securityDenied  securityDenied
  No value
  h225.NULL
```



```
h225.securityError securityError
    Unsigned 32-bit integer
    h225.SecurityErrors

h225.securityIntegrityFailed securityIntegrityFailed
    No value
    h225.NULL

h225.securityReplay securityReplay
    No value
    h225.NULL

h225.securityUnknownCA securityUnknownCA
    No value
    h225.NULL

h225.securityUnsupportedCertificateAlgOID securityUnsupportedCertificateAlgOID
    No value
    h225.NULL

h225.securityWrongGeneralID securityWrongGeneralID
    No value
    h225.NULL

h225.securityWrongOID securityWrongOID
    No value
    h225.NULL

h225.securityWrongSendersID securityWrongSendersID
    No value
    h225.NULL

h225.securityWrongSyncTime securityWrongSyncTime
    No value
    h225.NULL

h225.segment segment
    Unsigned 32-bit integer
    h225.INTEGER_0_65535

h225.segmentedResponseSupported segmentedResponseSupported
    No value
    h225.NULL

h225.sendAddress sendAddress
    Unsigned 32-bit integer
    h225.TransportAddress

h225.sender sender
    Boolean
    h225.BOOLEAN

h225.sent sent
    Boolean
    h225.BOOLEAN

h225.serviceControl serviceControl
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_ServiceControlSession

h225.serviceControlIndication serviceControlIndication
    No value
    h225.ServiceControlIndication
```

```
h225.serviceControlResponse  serviceControlResponse
    No value
    h225.ServiceControlResponse
h225.serviceControl_item  Item
    No value
    h225.ServiceControlSession
h225.sesn  sesn
    String
    h225.TBCD_STRING_SIZE_16
h225.sessionId  sessionId
    Unsigned 32-bit integer
    h225.INTEGER_0_255
h225.set  set
    Byte array
    h225.BIT_STRING_SIZE_32
h225.setup  setup
    No value
    h225.Setup_UUIE
h225.setupAcknowledge  setupAcknowledge
    No value
    h225.SetupAcknowledge_UUIE
h225.sid  sid
    String
    h225.TBCD_STRING_SIZE_1_4
h225.signal  signal
    Byte array
    h225.H248SignalsDescriptor
h225.sip  sip
    No value
    h225.SIPCaps
h225.sipGwCallsAvailable  sipGwCallsAvailable
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_CallsAvailable
h225.sipGwCallsAvailable_item  Item
    No value
    h225.CallsAvailable
h225.soc  soc
    String
    h225.TBCD_STRING_SIZE_3_16
h225.sourceAddress  sourceAddress
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress
h225.sourceAddress_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress
h225.sourceCallSignalAddress  sourceCallSignalAddress
    Unsigned 32-bit integer
    h225.TransportAddress
```

```
h225.sourceCircuitID  sourceCircuitID
    No value
    h225.CircuitIdentifier
h225.sourceEndpointInfo  sourceEndpointInfo
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress
h225.sourceEndpointInfo_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress
h225.sourceInfo  sourceInfo
    No value
    h225.EndpointType
h225.sourceInfo_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress
h225.srcAlternatives  srcAlternatives
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_Endpoint
h225.srcAlternatives_item  Item
    No value
    h225.Endpoint
h225.srcCallSignalAddress  srcCallSignalAddress
    Unsigned 32-bit integer
    h225.TransportAddress
h225.srcInfo  srcInfo
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_AliasAddress
h225.srcInfo_item  Item
    Unsigned 32-bit integer
    h225.AliasAddress
h225.ssrc  ssrc
    Unsigned 32-bit integer
    h225.INTEGER_1_4294967295
h225.standard  standard
    Unsigned 32-bit integer
    h225.T_standard
h225.start  start
    No value
    h225.NULL
h225.startH245  startH245
    No value
    h225.NULL
h225.startOfRange  startOfRange
    Unsigned 32-bit integer
    h225.PartyNumber
h225.startTime  startTime
    No value
    h225.NULL
```

```
h225.started started
    No value
    h225.NULL

h225.status status
    No value
    h225.Status_UUIE

h225.statusInquiry statusInquiry
    No value
    h225.StatusInquiry_UUIE

h225.stimulusControl stimulusControl
    No value
    h225.StimulusControl

h225.stopped stopped
    No value
    h225.NULL

h225.strict strict
    No value
    h225.NULL

h225.subIdentifier subIdentifier
    String
    h225.IA5String_SIZE_1_64

h225.subscriberNumber subscriberNumber
    No value
    h225.NULL

h225.substituteConfIDs substituteConfIDs
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_ConferenceIdentifier

h225.substituteConfIDs_item Item
    h225.ConferenceIdentifier

h225.supportedFeatures supportedFeatures
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_FeatureDescriptor

h225.supportedFeatures_item Item
    No value
    h225.FeatureDescriptor

h225.supportedH248Packages supportedH248Packages
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_H248PackagesDescriptor

h225.supportedH248Packages_item Item
    Byte array
    h225.H248PackagesDescriptor

h225.supportedPrefixes supportedPrefixes
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_SupportedPrefix

h225.supportedPrefixes_item Item
    No value
    h225.SupportedPrefix
```

```
h225.supportedProtocols supportedProtocols
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_SupportedProtocols

h225.supportedProtocols_item Item
  Unsigned 32-bit integer
  h225.SupportedProtocols

h225.supportedTunnelledProtocols supportedTunnelledProtocols
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_TunnelledProtocol

h225.supportedTunnelledProtocols_item Item
  No value
  h225.TunnelledProtocol

h225.supportsACFSequences supportsACFSequences
  No value
  h225.NULL

h225.supportsAdditiveRegistration supportsAdditiveRegistration
  No value
  h225.NULL

h225.supportsAltGK supportsAltGK
  No value
  h225.NULL

h225.supportsAssignedGK supportsAssignedGK
  Boolean
  h225.BOOLEAN

h225.symmetricOperationRequired symmetricOperationRequired
  No value
  h225.NULL

h225.systemAccessType systemAccessType
  Byte array
  h225.OCTET_STRING_SIZE_1

h225.systemMyTypeCode systemMyTypeCode
  Byte array
  h225.OCTET_STRING_SIZE_1

h225.system_id system-id
  Unsigned 32-bit integer
  h225.T_system_id

h225.t120OnlyGwCallsAvailable t120OnlyGwCallsAvailable
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_CallsAvailable

h225.t120OnlyGwCallsAvailable_item Item
  No value
  h225.CallsAvailable

h225.t120_only t120-only
  No value
  h225.T120OnlyCaps

h225.t35CountryCode t35CountryCode
  Unsigned 32-bit integer
  h225.T_t35CountryCode
```

```
h225.t35Extension t35Extension
  Unsigned 32-bit integer
  h225.T_t35Extension

h225.t38FaxAnnexbOnly t38FaxAnnexbOnly
  No value
  h225.T38FaxAnnexbOnlyCaps

h225.t38FaxAnnexbOnlyGwCallsAvailable t38FaxAnnexbOnlyGwCallsAvailable
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_CallsAvailable

h225.t38FaxAnnexbOnlyGwCallsAvailable_item Item
  No value
  h225.CallsAvailable

h225.t38FaxProfile t38FaxProfile
  No value
  h245.T38FaxProfile

h225.t38FaxProtocol t38FaxProtocol
  Unsigned 32-bit integer
  h245.DataProtocolCapability

h225.tcp tcp
  No value
  h225.NULL

h225.telexPartyNumber telexPartyNumber
  String
  h225.NumberDigits

h225.terminal terminal
  No value
  h225.TerminalInfo

h225.terminalAlias terminalAlias
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_AliasAddress

h225.terminalAliasPattern terminalAliasPattern
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_AddressPattern

h225.terminalAliasPattern_item Item
  Unsigned 32-bit integer
  h225.AddressPattern

h225.terminalAlias_item Item
  Unsigned 32-bit integer
  h225.AliasAddress

h225.terminalCallsAvailable terminalCallsAvailable
  Unsigned 32-bit integer
  h225.SEQUENCE_OF_CallsAvailable

h225.terminalCallsAvailable_item Item
  No value
  h225.CallsAvailable

h225.terminalExcluded terminalExcluded
  No value
  h225.NULL
```

```
h225.terminalType terminalType
    No value
    h225.EndpointType
h225.terminationCause terminationCause
    No value
    h225.NULL
h225.text text
    String
    h225.IA5String
h225.threadId threadId
    h225.GloballyUniqueID
h225.threePartyService threePartyService
    Boolean
    h225.BOOLEAN
h225.timeStamp timeStamp
    Date/Time stamp
    h235.TimeStamp
h225.timeToLive timeToLive
    Unsigned 32-bit integer
    h225.TimeToLive
h225.tls tls
    No value
    h225.SecurityCapabilities
h225.tmsi tmsi
    Byte array
    h225.OCTET_STRING_SIZE_1_4
h225.token token
    No value
    h235.HASHED
h225.tokens tokens
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_ClearToken
h225.tokens_item Item
    No value
    h235.ClearToken
h225.totalBandwidthRestriction totalBandwidthRestriction
    Unsigned 32-bit integer
    h225.BandWidth
h225.transport transport
    Unsigned 32-bit integer
    h225.TransportAddress
h225.transportID transportID
    Unsigned 32-bit integer
    h225.TransportAddress
h225.transportNotSupported transportNotSupported
    No value
    h225.NULL
```

```
h225.transportQOS transportQOS
    Unsigned 32-bit integer
    h225.TransportQOS

h225.transportQOSNotSupported transportQOSNotSupported
    No value
    h225.NULL

h225.transportedInformation transportedInformation
    No value
    h225.NULL

h225.ttlExpired ttlExpired
    No value
    h225.NULL

h225.tunnelledProtocolAlternateID tunnelledProtocolAlternateID
    No value
    h225.TunnelledProtocolAlternateIdentifier

h225.tunnelledProtocolID tunnelledProtocolID
    No value
    h225.TunnelledProtocol

h225.tunnelledProtocolObjectID tunnelledProtocolObjectID
    h225.T_tunnelledProtocolObjectID

h225.tunnelledSignallingMessage tunnelledSignallingMessage
    No value
    h225.T_tunnelledSignallingMessage

h225.tunnelledSignallingRejected tunnelledSignallingRejected
    No value
    h225.NULL

h225.tunnellingRequired tunnellingRequired
    No value
    h225.NULL

h225.unallocatedNumber unallocatedNumber
    No value
    h225.NULL

h225.undefinedNode undefinedNode
    Boolean
    h225.BOOLEAN

h225.undefinedReason undefinedReason
    No value
    h225.NULL

h225.unicode unicode
    String
    h225.BMPString

h225.unknown unknown
    No value
    h225.NULL

h225.unknownMessageResponse unknownMessageResponse
    No value
    h225.UnknownMessageResponse
```



```
h225.unreachableDestination unreachableDestination
    No value
    h225.NULL

h225.unreachableGatekeeper unreachableGatekeeper
    No value
    h225.NULL

h225.unregistrationConfirm unregistrationConfirm
    No value
    h225.UnregistrationConfirm

h225.unregistrationReject unregistrationReject
    No value
    h225.UnregistrationReject

h225.unregistrationRequest unregistrationRequest
    No value
    h225.UnregistrationRequest

h225.unsolicited unsolicited
    Boolean
    h225.BOOLEAN

h225.url url
    String
    h225.IA5String_SIZE_0_512

h225.url_ID url-ID
    String
    h225.IA5String_SIZE_1_512

h225.usageInfoRequested usageInfoRequested
    No value
    h225.RasUsageInfoTypes

h225.usageInformation usageInformation
    No value
    h225.RasUsageInformation

h225.usageReportingCapability usageReportingCapability
    No value
    h225.RasUsageInfoTypes

h225.usageSpec usageSpec
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_RasUsageSpecification

h225.usageSpec_item Item
    No value
    h225.RasUsageSpecification

h225.useGKCallSignalAddressToAnswer useGKCallSignalAddressToAnswer
    Boolean
    h225.BOOLEAN

h225.useGKCallSignalAddressToMakeCall useGKCallSignalAddressToMakeCall
    Boolean
    h225.BOOLEAN

h225.useSpecifiedTransport useSpecifiedTransport
    Unsigned 32-bit integer
    h225.UseSpecifiedTransport
```

```
h225.user_data user-data
    No value
    h225.T_user_data
h225.user_information user-information
    Byte array
    h225.OCTET_STRING_SIZE_1_131
h225.uuiesRequested uuiesRequested
    No value
    h225.UUIEsRequested
h225.vendor vendor
    No value
    h225.VendorIdentifier
h225.versionId versionId
    String
    h225.OCTET_STRING_SIZE_1_256
h225.video video
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_RTPSession
h225.video_item Item
    No value
    h225.RTPSession
h225.voice voice
    No value
    h225.VoiceCaps
h225.voiceGwCallsAvailable voiceGwCallsAvailable
    Unsigned 32-bit integer
    h225.SEQUENCE_OF_CallsAvailable
h225.voiceGwCallsAvailable_item Item
    No value
    h225.CallsAvailable
h225.vplmn vplmn
    String
    h225.TBCD_STRING_SIZE_1_4
h225.when when
    No value
    h225.CapacityReportingSpecification_when
h225.wildcard wildcard
    Unsigned 32-bit integer
    h225.AliasAddress
h225.willRespondToIRR willRespondToIRR
    Boolean
    h225.BOOLEAN
h225.willSupplyUUIEs willSupplyUUIEs
    Boolean
    h225.BOOLEAN
```

**HP Extended Local-Link Control (hpext)**

hpext.dxsap DXSAP  
Unsigned 16-bit integer

hpext.sxsap SXSAP  
Unsigned 16-bit integer

**HP Remote Maintenance Protocol (rmp)**

rmp.filename Filename  
String

rmp.machtype Machine Type  
String

rmp.offset Offset  
Unsigned 32-bit integer

rmp.retcode Returncode  
Unsigned 8-bit integer

rmp.seqnum Sequence Number  
Unsigned 32-bit integer

rmp.sessionid Session ID  
Unsigned 16-bit integer

rmp.size Size  
Unsigned 16-bit integer

rmp.type Type  
Unsigned 8-bit integer

rmp.version Version  
Unsigned 16-bit integer

**HP Switch Protocol (hpsw)**

hpsw.tlv\_len Length  
Unsigned 8-bit integer

hpsw.tlv\_type Type  
Unsigned 8-bit integer

hpsw.type Type  
Unsigned 8-bit integer

hpsw.version Version  
Unsigned 8-bit integer

**HP-UX Network Tracing and Logging (nettl)**

nettl.devid Device ID  
Signed 32-bit integer  
HP-UX Device ID

nettl.kind Trace Kind  
Unsigned 32-bit integer  
HP-UX Trace record kind

nettl.pid Process ID (pid/ktid)  
Signed 32-bit integer  
HP-UX Process/thread id

```
nettl.subsys  Subsystem
              Unsigned 16-bit integer
              HP-UX Subsystem/Driver
nettl.uid    User ID (uid)
              Unsigned 16-bit integer
              HP-UX User ID
```

#### **Hilscher analyzer dissector (hilscher)**

```
hilscher.information_type  Hilscher information block type
                            Unsigned 8-bit integer
hilscher.net_analyzer.gpio_edge  Event type
                                Unsigned 8-bit integer
hilscher.net_analyzer.gpio_number  Event on
                                    Unsigned 8-bit integer
```

#### **HomePlug protocol (homeplug)**

```
homeplug.cer  Channel Estimation Response
              No value
              Channel Estimation Response
homeplug.cer.bda  Bridged Destination Address
                 6-byte Hardware (MAC) Address
                 Bridged Destination Address
homeplug.cer.bp  Bridge Proxy
                 Unsigned 8-bit integer
                 Bridge Proxy
homeplug.cer.cerv  Channel Estimation Response Version
                  Unsigned 8-bit integer
                  Channel Estimation Response Version
homeplug.cer.mod  Modulation Method
                  Unsigned 8-bit integer
                  Modulation Method
homeplug.cer.nbdas  Number Bridged Destination Addresses
                   Unsigned 8-bit integer
                   Number Bridged Destination Addresses
homeplug.cer.rate  FEC Rate
                   Unsigned 8-bit integer
                   FEC Rate
homeplug.cer.rsvd1  Reserved
                   No value
                   Reserved
homeplug.cer.rsvd2  Reserved
                   Unsigned 8-bit integer
                   Reserved
homeplug.cer.rxtmi  Receive Tone Map Index
                   Unsigned 8-bit integer
                   Receive Tone Map Index
```

```
homeplug.cer.vt  Valid Tone Flags
  Unsigned 8-bit integer
  Valid Tone Flags

homeplug.cer.vt11 Valid Tone Flags [83-80]
  Unsigned 8-bit integer
  Valid Tone Flags [83-80]

homeplug.mctrl  MAC Control Field
  Unsigned 8-bit integer
  MAC Control Field

homeplug.mctrl.ne  Number of MAC Data Entries
  Unsigned 8-bit integer
  Number of MAC Data Entries

homeplug.mctrl.rsvd  Reserved
  No value
  Reserved

homeplug.mehdr  MAC Management Entry Header
  No value
  MAC Management Entry Header

homeplug.mehdr.metype  MAC Entry Type
  Unsigned 8-bit integer
  MAC Entry Type

homeplug.mehdr.mev  MAC Entry Version
  Unsigned 8-bit integer
  MAC Entry Version

homeplug.melen  MAC Management Entry Length
  Unsigned 8-bit integer
  MAC Management Entry Length

homeplug.mmentry  MAC Management Entry Data
  Unsigned 8-bit integer
  MAC Management Entry Data

homeplug.ns  Network Statistics Basic
  No value
  Network Statistics Basic

homeplug.ns.ac  Action Control
  Boolean
  Action Control

homeplug.ns.bytes40  Bytes in 40 symbols
  Unsigned 16-bit integer
  Bytes in 40 symbols

homeplug.ns.bytes40_robo  Bytes in 40 symbols in ROBO
  Unsigned 16-bit integer
  Bytes in 40 symbols in ROBO

homeplug.ns.drops  Frame Drops
  Unsigned 16-bit integer
  Frame Drops

homeplug.ns.drops_robo  Frame Drops in ROBO
  Unsigned 16-bit integer
  Frame Drops in ROBO
```

```
homeplug.ns.fails  Fails Received
  Unsigned 16-bit integer
  Fails Received

homeplug.ns.fails_robo  Fails Received in ROBO
  Unsigned 16-bit integer
  Fails Received in ROBO

homeplug.ns.icid  IC_ID
  Unsigned 8-bit integer
  IC_ID

homeplug.ns.netw_da  Address of Network DA
  6-byte Hardware (MAC) Address
  Address of Network DA

homeplug.psr  Parameters and Statistics Response
  No value
  Parameters and Statistics Response

homeplug.psr.rxbp40  Receive Cumulative Bytes per 40-symbol
  Unsigned 32-bit integer
  Receive Cumulative Bytes per 40-symbol

homeplug.psr.txack  Transmit ACK Counter
  Unsigned 16-bit integer
  Transmit ACK Counter

homeplug.psr.txca0lat  Transmit CA0 Latency Counter
  Unsigned 16-bit integer
  Transmit CA0 Latency Counter

homeplug.psr.txcallat  Transmit CA1 Latency Counter
  Unsigned 16-bit integer
  Transmit CA1 Latency Counter

homeplug.psr.txca2lat  Transmit CA2 Latency Counter
  Unsigned 16-bit integer
  Transmit CA2 Latency Counter

homeplug.psr.txca3lat  Transmit CA3 Latency Counter
  Unsigned 16-bit integer
  Transmit CA3 Latency Counter

homeplug.psr.txcloss  Transmit Contention Loss Counter
  Unsigned 16-bit integer
  Transmit Contention Loss Counter

homeplug.psr.txcoll  Transmit Collision Counter
  Unsigned 16-bit integer
  Transmit Collision Counter

homeplug.psr.txfail  Transmit FAIL Counter
  Unsigned 16-bit integer
  Transmit FAIL Counter

homeplug.psr.txnack  Transmit NACK Counter
  Unsigned 16-bit integer
  Transmit NACK Counter

homeplug.rce  Request Channel Estimation
  No value
  Request Channel Estimation
```

```
homeplug.rce.cev Channel Estimation Version
  Unsigned 8-bit integer
  Channel Estimation Version

homeplug.rce.rsvd Reserved
  No value
  Reserved

homeplug.rps Request Parameters and Statistics
  No value
  Request Parameters and Statistics
```

**Hummingbird NFS Daemon (hclnfsd)**

```
hclnfsd.access Access
  Unsigned 32-bit integer
  Access

hclnfsd.authorize.ident.obscure Obscure Ident
  String
  Authentication Obscure Ident

hclnfsd.cookie Cookie
  Unsigned 32-bit integer
  Cookie

hclnfsd.copies Copies
  Unsigned 32-bit integer
  Copies

hclnfsd.device Device
  String
  Device

hclnfsd.exclusive Exclusive
  Unsigned 32-bit integer
  Exclusive

hclnfsd.fileext File Extension
  Unsigned 32-bit integer
  File Extension

hclnfsd.filename Filename
  String
  Filename

hclnfsd.gid GID
  Unsigned 32-bit integer
  Group ID

hclnfsd.group Group
  String
  Group

hclnfsd.host_ip Host IP
  IPv4 address
  Host IP

hclnfsd.hostname Hostname
  String
  Hostname
```

```
hclnfsd.jobstatus  Job Status
  Unsigned 32-bit integer
  Job Status

hclnfsd.length  Length
  Unsigned 32-bit integer
  Length

hclnfsd.lockname  Lockname
  String
  Lockname

hclnfsd.lockowner  Lockowner
  Byte array
  Lockowner

hclnfsd.logintext  Login Text
  String
  Login Text

hclnfsd.mode  Mode
  Unsigned 32-bit integer
  Mode

hclnfsd.npp  Number of Physical Printers
  Unsigned 32-bit integer
  Number of Physical Printers

hclnfsd.offset  Offset
  Unsigned 32-bit integer
  Offset

hclnfsd.pqn  Print Queue Number
  Unsigned 32-bit integer
  Print Queue Number

hclnfsd.printername  Printer Name
  String
  Printer name

hclnfsd.printparameters  Print Parameters
  String
  Print Parameters

hclnfsd.printqueuecomment  Comment
  String
  Print Queue Comment

hclnfsd.printqueueenamel  Name
  String
  Print Queue Name

hclnfsd.procedure_v1  V1 Procedure
  Unsigned 32-bit integer
  V1 Procedure

hclnfsd.queuestatus  Queue Status
  Unsigned 32-bit integer
  Queue Status

hclnfsd.request_type  Request Type
  Unsigned 32-bit integer
  Request Type
```



```
hclnfsd.sequence  Sequence
    Unsigned 32-bit integer
    Sequence

hclnfsd.server_ip  Server IP
    IPv4 address
    Server IP

hclnfsd.size  Size
    Unsigned 32-bit integer
    Size

hclnfsd.status  Status
    Unsigned 32-bit integer
    Status

hclnfsd.timesubmitted  Time Submitted
    Unsigned 32-bit integer
    Time Submitted

hclnfsd.uid  UID
    Unsigned 32-bit integer
    User ID

hclnfsd.unknown_data  Unknown
    Byte array
    Data

hclnfsd.username  Username
    String
    Username
```

**HyperSCSI (hyperscsi)**

```
hyperscsi.cmd  HyperSCSI Command
    Unsigned 8-bit integer

hyperscsi.fragno  Fragment No
    Unsigned 16-bit integer

hyperscsi.lastfrag  Last Fragment
    Boolean

hyperscsi.reserved  Reserved
    Unsigned 8-bit integer

hyperscsi.tagno  Tag No
    Unsigned 16-bit integer

hyperscsi.version  HyperSCSI Version
    Unsigned 8-bit integer
```

**Hypertext Transfer Protocol (http)**

```
http.accept  Accept
    String
    HTTP Accept

http.accept_encoding  Accept Encoding
    String
    HTTP Accept Encoding
```

```
http.accept_language  Accept-Language
    String
    HTTP Accept Language
http.authbasic        Credentials
    String
http.authorization    Authorization
    String
    HTTP Authorization header
http.cache_control    Cache-Control
    String
    HTTP Cache Control
http.connection       Connection
    String
    HTTP Connection
http.content_encoding Content-Encoding
    String
    HTTP Content-Encoding header
http.content_length   Content-Length
    Unsigned 32-bit integer
    HTTP Content-Length header
http.content_type     Content-Type
    String
    HTTP Content-Type header
http.cookie           Cookie
    String
    HTTP Cookie
http.date             Date
    String
    HTTP Date
http.host             Host
    String
    HTTP Host
http.last_modified    Last-Modified
    String
    HTTP Last Modified
http.location         Location
    String
    HTTP Location
http.notification     Notification
    Boolean
    TRUE if HTTP notification
http.proxy_authenticate Proxy-Authenticate
    String
    HTTP Proxy-Authenticate header
http.proxy_authorization Proxy-Authorization
    String
    HTTP Proxy-Authorization header
```

```
http.proxy_connect_host Proxy-Connect-Hostname
    String
    HTTP Proxy Connect Hostname
http.proxy_connect_port Proxy-Connect-Port
    Unsigned 16-bit integer
    HTTP Proxy Connect Port
http.referer Referer
    String
    HTTP Referer
http.request Request
    Boolean
    TRUE if HTTP request
http.request.method Request Method
    String
    HTTP Request Method
http.request.uri Request URI
    String
    HTTP Request-URI
http.request.version Request Version
    String
    HTTP Request HTTP-Version
http.response Response
    Boolean
    TRUE if HTTP response
http.response.code Response Code
    Unsigned 16-bit integer
    HTTP Response Code
http.server Server
    String
    HTTP Server
http.set_cookie Set-Cookie
    String
    HTTP Set Cookie
http.transfer_encoding Transfer-Encoding
    String
    HTTP Transfer-Encoding header
http.user_agent User-Agent
    String
    HTTP User-Agent header
http.www_authenticate WWW-Authenticate
    String
    HTTP WWW-Authenticate header
http.x_forwarded_for X-Forwarded-For
    String
    HTTP X-Forwarded-For
```

**ICBAAccoCallback (cba\_acco\_cb)**

cba.acco.cb\_conn\_data CBA Connection data  
No value

cba.acco.cb\_count Count  
Unsigned 16-bit integer

cba.acco.cb\_flags Flags  
Unsigned 8-bit integer

cba.acco.cb\_item Item  
No value

cba.acco.cb\_item\_data Data(Hex)  
Byte array

cba.acco.cb\_item\_hole Hole  
No value

cba.acco.cb\_item\_length Length  
Unsigned 16-bit integer

cba.acco.cb\_length Length  
Unsigned 32-bit integer

cba.acco.cb\_version Version  
Unsigned 8-bit integer

cba.connect\_in Connect in frame  
Frame number  
This connection Connect was in the packet with this number

cba.data\_first\_in First data in frame  
Frame number  
The first data of this connection/frame in the packet with this number

cba.data\_last\_in Last data in frame  
Frame number  
The last data of this connection/frame in the packet with this number

cba.disconnect\_in Disconnect in frame  
Frame number  
This connection Disconnect was in the packet with this number

cba.disconnectme\_in DisconnectMe in frame  
Frame number  
This connection/frame DisconnectMe was in the packet with this number

**ICBAAccoCallback2 (cba\_acco\_cb2)****ICBAAccoMgt (cba\_acco\_mgt)**

cba.acco.addconnectionin ADDCONNECTIONIN  
No value

cba.acco.addconnectionout ADDCONNECTIONOUT  
No value

cba.acco.cdb\_cookie CDBCookie  
Unsigned 32-bit integer

cba.acco.conn\_cons\_id ConsumerID  
Unsigned 32-bit integer

```
cba.acco.conn_consumer  Consumer
    String
cba.acco.conn_consumer_item  ConsumerItem
    String
cba.acco.conn_epsilon  Epsilon
    No value
cba.acco.conn_error_state  ConnErrorState
    Unsigned 32-bit integer
cba.acco.conn_persist  Persistence
    Unsigned 16-bit integer
cba.acco.conn_prov_id  ProviderID
    Unsigned 32-bit integer
cba.acco.conn_provider  Provider
    String
cba.acco.conn_provider_item  ProviderItem
    String
cba.acco.conn_qos_type  QoSType
    Unsigned 16-bit integer
cba.acco.conn_qos_value  QoSValue
    Unsigned 16-bit integer
cba.acco.conn_state  State
    Unsigned 8-bit integer
cba.acco.conn_substitute  Substitute
    No value
cba.acco.conn_version  ConnVersion
    Unsigned 16-bit integer
cba.acco.connectin  CONNECTIN
    No value
cba.acco.connectincr  CONNECTINCR
    No value
cba.acco.connectout  CONNECTOUT
    No value
cba.acco.connectoutcr  CONNECTOUTCR
    No value
cba.acco.count  Count
    Unsigned 32-bit integer
cba.acco.data  Data
    No value
cba.acco.dcom  DcomRuntime
    Boolean
    This is a DCOM runtime context
cba.acco.diag_data  Data
    Byte array
cba.acco.diag_in_length  InLength
    Unsigned 32-bit integer
```

```

cba.acco.diag_out_length  OutLength
    Unsigned 32-bit integer
cba.acco.diag_req  Request
    Unsigned 32-bit integer
cba.acco.diagconsconnout  DIAGCONSCONNOUT
    No value
cba.acco.getconnectionout  GETCONNECTIONOUT
    No value
cba.acco.getconsconnout  GETCONSCONNOUT
    No value
cba.acco.getidout  GETIDOUT
    No value
cba.acco.info_curr  Current
    Unsigned 32-bit integer
cba.acco.info_max  Max
    Unsigned 32-bit integer
cba.acco.item  Item
    String
cba.acco.opnum  Operation
    Unsigned 16-bit integer
    Operation
cba.acco.ping_factor  PingFactor
    Unsigned 16-bit integer
cba.acco.prov_crid  ProviderCRID
    Unsigned 32-bit integer
cba.acco.qc  QualityCode
    Unsigned 8-bit integer
cba.acco.readitemout  ReadItemOut
    No value
cba.acco.rtauto  RTAuto
    String
cba.acco.srt  SrtRuntime
    Boolean
    This is an SRT runtime context
cba.acco.time_stamp  TimeStamp
    Unsigned 64-bit integer
cba.acco.writeitemin  WriteItemIn
    No value

```

**ICBAAccoMgt2 (cba\_acco\_mgt2)****ICBAAccoServer (cba\_acco\_server)**

```

cba.acco.getprovconnout  GETPROVCONNOUT
    No value
cba.acco.server_first_connect  FirstConnect
    Unsigned 8-bit integer

```

```

cba.acco.server_pICBAAccoCallback  pICBAAccoCallback
    Byte array
cba.acco.serversrt_action  Action
    Unsigned 32-bit integer
cba.acco.serversrt_cons_mac  ConsumerMAC
    6-byte Hardware (MAC) Address
cba.acco.serversrt_cr_flags  Flags
    Unsigned 32-bit integer
cba.acco.serversrt_cr_flags_reconfigure  Reconfigure
    Boolean
cba.acco.serversrt_cr_flags_timestamped  Timestamped
    Boolean
cba.acco.serversrt_cr_id  ConsumerCRID
    Unsigned 16-bit integer
cba.acco.serversrt_cr_length  CRLength
    Unsigned 16-bit integer
cba.acco.serversrt_last_connect  LastConnect
    Unsigned 8-bit integer
cba.acco.serversrt_prov_mac  ProviderMAC
    6-byte Hardware (MAC) Address
cba.acco.serversrt_record_length  RecordLength
    Unsigned 16-bit integer
cba.acco.type_desc_len  TypeDescLen
    Unsigned 16-bit integer

```

**ICBAAccoServer2 (cba\_acco\_server2)****ICBAAccoServerSRT (cba\_acco\_server\_srt)****ICBAAccoSync (cba\_acco\_sync)****ICBABrowse (cba\_browse)**

```

cba.browse.access_right  AccessRights
    No value
cba.browse.count  Count
    Unsigned 32-bit integer
cba.browse.data_type  DataTypes
    No value
cba.browse.info1  Info1
    No value
cba.browse.info2  Info2
    No value
cba.browse.item  ItemNames
    No value
cba.browse.max_return  MaxReturn
    Unsigned 32-bit integer

```

```
cba.browse.offset  Offset
                   Unsigned 32-bit integer
cba.browse.selector Selector
                   Unsigned 32-bit integer
cba.cookie         Cookie
                   Unsigned 32-bit integer
cba.grouperror     GroupError
                   Unsigned 16-bit integer
cba.grouperror_new NewGroupError
                   Unsigned 16-bit integer
cba.grouperror_old OldGroupError
                   Unsigned 16-bit integer
cba.opnum          Operation
                   Unsigned 16-bit integer
                   Operation
cba.production_date ProductionDate
                   Double-precision floating point
cba.serial_no      SerialNo
                   No value
cba.state          State
                   Unsigned 16-bit integer
cba.state_new      NewState
                   Unsigned 16-bit integer
cba.state_old      OldState
                   Unsigned 16-bit integer
cba.time          Time
                   Double-precision floating point
```

**ICBABrowse2 (cba\_browse2)****ICBAGroupError (cba\_grouperror)****ICBAGroupErrorEvent (cba\_grouperror\_event)****ICBALogicalDevice (cba\_ldev)****ICBALogicalDevice2 (cba\_ldev2)****ICBAPersist (cba\_persist)****ICBAPersist2 (cba\_persist2)****ICBAPhysicalDevice (cba\_pdev)**

```
cba.component_id  ComponentID
                   String
```



```
    cba.component_version  Version
                          String
    cba.multi_app          MultiApp
                          Unsigned 16-bit integer
    cba.name               Name
                          String
    cba.pbaddress          PROFIBUS Address
                          No value
    cba.pbaddress.address  Address
                          Unsigned 8-bit integer
    cba.pbaddress.system_id SystemID
                          Unsigned 8-bit integer
    cba.pdev_stamp         PDevStamp
                          Unsigned 32-bit integer
    cba.producer           Producer
                          String
    cba.product            Product
                          String
    cba.profinet_dcom_stack PROFInetDCOMStack
                          Unsigned 16-bit integer
    cba.revision_major     Major
                          Unsigned 16-bit integer
    cba.revision_minor     Minor
                          Unsigned 16-bit integer
    cba.revision_service_pack ServicePack
                          Unsigned 16-bit integer
    cba.save_ldev_name     LDevName
                          No value
    cba.save_result        PatialResult
                          No value
    cba_revision_build     Build
                          Unsigned 16-bit integer
```

**ICBAPhysicalDevice2 (cba\_pdev2)**

**ICBAPhysicalDevicePC (cba\_pdev\_pc)**

**ICBAPhysicalDevicePCEvent (cba\_pdev\_pc\_event)**

**ICBARTAuto (cba\_rtauto)**

**ICBARTAuto2 (cba\_rtauto2)**

**ICBAState (cba\_state)****ICBAStateEvent (cba\_state\_event)****ICBASystemProperties (cba\_sysprop)****ICBATime (cba\_time)****ICQ Protocol (icq)**

```
icq.checkcode  Checkcode
                Unsigned 32-bit integer

icq.client_cmd  Client command
                Unsigned 16-bit integer

icq.decode     Decode
                String

icq.server_cmd  Server command
                Unsigned 16-bit integer

icq.sessionid  Session ID
                Unsigned 32-bit integer

icq.type       Type
                Unsigned 16-bit integer

icq.uin        UIN
                Unsigned 32-bit integer
```

**IEEE 802.11 Radiotap Capture header (radiotap)**

```
radiotap.antenna  Antenna
                  Unsigned 32-bit integer
                  Antenna number this frame was sent/received over (starting at 0)

radiotap.channel  Channel
                  Unsigned 32-bit integer
                  802.11 channel number that this frame was sent/received on

radiotap.channel.freq  Channel frequency
                       Unsigned 32-bit integer
                       Channel frequency in megahertz that this frame was sent/received on

radiotap.channel.type  Channel type
                       Unsigned 16-bit integer
                       Channel type

radiotap.channel.type.2ghz  2 GHz spectrum
                             Boolean
                             Channel Type 2 GHz spectrum

radiotap.channel.type.5ghz  5 GHz spectrum
                             Boolean
                             Channel Type 5 GHz spectrum

radiotap.channel.type.cck  Complementary Code Keying (CCK)
                             Boolean
                             Channel Type Complementary Code Keying (CCK) Modulation
```

```

radiotap.channel.type.dynamic  Dynamic CCK-OFDM
    Boolean
    Channel Type Dynamic CCK-OFDM Channel
radiotap.channel.type.gfsk  Gaussian Frequency Shift Keying (GFSK)
    Boolean
    Channel Type Gaussian Frequency Shift Keying (GFSK) Modulation
radiotap.channel.type.gsm  GSM (900MHz)
    Boolean
    Channel Type GSM
radiotap.channel.type.half  Half Rate Channel (10MHz Channel Width)
    Boolean
    Channel Type Half Rate
radiotap.channel.type.ofdm  Orthogonal Frequency-Division Multiplexing (OFDM)
    Boolean
    Channel Type Orthogonal Frequency-Division Multiplexing (OFDM)
radiotap.channel.type.passive  Passive
    Boolean
    Channel Type Passive
radiotap.channel.type.quarter  Quarter Rate Channel (5MHz Channel Width)
    Boolean
    Channel Type Quarter Rate
radiotap.channel.type.sturbo  Static Turbo
    Boolean
    Channel Type Status Turbo
radiotap.channel.type.turbo  Turbo
    Boolean
    Channel Type Turbo
radiotap.channel.xtype.passive  Passive
    Boolean
    Channel Type Passive
radiotap.datarate  Data rate
    Unsigned 32-bit integer
    Speed this frame was sent/received at
radiotap.db_antnoise  SSI Noise (dB)
    Unsigned 32-bit integer
    RF noise power at the antenna from a fixed, arbitrary value in decibels
radiotap.db_antsignal  SSI Signal (dB)
    Unsigned 32-bit integer
    RF signal power at the antenna from a fixed, arbitrary value in decibels
radiotap.db_txattenuation  Transmit attenuation (dB)
    Unsigned 16-bit integer
    Transmit power expressed as decibels from max power set at factory (0 is max)
radiotap.dbm_antsignal  SSI Signal (dBm)
    Signed 32-bit integer
    RF signal power at the antenna from a fixed, arbitrary value in decibels fro
radiotap.fcs  802.11 FCS
    Unsigned 32-bit integer
    Frame check sequence of this frame

```

```
radiotap.fcs_bad  Bad FCS
  Boolean
  Specifies if this frame has a bad frame check sequence

radiotap.fhss.hopset  FHSS Hop Set
  Unsigned 8-bit integer
  Frequency Hopping Spread Spectrum hopset

radiotap.fhss.pattern  FHSS Pattern
  Unsigned 8-bit integer
  Frequency Hopping Spread Spectrum hop pattern

radiotap.flags  Flags
  Unsigned 8-bit integer

radiotap.flags.badfcs  Bad FCS
  Boolean
  Frame received with bad FCS

radiotap.flags.cfp  CFP
  Boolean
  Sent/Received during CFP

radiotap.flags.datapad  Data Pad
  Boolean
  Frame has padding between 802.11 header and payload

radiotap.flags.fcs  FCS at end
  Boolean
  Frame includes FCS at end

radiotap.flags.frag  Fragmentation
  Boolean
  Sent/Received with fragmentation

radiotap.flags.preamble  Preamble
  Boolean
  Sent/Received with short preamble

radiotap.flags.shortgi  Short GI
  Boolean
  Frame Sent/Received with HT short Guard Interval

radiotap.flags.wep  WEP
  Boolean
  Sent/Received with WEP encryption

radiotap.length  Header length
  Unsigned 16-bit integer
  Length of header including version, pad, length and data fields

radiotap.mactime  MAC timestamp
  Unsigned 64-bit integer
  Value in microseconds of the MAC's Time Synchronization Function timer when

radiotap.pad  Header pad
  Unsigned 8-bit integer
  Padding

radiotap.present  Present flags
  Unsigned 32-bit integer
  Bitmask indicating which fields are present
```

```
radiotap.present.antenna  Antenna
    Boolean
    Specifies if the antenna number field is present
radiotap.present.channel  Channel
    Boolean
    Specifies if the transmit/receive frequency field is present
radiotap.present.db_antnoise  DB Antenna Noise
    Boolean
    Specifies if the RF signal power at antenna in dBm field is present
radiotap.present.db_antsignal  DB Antenna Signal
    Boolean
    Specifies if the RF signal power at antenna in dB field is present
radiotap.present.db_tx_attenuation  DB TX Attenuation
    Boolean
    Specifies if the transmit power from max power (in dB) field is present
radiotap.present.dbm_antnoise  DBM Antenna Noise
    Boolean
    Specifies if the RF noise power at antenna field is present
radiotap.present.dbm_antsignal  DBM Antenna Signal
    Boolean
    Specifies if the antenna signal strength in dBm is present
radiotap.present.dbm_tx_attenuation  DBM TX Attenuation
    Boolean
    Specifies if the transmit power from max power (in dBm) field is present
radiotap.present.ext  Ext
    Boolean
    Specifies if there are any extensions to the header present
radiotap.present.fcs  FCS in header
    Boolean
    Specifies if the FCS field is present
radiotap.present.fhss  FHSS
    Boolean
    Specifies if the hop set and pattern is present for frequency hopping radios
radiotap.present.flags  Flags
    Boolean
    Specifies if the channel flags field is present
radiotap.present.lock_quality  Lock Quality
    Boolean
    Specifies if the signal quality field is present
radiotap.present.rate  Rate
    Boolean
    Specifies if the transmit/receive rate field is present
radiotap.present.tsft  TSFT
    Boolean
    Specifies if the Time Synchronization Function Timer field is present
radiotap.present.tx_attenuation  TX Attenuation
    Boolean
    Specifies if the transmit power from max power field is present
```

```
radiotap.present.xchannel  Channel+
    Boolean
    Specifies if the extended channel info field is present

radiotap.quality  Signal Quality
    Unsigned 16-bit integer
    Signal quality (unitless measure)

radiotap.txattenuation  Transmit attenuation
    Unsigned 16-bit integer
    Transmit power expressed as unitless distance from max power set at factory

radiotap.txpower  Transmit power
    Signed 32-bit integer
    Transmit power in decibels per one milliwatt (dBm)

radiotap.version  Header revision
    Unsigned 8-bit integer
    Version of radiotap header format

radiotap.xchannel  Channel number
    Unsigned 32-bit integer

radiotap.xchannel.flags  Channel type
    Unsigned 32-bit integer

radiotap.xchannel.freq  Channel frequency
    Unsigned 32-bit integer

radiotap.xchannel.type.2ghz  2 GHz spectrum
    Boolean
    Channel Type 2 GHz spectrum

radiotap.xchannel.type.5ghz  5 GHz spectrum
    Boolean
    Channel Type 5 GHz spectrum

radiotap.xchannel.type.cck  Complementary Code Keying (CCK)
    Boolean
    Channel Type Complementary Code Keying (CCK) Modulation

radiotap.xchannel.type.dynamic  Dynamic CCK-OFDM
    Boolean
    Channel Type Dynamic CCK-OFDM Channel

radiotap.xchannel.type.gfsk  Gaussian Frequency Shift Keying (GFSK)
    Boolean
    Channel Type Gaussian Frequency Shift Keying (GFSK) Modulation

radiotap.xchannel.type.gsm  GSM (900MHz)
    Boolean
    Channel Type GSM

radiotap.xchannel.type.half  Half Rate Channel (10MHz Channel Width)
    Boolean
    Channel Type Half Rate

radiotap.xchannel.type.ht20  HT Channel (20MHz Channel Width)
    Boolean
    Channel Type HT/20
```

```

radiotap.xchannel.type.ht40d  HT Channel (40MHz Channel Width with Extension cha
    Boolean
    Channel Type HT/40-
radiotap.xchannel.type.ht40u  HT Channel (40MHz Channel Width with Extension cha
    Boolean
    Channel Type HT/40+
radiotap.xchannel.type.ofdm  Orthogonal Frequency-Division Multiplexing (OFDM)
    Boolean
    Channel Type Orthogonal Frequency-Division Multiplexing (OFDM)
radiotap.xchannel.type.quarter  Quarter Rate Channel (5MHz Channel Width)
    Boolean
    Channel Type Quarter Rate
radiotap.xchannel.type.sturbo  Static Turbo
    Boolean
    Channel Type Status Turbo
radiotap.xchannel.type.turbo  Turbo
    Boolean
    Channel Type Turbo

```

**IEEE 802.11 wireless LAN (wlan)**

```

radiotap.dbm_antnoise  SSI Noise (dBm)
    Signed 32-bit integer
    RF noise power at the antenna from a fixed, arbitrary value in decibels per
wlan.addr  Source or Destination address
    6-byte Hardware (MAC) Address
    Source or Destination Hardware Address
wlan.aid  Association ID
    Unsigned 16-bit integer
    Association-ID field
wlan.analysis.retransmission  Retransmission
    No value
    This frame is a suspected wireless retransmission
wlan.analysis.retransmission_frame  Retransmission of frame
    Frame number
    This is a retransmission of frame #
wlan.antenna  Antenna
    Unsigned 32-bit integer
    Antenna number this frame was sent/received over (starting at 0)
wlan.ba.basic.tidinfo  TID for which a Basic BlockAck frame is requested
    Unsigned 16-bit integer
    Traffic Identifier (TID) for which a Basic BlockAck frame is requested
wlan.ba.control  Block Ack Request Control
    Unsigned 16-bit integer
    Block Ack Request Control
wlan.ba.control.ackpolicy  BAR Ack Policy
    Boolean
    Block Ack Request (BAR) Ack Policy

```

```
wlan.ba.control.cbitmap  Compressed Bitmap
    Boolean
    Compressed Bitmap

wlan.ba.control.multitid  Multi-TID
    Boolean
    Multi-Traffic Identifier (TID)

wlan.ba.mtid.tid  Traffic Identifier (TID) Info
    Unsigned 8-bit integer
    Traffic Identifier (TID) Info

wlan.ba.mtid.tidinfo  Number of TIDs Present
    Unsigned 16-bit integer
    Number of Traffic Identifiers (TIDs) Present

wlan.ba.type  Block Ack Request Type
    Unsigned 8-bit integer
    Block Ack Request Type

wlan.bar.compressed.tidinfo  TID for which a BlockAck frame is requested
    Unsigned 16-bit integer
    Traffic Identifier (TID) for which a BlockAck frame is requested

wlan.bar.control  Block Ack Request (BAR) Control
    Unsigned 16-bit integer
    Block Ack Request (BAR) Control

wlan.bar.mtid.tidinfo.reserved  Reserved
    Unsigned 16-bit integer
    Reserved

wlan.bar.mtid.tidinfo.value  Multi-TID Value
    Unsigned 16-bit integer
    Multi-TID Value

wlan.bar.type  Block Ack Request Type
    Unsigned 8-bit integer
    Block Ack Request (BAR) Type

wlan.bssid  BSS Id
    6-byte Hardware (MAC) Address
    Basic Service Set ID

wlan.ccmp.extiv  CCMP Ext. Initialization Vector
    String
    CCMP Extended Initialization Vector

wlan.channel  Channel
    Unsigned 8-bit integer
    802.11 channel number that this frame was sent/received on

wlan.channel_frequency  Channel frequency
    Unsigned 32-bit integer
    Channel frequency in megahertz that this frame was sent/received on

wlan.controlwrap.addr1  First Address of Contained Frame
    6-byte Hardware (MAC) Address
    First Address of Contained Frame

wlan.da  Destination address
    6-byte Hardware (MAC) Address
    Destination Hardware Address
```



```
wlan.data_rate  Data Rate
  Unsigned 64-bit integer
  Data rate (b/s)

wlan.dbm_antsignal  SSI Signal (dBm)
  Signed 32-bit integer
  RF signal power at the antenna from a fixed, arbitrary value in decibels from

wlan.duration  Duration
  Unsigned 16-bit integer
  Duration field

wlan.fc  Frame Control Field
  Unsigned 16-bit integer
  MAC Frame control

wlan.fc.ds  DS status
  Unsigned 8-bit integer
  Data-frame DS-traversal status

wlan.fc.frag  More Fragments
  Boolean
  More Fragments flag

wlan.fc.fromds  From DS
  Boolean
  From DS flag

wlan.fc.moredata  More Data
  Boolean
  More data flag

wlan.fc.order  Order flag
  Boolean
  Strictly ordered flag

wlan.fc.protected  Protected flag
  Boolean
  Protected flag

wlan.fc.pwrmtgt  PWR MGT
  Boolean
  Power management status

wlan.fc.retry  Retry
  Boolean
  Retransmission flag

wlan.fc.subtype  Subtype
  Unsigned 8-bit integer
  Frame subtype

wlan.fc.tods  To DS
  Boolean
  To DS flag

wlan.fc.type  Type
  Unsigned 8-bit integer
  Frame type

wlan.fc.type_subtype  Type/Subtype
  Unsigned 8-bit integer
  Type and subtype combined (first byte: type, second byte: subtype)
```

```
wlan.fc.version  Version
    Unsigned 8-bit integer
    MAC Protocol version

wlan.fcs  Frame check sequence
    Unsigned 32-bit integer
    Frame Check Sequence (FCS)

wlan.fcs_bad  Bad
    Boolean
    True if the FCS is incorrect

wlan.fcs_good  Good
    Boolean
    True if the FCS is correct

wlan.flags  Protocol Flags
    Unsigned 8-bit integer
    Protocol flags

wlan.frag  Fragment number
    Unsigned 16-bit integer
    Fragment number

wlan.fragment  802.11 Fragment
    Frame number
    802.11 Fragment

wlan.fragment.error  Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments

wlan.fragment.multipletails  Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet

wlan.fragment.overlap  Fragment overlap
    Boolean
    Fragment overlaps with other fragments

wlan.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data

wlan.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet

wlan.fragments  802.11 Fragments
    No value
    802.11 Fragments

wlan.hosttime  Host timestamp
    Unsigned 64-bit integer

wlan.mactime  MAC timestamp
    Unsigned 64-bit integer
    Value in microseconds of the MAC's Time Synchronization Function timer when

wlan.normrssi_antnoise  Normalized RSSI Noise
    Unsigned 32-bit integer
    RF noise power at the antenna, normalized to the range 0-1000
```

```
wlan.normrssi_antsignal Normalized RSSI Signal
    Unsigned 32-bit integer
    RF signal power at the antenna, normalized to the range 0-1000

wlan.qos.ack Ack Policy
    Unsigned 8-bit integer
    Ack Policy

wlan.qos.amsdupresent Payload Type
    Boolean
    Payload Type

wlan.qos.eosp EOSP
    Boolean
    EOSP Field

wlan.qos.fc_content Content
    Unsigned 16-bit integer
    Content1

wlan.qos.priority Priority
    Unsigned 16-bit integer
    802.1D Tag

wlan.ra Receiver address
    6-byte Hardware (MAC) Address
    Receiving Station Hardware Address

wlan.rawrssi_antnoise Raw RSSI Noise
    Unsigned 32-bit integer
    RF noise power at the antenna, reported as RSSI by the adapter

wlan.rawrssi_antsignal Raw RSSI Signal
    Unsigned 32-bit integer
    RF signal power at the antenna, reported as RSSI by the adapter

wlan.reassembled_in Reassembled 802.11 in frame
    Frame number
    This 802.11 packet is reassembled in this frame

wlan.sa Source address
    6-byte Hardware (MAC) Address
    Source Hardware Address

wlan.seq Sequence number
    Unsigned 16-bit integer
    Sequence number

wlan.signal_strength Signal Strength
    Unsigned 8-bit integer
    Signal strength (Percentage)

wlan.ta Transmitter address
    6-byte Hardware (MAC) Address
    Transmitting Station Hardware Address

wlan.tkip.extiv TKIP Ext. Initialization Vector
    String
    TKIP Extended Initialization Vector

wlan.wep.icv WEP ICV
    Unsigned 32-bit integer
    WEP ICV
```

wlan.wep.iv Initialization Vector  
Unsigned 24-bit integer  
Initialization Vector

wlan.wep.key Key Index  
Unsigned 8-bit integer  
Key Index

wlan.wep.weakiv Weak IV  
Boolean  
Weak IV

**IEEE 802.11 wireless LAN aggregate frame (wlan\_aggregate)**

wlan\_aggregate.msduheader MAC Service Data Unit (MSDU)  
Unsigned 16-bit integer  
MAC Service Data Unit (MSDU)

**IEEE 802.11 wireless LAN management frame (wlan\_mgt)**

wlan\_mgt.aironet.data Aironet IE data  
Byte array  
Aironet IE data

wlan\_mgt.aironet.qos.paramset Aironet IE QoS paramset  
Unsigned 8-bit integer  
Aironet IE QoS paramset

wlan\_mgt.aironet.qos.unkl Aironet IE QoS unknown 1  
Unsigned 8-bit integer  
Aironet IE QoS unknown 1

wlan\_mgt.aironet.qos.val Aironet IE QoS valueset  
Byte array  
Aironet IE QoS valueset

wlan\_mgt.aironet.type Aironet IE type  
Unsigned 8-bit integer  
Aironet IE type

wlan\_mgt.aironet.version Aironet IE CCX version?  
Unsigned 8-bit integer  
Aironet IE CCX version?

wlan\_mgt.asel Antenna Selection (ASEL) Capabilities  
Unsigned 8-bit integer  
Antenna Selection (ASEL) Capabilities

wlan\_mgt.asel.capable Antenna Selection Capable  
Boolean  
Antenna Selection Capable

wlan\_mgt.asel.csi Explicit CSI Feedback  
Boolean  
Explicit CSI Feedback

wlan\_mgt.asel.if Antenna Indices Feedback  
Boolean  
Antenna Indices Feedback

```
wlan_mgt.asel.reserved  Reserved
    Unsigned 8-bit integer
    Reserved

wlan_mgt.asel.rx  Rx ASEL
    Boolean
    Rx ASEL

wlan_mgt.asel.sppdu  Tx Sounding PPDUs
    Boolean
    Tx Sounding PPDUs

wlan_mgt.asel.txcsi  Explicit CSI Feedback Based Tx ASEL
    Boolean
    Explicit CSI Feedback Based Tx ASEL

wlan_mgt.asel.txif  Antenna Indices Feedback Based Tx ASEL
    Boolean
    Antenna Indices Feedback Based Tx ASEL

wlan_mgt.extcap.infoexchange  HT Information Exchange Support
    Unsigned 8-bit integer
    HT Information Exchange Support

wlan_mgt.extchanswitch.new.channumber  New Channel Number
    Unsigned 8-bit integer
    New Channel Number

wlan_mgt.extchanswitch.new.regclass  New Regulatory Class
    Unsigned 8-bit integer
    New Regulatory Class

wlan_mgt.extchanswitch.switchcount  Channel Switch Count
    Unsigned 8-bit integer
    Channel Switch Count

wlan_mgt.extchanswitch.switchmode  Channel Switch Mode
    Unsigned 8-bit integer
    Channel Switch Mode

wlan_mgt.fixed.action  Action
    Unsigned 8-bit integer
    Action

wlan_mgt.fixed.action_code  Action code
    Unsigned 16-bit integer
    Management action code

wlan_mgt.fixed.aid  Association ID
    Unsigned 16-bit integer
    Association ID

wlan_mgt.fixed.all  Fixed parameters
    Unsigned 16-bit integer
    Fixed parameters

wlan_mgt.fixed.antsel  Antenna Selection
    Unsigned 8-bit integer
    Antenna Selection

wlan_mgt.fixed.antsel.ant0  Antenna 0
    Unsigned 8-bit integer
    Antenna 0
```

```
wlan_mgt.fixed.antsel.ant1  Antenna 1
    Unsigned 8-bit integer
    Antenna 1
wlan_mgt.fixed.antsel.ant2  Antenna 2
    Unsigned 8-bit integer
    Antenna 2
wlan_mgt.fixed.antsel.ant3  Antenna 3
    Unsigned 8-bit integer
    Antenna 3
wlan_mgt.fixed.antsel.ant4  Antenna 4
    Unsigned 8-bit integer
    Antenna 4
wlan_mgt.fixed.antsel.ant5  Antenna 5
    Unsigned 8-bit integer
    Antenna 5
wlan_mgt.fixed.antsel.ant6  Antenna 6
    Unsigned 8-bit integer
    Antenna 6
wlan_mgt.fixed.antsel.ant7  Antenna 7
    Unsigned 8-bit integer
    Antenna 7
wlan_mgt.fixed.auth.alg     Authentication Algorithm
    Unsigned 16-bit integer
    Authentication Algorithm
wlan_mgt.fixed.auth_seq     Authentication SEQ
    Unsigned 16-bit integer
    Authentication Sequence Number
wlan_mgt.fixed.baparams     Block Ack Parameters
    Unsigned 16-bit integer
    Block Ack Parameters
wlan_mgt.fixed.baparams.amsdu  A-MSDUs
    Boolean
    A-MSDU Permitted in QoS Data MPDUs
wlan_mgt.fixed.baparams.buffersize  Number of Buffers (1 Buffer = 2304 Bytes)
    Unsigned 16-bit integer
    Number of Buffers
wlan_mgt.fixed.baparams.policy  Block Ack Policy
    Boolean
    Block Ack Policy
wlan_mgt.fixed.baparams.tid     Traffic Identifier
    Unsigned 8-bit integer
    Traffic Identifier
wlan_mgt.fixed.batimeout     Block Ack Timeout
    Unsigned 16-bit integer
    Block Ack Timeout
wlan_mgt.fixed.beacon        Beacon Interval
    Double-precision floating point
    Beacon Interval
```

```
wlan_mgt.fixed.capabilities  Capabilities
    Unsigned 16-bit integer
    Capability information

wlan_mgt.fixed.capabilities.agility  Channel Agility
    Boolean
    Channel Agility

wlan_mgt.fixed.capabilities.apsd  Automatic Power Save Delivery
    Boolean
    Automatic Power Save Delivery

wlan_mgt.fixed.capabilities.cfpoll.ap  CFP participation capabilities
    Unsigned 16-bit integer
    CF-Poll capabilities for an AP

wlan_mgt.fixed.capabilities.cfpoll.sta  CFP participation capabilities
    Unsigned 16-bit integer
    CF-Poll capabilities for a STA

wlan_mgt.fixed.capabilities.del_blk_ack  Delayed Block Ack
    Boolean
    Delayed Block Ack

wlan_mgt.fixed.capabilities.dsss_ofdm  DSSS-OFDM
    Boolean
    DSSS-OFDM Modulation

wlan_mgt.fixed.capabilities.ess  ESS capabilities
    Boolean
    ESS capabilities

wlan_mgt.fixed.capabilities.ibss  IBSS status
    Boolean
    IBSS participation

wlan_mgt.fixed.capabilities.imm_blk_ack  Immediate Block Ack
    Boolean
    Immediate Block Ack

wlan_mgt.fixed.capabilities.pbcc  PBCC
    Boolean
    PBCC Modulation

wlan_mgt.fixed.capabilities.preamble  Short Preamble
    Boolean
    Short Preamble

wlan_mgt.fixed.capabilities.privacy  Privacy
    Boolean
    WEP support

wlan_mgt.fixed.capabilities.short_slot_time  Short Slot Time
    Boolean
    Short Slot Time

wlan_mgt.fixed.capabilities.spec_man  Spectrum Management
    Boolean
    Spectrum Management

wlan_mgt.fixed.category_code  Category code
    Unsigned 16-bit integer
    Management action category
```

```
wlan_mgt.fixed.chanwidth Supported Channel Width
    Unsigned 8-bit integer
    Supported Channel Width

wlan_mgt.fixed.country Country String
    String
    Country String

wlan_mgt.fixed.current_ap Current AP
    6-byte Hardware (MAC) Address
    MAC address of current AP

wlan_mgt.fixed.delba.param Delete Block Ack (DELBA) Parameter Set
    Unsigned 16-bit integer
    Delete Block Ack (DELBA) Parameter Set

wlan_mgt.fixed.delba.param.initiator Initiator
    Boolean
    Initiator

wlan_mgt.fixed.delba.param.reserved Reserved
    Unsigned 16-bit integer
    Reserved

wlan_mgt.fixed.delba.param.tid TID
    Unsigned 16-bit integer
    Traffic Identifier (TID)

wlan_mgt.fixed.dialog_token Dialog token
    Unsigned 8-bit integer
    Management action dialog token

wlan_mgt.fixed.dls_timeout DLS timeout
    Unsigned 16-bit integer
    DLS timeout value

wlan_mgt.fixed.dst_mac_addr Destination address
    6-byte Hardware (MAC) Address
    Destination MAC address

wlan_mgt.fixed.extchansw Extended Channel Switch Announcement
    Unsigned 32-bit integer

wlan_mgt.fixed.fragment Fragment
    Unsigned 16-bit integer
    Fragment

wlan_mgt.fixed.htact HT Action
    Unsigned 8-bit integer
    HT Action Code

wlan_mgt.fixed.listen_ival Listen Interval
    Unsigned 16-bit integer
    Listen Interval

wlan_mgt.fixed.maxregpwr Maximum Regulation Power
    Unsigned 16-bit integer
    Maximum Regulation Power

wlan_mgt.fixed.maxtxpwr Maximum Transmit Power
    Unsigned 8-bit integer
    Maximum Transmit Power
```



```
wlan_mgt.fixed.mimo.control.chanwidth  Channel Width
    Boolean
    Channel Width

wlan_mgt.fixed.mimo.control.codebookinfo  Codebook Information
    Unsigned 16-bit integer
    Codebook Information

wlan_mgt.fixed.mimo.control.cosize  Coefficient Size (Nb)
    Unsigned 16-bit integer
    Coefficient Size (Nb)

wlan_mgt.fixed.mimo.control.grouping  Grouping (Ng)
    Unsigned 16-bit integer
    Grouping (Ng)

wlan_mgt.fixed.mimo.control.matrixseg  Remaining Matrix Segment
    Unsigned 16-bit integer
    Remaining Matrix Segment

wlan_mgt.fixed.mimo.control.ncindex  Nc Index
    Unsigned 16-bit integer
    Number of Columns Less One

wlan_mgt.fixed.mimo.control.nrindex  Nr Index
    Unsigned 16-bit integer
    Number of Rows Less One

wlan_mgt.fixed.mimo.control.reserved  Reserved
    Unsigned 16-bit integer
    Reserved

wlan_mgt.fixed.mimo.control.soundingtime  Sounding Timestamp
    Unsigned 32-bit integer
    Sounding Timestamp

wlan_mgt.fixed.msmtppilotint  Measurement Pilot Interval
    Unsigned 16-bit integer
    Measurement Pilot Interval Fixed Field

wlan_mgt.fixed.pco.phasecntrl  Phased Coexistence Operation (PCO) Phase Control
    Boolean
    Phased Coexistence Operation (PCO) Phase Control

wlan_mgt.fixed.psmpt.paramset  Power Save Multi-Poll (PSMP) Parameter Set
    Unsigned 16-bit integer
    Power Save Multi-Poll (PSMP) Parameter Set

wlan_mgt.fixed.psmpt.paramset.more  More PSMP
    Boolean
    More Power Save Multi-Poll (PSMP)

wlan_mgt.fixed.psmpt.paramset.nsta  Number of STA Info Fields Present
    Unsigned 8-bit integer
    Number of STA Info Fields Present

wlan_mgt.fixed.psmpt.paramset.seqduration  PSMP Sequence Duration
    Unsigned 16-bit integer
    Power Save Multi-Poll (PSMP) Sequence Duration

wlan_mgt.fixed.psmpt.stainfo  Power Save Multi-Poll (PSMP) Station Information
    Unsigned 8-bit integer
    Power Save Multi-Poll (PSMP) Station Information
```

```
wlan_mgt.fixed.psmpp.stainfo.dttduration  DTT Duration
    Unsigned 8-bit integer
    DTT Duration

wlan_mgt.fixed.psmpp.stainfo.dttstart  DTT Start Offset
    Unsigned 16-bit integer
    DTT Start Offset

wlan_mgt.fixed.psmpp.stainfo.multicastid  Power Save Multi-Poll (PSMP) Multicast
    Unsigned 64-bit integer
    Power Save Multi-Poll (PSMP) Multicast ID

wlan_mgt.fixed.psmpp.stainfo.reserved  Reserved
    Unsigned 16-bit integer
    Reserved

wlan_mgt.fixed.psmpp.stainfo.staid  Target Station ID
    Unsigned 16-bit integer
    Target Station ID

wlan_mgt.fixed.psmpp.stainfo.uttduration  UTT Duration
    Unsigned 16-bit integer
    UTT Duration

wlan_mgt.fixed.psmpp.stainfo.uttstart  UTT Start Offset
    Unsigned 16-bit integer
    UTT Start Offset

wlan_mgt.fixed.qosinfo.ap  QoS Inforamtion (AP)
    Unsigned 8-bit integer
    QoS Inforamtion (AP)

wlan_mgt.fixed.qosinfo.ap.edcaupdate  EDCA Parameter Set Update Count
    Unsigned 8-bit integer
    Enhanced Distributed Channel Access (EDCA) Parameter Set Update Count

wlan_mgt.fixed.qosinfo.ap.qack  Q-Ack
    Boolean
    QoS Ack

wlan_mgt.fixed.qosinfo.ap.reserved  Reserved
    Boolean
    Reserved

wlan_mgt.fixed.qosinfo.ap.txopreq  TXOP Request
    Boolean
    Transmit Opportunity (TXOP) Request

wlan_mgt.fixed.qosinfo.sta  QoS Inforamtion (STA)
    Unsigned 8-bit integer
    QoS Inforamtion (STA)

wlan_mgt.fixed.qosinfo.sta.ac.be  AC_BE
    Boolean
    AC_BE

wlan_mgt.fixed.qosinfo.sta.ac.bk  AC_BK
    Boolean
    AC_BK

wlan_mgt.fixed.qosinfo.sta.ac.vi  AC_VI
    Boolean
    AC_VI
```

```
wlan_mgt.fixed.qosinfo.sta.ac.vo AC_VO
  Boolean
  AC_VO

wlan_mgt.fixed.qosinfo.sta.moredataack More Data Ack
  Boolean
  More Data Ack

wlan_mgt.fixed.qosinfo.sta.qack Q-Ack
  Boolean
  QoS Ack

wlan_mgt.fixed.qosinfo.sta.splen Service Period (SP) Length
  Unsigned 8-bit integer
  Service Period (SP) Length

wlan_mgt.fixed.reason_code Reason code
  Unsigned 16-bit integer
  Reason for unsolicited notification

wlan_mgt.fixed.sequence Starting Sequence Number
  Unsigned 16-bit integer
  Starting Sequence Number

wlan_mgt.fixed.sm.powercontrol Spatial Multiplexing (SM) Power Control
  Unsigned 8-bit integer
  Spatial Multiplexing (SM) Power Control

wlan_mgt.fixed.sm.powercontrol.enabled SM Power Save
  Boolean
  Spatial Multiplexing (SM) Power Save

wlan_mgt.fixed.sm.powercontrol.mode SM Mode
  Boolean
  Spatial Multiplexing (SM) Mode

wlan_mgt.fixed.sm.powercontrol.reserved Reserved
  Unsigned 8-bit integer
  Reserved

wlan_mgt.fixed.src_mac_addr Source address
  6-byte Hardware (MAC) Address
  Source MAC address

wlan_mgt.fixed.ssc Block Ack Starting Sequence Control (SSC)
  Unsigned 16-bit integer
  Block Ack Starting Sequence Control (SSC)

wlan_mgt.fixed.status_code Status code
  Unsigned 16-bit integer
  Status of requested event

wlan_mgt.fixed.timestamp Timestamp
  String
  Timestamp

wlan_mgt.fixed.tnoisefloor Transceiver Noise Floor
  Unsigned 8-bit integer
  Transceiver Noise Floor

wlan_mgt.fixed.txpwr Transmit Power Used
  Unsigned 8-bit integer
  Transmit Power Used
```

```
wlan_mgt.ht.ampduparam  A-MPDU Parameters
    Unsigned 16-bit integer
    A-MPDU Parameters

wlan_mgt.ht.ampduparam.maxlength  Maximum Rx A-MPDU Length
    Unsigned 8-bit integer
    Maximum Rx A-MPDU Length

wlan_mgt.ht.ampduparam.mpdudensity  MPDU Density
    Unsigned 8-bit integer
    MPDU Density

wlan_mgt.ht.ampduparam.reserved  Reserved
    Unsigned 8-bit integer
    Reserved

wlan_mgt.ht.capabilities  HT Capabilities Info
    Unsigned 16-bit integer
    HT Capability information

wlan_mgt.ht.capabilities.40mhzintolerant  HT Forty MHz Intolerant
    Boolean
    HT Forty MHz Intolerant

wlan_mgt.ht.capabilities.amsdu  HT Max A-MSDU length
    Boolean
    HT Max A-MSDU length

wlan_mgt.ht.capabilities.delayedblockack  HT Delayed Block ACK
    Boolean
    HT Delayed Block ACK

wlan_mgt.ht.capabilities.dsssck  HT DSSS/CCK mode in 40MHz
    Boolean
    HT DSS/CCK mode in 40MHz

wlan_mgt.ht.capabilities.green  HT Green Field
    Boolean
    HT Green Field

wlan_mgt.ht.capabilities.ldpccoding  HT LDPC coding capability
    Boolean
    HT LDPC coding capability

wlan_mgt.ht.capabilities.lsig  HT L-SIG TXOP Protection support
    Boolean
    HT L-SIG TXOP Protection support

wlan_mgt.ht.capabilities.psm  HT PSMP Support
    Boolean
    HT PSMP Support

wlan_mgt.ht.capabilities.rxstbc  HT Rx STBC
    Unsigned 16-bit integer
    HT Tx STBC

wlan_mgt.ht.capabilities.short20  HT Short GI for 20MHz
    Boolean
    HT Short GI for 20MHz

wlan_mgt.ht.capabilities.short40  HT Short GI for 40MHz
    Boolean
    HT Short GI for 40MHz
```

```
wlan_mgt.ht.capabilities.sm    HT SM Power Save
    Unsigned 16-bit integer
    HT SM Power Save

wlan_mgt.ht.capabilities.txstbc  HT Tx STBC
    Boolean
    HT Tx STBC

wlan_mgt.ht.capabilities.width  HT Support channel width
    Boolean
    HT Support channel width

wlan_mgt.ht.info.             Shortest service interval
    Unsigned 8-bit integer
    Shortest service interval

wlan_mgt.ht.info.burstlim      Transmit burst limit
    Boolean
    Transmit burst limit

wlan_mgt.ht.info.chanwidth     Supported channel width
    Boolean
    Supported channel width

wlan_mgt.ht.info.delim1        HT Information Delimiter #1
    Unsigned 8-bit integer
    HT Information Delimiter #1

wlan_mgt.ht.info.delim2        HT Information Delimiter #2
    Unsigned 16-bit integer
    HT Information Delimiter #2

wlan_mgt.ht.info.delim3        HT Information Delimiter #3
    Unsigned 16-bit integer
    HT Information Delimiter #3

wlan_mgt.ht.info.dualbeacon     Dual beacon
    Boolean
    Dual beacon

wlan_mgt.ht.info.dualcts       Dual Clear To Send (CTS) protection
    Boolean
    Dual Clear To Send (CTS) protection

wlan_mgt.ht.info.greenfield     Non-greenfield STAs present
    Boolean
    Non-greenfield STAs present

wlan_mgt.ht.info.lsigprotsupport L-SIG TXOP Protection Full Support
    Boolean
    L-SIG TXOP Protection Full Support

wlan_mgt.ht.info.obssnonht     OBSS non-HT STAs present
    Boolean
    OBSS non-HT STAs present

wlan_mgt.ht.info.operatingmode  Operating mode of BSS
    Unsigned 16-bit integer
    Operating mode of BSS

wlan_mgt.ht.info.pco.active     Phased Coexistence Operation (PCO)
    Boolean
    Phased Coexistence Operation (PCO)
```

```
wlan_mgt.ht.info.pco.phase   Phased Coexistence Operation (PCO) Phase
    Boolean
    Phased Coexistence Operation (PCO) Phase
wlan_mgt.ht.info.primarychannel Primary Channel
    Unsigned 8-bit integer
    Primary Channel
wlan_mgt.ht.info.psmponly   Power Save Multi-Poll (PSMP) stations only
    Boolean
    Power Save Multi-Poll (PSMP) stations only
wlan_mgt.ht.info.reserved1  Reserved
    Unsigned 16-bit integer
    Reserved
wlan_mgt.ht.info.reserved2  Reserved
    Unsigned 16-bit integer
    Reserved
wlan_mgt.ht.info.reserved3  Reserved
    Unsigned 16-bit integer
    Reserved
wlan_mgt.ht.info.rifs      Reduced Interframe Spacing (RIFS)
    Boolean
    Reduced Interframe Spacing (RIFS)
wlan_mgt.ht.info.secchanoffset Secondary channel offset
    Unsigned 8-bit integer
    Secondary channel offset
wlan_mgt.ht.info.secondarybeacon Beacon ID
    Boolean
    Beacon ID
wlan_mgt.ht.mcsset        Rx Supported Modulation and Coding Scheme Set
    String
    Rx Supported Modulation and Coding Scheme Set
wlan_mgt.ht.mcsset.highestdatarate Highest Supported Data Rate
    Unsigned 16-bit integer
    Highest Supported Data Rate
wlan_mgt.ht.mcsset.rxbitmask.0to7 Rx Bitmask Bits 0-7
    Unsigned 32-bit integer
    Rx Bitmask Bits 0-7
wlan_mgt.ht.mcsset.rxbitmask.16to23 Rx Bitmask Bits 16-23
    Unsigned 32-bit integer
    Rx Bitmask Bits 16-23
wlan_mgt.ht.mcsset.rxbitmask.24to31 Rx Bitmask Bits 24-31
    Unsigned 32-bit integer
    Rx Bitmask Bits 24-31
wlan_mgt.ht.mcsset.rxbitmask.32 Rx Bitmask Bit 32
    Unsigned 32-bit integer
    Rx Bitmask Bit 32
wlan_mgt.ht.mcsset.rxbitmask.33to38 Rx Bitmask Bits 33-38
    Unsigned 32-bit integer
    Rx Bitmask Bits 33-38
```

```
wlan_mgt.ht.mcsset.rxbitmask.39to52  Rx Bitmask Bits 39-52
    Unsigned 32-bit integer
    Rx Bitmask Bits 39-52

wlan_mgt.ht.mcsset.rxbitmask.53to76  Rx Bitmask Bits 53-76
    Unsigned 32-bit integer
    Rx Bitmask Bits 53-76

wlan_mgt.ht.mcsset.rxbitmask.8to15  Rx Bitmask Bits 8-15
    Unsigned 32-bit integer
    Rx Bitmask Bits 8-15

wlan_mgt.ht.mcsset.txmaxss  Tx Maximum Number of Spatial Streams Supported
    Unsigned 16-bit integer
    Tx Maximum Number of Spatial Streams Supported

wlan_mgt.ht.mcsset.txrxmcsnotequal  Tx and Rx MCS Set
    Boolean
    Tx and Rx MCS Set

wlan_mgt.ht.mcsset.txsetdefined  Tx Supported MCS Set
    Boolean
    Tx Supported MCS Set

wlan_mgt.ht.mcsset.txunequalmod  Unequal Modulation
    Boolean
    Unequal Modulation

wlan_mgt.hta.capabilities  HT Additional Capabilities
    Unsigned 16-bit integer
    HT Additional Capability information

wlan_mgt.hta.capabilities.  Basic STB Modulation and Coding Scheme (MCS)
    Unsigned 16-bit integer
    Basic STB Modulation and Coding Scheme (MCS)

wlan_mgt.hta.capabilities.controlledaccess  Controlled Access Only
    Boolean
    Controlled Access Only

wlan_mgt.hta.capabilities.extchan  Extension Channel Offset
    Unsigned 16-bit integer
    Extension Channel Offset

wlan_mgt.hta.capabilities.nongfdevices  Non Greenfield (GF) devices Present
    Boolean
    on Greenfield (GF) devices Present

wlan_mgt.hta.capabilities.operatingmode  Operating Mode
    Unsigned 16-bit integer
    Operating Mode

wlan_mgt.hta.capabilities.rectxwidth  Recommended Tx Channel Width
    Boolean
    Recommended Transmit Channel Width

wlan_mgt.hta.capabilities.rifsmode  Reduced Interframe Spacing (RIFS) Mode
    Boolean
    Reduced Interframe Spacing (RIFS) Mode

wlan_mgt.hta.capabilities.serviceinterval  Service Interval Granularity
    Unsigned 16-bit integer
    Service Interval Granularity
```

```
wlan_mgt.htc    HT Control (+HTC)
                Unsigned 32-bit integer
                High Throughput Control (+HTC)
wlan_mgt.htc.ac_constraint  AC Constraint
                Boolean
                High Throughput Control AC Constraint
wlan_mgt.htc.cal.pos    Calibration Position
                Unsigned 16-bit integer
                High Throughput Control Calibration Position
wlan_mgt.htc.cal.seq    Calibration Sequence Identifier
                Unsigned 16-bit integer
                High Throughput Control Calibration Sequence Identifier
wlan_mgt.htc.csi_steering  CSI/Steering
                Unsigned 16-bit integer
                High Throughput Control CSI/Steering
wlan_mgt.htc.lac    Link Adaptation Control (LAC)
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control (LAC)
wlan_mgt.htc.lac.asel.command  Antenna Selection (ASEL) Command
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control Antenna Selection (ASEL) Com
wlan_mgt.htc.lac.asel.data    Antenna Selection (ASEL) Data
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control Antenna Selection (ASEL) Dat
wlan_mgt.htc.lac.mai.aseli    Antenna Selection Indication (ASELI)
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control MAI Antenna Selection Indica
wlan_mgt.htc.lac.mai.mrq    MCS Request (MRQ)
                Boolean
                High Throughput Control Link Adaptation Control MAI MCS Request
wlan_mgt.htc.lac.mai.msi    MCS Request Sequence Identifier (MSI)
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control MAI MCS Request Sequence Ide
wlan_mgt.htc.lac.mai.reserved  Reserved
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control MAI Reserved
wlan_mgt.htc.lac.mfb    MCS Feedback (MFB)
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control MCS Feedback
wlan_mgt.htc.lac.mfsi    MCS Feedback Sequence Identifier (MFSI)
                Unsigned 16-bit integer
                High Throughput Control Link Adaptation Control MCS Feedback Sequence Ident
wlan_mgt.htc.lac.reserved  Reserved
                Boolean
                High Throughput Control Link Adaptation Control Reserved
wlan_mgt.htc.lac.trq    Training Request (TRQ)
                Boolean
                High Throughput Control Link Adaptation Control Training Request (TRQ)
```



```
wlan_mgt.htc.ndp_announcement  NDP Announcement
    Boolean
    High Throughput Control NDP Announcement
wlan_mgt.htc.rdg_more_ppdu  RDG/More PPDU
    Boolean
    High Throughput Control RDG/More PPDU
wlan_mgt.htc.reserved1  Reserved
    Unsigned 16-bit integer
    High Throughput Control Reserved
wlan_mgt.htc.reserved2  Reserved
    Unsigned 16-bit integer
    High Throughput Control Reserved
wlan_mgt.htex.capabilities  HT Extended Capabilities
    Unsigned 16-bit integer
    HT Extended Capability information
wlan_mgt.htex.capabilities.htc  High Throughput
    Boolean
    High Throughput
wlan_mgt.htex.capabilities.mcs  MCS Feedback capability
    Unsigned 16-bit integer
    MCS Feedback capability
wlan_mgt.htex.capabilities.pco  Transmitter supports PCO
    Boolean
    Transmitter supports PCO
wlan_mgt.htex.capabilities.rdresponder  Reverse Direction Responder
    Boolean
    Reverse Direction Responder
wlan_mgt.htex.capabilities.transtime  Time needed to transition between 20MHz and
    Unsigned 16-bit integer
    Time needed to transition between 20MHz and 40MHz
wlan_mgt.measure.rep.antid  Antenna ID
    Unsigned 8-bit integer
    Antenna ID
wlan_mgt.measure.rep.bssid  BSSID Being Reported
    6-byte Hardware (MAC) Address
    BSSID Being Reported
wlan_mgt.measure.rep.ccabusy  CCA Busy Fraction
    Unsigned 8-bit integer
    CCA Busy Fraction
wlan_mgt.measure.rep.chanload  Channel Load
    Unsigned 8-bit integer
    Channel Load
wlan_mgt.measure.rep.channelnumber  Measurement Channel Number
    Unsigned 8-bit integer
    Measurement Channel Number
wlan_mgt.measure.rep.frameinfo  Reported Frame Information
    Unsigned 8-bit integer
    Reported Frame Information
```

```
wlan_mgt.measure.rep.frameinfo.frameinfo.frameinfo.frameinfo.frameinfo.frameinfo
  Reported Frame Type
  Unsigned 8-bit integer
  Reported Frame Type

wlan_mgt.measure.rep.frameinfo.phytype Condensed PHY
  Unsigned 8-bit integer
  Condensed PHY

wlan_mgt.measure.rep.mapfield Map Field
  Unsigned 8-bit integer
  Map Field

wlan_mgt.measure.rep.parenttsf Parent Timing Synchronization Function (TSF)
  Unsigned 32-bit integer
  Parent Timing Synchronization Function (TSF)

wlan_mgt.measure.rep.rcpi Received Channel Power Indicator (RCPI)
  Unsigned 8-bit integer
  Received Channel Power Indicator (RCPI)

wlan_mgt.measure.rep.regclass Regulatory Class
  Unsigned 8-bit integer
  Regulatory Class

wlan_mgt.measure.rep.repmode.incapable Measurement Reports
  Boolean
  Measurement Reports

wlan_mgt.measure.rep.repmode.late Measurement Report Mode Field
  Boolean
  Measurement Report Mode Field

wlan_mgt.measure.rep.repmode.mapfield.bss BSS
  Boolean
  BSS

wlan_mgt.measure.rep.repmode.mapfield.radar Radar
  Boolean
  Radar

wlan_mgt.measure.rep.repmode.mapfield.reserved Reserved
  Unsigned 8-bit integer
  Reserved

wlan_mgt.measure.rep.repmode.mapfield.unidentsig Unidentified Signal
  Boolean
  Unidentified Signal

wlan_mgt.measure.rep.repmode.mapfield.unmeasured Unmeasured
  Boolean
  Unmeasured

wlan_mgt.measure.rep.repmode.refused Autonomous Measurement Reports
  Boolean
  Autonomous Measurement Reports

wlan_mgt.measure.rep.repmode.reserved Reserved
  Unsigned 8-bit integer
  Reserved

wlan_mgt.measure.rep.reptype Measurement Report Type
  Unsigned 8-bit integer
  Measurement Report Type
```

```
wlan_mgt.measure.rep.rpi.histogram_report  Receive Power Indicator (RPI) Histogram  
String  
Receive Power Indicator (RPI) Histogram Report  
wlan_mgt.measure.rep.rpi.rpi0density  RPI 0 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 0 Density  
wlan_mgt.measure.rep.rpi.rpi1density  RPI 1 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 1 Density  
wlan_mgt.measure.rep.rpi.rpi2density  RPI 2 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 2 Density  
wlan_mgt.measure.rep.rpi.rpi3density  RPI 3 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 3 Density  
wlan_mgt.measure.rep.rpi.rpi4density  RPI 4 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 4 Density  
wlan_mgt.measure.rep.rpi.rpi5density  RPI 5 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 5 Density  
wlan_mgt.measure.rep.rpi.rpi6density  RPI 6 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 6 Density  
wlan_mgt.measure.rep.rpi.rpi7density  RPI 7 Density  
Unsigned 8-bit integer  
Receive Power Indicator (RPI) 7 Density  
wlan_mgt.measure.rep.rsni  Received Signal to Noise Indicator (RSNI)  
Unsigned 8-bit integer  
Received Signal to Noise Indicator (RSNI)  
wlan_mgt.measure.rep.starttime  Measurement Start Time  
Unsigned 64-bit integer  
Measurement Start Time  
wlan_mgt.measure.req.bssid  BSSID  
6-byte Hardware (MAC) Address  
BSSID  
wlan_mgt.measure.req.channelnumber  Measurement Channel Number  
Unsigned 8-bit integer  
Measurement Channel Number  
wlan_mgt.measure.req.clr  Measurement Token  
Unsigned 8-bit integer  
Measurement Token  
wlan_mgt.measure.req.groupid  Group ID  
Unsigned 8-bit integer  
Group ID  
wlan_mgt.measure.req.measurementmode  Measurement Mode  
Unsigned 8-bit integer  
Measurement Mode
```

```
wlan_mgt.measure.req.measuretoken  Measurement Token
    Unsigned 8-bit integer
    Measurement Token

wlan_mgt.measure.req.randint  Randomization Interval
    Unsigned 16-bit integer
    Randomization Interval

wlan_mgt.measure.req.regclass  Measurement Channel Number
    Unsigned 8-bit integer
    Measurement Channel Number

wlan_mgt.measure.req.repcnd  Reporting Condition
    Unsigned 8-bit integer
    Reporting Condition

wlan_mgt.measure.req.reportmac  MAC on which to gather data
    6-byte Hardware (MAC) Address
    MAC on which to gather data

wlan_mgt.measure.req.reqmode  Measurement Request Mode
    Unsigned 8-bit integer
    Measurement Request Mode

wlan_mgt.measure.req.reqmode.enable  Measurement Request Mode Field
    Boolean
    Measurement Request Mode Field

wlan_mgt.measure.req.reqmode.report  Autonomous Measurement Reports
    Boolean
    Autonomous Measurement Reports

wlan_mgt.measure.req.reqmode.request  Measurement Reports
    Boolean
    Measurement Reports

wlan_mgt.measure.req.reqmode.reserved1  Reserved
    Unsigned 8-bit integer
    Reserved

wlan_mgt.measure.req.reqmode.reserved2  Reserved
    Unsigned 8-bit integer
    Reserved

wlan_mgt.measure.req.reqtype  Measurement Request Type
    Unsigned 8-bit integer
    Measurement Request Type

wlan_mgt.measure.req.starttime  Measurement Start Time
    Unsigned 64-bit integer
    Measurement Start Time

wlan_mgt.measure.req.threshold  Threshold/Offset
    Unsigned 8-bit integer
    Threshold/Offset

wlan_mgt.mimo.csimatrices.snr  Signal to Noise Ratio (SNR)
    Unsigned 8-bit integer
    Signal to Noise Ratio (SNR)

wlan_mgt.nreport.bssid  BSSID
    6-byte Hardware (MAC) Address
    BSSID
```

```
wlan_mgt.nreport.bssid.info    BSSID Information
    Unsigned 32-bit integer
    BSSID Information

wlan_mgt.nreport.bssid.info.capability.apsd    Capability: APSD
    Unsigned 16-bit integer
    Capability: APSD

wlan_mgt.nreport.bssid.info.capability.dback    Capability: Delayed Block Ack
    Unsigned 16-bit integer
    Capability: Delayed Block Ack

wlan_mgt.nreport.bssid.info.capability.iback    Capability: Immediate Block Ack
    Unsigned 16-bit integer
    Capability: Immediate Block Ack

wlan_mgt.nreport.bssid.info.capability.qos    Capability: QoS
    Unsigned 16-bit integer
    Capability: QoS

wlan_mgt.nreport.bssid.info.capability.radiomsnt    Capability: Radio Measurement
    Unsigned 16-bit integer
    Capability: Radio Measurement

wlan_mgt.nreport.bssid.info.capability.specmngt    Capability: Spectrum Management
    Unsigned 16-bit integer
    Capability: Spectrum Management

wlan_mgt.nreport.bssid.info.hthroughput    High Throughput
    Unsigned 16-bit integer
    High Throughput

wlan_mgt.nreport.bssid.info.keyscope    Key Scope
    Unsigned 16-bit integer
    Key Scope

wlan_mgt.nreport.bssid.info.mobilitydomain    Mobility Domain
    Unsigned 16-bit integer
    Mobility Domain

wlan_mgt.nreport.bssid.info.reachability    AP Reachability
    Unsigned 16-bit integer
    AP Reachability

wlan_mgt.nreport.bssid.info.reserved    Reserved
    Unsigned 32-bit integer
    Reserved

wlan_mgt.nreport.bssid.info.security    Security
    Unsigned 16-bit integer
    Security

wlan_mgt.nreport.channumber    Channel Number
    Unsigned 8-bit integer
    Channel Number

wlan_mgt.nreport.phytype    PHY Type
    Unsigned 8-bit integer
    PHY Type

wlan_mgt.nreport.regclass    Regulatory Class
    Unsigned 8-bit integer
    Regulatory Class
```

```
wlan_mgt.powercap.max  Maximum Transmit Power
    Unsigned 8-bit integer
    Maximum Transmit Power

wlan_mgt.powercap.min  Minimum Transmit Power
    Unsigned 8-bit integer
    Minimum Transmit Power

wlan_mgt.qbss.adc  Available Admission Capabilities
    Unsigned 8-bit integer
    Available Admission Capabilities

wlan_mgt.qbss.cu  Channel Utilization
    Unsigned 8-bit integer
    Channel Utilization

wlan_mgt.qbss.scount  Station Count
    Unsigned 16-bit integer
    Station Count

wlan_mgt.qbss.version  QBSS Version
    Unsigned 8-bit integer
    QBSS Version

wlan_mgt.qbss2.cal  Call Admission Limit
    Unsigned 8-bit integer
    Call Admission Limit

wlan_mgt.qbss2.cu  Channel Utilization
    Unsigned 8-bit integer
    Channel Utilization

wlan_mgt.qbss2.glimit  G.711 CU Quantum
    Unsigned 8-bit integer
    G.711 CU Quantum

wlan_mgt.qbss2.scount  Station Count
    Unsigned 16-bit integer
    Station Count

wlan_mgt.rsn.capabilities  RSN Capabilities
    Unsigned 16-bit integer
    RSN Capability information

wlan_mgt.rsn.capabilities.gtksa_replay_counter  RSN GTKSA Replay Counter capabilities
    Unsigned 16-bit integer
    RSN GTKSA Replay Counter capabilities

wlan_mgt.rsn.capabilities.no_pairwise  RSN No Pairwise capabilities
    Boolean
    RSN No Pairwise capabilities

wlan_mgt.rsn.capabilities.preauth  RSN Pre-Auth capabilities
    Boolean
    RSN Pre-Auth capabilities

wlan_mgt.rsn.capabilities.ptksa_replay_counter  RSN PTKSA Replay Counter capabilities
    Unsigned 16-bit integer
    RSN PTKSA Replay Counter capabilities

wlan_mgt.sched.sched_info  Schedule Info
    Unsigned 16-bit integer
    Schedule Info field
```

```
wlan_mgt.sched.spec_int  Specification Interval
    Unsigned 16-bit integer
    Specification Interval

wlan_mgt.sched.srv_int  Service Interval
    Unsigned 32-bit integer
    Service Interval

wlan_mgt.sched.srv_start  Service Start Time
    Unsigned 32-bit integer
    Service Start Time

wlan_mgt.secchanoffset  Secondary Channel Offset
    Unsigned 8-bit integer
    Secondary Channel Offset

wlan_mgt.supchan  Supported Channels Set
    Unsigned 8-bit integer
    Supported Channels Set

wlan_mgt.supchan.first  First Supported Channel
    Unsigned 8-bit integer
    First Supported Channel

wlan_mgt.supchan.range  Supported Channel Range
    Unsigned 8-bit integer
    Supported Channel Range

wlan_mgt.supregclass.alt  Alternate Regulatory Classes
    String
    Alternate Regulatory Classes

wlan_mgt.supregclass.current  Current Regulatory Class
    Unsigned 8-bit integer
    Current Regulatory Class

wlan_mgt.tag.interpretation  Tag interpretation
    String
    Interpretation of tag

wlan_mgt.tag.length  Tag length
    Unsigned 8-bit integer
    Length of tag

wlan_mgt.tag.number  Tag
    Unsigned 8-bit integer
    Element ID

wlan_mgt.tag.oui  OUI
    Byte array
    OUI of vendor specific IE

wlan_mgt.tagged.all  Tagged parameters
    Unsigned 16-bit integer
    Tagged parameters

wlan_mgt.tclas.class_mask  Classifier Mask
    Unsigned 8-bit integer
    Classifier Mask

wlan_mgt.tclas.class_type  Classifier Type
    Unsigned 8-bit integer
    Classifier Type
```

```
wlan_mgt.tclas.params.dscp  IPv4 DSCP
    Unsigned 8-bit integer
    IPv4 Differentiated Services Code Point (DSCP) Field

wlan_mgt.tclas.params.dst_port  Destination Port
    Unsigned 16-bit integer
    Destination Port

wlan_mgt.tclas.params.flow  Flow Label
    Unsigned 24-bit integer
    IPv6 Flow Label

wlan_mgt.tclas.params.ipv4_dst  IPv4 Dst Addr
    IPv4 address
    IPv4 Dst Addr

wlan_mgt.tclas.params.ipv4_src  IPv4 Src Addr
    IPv4 address
    IPv4 Src Addr

wlan_mgt.tclas.params.ipv6_dst  IPv6 Dst Addr
    IPv6 address
    IPv6 Dst Addr

wlan_mgt.tclas.params.ipv6_src  IPv6 Src Addr
    IPv6 address
    IPv6 Src Addr

wlan_mgt.tclas.params.protocol  Protocol
    Unsigned 8-bit integer
    IPv4 Protocol

wlan_mgt.tclas.params.src_port  Source Port
    Unsigned 16-bit integer
    Source Port

wlan_mgt.tclas.params.tag_type  802.1Q Tag Type
    Unsigned 16-bit integer
    802.1Q Tag Type

wlan_mgt.tclas.params.type  Ethernet Type
    Unsigned 8-bit integer
    Classifier Parameters Ethernet Type

wlan_mgt.tclas.params.version  IP Version
    Unsigned 8-bit integer
    IP Version

wlan_mgt.tclas_proc.processing  Processing
    Unsigned 8-bit integer
    TCLAS Processing

wlan_mgt.tim.bmapctl  Bitmap control
    Unsigned 8-bit integer
    Bitmap control

wlan_mgt.tim.dtim_count  DTIM count
    Unsigned 8-bit integer
    DTIM count

wlan_mgt.tim.dtim_period  DTIM period
    Unsigned 8-bit integer
    DTIM period
```



```
wlan_mgt.tim.length  TIM length
    Unsigned 8-bit integer
    Traffic Indication Map length

wlan_mgt.ts_delay  Traffic Stream (TS) Delay
    Unsigned 32-bit integer
    Traffic Stream (TS) Delay

wlan_mgt.ts_info  Traffic Stream (TS) Info
    Unsigned 24-bit integer
    Traffic Stream (TS) Info field

wlan_mgt.ts_info.ack  Ack Policy
    Unsigned 8-bit integer
    Traffic Stream (TS) Info Ack Policy

wlan_mgt.ts_info.agg  Aggregation
    Unsigned 8-bit integer
    Traffic Stream (TS) Info Access Policy

wlan_mgt.ts_info.apsd  Automatic Power-Save Delivery (APSD)
    Unsigned 8-bit integer
    Traffic Stream (TS) Info Automatic Power-Save Delivery (APSD)

wlan_mgt.ts_info.dir  Direction
    Unsigned 8-bit integer
    Traffic Stream (TS) Info Direction

wlan_mgt.ts_info.sched  Schedule
    Unsigned 8-bit integer
    Traffic Stream (TS) Info Schedule

wlan_mgt.ts_info.tsid  Traffic Stream ID (TSID)
    Unsigned 8-bit integer
    Traffic Stream ID (TSID) Info TSID

wlan_mgt.ts_info.type  Traffic Type
    Unsigned 8-bit integer
    Traffic Stream (TS) Info Traffic Type

wlan_mgt.ts_info.up  User Priority
    Unsigned 8-bit integer
    Traffic Stream (TS) Info User Priority

wlan_mgt.tspec.burst_size  Burst Size
    Unsigned 32-bit integer
    Burst Size

wlan_mgt.tspec.delay_bound  Delay Bound
    Unsigned 32-bit integer
    Delay Bound

wlan_mgt.tspec.inact_int  Inactivity Interval
    Unsigned 32-bit integer
    Inactivity Interval

wlan_mgt.tspec.max_msdu  Maximum MSDU Size
    Unsigned 16-bit integer
    Maximum MSDU Size

wlan_mgt.tspec.max_srv  Maximum Service Interval
    Unsigned 32-bit integer
    Maximum Service Interval
```

```
wlan_mgt.tspec.mean_data  Mean Data Rate
    Unsigned 32-bit integer
    Mean Data Rate

wlan_mgt.tspec.medium     Medium Time
    Unsigned 16-bit integer
    Medium Time

wlan_mgt.tspec.min_data   Minimum Data Rate
    Unsigned 32-bit integer
    Minimum Data Rate

wlan_mgt.tspec.min_phy    Minimum PHY Rate
    Unsigned 32-bit integer
    Minimum PHY Rate

wlan_mgt.tspec.min_srv    Minimum Service Interval
    Unsigned 32-bit integer
    Minimum Service Interval

wlan_mgt.tspec.nor_msdu   Normal MSDU Size
    Unsigned 16-bit integer
    Normal MSDU Size

wlan_mgt.tspec.peak_data  Peak Data Rate
    Unsigned 32-bit integer
    Peak Data Rate

wlan_mgt.tspec.srv_start  Service Start Time
    Unsigned 32-bit integer
    Service Start Time

wlan_mgt.tspec.surplus    Surplus Bandwidth Allowance
    Unsigned 16-bit integer
    Surplus Bandwidth Allowance

wlan_mgt.tspec.susp_int   Suspension Interval
    Unsigned 32-bit integer
    Suspension Interval

wlan_mgt.txbf             Transmit Beam Forming (TxBF) Capabilities
    Unsigned 16-bit integer
    Transmit Beam Forming (TxBF) Capabilities

wlan_mgt.txbf.calibration Calibration
    Unsigned 32-bit integer
    Calibration

wlan_mgt.txbf.channelest  Maximum number of space time streams for which channel
    Unsigned 32-bit integer
    Maximum number of space time streams for which channel dimensions can be sim

wlan_mgt.txbf.csi         STA can apply TxBF using CSI explicit feedback
    Boolean
    Station can apply TxBF using CSI explicit feedback

wlan_mgt.txbf.csi.maxrows Maximum number of rows of CSI explicit feedback
    Unsigned 32-bit integer
    Maximum number of rows of CSI explicit feedback

wlan_mgt.txbf.csinumant   Max antennae STA can support when CSI feedback required
    Unsigned 32-bit integer
    Max antennae station can support when CSI feedback required
```

wlan\_mgt.txbf.fm.compressed.bf STA can compress and use compressed Beamforming  
Unsigned 32-bit integer  
Station can compress and use compressed Beamforming Feedback Matrix

wlan\_mgt.txbf.fm.compressed.maxant Max antennae STA can support when compressed  
Unsigned 32-bit integer  
Max antennae station can support when compressed Beamforming feedback require

wlan\_mgt.txbf.fm.compressed.tbf STA can apply TxBF using compressed beamforming  
Boolean  
Station can apply TxBF using compressed beamforming feedback matrix

wlan\_mgt.txbf.fm.uncompressed.maxant Max antennae STA can support when uncompressed  
Unsigned 32-bit integer  
Max antennae station can support when uncompressed Beamforming feedback require

wlan\_mgt.txbf.fm.uncompressed.rbf Receiver can return explicit uncompressed Beamforming  
Unsigned 32-bit integer  
Receiver can return explicit uncompressed Beamforming Feedback Matrix

wlan\_mgt.txbf.fm.uncompressed.tbf STA can apply TxBF using uncompressed beamforming  
Boolean  
Station can apply TxBF using uncompressed beamforming feedback matrix

wlan\_mgt.txbf.impltxbf Implicit TxBF capable  
Boolean  
Implicit Transmit Beamforming (TxBF) capable

wlan\_mgt.txbf.mingroup Minimal grouping used for explicit feedback reports  
Unsigned 32-bit integer  
Minimal grouping used for explicit feedback reports

wlan\_mgt.txbf.rcsi Receiver can return explicit CSI feedback  
Unsigned 32-bit integer  
Receiver can return explicit CSI feedback

wlan\_mgt.txbf.reserved Reserved  
Unsigned 32-bit integer  
Reserved

wlan\_mgt.txbf.rxndp Receive Null Data packet (NDP)  
Boolean  
Receive Null Data packet (NDP)

wlan\_mgt.txbf.rxss Receive Staggered Sounding  
Boolean  
Receive Staggered Sounding

wlan\_mgt.txbf.txbf Transmit Beamforming  
Boolean  
Transmit Beamforming

wlan\_mgt.txbf.txndp Transmit Null Data packet (NDP)  
Boolean  
Transmit Null Data packet (NDP)

wlan\_mgt.txbf.txss Transmit Staggered Sounding  
Boolean  
Transmit staggered sounding

wlan\_mgt.vs.asel Antenna Selection (ASEL) Capabilities (VS)  
Unsigned 8-bit integer  
Vendor Specific Antenna Selection (ASEL) Capabilities

wlan\_mgt.vs.ht.ampduparam A-MPDU Parameters (VS)  
 Unsigned 16-bit integer  
 Vendor Specific A-MPDU Parameters

wlan\_mgt.vs.ht.capabilities HT Capabilities Info (VS)  
 Unsigned 16-bit integer  
 Vendor Specific HT Capability information

wlan\_mgt.vs.ht.mcsset Rx Supported Modulation and Coding Scheme Set (VS)  
 String  
 Vendor Specific Rx Supported Modulation and Coding Scheme Set

wlan\_mgt.vs.htex.capabilities HT Extended Capabilities (VS)  
 Unsigned 16-bit integer  
 Vendor Specific HT Extended Capability information

wlan\_mgt.vs.txbf Transmit Beam Forming (TxBF) Capabilities (VS)  
 Unsigned 16-bit integer  
 Vendor Specific Transmit Beam Forming (TxBF) Capabilities

#### IEEE 802.15.4 Low-Rate Wireless PAN (wpan)

wpan.ack\_request Acknowledge Request  
 Boolean  
 Whether the sender of this packet requests acknowledgement or not.

wpan.bcn.assoc\_permit Association Permit  
 Boolean  
 Whether this PAN is accepting association requests or not.

wpan.bcn.battery\_ext Battery Extension  
 Boolean  
 Whether transmissions may not extend past the length of the beacon frame.

wpan.bcn.beacon\_order Beacon Interval  
 Unsigned 8-bit integer  
 Specifies the transmission interval of the beacons.

wpan.bcn.cap Final CAP Slot  
 Unsigned 8-bit integer  
 Specifies the final superframe slot used by the CAP.

wpan.bcn.coord PAN Coordinator  
 Boolean  
 Whether this beacon frame is being transmitted by the PAN coordinator or not.

wpan.bcn.gts.count GTS Descriptor Count  
 Unsigned 8-bit integer  
 The number of GTS descriptors present in this beacon frame.

wpan.bcn.gts.direction Direction  
 Boolean  
 A flag defining the direction of the GTS Slot.

wpan.bcn.gts.permit GTS Permit  
 Boolean  
 Whether the PAN coordinator is accepting GTS requests or not.

wpan.bcn.pending16 Address  
 Unsigned 16-bit integer  
 Device with pending data to receive.

wpan.bcn.pending64 Address  
Unsigned 64-bit integer  
Device with pending data to receive.

wpan.bcn.superframe\_order Superframe Interval  
Unsigned 8-bit integer  
Specifies the length of time the coordinator will interact with the PAN.

wpan.cmd.asrsp.addr Short Address  
Unsigned 16-bit integer  
The short address that the device should assume. An address of 0xffff indicates that the device should use the short address of the coordinator.

wpan.cmd.asrsp.status Association Status  
Unsigned 8-bit integer

wpan.cmd.cinfo.alloc\_addr Allocate Address  
Boolean  
Whether this device wishes to use a 16-bit short address instead of its IEEE 802.15.4 address.

wpan.cmd.cinfo.alt\_coord Alternate PAN Coordinator  
Boolean  
Whether this device can act as a PAN coordinator or not.

wpan.cmd.cinfo.device\_type Device Type  
Boolean  
Whether this device is RFD (reduced-function device) or FFD (full-function device).

wpan.cmd.cinfo.idle\_rx Receive On When Idle  
Boolean  
Whether this device can receive packets while idle or not.

wpan.cmd.cinfo.power\_src Power Source  
Boolean  
Whether this device is operating on AC/mains or battery power.

wpan.cmd.cinfo.sec\_capable Security Capability  
Boolean  
Whether this device is capable of receiving encrypted packets.

wpan.cmd.coord.addr Coordinator Short Address  
Unsigned 16-bit integer  
The 16-bit address the coordinator wishes to use for future communication.

wpan.cmd.coord.channel Logical Channel  
Unsigned 8-bit integer  
The logical channel the coordinator wishes to use for future communication.

wpan.cmd.coord.channel\_page Channel Page  
Unsigned 8-bit integer  
The logical channel page the coordinator wishes to use for future communication.

wpan.cmd.coord.pan PAN ID  
Unsigned 16-bit integer  
The PAN identifier the coordinator wishes to use for future communication.

wpan.cmd.disas.reason Disassociation Reason  
Unsigned 8-bit integer

wpan.cmd.gts.direction GTS Direction  
Boolean  
The direction of traffic in the guaranteed timeslot.

wpan.cmd.gts.length GTS Length  
Unsigned 8-bit integer  
Number of superframe slots the device is requesting.

wpan.cmd.gts.type Characteristic Type  
Boolean  
Whether this request is to allocate or deallocate a timeslot.

wpan.cmd.id Command Identifier  
Unsigned 8-bit integer

wpan.correlation LQI Correlation Value  
Unsigned 8-bit integer

wpan.dst\_addr16 Destination  
Unsigned 16-bit integer

wpan.dst\_addr64 Destination  
Unsigned 64-bit integer

wpan.dst\_addr\_mode Destination Addressing Mode  
Unsigned 16-bit integer

wpan.dst\_pan Destination PAN  
Unsigned 16-bit integer

wpan.fcs FCS  
Unsigned 16-bit integer

wpan.fcs\_ok FCS Valid  
Boolean

wpan.frame\_type Frame Type  
Unsigned 16-bit integer

wpan.intra\_pan Intra-PAN  
Boolean  
Whether this packet originated and terminated within the same PAN or not.

wpan.pending Frame Pending  
Boolean  
Indication of additional packets waiting to be transferred from the source d

wpan.rssi RSSI  
Signed 8-bit integer  
Received Signal Strength

wpan.security Security Enabled  
Boolean  
Whether security operations are performed at the MAC layer or not.

wpan.seq\_no Sequence Number  
Unsigned 8-bit integer

wpan.src\_addr16 Source  
Unsigned 16-bit integer

wpan.src\_addr64 Source  
Unsigned 64-bit integer

wpan.src\_addr\_mode Source Addressing Mode  
Unsigned 16-bit integer

wpan.src\_pan Source PAN  
Unsigned 16-bit integer

wpan.version Frame Version  
Unsigned 16-bit integer

**IEEE 802.1ad (ieee8021ad)**

ieee8021ad.cvid ID  
Unsigned 16-bit integer  
C-Vlan ID

ieee8021ad.dei DEI  
Unsigned 16-bit integer  
Drop Eligibility

ieee8021ad.id ID  
Unsigned 16-bit integer  
Vlan ID

ieee8021ad.priority Priority  
Unsigned 16-bit integer  
Priority

ieee8021ad.svid ID  
Unsigned 16-bit integer  
S-Vlan ID

**IEEE 802.1ah (ieee8021ah)**

ieee8021ah.cdsc C-Destination  
6-byte Hardware (MAC) Address  
Customer Destination Address

ieee8021ah.csrc C-Source  
6-byte Hardware (MAC) Address  
Customer Source Address

ieee8021ah.drop DROP  
Unsigned 32-bit integer  
Drop

ieee8021ah.etype Type  
Unsigned 16-bit integer  
Type

ieee8021ah.isid I-SID  
Unsigned 32-bit integer  
I-SID

ieee8021ah.len Length  
Unsigned 16-bit integer  
Length

ieee8021ah.nca NCA  
Unsigned 32-bit integer  
No Customer Addresses

ieee8021ah.priority Priority  
Unsigned 32-bit integer  
Priority

ieee8021ah.res1 RES1  
Unsigned 32-bit integer  
Reserved1

```
ieee8021ah.res2  RES2
    Unsigned 32-bit integer
    Reserved2

ieee8021ah.trailer  Trailer
    Byte array
    802.1ah Trailer
```

**IEEE802a OUI Extended Ethertype (ieee802a)**

```
ieee802a.oui  Organization Code
    Unsigned 24-bit integer

ieee802a.pid  Protocol ID
    Unsigned 16-bit integer
```

**ILMI (ilmi)****IP Device Control (SS7 over IP) (ipdc)**

```
ipdc.length  Payload length
    Unsigned 16-bit integer
    Payload length

ipdc.message_code  Message code
    Unsigned 16-bit integer
    Message Code

ipdc.nr  N(r)
    Unsigned 8-bit integer
    Receive sequence number

ipdc.ns  N(s)
    Unsigned 8-bit integer
    Transmit sequence number

ipdc.protocol_id  Protocol ID
    Unsigned 8-bit integer
    Protocol ID

ipdc.trans_id  Transaction ID
    Byte array
    Transaction ID

ipdc.trans_id_size  Transaction ID size
    Unsigned 8-bit integer
    Transaction ID size
```

**IP Over FC (ipfc)**

```
ipfc.nh.da  Network DA
    String

ipfc.nh.sa  Network SA
    String
```

**IP Payload Compression (ipcomp)**

```
ipcomp.cpi  IPComp CPI
    Unsigned 16-bit integer
    IP Payload Compression Protocol Compression Parameter Index
```



```
ipcomp.flags  IPComp Flags
              Unsigned 8-bit integer
              IP Payload Compression Protocol Flags
```

#### **IP Virtual Services Sync Daemon (ipvs)**

```
ipvs.caddr  Client Address
            IPv4 address
            Client Address

ipvs.conncount  Connection Count
              Unsigned 8-bit integer
              Connection Count

ipvs.cport  Client Port
           Unsigned 16-bit integer
           Client Port

ipvs.daddr  Destination Address
           IPv4 address
           Destination Address

ipvs.dport  Destination Port
           Unsigned 16-bit integer
           Destination Port

ipvs.flags  Flags
           Unsigned 16-bit integer
           Flags

ipvs.in_seq.delta  Input Sequence (Delta)
                 Unsigned 32-bit integer
                 Input Sequence (Delta)

ipvs.in_seq.initial  Input Sequence (Initial)
                   Unsigned 32-bit integer
                   Input Sequence (Initial)

ipvs.in_seq.pdelta  Input Sequence (Previous Delta)
                  Unsigned 32-bit integer
                  Input Sequence (Previous Delta)

ipvs.out_seq.delta  Output Sequence (Delta)
                  Unsigned 32-bit integer
                  Output Sequence (Delta)

ipvs.out_seq.initial  Output Sequence (Initial)
                    Unsigned 32-bit integer
                    Output Sequence (Initial)

ipvs.out_seq.pdelta  Output Sequence (Previous Delta)
                   Unsigned 32-bit integer
                   Output Sequence (Previous Delta)

ipvs.proto  Protocol
           Unsigned 8-bit integer
           Protocol

ipvs.resv8  Reserved
           Unsigned 8-bit integer
           Reserved
```

```
ipvs.size      Size
               Unsigned 16-bit integer
               Size

ipvs.state     State
               Unsigned 16-bit integer
               State

ipvs.syncid    Synchronization ID
               Unsigned 8-bit integer
               Synchronization ID

ipvs.vaddr     Virtual Address
               IPv4 address
               Virtual Address

ipvs.vport     Virtual Port
               Unsigned 16-bit integer
               Virtual Port
```

**IPX Message (ipxmsg)**

```
ipxmsg.conn    Connection Number
               Unsigned 8-bit integer
               Connection Number

ipxmsg.sigchar Signature Char
               Unsigned 8-bit integer
               Signature Char
```

**IPX Routing Information Protocol (ipxrip)**

```
ipxrip.request Request
               Boolean
               TRUE if IPX RIP request

ipxrip.response Response
               Boolean
               TRUE if IPX RIP response
```

**IPX WAN (ipxwan)**

```
ipxwan.accept_option Accept Option
               Unsigned 8-bit integer

ipxwan.compression.type Compression Type
               Unsigned 8-bit integer

ipxwan.extended_node_id Extended Node ID
               IPX network or server name

ipxwan.identifier Identifier
               String

ipxwan.nlsip_information.delay Delay
               Unsigned 32-bit integer

ipxwan.nlsip_information.throughput Throughput
               Unsigned 32-bit integer

ipxwan.nlsip_raw_throughput_data.delta_time Delta Time
               Unsigned 32-bit integer
```

```

ipxwan.nlsp_raw_throughput_data.request_size  Request Size
    Unsigned 32-bit integer

ipxwan.node_id  Node ID
    Unsigned 32-bit integer

ipxwan.node_number  Node Number
    6-byte Hardware (MAC) Address

ipxwan.num_options  Number of Options
    Unsigned 8-bit integer

ipxwan.option_data_len  Option Data Length
    Unsigned 16-bit integer

ipxwan.option_num  Option Number
    Unsigned 8-bit integer

ipxwan.packet_type  Packet Type
    Unsigned 8-bit integer

ipxwan.rip_sap_info_exchange.common_network_number  Common Network Number
    IPX network or server name

ipxwan.rip_sap_info_exchange.router_name  Router Name
    String

ipxwan.rip_sap_info_exchange.wan_link_delay  WAN Link Delay
    Unsigned 16-bit integer

ipxwan.routing_type  Routing Type
    Unsigned 8-bit integer

ipxwan.sequence_number  Sequence Number
    Unsigned 8-bit integer

```

**IRemUnknown (remunk)**

```

remunk_flags  Flags
    Unsigned 32-bit integer

remunk_iids  IIDs
    Unsigned 16-bit integer

remunk_int_refs  InterfaceRefs
    Unsigned 32-bit integer

remunk_opnum  Operation
    Unsigned 16-bit integer
    Operation

remunk_private_refs  PrivateRefs
    Unsigned 32-bit integer

remunk_public_refs  PublicRefs
    Unsigned 32-bit integer

remunk_qiresult  QIResult
    No value

remunk_refs  Refs
    Unsigned 32-bit integer

remunk_remintercerref  RemInterfaceRef
    No value

```

**IRemUnknown2 (remunk2)****ISC Object Management API (omapi)**

omapi.authid Authentication ID  
Unsigned 32-bit integer

omapi.authlength Authentication length  
Unsigned 32-bit integer

omapi.handle Handle  
Unsigned 32-bit integer

omapi.hlength Header length  
Unsigned 32-bit integer

omapi.id ID  
Unsigned 32-bit integer

omapi.msg\_name Message name  
String

omapi.msg\_name\_length Message name length  
Unsigned 16-bit integer

omapi.msg\_value Message value  
String

omapi.msg\_value\_length Message value length  
Unsigned 32-bit integer

omapi.obj\_name Object name  
String

omapi.obj\_name\_length Object name length  
Unsigned 16-bit integer

omapi.obj\_value Object value  
Byte array

omapi.object\_value\_length Object value length  
Unsigned 32-bit integer

omapi.opcode Opcode  
Unsigned 32-bit integer

omapi.rid Response ID  
Unsigned 32-bit integer

omapi.signature Signature  
Byte array

omapi.version Version  
Unsigned 32-bit integer

**ISDN (isdn)**

isdn.channel Channel  
Unsigned 8-bit integer

**ISDN Q.921–User Adaptation Layer (iua)**

iua.asp\_identifier ASP identifier  
Unsigned 32-bit integer

```
iua.asp_reason Reason
    Unsigned 32-bit integer
iua.diagnostic_information Diagnostic information
    Byte array
iua.dlci_one_bit One bit
    Boolean
iua.dlci_sapi SAPI
    Unsigned 8-bit integer
iua.dlci_spare Spare
    Unsigned 16-bit integer
iua.dlci_spare_bit Spare bit
    Boolean
iua.dlci_tei TEI
    Unsigned 8-bit integer
iua.dlci_zero_bit Zero bit
    Boolean
iua.error_code Error code
    Unsigned 32-bit integer
iua.heartbeat_data Heartbeat data
    Byte array
iua.info_string Info string
    String
iua.int_interface_identifier Integer interface identifier
    Unsigned 32-bit integer
iua.interface_range_end End
    Unsigned 32-bit integer
iua.interface_range_start Start
    Unsigned 32-bit integer
iua.message_class Message class
    Unsigned 8-bit integer
iua.message_length Message length
    Unsigned 32-bit integer
iua.message_type Message Type
    Unsigned 8-bit integer
iua.parameter_length Parameter length
    Unsigned 16-bit integer
iua.parameter_padding Parameter padding
    Byte array
iua.parameter_tag Parameter Tag
    Unsigned 16-bit integer
iua.parameter_value Parameter value
    Byte array
iua.release_reason Reason
    Unsigned 32-bit integer
```

```
iua.reserved    Reserved
                Unsigned 8-bit integer
iua.status_identification  Status identification
                Unsigned 16-bit integer
iua.status_type  Status type
                Unsigned 16-bit integer
iua.tei_status   TEI status
                Unsigned 32-bit integer
iua.text_interface_identifier  Text interface identifier
                String
iua.traffic_mode_type  Traffic mode type
                Unsigned 32-bit integer
iua.version      Version
                Unsigned 8-bit integer
```

**ISDN User Part (isup)**

```
ansi_isup.cause_indicator  Cause indicator
                Unsigned 8-bit integer
ansi_isup.coding_standard  Coding standard
                Unsigned 8-bit integer
bat_ase.Comp_Report_Reason  Compability report reason
                Unsigned 8-bit integer
bat_ase.Comp_Report_diagnostic  Diagnostics
                Unsigned 16-bit integer
bat_ase.ETSI_codec_type_subfield  ETSI codec type subfield
                Unsigned 8-bit integer
bat_ase.ITU_T_codec_type_subfield  ITU-T codec type subfield
                Unsigned 8-bit integer
bat_ase.Local_BCU_ID  Local BCU ID
                Unsigned 32-bit integer
bat_ase.acs  Active Code Set
                Unsigned 8-bit integer
bat_ase.acs.10_2  10.2 kbps rate
                Unsigned 8-bit integer
bat_ase.acs.12_2  12.2 kbps rate
                Unsigned 8-bit integer
bat_ase.acs.4_75  4.75 kbps rate
                Unsigned 8-bit integer
bat_ase.acs.5_15  5.15 kbps rate
                Unsigned 8-bit integer
bat_ase.acs.5_90  5.90 kbps rate
                Unsigned 8-bit integer
bat_ase.acs.6_70  6.70 kbps rate
                Unsigned 8-bit integer
```

```
bat_ase.acs.7_40  7.40 kbps rate
                  Unsigned 8-bit integer
bat_ase.acs.7_95  7.95 kbps rate
                  Unsigned 8-bit integer
bat_ase.bearer_control_tunneling  Bearer control tunneling
                  Boolean
bat_ase.bearer_redir_ind  Redirection Indicator
                  Unsigned 8-bit integer
bat_ase.bncid  Backbone Network Connection Identifier (BNCId)
                  Unsigned 32-bit integer
bat_ase.char  Backbone network connection characteristics
                  Unsigned 8-bit integer
bat_ase.late_cut_trough_cap_ind  Late Cut-through capability indicator
                  Boolean
bat_ase.macs  Maximal number of Codec Modes, MACS
                  Unsigned 8-bit integer
                  Maximal number of Codec Modes, MACS
bat_ase.optimisation_mode  Optimisation Mode for ACS , OM
                  Unsigned 8-bit integer
                  Optimisation Mode for ACS , OM
bat_ase.organization_identifier_subfield  Organization identifier subfield
                  Unsigned 8-bit integer
bat_ase.scs  Supported Code Set
                  Unsigned 8-bit integer
bat_ase.scs.10_2  10.2 kbps rate
                  Unsigned 8-bit integer
bat_ase.scs.12_2  12.2 kbps rate
                  Unsigned 8-bit integer
bat_ase.scs.4_75  4.75 kbps rate
                  Unsigned 8-bit integer
bat_ase.scs.5_15  5.15 kbps rate
                  Unsigned 8-bit integer
bat_ase.scs.5_90  5.90 kbps rate
                  Unsigned 8-bit integer
bat_ase.scs.6_70  6.70 kbps rate
                  Unsigned 8-bit integer
bat_ase.scs.7_40  7.40 kbps rate
                  Unsigned 8-bit integer
bat_ase.scs.7_95  7.95 kbps rate
                  Unsigned 8-bit integer
bat_ase.signal_type  Q.765.5 - Signal Type
                  Unsigned 8-bit integer
bat_ase_biwfa  Interworking Function Address( X.213 NSAP encoded)
                  Byte array
```

```
bicc.bat_ase_BCTP_BVEI    BVEI
    Boolean
bicc.bat_ase_BCTP_Tunnelled_Protocol_Indicator    Tunnelled Protocol Indicator
    Unsigned 8-bit integer
bicc.bat_ase_BCTP_Version_Indicator    BCTP Version Indicator
    Unsigned 8-bit integer
bicc.bat_ase_BCTP_tpei    TPEI
    Boolean
bicc.bat_ase_Instruction_ind_for_general_action    BAT ASE Instruction indicator f
    Unsigned 8-bit integer
bicc.bat_ase_Instruction_ind_for_pass_on_not_possible    Instruction ind for pass-
    Unsigned 8-bit integer
bicc.bat_ase_Send_notification_ind_for_general_action    Send notification indicat
    Boolean
bicc.bat_ase_Send_notification_ind_for_pass_on_not_possible    Send notification i
    Boolean
bicc.bat_ase_bat_ase_action_indicator_field    BAT ASE action indicator field
    Unsigned 8-bit integer
bicc.bat_ase_identifier    BAT ASE Identifiers
    Unsigned 8-bit integer
bicc.bat_ase_length_indicator    BAT ASE Element length indicator
    Unsigned 16-bit integer
cg_alarm_car_ind    Alarm Carrier Indicator
    Unsigned 8-bit integer
cg_alarm_cnt_chk    Continuity Check Indicator
    Unsigned 8-bit integer
cg_carrier_ind    CVR Circuit Group Carrier
    Unsigned 8-bit integer
cg_char_ind.doubleSeize    Doube Seize Control
    Unsigned 8-bit integer
conn_rsp_ind    CVR Response Ind
    Unsigned 8-bit integer
isup.APM_Sequence_ind    Sequence indicator (SI)
    Boolean
isup.APM_slr    Segmentation local reference (SLR)
    Unsigned 8-bit integer
isup.Discard_message_ind_value    Discard message indicator
    Boolean
isup.Discard_parameter_ind    Discard parameter indicator
    Boolean
isup.IECD_inf_ind_vals    IECD information indicator
    Unsigned 8-bit integer
isup.IECD_req_ind_vals    IECD request indicator
    Unsigned 8-bit integer
```



```
isup.OECD_inf_ind_vals  OECD information indicator
    Unsigned 8-bit integer
isup.OECD_req_ind_vals  OECD request indicator
    Unsigned 8-bit integer
isup.Release_call_ind  Release call indicator
    Boolean
isup.Send_notification_ind  Send notification indicator
    Boolean
isup.UUI_network_discard_ind  User-to-User indicator network discard indicator
    Boolean
isup.UUI_req_service1  User-to-User indicator request service 1
    Unsigned 8-bit integer
isup.UUI_req_service2  User-to-User indicator request service 2
    Unsigned 8-bit integer
isup.UUI_req_service3  User-to-User indicator request service 3
    Unsigned 8-bit integer
isup.UUI_res_service1  User-to-User indicator response service 1
    Unsigned 8-bit integer
isup.UUI_res_service2  User-to-User indicator response service 2
    Unsigned 8-bit integer
isup.UUI_res_service3  User-to-User response service 3
    Unsigned 8-bit integer
isup.UUI_type  User-to-User indicator type
    Boolean
isup.access_delivery_ind  Access delivery indicator
    Boolean
isup.address_presentation_restricted_indicator  Address presentation restricted
    Unsigned 8-bit integer
isup.apm_segmentation_ind  APM segmentation indicator
    Unsigned 8-bit integer
isup.app_Release_call_indicator  Release call indicator (RCI)
    Boolean
isup.app_Send_notification_ind  Send notification indicator (SNI)
    Boolean
isup.app_context_identifier  Application context identifier
    Unsigned 16-bit integer
isup.automatic_congestion_level  Automatic congestion level
    Unsigned 8-bit integer
isup.backw_call_echo_control_device_indicator  Echo Control Device Indicator
    Boolean
isup.backw_call_end_to_end_information_indicator  End-to-end information indicat
    Boolean
isup.backw_call_end_to_end_method_indicator  End-to-end method indicator
    Unsigned 16-bit integer
```

```
isup.backw_call_holding_indicator  Holding indicator
    Boolean
isup.backw_call_interworking_indicator  Interworking indicator
    Boolean
isup.backw_call_isdn_access_indicator  ISDN access indicator
    Boolean
isup.backw_call_isdn_user_part_indicator  ISDN user part indicator
    Boolean
isup.backw_call_sccp_method_indicator  SCCP method indicator
    Unsigned 16-bit integer
isup.call_diversion_may_occur_ind  Call diversion may occur indicator
    Boolean
isup.call_processing_state  Call processing state
    Unsigned 8-bit integer
isup.call_to_be_diverted_ind  Call to be diverted indicator
    Unsigned 8-bit integer
isup.call_to_be_offered_ind  Call to be offered indicator
    Unsigned 8-bit integer
isup.called  ISUP Called Number
    String
isup.called_party_even_address_signal_digit  Address signal digit
    Unsigned 8-bit integer
isup.called_party_nature_of_address_indicator  Nature of address indicator
    Unsigned 8-bit integer
isup.called_party_odd_address_signal_digit  Address signal digit
    Unsigned 8-bit integer
isup.called_partys_category_indicator  Called party's category indicator
    Unsigned 16-bit integer
isup.called_partys_status_indicator  Called party's status indicator
    Unsigned 16-bit integer
isup.calling  ISUP Calling Number
    String
isup.calling_party_address_request_indicator  Calling party address request indi
    Boolean
isup.calling_party_address_response_indicator  Calling party address response in
    Unsigned 16-bit integer
isup.calling_party_even_address_signal_digit  Address signal digit
    Unsigned 8-bit integer
isup.calling_party_nature_of_address_indicator  Nature of address indicator
    Unsigned 8-bit integer
isup.calling_party_odd_address_signal_digit  Address signal digit
    Unsigned 8-bit integer
isup.calling_partys_category  Calling Party's category
    Unsigned 8-bit integer
```

isup.calling\_partys\_category\_request\_indicator Calling party's category request  
Boolean

isup.calling\_partys\_category\_response\_indicator Calling party's category response  
Boolean

isup.cause\_indicator Cause indicator  
Unsigned 8-bit integer

isup.cause\_location Cause location  
Unsigned 8-bit integer

isup.cgs\_message\_type Circuit group supervision message type  
Unsigned 8-bit integer

isup.charge\_indicator Charge indicator  
Unsigned 16-bit integer

isup.charge\_information\_request\_indicator Charge information request indicator  
Boolean

isup.charge\_information\_response\_indicator Charge information response indicator  
Boolean

isup.charge\_number\_nature\_of\_address\_indicator Nature of address indicator  
Unsigned 8-bit integer

isup.cic CIC  
Unsigned 16-bit integer

isup.clg\_call\_ind Closed user group call indicator  
Unsigned 8-bit integer

isup.conference\_acceptance\_ind Conference acceptance indicator  
Unsigned 8-bit integer

isup.connected\_line\_identity\_request\_ind Connected line identity request indicator  
Boolean

isup.continuity\_check\_indicator Continuity Check Indicator  
Unsigned 8-bit integer

isup.continuity\_indicator Continuity indicator  
Boolean

isup.echo\_control\_device\_indicator Echo Control Device Indicator  
Boolean

isup.event\_ind Event indicator  
Unsigned 8-bit integer

isup.event\_presentation\_restr\_ind Event presentation restricted indicator  
Boolean

isup.extension\_ind Extension indicator  
Boolean

isup.forw\_call\_end\_to\_end\_information\_indicator End-to-end information indicator  
Boolean

isup.forw\_call\_end\_to\_end\_method\_indicator End-to-end method indicator  
Unsigned 16-bit integer

isup.forw\_call\_interworking\_indicator Interworking indicator  
Boolean

```
isup.forw_call_isdn_access_indicator  ISDN access indicator
    Boolean
isup.forw_call_isdn_user_part_indicator  ISDN user part indicator
    Boolean
isup.forw_call_natnl_inatnl_call_indicator  National/international call indicator
    Boolean
isup.forw_call_ported_num_trans_indicator  Ported number translation indicator
    Boolean
isup.forw_call_preferences_indicator  ISDN user part preference indicator
    Unsigned 16-bit integer
isup.forw_call_sccp_method_indicator  SCCP method indicator
    Unsigned 16-bit integer
isup.hold_provided_indicator  Hold provided indicator
    Boolean
isup.hw_blocking_state  HW blocking state
    Unsigned 8-bit integer
isup.inband_information_ind  In-band information indicator
    Boolean
isup.info_req_holding_indicator  Holding indicator
    Boolean
isup.inn_indicator  INN indicator
    Boolean
isup.isdn_generic_name_availability  Availability indicator
    Boolean
isup.isdn_generic_name_ia5  Generic Name
    String
isup.isdn_generic_name_presentation  Presentation indicator
    Unsigned 8-bit integer
isup.isdn_generic_name_type  Type indicator
    Unsigned 8-bit integer
isup.isdn_odd_even_indicator  Odd/even indicator
    Boolean
isup.loop_prevention_response_ind  Response indicator
    Unsigned 8-bit integer
isup.malicious_call_ident_request_indicator  Malicious call identification request
    Boolean
isup.mandatory_variable_parameter_pointer  Pointer to Parameter
    Unsigned 8-bit integer
isup.map_type  Map Type
    Unsigned 8-bit integer
isup.message_type  Message Type
    Unsigned 8-bit integer
isup.mlpp_user  MLPP user indicator
    Boolean
```

```
isup.mtc_blocking_state  Maintenance blocking state
    Unsigned 8-bit integer
isup.network_identification_plan  Network identification plan
    Unsigned 8-bit integer
isup.ni_indicator  NI indicator
    Boolean
isup.numbering_plan_indicator  Numbering plan indicator
    Unsigned 8-bit integer
isup.optional_parameter_part_pointer  Pointer to optional parameter part
    Unsigned 8-bit integer
isup.orig_addr_len  Originating Address length
    Unsigned 8-bit integer
    Originating Address length
isup.original_redirection_reason  Original redirection reason
    Unsigned 16-bit integer
isup.parameter_length  Parameter Length
    Unsigned 8-bit integer
isup.parameter_type  Parameter Type
    Unsigned 8-bit integer
isup.range_indicator  Range indicator
    Unsigned 8-bit integer
isup.redirecting  ISUP Redirecting Number
    String
isup.redirecting_ind  Redirection indicator
    Unsigned 16-bit integer
isup.redirection_counter  Redirection counter
    Unsigned 16-bit integer
isup.redirection_reason  Redirection reason
    Unsigned 16-bit integer
isup.satellite_indicator  Satellite Indicator
    Unsigned 8-bit integer
isup.screening_indicator  Screening indicator
    Unsigned 8-bit integer
isup.screening_indicator_enhanced  Screening indicator
    Unsigned 8-bit integer
isup.simple_segmentation_ind  Simple segmentation indicator
    Boolean
isup.solicited_indicator  Solicited indicator
    Boolean
isup.suspend_resume_indicator  Suspend/Resume indicator
    Boolean
isup.temporary_alternative_routing_ind  Temporary alternative routing indicator
    Boolean
isup.transit_at_intermediate_exchange_ind  Transit at intermediate exchange indi
    Boolean
```

```

isup.transmission_medium_requirement  Transmission medium requirement
    Unsigned 8-bit integer
isup.transmission_medium_requirement_prime  Transmission medium requirement prim
    Unsigned 8-bit integer
isup.type_of_network_identification  Type of network identification
    Unsigned 8-bit integer
isup_pass_on_not_possible_ind  Pass on not possible indicator
    Unsigned 8-bit integer
isup_pass_on_not_possible_val  Pass on not possible indicator
    Boolean
isup_apm.msg.fragment  Message fragment
    Frame number
isup_apm.msg.fragment.error  Message defragmentation error
    Frame number
isup_apm.msg.fragment.multiple_tails  Message has multiple tail fragments
    Boolean
isup_apm.msg.fragment.overlap  Message fragment overlap
    Boolean
isup_apm.msg.fragment.overlap.conflicts  Message fragment overlapping with confl
    Boolean
isup_apm.msg.fragment.too_long_fragment  Message fragment too long
    Boolean
isup_apm.msg.fragments  Message fragments
    No value
isup_apm.msg.reassembled.in  Reassembled in
    Frame number
isup_broadband-narrowband_interworking_ind  Broadband narrowband interworking in
    Unsigned 8-bit integer
isup_broadband-narrowband_interworking_ind2  Broadband narrowband interworking i
    Unsigned 8-bit integer
nsap.iana_icp  IANA ICP
    Unsigned 16-bit integer
nsap.ipv4_addr  IWFA IPv4 Address
    IPv4 address
    IPv4 address
nsap.ipv6_addr  IWFA IPv6 Address
    IPv6 address
    IPv6 address
x213.afi  X.213 Address Format Information ( AFI )
    Unsigned 8-bit integer
x213.dsp  X.213 Address Format Information ( DSP )
    Byte array

```

**ISO 10589 ISIS InTRA Domain Routeing Information Exchange Protocol (isis)**

isis.csnp.pdu\_length PDU length  
Unsigned 16-bit integer

isis.hello.circuit\_type Circuit type  
Unsigned 8-bit integer

isis.hello.clv\_ipv4\_int\_addr IPv4 interface address  
IPv4 address

isis.hello.clv\_ipv6\_int\_addr IPv6 interface address  
IPv6 address

isis.hello.clv\_mt MT-ID  
Unsigned 16-bit integer

isis.hello.clv\_ptp\_adj Point-to-point Adjacency  
Unsigned 8-bit integer

isis.hello.clv\_restart.neighbor Restarting Neighbor ID  
Byte array  
The System ID of the restarting neighbor

isis.hello.clv\_restart.remain\_time Remaining holding time  
Unsigned 16-bit integer  
How long the helper router will maintain the existing adjacency

isis.hello.clv\_restart\_flags Restart Signaling Flags  
Unsigned 8-bit integer

isis.hello.clv\_restart\_flags.ra Restart Acknowledgment  
Boolean  
When set, the router is willing to enter helper mode

isis.hello.clv\_restart\_flags.rr Restart Request  
Boolean  
When set, the router is beginning a graceful restart

isis.hello.clv\_restart\_flags.sa Suppress Adjacency  
Boolean  
When set, the router is starting as opposed to restarting

isis.hello.holding\_timer Holding timer  
Unsigned 16-bit integer

isis.hello.lan\_id SystemID{ Designated IS }  
Byte array

isis.hello.local\_circuit\_id Local circuit ID  
Unsigned 8-bit integer

isis.hello.pdu\_length PDU length  
Unsigned 16-bit integer

isis.hello.priority Priority  
Unsigned 8-bit integer

isis.hello.source\_id SystemID{ Sender of PDU }  
Byte array

isis.irpd Intra Domain Routing Protocol Discriminator  
Unsigned 8-bit integer

isis.len PDU Header Length  
Unsigned 8-bit integer

```
isis.lsp.att Attachment
    Unsigned 8-bit integer
isis.lsp.checksum Checksum
    Unsigned 16-bit integer
isis.lsp.checksum_bad Bad Checksum
    Boolean
    Bad IS-IS LSP Checksum
isis.lsp.checksum_good Good Checksum
    Boolean
    Good IS-IS LSP Checksum
isis.lsp.clv_ipv4_int_addr IPv4 interface address
    IPv4 address
isis.lsp.clv_ipv6_int_addr IPv6 interface address
    IPv6 address
isis.lsp.clv_mt MT-ID
    Unsigned 16-bit integer
isis.lsp.clv_te_router_id Traffic Engineering Router ID
    IPv4 address
isis.lsp.hostname Hostname
    String
isis.lsp.is_type Type of Intermediate System
    Unsigned 8-bit integer
isis.lsp.lsp_id LSP-ID
    String
isis.lsp.overload Overload bit
    Boolean
    If set, this router will not be used by any decision process to calculate ro
isis.lsp.partition_repair Partition Repair
    Boolean
    If set, this router supports the optional Partition Repair function
isis.lsp.pdu_length PDU length
    Unsigned 16-bit integer
isis.lsp.remaining_life Remaining lifetime
    Unsigned 16-bit integer
isis.lsp.sequence_number Sequence number
    Unsigned 32-bit integer
isis.max_area_adr Max.AREAs: (0==3)
    Unsigned 8-bit integer
isis.psnp.pdu_length PDU length
    Unsigned 16-bit integer
isis.reserved Reserved (==0)
    Unsigned 8-bit integer
isis.sysid_len System ID Length
    Unsigned 8-bit integer
isis.type PDU Type
    Unsigned 8-bit integer
```



isis.version Version (==1)  
Unsigned 8-bit integer

isis.version2 Version2 (==1)  
Unsigned 8-bit integer

**ISO 8073 COTP Connection-Oriented Transport Protocol (cotp)**

cotp.destref Destination reference  
Unsigned 16-bit integer  
Destination address reference

cotp.dst-tsap Destination TSAP  
String  
Called TSAP

cotp.dst-tsap-bytes Destination TSAP  
Byte array  
Called TSAP (bytes representation)

cotp.eot Last data unit  
Boolean  
Is current TPDU the last data unit of a complete DT TPDU sequence (End of TSAP)

cotp.li Length  
Unsigned 8-bit integer  
Length Indicator, length of this header

cotp.next-tpdu-number Your TPDU number  
Unsigned 8-bit integer  
Your TPDU number

cotp.reassembled\_in Reassembled COTP in frame  
Frame number  
This COTP packet is reassembled in this frame

cotp.segment COTP Segment  
Frame number  
COTP Segment

cotp.segment.error Reassembly error  
Frame number  
Reassembly error due to illegal segments

cotp.segment.multipletails Multiple tail segments found  
Boolean  
Several tails were found when reassembling the packet

cotp.segment.overlap Segment overlap  
Boolean  
Segment overlaps with other segments

cotp.segment.overlap.conflict Conflicting data in segment overlap  
Boolean  
Overlapping segments contained conflicting data

cotp.segment.toolongsegment Segment too long  
Boolean  
Segment contained data past end of packet

cotp.segments COTP Segments  
No value  
COTP Segments

```
cotp.src-tsap   Source TSAP
                String
                Calling TSAP

cotp.src-tsap-bytes   Source TSAP
                    Byte array
                    Calling TSAP (bytes representation)

cotp.srcref   Source reference
              Unsigned 16-bit integer
              Source address reference

cotp.tpdu-number   TPDU number
                  Unsigned 8-bit integer
                  TPDU number

cotp.type   PDU Type
            Unsigned 8-bit integer
            PDU Type - upper nibble of byte
```

**ISO 8327-1 OSI Session Protocol (ses)**

```
ses.activity_identifier   Activity Identifier
                          Unsigned 32-bit integer
                          Activity Identifier

ses.activity_management   Activity management function unit
                          Boolean
                          Activity management function unit

ses.additional_reference_information   Additional Reference Information
                                      Byte array
                                      Additional Reference Information

ses.beginning_of_SSDU   beginning of SSDU
                        Boolean
                        beginning of SSDU

ses.called_session_selector   Called Session Selector
                              Byte array
                              Called Session Selector

ses.called_ss_user_reference   Called SS User Reference
                              Byte array
                              Called SS User Reference

ses.calling_session_selector   Calling Session Selector
                              Byte array
                              Calling Session Selector

ses.calling_ss_user_reference   Calling SS User Reference
                              Byte array
                              Calling SS User Reference

ses.capability_data   Capability function unit
                      Boolean
                      Capability function unit

ses.common_reference   Common Reference
                      Byte array
                      Common Reference
```

```
ses.connect.f1  Able to receive extended concatenated SPDU
  Boolean
  Able to receive extended concatenated SPDU
ses.connect.flags  Flags
  Unsigned 8-bit integer
ses.data_sep  Data separation function unit
  Boolean
  Data separation function unit
ses.data_token  data token
  Boolean
  data token
ses.data_token_setting  data token setting
  Unsigned 8-bit integer
  data token setting
ses.duplex  Duplex functional unit
  Boolean
  Duplex functional unit
ses.enclosure.flags  Flags
  Unsigned 8-bit integer
ses.end_of_SSDU  end of SSDU
  Boolean
  end of SSDU
ses.exception_data  Exception function unit
  Boolean
  Exception function unit
ses.exception_report.  Session exception report
  Boolean
  Session exception report
ses.expedited_data  Expedited data function unit
  Boolean
  Expedited data function unit
ses.half_duplex  Half-duplex functional unit
  Boolean
  Half-duplex functional unit
ses.initial_serial_number  Initial Serial Number
  String
  Initial Serial Number
ses.large_initial_serial_number  Large Initial Serial Number
  String
  Large Initial Serial Number
ses.large_second_initial_serial_number  Large Second Initial Serial Number
  String
  Large Second Initial Serial Number
ses.length  Length
  Unsigned 16-bit integer
```

```
ses.major.token    major/activity token
                  Boolean
                  major/activity token

ses.major_activity_token_setting  major/activity setting
                  Unsigned 8-bit integer
                  major/activity token setting

ses.major_resynchronize  Major resynchronize function unit
                  Boolean
                  Major resynchronize function unit

ses.minor_resynchronize  Minor resynchronize function unit
                  Boolean
                  Minor resynchronize function unit

ses.negotiated_release  Negotiated release function unit
                  Boolean
                  Negotiated release function unit

ses.proposed_tsdu_maximum_size_i2r  Proposed TSDU Maximum Size, Initiator to Responder
                  Unsigned 16-bit integer
                  Proposed TSDU Maximum Size, Initiator to Responder

ses.proposed_tsdu_maximum_size_r2i  Proposed TSDU Maximum Size, Responder to Initiator
                  Unsigned 16-bit integer
                  Proposed TSDU Maximum Size, Responder to Initiator

ses.protocol_version1  Protocol Version 1
                  Boolean
                  Protocol Version 1

ses.protocol_version2  Protocol Version 2
                  Boolean
                  Protocol Version 2

ses.release_token    release token
                  Boolean
                  release token

ses.release_token_setting  release token setting
                  Unsigned 8-bit integer
                  release token setting

ses.req.flags    Flags
                  Unsigned 16-bit integer

ses.reserved    Reserved
                  Unsigned 8-bit integer

ses.resynchronize  Resynchronize function unit
                  Boolean
                  Resynchronize function unit

ses.second_initial_serial_number  Second Initial Serial Number
                  String
                  Second Initial Serial Number

ses.second_serial_number  Second Serial Number
                  String
                  Second Serial Number
```

```
ses.serial_number  Serial Number
  String
  Serial Number

ses.symm_sync      Symmetric synchronize function unit
  Boolean
  Symmetric synchronize function unit

ses.synchronize_minor_token_setting  synchronize-minor token setting
  Unsigned 8-bit integer
  synchronize-minor token setting

ses.synchronize_token  synchronize minor token
  Boolean
  synchronize minor token

ses.tken_item.flags  Flags
  Unsigned 8-bit integer

ses.type           SPDU Type
  Unsigned 8-bit integer

ses.typed_data     Typed data function unit
  Boolean
  Typed data function unit

ses.version        Version
  Unsigned 8-bit integer

ses.version.flags  Flags
  Unsigned 8-bit integer
```

#### **ISO 8473 CLNP ConnectionLess Network Protocol (clnp)**

```
clnp.checksum      Checksum
  Unsigned 16-bit integer

clnp.dsap          DA
  Byte array

clnp.dsap.len      DAL
  Unsigned 8-bit integer

clnp.len           HDR Length
  Unsigned 8-bit integer

clnp.nlpi          Network Layer Protocol Identifier
  Unsigned 8-bit integer

clnp.pdu.len       PDU length
  Unsigned 16-bit integer

clnp.reassembled_in  Reassembled CLNP in frame
  Frame number
  This CLNP packet is reassembled in this frame

clnp.segment       CLNP Segment
  Frame number
  CLNP Segment

clnp.segment.error  Reassembly error
  Frame number
  Reassembly error due to illegal segments
```

```
clnp.segment.multipletails  Multiple tail segments found
    Boolean
    Several tails were found when reassembling the packet
clnp.segment.overlap  Segment overlap
    Boolean
    Segment overlaps with other segments
clnp.segment.overlap.conflict  Conflicting data in segment overlap
    Boolean
    Overlapping segments contained conflicting data
clnp.segment.toolongsegment  Segment too long
    Boolean
    Segment contained data past end of packet
clnp.segments  CLNP Segments
    No value
    CLNP Segments
clnp.ssap  SA
    Byte array
clnp.ssap.len  SAL
    Unsigned 8-bit integer
clnp.ttl  Holding Time
    Unsigned 8-bit integer
clnp.type  PDU Type
    Unsigned 8-bit integer
clnp.version  Version
    Unsigned 8-bit integer
```

**ISO 8571 FTAM (ftam)**

```
ftam.AND_Set_item  Item
    Unsigned 32-bit integer
    ftam.AND_Set_item
ftam.Attribute_Extension_Names_item  Item
    No value
    ftam.Attribute_Extension_Set_Name
ftam.Attribute_Extensions_Pattern_item  Item
    No value
    ftam.Attribute_Extensions_Pattern_item
ftam.Attribute_Extensions_item  Item
    No value
    ftam.Attribute_Extension_Set
ftam.Child_Objects_Attribute_item  Item
    String
    ftam.GraphicString
ftam.OR_Set_item  Item
    Unsigned 32-bit integer
    ftam.AND_Set
```

```
ftam.Pass_Passwords_item  Item
    Unsigned 32-bit integer
    ftam.Password

ftam.Pathname_item  Item
    String
    ftam.GraphicString

ftam._untag_item  Item
    Unsigned 32-bit integer
    ftam.Contents_Type_List_item

ftam.abstract_Syntax_Pattern  abstract-Syntax-Pattern
    No value
    ftam.Object_Identifier_Pattern

ftam.abstract_Syntax_name  abstract-Syntax-name
    ftam.Abstract_Syntax_Name

ftam.abstract_Syntax_not_supported  abstract-Syntax-not-supported
    No value
    ftam.NULL

ftam.access-class  access-class
    Boolean

ftam.access_context  access-context
    No value
    ftam.Access_Context

ftam.access_control  access-control
    Unsigned 32-bit integer
    ftam.Access_Control_Change_Attribute

ftam.access_passwords  access-passwords
    No value
    ftam.Access_Passwords

ftam.account  account
    String
    ftam.Account

ftam.action_list  action-list
    Byte array
    ftam.Access_Request

ftam.action_result  action-result
    Signed 32-bit integer
    ftam.Action_Result

ftam.activity_identifier  activity-identifier
    Signed 32-bit integer
    ftam.Activity_Identifier

ftam.actual_values  actual-values
    Unsigned 32-bit integer
    ftam.SET_OF_Access_Control_Element

ftam.actual_values_item  Item
    No value
    ftam.Access_Control_Element
```

```
ftam.ae ae
    Unsigned 32-bit integer
    ftam.AE_qualifier

ftam.any_match any-match
    No value
    ftam.NULL

ftam.ap ap
    Unsigned 32-bit integer
    ftam.AP_title

ftam.attribute_extension_names attribute-extension-names
    Unsigned 32-bit integer
    ftam.Attribute_Extension_Names

ftam.attribute_extensions attribute-extensions
    Unsigned 32-bit integer
    ftam.Attribute_Extensions

ftam.attribute_extensions_pattern attribute-extensions-pattern
    Unsigned 32-bit integer
    ftam.Attribute_Extensions_Pattern

ftam.attribute_groups attribute-groups
    Byte array
    ftam.Attribute_Groups

ftam.attribute_names attribute-names
    Byte array
    ftam.Attribute_Names

ftam.attribute_value_assertions attribute-value-assertions
    Unsigned 32-bit integer
    ftam.Attribute_Value_Assertions

ftam.attribute_value_asset_tions attribute-value-asset-tions
    Unsigned 32-bit integer
    ftam.Attribute_Value_Assertions

ftam.attributes attributes
    No value
    ftam.Select_Attributes

ftam.begin_end begin-end
    Signed 32-bit integer
    ftam.T_begin_end

ftam.boolean_value boolean-value
    Boolean
    ftam.BOOLEAN

ftam.bulk_Data_PDU bulk-Data-PDU
    Unsigned 32-bit integer
    ftam.Bulk_Data_PDU

ftam.bulk_transfer_number bulk-transfer-number
    Signed 32-bit integer
    ftam.INTEGER

ftam.change-attribute change-attribute
    Boolean
```



```
ftam.change_attribute  change-attribute
    Signed 32-bit integer
    ftam.Lock

ftam.change_attribute_password  change-attribute-password
    Unsigned 32-bit integer
    ftam.Password

ftam.charging  charging
    Unsigned 32-bit integer
    ftam.Charging

ftam.charging_unit  charging-unit
    String
    ftam.GraphicString

ftam.charging_value  charging-value
    Signed 32-bit integer
    ftam.INTEGER

ftam.checkpoint_identifier  checkpoint-identifier
    Signed 32-bit integer
    ftam.INTEGER

ftam.checkpoint_window  checkpoint-window
    Signed 32-bit integer
    ftam.INTEGER

ftam.child_objects  child-objects
    Unsigned 32-bit integer
    ftam.Child_Objects_Attribute

ftam.child_objects_Pattern  child-objects-Pattern
    No value
    ftam.Pathname_Pattern

ftam.complete_pathname  complete-pathname
    Unsigned 32-bit integer
    ftam.Pathname

ftam.concurrency_access  concurrency-access
    No value
    ftam.Concurrency_Access

ftam.concurrency_control  concurrency-control
    No value
    ftam.Concurrency_Control

ftam.concurrent-access  concurrent-access
    Boolean

ftam.concurrent_bulk_transfer_number  concurrent-bulk-transfer-number
    Signed 32-bit integer
    ftam.INTEGER

ftam.concurrent_recovery_point  concurrent-recovery-point
    Signed 32-bit integer
    ftam.INTEGER

ftam.consecutive-access  consecutive-access
    Boolean
```

```
ftam.constraint_Set_Pattern  constraint-Set-Pattern
    No value
    ftam.Object_Identifier_Pattern
ftam.constraint_set_abstract_Syntax_Pattern  constraint-set-abstract-Syntax-Patt
    No value
    ftam.T_constraint_set_abstract_Syntax_Pattern
ftam.constraint_set_and_abstract_Syntax  constraint-set-and-abstract-Syntax
    No value
    ftam.T_constraint_set_and_abstract_Syntax
ftam.constraint_set_name  constraint-set-name
    ftam.Constraint_Set_Name
ftam.contents_type  contents-type
    Unsigned 32-bit integer
    ftam.T_open_contents_type
ftam.contents_type_Pattern  contents-type-Pattern
    Unsigned 32-bit integer
    ftam.Contents_Type_Pattern
ftam.contents_type_list  contents-type-list
    Unsigned 32-bit integer
    ftam.Contents_Type_List
ftam.create_password  create-password
    Unsigned 32-bit integer
    ftam.Password
ftam.date_and_time_of_creation  date-and-time-of-creation
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
ftam.date_and_time_of_creation_Pattern  date-and-time-of-creation-Pattern
    No value
    ftam.Date_and_Time_Pattern
ftam.date_and_time_of_last_attribute_modification  date-and-time-of-last-attribu
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
ftam.date_and_time_of_last_attribute_modification_Pattern  date-and-time-of-last
    No value
    ftam.Date_and_Time_Pattern
ftam.date_and_time_of_last_modification  date-and-time-of-last-modification
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
ftam.date_and_time_of_last_modification_Pattern  date-and-time-of-last-modificat
    No value
    ftam.Date_and_Time_Pattern
ftam.date_and_time_of_last_read_access  date-and-time-of-last-read-access
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
ftam.date_and_time_of_last_read_access_Pattern  date-and-time-of-last-read-acces
    No value
    ftam.Date_and_Time_Pattern
```

```
ftam.define_contexts  define-contexts
    Unsigned 32-bit integer
    ftam.SET_OF_Abstract_Syntax_Name
ftam.define_contexts_item  Item
    ftam.Abstract_Syntax_Name
ftam.degree_of_overlap  degree-of-overlap
    Signed 32-bit integer
    ftam.Degree_Of_Overlap
ftam.delete-Object  delete-Object
    Boolean
ftam.delete_Object  delete-Object
    Signed 32-bit integer
    ftam.Lock
ftam.delete_password  delete-password
    Unsigned 32-bit integer
    ftam.Password
ftam.delete_values  delete-values
    Unsigned 32-bit integer
    ftam.SET_OF_Access_Control_Element
ftam.delete_values_item  Item
    No value
    ftam.Access_Control_Element
ftam.destination_file_directory  destination-file-directory
    Unsigned 32-bit integer
    ftam.Destination_File_Directory
ftam.diagnostic  diagnostic
    Unsigned 32-bit integer
    ftam.Diagnostic
ftam.diagnostic_type  diagnostic-type
    Signed 32-bit integer
    ftam.T_diagnostic_type
ftam.document_type  document-type
    No value
    ftam.T_document_type
ftam.document_type_Pattern  document-type-Pattern
    No value
    ftam.Object_Identifier_Pattern
ftam.document_type_name  document-type-name
    ftam.Document_Type_Name
ftam.enable_fadu_locking  enable-fadu-locking
    Boolean
    ftam.BOOLEAN
ftam.enhanced-file-management  enhanced-file-management
    Boolean
ftam.enhanced-filestore-management  enhanced-filestore-management
    Boolean
```

```
ftam.equality_comparision  equality-comparision
    Byte array
    ftam.Equality_Comparision
ftam.equals-matches  equals-matches
    Boolean
ftam.erase  erase
    Signed 32-bit integer
    ftam.Lock
ftam.erase_password  erase-password
    Unsigned 32-bit integer
    ftam.Password
ftam.error_Source  error-Source
    Signed 32-bit integer
    ftam.Entity_Reference
ftam.error_action  error-action
    Signed 32-bit integer
    ftam.Error_Action
ftam.error_identifier  error-identifier
    Signed 32-bit integer
    ftam.INTEGER
ftam.error_observer  error-observer
    Signed 32-bit integer
    ftam.Entity_Reference
ftam.exclusive  exclusive
    Boolean
ftam.extend  extend
    Signed 32-bit integer
    ftam.Lock
ftam.extend_password  extend-password
    Unsigned 32-bit integer
    ftam.Password
ftam.extension  extension
    Boolean
ftam.extension_attribute  extension-attribute
    No value
    ftam.T_extension_attribute
ftam.extension_attribute_Pattern  extension-attribute-Pattern
    No value
    ftam.T_extension_attribute_Pattern
ftam.extension_attribute_identifier  extension-attribute-identifier
    ftam.T_extension_attribute_identifier
ftam.extension_attribute_names  extension-attribute-names
    Unsigned 32-bit integer
    ftam.SEQUENCE_OF_Extension_Attribute_identifier
ftam.extension_attribute_names_item  Item
    ftam.Extension_Attribute_identifier
```

```

ftam.extension_set_attribute_Patterns  extension-set-attribute-Patterns
    Unsigned 32-bit integer
    ftam.T_extension_set_attribute_Patterns
ftam.extension_set_attribute_Patterns_item  Item
    No value
    ftam.T_extension_set_attribute_Patterns_item
ftam.extension_set_attributes  extension-set-attributes
    Unsigned 32-bit integer
    ftam.SEQUENCE_OF_Extension_Attribute
ftam.extension_set_attributes_item  Item
    No value
    ftam.Extension_Attribute
ftam.extension_set_identifier  extension-set-identifier
    ftam.Extension_Set_Identifier
ftam.f-erase  f-erase
    Boolean
ftam.f-extend  f-extend
    Boolean
ftam.f-insert  f-insert
    Boolean
ftam.f-read  f-read
    Boolean
ftam.f-replace  f-replace
    Boolean
ftam.fSM_PDU  fSM-PDU
    Unsigned 32-bit integer
    ftam.FSM_PDU
ftam.ftAM_Regime_PDU  ftAM-Regime-PDU
    Unsigned 32-bit integer
    ftam.FTAM_Regime_PDU
ftam.f_Change_Link_attrib_response  f-Change-Link-attrib-response
    No value
    ftam.F_CHANGE_LINK_ATTRIB_response
ftam.f_Change_attrib_reques  f-Change-attrib-reques
    No value
    ftam.F_CHANGE_ATTRIB_request
ftam.f_Change_attrib_respon  f-Change-attrib-respon
    No value
    ftam.F_CHANGE_ATTRIB_response
ftam.f_Change_link_attrib_request  f-Change-link-attrib-request
    No value
    ftam.F_CHANGE_LINK_ATTRIB_request
ftam.f_Change_prefix_request  f-Change-prefix-request
    No value
    ftam.F_CHANGE_PREFIX_request

```

```
ftam.f_Change_prefix_response  f-Change-prefix-response
    No value
    ftam.F_CHANGE_PREFIX_response

ftam.f_begin_group_request  f-begin-group-request
    No value
    ftam.F_BEGIN_GROUP_request

ftam.f_begin_group_response  f-begin-group-response
    No value
    ftam.F_BEGIN_GROUP_response

ftam.f_cancel_request  f-cancel-request
    No value
    ftam.F_CANCEL_request

ftam.f_cancel_response  f-cancel-response
    No value
    ftam.F_CANCEL_response

ftam.f_close_request  f-close-request
    No value
    ftam.F_CLOSE_request

ftam.f_close_response  f-close-response
    No value
    ftam.F_CLOSE_response

ftam.f_copy_request  f-copy-request
    No value
    ftam.F_COPY_request

ftam.f_copy_response  f-copy-response
    No value
    ftam.F_COPY_response

ftam.f_create_directory_request  f-create-directory-request
    No value
    ftam.F_CREATE_DIRECTORY_request

ftam.f_create_directory_response  f-create-directory-response
    No value
    ftam.F_CREATE_DIRECTORY_response

ftam.f_create_request  f-create-request
    No value
    ftam.F_CREATE_request

ftam.f_create_response  f-create-response
    No value
    ftam.F_CREATE_response

ftam.f_data_end_request  f-data-end-request
    No value
    ftam.F_DATA_END_request

ftam.f_delete_request  f-delete-request
    No value
    ftam.F_DELETE_request

ftam.f_delete_response  f-delete-response
    No value
    ftam.F_DELETE_response
```

```
ftam.f_deselect_request  f-deselect-request
    No value
    ftam.F_DESELECT_request
ftam.f_deselect_response  f-deselect-response
    No value
    ftam.F_DESELECT_response
ftam.f_end_group_request  f-end-group-request
    No value
    ftam.F_END_GROUP_request
ftam.f_end_group_response  f-end-group-response
    No value
    ftam.F_END_GROUP_response
ftam.f_erase_request  f-erase-request
    No value
    ftam.F_ERASE_request
ftam.f_erase_response  f-erase-response
    No value
    ftam.F_ERASE_response
ftam.f_group_Change_attrib_request  f-group-Change-attrib-request
    No value
    ftam.F_GROUP_CHANGE_ATTRIB_request
ftam.f_group_Change_attrib_response  f-group-Change-attrib-response
    No value
    ftam.F_GROUP_CHANGE_ATTRIB_response
ftam.f_group_copy_request  f-group-copy-request
    No value
    ftam.F_GROUP_COPY_request
ftam.f_group_copy_response  f-group-copy-response
    No value
    ftam.F_GROUP_COPY_response
ftam.f_group_delete_request  f-group-delete-request
    No value
    ftam.F_GROUP_DELETE_request
ftam.f_group_delete_response  f-group-delete-response
    No value
    ftam.F_GROUP_DELETE_response
ftam.f_group_list_request  f-group-list-request
    No value
    ftam.F_GROUP_LIST_request
ftam.f_group_list_response  f-group-list-response
    No value
    ftam.F_GROUP_LIST_response
ftam.f_group_move_request  f-group-move-request
    No value
    ftam.F_GROUP_MOVE_request
ftam.f_group_move_response  f-group-move-response
    No value
    ftam.F_GROUP_MOVE_response
```

```
ftam.f_group_select_request  f-group-select-request
    No value
    ftam.F_GROUP_SELECT_request

ftam.f_group_select_response  f-group-select-response
    No value
    ftam.F_GROUP_SELECT_response

ftam.f_initialize_request    f-initialize-request
    No value
    ftam.F_INITIALIZE_request

ftam.f_initialize_response   f-initialize-response
    No value
    ftam.F_INITIALIZE_response

ftam.f_link_request         f-link-request
    No value
    ftam.F_LINK_request

ftam.f_link_response        f-link-response
    No value
    ftam.F_LINK_response

ftam.f_list_request         f-list-request
    No value
    ftam.F_LIST_request

ftam.f_list_response        f-list-response
    No value
    ftam.F_LIST_response

ftam.f_locate_request       f-locate-request
    No value
    ftam.F_LOCATE_request

ftam.f_locate_response      f-locate-response
    No value
    ftam.F_LOCATE_response

ftam.f_move_request         f-move-request
    No value
    ftam.F_MOVE_request

ftam.f_move_response        f-move-response
    No value
    ftam.F_MOVE_response

ftam.f_open_request         f-open-request
    No value
    ftam.F_OPEN_request

ftam.f_open_response        f-open-response
    No value
    ftam.F_OPEN_response

ftam.f_p_abort_request      f-p-abort-request
    No value
    ftam.F_P_ABORT_request

ftam.f_read_attrib_request  f-read-attrib-request
    No value
    ftam.F_READ_ATTRIB_request
```



```
ftam.f_read_attrib_response  f-read-attrib-response
    No value
    ftam.F_READ_ATTRIB_response
ftam.f_read_link_attrib_request  f-read-link-attrib-request
    No value
    ftam.F_READ_LINK_ATTRIB_request
ftam.f_read_link_attrib_response  f-read-link-attrib-response
    No value
    ftam.F_READ_LINK_ATTRIB_response
ftam.f_read_request  f-read-request
    No value
    ftam.F_READ_request
ftam.f_recover_request  f-recover-request
    No value
    ftam.F_RECOVER_request
ftam.f_recover_response  f-recover-response
    No value
    ftam.F_RECOVER_response
ftam.f_restart_request  f-restart-request
    No value
    ftam.F_RESTART_request
ftam.f_restart_response  f-restart-response
    No value
    ftam.F_RESTART_response
ftam.f_select_another_request  f-select-another-request
    No value
    ftam.F_SELECT_ANOTHER_request
ftam.f_select_another_response  f-select-another-response
    No value
    ftam.F_SELECT_ANOTHER_response
ftam.f_select_request  f-select-request
    No value
    ftam.F_SELECT_request
ftam.f_select_response  f-select-response
    No value
    ftam.F_SELECT_response
ftam.f_terminate_request  f-terminate-request
    No value
    ftam.F_TERMINATE_request
ftam.f_terminate_response  f-terminate-response
    No value
    ftam.F_TERMINATE_response
ftam.f_transfer_end_request  f-transfer-end-request
    No value
    ftam.F_TRANSFER_END_request
ftam.f_transfer_end_response  f-transfer-end-response
    No value
    ftam.F_TRANSFER_END_response
```

```
ftam.f_u_abort_request  f-u-abort-request
    No value
    ftam.F_U_ABORT_request
ftam.f_unlink_request  f-unlink-request
    No value
    ftam.F_UNLINK_request
ftam.f_unlink_response  f-unlink-response
    No value
    ftam.F_UNLINK_response
ftam.f_write_request  f-write-request
    No value
    ftam.F_WRITE_request
ftam.fadu-locking  fadu-locking
    Boolean
ftam.fadu_lock  fadu-lock
    Signed 32-bit integer
    ftam.FADU_Lock
ftam.fadu_number  fadu-number
    Signed 32-bit integer
    ftam.INTEGER
ftam.file-access  file-access
    Boolean
ftam.file_PDU  file-PDU
    Unsigned 32-bit integer
    ftam.File_PDU
ftam.file_access_data_unit_Operation  file-access-data-unit-Operation
    Signed 32-bit integer
    ftam.T_file_access_data_unit_Operation
ftam.file_access_data_unit_identity  file-access-data-unit-identity
    Unsigned 32-bit integer
    ftam.FADU_Identity
ftam.filestore_password  filestore-password
    Unsigned 32-bit integer
    ftam.Password
ftam.first_last  first-last
    Signed 32-bit integer
    ftam.T_first_last
ftam.ftam_quality_of_Service  ftam-quality-of-Service
    Signed 32-bit integer
    ftam.FTAM_Quality_of_Service
ftam.functional_units  functional-units
    Byte array
    ftam.Functional_Units
ftam.further_details  further-details
    String
    ftam.GraphicString
```

```
ftam.future_Object_size  future-Object-size
    Unsigned 32-bit integer
    ftam.Object_Size_Attribute

ftam.future_object_size_Pattern  future-object-size-Pattern
    No value
    ftam.Integer_Pattern

ftam.graphicString  graphicString
    String
    ftam.GraphicString

ftam.greater-than-matches  greater-than-matches
    Boolean

ftam.group-manipulation  group-manipulation
    Boolean

ftam.grouping  grouping
    Boolean

ftam.identity  identity
    String
    ftam.User_Identity

ftam.identity_last_attribute_modifier  identity-last-attribute-modifier
    Unsigned 32-bit integer
    ftam.User_Identity_Attribute

ftam.identity_of_creator  identity-of-creator
    Unsigned 32-bit integer
    ftam.User_Identity_Attribute

ftam.identity_of_creator_Pattern  identity-of-creator-Pattern
    No value
    ftam.User_Identity_Pattern

ftam.identity_of_last_attribute_modifier_Pattern  identity-of-last-attribute-mod
    No value
    ftam.User_Identity_Pattern

ftam.identity_of_last_modifier  identity-of-last-modifier
    Unsigned 32-bit integer
    ftam.User_Identity_Attribute

ftam.identity_of_last_modifier_Pattern  identity-of-last-modifier-Pattern
    No value
    ftam.User_Identity_Pattern

ftam.identity_of_last_reader  identity-of-last-reader
    Unsigned 32-bit integer
    ftam.User_Identity_Attribute

ftam.identity_of_last_reader_Pattern  identity-of-last-reader-Pattern
    No value
    ftam.User_Identity_Pattern

ftam.implementation_information  implementation-information
    String
    ftam.Implementation_Information
```

```
ftam.incomplete_pathname  incomplete-pathname
    Unsigned 32-bit integer
    ftam.Pathname

ftam.initial_attributes  initial-attributes
    No value
    ftam.Create_Attributes

ftam.initiator_identity  initiator-identity
    String
    ftam.User_Identity

ftam.insert  insert
    Signed 32-bit integer
    ftam.Lock

ftam.insert_password  insert-password
    Unsigned 32-bit integer
    ftam.Password

ftam.insert_values  insert-values
    Unsigned 32-bit integer
    ftam.SET_OF_Access_Control_Element

ftam.insert_values_item  Item
    No value
    ftam.Access_Control_Element

ftam.integer_value  integer-value
    Signed 32-bit integer
    ftam.INTEGER

ftam.last_member_indicator  last-member-indicator
    Boolean
    ftam.BOOLEAN

ftam.last_transfer_end_read_request  last-transfer-end-read-request
    Signed 32-bit integer
    ftam.INTEGER

ftam.last_transfer_end_read_response  last-transfer-end-read-response
    Signed 32-bit integer
    ftam.INTEGER

ftam.last_transfer_end_write_request  last-transfer-end-write-request
    Signed 32-bit integer
    ftam.INTEGER

ftam.last_transfer_end_write_response  last-transfer-end-write-response
    Signed 32-bit integer
    ftam.INTEGER

ftam.legal_qualification_Pattern  legal-qualification-Pattern
    No value
    ftam.String_Pattern

ftam.legal_qualification  legal-qualification
    Unsigned 32-bit integer
    ftam.Legal_Qualification_Attribute

ftam.less-than-matches  less-than-matches
    Boolean
```

```
ftam.level_number    level-number
                    Signed 32-bit integer
                    ftam.INTEGER

ftam.limited-file-management    limited-file-management
                    Boolean

ftam.limited-filestore-management    limited-filestore-management
                    Boolean

ftam.link    link
            Boolean

ftam.link_password    link-password
                    Unsigned 32-bit integer
                    ftam.Password

ftam.linked_Object    linked-Object
                    Unsigned 32-bit integer
                    ftam.Pathname_Attribute

ftam.linked_Object_Pattern    linked-Object-Pattern
                    No value
                    ftam.Pathname_Pattern

ftam.location    location
                    Unsigned 32-bit integer
                    ftam.Application_Entity_Title

ftam.management-class    management-class
                    Boolean

ftam.match_bitstring    match-bitstring
                    Byte array
                    ftam.BIT_STRING

ftam.maximum_set_size    maximum-set-size
                    Signed 32-bit integer
                    ftam.INTEGER

ftam.nBS9    nBS9
            No value
            ftam.F_READ_ATTRIB_response

ftam.name_list    name-list
                    Unsigned 32-bit integer
                    ftam.SEQUENCE_OF_Node_Name

ftam.name_list_item    Item
                    No value
                    ftam.Node_Name

ftam.no-access    no-access
                    Boolean

ftam.no-value-available-matches    no-value-available-matches
                    Boolean

ftam.no_value_available    no-value-available
                    No value
                    ftam.NULL

ftam.not-required    not-required
                    Boolean
```

```
ftam.number_of_characters_match  number-of-characters-match
    Signed 32-bit integer
    ftam.INTEGER

ftam.object-manipulation  object-manipulation
    Boolean

ftam.object_availability_Pattern  object-availability-Pattern
    No value
    ftam.Boolean_Pattern

ftam.object_availability  object-availability
    Unsigned 32-bit integer
    ftam.Object_Availability_Attribute

ftam.object_identifier_value  object-identifier-value
    ftam.OBJECT_IDENTIFIER

ftam.object_size  object-size
    Unsigned 32-bit integer
    ftam.Object_Size_Attribute

ftam.object_size_Pattern  object-size-Pattern
    No value
    ftam.Integer_Pattern

ftam.object_type  object-type
    Signed 32-bit integer
    ftam.Object_Type_Attribute

ftam.object_type_Pattern  object-type-Pattern
    No value
    ftam.Integer_Pattern

ftam.objects_attributes_list  objects-attributes-list
    Unsigned 32-bit integer
    ftam.Objects_Attributes_List

ftam.octetString  octetString
    Byte array
    ftam.OCTET_STRING

ftam.operation_result  operation-result
    Unsigned 32-bit integer
    ftam.Operation_Result

ftam.override  override
    Signed 32-bit integer
    ftam.Override

ftam.parameter  parameter
    No value
    ftam.T_parameter

ftam.pass  pass
    Boolean

ftam.pass_passwords  pass-passwords
    Unsigned 32-bit integer
    ftam.Pass_Passwords
```

```
ftam.passwords passwords
    No value
    ftam.Access_Passwords

ftam.path_access_control path-access-control
    Unsigned 32-bit integer
    ftam.Access_Control_Change_Attribute

ftam.path_access_passwords path-access-passwords
    Unsigned 32-bit integer
    ftam.Path_Access_Passwords

ftam.pathname pathname
    Unsigned 32-bit integer
    ftam.Pathname_Attribute

ftam.pathname_Pattern pathname-Pattern
    No value
    ftam.Pathname_Pattern

ftam.pathname_value pathname-value
    Unsigned 32-bit integer
    ftam.T_pathname_value

ftam.pathname_value_item Item
    Unsigned 32-bit integer
    ftam.T_pathname_value_item

ftam.permitted_actions permitted-actions
    Byte array
    ftam.Permitted_Actions_Attribute

ftam.permitted_actions_Pattern permitted-actions-Pattern
    No value
    ftam.Bitstring_Pattern

ftam.presentation_action presentation-action
    Boolean
    ftam.BOOLEAN

ftam.presentation_tontext_management presentation-tontext-management
    Boolean
    ftam.BOOLEAN

ftam.primaty_pathname primaty-pathname
    Unsigned 32-bit integer
    ftam.Pathname_Attribute

ftam.primaty_pathname_Pattern primaty-pathname-Pattern
    No value
    ftam.Pathname_Pattern

ftam.private private
    Boolean

ftam.private_use private-use
    Unsigned 32-bit integer
    ftam.Private_Use_Attribute

ftam.processing_mode processing-mode
    Byte array
    ftam.T_processing_mode
```

```
ftam.proposed    proposed
                 Unsigned 32-bit integer
                 ftam.Contents_Type_Attribute

ftam.protocol_Version    protocol-Version
                         Byte array
                         ftam.Protocol_Version

ftam.random-Order    random-Order
                     Boolean

ftam.read    read
             Signed 32-bit integer
             ftam.Lock

ftam.read-Child-objects    read-Child-objects
                           Boolean

ftam.read-Object-availability    read-Object-availability
                                  Boolean

ftam.read-Object-size    read-Object-size
                          Boolean

ftam.read-Object-type    read-Object-type
                          Boolean

ftam.read-access-control    read-access-control
                             Boolean

ftam.read-attribute    read-attribute
                       Boolean

ftam.read-contents-type    read-contents-type
                            Boolean

ftam.read-date-and-time-of-creation    read-date-and-time-of-creation
                                         Boolean

ftam.read-date-and-time-of-last-attribute-modification    read-date-and-time-of-la
                                                         Boolean

ftam.read-date-and-time-of-last-modification    read-date-and-time-of-last-modific
                                                  Boolean

ftam.read-date-and-time-of-last-read-access    read-date-and-time-of-last-read-acc
                                                Boolean

ftam.read-future-Object-size    read-future-Object-size
                                  Boolean

ftam.read-identity-of-creator    read-identity-of-creator
                                  Boolean

ftam.read-identity-of-last-attribute-modifier    read-identity-of-last-attribute-m
                                                  Boolean

ftam.read-identity-of-last-modifier    read-identity-of-last-modifier
                                        Boolean

ftam.read-identity-of-last-reader    read-identity-of-last-reader
                                      Boolean

ftam.read-legal-qualifiCatiOnS    read-legal-qualifiCatiOnS
                                    Boolean
```



```
ftam.read-linked-Object  read-linked-Object
    Boolean

ftam.read-path-access-control  read-path-access-control
    Boolean

ftam.read-pathname  read-pathname
    Boolean

ftam.read-permitted-actions  read-permitted-actions
    Boolean

ftam.read-primary-pathname  read-primary-pathname
    Boolean

ftam.read-private-use  read-private-use
    Boolean

ftam.read-storage-account  read-storage-account
    Boolean

ftam.read_attribute  read-attribute
    Signed 32-bit integer
    ftam.Lock

ftam.read_attribute_password  read-attribute-password
    Unsigned 32-bit integer
    ftam.Password

ftam.read_password  read-password
    Unsigned 32-bit integer
    ftam.Password

ftam.recoverfy_Point  recoverfy-Point
    Signed 32-bit integer
    ftam.INTEGER

ftam.recovery  recovery
    Boolean

ftam.recovery_mode  recovery-mode
    Signed 32-bit integer
    ftam.T_request_recovery_mode

ftam.recovety_Point  recovety-Point
    Signed 32-bit integer
    ftam.INTEGER

ftam.referent_indicator  referent-indicator
    Boolean
    ftam.Referent_Indicator

ftam.relational_camparision  relational-camparision
    Byte array
    ftam.Equality_Comparision

ftam.relational_comparision  relational-comparision
    Byte array
    ftam.Relational_Comparision

ftam.relative  relative
    Signed 32-bit integer
    ftam.T_relative
```

```
ftam.remove_contexts  remove-contexts
    Unsigned 32-bit integer
    ftam.SET_OF_Abstract_Syntax_Name
ftam.remove_contexts_item  Item
    ftam.Abstract_Syntax_Name
ftam.replace  replace
    Signed 32-bit integer
    ftam.Lock
ftam.replace_password  replace-password
    Unsigned 32-bit integer
    ftam.Password
ftam.request_operation_result  request-Operation-result
    Signed 32-bit integer
    ftam.Request_Operation_Result
ftam.request_type  request-type
    Signed 32-bit integer
    ftam.Request_Type
ftam.requested_access  requested-access
    Byte array
    ftam.Access_Request
ftam.reset  reset
    Boolean
    ftam.BOOLEAN
ftam.resource_identifier  resource-identifier
    String
    ftam.GraphicString
ftam.restart-data-transfer  restart-data-transfer
    Boolean
ftam.retrieval_scope  retrieval-scope
    Signed 32-bit integer
    ftam.T_retrieval_scope
ftam.reverse-traversal  reverse-traversal
    Boolean
ftam.root_directory  root-directory
    Unsigned 32-bit integer
    ftam.Pathname_Attribute
ftam.scope  scope
    Unsigned 32-bit integer
    ftam.Scope
ftam.security  security
    Boolean
ftam.service_class  service-class
    Byte array
    ftam.Service_Class
ftam.shared  shared
    Boolean
```

```
ftam.shared_ASE_infonnation  shared-ASE-infonnation
    No value
    ftam.Shared_ASE_Information
ftam.shared_ASE_information  shared-ASE-information
    No value
    ftam.Shared_ASE_Information
ftam.significance_bitstring  significance-bitstring
    Byte array
    ftam.BIT_STRING
ftam.single_name  single-name
    No value
    ftam.Node_Name
ftam.state_result  state-result
    Signed 32-bit integer
    ftam.State_Result
ftam.storage  storage
    Boolean
ftam.storage_account  storage-account
    Unsigned 32-bit integer
    ftam.Account_Attribute
ftam.storage_account_Pattern  storage-account-Pattern
    No value
    ftam.String_Pattern
ftam.string_match  string-match
    No value
    ftam.String_Pattern
ftam.string_value  string-value
    Unsigned 32-bit integer
    ftam.T_string_value
ftam.string_value_item  Item
    Unsigned 32-bit integer
    ftam.T_string_value_item
ftam.substring_match  substring-match
    String
    ftam.GraphicString
ftam.success_Object_count  success-Object-count
    Signed 32-bit integer
    ftam.INTEGER
ftam.success_Object_names  success-Object-names
    Unsigned 32-bit integer
    ftam.SEQUENCE_OF_Pathname
ftam.success_Object_names_item  Item
    Unsigned 32-bit integer
    ftam.Pathname
ftam.suggested_delay  suggested-delay
    Signed 32-bit integer
    ftam.INTEGER
```

```
ftam.target_Object  target-Object
    Unsigned 32-bit integer
    ftam.Pathname_Attribute

ftam.target_object  target-object
    Unsigned 32-bit integer
    ftam.Pathname_Attribute

ftam.threshold  threshold
    Signed 32-bit integer
    ftam.INTEGER

ftam.time_and_date_value  time-and-date-value
    String
    ftam.GeneralizedTime

ftam.transfer-and-management-class  transfer-and-management-class
    Boolean

ftam.transfer-class  transfer-class
    Boolean

ftam.transfer_number  transfer-number
    Signed 32-bit integer
    ftam.INTEGER

ftam.transfer_window  transfer-window
    Signed 32-bit integer
    ftam.INTEGER

ftam.traversal  traversal
    Boolean

ftam.unconstrained-class  unconstrained-class
    Boolean

ftam.unknown  unknown
    No value
    ftam.NULL

ftam.unstructured_binary  ISO FTAM unstructured binary
    Byte array
    ISO FTAM unstructured binary

ftam.unstructured_text  ISO FTAM unstructured text
    String
    ISO FTAM unstructured text

ftam.version-1  version-1
    Boolean

ftam.version-2  version-2
    Boolean

ftam.write  write
    Boolean
```

### ISO 8602 CLTP ConnectionLess Transport Protocol (cltp)

```
cltp.li  Length
    Unsigned 8-bit integer
    Length Indicator, length of this header
```

```

cltp.type  PDU Type
           Unsigned 8-bit integer
           PDU Type

```

### ISO 8650-1 OSI Association Control Service (acse)

```

acse.ASOI_tag_item  Item
                   No value
                   acse.ASOI_tag_item

acse.ASO_context_name_list_item  Item
                                  acse.ASO_context_name

acse.Association_data_item  Association-data
                             No value
                             acse.EXTERNALt

acse.Context_list_item  Item
                        No value
                        acse.Context_list_item

acse.Default_Context_List_item  Item
                                 No value
                                 acse.Default_Context_List_item

acse.P_context_result_list_item  Item
                                  No value
                                  acse.P_context_result_list_item

acse.aSO-context-negotiation  aSO-context-negotiation
                               Boolean

acse.aSO_context_name  aSO-context-name
                       acse.T_AARQ_aSO_context_name

acse.aSO_context_name_list  aSO-context-name-list
                             Unsigned 32-bit integer
                             acse.ASO_context_name_list

acse.a_user_data  a-user-data
                  Unsigned 32-bit integer
                  acse.User_Data

acse.aare  aare
           No value
           acse.AARE_apdu

acse.aarq  aarq
           No value
           acse.AARQ_apdu

acse.abort_diagnostic  abort-diagnostic
                       Unsigned 32-bit integer
                       acse.ABRT_diagnostic

acse.abort_source  abort-source
                   Unsigned 32-bit integer
                   acse.ABRT_source

acse.abrt  abrt
           No value
           acse.ABRT_apdu

```

```
acse.abstract_syntax abstract-syntax
    acse.Abstract_syntax_name
acse.abstract_syntax_name abstract-syntax-name
    acse.Abstract_syntax_name
acse.acrp acrp
    No value
    acse.ACRP_apdu
acse.acrq acrq
    No value
    acse.ACRQ_apdu
acse.acse_service_provider acse-service-provider
    Unsigned 32-bit integer
    acse.T_acse_service_provider
acse.acse_service_user acse-service-user
    Unsigned 32-bit integer
    acse.T_acse_service_user
acse.adt adt
    No value
    acse.A_DT_apdu
acse.ae_title_form1 ae-title-form1
    Unsigned 32-bit integer
    acse.AE_title_form1
acse.ae_title_form2 ae-title-form2
    acse.AE_title_form2
acse.ap_title_form1 ap-title-form1
    Unsigned 32-bit integer
    acse.AP_title_form1
acse.ap_title_form2 ap-title-form2
    acse.AP_title_form2
acse.ap_title_form3 ap-title-form3
    String
    acse.AP_title_form3
acse.arbitrary arbitrary
    Byte array
    acse.BIT_STRING
acse.aso_qualifier aso-qualifier
    Unsigned 32-bit integer
    acse.ASO_qualifier
acse.aso_qualifier_form1 aso-qualifier-form1
    Unsigned 32-bit integer
    acse.ASO_qualifier_form1
acse.aso_qualifier_form2 aso-qualifier-form2
    Signed 32-bit integer
    acse.ASO_qualifier_form2
```

```
acse.aso_qualifier_form3  aso-qualifier-form3
    String
    acse.ASO_qualifier_form3
acse.aso_qualifier_form_any_octets  aso-qualifier-form-any-octets
    Byte array
    acse.ASO_qualifier_form_octets
acse.asoi_identifier  asoi-identifier
    Unsigned 32-bit integer
    acse.ASOI_identifier
acse.authentication  authentication
    Boolean
acse.bitstring  bitstring
    Byte array
    acse.BIT_STRING
acse.called_AE_invocation_identifier  called-AE-invocation-identifier
    Signed 32-bit integer
    acse.AE_invocation_identifier
acse.called_AE_qualifier  called-AE-qualifier
    Unsigned 32-bit integer
    acse.AE_qualifier
acse.called_AP_invocation_identifier  called-AP-invocation-identifier
    Signed 32-bit integer
    acse.AP_invocation_identifier
acse.called_AP_title  called-AP-title
    Unsigned 32-bit integer
    acse.AP_title
acse.called_asoi_tag  called-asoi-tag
    Unsigned 32-bit integer
    acse.ASOI_tag
acse.calling_AE_invocation_identifier  calling-AE-invocation-identifier
    Signed 32-bit integer
    acse.AE_invocation_identifier
acse.calling_AE_qualifier  calling-AE-qualifier
    Unsigned 32-bit integer
    acse.AE_qualifier
acse.calling_AP_invocation_identifier  calling-AP-invocation-identifier
    Signed 32-bit integer
    acse.AP_invocation_identifier
acse.calling_AP_title  calling-AP-title
    Unsigned 32-bit integer
    acse.AP_title
acse.calling_asoi_tag  calling-asoi-tag
    Unsigned 32-bit integer
    acse.ASOI_tag
acse.calling_authentication_value  calling-authentication-value
    Unsigned 32-bit integer
    acse.Authentication_value
```

```
acse.charstring charstring
    String
    acse.GraphicString
acse.concrete_syntax_name concrete-syntax-name
    acse.Concrete_syntax_name
acse.context_list context-list
    Unsigned 32-bit integer
    acse.Context_list
acse.data_value_descriptor data-value-descriptor
    String
    acse.ObjectDescriptor
acse.default_contact_list default-contact-list
    Unsigned 32-bit integer
    acse.Default_Context_List
acse.direct_reference direct-reference
    acse.T_direct_reference
acse.encoding encoding
    Unsigned 32-bit integer
    acse.T_encoding
acse.external external
    No value
    acse.EXTERNALt
acse.fully_encoded_data fully-encoded-data
    No value
    acse.PDV_list
acse.higher-level-association higher-level-association
    Boolean
acse.identifier identifier
    Unsigned 32-bit integer
    acse.ASOI_identifier
acse.implementation_information implementation-information
    String
    acse.Implementation_data
acse.indirect_reference indirect-reference
    Signed 32-bit integer
    acse.T_indirect_reference
acse.mechanism_name mechanism-name
    acse.Mechanism_name
acse.nested-association nested-association
    Boolean
acse.octet_aligned octet-aligned
    Byte array
    acse.T_octet_aligned
acse.other other
    No value
    acse.Authentication_value_other
```



```
acse.other_mechanism_name  other-mechanism-name
    acse.T_other_mechanism_name
acse.other_mechanism_value  other-mechanism-value
    No value
    acse.T_other_mechanism_value
acse.p_context_definition_list  p-context-definition-list
    Unsigned 32-bit integer
    acse.Syntactic_context_list
acse.p_context_result_list  p-context-result-list
    Unsigned 32-bit integer
    acse.P_context_result_list
acse.pci  pci
    Signed 32-bit integer
    acse.Presentation_context_identifier
acse.presentation_context_identifier  presentation-context-identifier
    Signed 32-bit integer
    acse.Presentation_context_identifier
acse.presentation_data_values  presentation-data-values
    Unsigned 32-bit integer
    acse.T_presentation_data_values
acse.protocol_version  protocol-version
    Byte array
    acse.T_AARQ_protocol_version
acse.provider_reason  provider-reason
    Signed 32-bit integer
    acse.T_provider_reason
acse.qualifier  qualifier
    Unsigned 32-bit integer
    acse.ASO_qualifier
acse.reason  reason
    Signed 32-bit integer
    acse.Release_request_reason
acse.responder_acse_requirements  responder-acse-requirements
    Byte array
    acse.ACSE_requirements
acse.responding_AE_invocation_identifier  responding-AE-invocation-identifier
    Signed 32-bit integer
    acse.AE_invocation_identifier
acse.responding_AE_qualifier  responding-AE-qualifier
    Unsigned 32-bit integer
    acse.AE_qualifier
acse.responding_AP_invocation_identifier  responding-AP-invocation-identifier
    Signed 32-bit integer
    acse.AP_invocation_identifier
acse.responding_AP_title  responding-AP-title
    Unsigned 32-bit integer
    acse.AP_title
```

```
acse.responding_authentication_value  responding-authentication-value
    Unsigned 32-bit integer
    acse.Authentication_value

acse.result  result
    Unsigned 32-bit integer
    acse.Associate_result

acse.result_source_diagnostic  result-source-diagnostic
    Unsigned 32-bit integer
    acse.Associate_source_diagnostic

acse.rlre  rlre
    No value
    acse.RLRE_apdu

acse.rlrq  rlrq
    No value
    acse.RLRQ_apdu

acse.sender_acse_requirements  sender-acse-requirements
    Byte array
    acse.ACSE_requirements

acse.simple_ASN1_type  simple-ASN1-type
    No value
    acse.T_simple_ASN1_type

acse.simply_encoded_data  simply-encoded-data
    Byte array
    acse.Simply_encoded_data

acse.single_ASN1_type  single-ASN1-type
    No value
    acse.T_single_ASN1_type

acse.transfer_syntax_name  transfer-syntax-name
    acse.TransferSyntaxName

acse.transfer_syntaxes  transfer-syntaxes
    Unsigned 32-bit integer
    acse.SEQUENCE_OF_TransferSyntaxName

acse.transfer_syntaxes_item  Item
    acse.TransferSyntaxName

acse.user_information  user-information
    Unsigned 32-bit integer
    acse.Association_data

acse.version1  version1
    Boolean
```

**ISO 8823 OSI Presentation Protocol (pres)**

```
pres.Context_list_item  Item
    No value
    pres.Context_list_item

pres.Fully_encoded_data_item  Item
    No value
    pres.PDV_list
```

```
pres.Presentation_context_deletion_list_item  Item
    Signed 32-bit integer
    pres.Presentation_context_identifier
pres.Presentation_context_deletion_result_list_item  Item
    Signed 32-bit integer
    pres.Presentation_context_deletion_result_list_item
pres.Presentation_context_identifier_list_item  Item
    No value
    pres.Presentation_context_identifier_list_item
pres.Result_list_item  Item
    No value
    pres.Result_list_item
pres.Typed_data_type  Typed data type
    Unsigned 32-bit integer
pres.aborttype  Abort type
    Unsigned 32-bit integer
pres.abstract_syntax_name  abstract-syntax-name
    pres.Abstract_syntax_name
pres.acPPDU  acPPDU
    No value
    pres.AC_PPDU
pres.acaPPDU  acaPPDU
    No value
    pres.ACA_PPDU
pres.activity-management  activity-management
    Boolean
pres.arbitrary  arbitrary
    Byte array
    pres.BIT_STRING
pres.arp_ppdu  arp-ppdu
    No value
    pres.ARP_PPDU
pres.aru_ppdu  aru-ppdu
    Unsigned 32-bit integer
    pres.ARU_PPDU
pres.called_presentation_selector  called-presentation-selector
    Byte array
    pres.Called_presentation_selector
pres.calling_presentation_selector  calling-presentation-selector
    Byte array
    pres.Calling_presentation_selector
pres.capability-data  capability-data
    Boolean
pres.context-management  context-management
    Boolean
```

```
pres.cpapdu    CPA-PPDU
               No value
pres.cprtype   CPR-PPDU
               Unsigned 32-bit integer
pres.cptype    CP-type
               No value
pres.data-separation  data-separation
               Boolean
pres.default_context_name  default-context-name
               No value
               pres.Default_context_name
pres.default_context_result  default-context-result
               Signed 32-bit integer
               pres.Default_context_result
pres.duplex    duplex
               Boolean
pres.event_identifier  event-identifier
               Signed 32-bit integer
               pres.Event_identifier
pres.exceptions  exceptions
               Boolean
pres.expedited-data  expedited-data
               Boolean
pres.extensions  extensions
               No value
               pres.T_extensions
pres.fully_encoded_data  fully-encoded-data
               Unsigned 32-bit integer
               pres.Fully_encoded_data
pres.half-duplex  half-duplex
               Boolean
pres.initiators_nominated_context  initiators-nominated-context
               Signed 32-bit integer
               pres.Presentation_context_identifier
pres.major-synchronize  major-synchronize
               Boolean
pres.minor-synchronize  minor-synchronize
               Boolean
pres.mode_selector  mode-selector
               No value
               pres.Mode_selector
pres.mode_value  mode-value
               Signed 32-bit integer
               pres.T_mode_value
pres.negotiated-release  negotiated-release
               Boolean
```

```
pres.nominated-context  nominated-context
  Boolean

pres.normal_mode_parameters  normal-mode-parameters
  No value
  pres.T_normal_mode_parameters

pres.octet_aligned  octet-aligned
  Byte array
  pres.T_octet_aligned

pres.packed-encoding-rules  packed-encoding-rules
  Boolean

pres.presentation_context_addition_list  presentation-context-addition-list
  Unsigned 32-bit integer
  pres.Presentation_context_addition_list

pres.presentation_context_addition_result_list  presentation-context-addition-re
  Unsigned 32-bit integer
  pres.Presentation_context_addition_result_list

pres.presentation_context_definition_list  presentation-context-definition-list
  Unsigned 32-bit integer
  pres.Presentation_context_definition_list

pres.presentation_context_definition_result_list  presentation-context-definitio
  Unsigned 32-bit integer
  pres.Presentation_context_definition_result_list

pres.presentation_context_deletion_list  presentation-context-deletion-list
  Unsigned 32-bit integer
  pres.Presentation_context_deletion_list

pres.presentation_context_deletion_result_list  presentation-context-deletion-re
  Unsigned 32-bit integer
  pres.Presentation_context_deletion_result_list

pres.presentation_context_identifier  presentation-context-identifier
  Signed 32-bit integer
  pres.Presentation_context_identifier

pres.presentation_context_identifier_list  presentation-context-identifier-list
  Unsigned 32-bit integer
  pres.Presentation_context_identifier_list

pres.presentation_data_values  presentation-data-values
  Unsigned 32-bit integer
  pres.T_presentation_data_values

pres.presentation_requirements  presentation-requirements
  Byte array
  pres.Presentation_requirements

pres.protocol_options  protocol-options
  Byte array
  pres.Protocol_options

pres.protocol_version  protocol-version
  Byte array
  pres.Protocol_version
```

```
pres.provider_reason provider-reason
    Signed 32-bit integer
    pres.Provider_reason

pres.responders_nominated_context responders-nominated-context
    Signed 32-bit integer
    pres.Presentation_context_identifier

pres.responding_presentation_selector responding-presentation-selector
    Byte array
    pres.Responding_presentation_selector

pres.restoration restoration
    Boolean

pres.result result
    Signed 32-bit integer
    pres.Result

pres.resynchronize resynchronize
    Boolean

pres.short-encoding short-encoding
    Boolean

pres.simply_encoded_data simply-encoded-data
    Byte array
    pres.Simple_encoded_data

pres.single_ASN1_type single-ASN1-type
    Byte array
    pres.T_single_ASN1_type

pres.symmetric-synchronize symmetric-synchronize
    Boolean

pres.transfer_syntax_name transfer-syntax-name
    pres.Transfer_syntax_name

pres.transfer_syntax_name_list transfer-syntax-name-list
    Unsigned 32-bit integer
    pres.SEQUENCE_OF_Transfer_syntax_name

pres.transfer_syntax_name_list_item Item
    pres.Transfer_syntax_name

pres.ttdPPDU ttdPPDU
    Unsigned 32-bit integer
    pres.User_data

pres.typed-data typed-data
    Boolean

pres.user_data user-data
    Unsigned 32-bit integer
    pres.User_data

pres.user_session_requirements user-session-requirements
    Byte array
    pres.User_session_requirements

pres.version-1 version-1
    Boolean
```

```

pres.x400_mode_parameters  x400-mode-parameters
    No value
    rtse.RTORJapdu

pres.x410_mode_parameters  x410-mode-parameters
    No value
    rtse.RTORQapdu

```

### ISO 9542 ESIS Routeing Information Exchange Protocol (esis)

```

esis.chksum  Checksum
    Unsigned 16-bit integer

esis.htime  Holding Time
    Unsigned 16-bit integer
    s

esis.length  PDU Length
    Unsigned 8-bit integer

esis.nlpi  Network Layer Protocol Identifier
    Unsigned 8-bit integer

esis.res  Reserved(==0)
    Unsigned 8-bit integer

esis.type  PDU Type
    Unsigned 8-bit integer

esis.ver  Version (==1)
    Unsigned 8-bit integer

```

### ISO/IEC 13818-1 (mp2t)

```

mp2t.af  Adaption field
    No value

mp2t.af.afe_flag  Adaptation Field Extension Flag
    Unsigned 8-bit integer

mp2t.af.di  Discontinuity Indicator
    Unsigned 8-bit integer

mp2t.af.e.dnau_14_0  DTS Next AU[14...0]
    Unsigned 16-bit integer

mp2t.af.e.dnau_29_15  DTS Next AU[29...15]
    Unsigned 16-bit integer

mp2t.af.e.dnau_32_30  DTS Next AU[32...30]
    Unsigned 8-bit integer

mp2t.af.e.ltw_flag  LTW Flag
    Unsigned 8-bit integer

mp2t.af.e.ltwo  LTW Offset
    Unsigned 16-bit integer

mp2t.af.e.ltwv_flag  LTW Valid Flag
    Unsigned 16-bit integer

mp2t.af.e.m_1  Marker Bit
    Unsigned 8-bit integer

```

mp2t.af.e.m\_2 Marker Bit  
Unsigned 16-bit integer

mp2t.af.e.m\_3 Marker Bit  
Unsigned 16-bit integer

mp2t.af.e.pr Piecewise Rate  
Unsigned 24-bit integer

mp2t.af.e.pr\_flag Piecewise Rate Flag  
Unsigned 8-bit integer

mp2t.af.e.pr\_reserved Reserved  
Unsigned 24-bit integer

mp2t.af.e.reserved Reserved  
Unsigned 8-bit integer

mp2t.af.e.reserved\_bytes Reserved  
Byte array

mp2t.af.e.ss\_flag Seamless Splice Flag  
Unsigned 8-bit integer

mp2t.af.e.st Splice Type  
Unsigned 8-bit integer

mp2t.af.e.length Adaptation Field Extension Length  
Unsigned 8-bit integer

mp2t.af.espi Elementary Stream Priority Indicator  
Unsigned 8-bit integer

mp2t.af.length Adaptation Field Length  
Unsigned 8-bit integer

mp2t.af.opcr Original Program Clock Reference  
No value

mp2t.af.opcr\_flag OPCR Flag  
Unsigned 8-bit integer

mp2t.af.pcr Program Clock Reference  
No value

mp2t.af.pcr\_flag PCR Flag  
Unsigned 8-bit integer

mp2t.af.rai Random Access Indicator  
Unsigned 8-bit integer

mp2t.af.sc Splice Countdown  
Unsigned 8-bit integer

mp2t.af.sp\_flag Splicing Point Flag  
Unsigned 8-bit integer

mp2t.af.stuffing\_bytes Stuffing  
Byte array

mp2t.af.tpd Transport Private Data  
Byte array

mp2t.af.tpd\_flag Transport Private Data Flag  
Unsigned 8-bit integer



```
mp2t.af.tpd_length  Transport Private Data Length
    Unsigned 8-bit integer
mp2t.afc  Adaption Field Control
    Unsigned 32-bit integer
mp2t.cc  Continuity Counter
    Unsigned 32-bit integer
mp2t.header  Header
    Unsigned 32-bit integer
mp2t.malformed_payload  Malformed Payload
    Byte array
mp2t.payload  Payload
    Byte array
mp2t.pid  PID
    Unsigned 32-bit integer
mp2t.pusi  Payload Unit Start Indicator
    Unsigned 32-bit integer
mp2t.sync_byte  Sync Byte
    Unsigned 32-bit integer
mp2t.tei  Transport Error Indicator
    Unsigned 32-bit integer
mp2t.tp  Transport Priority
    Unsigned 32-bit integer
mp2t.tsc  Transport Scrambling Control
    Unsigned 32-bit integer
```

**ISUP Thin Protocol (isup\_thin)**

```
isup_thin.count  Message length (counted according to bit 0) including the Message
    Unsigned 16-bit integer
    Message length
isup_thin.count.type  Count Type
    Unsigned 8-bit integer
    Count Type
isup_thin.count.version  Version
    Unsigned 16-bit integer
    Version
isup_thin.dpc  Destination Point Code
    Unsigned 32-bit integer
    Destination Point Code
isup_thin.isup.message.length  ISUP message length
    Unsigned 16-bit integer
    ISUP message length
isup_thin.message.class  Message Class
    Unsigned 8-bit integer
    Message Class
```

```

isup_thin.message.type  Message Type
    Unsigned 8-bit integer
    Message Type

isup_thin.mtp.message.name  Message Name Code
    Unsigned 8-bit integer
    Message Name

isup_thin.oam.message.name  Message Name Code
    Unsigned 8-bit integer
    Message Name

isup_thin.opc  Originating Point Code
    Unsigned 32-bit integer
    Originating Point Code

isup_thin.priority  Priority
    Unsigned 8-bit integer
    Priority

isup_thin.servind  Service Indicator
    Unsigned 8-bit integer
    Service Indicator

isup_thin.sls  Signalling Link Selection
    Unsigned 8-bit integer
    Signalling Link Selection

isup_thin.subservind  Sub Service Field (Network Indicator)
    Unsigned 8-bit integer
    Sub Service Field (Network Indicator)

```

#### **ISystemActivator ISystemActivator Resolver (isystemactivator)**

```

isystemactivator.opnum  Operation
    Unsigned 16-bit integer

isystemactivator.unknown  IUnknown
    No value

```

#### **ITU M.3100 Generic Network Information Model (gnm)**

```

gnm.AcceptableCircuitPackTypeList  AcceptableCircuitPackTypeList
    Unsigned 32-bit integer
    gnm.AcceptableCircuitPackTypeList

gnm.AcceptableCircuitPackTypeList_item  Item
    String
    gnm.PrintableString

gnm.AlarmSeverityAssignmentList  AlarmSeverityAssignmentList
    Unsigned 32-bit integer
    gnm.AlarmSeverityAssignmentList

gnm.AlarmSeverityAssignmentList_item  Item
    No value
    gnm.AlarmSeverityAssignment

gnm.AlarmStatus  AlarmStatus
    Unsigned 32-bit integer
    gnm.AlarmStatus

```

```
gnm.Boolean Boolean
    Boolean
    gnm.Boolean

gnm.ChannelNumber ChannelNumber
    Signed 32-bit integer
    gnm.ChannelNumber

gnm.CharacteristicInformation CharacteristicInformation
    gnm.CharacteristicInformation

gnm.CircuitDirectionality CircuitDirectionality
    Unsigned 32-bit integer
    gnm.CircuitDirectionality

gnm.CircuitPackType CircuitPackType
    String
    gnm.CircuitPackType

gnm.ConnectivityPointer ConnectivityPointer
    Unsigned 32-bit integer
    gnm.ConnectivityPointer

gnm.Count Count
    Signed 32-bit integer
    gnm.Count

gnm.CrossConnectionName CrossConnectionName
    String
    gnm.CrossConnectionName

gnm.CrossConnectionObjectPointer CrossConnectionObjectPointer
    Unsigned 32-bit integer
    gnm.CrossConnectionObjectPointer

gnm.CurrentProblemList CurrentProblemList
    Unsigned 32-bit integer
    gnm.CurrentProblemList

gnm.CurrentProblemList_item Item
    No value
    gnm.CurrentProblem

gnm.Directionality Directionality
    Unsigned 32-bit integer
    gnm.Directionality

gnm.DownstreamConnectivityPointer DownstreamConnectivityPointer
    Unsigned 32-bit integer
    gnm.DownstreamConnectivityPointer

gnm.EquipmentHolderAddress EquipmentHolderAddress
    Unsigned 32-bit integer
    gnm.EquipmentHolderAddress

gnm.EquipmentHolderAddress_item Item
    String
    gnm.PrintableString

gnm.EquipmentHolderType EquipmentHolderType
    String
    gnm.EquipmentHolderType
```

```
gnm.ExternalTime ExternalTime
    String
    gnm.ExternalTime

gnm.HolderStatus HolderStatus
    Unsigned 32-bit integer
    gnm.HolderStatus

gnm.InformationTransferCapabilities InformationTransferCapabilities
    Unsigned 32-bit integer
    gnm.InformationTransferCapabilities

gnm.ListOfCharacteristicInformation ListOfCharacteristicInformation
    Unsigned 32-bit integer
    gnm.ListOfCharacteristicInformation

gnm.ListOfCharacteristicInformation_item Item
    gnm.CharacteristicInformation

gnm.MappingList_item Item
    gnm.PayloadLevel

gnm.MultipleConnections_item Item
    Unsigned 32-bit integer
    gnm.MultipleConnections_item

gnm.NameType NameType
    Unsigned 32-bit integer
    gnm.NameType

gnm.NumberOfCircuits NumberOfCircuits
    Signed 32-bit integer
    gnm.NumberOfCircuits

gnm.ObjectList ObjectList
    Unsigned 32-bit integer
    gnm.ObjectList

gnm.ObjectList_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.Pointer Pointer
    Unsigned 32-bit integer
    gnm.Pointer

gnm.PointerOrNull PointerOrNull
    Unsigned 32-bit integer
    gnm.PointerOrNull

gnm.RelatedObjectInstance RelatedObjectInstance
    Unsigned 32-bit integer
    gnm.RelatedObjectInstance

gnm.Replaceable Replaceable
    Unsigned 32-bit integer
    gnm.Replaceable

gnm.SequenceOfObjectInstance SequenceOfObjectInstance
    Unsigned 32-bit integer
    gnm.SequenceOfObjectInstance
```

```
gnm.SequenceOfObjectInstance_item  Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.SerialNumber  SerialNumber
    String
    gnm.SerialNumber

gnm.SignalRateAndMappingList_item  Item
    No value
    gnm.SignalRateAndMappingList_item

gnm.SignalType  SignalType
    Unsigned 32-bit integer
    gnm.SignalType

gnm.SignallingCapabilities  SignallingCapabilities
    Unsigned 32-bit integer
    gnm.SignallingCapabilities

gnm.SubordinateCircuitPackSoftwareLoad  SubordinateCircuitPackSoftwareLoad
    Unsigned 32-bit integer
    gnm.SubordinateCircuitPackSoftwareLoad

gnm.SupportableClientList  SupportableClientList
    Unsigned 32-bit integer
    gnm.SupportableClientList

gnm.SupportableClientList_item  Item
    Unsigned 32-bit integer
    cmip.ObjectClass

gnm.SupportedTOClasses  SupportedTOClasses
    Unsigned 32-bit integer
    gnm.SupportedTOClasses

gnm.SupportedTOClasses_item  Item
    gnm.OBJECT_IDENTIFIER

gnm.SystemTimingSource  SystemTimingSource
    No value
    gnm.SystemTimingSource

gnm.ToTPPools_item  Item
    No value
    gnm.ToTPPools_item

gnm.TpsInGtpList  TpsInGtpList
    Unsigned 32-bit integer
    gnm.TpsInGtpList

gnm.TpsInGtpList_item  Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.TransmissionCharacteristics  TransmissionCharacteristics
    Byte array
    gnm.TransmissionCharacteristics

gnm.UserLabel  UserLabel
    String
    gnm.UserLabel
```

```
gnm.VendorName VendorName
    String
    gnm.VendorName

gnm.Version Version
    String
    gnm.Version

gnm._item_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.alarmStatus alarmStatus
    Unsigned 32-bit integer
    gnm.AlarmStatus

gnm.broadcast broadcast
    Unsigned 32-bit integer
    gnm.SET_OF_ObjectInstance

gnm.broadcastConcatenated broadcastConcatenated
    Unsigned 32-bit integer
    gnm.T_broadcastConcatenated

gnm.broadcastConcatenated_item Item
    Unsigned 32-bit integer
    gnm.SEQUENCE_OF_ObjectInstance

gnm.broadcast_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.bundle bundle
    No value
    gnm.Bundle

gnm.bundlingFactor bundlingFactor
    Signed 32-bit integer
    gnm.INTEGER

gnm.characteristicInfoType characteristicInfoType
    gnm.CharacteristicInformation

gnm.characteristicInformation characteristicInformation
    gnm.CharacteristicInformation

gnm.complex complex
    Unsigned 32-bit integer
    gnm.SEQUENCE_OF_Bundle

gnm.complex_item Item
    No value
    gnm.Bundle

gnm.concatenated concatenated
    Unsigned 32-bit integer
    gnm.SEQUENCE_OF_ObjectInstance

gnm.concatenated_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance
```

```
gnm.connected    connected
                 Unsigned 32-bit integer
                 cmip.ObjectInstance

gnm.connection    connection
                 Unsigned 32-bit integer
                 cmip.ObjectInstance

gnm.dCME          dCME
                 Boolean

gnm.deletedTpPoolOrGTP  deletedTpPoolOrGTP
                 Unsigned 32-bit integer
                 cmip.ObjectInstance

gnm.downstreamConnected  downstreamConnected
                 Unsigned 32-bit integer
                 cmip.ObjectInstance

gnm.downstreamNotConnected  downstreamNotConnected
                 Unsigned 32-bit integer
                 cmip.ObjectInstance

gnm.echoControl    echoControl
                 Boolean

gnm.explicitPToP    explicitPToP
                 No value
                 gnm.ExplicitPtoP

gnm.explicitPtoMP    explicitPtoMP
                 No value
                 gnm.ExplicitPtoMP

gnm.failed          failed
                 Unsigned 32-bit integer
                 gnm.Failed

gnm.fromTp          fromTp
                 Unsigned 32-bit integer
                 gnm.ExplicitTP

gnm.globalValue     globalValue
                 gnm.OBJECT_IDENTIFIER

gnm.gtp             gtp
                 Unsigned 32-bit integer
                 cmip.ObjectInstance

gnm.holderEmpty     holderEmpty
                 No value
                 gnm.NULL

gnm.inTheAcceptableList  inTheAcceptableList
                 String
                 gnm.CircuitPackType

gnm.incorrectInstances  incorrectInstances
                 Unsigned 32-bit integer
                 gnm.SET_OF_ObjectInstance
```

```
gnm.incorrectInstances_item  Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.integerValue  integerValue
    Signed 32-bit integer
    gnm.INTEGER

gnm.legs  legs
    Unsigned 32-bit integer
    gnm.SET_OF_ToTermSpecifier

gnm.legs_item  Item
    Unsigned 32-bit integer
    gnm.ToTermSpecifier

gnm.listofTPs  listofTPs
    Unsigned 32-bit integer
    gnm.SEQUENCE_OF_ObjectInstance

gnm.listofTPs_item  Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.localValue  localValue
    Signed 32-bit integer
    gnm.INTEGER

gnm.logicalProblem  logicalProblem
    No value
    gnm.LogicalProblem

gnm.mappingList  mappingList
    Unsigned 32-bit integer
    gnm.MappingList

gnm.mpCrossConnection  mpCrossConnection
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.mpXCon  mpXCon
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.multipleConnections  multipleConnections
    Unsigned 32-bit integer
    gnm.MultipleConnections

gnm.name  name
    String
    gnm.CrossConnectionName

gnm.newTP  newTP
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.none  none
    No value
    gnm.NULL

gnm.notApplicable  notApplicable
    No value
    gnm.NULL
```



```
gnm.notAvailable  notAvailable
    No value
    gnm.NULL

gnm.notConnected  notConnected
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.notInTheAcceptableList  notInTheAcceptableList
    String
    gnm.CircuitPackType

gnm.null  null
    No value
    gnm.NULL

gnm.numberOfTPs  numberOfTPs
    Signed 32-bit integer
    gnm.INTEGER

gnm.numericName  numericName
    Signed 32-bit integer
    gnm.INTEGER

gnm.objectClass  objectClass
    gnm.OBJECT_IDENTIFIER

gnm.oneTPorGTP  oneTPorGTP
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.pString  pString
    String
    gnm.GraphicString

gnm.pass  pass
    Unsigned 32-bit integer
    gnm.Connected

gnm.pointToMultipoint  pointToMultipoint
    No value
    gnm.PointToMultipoint

gnm.pointToPoint  pointToPoint
    No value
    gnm.PointToPoint

gnm.pointer  pointer
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.primaryTimingSource  primaryTimingSource
    No value
    gnm.SystemTiming

gnm.problem  problem
    Unsigned 32-bit integer
    cmip.ProbableCause

gnm.problemCause  problemCause
    Unsigned 32-bit integer
    gnm.ProblemCause
```

```
gnm.ptoMPools  ptoMPools
    No value
    gnm.PtoMPools

gnm.ptoTpPool  ptoTpPool
    No value
    gnm.PtoTPPool

gnm.redline    redline
    Boolean
    gnm.BOOLEAN

gnm.relatedObject  relatedObject
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.resourceProblem  resourceProblem
    Unsigned 32-bit integer
    gnm.ResourceProblem

gnm.satellite    satellite
    Boolean

gnm.secondaryTimingSource  secondaryTimingSource
    No value
    gnm.SystemTiming

gnm.severityAssignedNonServiceAffecting  severityAssignedNonServiceAffecting
    Unsigned 32-bit integer
    gnm.AlarmSeverityCode

gnm.severityAssignedServiceAffecting  severityAssignedServiceAffecting
    Unsigned 32-bit integer
    gnm.AlarmSeverityCode

gnm.severityAssignedServiceIndependent  severityAssignedServiceIndependent
    Unsigned 32-bit integer
    gnm.AlarmSeverityCode

gnm.signalRate  signalRate
    Unsigned 32-bit integer
    gnm.SignalRate

gnm.simple  simple
    gnm.CharacteristicInformation

gnm.single  single
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.sinkTP  sinkTP
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.softwareIdentifiers  softwareIdentifiers
    Unsigned 32-bit integer
    gnm.T_softwareIdentifiers

gnm.softwareIdentifiers_item  Item
    String
    gnm.PrintableString
```

```
gnm.softwareInstances softwareInstances
    Unsigned 32-bit integer
    gnm.SEQUENCE_OF_ObjectInstance

gnm.softwareInstances_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.sourceID sourceID
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.sourceTP sourceTP
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.sourceType sourceType
    Unsigned 32-bit integer
    gnm.T_sourceType

gnm.tPOrGTP tPOrGTP
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.toPool toPool
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.toTPPools toTPPools
    Unsigned 32-bit integer
    gnm.ToTPPools

gnm.toTPs toTPs
    Unsigned 32-bit integer
    gnm.SET_OF_ExplicitTP

gnm.toTPs_item Item
    Unsigned 32-bit integer
    gnm.ExplicitTP

gnm.toTp toTp
    Unsigned 32-bit integer
    gnm.ExplicitTP

gnm.toTpOrGTP toTpOrGTP
    Unsigned 32-bit integer
    gnm.ExplicitTP

gnm.toTpPool toTpPool
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.toTps toTps
    Unsigned 32-bit integer
    gnm.T_toTps

gnm.toTps_item Item
    No value
    gnm.T_toTps_item

gnm.tp tp
    Unsigned 32-bit integer
    cmip.ObjectInstance
```

```

gnm.tpPool tpPool
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.tpPoolId tpPoolId
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.tps tps
    Unsigned 32-bit integer
    gnm.SET_OF_ObjectInstance

gnm.tpsAdded tpsAdded
    Unsigned 32-bit integer
    gnm.SEQUENCE_OF_ObjectInstance

gnm.tpsAdded_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.tps_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.unchangedTP unchangedTP
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.unknown unknown
    No value
    gnm.NULL

gnm.unknownType unknownType
    No value
    gnm.NULL

gnm.upstreamConnected upstreamConnected
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.upstreamNotConnected upstreamNotConnected
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.wavelength wavelength
    Signed 32-bit integer
    gnm.WaveLength

gnm.xCon xCon
    Unsigned 32-bit integer
    cmip.ObjectInstance

gnm.xConnection xConnection
    Unsigned 32-bit integer
    cmip.ObjectInstance

```

**ITU-T E.164 number (e164)**

```

e164.called_party_number.digits E.164 Called party number digits
    String

e164.calling_party_number.digits E.164 Calling party number digits
    String

```

**ITU-T E.212 number (e.212)**

e212.mcc Mobile Country Code (MCC)  
Unsigned 16-bit integer  
Mobile Country Code MCC

e212.mnc Mobile network code (MNC)  
Unsigned 16-bit integer  
Mobile network code

e212.msina Mobile Subscriber Identification Number (MSIN)  
String  
Mobile Subscriber Identification Number(MSIN)

**ITU-T Rec X.224 (x224)**

x224.class Class  
Unsigned 8-bit integer

x224.code Code  
Unsigned 8-bit integer

x224.dst\_ref DST-REF  
Unsigned 16-bit integer

x224.eot EOT  
Boolean

x224.length Length  
Unsigned 8-bit integer

x224.nr NR  
Unsigned 8-bit integer

x224.src\_ref SRC-REF  
Unsigned 16-bit integer

**ITU-T Recommendation H.223 (h223)**

h223.al.fragment H.223 AL-PDU Fragment  
Frame number  
H.223 AL-PDU Fragment

h223.al.fragment.error Defragmentation error  
Frame number  
Defragmentation error due to illegal fragments

h223.al.fragment.multipletails Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

h223.al.fragment.overlap Fragment overlap  
Boolean  
Fragment overlaps with other fragments

h223.al.fragment.overlap.conflict Conflicting data in fragment overlap  
Boolean  
Overlapping fragments contained conflicting data

h223.al.fragment.toolongfragment Fragment too long  
Boolean  
Fragment contained data past end of packet

h223.al.fragments H.223 AL-PDU Fragments  
No value  
H.223 AL-PDU Fragments

h223.al.payload H.223 AL Payload  
No value  
H.223 AL-PDU Payload

h223.al.reassembled\_in AL-PDU fragment, reassembled in frame  
Frame number  
This H.223 AL-PDU packet is reassembled in this frame

h223.al1 H.223 AL1  
No value  
H.223 AL-PDU using AL1

h223.al1.framed H.223 AL1 framing  
Boolean

h223.al2 H.223 AL2  
Boolean  
H.223 AL-PDU using AL2

h223.al2.crc CRC  
Unsigned 8-bit integer  
CRC

h223.al2.crc\_bad Bad CRC  
Boolean

h223.al2.seqno Sequence Number  
Unsigned 8-bit integer  
H.223 AL2 sequence number

h223.mux H.223 MUX-PDU  
No value  
H.223 MUX-PDU

h223.mux.correctedhdr Corrected value  
Unsigned 24-bit integer  
Corrected header bytes

h223.mux.deactivated Deactivated multiplex table entry  
No value  
mpl refers to an entry in the multiplex table which is not active

h223.mux.extra Extraneous data  
No value  
data beyond mpl

h223.mux.fragment H.223 MUX-PDU Fragment  
Frame number  
H.223 MUX-PDU Fragment

h223.mux.fragment.error Defragmentation error  
Frame number  
Defragmentation error due to illegal fragments

h223.mux.fragment.multipletails Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

```
h223.mux.fragment.overlap  Fragment overlap
    Boolean
    Fragment overlaps with other fragments
h223.mux.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
h223.mux.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet
h223.mux.fragments  H.223 MUX-PDU Fragments
    No value
    H.223 MUX-PDU Fragments
h223.mux.hdlc  HDLC flag
    Unsigned 16-bit integer
    framing flag
h223.mux.header  Header
    No value
    H.223 MUX header
h223.mux.mc  Multiplex Code
    Unsigned 8-bit integer
    H.223 MUX multiplex code
h223.mux.mpl  Multiplex Payload Length
    Unsigned 8-bit integer
    H.223 MUX multiplex Payload Length
h223.mux.rawhdr  Raw value
    Unsigned 24-bit integer
    Raw header bytes
h223.mux.reassembled_in  MUX-PDU fragment, reassembled in frame
    Frame number
    This H.223 MUX-PDU packet is reassembled in this frame
h223.mux.stuffing  H.223 stuffing PDU
    No value
    Empty PDU used for stuffing when no data available
h223.mux.vc  H.223 virtual circuit
    Unsigned 16-bit integer
    H.223 Virtual Circuit
h223.non-h223  Non-H.223 data
    No value
    Initial data in stream, not a PDU
h223.sequenced_al2  H.223 sequenced AL2
    No value
    H.223 AL-PDU using AL2 with sequence numbers
h223.unsequenced_al2  H.223 unsequenced AL2
    No value
    H.223 AL-PDU using AL2 without sequence numbers
```

**ITU-T Recommendation H.261 (h261)**

h261.ebit End bit position  
Unsigned 8-bit integer

h261.gobn GOB Number  
Unsigned 8-bit integer

h261.hmvd Horizontal motion vector data  
Unsigned 8-bit integer

h261.i Intra frame encoded data flag  
Boolean

h261.mbap Macroblock address predictor  
Unsigned 8-bit integer

h261.quant Quantizer  
Unsigned 8-bit integer

h261.sbit Start bit position  
Unsigned 8-bit integer

h261.stream H.261 stream  
Byte array

h261.v Motion vector flag  
Boolean

h261.vmvd Vertical motion vector data  
Unsigned 8-bit integer

**ITU-T Recommendation H.263 (h263data)****ITU-T Recommendation H.263 RTP Payload header (RFC2190) (h263)**

h263.PB\_frames\_mode H.263 Optional PB-frames mode  
Boolean  
Optional PB-frames mode

h263.advanced\_prediction Advanced prediction option  
Boolean  
Advanced Prediction option for current picture

h263.cpm H.263 Continuous Presence Multipoint and Video Multiplex (CPM)  
Boolean  
Continuous Presence Multipoint and Video Multiplex (CPM)

h263.custom\_pcf H.263 Custom PCF  
Boolean  
Custom PCF

h263.dbq Differential quantization parameter  
Unsigned 8-bit integer  
Differential quantization parameter used to calculate quantizer for the B fr

h263.document\_camera\_indicator H.263 Document camera indicator  
Boolean  
Document camera indicator

h263.ebit End bit position  
Unsigned 8-bit integer  
End bit position specifies number of least significant bits that shall be ig



h263.ext\_source\_format H.263 Source Format  
Unsigned 8-bit integer  
Source Format

h263.ftype F  
Boolean  
Indicates the mode of the payload header (MODE A or B/C)

h263.gbsc H.263 Group of Block Start Code  
Unsigned 32-bit integer  
Group of Block Start Code

h263.gn H.263 Group Number  
Unsigned 32-bit integer  
Group Number, GN

h263.gobn GOB Number  
Unsigned 8-bit integer  
GOB number in effect at the start of the packet.

h263.hmv1 Horizontal motion vector 1  
Unsigned 8-bit integer  
Horizontal motion vector predictor for the first MB in this packet

h263.hmv2 Horizontal motion vector 2  
Unsigned 8-bit integer  
Horizontal motion vector predictor for block number 3 in the first MB in this packet

h263.mba Macroblock address  
Unsigned 16-bit integer  
The address within the GOB of the first MB in the packet, counting from zero

h263.opptype H.263 Optional Part of PLUSPTYPE  
Unsigned 24-bit integer  
Optional Part of PLUSPTYPE

h263.opt\_unres\_motion\_vector\_mode H.263 Optional Unrestricted Motion Vector mode  
Boolean  
Optional Unrestricted Motion Vector mode

h263.optional\_advanced\_prediction\_mode H.263 Optional Advanced Prediction mode  
Boolean  
Optional Advanced Prediction mode

h263.payload H.263 payload  
No value  
The actual H.263 data

h263.pbframes p/b frame  
Boolean  
Optional PB-frames mode as defined by H.263 (MODE C)

h263.pei H.263 Extra Insertion Information (PEI)  
Boolean  
Extra Insertion Information (PEI)

h263.picture\_coding\_type Inter-coded frame  
Boolean  
Picture coding type, intra-coded (false) or inter-coded (true)

h263.pquant H.263 Quantizer Information (PQUANT)  
Unsigned 32-bit integer  
Quantizer Information (PQUANT)

h263.psc H.263 Picture start Code  
Unsigned 32-bit integer  
Picture start Code, PSC

h263.psi H.263 Picture Sub-Bitstream Indicator (PSBI)  
Unsigned 32-bit integer  
Picture Sub-Bitstream Indicator (PSBI)

h263.psupp H.263 Supplemental Enhancement Information (PSUPP)  
Unsigned 32-bit integer  
Supplemental Enhancement Information (PSUPP)

h263.quant Quantizer  
Unsigned 8-bit integer  
Quantization value for the first MB coded at the starting of the packet.

h263.r Reserved field  
Unsigned 8-bit integer  
Reserved field that hould contain zeroes

h263.rr Reserved field 2  
Unsigned 16-bit integer  
Reserved field that should contain zeroes

h263.sbit Start bit position  
Unsigned 8-bit integer  
Start bit position specifies number of most significant bits that shall be i

h263.source\_format H.263 Source Format  
Unsigned 8-bit integer  
Source Format

h263.split\_screen\_indicator H.263 Split screen indicator  
Boolean  
Split screen indicator

h263.srcformat SRC format  
Unsigned 8-bit integer  
Source format specifies the resolution of the current picture.

h263.stream H.263 stream  
Byte array  
The H.263 stream including its Picture, GOB or Macro block start code.

h263.syntax\_based\_arithmetic Syntax-based arithmetic coding  
Boolean  
Syntax-based Arithmetic Coding option for current picture

h263.syntax\_based\_arithmetic\_coding\_mode H.263 Optional Syntax-based Arithmetic  
Boolean  
Optional Syntax-based Arithmetic Coding mode

h263.tr Temporal Reference for P frames  
Unsigned 8-bit integer  
Temporal Reference for the P frame as defined by H.263

h263.tr2 H.263 Temporal Reference  
Unsigned 32-bit integer  
Temporal Reference, TR

h263.trb Temporal Reference for B frames  
Unsigned 8-bit integer  
Temporal Reference for the B frame as defined by H.263

h263.ufep H.263 Update Full Extended PTYPE  
Unsigned 16-bit integer  
Update Full Extended PTYPE

h263.unrestricted\_motion\_vector Motion vector  
Boolean  
Unrestricted Motion Vector option for current picture

h263.vmv1 Vertical motion vector 1  
Unsigned 8-bit integer  
Vertical motion vector predictor for the first MB in this packet

h263.vmv2 Vertical motion vector 2  
Unsigned 8-bit integer  
Vertical motion vector predictor for block number 3 in the first MB in this

**ITU-T Recommendation H.263 RTP Payload header (RFC4629) (h263p)**

h263P.PSC H.263 PSC  
Unsigned 16-bit integer  
Picture Start Code(PSC)

h263P.extra\_hdr Extra picture header  
Byte array  
Extra picture header

h263P.p P  
Boolean  
Indicates (GOB/Slice) start or (EOS or EOSBS)

h263P.payload H.263 RFC4629 payload  
No value  
The actual H.263 RFC4629 data

h263P.pebit PEBIT  
Unsigned 16-bit integer  
number of bits that shall be ignored in the last byte of the picture header

h263P.plen PLEN  
Unsigned 16-bit integer  
Length, in bytes, of the extra picture header

h263P.rr Reserved  
Unsigned 16-bit integer  
Reserved SHALL be zero

h263P.s S  
Unsigned 8-bit integer  
Indicates that the packet content is for a sync frame

h263P.tid Thread ID  
Unsigned 8-bit integer  
Thread ID

h263P.tr H.263 Temporal Reference  
Unsigned 16-bit integer  
Temporal Reference, TR

h263P.trun Trun  
Unsigned 8-bit integer  
Monotonically increasing (modulo 16) 4-bit number counting the packet number

h263P.v V  
Boolean  
presence of Video Redundancy Coding (VRC) field

**InMon sFlow (sflow)**

sflow.agent agent address  
IPv4 address  
sFlow Agent IP address

sflow.agent.v6 agent address  
IPv6 address  
sFlow Agent IPv6 address

sflow.as AS Router  
Unsigned 32-bit integer  
Autonomous System of Router

sflow.community Gateway Community  
Unsigned 32-bit integer  
Gateway Communities

sflow.communityEntries Gateway Communities  
Unsigned 32-bit integer  
Gateway Communities

sflow.dstAS AS Destination  
Unsigned 32-bit integer  
Autonomous System destination

sflow.dstASentries AS Destinations  
Unsigned 32-bit integer  
Autonomous System destinations

sflow.extended\_information\_type Extended information type  
Unsigned 32-bit integer  
Type of extended information

sflow.header Header of sampled packet  
Byte array  
Data from sampled header

sflow.header\_protocol Header protocol  
Unsigned 32-bit integer  
Protocol of sampled header

sflow.ifdirection Interface Direction  
Unsigned 32-bit integer  
Interface Direction

sflow.ifinbcst Input Broadcast Packets  
Unsigned 32-bit integer  
Interface Input Broadcast Packets

sflow.ifindex Interface index  
Unsigned 32-bit integer  
Interface Index

sflow.ifindisc Input Discarded Packets  
Unsigned 32-bit integer  
Interface Input Discarded Packets

```
sflow.ifinerr  Input Errors
               Unsigned 32-bit integer
               Interface Input Errors

sflow.ifinmcast  Input Multicast Packets
                Unsigned 32-bit integer
                Interface Input Multicast Packets

sflow.ifinoct  Input Octets
              Unsigned 64-bit integer
              Interface Input Octets

sflow.ifinpkt  Input Packets
              Unsigned 32-bit integer
              Interface Input Packets

sflow.ifinunk  Input Unknown Protocol Packets
              Unsigned 32-bit integer
              Interface Input Unknown Protocol Packets

sflow.ifoutbcast  Output Broadcast Packets
                 Unsigned 32-bit integer
                 Interface Output Broadcast Packets

sflow.ifoutdisc  Output Discarded Packets
                Unsigned 32-bit integer
                Interface Output Discarded Packets

sflow.ifouterr  Output Errors
               Unsigned 32-bit integer
               Interface Output Errors

sflow.ifoutmcast  Output Multicast Packets
                 Unsigned 32-bit integer
                 Interface Output Multicast Packets

sflow.ifoutoct  Output Octets
               Unsigned 64-bit integer
               Interface Output Octets

sflow.ifoutpkt  Output Packets
               Unsigned 32-bit integer
               Interface Output Packets

sflow.ifpromisc  Promiscuous Mode
                Unsigned 32-bit integer
                Interface Promiscuous Mode

sflow.ifspeed  Interface Speed
              Unsigned 64-bit integer
              Interface Speed

sflow.ifstatus  Interface Status
              Unsigned 32-bit integer
              Interface Status

sflow.iftype  Interface Type
             Unsigned 32-bit integer
             Interface Type

sflow.localpref  localpref
                Unsigned 32-bit integer
                Local preferences of AS route
```

```
sflow.nexthop  Next hop
  IPv4 address
  Next hop address

sflow.nexthop.dst_mask  Next hop destination mask
  Unsigned 32-bit integer
  Next hop destination mask bits

sflow.nexthop.src_mask  Next hop source mask
  Unsigned 32-bit integer
  Next hop source mask bits

sflow.numsamples  NumSamples
  Unsigned 32-bit integer
  Number of samples in sFlow datagram

sflow.packet_information_type  Sample type
  Unsigned 32-bit integer
  Type of sampled information

sflow.peerAS  AS Peer
  Unsigned 32-bit integer
  Autonomous System of Peer

sflow.pri.in  Incoming 802.1p priority
  Unsigned 32-bit integer
  Incoming 802.1p priority

sflow.pri.out  Outgoing 802.1p priority
  Unsigned 32-bit integer
  Outgoing 802.1p priority

sflow.samplertype  sFlow sample type
  Unsigned 32-bit integer
  Type of sFlow sample

sflow.sequence_number  Sequence number
  Unsigned 32-bit integer
  sFlow datagram sequence number

sflow.srcAS  AS Source
  Unsigned 32-bit integer
  Autonomous System of Source

sflow.sub_agent_id  Sub-agent ID
  Unsigned 32-bit integer
  sFlow sub-agent ID

sflow.sysuptime  SysUptime
  Unsigned 32-bit integer
  System Uptime

sflow.version  datagram version
  Unsigned 32-bit integer
  sFlow datagram version

sflow.vlan.in  Incoming 802.1Q VLAN
  Unsigned 32-bit integer
  Incoming VLAN ID

sflow.vlan.out  Outgoing 802.1Q VLAN
  Unsigned 32-bit integer
  Outgoing VLAN ID
```

**InfiniBand (infiniband)**

infiniband.aeth ACK Extended Transport Header  
Byte array

infiniband.aeth.msn Message Sequence Number  
Unsigned 24-bit integer

infiniband.aeth.syndrome Syndrome  
Unsigned 8-bit integer

infiniband.atomicacketh Atomic ACK Extended Transport Header  
Byte array

infiniband.atomicacketh.origremdt Original Remote Data  
Unsigned 64-bit integer

infiniband.atomiceth Atomic Extended Transport Header  
Byte array

infiniband.atomiceth.cmpdt Compare Data  
Unsigned 64-bit integer

infiniband.atomiceth.r\_key Remote Key  
Unsigned 32-bit integer

infiniband.atomiceth.swapdt Swap (Or Add) Data  
Unsigned 64-bit integer

infiniband.atomiceth.va Virtual Address  
Unsigned 64-bit integer

infiniband.bth Base Transport Header  
Byte array

infiniband.bth.a Acknowledge Request  
Boolean

infiniband.bth.destqp Destination Queue Pair  
Unsigned 24-bit integer

infiniband.bth.m MigReq  
Boolean

infiniband.bth.opcode Opcode  
Unsigned 8-bit integer

infiniband.bth.p\_key Partition Key  
Unsigned 16-bit integer

infiniband.bth.padcnt Pad Count  
Unsigned 8-bit integer

infiniband.bth.psn Packet Sequence Number  
Unsigned 24-bit integer

infiniband.bth.reserved7 Reserved (7 bits)  
Unsigned 8-bit integer

infiniband.bth.reserved8 Reserved (8 bits)  
Unsigned 8-bit integer

infiniband.bth.se Solicited Event  
Boolean

infiniband.bth.tver Header Version  
Unsigned 8-bit integer

```
infiniband.deth  Datagram Extended Transport Header
  Byte array
infiniband.deth.q_key  Queue Key
  Unsigned 64-bit integer
infiniband.deth.reserved8  Reserved (8 bits)
  Unsigned 32-bit integer
infiniband.deth.srcqp  Source Queue Pair
  Unsigned 32-bit integer
infiniband.grh  Global Route Header
  Byte array
infiniband.grh.dgid  Destination GID
  Byte array
infiniband.grh.flowlabel  Flow Label
  Unsigned 32-bit integer
infiniband.grh.hoplimit  Hop Limit
  Unsigned 8-bit integer
infiniband.grh.ipver  IP Version
  Unsigned 8-bit integer
infiniband.grh.nxthdr  Next Header
  Unsigned 8-bit integer
infiniband.grh.paylen  Payload Length
  Unsigned 16-bit integer
infiniband.grh.sgid  Source GID
  Byte array
infiniband.grh.tclass  Traffic Class
  Unsigned 16-bit integer
infiniband.ieth  RKey
  Byte array
infiniband.immtdt  Immediate Data
  Byte array
infiniband.invariant.crc  Invariant CRC
  Unsigned 32-bit integer
infiniband.lrh  Local Route Header
  Byte array
infiniband.lrh.dlid  Destination Local ID
  Unsigned 16-bit integer
infiniband.lrh.lnh  Link Next Header
  Unsigned 8-bit integer
infiniband.lrh.lver  Link Version
  Unsigned 8-bit integer
infiniband.lrh.pktlen  Packet Length
  Unsigned 16-bit integer
infiniband.lrh.reserved2  Reserved (2 bits)
  Unsigned 8-bit integer
```



```
infiniband.lrh.reserved5  Reserved (5 bits)
    Unsigned 16-bit integer
infiniband.lrh.sl  Service Level
    Unsigned 8-bit integer
infiniband.lrh.slid  Source Local ID
    Unsigned 16-bit integer
infiniband.lrh.vl  Virtual Lane
    Unsigned 8-bit integer
infiniband.payload  Payload
    Byte array
infiniband.rawdata  Raw Data
    Byte array
infiniband.rdeth  Reliable Datagram Extended Transport Header
    Byte array
infiniband.rdeth.eecnxt  E2E Context
    Unsigned 24-bit integer
infiniband.rdeth.reserved8  Reserved (8 bits)
    Unsigned 8-bit integer
infiniband.reth  RDMA Extended Transport Header
    Byte array
infiniband.reth.dmalen  DMA Length
    Unsigned 8-bit integer
infiniband.reth.r_key  Remote Key
    Unsigned 8-bit integer
infiniband.reth.va  Virtual Address
    Unsigned 8-bit integer
infiniband.variant.crc  Variant CRC
    Unsigned 16-bit integer
infiniband.vendor  Unknown/Vendor Specific Data
    Byte array
```

**Information Access Protocol (iap)**

```
iap.attrname  Attribute Name
    String
iap.attrtype  Type
    Unsigned 8-bit integer
iap.charset  Character Set
    Unsigned 8-bit integer
iap.classname  Class Name
    String
iapctl  Control Field
    Unsigned 8-bit integer
iapctl.ack  Acknowledge
    Boolean
```

```
iap.ctl.lst    Last Frame
               Boolean

iap.ctl.opcode Opcode
               Unsigned 8-bit integer

iap.int    Value
           Signed 32-bit integer

iap.invalldsap Mailformed IAP result: "
           No value

iap.invalloctet Mailformed IAP result: "
           No value

iap.listentry List Entry
           No value

iap.listlen List Length
           Unsigned 16-bit integer

iap.objectid Object Identifier
           Unsigned 16-bit integer

iap.octseq Sequence
           Byte array

iap.return Return
           Unsigned 8-bit integer

iap.seqlen Sequence Length
           Unsigned 16-bit integer

iap.string String
           String
```

**Init shutdown service (initshutdown)**

```
initshutdown.initshutdown_Abort.server Server
           Unsigned 16-bit integer

initshutdown.initshutdown_Init.force_apps Force Apps
           Unsigned 8-bit integer

initshutdown.initshutdown_Init.hostname Hostname
           Unsigned 16-bit integer

initshutdown.initshutdown_Init.message Message
           No value

initshutdown.initshutdown_Init.reboot Reboot
           Unsigned 8-bit integer

initshutdown.initshutdown_Init.timeout Timeout
           Unsigned 32-bit integer

initshutdown.initshutdown_InitEx.force_apps Force Apps
           Unsigned 8-bit integer

initshutdown.initshutdown_InitEx.hostname Hostname
           Unsigned 16-bit integer

initshutdown.initshutdown_InitEx.message Message
           No value
```

```

initshutdown.initshutdown_InitEx.reason  Reason
    Unsigned 32-bit integer
initshutdown.initshutdown_InitEx.reboot  Reboot
    Unsigned 8-bit integer
initshutdown.initshutdown_InitEx.timeout  Timeout
    Unsigned 32-bit integer
initshutdown.initshutdown_String.name     Name
    No value
initshutdown.initshutdown_String.name_len Name Len
    Unsigned 16-bit integer
initshutdown.initshutdown_String.name_size Name Size
    Unsigned 16-bit integer
initshutdown.initshutdown_String_sub.name Name
    No value
initshutdown.initshutdown_String_sub.name_size Name Size
    Unsigned 32-bit integer
initshutdown.opnum  Operation
    Unsigned 16-bit integer
initshutdown.werror  Windows Error
    Unsigned 32-bit integer

```

**Intel ANS probe (ans)**

```

ans.app_id  Application ID
    Unsigned 16-bit integer
    Intel ANS Application ID
ans.rev_id  Revision ID
    Unsigned 16-bit integer
    Intel ANS Revision ID
ans.sender_id  Sender ID
    Unsigned 16-bit integer
    Intel ANS Sender ID
ans.seq_num  Sequence Number
    Unsigned 32-bit integer
    Intel ANS Sequence Number
ans.team_id  Team ID
    6-byte Hardware (MAC) Address
    Intel ANS Team ID

```

**Intelligent Network Application Protocol (inap)**

```

inap.ActivateServiceFilteringArg  ActivateServiceFilteringArg
    No value
    inap.ActivateServiceFilteringArg
inap.AlternativeIdentities_item  Item
    Unsigned 32-bit integer
    inap.AlternativeIdentity

```

```
inap.AnalyseInformationArg  AnalyseInformationArg
    No value
    inap.AnalyseInformationArg
inap.AnalysedInformationArg  AnalysedInformationArg
    No value
    inap.AnalysedInformationArg
inap.ApplyChargingArg  ApplyChargingArg
    No value
    inap.ApplyChargingArg
inap.ApplyChargingReportArg  ApplyChargingReportArg
    Byte array
    inap.ApplyChargingReportArg
inap.AssistRequestInstructionsArg  AssistRequestInstructionsArg
    No value
    inap.AssistRequestInstructionsArg
inap.AuthorizeTerminationArg  AuthorizeTerminationArg
    No value
    inap.AuthorizeTerminationArg
inap.CallFilteringArg  CallFilteringArg
    No value
    inap.CallFilteringArg
inap.CallGapArg  CallGapArg
    No value
    inap.CallGapArg
inap.CallInformationReportArg  CallInformationReportArg
    No value
    inap.CallInformationReportArg
inap.CallInformationRequestArg  CallInformationRequestArg
    No value
    inap.CallInformationRequestArg
inap.CancelArg  CancelArg
    Unsigned 32-bit integer
    inap.CancelArg
inap.CancelStatusReportRequestArg  CancelStatusReportRequestArg
    No value
    inap.CancelStatusReportRequestArg
inap.CollectInformationArg  CollectInformationArg
    No value
    inap.CollectInformationArg
inap.CollectedInformationArg  CollectedInformationArg
    No value
    inap.CollectedInformationArg
inap.ConnectArg  ConnectArg
    No value
    inap.ConnectArg
inap.ConnectToResourceArg  ConnectToResourceArg
    No value
    inap.ConnectToResourceArg
```

```
inap.ContinueWithArgumentArg ContinueWithArgumentArg
    No value
    inap.ContinueWithArgumentArg
inap.CountersValue_item Item
    No value
    inap.CounterAndValue
inap.CreateCallSegmentAssociationArg CreateCallSegmentAssociationArg
    No value
    inap.CreateCallSegmentAssociationArg
inap.CreateCallSegmentAssociationResultArg CreateCallSegmentAssociationResultArg
    No value
    inap.CreateCallSegmentAssociationResultArg
inap.CreateOrRemoveTriggerDataArg CreateOrRemoveTriggerDataArg
    No value
    inap.CreateOrRemoveTriggerDataArg
inap.CreateOrRemoveTriggerDataResultArg CreateOrRemoveTriggerDataResultArg
    No value
    inap.CreateOrRemoveTriggerDataResultArg
inap.DestinationRoutingAddress_item Item
    Byte array
    inap.CalledPartyNumber
inap.DisconnectForwardConnectionWithArgumentArg DisconnectForwardConnectionWith
    No value
    inap.DisconnectForwardConnectionWithArgumentArg
inap.DisconnectLegArg DisconnectLegArg
    No value
    inap.DisconnectLegArg
inap.EntityReleasedArg EntityReleasedArg
    Unsigned 32-bit integer
    inap.EntityReleasedArg
inap.EstablishTemporaryConnectionArg EstablishTemporaryConnectionArg
    No value
    inap.EstablishTemporaryConnectionArg
inap.EventNotificationChargingArg EventNotificationChargingArg
    No value
    inap.EventNotificationChargingArg
inap.EventReportBCSMArg EventReportBCSMArg
    No value
    inap.EventReportBCSMArg
inap.EventReportFacilityArg EventReportFacilityArg
    No value
    inap.EventReportFacilityArg
inap.Extensions_item Item
    No value
    inap.ExtensionField
inap.FacilitySelectedAndAvailableArg FacilitySelectedAndAvailableArg
    No value
    inap.FacilitySelectedAndAvailableArg
```

```
inap.FurnishChargingInformationArg  FurnishChargingInformationArg
    Byte array
    inap.FurnishChargingInformationArg
inap.GenericNumbers_item  Item
    Byte array
    inap.GenericNumber
inap.HoldCallInNetworkArg  HoldCallInNetworkArg
    Unsigned 32-bit integer
    inap.HoldCallInNetworkArg
inap.INAP_Component  INAP-Component
    Unsigned 32-bit integer
    inap.INAP_Component
inap.INSERVICECompatibilityIndication_item  Item
    Unsigned 32-bit integer
    inap.Entry
inap.InitialDPArg  InitialDPArg
    No value
    inap.InitialDPArg
inap.InitiateCallAttemptArg  InitiateCallAttemptArg
    No value
    inap.InitiateCallAttemptArg
inap.ManageTriggerDataArg  ManageTriggerDataArg
    No value
    inap.ManageTriggerDataArg
inap.ManageTriggerDataResultArg  ManageTriggerDataResultArg
    Unsigned 32-bit integer
    inap.ManageTriggerDataResultArg
inap.MergeCallSegmentsArg  MergeCallSegmentsArg
    No value
    inap.MergeCallSegmentsArg
inap.MessageReceivedArg  MessageReceivedArg
    No value
    inap.MessageReceivedArg
inap.MidCallArg  MidCallArg
    No value
    inap.MidCallArg
inap.MidCallControlInfo_item  Item
    No value
    inap.MidCallControlInfo_item
inap.MonitorRouteReportArg  MonitorRouteReportArg
    No value
    inap.MonitorRouteReportArg
inap.MonitorRouteRequestArg  MonitorRouteRequestArg
    No value
    inap.MonitorRouteRequestArg
inap.MoveCallSegmentsArg  MoveCallSegmentsArg
    No value
    inap.MoveCallSegmentsArg
```

```
inap.MoveLegArg MoveLegArg
    No value
    inap.MoveLegArg
inap.OAbandonArg OAbandonArg
    No value
    inap.OAbandonArg
inap.OAnswerArg OAnswerArg
    No value
    inap.OAnswerArg
inap.OCalledPartyBusyArg OCalledPartyBusyArg
    No value
    inap.OCalledPartyBusyArg
inap.ODisconnectArg ODisconnectArg
    No value
    inap.ODisconnectArg
inap.ONoAnswerArg ONoAnswerArg
    No value
    inap.ONoAnswerArg
inap.OSuspendedArg OSuspendedArg
    No value
    inap.OSuspendedArg
inap.OriginationAttemptArg OriginationAttemptArg
    No value
    inap.OriginationAttemptArg
inap.OriginationAttemptAuthorizedArg OriginationAttemptAuthorizedArg
    No value
    inap.OriginationAttemptAuthorizedArg
inap.PlayAnnouncementArg PlayAnnouncementArg
    No value
    inap.PlayAnnouncementArg
inap.PromptAndCollectUserInformationArg PromptAndCollectUserInformationArg
    No value
    inap.PromptAndCollectUserInformationArg
inap.PromptAndReceiveMessageArg PromptAndReceiveMessageArg
    No value
    inap.PromptAndReceiveMessageArg
inap.ReceivedInformationArg ReceivedInformationArg
    Unsigned 32-bit integer
    inap.ReceivedInformationArg
inap.ReconnectArg ReconnectArg
    No value
    inap.ReconnectArg
inap.ReleaseCallArg ReleaseCallArg
    Unsigned 32-bit integer
    inap.ReleaseCallArg
inap.ReportUTSIArg ReportUTSIArg
    No value
    inap.ReportUTSIArg
```

```
inap.RequestCurrentStatusReportArg RequestCurrentStatusReportArg
    Unsigned 32-bit integer
    inap.RequestCurrentStatusReportArg
inap.RequestCurrentStatusReportResultArg RequestCurrentStatusReportResultArg
    No value
    inap.RequestCurrentStatusReportResultArg
inap.RequestEveryStatusChangeReportArg RequestEveryStatusChangeReportArg
    No value
    inap.RequestEveryStatusChangeReportArg
inap.RequestFirstStatusMatchReportArg RequestFirstStatusMatchReportArg
    No value
    inap.RequestFirstStatusMatchReportArg
inap.RequestNotificationChargingEventArg RequestNotificationChargingEventArg
    Unsigned 32-bit integer
    inap.RequestNotificationChargingEventArg
inap.RequestNotificationChargingEventArg_item Item
    No value
    inap.ChargingEvent
inap.RequestReportBCSMEEventArg RequestReportBCSMEEventArg
    No value
    inap.RequestReportBCSMEEventArg
inap.RequestReportFacilityEventArg RequestReportFacilityEventArg
    No value
    inap.RequestReportFacilityEventArg
inap.RequestReportUTSIArg RequestReportUTSIArg
    No value
    inap.RequestReportUTSIArg
inap.RequestedInformationList_item Item
    No value
    inap.RequestedInformation
inap.RequestedInformationTypeList_item Item
    Unsigned 32-bit integer
    inap.RequestedInformationType
inap.RequestedUTSIList_item Item
    No value
    inap.RequestedUTSI
inap.ResetTimerArg ResetTimerArg
    No value
    inap.ResetTimerArg
inap.RouteCountersValue_item Item
    No value
    inap.RouteCountersAndValue
inap.RouteList_item Item
    Byte array
    inap.Route
inap.RouteSelectFailureArg RouteSelectFailureArg
    No value
    inap.RouteSelectFailureArg
```



```
inap.SRFCallGapArg  SRFCallGapArg
    No value
    inap.SRFCallGapArg

inap.ScriptCloseArg  ScriptCloseArg
    No value
    inap.ScriptCloseArg

inap.ScriptEventArg  ScriptEventArg
    No value
    inap.ScriptEventArg

inap.ScriptInformationArg  ScriptInformationArg
    No value
    inap.ScriptInformationArg

inap.ScriptRunArg  ScriptRunArg
    No value
    inap.ScriptRunArg

inap.SelectFacilityArg  SelectFacilityArg
    No value
    inap.SelectFacilityArg

inap.SelectRouteArg  SelectRouteArg
    No value
    inap.SelectRouteArg

inap.SendChargingInformationArg  SendChargingInformationArg
    No value
    inap.SendChargingInformationArg

inap.SendFacilityInformationArg  SendFacilityInformationArg
    No value
    inap.SendFacilityInformationArg

inap.SendSTUIArg  SendSTUIArg
    No value
    inap.SendSTUIArg

inap.ServiceFilteringResponseArg  ServiceFilteringResponseArg
    No value
    inap.ServiceFilteringResponseArg

inap.SetServiceProfileArg  SetServiceProfileArg
    No value
    inap.SetServiceProfileArg

inap.SpecializedResourceReportArg  SpecializedResourceReportArg
    No value
    inap.SpecializedResourceReportArg

inap.SplitLegArg  SplitLegArg
    No value
    inap.SplitLegArg

inap.StatusReportArg  StatusReportArg
    No value
    inap.StatusReportArg

inap.TAnswerArg  TAnswerArg
    No value
    inap.TAnswerArg
```

```
inap.TBusyArg TBusyArg
    No value
    inap.TBusyArg
inap.TDisconnectArg TDisconnectArg
    No value
    inap.TDisconnectArg
inap.TNoAnswerArg TNoAnswerArg
    No value
    inap.TNoAnswerArg
inap.TSuspendedArg TSuspendedArg
    No value
    inap.TSuspendedArg
inap.TermAttemptAuthorizedArg TermAttemptAuthorizedArg
    No value
    inap.TermAttemptAuthorizedArg
inap.TerminationAttemptArg TerminationAttemptArg
    No value
    inap.TerminationAttemptArg
inap.TriggerResults_item Item
    No value
    inap.TriggerResult
inap.Triggers_item Item
    No value
    inap.Trigger
inap.aALParameters aALParameters
    Byte array
    inap.AALParameters
inap.aChBillingChargingCharacteristics aChBillingChargingCharacteristics
    Byte array
    inap.AChBillingChargingCharacteristics
inap.aESACalledParty aESACalledParty
    Byte array
    inap.AESACalledParty
inap.aESACallingParty aESACallingParty
    Byte array
    inap.AESACallingParty
inap.aTMCellRate aTMCellRate
    Byte array
    inap.ATMCellRate
inap.abandonCause abandonCause
    Byte array
    inap.Cause
inap.access access
    Byte array
    inap.CalledPartyNumber
inap.accessCode accessCode
    Byte array
    inap.AccessCode
```

```
inap.action action
    Unsigned 32-bit integer
    inap.T_action

inap.actionIndicator actionIndicator
    Unsigned 32-bit integer
    inap.ActionIndicator

inap.actionOnProfile actionOnProfile
    Unsigned 32-bit integer
    inap.ActionOnProfile

inap.actionPerformed actionPerformed
    Unsigned 32-bit integer
    inap.ActionPerformed

inap.additionalATMCellRate additionalATMCellRate
    Byte array
    inap.AdditionalATMCellRate

inap.additionalCallingPartyNumber additionalCallingPartyNumber
    Byte array
    inap.AdditionalCallingPartyNumber

inap.addressAndService addressAndService
    No value
    inap.T_addressAndService

inap.agreements agreements
    inap.OBJECT_IDENTIFIER

inap.alertingPattern alertingPattern
    Byte array
    inap.AlertingPattern

inap.allCallSegments allCallSegments
    No value
    inap.T_allCallSegments

inap.allRequests allRequests
    No value
    inap.NULL

inap.allRequestsForCallSegment allRequestsForCallSegment
    Unsigned 32-bit integer
    inap.CallSegmentID

inap.allowCdINNoPresentationInd allowCdINNoPresentationInd
    Boolean
    inap.BOOLEAN

inap.alternativeATMTrafficDescriptor alternativeATMTrafficDescriptor
    Byte array
    inap.AlternativeATMTrafficDescriptor

inap.alternativeCalledPartyIds alternativeCalledPartyIds
    Unsigned 32-bit integer
    inap.AlternativeIdentities

inap.alternativeOriginalCalledPartyIds alternativeOriginalCalledPartyIds
    Unsigned 32-bit integer
    inap.AlternativeIdentities
```

```
inap.alternativeOriginatingPartyIds  alternativeOriginatingPartyIds
    Unsigned 32-bit integer
    inap.AlternativeIdentities

inap.alternativeRedirectingPartyIds  alternativeRedirectingPartyIds
    Unsigned 32-bit integer
    inap.AlternativeIdentities

inap.analysedInfoSpecificInfo  analysedInfoSpecificInfo
    No value
    inap.T_analysedInfoSpecificInfo

inap.applicationTimer  applicationTimer
    Unsigned 32-bit integer
    inap.ApplicationTimer

inap.assistingSSPIPRoutingAddress  assistingSSPIPRoutingAddress
    Byte array
    inap.AssistingSSPIPRoutingAddress

inap.attributes  attributes
    Byte array
    inap.OCTET_STRING_SIZE_b3__minAttributesLength_b3__maxAttributesLength

inap.authoriseRouteFailureCause  authoriseRouteFailureCause
    Byte array
    inap.Cause

inap.authorizeRouteFailure  authorizeRouteFailure
    No value
    inap.T_authorizeRouteFailure

inap.bCSMFailure  bCSMFailure
    No value
    inap.T_bCSMFailure

inap.bISDNParameters  bISDNParameters
    No value
    inap.BISDNParameters

inap.backwardGVNS  backwardGVNS
    Byte array
    inap.BackwardGVNS

inap.backwardServiceInteractionInd  backwardServiceInteractionInd
    No value
    inap.BackwardServiceInteractionInd

inap.basicGapCriteria  basicGapCriteria
    Unsigned 32-bit integer
    inap.BasicGapCriteria

inap.bcsmEventCorrelationID  bcsmEventCorrelationID
    Byte array
    inap.CorrelationID

inap.bcsmEvents  bcsmEvents
    Unsigned 32-bit integer
    inap.SEQUENCE_SIZE_1_numOfBCSMEvents_OF_BCSMEvent

inap.bcsmEvents_item  Item
    No value
    inap.BCSMEvent
```

```

inap.bearerCap bearerCap
    Byte array
    inap.T_bearerCap

inap.bearerCapability bearerCapability
    Unsigned 32-bit integer
    inap.BearerCapability

inap.both both
    No value
    inap.T_both

inap.bothwayThroughConnectionInd bothwayThroughConnectionInd
    Unsigned 32-bit integer
    inap.BothwayThroughConnectionInd

inap.broadbandBearerCap broadbandBearerCap
    Byte array
    inap.OCTET_STRING_SIZE_minBroadbandBearerCapabilityLength_maxBroadbandBearer

inap.busyCause busyCause
    Byte array
    inap.Cause

inap.cCSS cCSS
    Boolean
    inap.CCSS

inap.cDVTDescriptor cDVTDescriptor
    Byte array
    inap.CDVTDescriptor

inap.cGEncountered cGEncountered
    Unsigned 32-bit integer
    inap.CGEncountered

inap.cNInfo cNInfo
    Byte array
    inap.CNInfo

inap.cSFailure cSFailure
    No value
    inap.T_cSFailure

inap.callAccepted callAccepted
    No value
    inap.T_callAccepted

inap.callAttemptElapsedTimeValue callAttemptElapsedTimeValue
    Unsigned 32-bit integer
    inap.INTEGER_0_255

inap.callCompletionTreatmentIndicator callCompletionTreatmentIndicator
    Byte array
    inap.OCTET_STRING_SIZE_1

inap.callConnectedElapsedTimeValue callConnectedElapsedTimeValue
    Unsigned 32-bit integer
    inap.Integer4

inap.callDiversionTreatmentIndicator callDiversionTreatmentIndicator
    Byte array
    inap.OCTET_STRING_SIZE_1

```

```
inap.callOfferingTreatmentIndicator  callOfferingTreatmentIndicator
    Byte array
    inap.OCTET_STRING_SIZE_1
inap.callProcessingOperation  callProcessingOperation
    Unsigned 32-bit integer
    inap.CallProcessingOperation
inap.callReference  callReference
    Byte array
    inap.CallReference
inap.callSegment  callSegment
    Unsigned 32-bit integer
    inap.INTEGER_1_numOfCSs
inap.callSegmentID  callSegmentID
    Unsigned 32-bit integer
    inap.CallSegmentID
inap.callSegmentToCancel  callSegmentToCancel
    No value
    inap.T_callSegmentToCancel
inap.callSegmentToRelease  callSegmentToRelease
    No value
    inap.T_callSegmentToRelease
inap.callSegments  callSegments
    Unsigned 32-bit integer
    inap.T_callSegments
inap.callSegments_item  Item
    No value
    inap.T_callSegments_item
inap.callStopTimeValue  callStopTimeValue
    Byte array
    inap.DateAndTime
inap.callWaitingTreatmentIndicator  callWaitingTreatmentIndicator
    Byte array
    inap.OCTET_STRING_SIZE_1
inap.calledAddressAndService  calledAddressAndService
    No value
    inap.T_calledAddressAndService
inap.calledAddressValue  calledAddressValue
    Byte array
    inap.Digits
inap.calledDirectoryNumber  calledDirectoryNumber
    Byte array
    inap.CalledDirectoryNumber
inap.calledFacilityGroup  calledFacilityGroup
    Unsigned 32-bit integer
    inap.FacilityGroup
inap.calledFacilityGroupMember  calledFacilityGroupMember
    Signed 32-bit integer
    inap.FacilityGroupMember
```

```
inap.calledINNumberOverriding  calledINNumberOverriding
    Boolean
    inap.BOOLEAN

inap.calledPartyBusinessGroupID  calledPartyBusinessGroupID
    Byte array
    inap.CalledPartyBusinessGroupID

inap.calledPartyNumber  calledPartyNumber
    Byte array
    inap.CalledPartyNumber

inap.calledPartySubaddress  calledPartySubaddress
    Byte array
    inap.CalledPartySubaddress

inap.calledPartynumber  calledPartynumber
    Byte array
    inap.CalledPartyNumber

inap.callingAddressAndService  callingAddressAndService
    No value
    inap.T_callingAddressAndService

inap.callingAddressValue  callingAddressValue
    Byte array
    inap.Digits

inap.callingFacilityGroup  callingFacilityGroup
    Unsigned 32-bit integer
    inap.FacilityGroup

inap.callingFacilityGroupMember  callingFacilityGroupMember
    Signed 32-bit integer
    inap.FacilityGroupMember

inap.callingGeodeticLocation  callingGeodeticLocation
    Byte array
    inap.CallingGeodeticLocation

inap.callingLineID  callingLineID
    Byte array
    inap.Digits

inap.callingPartyBusinessGroupID  callingPartyBusinessGroupID
    Byte array
    inap.CallingPartyBusinessGroupID

inap.callingPartyNumber  callingPartyNumber
    Byte array
    inap.CallingPartyNumber

inap.callingPartySubaddress  callingPartySubaddress
    Byte array
    inap.CallingPartySubaddress

inap.callingPartysCategory  callingPartysCategory
    Unsigned 16-bit integer
    inap.CallingPartysCategory

inap.cancelDigit  cancelDigit
    Byte array
    inap.OCTET_STRING_SIZE_1_2
```

```
inap.carrier carrier
    Byte array
    inap.Carrier

inap.cause cause
    Byte array
    inap.Cause

inap.chargeNumber chargeNumber
    Byte array
    inap.ChargeNumber

inap.collectedDigits collectedDigits
    No value
    inap.CollectedDigits

inap.collectedInfo collectedInfo
    Unsigned 32-bit integer
    inap.CollectedInfo

inap.collectedInfoSpecificInfo collectedInfoSpecificInfo
    No value
    inap.T_collectedInfoSpecificInfo

inap.component component
    Unsigned 32-bit integer
    inap.Component

inap.componentCorrelationID componentCorrelationID
    Signed 32-bit integer
    inap.ComponentCorrelationID

inap.componentInfo componentInfo
    Byte array
    inap.OCTET_STRING_SIZE_1_118

inap.componentType componentType
    Unsigned 32-bit integer
    inap.ComponentType

inap.componentTypes componentTypes
    Unsigned 32-bit integer
    inap.SEQUENCE_SIZE_1_3_OF_ComponentType

inap.componentTypes_item Item
    Unsigned 32-bit integer
    inap.ComponentType

inap.componentttCorrelationID componentttCorrelationID
    Signed 32-bit integer
    inap.ComponentCorrelationID

inap.compoundCapCriteria compoundCapCriteria
    No value
    inap.CompoundCriteria

inap.conferenceTreatmentIndicator conferenceTreatmentIndicator
    Byte array
    inap.OCTET_STRING_SIZE_1

inap.connectTime connectTime
    Unsigned 32-bit integer
    inap.Integer4
```



```

inap.connectedNumberTreatmentInd  connectedNumberTreatmentInd
    Unsigned 32-bit integer
    inap.ConnectedNumberTreatmentInd

inap.connectedParty  connectedParty
    Unsigned 32-bit integer
    inap.T_connectedParty

inap.connectionIdentifier  connectionIdentifier
    Byte array
    inap.ConnectionIdentifier

inap.controlDigits  controlDigits
    No value
    inap.T_controlDigits

inap.controlType  controlType
    Unsigned 32-bit integer
    inap.ControlType

inap.correlationID  correlationID
    Byte array
    inap.CorrelationID

inap.counterID  counterID
    Unsigned 32-bit integer
    inap.CounterID

inap.counterValue  counterValue
    Unsigned 32-bit integer
    inap.Integer4

inap.countersValue  countersValue
    Unsigned 32-bit integer
    inap.CountersValue

inap.createOrRemove  createOrRemove
    Unsigned 32-bit integer
    inap.CreateOrRemoveIndicator

inap.createdCallSegmentAssociation  createdCallSegmentAssociation
    Unsigned 32-bit integer
    inap.CSAID

inap.criticality  criticality
    Unsigned 32-bit integer
    inap.CriticalityType

inap.csID  csID
    Unsigned 32-bit integer
    inap.CallSegmentID

inap.cug_Index  cug-Index
    String
    inap.CUG_Index

inap.cug_Interlock  cug-Interlock
    Byte array
    inap.CUG_Interlock

inap.cug_OutgoingAccess  cug-OutgoingAccess
    No value
    inap.NULL

```

```
inap.cumulativeTransitDelay  cumulativeTransitDelay
    Byte array
    inap.CumulativeTransitDelay

inap.cutAndPaste  cutAndPaste
    Unsigned 32-bit integer
    inap.CutAndPaste

inap.dPName  dPName
    Unsigned 32-bit integer
    inap.EventTypeBCSM

inap.date  date
    Byte array
    inap.OCTET_STRING_SIZE_3

inap.defaultFaultHandling  defaultFaultHandling
    No value
    inap.DefaultFaultHandling

inap.derivable  derivable
    Signed 32-bit integer
    inap.InvokeIdType

inap.destinationIndex  destinationIndex
    Byte array
    inap.DestinationIndex

inap.destinationNumberRoutingAddress  destinationNumberRoutingAddress
    Byte array
    inap.CalledPartyNumber

inap.destinationRoutingAddress  destinationRoutingAddress
    Unsigned 32-bit integer
    inap.DestinationRoutingAddress

inap.detachSignallingPath  detachSignallingPath
    No value
    inap.NULL

inap.detectModem  detectModem
    Boolean
    inap.BOOLEAN

inap.dialledDigits  dialledDigits
    Byte array
    inap.CalledPartyNumber

inap.dialledNumber  dialledNumber
    Byte array
    inap.Digits

inap.digitsResponse  digitsResponse
    Byte array
    inap.Digits

inap.disconnectFromIPForbidden  disconnectFromIPForbidden
    Boolean
    inap.BOOLEAN

inap.displayInformation  displayInformation
    String
    inap.DisplayInformation
```

```
inap.dpAssignment dpAssignment
    Unsigned 32-bit integer
    inap.T_dpAssignment

inap.dpCriteria dpCriteria
    Unsigned 32-bit integer
    inap.EventTypeBCSM

inap.dpName dpName
    Unsigned 32-bit integer
    inap.EventTypeBCSM

inap.dpSpecificCommonParameters dpSpecificCommonParameters
    No value
    inap.DpSpecificCommonParameters

inap.dpSpecificCriteria dpSpecificCriteria
    Unsigned 32-bit integer
    inap.DpSpecificCriteria

inap.duration duration
    Signed 32-bit integer
    inap.Duration

inap.ectTreatmentIndicator ectTreatmentIndicator
    Byte array
    inap.OCTET_STRING_SIZE_1

inap.elementaryMessageID elementaryMessageID
    Unsigned 32-bit integer
    inap.Integer4

inap.elementaryMessageIDs elementaryMessageIDs
    Unsigned 32-bit integer
    inap.SEQUENCE_SIZE_1_b3__numOfMessageIDs_OF_Integer4

inap.elementaryMessageIDs_item Item
    Unsigned 32-bit integer
    inap.Integer4

inap.empty empty
    No value
    inap.NULL

inap.endOfRecordingDigit endOfRecordingDigit
    Byte array
    inap.OCTET_STRING_SIZE_1_2

inap.endOfReplyDigit endOfReplyDigit
    Byte array
    inap.OCTET_STRING_SIZE_1_2

inap.endToEndTransitDelay endToEndTransitDelay
    Byte array
    inap.EndToEndTransitDelay

inap.errorCode errorCode
    Unsigned 32-bit integer
    inap.INAP_ERROR

inap.errorTreatment errorTreatment
    Unsigned 32-bit integer
    inap.ErrorTreatment
```

```
inap.eventSpecificInformationBCSM  eventSpecificInformationBCSM
    Unsigned 32-bit integer
    inap.EventSpecificInformationBCSM

inap.eventSpecificInformationCharging  eventSpecificInformationCharging
    Byte array
    inap.EventSpecificInformationCharging

inap.eventTypeBCSM  eventTypeBCSM
    Unsigned 32-bit integer
    inap.EventTypeBCSM

inap.eventTypeCharging  eventTypeCharging
    Byte array
    inap.EventTypeCharging

inap.exportSignallingPath  exportSignallingPath
    No value
    inap.NULL

inap.extensions  extensions
    Unsigned 32-bit integer
    inap.Extensions

inap.facilityGroupID  facilityGroupID
    Unsigned 32-bit integer
    inap.FacilityGroup

inap.facilityGroupMemberID  facilityGroupMemberID
    Signed 32-bit integer
    inap.INTEGER

inap.facilitySelectedAndAvailable  facilitySelectedAndAvailable
    No value
    inap.T_facilitySelectedAndAvailable

inap.failureCause  failureCause
    Byte array
    inap.Cause

inap.featureCode  featureCode
    Byte array
    inap.FeatureCode

inap.featureRequestIndicator  featureRequestIndicator
    Unsigned 32-bit integer
    inap.FeatureRequestIndicator

inap.filteredCallTreatment  filteredCallTreatment
    No value
    inap.FilteredCallTreatment

inap.filteringCharacteristics  filteringCharacteristics
    Unsigned 32-bit integer
    inap.FilteringCharacteristics

inap.filteringCriteria  filteringCriteria
    Unsigned 32-bit integer
    inap.FilteringCriteria

inap.filteringTimeOut  filteringTimeOut
    Unsigned 32-bit integer
    inap.FilteringTimeOut
```

```
inap.firstDigitTimeOut  firstDigitTimeOut
    Unsigned 32-bit integer
    inap.INTEGER_1_127

inap.forcedRelease  forcedRelease
    Boolean
    inap.BOOLEAN

inap.forwardCallIndicators  forwardCallIndicators
    Byte array
    inap.ForwardCallIndicators

inap.forwardGVNS  forwardGVNS
    Byte array
    inap.ForwardGVNS

inap.forwardServiceInteractionInd  forwardServiceInteractionInd
    No value
    inap.ForwardServiceInteractionInd

inap.forwardingCondition  forwardingCondition
    Unsigned 32-bit integer
    inap.ForwardingCondition

inap.gapAllInTraffic  gapAllInTraffic
    No value
    inap.NULL

inap.gapCriteria  gapCriteria
    Unsigned 32-bit integer
    inap.GapCriteria

inap.gapIndicators  gapIndicators
    No value
    inap.GapIndicators

inap.gapInterval  gapInterval
    Signed 32-bit integer
    inap.Interval

inap.gapOnResource  gapOnResource
    Unsigned 32-bit integer
    inap.GapOnResource

inap.gapOnService  gapOnService
    No value
    inap.GapOnService

inap.gapTreatment  gapTreatment
    Unsigned 32-bit integer
    inap.GapTreatment

inap.generalProblem  generalProblem
    Signed 32-bit integer
    inap.GeneralProblem

inap.genericIdentifier  genericIdentifier
    Byte array
    inap.GenericIdentifier

inap.genericName  genericName
    Byte array
    inap.GenericName
```

```
inap.genericNumbers genericNumbers
    Unsigned 32-bit integer
    inap.GenericNumbers
inap.global global
    inap.OBJECT_IDENTIFIER
inap.globalCallReference globalCallReference
    Byte array
    inap.GlobalCallReference
inap.globalValue globalValue
    inap.OBJECT_IDENTIFIER
inap.group group
    Unsigned 32-bit integer
    inap.FacilityGroup
inap.highLayerCompatibility highLayerCompatibility
    Byte array
    inap.HighLayerCompatibility
inap.holdTreatmentIndicator holdTreatmentIndicator
    Byte array
    inap.OCTET_STRING_SIZE_1
inap.holdcause holdcause
    Byte array
    inap.HoldCause
inap.huntGroup huntGroup
    Byte array
    inap.OCTET_STRING
inap.iA5Information iA5Information
    Boolean
    inap.BOOLEAN
inap.iA5Response iA5Response
    String
    inap.IA5String
inap.iNServiceCompatibilityIndication iNServiceCompatibilityIndication
    Unsigned 32-bit integer
    inap.INServiceCompatibilityIndication
inap.iNServiceCompatibilityResponse iNServiceCompatibilityResponse
    Unsigned 32-bit integer
    inap.INServiceCompatibilityResponse
inap.iNServiceControlCode iNServiceControlCode
    Byte array
    inap.Digits
inap.iNServiceControlCodeHigh iNServiceControlCodeHigh
    Byte array
    inap.Digits
inap.iNServiceControlCodeLow iNServiceControlCodeLow
    Byte array
    inap.Digits
```

```
inap.iNprofiles iNprofiles
    Unsigned 32-bit integer
    inap.SEQUENCE_SIZE_1_numOfINProfile_OF_INprofile
inap.iNprofiles_item Item
    No value
    inap.INprofile
inap.iPAddressAndresource iPAddressAndresource
    No value
    inap.T_iPAddressAndresource
inap.iPAddressValue iPAddressValue
    Byte array
    inap.Digits
inap.iPAvailable iPAvailable
    Byte array
    inap.IPAvailable
inap.iPSSPCapabilities iPSSPCapabilities
    Byte array
    inap.IPSSPCapabilities
inap.iSDNAccessRelatedInformation iSDNAccessRelatedInformation
    Byte array
    inap.ISDNAccessRelatedInformation
inap.inbandInfo inbandInfo
    No value
    inap.InbandInfo
inap.incomingSignallingBufferCopy incomingSignallingBufferCopy
    Boolean
    inap.BOOLEAN
inap.informationToRecord informationToRecord
    No value
    inap.InformationToRecord
inap.informationToSend informationToSend
    Unsigned 32-bit integer
    inap.InformationToSend
inap.initialCallSegment initialCallSegment
    Byte array
    inap.Cause
inap.integer integer
    Unsigned 32-bit integer
    inap.Integer4
inap.interDigitTimeOut interDigitTimeOut
    Unsigned 32-bit integer
    inap.INTEGER_1_127
inap.interruptableAnnInd interruptableAnnInd
    Boolean
    inap.BOOLEAN
inap.interval interval
    Signed 32-bit integer
    inap.INTEGER_M1_32000
```

```
inap.invoke invoke
    No value
    inap.Invoke

inap.invokeID invokeID
    Signed 32-bit integer
    inap.InvokeIdType

inap.invokeIDRej invokeIDRej
    Unsigned 32-bit integer
    inap.T_invokeIDRej

inap.invokeProblem invokeProblem
    Signed 32-bit integer
    inap.InvokeProblem

inap.invokeparameter invokeparameter
    No value
    inap.InvokeParameter

inap.ipAddressAndCallSegment ipAddressAndCallSegment
    No value
    inap.T_ipAddressAndCallSegment

inap.ipAddressAndLegID ipAddressAndLegID
    No value
    inap.T_ipAddressAndLegID

inap.ipRelatedInformation ipRelatedInformation
    No value
    inap.IPRelatedInformation

inap.ipRelationInformation ipRelationInformation
    No value
    inap.IPRelatedInformation

inap.ipRoutingAddress ipRoutingAddress
    Byte array
    inap.IPRoutingAddress

inap.lastEventIndicator lastEventIndicator
    Boolean
    inap.BOOLEAN

inap.legID legID
    Unsigned 32-bit integer
    inap.LegID

inap.legIDToMove legIDToMove
    Unsigned 32-bit integer
    inap.LegID

inap.legToBeCreated legToBeCreated
    Unsigned 32-bit integer
    inap.LegID

inap.legToBeReleased legToBeReleased
    Unsigned 32-bit integer
    inap.LegID

inap.legToBeSplit legToBeSplit
    Unsigned 32-bit integer
    inap.LegID
```



```
inap.legorCSID legorCSID
    Unsigned 32-bit integer
    inap.T_legorCSID

inap.legs legs
    Unsigned 32-bit integer
    inap.T_legs

inap.legs_item Item
    No value
    inap.T_legs_item

inap.lineID lineID
    Byte array
    inap.Digits

inap.linkedID linkedID
    Signed 32-bit integer
    inap.InvokeIdType

inap.local local
    Signed 32-bit integer
    inap.INTEGER

inap.localValue localValue
    Signed 32-bit integer
    inap.OperationLocalvalue

inap.locationNumber locationNumber
    Byte array
    inap.LocationNumber

inap.mailBoxID mailBoxID
    Byte array
    inap.MailBoxID

inap.maximumNbOfDigits maximumNbOfDigits
    Unsigned 32-bit integer
    inap.INTEGER_1_127

inap.maximumNumberOfCounters maximumNumberOfCounters
    Unsigned 32-bit integer
    inap.MaximumNumberOfCounters

inap.media media
    Unsigned 32-bit integer
    inap.Media

inap.mergeSignallingPaths mergeSignallingPaths
    No value
    inap.NULL

inap.messageContent messageContent
    String
    inap.IA5String_SIZE_b3__minMessageContentLength_b3__maxMessageContentLength

inap.messageDeletionTimeOut messageDeletionTimeOut
    Unsigned 32-bit integer
    inap.INTEGER_1_3600

inap.messageID messageID
    Unsigned 32-bit integer
    inap.MessageID
```

```
inap.messageType messageType
    Unsigned 32-bit integer
    inap.T_messageType

inap.midCallControlInfo midCallControlInfo
    Unsigned 32-bit integer
    inap.MidCallControlInfo

inap.midCallInfoType midCallInfoType
    No value
    inap.MidCallInfoType

inap.midCallReportType midCallReportType
    Unsigned 32-bit integer
    inap.T_midCallReportType

inap.minAcceptableATMTrafficDescriptor minAcceptableATMTrafficDescriptor
    Byte array
    inap.MinAcceptableATMTrafficDescriptor

inap.minNumberOfDigits minNumberOfDigits
    Unsigned 32-bit integer
    inap.NumberOfDigits

inap.minimumNbOfDigits minimumNbOfDigits
    Unsigned 32-bit integer
    inap.INTEGER_1_127

inap.miscCallInfo miscCallInfo
    No value
    inap.MiscCallInfo

inap.modemdetected modemdetected
    Boolean
    inap.BOOLEAN

inap.modifyResultType modifyResultType
    Unsigned 32-bit integer
    inap.ModifyResultType

inap.monitorDuration monitorDuration
    Signed 32-bit integer
    inap.Duration

inap.monitorMode monitorMode
    Unsigned 32-bit integer
    inap.MonitorMode

inap.monitoringCriteria monitoringCriteria
    Unsigned 32-bit integer
    inap.MonitoringCriteria

inap.monitoringTimeout monitoringTimeout
    Unsigned 32-bit integer
    inap.MonitoringTimeOut

inap.networkSpecific networkSpecific
    Unsigned 32-bit integer
    inap.Integer4

inap.newCallSegment newCallSegment
    Unsigned 32-bit integer
    inap.CallSegmentID
```

```
inap.newCallSegmentAssociation  newCallSegmentAssociation
    Unsigned 32-bit integer
    inap.CSAID

inap.newLeg  newLeg
    Unsigned 32-bit integer
    inap.LegID

inap.nocharge  nocharge
    Boolean
    inap.BOOLEAN

inap.nonCUGCall  nonCUGCall
    No value
    inap.NULL

inap.none  none
    No value
    inap.NULL

inap.not_derivable  not-derivable
    No value
    inap.NULL

inap.notificationDuration  notificationDuration
    Unsigned 32-bit integer
    inap.ApplicationTimer

inap.number  number
    Byte array
    inap.Digits

inap.numberOfCalls  numberOfCalls
    Unsigned 32-bit integer
    inap.Integer4

inap.numberOfDigits  numberOfDigits
    Unsigned 32-bit integer
    inap.NumberOfDigits

inap.numberOfDigitsTwo  numberOfDigitsTwo
    No value
    inap.T_numberOfDigitsTwo

inap.numberOfRepetitions  numberOfRepetitions
    Unsigned 32-bit integer
    inap.INTEGER_1_127

inap.numberingPlan  numberingPlan
    Byte array
    inap.NumberingPlan

inap.oAbandon  oAbandon
    No value
    inap.T_oAbandon

inap.oAnswerSpecificInfo  oAnswerSpecificInfo
    No value
    inap.T_oAnswerSpecificInfo

inap.oCalledPartyBusySpecificInfo  oCalledPartyBusySpecificInfo
    No value
    inap.T_oCalledPartyBusySpecificInfo
```

```
inap.oDisconnectSpecificInfo  oDisconnectSpecificInfo
    No value
    inap.T_oDisconnectSpecificInfo
inap.oMidCallInfo  oMidCallInfo
    No value
    inap.MidCallInfo
inap.oMidCallSpecificInfo  oMidCallSpecificInfo
    No value
    inap.T_oMidCallSpecificInfo
inap.oModifyRequestSpecificInfo  oModifyRequestSpecificInfo
    No value
    inap.T_oModifyRequestSpecificInfo
inap.oModifyResultSpecificInfo  oModifyResultSpecificInfo
    No value
    inap.T_oModifyResultSpecificInfo
inap.oNoAnswerSpecificInfo  oNoAnswerSpecificInfo
    No value
    inap.T_oNoAnswerSpecificInfo
inap.oReAnswer  oReAnswer
    No value
    inap.T_oReAnswer
inap.oSuspend  oSuspend
    No value
    inap.T_oSuspend
inap.oTermSeizedSpecificInfo  oTermSeizedSpecificInfo
    No value
    inap.T_oTermSeizedSpecificInfo
inap.oneTrigger  oneTrigger
    Signed 32-bit integer
    inap.INTEGER
inap.oneTriggerResult  oneTriggerResult
    No value
    inap.T_oneTriggerResult
inap.opCode  opCode
    Unsigned 32-bit integer
    inap.INAP_OPERATION
inap.operation  operation
    Signed 32-bit integer
    inap.INTEGER_M128_127
inap.origAttemptAuthorized  origAttemptAuthorized
    No value
    inap.T_origAttemptAuthorized
inap.originalCalledPartyID  originalCalledPartyID
    Byte array
    inap.OriginalCalledPartyID
inap.originationAttemptDenied  originationAttemptDenied
    No value
    inap.T_originationAttemptDenied
```

```
inap.originationDeniedCause  originationDeniedCause
    Byte array
    inap.Cause

inap.overrideLineRestrictions  overrideLineRestrictions
    Boolean
    inap.BOOLEAN

inap.parameter  parameter
    No value
    inap.ReturnErrorParameter

inap.partyToCharge  partyToCharge
    Unsigned 32-bit integer
    inap.LegID

inap.partyToConnect  partyToConnect
    Unsigned 32-bit integer
    inap.T_partyToConnect

inap.partyToDisconnect  partyToDisconnect
    Unsigned 32-bit integer
    inap.T_partyToDisconnect

inap.preferredLanguage  preferredLanguage
    String
    inap.Language

inap.prefix  prefix
    Byte array
    inap.Digits

inap.price  price
    Byte array
    inap.OCTET_STRING_SIZE_4

inap.privateFacilityID  privateFacilityID
    Signed 32-bit integer
    inap.INTEGER

inap.problem  problem
    Unsigned 32-bit integer
    inap.T_problem

inap.profile  profile
    Unsigned 32-bit integer
    inap.ProfileIdentifier

inap.profileAndDP  profileAndDP
    No value
    inap.TriggerDataIdentifier

inap.qOSParameter  qOSParameter
    Byte array
    inap.QoSParameter

inap.reason  reason
    Byte array
    inap.Reason

inap.receivedStatus  receivedStatus
    Unsigned 32-bit integer
    inap.ReceivedStatus
```

```
inap.receivingSideID  receivingSideID
    Byte array
    inap.LegType

inap.recordedMessageID  recordedMessageID
    Unsigned 32-bit integer
    inap.RecordedMessageID

inap.recordedMessageUnits  recordedMessageUnits
    Unsigned 32-bit integer
    inap.INTEGER_1_b3__maxRecordedMessageUnits

inap.redirectReason  redirectReason
    Byte array
    inap.RedirectReason

inap.redirectServiceTreatmentInd  redirectServiceTreatmentInd
    No value
    inap.T_redirectServiceTreatmentInd

inap.redirectingPartyID  redirectingPartyID
    Byte array
    inap.RedirectingPartyID

inap.redirectionInformation  redirectionInformation
    Byte array
    inap.RedirectionInformation

inap.registratorIdentifier  registratorIdentifier
    Byte array
    inap.RegistratorIdentifier

inap.reject  reject
    No value
    inap.Reject

inap.relayedComponent  relayedComponent
    No value
    inap.EMBEDDED_PDV

inap.releaseCause  releaseCause
    Byte array
    inap.Cause

inap.releaseCauseValue  releaseCauseValue
    Byte array
    inap.Cause

inap.releaseIndication  releaseIndication
    Boolean
    inap.BOOLEAN

inap.replayAllowed  replayAllowed
    Boolean
    inap.BOOLEAN

inap.replayDigit  replayDigit
    Byte array
    inap.OCTET_STRING_SIZE_1_2

inap.reportCondition  reportCondition
    Unsigned 32-bit integer
    inap.ReportCondition
```

```
inap.requestAnnouncementComplete requestAnnouncementComplete
    Boolean
    inap.BOOLEAN

inap.requestedInformationList requestedInformationList
    Unsigned 32-bit integer
    inap.RequestedInformationList

inap.requestedInformationType requestedInformationType
    Unsigned 32-bit integer
    inap.RequestedInformationType

inap.requestedInformationTypeList requestedInformationTypeList
    Unsigned 32-bit integer
    inap.RequestedInformationTypeList

inap.requestedInformationValue requestedInformationValue
    Unsigned 32-bit integer
    inap.RequestedInformationValue

inap.requestedNumberOfDigits requestedNumberOfDigits
    Unsigned 32-bit integer
    inap.NumberOfDigits

inap.requestedUTSILList requestedUTSILList
    Unsigned 32-bit integer
    inap.RequestedUTSILList

inap.resourceAddress resourceAddress
    Unsigned 32-bit integer
    inap.T_resourceAddress

inap.resourceID resourceID
    Unsigned 32-bit integer
    inap.ResourceID

inap.resourceStatus resourceStatus
    Unsigned 32-bit integer
    inap.ResourceStatus

inap.responseCondition responseCondition
    Unsigned 32-bit integer
    inap.ResponseCondition

inap.restartAllowed restartAllowed
    Boolean
    inap.BOOLEAN

inap.restartRecordingDigit restartRecordingDigit
    Byte array
    inap.OCTET_STRING_SIZE_1_2

inap.resultretres resultretres
    No value
    inap.T_resultretres

inap.results results
    Unsigned 32-bit integer
    inap.TriggerResults

inap.returnError returnError
    No value
    inap.ReturnError
```

```
inap.returnErrorProblem returnErrorProblem
    Signed 32-bit integer
    inap.ReturnErrorProblem

inap.returnResultLast returnResultLast
    No value
    inap.ReturnResult

inap.returnResultNotLast returnResultNotLast
    No value
    inap.ReturnResult

inap.returnResultProblem returnResultProblem
    Signed 32-bit integer
    inap.ReturnResultProblem

inap.returnparameter returnparameter
    No value
    inap.ReturnResultParameter

inap.route route
    Byte array
    inap.Route

inap.routeCounters routeCounters
    Unsigned 32-bit integer
    inap.RouteCountersValue

inap.routeIndex routeIndex
    Byte array
    inap.OCTET_STRING

inap.routeList routeList
    Unsigned 32-bit integer
    inap.RouteList

inap.routeSelectFailureSpecificInfo routeSelectFailureSpecificInfo
    No value
    inap.T_routeSelectFailureSpecificInfo

inap.routeingNumber routeingNumber
    Byte array
    inap.RouteingNumber

inap.sCIBillingChargingCharacteristics sCIBillingChargingCharacteristics
    Byte array
    inap.SCIBillingChargingCharacteristics

inap.sDSSinformation sDSSinformation
    Byte array
    inap.SDSSinformation

inap.sFBillingChargingCharacteristics sFBillingChargingCharacteristics
    Byte array
    inap.SFBillingChargingCharacteristics

inap.sRFgapCriteria sRFgapCriteria
    Unsigned 32-bit integer
    inap.SRFGapCriteria

inap.scfID scfID
    Byte array
    inap.ScfID
```



```
inap.sendingSideID  sendingSideID
    Byte array
    inap.LegType

inap.serviceAddressInformation  serviceAddressInformation
    No value
    inap.ServiceAddressInformation

inap.serviceInteractionIndicators  serviceInteractionIndicators
    Byte array
    inap.ServiceInteractionIndicators

inap.serviceInteractionIndicatorsTwo  serviceInteractionIndicatorsTwo
    No value
    inap.ServiceInteractionIndicatorsTwo

inap.serviceKey  serviceKey
    Unsigned 32-bit integer
    inap.ServiceKey

inap.serviceProfileIdentifier  serviceProfileIdentifier
    Byte array
    inap.ServiceProfileIdentifier

inap.servingAreaID  servingAreaID
    Byte array
    inap.ServingAreaID

inap.severalTriggerResult  severalTriggerResult
    No value
    inap.T_severalTriggerResult

inap.sourceCallSegment  sourceCallSegment
    Unsigned 32-bit integer
    inap.CallSegmentID

inap.sourceLeg  sourceLeg
    Unsigned 32-bit integer
    inap.LegID

inap.startDigit  startDigit
    Byte array
    inap.OCTET_STRING_SIZE_1_2

inap.startTime  startTime
    Byte array
    inap.DateAndTime

inap.stopTime  stopTime
    Byte array
    inap.DateAndTime

inap.subscriberID  subscriberID
    Byte array
    inap.GenericNumber

inap.suppressCallDiversionNotification  suppressCallDiversionNotification
    Boolean
    inap.BOOLEAN

inap.suppressCallTransferNotification  suppressCallTransferNotification
    Boolean
    inap.BOOLEAN
```

```
inap.suppressVPNAPP  suppressVPNAPP
  Boolean
  inap.BOOLEAN

inap.suspendTimer  suspendTimer
  Unsigned 32-bit integer
  inap.SuspendTimer

inap.tAbandon  tAbandon
  No value
  inap.T_tAbandon

inap.tAnswerSpecificInfo  tAnswerSpecificInfo
  No value
  inap.T_tAnswerSpecificInfo

inap.tBusySpecificInfo  tBusySpecificInfo
  No value
  inap.T_tBusySpecificInfo

inap.tDPIIdentifier  tDPIIdentifier
  Signed 32-bit integer
  inap.INTEGER

inap.tDPIIdentifier  tDPIIdentifier
  Unsigned 32-bit integer
  inap.TDPIIdentifier

inap.tDisconnectSpecificInfo  tDisconnectSpecificInfo
  No value
  inap.T_tDisconnectSpecificInfo

inap.tMidCallInfo  tMidCallInfo
  No value
  inap.MidCallInfo

inap.tMidCallSpecificInfo  tMidCallSpecificInfo
  No value
  inap.T_tMidCallSpecificInfo

inap.tModifyRequestSpecificInfo  tModifyRequestSpecificInfo
  No value
  inap.T_tModifyRequestSpecificInfo

inap.tModifyResultSpecificInfo  tModifyResultSpecificInfo
  No value
  inap.T_tModifyResultSpecificInfo

inap.tNoAnswerSpecificInfo  tNoAnswerSpecificInfo
  No value
  inap.T_tNoAnswerSpecificInfo

inap.tReAnswer  tReAnswer
  No value
  inap.T_tReAnswer

inap.tSuspend  tSuspend
  No value
  inap.T_tSuspend

inap.targetCallSegment  targetCallSegment
  Unsigned 32-bit integer
  inap.CallSegmentID
```

```
inap.targetCallSegmentAssociation  targetCallSegmentAssociation
    Unsigned 32-bit integer
    inap.CSAID

inap.terminalType  terminalType
    Unsigned 32-bit integer
    inap.TerminalType

inap.terminationAttemptAuthorized  terminationAttemptAuthorized
    No value
    inap.T_terminationAttemptAuthorized

inap.terminationAttemptDenied  terminationAttemptDenied
    No value
    inap.T_terminationAttemptDenied

inap.terminationDeniedCause  terminationDeniedCause
    Byte array
    inap.Cause

inap.text  text
    No value
    inap.T_text

inap.threshold  threshold
    Unsigned 32-bit integer
    inap.Integer4

inap.time  time
    Byte array
    inap.OCTET_STRING_SIZE_2

inap.timeToRecord  timeToRecord
    Unsigned 32-bit integer
    inap.INTEGER_0_b3__maxRecordingTime

inap.timeToRelease  timeToRelease
    Unsigned 32-bit integer
    inap.TimerValue

inap.timerID  timerID
    Unsigned 32-bit integer
    inap.TimerID

inap.timervalue  timervalue
    Unsigned 32-bit integer
    inap.TimerValue

inap.tmr  tmr
    Byte array
    inap.OCTET_STRING_SIZE_1

inap.tone  tone
    No value
    inap.Tone

inap.toneID  toneID
    Unsigned 32-bit integer
    inap.Integer4

inap.travellingClassMark  travellingClassMark
    Byte array
    inap.TravellingClassMark
```

```
inap.treatment treatment
    Unsigned 32-bit integer
    inap.GapTreatment

inap.triggerDPTType triggerDPTType
    Unsigned 32-bit integer
    inap.TriggerDPTType

inap.triggerData triggerData
    No value
    inap.TriggerData

inap.triggerDataIdentifier triggerDataIdentifier
    Unsigned 32-bit integer
    inap.T_triggerDataIdentifier

inap.triggerID triggerID
    Unsigned 32-bit integer
    inap.EventTypeBCSM

inap.triggerId triggerId
    Unsigned 32-bit integer
    inap.T_triggerId

inap.triggerPar triggerPar
    No value
    inap.T_triggerPar

inap.triggerStatus triggerStatus
    Unsigned 32-bit integer
    inap.TriggerStatus

inap.triggerType triggerType
    Unsigned 32-bit integer
    inap.TriggerType

inap.triggers triggers
    Unsigned 32-bit integer
    inap.Triggers

inap.trunkGroupID trunkGroupID
    Signed 32-bit integer
    inap.INTEGER

inap.type type
    Unsigned 32-bit integer
    inap.Code

inap.uIScriptId uIScriptId
    Unsigned 32-bit integer
    inap.Code

inap.uIScriptResult uIScriptResult
    No value
    inap.T_uIScriptResult

inap.uIScriptSpecificInfo uIScriptSpecificInfo
    No value
    inap.T_uIScriptSpecificInfo

inap.uSIInformation uSIInformation
    Byte array
    inap.USIInformation
```

```

inap.uSIServiceIndicator  uSIServiceIndicator
    Unsigned 32-bit integer
    inap.USIServiceIndicator

inap.uSIMonitorMode  uSIMonitorMode
    Unsigned 32-bit integer
    inap.USIMonitorMode

inap.url  url
    String
    inap.IA5String_SIZE_1_512

inap.userDialogueDurationInd  userDialogueDurationInd
    Boolean
    inap.BOOLEAN

inap.vpnIndicator  vpnIndicator
    Boolean
    inap.VPNIndicator

inap.value  value
    No value
    inap.T_value

inap.variableMessage  variableMessage
    No value
    inap.T_variableMessage

inap.variableParts  variableParts
    Unsigned 32-bit integer
    inap.SEQUENCE_SIZE_1_b3__maxVariableParts_OF_VariablePart

inap.variableParts_item  Item
    Unsigned 32-bit integer
    inap.VariablePart

inap.voiceBack  voiceBack
    Boolean
    inap.BOOLEAN

inap.voiceInformation  voiceInformation
    Boolean
    inap.BOOLEAN

```

### Intelligent Platform Management Interface (ipmi)

```

ClearSEL.datafield.BytesToRead  'R' (0x52)
    Unsigned 8-bit integer
    'R' (0x52)

ClearSEL.datafield.ErasureProgress.EraProg  Erasure Progress
    Unsigned 8-bit integer
    Erasure Progress

ClearSEL.datafield.ErasureProgress.Reserved  Reserved
    Unsigned 8-bit integer
    Reserved

ClearSEL.datafield.NextSELRecordID  Action for Clear SEL
    Unsigned 8-bit integer
    Action for Clear SEL

```

```

ClearSEL.datafield.OffsetIntoRecord  'L' (0x4C)
    Unsigned 8-bit integer
    'L' (0x4C)

ClearSEL.datafield.ReservationID  Reservation ID
    Unsigned 16-bit integer
    Reservation ID

ClearSEL.datafield.SELRecordID  'C' (0x43)
    Unsigned 8-bit integer
    'C' (0x43)

FRUControl.datafield.FRUControlOption  FRU Control Option
    Unsigned 8-bit integer
    FRU Control Option

FRUControl.datafield.FRUDeviceID  FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

FRUControl.datafield.PICMGIdentifier  PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier

GetChannelAuthCap.datafield.channelno  Channel number
    Unsigned 8-bit integer
    Channel number

GetChannelAuthCap.datafield.compinfo  Compability information
    Boolean
    Compability information

GetChannelAuthCap.datafield.max_priv_lev  Requested Maximum Privilege Level
    Unsigned 8-bit integer
    Requested Maximum Privilege Level

GetChannelAuthCap.resp.Auth_Cap_comp_info  Compability information
    Boolean
    Compability information

GetChannelAuthCap.resp.anonymouslogin_status_b0  Anonymous Login enabled
    Boolean
    Anonymous Login enabled

GetChannelAuthCap.resp.anonymouslogin_status_b1  Null usernames enabled
    Boolean
    Null usernames enabled

GetChannelAuthCap.resp.anonymouslogin_status_b2  Non-null usernames enabled
    Boolean
    Non-null usernames enabled

GetChannelAuthCap.resp.auth_types_b0  None
    Boolean
    None

GetChannelAuthCap.resp.auth_types_b1  MD2
    Boolean
    MD2

GetChannelAuthCap.resp.auth_types_b2  MD5
    Boolean
    MD5

```

GetChannelAuthCap.resp.auth\_types\_b4 OEM proprietary (per OEM identified by the  
Boolean  
OEM proprietary (per OEM identified by the IANA OEM ID in the RMCP Ping Resp

GetChannelAuthCap.resp.channelno Channel number  
Unsigned 8-bit integer  
Channel number

GetChannelAuthCap.resp.ext\_cap\_b0 Channel supports IPMI v1.5 connections  
Boolean  
Channel supports IPMI v1.5 connections

GetChannelAuthCap.resp.ext\_cap\_b1 Channel supports IPMI v2.0 connections  
Boolean  
Channel supports IPMI v2.0 connections

GetChannelAuthCap.resp.oemaux OEM auxiliary data  
Unsigned 8-bit integer  
OEM auxiliary data.

GetChannelAuthCap.resp.oemid OEM ID  
Unsigned 24-bit integer  
OEM ID

GetChannelAuthCap.resp.per\_mess\_auth\_status Per-message Authentication is enabl  
Boolean  
Per-message Authentication is enabled

GetChannelAuthCap.resp.user\_level\_auth\_status User Level Authentication status  
Boolean  
User Level Authentication status

GetDeviceID.datafield.AuxiliaryFirmwareRevisionInfomation Auxiliary Firmware Re  
Unsigned 32-bit integer  
Auxiliary Firmware Revision Infomation

GetDeviceID.datafield.Bridge Bridge Device  
Unsigned 8-bit integer  
Bridge Device

GetDeviceID.datafield.Chassis Chassis Device  
Unsigned 8-bit integer  
Chassis Device

GetDeviceID.datafield.DeviceAvailable Device Available  
Unsigned 8-bit integer  
Device Available

GetDeviceID.datafield.DeviceID Device ID  
Unsigned 8-bit integer  
Device ID field

GetDeviceID.datafield.DeviceRevision Device Revision  
Unsigned 8-bit integer  
Device Revision binary code

GetDeviceID.datafield.DeviceSDR Device SDR  
Unsigned 8-bit integer  
Device SDR

GetDeviceID.datafield.FRUInventoryDevice FRU Inventory Device  
Unsigned 8-bit integer  
FRU Inventory Device

```
GetDeviceID.datafield.IPMBEventGenerator  IPMB Event Generator
    Unsigned 8-bit integer
    IPMB Event Generator

GetDeviceID.datafield.IPMBEventReceiver  IPMB Event Receiver
    Unsigned 8-bit integer
    IPMB Event Receiver

GetDeviceID.datafield.IPMIRevision  IPMI Revision
    Unsigned 8-bit integer
    IPMI Revision

GetDeviceID.datafield.MajorFirmwareRevision  Major Firmware Revision
    Unsigned 8-bit integer
    Major Firmware Revision

GetDeviceID.datafield.ManufactureID  Manufacture ID
    Unsigned 24-bit integer
    Manufacture ID

GetDeviceID.datafield.MinorFirmwareRevision  Minor Firmware Revision
    Unsigned 8-bit integer
    Minor Firmware Revision

GetDeviceID.datafield.ProductID  Product ID
    Unsigned 16-bit integer
    Product ID

GetDeviceID.datafield.SDRRepositoryDevice  SDR Repository Device
    Unsigned 8-bit integer
    SDR Repository Device

GetDeviceID.datafield.SELDevice  SEL Device
    Unsigned 8-bit integer
    SEL Device

GetDeviceID.datafield.SensorDevice  Sensor Device
    Unsigned 8-bit integer
    Sensor Device

GetDeviceLocatorRecordID.datafield.FRUDeviceID  FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

GetDeviceLocatorRecordID.datafield.PICMGIdentifier  PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier

GetDeviceLocatorRecordID.datafield.RecordID  Record ID
    Unsigned 16-bit integer
    Record ID

GetDeviceSDR.datafield.BytesToRead  Bytes to read (number)
    Unsigned 8-bit integer
    Bytes to read

GetDeviceSDR.datafield.OffsetIntoRecord  Offset into record
    Unsigned 8-bit integer
    Offset into record

GetDeviceSDR.datafield.RecordID  Record ID of record to Get
    Unsigned 16-bit integer
    Record ID of record to Get
```



```
GetDeviceSDR.datafield.ReservationID  Reservation ID
    Unsigned 16-bit integer
    Reservation ID

GetDeviceSDRInfo.datafield.Flag  Flag
    Unsigned 8-bit integer
    Flag

GetDeviceSDRInfo.datafield.Flag.DeviceLUN3  Device LUN 3
    Unsigned 8-bit integer
    Device LUN 3

GetDeviceSDRInfo.datafield.Flag.DeviceLUNs0  Device LUN 0
    Unsigned 8-bit integer
    Device LUN 0

GetDeviceSDRInfo.datafield.Flag.DeviceLUNs1  Device LUN 1
    Unsigned 8-bit integer
    Device LUN 1

GetDeviceSDRInfo.datafield.Flag.DeviceLUNs2  Device LUN 2
    Unsigned 8-bit integer
    Device LUN 2

GetDeviceSDRInfo.datafield.Flag.Dynamicpopulation  Dynamic population
    Unsigned 8-bit integer
    Dynamic population

GetDeviceSDRInfo.datafield.Flag.Reserved  Reserved
    Unsigned 8-bit integer
    Reserved

GetDeviceSDRInfo.datafield.PICMGIdentifier  Number of the Sensors in device
    Unsigned 8-bit integer
    Number of the Sensors in device

GetDeviceSDRInfo.datafield.SensorPopulationChangeIndicator  SensorPopulation Cha
    Unsigned 32-bit integer
    Sensor Population Change Indicator

GetFRUActivationPolicy.datafield.FRUActivationPolicy.Bit0  Locked Bit
    Unsigned 8-bit integer
    Locked Bit

GetFRUActivationPolicy.datafield.FRUActivationPolicy.Bit1  Deactivation-Locked B
    Unsigned 8-bit integer
    Deactivation-Locked Bit

GetFRUActivationPolicy.datafield.FRUActivationPolicy.Bit72  Bit 7...2 Reserverd
    Unsigned 8-bit integer
    Bit 7...2 Reserverd

GetFRUActivationPolicy.datafield.FRUDeviceID  FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

GetFRUActivationPolicy.datafield.PICMGIdentifier  PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier

GetFRUInventoryAreaInfo.datafield.FRUInventoryAreaSize  FRU Inventory area size
    Unsigned 16-bit integer
    FRU Inventory area size in bytes
```

```

GetFRUInventoryAreaInfo.datafield.ReservationID  FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

GetFRUInventoryAreaInfo.datafield.ResponseDataByte4.Bit0  Device is accessed by
    Unsigned 8-bit integer
    Device is accessed by bytes or words ?

GetFRUInventoryAreaInfo.datafield.ResponseDataByte4.Bit71  Reserved
    Unsigned 8-bit integer
    Reserved

GetFRULedProperties.datafield.ApplicationSpecificLEDCount  Application Specific
    Unsigned 8-bit integer
    Application Specific LED Count

GetFRULedProperties.datafield.FRUDeviceID  FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

GetFRULedProperties.datafield.LedProperties.BlueLED  BlueLED
    Unsigned 8-bit integer
    BlueLED

GetFRULedProperties.datafield.LedProperties.LED1  LED1
    Unsigned 8-bit integer
    LED1

GetFRULedProperties.datafield.LedProperties.LED2  LED2
    Unsigned 8-bit integer
    LED2

GetFRULedProperties.datafield.LedProperties.LED3  LED3
    Unsigned 8-bit integer
    LED3

GetFRULedProperties.datafield.LedProperties.Reserved  Reserved
    Unsigned 8-bit integer
    Reserved

GetFRULedProperties.datafield.PICMGIdentifier  PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier

GetFRULedState.datafield.FRUDeviceID  FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

GetFRULedState.datafield.LEDFunction  Bit 7...3 Reserved
    Unsigned 8-bit integer
    Bit 7...3 Reserved

GetFRULedState.datafield.LEDID  LED ID
    Unsigned 8-bit integer
    LED ID

GetFRULedState.datafield.LEDState.Bit0  IPM Controller has a Local Control State
    Unsigned 8-bit integer
    IPM Controller has a Local Control State ?

GetFRULedState.datafield.LEDState.Bit1  Override State
    Unsigned 8-bit integer
    Override State

```

```
GetFRULedState.datafield.LEDState.Bit2   Lamp Test
    Unsigned 8-bit integer
    Lamp Test

GetFRULedState.datafield.LampTestDuration   Lamp Test Duration
    Unsigned 8-bit integer
    Lamp Test Duration

GetFRULedState.datafield.LocalControlColor.ColorVal   Color
    Unsigned 8-bit integer
    Color

GetFRULedState.datafield.LocalControlColor.Reserved   Bit 7...4 Reserved
    Unsigned 8-bit integer
    Bit 7...4 Reserved

GetFRULedState.datafield.LocalControlLEDFunction   Local Control LED Function
    Unsigned 8-bit integer
    Local Control LED Function

GetFRULedState.datafield.LocalControlOffduration   Local Control Off-duration
    Unsigned 8-bit integer
    Local Control Off-duration

GetFRULedState.datafield.LocalControlOnduration   Local Control On-duration
    Unsigned 8-bit integer
    Local Control On-duration

GetFRULedState.datafield.OverrideStateColor.ColorVal   Color
    Unsigned 8-bit integer
    Color

GetFRULedState.datafield.OverrideStateColor.Reserved   Bit 7...4 Reserved
    Unsigned 8-bit integer
    Bit 7...4 Reserved

GetFRULedState.datafield.OverrideStateLEDFunction   Override State LED Function
    Unsigned 8-bit integer
    Override State LED Function

GetFRULedState.datafield.OverrideStateOffduration   Override State Off-duration
    Unsigned 8-bit integer
    Override State Off-duration

GetFRULedState.datafield.OverrideStateOnduration   Override State On-duration
    Unsigned 8-bit integer
    Override State On-duration

GetFRULedState.datafield.PICMGIdentifier   PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier

GetFanLevel.datafield.FRUDeviceID   FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

GetFanLevel.datafield.LocalControlFanLevel   Local Control Fan Level
    Unsigned 8-bit integer
    Local Control Fan Level

GetFanLevel.datafield.OverrideFanLevel   Override Fan Level
    Unsigned 8-bit integer
    Override Fan Level
```

```
GetFanLevel.datafield.PICMGIdentifier PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier

GetLedColorCapabilities.datafield.DefaultLEDColorLocalControl.Color Default LED
    Unsigned 8-bit integer
    Default LED Color (Local Control State)

GetLedColorCapabilities.datafield.DefaultLEDColorLocalControl.Reserved.bit7-4 R
    Unsigned 8-bit integer
    Reserved

GetLedColorCapabilities.datafield.DefaultLEDColorOverride.Color Default LED Col
    Unsigned 8-bit integer
    Default LED Color (Override State)

GetLedColorCapabilities.datafield.DefaultLEDColorOverride.Reserved.bit7-4 Reser
    Unsigned 8-bit integer
    Reserved

GetLedColorCapabilities.datafield.FRUDeviceID FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

GetLedColorCapabilities.datafield.LEDColorCapabilities.AMBER LED Support AMBER
    Unsigned 8-bit integer
    LED Support AMBER ?

GetLedColorCapabilities.datafield.LEDColorCapabilities.BLUE LED Support BLUE ?
    Unsigned 8-bit integer
    LED Support BLUE ?

GetLedColorCapabilities.datafield.LEDColorCapabilities.GREEN LED Support GREEN
    Unsigned 8-bit integer
    LED Support GREEN ?

GetLedColorCapabilities.datafield.LEDColorCapabilities.ORANGE LED Support ORANG
    Unsigned 8-bit integer
    LED Support ORANGE ?

GetLedColorCapabilities.datafield.LEDColorCapabilities.RED LED Support RED ?
    Unsigned 8-bit integer
    LED Support RED ?

GetLedColorCapabilities.datafield.LEDColorCapabilities.Reserved.bit0 Reserved
    Unsigned 8-bit integer
    Reserved

GetLedColorCapabilities.datafield.LEDColorCapabilities.Reserved.bit7 Reserved
    Unsigned 8-bit integer
    Reserved

GetLedColorCapabilities.datafield.LEDColorCapabilities.WHITE LED Support WHITE
    Unsigned 8-bit integer
    LED Support WHITE ?

GetLedColorCapabilities.datafield.LEDID LED ID
    Unsigned 8-bit integer
    LED ID

GetLedColorCapabilities.datafield.PICMGIdentifier PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier
```

```
GetPICMGProperties.datafield.FRUDeviceIDforIPMController  FRU Device ID for IPM
  Unsigned 8-bit integer
  FRU Device ID for IPM Controller

GetPICMGProperties.datafield.MaxFRUDeviceID  Max FRU Device ID
  Unsigned 8-bit integer
  Max FRU Device ID

GetPICMGProperties.datafield.PICMGExtensionVersion  PICMG Extension Version
  Unsigned 8-bit integer
  PICMG Extension Version

GetPICMGProperties.datafield.PICMGIdentifier  PICMG Identifier
  Unsigned 8-bit integer
  PICMG Identifier

GetPowerLevel.datafield.DelayToStablePower  Delay To Stable Power
  Unsigned 8-bit integer
  Delay To Stable Power

GetPowerLevel.datafield.FRUDeviceID  FRU Device ID
  Unsigned 8-bit integer
  FRU Device ID

GetPowerLevel.datafield.PICMGIdentifier  PICMG Identifier
  Unsigned 8-bit integer
  PICMG Identifier

GetPowerLevel.datafield.PowerDraw  Power Draw
  Unsigned 8-bit integer
  Power Draw

GetPowerLevel.datafield.PowerMultiplier  Power Multiplier
  Unsigned 8-bit integer
  Power Multiplier

GetPowerLevel.datafield.PowerType  Power Type
  Unsigned 8-bit integer
  Power Type

GetPowerLevel.datafield.Properties  Properties
  Unsigned 8-bit integer
  Properties

GetPowerLevel.datafield.Properties.DynamicPowerCon  Dynamic Power Configuration
  Unsigned 8-bit integer
  Dynamic Power Configuration

GetPowerLevel.datafield.Properties.PowerLevel  Power Level
  Unsigned 8-bit integer
  Power Level

GetPowerLevel.datafield.Properties.Reserved  Reserved
  Unsigned 8-bit integer
  Reserved

GetSELEntry.datafield.BytesToRead  Bytes to read
  Unsigned 8-bit integer
  Bytes to read

GetSELEntry.datafield.NextSELRecordID  Next SEL Record ID
  Unsigned 16-bit integer
  Next SEL Record ID
```

```

GetSELEntry.datafield.OffsetIntoRecord  Offset into record
    Unsigned 8-bit integer
    Offset into record

GetSELEntry.datafield.ReservationID  Reservation ID
    Unsigned 16-bit integer
    Reservation ID

GetSELEntry.datafield.SELRecordID  SEL Record ID
    Unsigned 16-bit integer
    SEL Record ID

GetSELInfo.datafield.AdditionTimestamp  Most recent addition timestamp
    Unsigned 32-bit integer
    Most recent addition timestamp

GetSELInfo.datafield.Entries  Number of log entries in SEL
    Unsigned 16-bit integer
    Number of log entries in SEL

GetSELInfo.datafield.EraseTimestamp  Most recent erase timestamp
    Unsigned 32-bit integer
    Most recent erase timestamp

GetSELInfo.datafield.FreeSpace  Free Space in bytes
    Unsigned 16-bit integer
    Free Space in bytes

GetSELInfo.datafield.OperationSupport.Bit0  Get SEL Allocation Information command supported ?
    Unsigned 8-bit integer
    Get SEL Allocation Information command supported ?

GetSELInfo.datafield.OperationSupport.Bit1  Reserve SEL command supported ?
    Unsigned 8-bit integer
    Reserve SEL command supported ?

GetSELInfo.datafield.OperationSupport.Bit2  Partial Add SEL Entry command supported ?
    Unsigned 8-bit integer
    Partial Add SEL Entry command supported ?

GetSELInfo.datafield.OperationSupport.Bit3  Delete SEL command supported ?
    Unsigned 8-bit integer
    Delete SEL command supported ?

GetSELInfo.datafield.OperationSupport.Bit7  Overflow Flag
    Unsigned 8-bit integer
    Overflow Flag

GetSELInfo.datafield.OperationSupport.Reserved  Reserved
    Unsigned 8-bit integer
    Reserved

GetSELInfo.datafield.ReservationID  Reservation ID
    Unsigned 16-bit integer
    Reservation ID

GetSELInfo.datafield.SELVersion  SEL Version
    Unsigned 8-bit integer
    SEL Version

GetSensorHysteresis.datafield.NegativegoingThresholdHysteresisValue  Negative-going Threshold Hysteresis Value
    Unsigned 8-bit integer
    Negative-going Threshold Hysteresis Value

```

```

GetSensorHysteresis.datafield.PositivegoingThresholdHysteresisValue  Positive-go
    Unsigned 8-bit integer
    Positive-going Threshold Hysteresis Value

GetSensorHysteresis.datafield.ReservedForHysteresisMask  Reserved for future ' H
    Unsigned 8-bit integer
    Reserved For Hysteresis Mask

GetSensorHysteresis.datafield.SensorNumber  Sensor Number
    Unsigned 8-bit integer
    Sensor Number

GetSensorReading.datafield.ResponseDataByte2.Bit5  Bit 5
    Unsigned 8-bit integer
    Bit 5

GetSensorReading.datafield.ResponseDataByte2.Bit6  Bit 6
    Unsigned 8-bit integer
    Bit 6

GetSensorReading.datafield.ResponseDataByte2.Bit7  Bit 7
    Unsigned 8-bit integer
    Bit 7

GetSensorReading.datafield.ResponseDataByte3.Bit0  Bit 0
    Unsigned 8-bit integer
    Bit 0

GetSensorReading.datafield.ResponseDataByte3.Bit0_threshold  Bit 0
    Unsigned 8-bit integer
    Bit 0

GetSensorReading.datafield.ResponseDataByte3.Bit1  Bit 1
    Unsigned 8-bit integer
    Bit 1

GetSensorReading.datafield.ResponseDataByte3.Bit1_threshold  Bit 1
    Unsigned 8-bit integer
    Bit 1

GetSensorReading.datafield.ResponseDataByte3.Bit2  Bit 2
    Unsigned 8-bit integer
    Bit 2

GetSensorReading.datafield.ResponseDataByte3.Bit2_threshold  Bit 2
    Unsigned 8-bit integer
    Bit 2

GetSensorReading.datafield.ResponseDataByte3.Bit3  Bit 3
    Unsigned 8-bit integer
    Bit 3

GetSensorReading.datafield.ResponseDataByte3.Bit3_threshold  Bit 3
    Unsigned 8-bit integer
    Bit 3

GetSensorReading.datafield.ResponseDataByte3.Bit4  Bit 4
    Unsigned 8-bit integer
    Bit 4

GetSensorReading.datafield.ResponseDataByte3.Bit4_threshold  Bit 4
    Unsigned 8-bit integer
    Bit 4

```

```

GetSensorReading.datafield.ResponseDataByte3.Bit5  Bit 5
    Unsigned 8-bit integer
    Bit 5

GetSensorReading.datafield.ResponseDataByte3.Bit5_threshold  Bit 5
    Unsigned 8-bit integer
    Bit 5

GetSensorReading.datafield.ResponseDataByte3.Bit6  Bit 6
    Unsigned 8-bit integer
    Bit 6

GetSensorReading.datafield.ResponseDataByte3.Bit7  Bit 7
    Unsigned 8-bit integer
    Bit 7

GetSensorReading.datafield.ResponseDataByte3.Bit7_6_threshold  Bit 7...6 Reserved
    Unsigned 8-bit integer
    Bit 7...6 Reserved

GetSensorReading.datafield.ResponseDataByte4.Bit0  Bit 0
    Unsigned 8-bit integer
    Bit 0

GetSensorReading.datafield.ResponseDataByte4.Bit1  Bit 1
    Unsigned 8-bit integer
    Bit 1

GetSensorReading.datafield.ResponseDataByte4.Bit2  Bit 2
    Unsigned 8-bit integer
    Bit 2

GetSensorReading.datafield.ResponseDataByte4.Bit4  Bit 4
    Unsigned 8-bit integer
    Bit 4

GetSensorReading.datafield.ResponseDataByte4.Bit5  Bit 5
    Unsigned 8-bit integer
    Bit 5

GetSensorReading.datafield.ResponseDataByte4.Bit6  Bit 6
    Unsigned 8-bit integer
    Bit 6

GetSensorReading.datafield.ResponseDataByte4.Bit7  Bit 7
    Unsigned 8-bit integer
    Bit 7

GetSensorReading.datafield.SensorNumber  Sensor Number
    Unsigned 8-bit integer
    Sensor Number

GetSensorReading.datafield.Sensorreading  Sensor Reading
    Unsigned 8-bit integer
    Sensor Reading

GetSensorThresholds.datafield.ControlByte.Bit0  lower non-critical threshold
    Unsigned 8-bit integer
    lower non-critical threshold

GetSensorThresholds.datafield.ControlByte.Bit1  lower critical threshold
    Unsigned 8-bit integer
    lower critical threshold

```



```

GetSensorThresholds.datafield.ControlByte.Bit2  lower non-recoverable threshold
    Unsigned 8-bit integer
    lower non-recoverable threshold
GetSensorThresholds.datafield.ControlByte.Bit3  upper non-critical threshold
    Unsigned 8-bit integer
    upper non-critical threshold
GetSensorThresholds.datafield.ControlByte.Bit4  upper critical threshold
    Unsigned 8-bit integer
    upper critical threshold
GetSensorThresholds.datafield.ControlByte.Bit5  upper non-recoverable threshold
    Unsigned 8-bit integer
    upper non-recoverable threshold
GetSensorThresholds.datafield.ControlByte.Bit76  Bit 7...6 Reserved
    Unsigned 8-bit integer
    Bit 7...6 Reserved
GetSensorThresholds.datafield.LowerCriticalThreshold  lower critical threshold
    Unsigned 8-bit integer
    lower critical threshold
GetSensorThresholds.datafield.LowerNonCriticalThreshold  lower non-critical thre
    Unsigned 8-bit integer
    lower non-critical threshold
GetSensorThresholds.datafield.LowerNonRecoverableThreshold  lower non-recoverabl
    Unsigned 8-bit integer
    lower non-recoverable threshold
GetSensorThresholds.datafield.SensorNumber  Sensor Number
    Unsigned 8-bit integer
    Sensor Number
GetSensorThresholds.datafield.UpperCriticalThreshold  upper critical threshold
    Unsigned 8-bit integer
    upper critical threshold
GetSensorThresholds.datafield.UpperNonCriticalThreshold  upper non-critical thre
    Unsigned 8-bit integer
    upper non-critical threshold
GetSensorThresholds.datafield.UpperNonRecoverableThreshold  upper non-recoverabl
    Unsigned 8-bit integer
    upper non-recoverable threshold
PEM.datafield.EvMRev  Event Message Revision
    Unsigned 8-bit integer
    Event Message Revision
PEM.datafield.EventData1_OEM_30  Offset from Event/Reading Type Code
    Unsigned 8-bit integer
    Offset from Event/Reading Type Code
PEM.datafield.EventData1_OEM_54  [5,4]
    Unsigned 8-bit integer
    byte 3 in the event data
PEM.datafield.EventData1_OEM_76  [7,6]
    Unsigned 8-bit integer
    byte 2 in the event data

```

```

PEM.datafield.EventData1_discrete_30  Offset from Event/Reading Code for thresho
    Unsigned 8-bit integer
    Offset from Event/Reading Code for threshold event
PEM.datafield.EventData1_discrete_54  [5,4]
    Unsigned 8-bit integer
    byte 3 in the event data
PEM.datafield.EventData1_discrete_76  [7,6]
    Unsigned 8-bit integer
    byte 2 in the event data
PEM.datafield.EventData1_threshold_30  Offset from Event/Reading Code for thresh
    Unsigned 8-bit integer
    Offset from Event/Reading Code for threshold event
PEM.datafield.EventData1_threshold_54  [5,4]
    Unsigned 8-bit integer
    byte 3 in the event data
PEM.datafield.EventData1_threshold_76  [7,6]
    Unsigned 8-bit integer
    byte 2 in the event data
PEM.datafield.EventData2_OEM_30  Optional OEM code or offset from Event/Reading
    Unsigned 8-bit integer
    Optional OEM code or offset from Event/Reading Type Code for previous event
PEM.datafield.EventData2_OEM_74  Optional OEM code bits or offset from 'Severity
    Unsigned 8-bit integer
    Optional OEM code bits or offset from 'Severity' Event/Reading Type Code(0x0
PEM.datafield.EventData2_discrete_30  Optional offset from Event/Reading Type Co
    Unsigned 8-bit integer
    Optional offset from Event/Reading Type Code for previous discrete event sta
PEM.datafield.EventData2_discrete_74  Optional offset from 'Severity' Event/Read
    Unsigned 8-bit integer
    Optional offset from 'Severity' Event/Reading Code(0x0f if unspecified)
PEM.datafield.EventData2_threshold  reading that triggered event
    Unsigned 8-bit integer
    reading that triggered event
PEM.datafield.EventData3_discrete  Optional OEM code
    Unsigned 8-bit integer
    Optional OEM code
PEM.datafield.EventData3_threshold  threshold value that triggered event
    Unsigned 8-bit integer
    threshold value that triggered event
PEM.datafield.EventDirAndEventType.EventDir  Event Direction
    Unsigned 8-bit integer
    Event Direction
PEM.datafield.EventType  Event Type
    Unsigned 8-bit integer
    Event Type
PEM.datafield.HotSwapEvent_CurrentState  Current State
    Unsigned 8-bit integer
    Current State

```

```
PEM.datafield.HotSwapEvent_EventData2_74 Cause of State Change
    Unsigned 8-bit integer
    Cause of State Change

PEM.datafield.HotSwapEvent_FRUDeviceID FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

PEM.datafield.HotSwapEvent_HotSwapEvent_PreviousState Previous State
    Unsigned 8-bit integer
    Previous State

PEM.datafield.SensorNumber Sensor #
    Unsigned 8-bit integer
    Sensor Number

PEM.datafield.SensorType Sensor Type
    Unsigned 8-bit integer
    Sensor Type

ReserveDeviceSDRRepository.datafield.ReservationID Reservation ID
    Unsigned 16-bit integer
    Reservation ID

SetFRUActivation.datafield.FRUAActivationDeactivation FRU Activation/Deactivation
    Unsigned 8-bit integer
    FRU Activation/Deactivation

SetFRUActivation.datafield.FRUDeviceID FRU Device ID
    Unsigned 8-bit integer
    FRU Device ID

SetFRUActivation.datafield.PICMGIdentifier PICMG Identifier
    Unsigned 8-bit integer
    PICMG Identifier

SetFRUActivationPolicy.datafield.FRUAActivationPolicyMaskBit.Bit0 Bit 0
    Unsigned 8-bit integer
    Bit 0

SetFRUActivationPolicy.datafield.FRUAActivationPolicyMaskBit.Bit1 Bit 1
    Unsigned 8-bit integer
    Bit 1

SetFRUActivationPolicy.datafield.FRUAActivationPolicyMaskBit.Bit72 Bit 7...2 Res
    Unsigned 8-bit integer
    Bit 7...2 Reserverd

SetFRUActivationPolicy.datafield.FRUAActivationPolicySetBit.Bit0 Set or Clear Lo
    Unsigned 8-bit integer
    Set or Clear Locked

SetFRUActivationPolicy.datafield.FRUAActivationPolicySetBit.Bit0_ignored Set or
    Unsigned 8-bit integer
    Set or Clear Locked

SetFRUActivationPolicy.datafield.FRUAActivationPolicySetBit.Bit1 Set or Clear De
    Unsigned 8-bit integer
    Set or Clear Deactivation-Locked

SetFRUActivationPolicy.datafield.FRUAActivationPolicySetBit.Bit1_ignored Set or
    Unsigned 8-bit integer
    Set or Clear Deactivation-Locked
```

```
SetFRUActivationPolicy.datafield.FRUActivationPolicySetBit.Bit72  Bit 7...2 Rese
  Unsigned 8-bit integer
  Bit 7...2 Reserverd

SetFRUActivationPolicy.datafield.FRUDeviceID  FRU Device ID
  Unsigned 8-bit integer
  FRU Device ID

SetFRUActivationPolicy.datafield.PICMGIdentifier  PICMG Identifier
  Unsigned 8-bit integer
  PICMG Identifier

SetFRULedState.datafield.Color.ColorVal  Color
  Unsigned 8-bit integer
  Color

SetFRULedState.datafield.Color.Reserved  Bit 7...4 Reserved
  Unsigned 8-bit integer
  Bit 7...4 Reserved

SetFRULedState.datafield.FRUDeviceID  FRU Device ID
  Unsigned 8-bit integer
  FRU Device ID

SetFRULedState.datafield.LEDFunction  LED Function
  Unsigned 8-bit integer
  LED Function

SetFRULedState.datafield.LEDID  LED ID
  Unsigned 8-bit integer
  LED ID

SetFRULedState.datafield.Offduration  Off-duration
  Unsigned 8-bit integer
  Off-duration

SetFRULedState.datafield.Onduration  On-duration
  Unsigned 8-bit integer
  On-duration

SetFRULedState.datafield.PICMGIdentifier  PICMG Identifier
  Unsigned 8-bit integer
  PICMG Identifier

SetFanLevel.datafield.FRUDeviceID  FRU Device ID
  Unsigned 8-bit integer
  FRU Device ID

SetFanLevel.datafield.FanLevel  Fan Level
  Unsigned 8-bit integer
  Fan Level

SetFanLevel.datafield.PICMGIdentifier  PICMG Identifier
  Unsigned 8-bit integer
  PICMG Identifier

SetPowerLevel.datafield.FRUDeviceID  FRU Device ID
  Unsigned 8-bit integer
  FRU Device ID

SetPowerLevel.datafield.PICMGIdentifier  PICMG Identifier
  Unsigned 8-bit integer
  PICMG Identifier
```

```

SetPowerLevel.datafield.PowerLevel  Power Level
    Unsigned 8-bit integer
    Power Level

SetPowerLevel.datafield.SetPresentLevelsToDesiredLevels  Set Present Levels to D
    Unsigned 8-bit integer
    Set Present Levels to Desired Levels

SetSensorHysteresis.datafield.NegativegoingThresholdHysteresisValue  Negative-go
    Unsigned 8-bit integer
    Negative-going Threshold Hysteresis Value

SetSensorHysteresis.datafield.PositivegoingThresholdHysteresisValue  Positive-go
    Unsigned 8-bit integer
    Positive-going Threshold Hysteresis Value

SetSensorHysteresis.datafield.ReservedForHysteresisMask  Reserved for future ' H
    Unsigned 8-bit integer
    Reserved For Hysteresis Mask

SetSensorHysteresis.datafield.SensorNumber  Sensor Number
    Unsigned 8-bit integer
    Sensor Number

SetSensorThresholds.datafield.ControlByte.Bit0  lower non-critical threshold
    Unsigned 8-bit integer
    lower non-critical threshold

SetSensorThresholds.datafield.ControlByte.Bit1  lower critical threshold
    Unsigned 8-bit integer
    lower critical threshold

SetSensorThresholds.datafield.ControlByte.Bit2  lower non-recoverable threshold
    Unsigned 8-bit integer
    lower non-recoverable threshold

SetSensorThresholds.datafield.ControlByte.Bit3  upper non-critical threshold
    Unsigned 8-bit integer
    upper non-critical threshold

SetSensorThresholds.datafield.ControlByte.Bit4  upper critical threshold
    Unsigned 8-bit integer
    upper critical threshold

SetSensorThresholds.datafield.ControlByte.Bit5  upper non-recoverable threshold
    Unsigned 8-bit integer
    upper non-recoverable threshold

SetSensorThresholds.datafield.ControlByte.Bit76  Bit 7...6 Reserved
    Unsigned 8-bit integer
    Bit 7...6 Reserved

SetSensorThresholds.datafield.LowerCriticalThreshold  lower critical threshold
    Unsigned 8-bit integer
    lower critical threshold

SetSensorThresholds.datafield.LowerNonCriticalThreshold  lower non-critical thre
    Unsigned 8-bit integer
    lower non-critical threshold

SetSensorThresholds.datafield.LowerNonRecoverableThreshold  lower non-recoverabl
    Unsigned 8-bit integer
    lower non-recoverable threshold

```

```
SetSensorThresholds.datafield.SensorNumber  Sensor Number
    Unsigned 8-bit integer
    Sensor Number

SetSensorThresholds.datafield.UpperCriticalThreshold  upper critical threshold
    Unsigned 8-bit integer
    upper critical threshold

SetSensorThresholds.datafield.UpperNonCriticalThreshold  upper non-critical thre
    Unsigned 8-bit integer
    upper non-critical threshold

SetSensorThresholds.datafield.UpperNonRecoverableThreshold  upper non-recoverabl
    Unsigned 8-bit integer
    upper non-recoverable threshold

ipmi.msg.ccode  Completion Code
    Unsigned 8-bit integer
    Completion Code for Request

ipmi.msg.cmd  Command
    Unsigned 8-bit integer
    IPMI Command Byte

ipmi.msg.confhdr  Confidentiality Header
    Unsigned 8-bit integer
    IPMI Confidentiality Header

ipmi.msg.csum1  Checksum 1
    Unsigned 8-bit integer
    2s Complement Checksum

ipmi.msg.csum2  Checksum 2
    Unsigned 8-bit integer
    2s Complement Checksum

ipmi.msg.len  Message Length
    Unsigned 8-bit integer
    IPMI Message Length

ipmi.msg.nlfield  NetFn/LUN
    Unsigned 8-bit integer
    Network Function and LUN field

ipmi.msg.nlfield.netfn  NetFn
    Unsigned 8-bit integer
    Network Function Code

ipmi.msg.nlfield.rqlun  Request LUN
    Unsigned 8-bit integer
    Requester's Logical Unit Number

ipmi.msg.rqaddr  Request Address
    Unsigned 8-bit integer
    Requester's Address (SA or SWID)

ipmi.msg.rsaddr  Response Address
    Unsigned 8-bit integer
    Responder's Slave Address

ipmi.msg.slfield  Seq/LUN
    Unsigned 8-bit integer
    Sequence and LUN field
```

```

ipmi.msg.slfield.rslun  Response LUN
    Unsigned 8-bit integer
    Responder's Logical Unit Number

ipmi.msg.slfield.seq  Sequence
    Unsigned 8-bit integer
    Sequence Number (requester)

ipmi.session.authcode  Authentication Code
    Byte array
    IPMI Message Authentication Code

ipmi.session.authtype  Authentication Type
    Unsigned 8-bit integer
    IPMI Authentication Type

ipmi.session.id  Session ID
    Unsigned 32-bit integer
    IPMI Session ID

ipmi.session.oem.iana  OEM IANA
    Byte array
    IPMI OEM IANA

ipmi.session.oem.payloadid  OEM Payload ID
    Byte array
    IPMI OEM Payload ID

ipmi.session.payloadtype  Payload Type
    Unsigned 8-bit integer
    IPMI Payload Type

ipmi.session.payloadtype.auth  Authenticated
    Boolean
    IPMI Payload Type authenticated

ipmi.session.payloadtype.enc  Encryption
    Boolean
    IPMI Payload Type encryption

ipmi.session.sequence  Session Sequence Number
    Unsigned 32-bit integer
    IPMI Session Sequence Number

```

**Inter-Access-Point Protocol (iapp)**

```

iapp.type  type
    Unsigned 8-bit integer

iapp.version  Version
    Unsigned 8-bit integer

```

**Inter-Asterisk eXchange v2 (iax2)**

```

iax2.abstime  Absolute Time
    Date/Time stamp
    The absolute time of this packet (calculated by adding the IAX timestamp to

iax2.call  Call identifier
    Unsigned 32-bit integer
    This is the identifier Wireshark assigns to identify this call. It does not

```

```
iax2.cap.adpcm  ADPCM
  Boolean
  ADPCM

iax2.cap.alaw  Raw A-law data (G.711)
  Boolean
  Raw A-law data (G.711)

iax2.cap.g723_1  G.723.1 compression
  Boolean
  G.723.1 compression

iax2.cap.g726  G.726 compression
  Boolean
  G.726 compression

iax2.cap.g729a  G.729a Audio
  Boolean
  G.729a Audio

iax2.cap.gsm  GSM compression
  Boolean
  GSM compression

iax2.cap.h261  H.261 video
  Boolean
  H.261 video

iax2.cap.h263  H.263 video
  Boolean
  H.263 video

iax2.cap.ilbc  iLBC Free compressed Audio
  Boolean
  iLBC Free compressed Audio

iax2.cap.jpeg  JPEG images
  Boolean
  JPEG images

iax2.cap.lpc10  LPC10, 180 samples/frame
  Boolean
  LPC10, 180 samples/frame

iax2.cap.png  PNG images
  Boolean
  PNG images

iax2.cap.slinear  Raw 16-bit Signed Linear (8000 Hz) PCM
  Boolean
  Raw 16-bit Signed Linear (8000 Hz) PCM

iax2.cap.speex  SPEEX Audio
  Boolean
  SPEEX Audio

iax2.cap.ulaw  Raw mu-law data (G.711)
  Boolean
  Raw mu-law data (G.711)

iax2.control.subclass  Control subclass
  Unsigned 8-bit integer
  This gives the command number for a Control packet.
```



iax2.dst\_call Destination call  
Unsigned 16-bit integer  
dst\_call holds the number of this call at the packet destination

iax2.dtmf.subclass DTMF subclass (digit)  
String  
DTMF subclass gives the DTMF digit

iax2.fragment IAX2 Fragment data  
Frame number  
IAX2 Fragment data

iax2.fragment.error Defragmentation error  
Frame number  
Defragmentation error due to illegal fragments

iax2.fragment.multipletails Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

iax2.fragment.overlap Fragment overlap  
Boolean  
Fragment overlaps with other fragments

iax2.fragment.overlap.conflict Conflicting data in fragment overlap  
Boolean  
Overlapping fragments contained conflicting data

iax2.fragment.toolongfragment Fragment too long  
Boolean  
Fragment contained data past end of packet

iax2.fragments IAX2 Fragments  
No value  
IAX2 Fragments

iax2.iax.aesprovisioning AES Provisioning info  
String

iax2.iax.app\_addr.sinaddr Address  
IPv4 address  
Address

iax2.iax.app\_addr.sinfamily Family  
Unsigned 16-bit integer  
Family

iax2.iax.app\_addr.sinport Port  
Unsigned 16-bit integer  
Port

iax2.iax.auth.challenge Challenge data for MD5/RSA  
String

iax2.iax.auth.md5 MD5 challenge result  
String

iax2.iax.auth.methods Authentication method(s)  
Unsigned 16-bit integer

iax2.iax.auth.rsa RSA challenge result  
String

```
iax2.iax.autoanswer  Request auto-answering
    No value
iax2.iax.call_no     Call number of peer
    Unsigned 16-bit integer
iax2.iax.called_context  Context for number
    String
iax2.iax.called_number  Number/extension being called
    String
iax2.iax.calling_ani   Calling number ANI for billing
    String
iax2.iax.calling_name  Name of caller
    String
iax2.iax.calling_number  Calling number
    String
iax2.iax.callingpres   Calling presentation
    Unsigned 8-bit integer
iax2.iax.callingtms   Calling transit network select
    Unsigned 16-bit integer
iax2.iax.callington   Calling type of number
    Unsigned 8-bit integer
iax2.iax.capability   Actual codec capability
    Unsigned 32-bit integer
iax2.iax.cause        Cause
    String
iax2.iax.causecode    Hangup cause
    Unsigned 8-bit integer
iax2.iax.codecprefs   Codec negotiation
    String
iax2.iax.cpe_adsi     CPE ADSI capability
    Unsigned 16-bit integer
iax2.iax.dataformat   Data call format
    Unsigned 32-bit integer
iax2.iax.datetime    Date/Time
    Date/Time stamp
iax2.iax.datetime.raw  Date/Time
    Unsigned 32-bit integer
iax2.iax.devicetype   Device type
    String
iax2.iax.dialplan_status  Dialplan status
    Unsigned 16-bit integer
iax2.iax.dnid        Originally dialed DNID
    String
iax2.iax.enckey      Encryption key
    String
```

```
iax2.iax.encryption  Encryption format
                    Unsigned 16-bit integer
iax2.iax.firmwarever  Firmware version
                    Unsigned 16-bit integer
iax2.iax.format      Desired codec format
                    Unsigned 32-bit integer
iax2.iax.fwblockdata  Firmware block of data
                    String
iax2.iax.fwblockdesc  Firmware block description
                    Unsigned 32-bit integer
iax2.iax.iax_unknown  Unknown IAX command
                    Byte array
iax2.iax.language    Desired language
                    String
iax2.iax.moh         Request musiconhold with QUELCH
                    No value
iax2.iax.msg_count   How many messages waiting
                    Signed 16-bit integer
iax2.iax.password    Password for authentication
                    String
iax2.iax.provisioning  Provisioning info
                    String
iax2.iax.provver     Provisioning version
                    Unsigned 32-bit integer
iax2.iax.rdnis       Referring DNIS
                    String
iax2.iax.refresh     When to refresh registration
                    Signed 16-bit integer
iax2.iax.rrdelay     Max playout delay in ms for received frames
                    Unsigned 16-bit integer
iax2.iax.rrdropped   Dropped frames (presumably by jitterbuffer)
                    Unsigned 32-bit integer
iax2.iax.rrjitter    Received jitter (as in RFC1889)
                    Unsigned 32-bit integer
iax2.iax.rrloss      Received loss (high byte loss pct, low 24 bits loss count, as i
                    Unsigned 32-bit integer
iax2.iax.rrooo       Frame received out of order
                    Unsigned 32-bit integer
iax2.iax.rrpkts     Total frames received
                    Unsigned 32-bit integer
iax2.iax.samplingrate  Supported sampling rates
                    Unsigned 16-bit integer
iax2.iax.serviceident  Service identifier
                    String
```

`iax2.iax.subclass` IAX subclass  
Unsigned 8-bit integer  
IAX subclass gives the command number for IAX signalling packets

`iax2.iax.transferid` Transfer Request Identifier  
Unsigned 32-bit integer

`iax2.iax.unknownbyte` Unknown  
Unsigned 8-bit integer  
Raw data for unknown IEs

`iax2.iax.unknownlong` Unknown  
Unsigned 32-bit integer  
Raw data for unknown IEs

`iax2.iax.unknownshort` Unknown  
Unsigned 16-bit integer  
Raw data for unknown IEs

`iax2.iax.unknownstring` Unknown  
String  
Raw data for unknown IEs

`iax2.iax.username` Username (peer or user) for authentication  
String

`iax2.iax.version` Protocol version  
Unsigned 16-bit integer

`iax2.iseqno` Inbound seq.no.  
Unsigned 16-bit integer  
iseqno is the sequence no of the last successfully received packet

`iax2.lateness` Lateness  
Time duration  
The lateness of this packet compared to its timestamp

`iax2.modem.subclass` Modem subclass  
Unsigned 8-bit integer  
Modem subclass gives the type of modem

`iax2.oseqno` Outbound seq.no.  
Unsigned 16-bit integer  
oseqno is the sequence no of this packet. The first packet has oseqno==0, and

`iax2.packet_type` Packet type  
Unsigned 8-bit integer  
Full/minivoice/minivideo/meta packet

`iax2.reassembled_in` IAX2 fragment, reassembled in frame  
Frame number  
This IAX2 packet is reassembled in this frame

`iax2.retransmission` Retransmission  
Boolean  
retransmission is set if this packet is a retransmission of an earlier failed

`iax2.src_call` Source call  
Unsigned 16-bit integer  
src\_call holds the number of this call at the packet source pbx

```
iax2.subclass Unknown subclass
    Unsigned 8-bit integer
    Subclass of unknown type of full IAX2 frame

iax2.timestamp Timestamp
    Unsigned 32-bit integer
    timestamp is the time, in ms after the start of this call, at which this pac

iax2.type Type
    Unsigned 8-bit integer
    For full IAX2 frames, type is the type of frame

iax2.video.codec CODEC
    Unsigned 32-bit integer
    The codec used to encode video data

iax2.video.marker Marker
    Unsigned 16-bit integer
    RTP end-of-frame marker

iax2.video.subclass Video Subclass (compressed codec no)
    Unsigned 8-bit integer
    Video Subclass (compressed codec no)

iax2.voice.codec CODEC
    Unsigned 32-bit integer
    CODEC gives the codec used to encode audio data

iax2.voice.subclass Voice Subclass (compressed codec no)
    Unsigned 8-bit integer
    Voice Subclass (compressed codec no)
```

### **InterSwitch Message Protocol (ismp)**

```
ismp.authdata Auth Data
    Byte array

ismp.codelen Auth Code Length
    Unsigned 8-bit integer

ismp.edp.chassisip Chassis IP Address
    IPv4 address

ismp.edp.chassismac Chassis MAC Address
    6-byte Hardware (MAC) Address

ismp.edp.devtype Device Type
    Unsigned 16-bit integer

ismp.edp.maccount Number of Known Neighbors
    Unsigned 16-bit integer

ismp.edp.modip Module IP Address
    IPv4 address

ismp.edp.modmac Module MAC Address
    6-byte Hardware (MAC) Address

ismp.edp.modport Module Port (ifIndex num)
    Unsigned 32-bit integer

ismp.edp.nbrs Neighbors
    Byte array
```

ismep.edp.numtups Number of Tuples  
Unsigned 16-bit integer

ismep.edp.opts Device Options  
Unsigned 32-bit integer

ismep.edp.rev Module Firmware Revision  
Unsigned 32-bit integer

ismep.edp.tups Number of Tuples  
Byte array

ismep.edp.version Version  
Unsigned 16-bit integer

ismep.msgtype Message Type  
Unsigned 16-bit integer

ismep.seqnum Sequence Number  
Unsigned 16-bit integer

ismep.version Version  
Unsigned 16-bit integer

### **International Passenger Airline Reservation System (ipars)**

#### **Internet Cache Protocol (icp)**

icp.length Length  
Unsigned 16-bit integer

icp.nr Request Number  
Unsigned 32-bit integer

icp.opcode Opcode  
Unsigned 8-bit integer

icp.version Version  
Unsigned 8-bit integer

#### **Internet Communications Engine Protocol (icep)**

icep.compression\_status Compression Status  
Signed 8-bit integer  
The compression status of the message

icep.context Invocation Context  
String  
The invocation context

icep.encoding\_major Encoding Major  
Signed 8-bit integer  
The encoding major version number

icep.encoding\_minor Encoding Minor  
Signed 8-bit integer  
The encoding minor version number

icep.facet Facet Name  
String  
The facet name

```
icep.id.content  Object Identity Content
  String
  The object identity content
icep.id.name    Object Identity Name
  String
  The object identity name
icep.message_status  Message Size
  Signed 32-bit integer
  The size of the message in bytes, including the header
icep.message_type  Message Type
  Signed 8-bit integer
  The message type
icep.operation    Operation Name
  String
  The operation name
icep.operation_mode  Ice::OperationMode
  Signed 8-bit integer
  A byte representing Ice::OperationMode
icep.params.major  Input Parameters Encoding Major
  Signed 8-bit integer
  The major encoding version of encapsulated parameters
icep.params.minor  Input Parameters Encoding Minor
  Signed 8-bit integer
  The minor encoding version of encapsulated parameters
icep.params.size   Input Parameters Size
  Signed 32-bit integer
  The encapsulated input parameters size
icep.protocol_major  Protocol Major
  Signed 8-bit integer
  The protocol major version number
icep.protocol_minor  Protocol Minor
  Signed 8-bit integer
  The protocol minor version number
icep.request_id     Request Identifier
  Signed 32-bit integer
  The request identifier
```

#### **Internet Content Adaptation Protocol (icap)**

```
icap.options     Options
  Boolean
  TRUE if ICAP options
icap.other       Other
  Boolean
  TRUE if ICAP other
icap.reqmod      Reqmod
  Boolean
  TRUE if ICAP reqmod
```

```
icap.respmod  Respmod
  Boolean
  TRUE if ICAP respmod
icap.response Response
  Boolean
  TRUE if ICAP response
```

**Internet Control Message Protocol (icmp)**

```
icmp.checksum  Checksum
  Unsigned 16-bit integer
icmp.checksum_bad  Bad Checksum
  Boolean
icmp.code  Code
  Unsigned 8-bit integer
icmp.ident  Identifier
  Unsigned 16-bit integer
icmp.mip.b  Busy
  Boolean
  This FA will not accept requests at this time
icmp.mip.challenge  Challenge
  Byte array
icmp.mip.coa  Care-Of-Address
  IPv4 address
icmp.mip.f  Foreign Agent
  Boolean
  Foreign Agent Services Offered
icmp.mip.flags  Flags
  Unsigned 16-bit integer
icmp.mip.g  GRE
  Boolean
  GRE encapsulated tunneled datagram support
icmp.mip.h  Home Agent
  Boolean
  Home Agent Services Offered
icmp.mip.length  Length
  Unsigned 8-bit integer
icmp.mip.life  Registration Lifetime
  Unsigned 16-bit integer
icmp.mip.m  Minimal Encapsulation
  Boolean
  Minimal encapsulation tunneled datagram support
icmp.mip.prefixlength  Prefix Length
  Unsigned 8-bit integer
icmp.mip.r  Registration Required
  Boolean
  Registration with this FA is required
```



```
icmp.mip.reserved  Reserved
                   Unsigned 16-bit integer

icmp.mip.rt       Reverse tunneling
                   Boolean
                   Reverse tunneling support

icmp.mip.seq      Sequence Number
                   Unsigned 16-bit integer

icmp.mip.type     Extension Type
                   Unsigned 8-bit integer

icmp.mip.u        UDP tunneling
                   Boolean
                   UDP tunneling support

icmp.mip.v        VJ Comp
                   Boolean
                   Van Jacobson Header Compression Support

icmp.mip.x        Revocation support
                   Boolean
                   Registration revocation support

icmp.mpls         ICMP Extensions for MPLS
                   No value

icmp.mpls.checksum  Checksum
                   Unsigned 16-bit integer

icmp.mpls.checksum_bad  Bad Checksum
                   Boolean

icmp.mpls.class   Class
                   Unsigned 8-bit integer

icmp.mpls.ctype   C-Type
                   Unsigned 8-bit integer

icmp.mpls.exp     Experimental
                   Unsigned 24-bit integer

icmp.mpls.label   Label
                   Unsigned 24-bit integer

icmp.mpls.length  Length
                   Unsigned 16-bit integer

icmp.mpls.res     Reserved
                   Unsigned 16-bit integer

icmp.mpls.s       Stack bit
                   Boolean

icmp.mpls.ttl     Time to live
                   Unsigned 8-bit integer

icmp.mpls.version Version
                   Unsigned 8-bit integer

icmp.mtu          MTU of next hop
                   Unsigned 16-bit integer

icmp.redir_gw     Gateway address
                   IPv4 address
```

icmp.seq Sequence number  
Unsigned 16-bit integer

icmp.type Type  
Unsigned 8-bit integer

### **Internet Control Message Protocol v6 (icmpv6)**

icmpv6.all\_comp All Components  
Unsigned 16-bit integer  
All Components

icmpv6.checksum Checksum  
Unsigned 16-bit integer

icmpv6.checksum\_bad Bad Checksum  
Boolean

icmpv6.code Code  
Unsigned 8-bit integer

icmpv6.comp Component  
Unsigned 16-bit integer  
Component

icmpv6.haad.ha\_addr Home Agent Addresses  
IPv6 address

icmpv6.identifier Identifier  
Unsigned 16-bit integer  
Identifier

icmpv6.option ICMPv6 Option  
No value  
Option

icmpv6.option.cga CGA  
Byte array  
CGA

icmpv6.option.cga.pad\_length Pad Length  
Unsigned 8-bit integer  
Pad Length (in bytes)

icmpv6.option.length Length  
Unsigned 8-bit integer  
Options length (in bytes)

icmpv6.option.name\_type Name Type  
Unsigned 8-bit integer  
Name Type

icmpv6.option.name\_type.fqdn FQDN  
String  
FQDN

icmpv6.option.name\_x501 DER Encoded X.501 Name  
Byte array  
DER Encoded X.501 Name

icmpv6.option.rsa.key\_hash Key Hash  
Byte array  
Key Hash

```
icmpv6.option.type  Type
    Unsigned 8-bit integer
    Options type

icmpv6.ra.cur_hop_limit  Cur hop limit
    Unsigned 8-bit integer
    Current hop limit

icmpv6.ra.reachable_time  Reachable time
    Unsigned 32-bit integer
    Reachable time (ms)

icmpv6.ra.retrans_timer  Retrans timer
    Unsigned 32-bit integer
    Retrans timer (ms)

icmpv6.ra.router_lifetime  Router lifetime
    Unsigned 16-bit integer
    Router lifetime (s)

icmpv6.recursive_dns_serv  Recursive DNS Servers
    IPv6 address
    Recursive DNS Servers

icmpv6.type  Type
    Unsigned 8-bit integer

icmpv6.x509_Name  Name
    Unsigned 32-bit integer
    Name

icmpv6_x509_Certificate  Certificate
    No value
    Certificate
```

### **Internet Group Management Protocol (igmp)**

```
igmp.access_key  Access Key
    Byte array
    IGMP V0 Access Key

igmp.aux_data  Aux Data
    Byte array
    IGMP V3 Auxiliary Data

igmp.aux_data_len  Aux Data Len
    Unsigned 8-bit integer
    Aux Data Len, In units of 32bit words

igmp.checksum  Checksum
    Unsigned 16-bit integer
    IGMP Checksum

igmp.checksum_bad  Bad Checksum
    Boolean
    Bad IGMP Checksum

igmp.group_type  Type Of Group
    Unsigned 8-bit integer
    IGMP V0 Type Of Group
```

```
igmp.identifier Identifier
    Unsigned 32-bit integer
    IGMP V0 Identifier

igmp.maddr Multicast Address
    IPv4 address
    Multicast Address

igmp.max_resp Max Resp Time
    Unsigned 8-bit integer
    Max Response Time

igmp.max_resp.exp Exponent
    Unsigned 8-bit integer
    Maximum Response Time, Exponent

igmp.max_resp.mant Mantissa
    Unsigned 8-bit integer
    Maximum Response Time, Mantissa

igmp.mtrace.max_hops # hops
    Unsigned 8-bit integer
    Maximum Number of Hops to Trace

igmp.mtrace.q_arrival Query Arrival
    Unsigned 32-bit integer
    Query Arrival Time

igmp.mtrace.q_fwd_code Forwarding Code
    Unsigned 8-bit integer
    Forwarding information/error code

igmp.mtrace.q_fwd_ttl FwdTTL
    Unsigned 8-bit integer
    TTL required for forwarding

igmp.mtrace.q_id Query ID
    Unsigned 24-bit integer
    Identifier for this Traceroute Request

igmp.mtrace.q_inaddr In itf addr
    IPv4 address
    Incoming Interface Address

igmp.mtrace.q_inpkt In pkts
    Unsigned 32-bit integer
    Input packet count on incoming interface

igmp.mtrace.q_mbz MBZ
    Unsigned 8-bit integer
    Must be zeroed on transmission and ignored on reception

igmp.mtrace.q_outaddr Out itf addr
    IPv4 address
    Outgoing Interface Address

igmp.mtrace.q_outpkt Out pkts
    Unsigned 32-bit integer
    Output packet count on outgoing interface

igmp.mtrace.q_prevrtr Previous rtr addr
    IPv4 address
    Previous-Hop Router Address
```

```
igmp.mtrace.q_rtg_proto  Rtg Protocol
    Unsigned 8-bit integer
    Routing protocol between this and previous hop rtr

igmp.mtrace.q_s  S
    Unsigned 8-bit integer
    Set if S,G packet count is for source network

igmp.mtrace.q_src_mask  Src Mask
    Unsigned 8-bit integer
    Source mask length. 63 when forwarding on group state

igmp.mtrace.q_total  S,G pkt count
    Unsigned 32-bit integer
    Total number of packets for this source-group pair

igmp.mtrace.raddr  Receiver Address
    IPv4 address
    Multicast Receiver for the Path Being Traced

igmp.mtrace.resp_ttl  Response TTL
    Unsigned 8-bit integer
    TTL for Multicast Responses

igmp.mtrace.rspaddr  Response Address
    IPv4 address
    Destination of Completed Traceroute Response

igmp.mtrace.saddr  Source Address
    IPv4 address
    Multicast Source for the Path Being Traced

igmp.num_grp_recs  Num Group Records
    Unsigned 16-bit integer
    Number Of Group Records

igmp.num_src  Num Src
    Unsigned 16-bit integer
    Number Of Sources

igmp.qqic  QQIC
    Unsigned 8-bit integer
    Querier's Query Interval Code

igmp.qrv  QRV
    Unsigned 8-bit integer
    Querier's Robustness Value

igmp.record_type  Record Type
    Unsigned 8-bit integer
    Record Type

igmp.reply  Reply
    Unsigned 8-bit integer
    IGMP V0 Reply

igmp.reply.pending  Reply Pending
    Unsigned 8-bit integer
    IGMP V0 Reply Pending, Retry in this many seconds

igmp.s  S
    Boolean
    Suppress Router Side Processing
```

```
igmp.saddr  Source Address
            IPv4 address
            Source Address

igmp.type   Type
            Unsigned 8-bit integer
            IGMP Packet Type

igmp.version IGMP Version
            Unsigned 8-bit integer
            IGMP Version
```

### **Internet Group membership Authentication Protocol (igap)**

```
igap.account  User Account
              String
              User account

igap.asize    Account Size
              Unsigned 8-bit integer
              Length of the User Account field

igap.challengeid Challenge ID
              Unsigned 8-bit integer
              Challenge ID

igap.checksum Checksum
              Unsigned 16-bit integer
              Checksum

igap.checksum_bad Bad Checksum
                  Boolean
                  Bad Checksum

igap.maddr    Multicast group address
              IPv4 address
              Multicast group address

igap.max_resp Max Resp Time
              Unsigned 8-bit integer
              Max Response Time

igap.msize    Message Size
              Unsigned 8-bit integer
              Length of the Message field

igap.subtype  Subtype
              Unsigned 8-bit integer
              Subtype

igap.type     Type
              Unsigned 8-bit integer
              IGAP Packet Type

igap.version  Version
              Unsigned 8-bit integer
              IGAP protocol version
```

**Internet Message Access Protocol (imap)**

```
imap.request Request
  Boolean
  TRUE if IMAP request

imap.response Response
  Boolean
  TRUE if IMAP response
```

**Internet Message Format (imf)**

```
imf.address Address
  String

imf.address_list Address List
  Unsigned 32-bit integer

imf.address_list.item Item
  String

imf.autoforwarded Autoforwarded
  String

imf.autosubmitted Autosubmitted
  String

imf.bcc Bcc
  String

imf.cc Cc
  String

imf.comments Comments
  String

imf.content.description Content-Description
  String

imf.content.id Content-ID
  String

imf.content.transfer_encoding Content-Transfer-Encoding
  String

imf.content.type Content-Type
  String

imf.content.type.parameters Parameters
  String

imf.content.type.type Type
  String

imf.content_language Content-Language
  String

imf.conversion Conversion
  String

imf.conversion_with_loss Conversion-With-Loss
  String

imf.date Date
  String
  imf.DateTime
```

```
imf.deferred_delivery Deferred-Delivery
    String
imf.delivery_date Delivery-Date
    String
imf.discarded_x400_ipms_extensions Discarded-X400-IPMS-Extensions
    String
imf.discarded_x400_mts_extensions Discarded-X400-MTS-Extensions
    String
imf.display_name Display-Name
    String
imf.dl_expansion_history DL-Expansion-History
    String
imf.expires Expires
    String
imf.ext.expiry-date Expiry-Date
    String
imf.ext.mailer X-Mailer
    String
imf.ext.mimeole X-MimeOLE
    String
imf.ext.tnef-correlator X-MS-TNEF-Correlator
    String
imf.extension Unknown-Extension
    String
imf.extension.type Type
    String
imf.extension.value Value
    String
imf.from From
    String
    imf.MailboxList
imf.importance Importance
    String
imf.in_reply_to In-Reply-To
    String
imf.incomplete_copy Incomplete-Copy
    String
imf.keywords Keywords
    String
imf.latest_delivery_time Latest-Delivery-Time
    String
imf.mailbox_list Mailbox List
    Unsigned 32-bit integer
imf.mailbox_list.item Item
    String
```



```
imf.message_id  Message-ID
  String
imf.message_type  Message-Type
  String
imf.mime_version  MIME-Version
  String
imf.original_encoded_information_types  Original-Encoded-Information-Types
  String
imf.originator_return_address  Originator-Return-Address
  String
imf.priority  Priority
  String
imf.received  Received
  String
imf.references  References
  String
imf.reply_by  Reply-By
  String
imf.reply_to  Reply-To
  String
imf.resent.bcc  Resent-Bcc
  String
imf.resent.cc  Resent-Cc
  String
imf.resent.date  Resent-Date
  String
imf.resent.from  Resent-From
  String
imf.resent.message_id  Resent-Message-ID
  String
imf.resent.sender  Resent-Sender
  String
imf.resent.to  Resent-To
  String
imf.return_path  Return-Path
  String
imf.sender  Sender
  String
imf.sensitivity  Sensitivity
  String
imf.subject  Subject
  String
imf.supersedes  Supersedes
  String
```

```
imf.thread-index  Thread-Index
  String
imf.to  To
  String
imf.x400_content_identifier  X400-Content-Identifier
  String
imf.x400_content_type  X400-Content-Type
  String
imf.x400_mts_identifier  X400-MTS-Identifier
  String
imf.x400_originator  X400-Originator
  String
imf.x400_received  X400-Received
  String
imf.x400_recipients  X400-Recipients
  String
```

**Internet Printing Protocol (ipp)**

```
ipp.timestamp  Time
  Date/Time stamp
```

**Internet Protocol (ip)**

```
ip.addr  Source or Destination Address
  IPv4 address
ip.checksum  Header checksum
  Unsigned 16-bit integer
ip.checksum_bad  Bad
  Boolean
  True: checksum doesn't match packet content; False: matches content or not c
ip.checksum_good  Good
  Boolean
  True: checksum matches packet content; False: doesn't match content or not c
ip.dsfield  Differentiated Services field
  Unsigned 8-bit integer
ip.dsfield.ce  ECN-CE
  Unsigned 8-bit integer
ip.dsfield.dscp  Differentiated Services Codepoint
  Unsigned 8-bit integer
ip.dsfield.ect  ECN-Capable Transport (ECT)
  Unsigned 8-bit integer
ip.dst  Destination
  IPv4 address
ip.dst_host  Destination Host
  String
ip.flags  Flags
  Unsigned 8-bit integer
```

```
ip.flags.df  Don't fragment
             Boolean

ip.flags.mf  More fragments
             Boolean

ip.flags.rb  Reserved bit
             Boolean

ip.frag_offset  Fragment offset
               Unsigned 16-bit integer
               Fragment offset (13 bits)

ip.fragment  IP Fragment
             Frame number
             IP Fragment

ip.fragment.error  Defragmentation error
                  Frame number
                  Defragmentation error due to illegal fragments

ip.fragment.multipletails  Multiple tail fragments found
                           Boolean
                           Several tails were found when defragmenting the packet

ip.fragment.overlap  Fragment overlap
                    Boolean
                    Fragment overlaps with other fragments

ip.fragment.overlap.conflict  Conflicting data in fragment overlap
                              Boolean
                              Overlapping fragments contained conflicting data

ip.fragment.toolongfragment  Fragment too long
                              Boolean
                              Fragment contained data past end of packet

ip.fragments  IP Fragments
              No value
              IP Fragments

ip.hdr_len  Header Length
           Unsigned 8-bit integer

ip.host  Source or Destination Host
        String

ip.id  Identification
      Unsigned 16-bit integer

ip.len  Total Length
       Unsigned 16-bit integer

ip.proto  Protocol
         Unsigned 8-bit integer

ip.reassembled_in  Reassembled IP in frame
                  Frame number
                  This IP packet is reassembled in this frame

ip.src  Source
       IPv4 address
```

```
ip.src_host  Source Host
             String
ip.tos       Type of Service
             Unsigned 8-bit integer
ip.tos.cost  Cost
             Boolean
ip.tos.delay Delay
             Boolean
ip.tos.precedence Precedence
             Unsigned 8-bit integer
ip.tos.reliability Reliability
             Boolean
ip.tos.throughput Throughput
             Boolean
ip.ttl       Time to live
             Unsigned 8-bit integer
ip.version   Version
             Unsigned 8-bit integer
```

**Internet Protocol Version 6 (ipv6)**

```
ipv6.addr    Address
             IPv6 address
             Source or Destination IPv6 Address
ipv6.class   Traffic class
             Unsigned 32-bit integer
ipv6.dst     Destination
             IPv6 address
             Destination IPv6 Address
ipv6.dst_host Destination Host
             String
             Destination IPv6 Host
ipv6.dst_opt Destination Option
             No value
             Destination Option
ipv6.flow    Flowlabel
             Unsigned 32-bit integer
ipv6.fragment IPv6 Fragment
             Frame number
             IPv6 Fragment
ipv6.fragment.error Defragmentation error
             Frame number
             Defragmentation error due to illegal fragments
ipv6.fragment.more More Fragment
             Boolean
             More Fragments
```

ipv6.fragment.multipletails Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

ipv6.fragment.offset Offset  
Unsigned 16-bit integer  
Fragment Offset

ipv6.fragment.overlap Fragment overlap  
Boolean  
Fragment overlaps with other fragments

ipv6.fragment.overlap.conflict Conflicting data in fragment overlap  
Boolean  
Overlapping fragments contained conflicting data

ipv6.fragment.toolongfragment Fragment too long  
Boolean  
Fragment contained data past end of packet

ipv6.fragments IPv6 Fragments  
No value  
IPv6 Fragments

ipv6.framgent.id Identification  
Unsigned 32-bit integer  
Fragment Identification

ipv6.hlim Hop limit  
Unsigned 8-bit integer

ipv6.hop\_opt Hop-by-Hop Option  
No value  
Hop-by-Hop Option

ipv6.host Host  
String  
IPv6 Host

ipv6.mipv6\_home\_address Home Address  
IPv6 address

ipv6.mipv6\_length Option Length  
Unsigned 8-bit integer

ipv6.mipv6\_type Option Type  
Unsigned 8-bit integer

ipv6.nxt Next header  
Unsigned 8-bit integer

ipv6.opt.pad1 Pad1  
No value  
Pad1 Option

ipv6.opt.padn PadN  
Unsigned 8-bit integer  
PadN Option

ipv6.plen Payload length  
Unsigned 16-bit integer

```
ipv6.reassembled_in  Reassembled IPv6 in frame
    Frame number
    This IPv6 packet is reassembled in this frame
ipv6.routing_hdr    Routing Header, Type
    Unsigned 8-bit integer
    Routing Header Option
ipv6.routing_hdr.addr  Address
    IPv6 address
    Routing Header Address
ipv6.routing_hdr.left  Left Segments
    Unsigned 8-bit integer
    Routing Header Left Segments
ipv6.routing_hdr.type  Type
    Unsigned 8-bit integer
    Routing Header Type
ipv6.shim6          SHIM6
    No value
ipv6.shim6.checksum  Checksum
    Unsigned 16-bit integer
    Shim6 Checksum
ipv6.shim6.checksum_bad  Bad Checksum
    Boolean
    Shim6 Bad Checksum
ipv6.shim6.checksum_good  Good Checksum
    Boolean
ipv6.shim6.ct        Context Tag
    No value
ipv6.shim6.inonce    Initiator Nonce
    Unsigned 32-bit integer
ipv6.shim6.len        Header Ext Length
    Unsigned 8-bit integer
ipv6.shim6.loc.flags  Flags
    Unsigned 8-bit integer
    Locator Preferences Flags
ipv6.shim6.loc.prio   Priority
    Unsigned 8-bit integer
    Locator Preferences Priority
ipv6.shim6.loc.weight  Weight
    Unsigned 8-bit integer
    Locator Preferences Weight
ipv6.shim6.locator    Locator
    IPv6 address
    Shim6 Locator
ipv6.shim6.nxt        Next Header
    Unsigned 8-bit integer
```

```
ipv6.shim6.opt.critical  Option Critical Bit
    Boolean
    TRUE : option is critical, FALSE: option is not critical
ipv6.shim6.opt.elemlen  Element Length
    Unsigned 8-bit integer
    Length of Elements in Locator Preferences Option
ipv6.shim6.opt.fii     Forked Instance Identifier
    Unsigned 32-bit integer
ipv6.shim6.opt.len     Content Length
    Unsigned 16-bit integer
    Content Length Option
ipv6.shim6.opt.loclist  Locator List Generation
    Unsigned 32-bit integer
ipv6.shim6.opt.locnum  Num Locators
    Unsigned 8-bit integer
    Number of Locators in Locator List
ipv6.shim6.opt.total_len  Total Length
    Unsigned 16-bit integer
    Total Option Length
ipv6.shim6.opt.type    Option Type
    Unsigned 16-bit integer
    Shim6 Option Type
ipv6.shim6.opt.verif_method  Verification Method
    Unsigned 8-bit integer
    Locator Verification Method
ipv6.shim6.p          P Bit
    Boolean
ipv6.shim6.pdata     Data
    Unsigned 32-bit integer
    Shim6 Probe Data
ipv6.shim6.pdst     Destination Address
    IPv6 address
    Shim6 Probe Destination Address
ipv6.shim6.pnonce   Nonce
    Unsigned 32-bit integer
    Shim6 Probe Nonce
ipv6.shim6.precvd   Probes Received
    Unsigned 8-bit integer
ipv6.shim6.proto    Protocol
    Unsigned 8-bit integer
ipv6.shim6.psent    Probes Sent
    Unsigned 8-bit integer
ipv6.shim6.psrc     Source Address
    IPv6 address
    Shim6 Probe Source Address
ipv6.shim6.reap     REAP State
    Unsigned 8-bit integer
```

```
ipv6.shim6.rnonce  Responder Nonce
                   Unsigned 32-bit integer

ipv6.shim6.rulid  Receiver ULID
                   IPv6 address
                   Shim6 Receiver ULID

ipv6.shim6.sulid  Sender ULID
                   IPv6 address
                   Shim6 Sender ULID

ipv6.shim6.type   Message Type
                   Unsigned 8-bit integer

ipv6.src          Source
                   IPv6 address
                   Source IPv6 Address

ipv6.src_host     Source Host
                   String
                   Source IPv6 Host

ipv6.version      Version
                   Unsigned 8-bit integer
```

**Internet Relay Chat (irc)**

```
irc.request       Request
                   String
                   Line of request message

irc.response      Response
                   String
                   Line of response message
```

**Internet Security Association and Key Management Protocol (isakmp)**

```
ike.cert_authority Certificate Authority
                   Byte array
                   SHA-1 hash of the Certificate Authority

ike.cert_authority_dn Certificate Authority Distinguished Name
                   Unsigned 32-bit integer
                   Certificate Authority Distinguished Name

ike.nat_keepalive NAT Keepalive
                   No value
                   NAT Keepalive packet

isakmp.cert.encoding Port
                   Unsigned 8-bit integer
                   ISAKMP Certificate Encoding

isakmp.certificate Certificate
                   No value
                   ISAKMP Certificate Encoding

isakmp.certreq.type Port
                   Unsigned 8-bit integer
                   ISAKMP Certificate Request Type
```



```
isakmp.doi      Domain of interpretation
                Unsigned 32-bit integer
                ISAKMP Domain of Interpretation

isakmp.exchangetype  Exchange type
                Unsigned 8-bit integer
                ISAKMP Exchange Type

isakmp.flags     Flags
                Unsigned 8-bit integer
                ISAKMP Flags

isakmp.frag.last  Frag last
                Unsigned 8-bit integer
                ISAKMP last fragment

isakmp.frag.packetid  Frag ID
                Unsigned 16-bit integer
                ISAKMP fragment packet-id

isakmp.icookie   Initiator cookie
                Byte array
                ISAKMP Initiator Cookie

isakmp.id.port   Port
                Unsigned 16-bit integer
                ISAKMP ID Port

isakmp.id.type   ID type
                Unsigned 8-bit integer
                ISAKMP ID Type

isakmp.length    Length
                Unsigned 32-bit integer
                ISAKMP Length

isakmp.messageid  Message ID
                Unsigned 32-bit integer
                ISAKMP Message ID

isakmp.nextpayload  Next payload
                Unsigned 8-bit integer
                ISAKMP Next Payload

isakmp.notify.msgtype  Port
                Unsigned 8-bit integer
                ISAKMP Notify Message Type

isakmp.payloadlength  Payload length
                Unsigned 16-bit integer
                ISAKMP Payload Length

isakmp.prop.number  Proposal number
                Unsigned 8-bit integer
                ISAKMP Proposal Number

isakmp.prop.transforms  Proposal transforms
                Unsigned 8-bit integer
                ISAKMP Proposal Transforms

isakmp.protoid    Protocol ID
                Unsigned 8-bit integer
                ISAKMP Protocol ID
```

```
isakmp.rcookie Responder cookie
    Byte array
    ISAKMP Responder Cookie

isakmp.sa.situation Situation
    Byte array
    ISAKMP SA Situation

isakmp.spinum Port
    Unsigned 16-bit integer
    ISAKMP Number of SPIs

isakmp.spisize SPI Size
    Unsigned 8-bit integer
    ISAKMP SPI Size

isakmp.trans.id Transform ID
    Unsigned 8-bit integer
    ISAKMP Transform ID

isakmp.trans.number Transform number
    Unsigned 8-bit integer
    ISAKMP Transform Number

isakmp.version Version
    Unsigned 8-bit integer
    ISAKMP Version (major + minor)

msg.fragment Message fragment
    Frame number

msg.fragment.error Message defragmentation error
    Frame number

msg.fragment.multiple_tails Message has multiple tail fragments
    Boolean

msg.fragment.overlap Message fragment overlap
    Boolean

msg.fragment.overlap.conflicts Message fragment overlapping with conflicting da
    Boolean

msg.fragment.too_long_fragment Message fragment too long
    Boolean

msg.fragments Message fragments
    No value

msg.reassembled.in Reassembled in
    Frame number
```

### **Internet Datagram Protocol (idp)**

```
idp.checksum Checksum
    Unsigned 16-bit integer

idp.dst Destination Address
    String
    Destination Address

idp.dst.net Destination Network
    Unsigned 32-bit integer
```

```
idp.dst.node  Destination Node
              6-byte Hardware (MAC) Address
idp.dst.socket Destination Socket
              Unsigned 16-bit integer
idp.hops      Transport Control (Hops)
              Unsigned 8-bit integer
idp.len       Length
              Unsigned 16-bit integer
idp.packet_type Packet Type
              Unsigned 8-bit integer
idp.src       Source Address
              String
              Source Address
idp.src.net   Source Network
              Unsigned 32-bit integer
idp.src.node  Source Node
              6-byte Hardware (MAC) Address
idp.src.socket Source Socket
              Unsigned 16-bit integer
```

**Internetwork Packet eXchange (ipx)**

```
ipx.addr      Src/Dst Address
              String
              Source or Destination IPX Address  "network.node"
ipx.checksum  Checksum
              Unsigned 16-bit integer
ipx.dst       Destination Address
              String
              Destination IPX Address  "network.node"
ipx.dst.net   Destination Network
              IPX network or server name
ipx.dst.node  Destination Node
              6-byte Hardware (MAC) Address
ipx.dst.socket Destination Socket
              Unsigned 16-bit integer
ipx.hops      Transport Control (Hops)
              Unsigned 8-bit integer
ipx.len       Length
              Unsigned 16-bit integer
ipx.net       Source or Destination Network
              IPX network or server name
ipx.node      Source or Destination Node
              6-byte Hardware (MAC) Address
ipx.packet_type Packet Type
              Unsigned 8-bit integer
```

```
ipx.socket  Source or Destination Socket
            Unsigned 16-bit integer

ipx.src     Source Address
            String
            Source IPX Address  "network.node"

ipx.src.net Source Network
            IPX network or server name

ipx.src.node Source Node
            6-byte Hardware (MAC) Address

ipx.src.socket Source Socket
            Unsigned 16-bit integer
```

**IrCOMM Protocol (ircomm)**

```
ircomm.control Control Channel
            No value

ircomm.control.len Clen
            Unsigned 8-bit integer

ircomm.parameter IrCOMM Parameter
            No value

ircomm.pi Parameter Identifier
            Unsigned 8-bit integer

ircomm.pl Parameter Length
            Unsigned 8-bit integer

ircomm.pv Parameter Value
            Byte array
```

**IrDA Link Access Protocol (irlap)**

```
irlap.a Address Field
            Unsigned 8-bit integer

irlap.a.address Address
            Unsigned 8-bit integer

irlap.a.cr C/R
            Boolean

irlap.c Control Field
            Unsigned 8-bit integer

irlap.c.f Final
            Boolean

irlap.c.ftype Frame Type
            Unsigned 8-bit integer

irlap.c.n_r N(R)
            Unsigned 8-bit integer

irlap.c.n_s N(S)
            Unsigned 8-bit integer

irlap.c.p Poll
            Boolean
```

```
irlap.c.s_fctype  Supervisory frame type
                  Unsigned 8-bit integer
irlap.c.u_modifier_cmd  Command
                  Unsigned 8-bit integer
irlap.c.u_modifier_resp  Response
                  Unsigned 8-bit integer
irlap.i  Information Field
         No value
irlap.negotiation  Negotiation Parameter
                 No value
irlap.pi  Parameter Identifier
          Unsigned 8-bit integer
irlap.pl  Parameter Length
          Unsigned 8-bit integer
irlap.pv  Parameter Value
          Byte array
irlap.snrm.ca  Connection Address
              Unsigned 8-bit integer
irlap.snrm.daddr  Destination Device Address
                 Unsigned 32-bit integer
irlap.snrm.saddr  Source Device Address
                 Unsigned 32-bit integer
irlap.ua.daddr  Destination Device Address
                 Unsigned 32-bit integer
irlap.ua.saddr  Source Device Address
                 Unsigned 32-bit integer
irlap.xid.conflict  Conflict
                   Boolean
irlap.xid.daddr  Destination Device Address
                 Unsigned 32-bit integer
irlap.xid.fi  Format Identifier
              Unsigned 8-bit integer
irlap.xid.flags  Discovery Flags
                 Unsigned 8-bit integer
irlap.xid.s  Number of Slots
             Unsigned 8-bit integer
irlap.xid.saddr  Source Device Address
                 Unsigned 32-bit integer
irlap.xid.slotnr  Slot Number
                  Unsigned 8-bit integer
irlap.xid.version  Version Number
                   Unsigned 8-bit integer
```

**IrDA Link Management Protocol (irlmp)**

```
irlmp.dst Destination
    Unsigned 8-bit integer
irlmp.dst.c Control Bit
    Boolean
irlmp.dst.lsap Destination LSAP
    Unsigned 8-bit integer
irlmp.mode Mode
    Unsigned 8-bit integer
irlmp.opcode Opcode
    Unsigned 8-bit integer
irlmp.reason Reason
    Unsigned 8-bit integer
irlmp.rsvd Reserved
    Unsigned 8-bit integer
irlmp.src Source
    Unsigned 8-bit integer
irlmp.src.lsap Source LSAP
    Unsigned 8-bit integer
irlmp.src.r reserved
    Unsigned 8-bit integer
irlmp.status Status
    Unsigned 8-bit integer
irlmp.xid.charset Character Set
    Unsigned 8-bit integer
irlmp.xid.hints Service Hints
    Byte array
irlmp.xid.name Device Nickname
    String
```

**IuUP (iuup)**

```
iuup.ack Ack/Nack
    Unsigned 8-bit integer
    Ack/Nack
iuup.advance Advance
    Unsigned 32-bit integer
iuup.chain_ind Chain Indicator
    Unsigned 8-bit integer
iuup.circuit_id Circuit ID
    Unsigned 16-bit integer
iuup.data_pdu_type RFCI Data Pdu Type
    Unsigned 8-bit integer
iuup.delay Delay
    Unsigned 32-bit integer
iuup.delta Delta Time
```

```
iuup.direction  Frame Direction
                 Unsigned 16-bit integer

iuup.error_cause  Error Cause
                 Unsigned 8-bit integer

iuup.error_distance  Error DISTANCE
                 Unsigned 8-bit integer

iuup.fqc  FQC
          Unsigned 8-bit integer
          Frame Quality Classification

iuup.frameenum  Frame Number
               Unsigned 8-bit integer

iuup.header_crc  Header CRC
                Unsigned 8-bit integer

iuup.mode  Mode Version
          Unsigned 8-bit integer

iuup.p  Number of RFCI Indicators
       Unsigned 8-bit integer

iuup.payload_crc  Payload CRC
                 Unsigned 16-bit integer

iuup.payload_data  Payload Data
                  Byte array

iuup.pdu_type  PDU Type
              Unsigned 8-bit integer

iuup.procedure  Procedure
               Unsigned 8-bit integer

iuup.rfci  RFCI
          Unsigned 8-bit integer
          RAB sub-Flow Combination Indicator

iuup.rfci.0  RFCI 0
            Unsigned 8-bit integer

iuup.rfci.0.flow.0  RFCI 0 Flow 0
                  Byte array

iuup.rfci.0.flow.0.len  RFCI 0 Flow 0 Len
                       Unsigned 16-bit integer

iuup.rfci.0.flow.1  RFCI 0 Flow 1
                  Byte array

iuup.rfci.0.flow.1.len  RFCI 0 Flow 1 Len
                       Unsigned 16-bit integer

iuup.rfci.0.flow.2  RFCI 0 Flow 2
                  Byte array

iuup.rfci.0.flow.2.len  RFCI 0 Flow 2 Len
                       Unsigned 16-bit integer

iuup.rfci.0.flow.3  RFCI 0 Flow 3
                  Byte array
```

```
iuup.rfci.0.flow.3.len RFCI 0 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.0.flow.4 RFCI 0 Flow 4
    Byte array
iuup.rfci.0.flow.4.len RFCI 0 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.0.flow.5 RFCI 0 Flow 5
    Byte array
iuup.rfci.0.flow.5.len RFCI 0 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.0.flow.6 RFCI 0 Flow 6
    Byte array
iuup.rfci.0.flow.6.len RFCI 0 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.0.flow.7 RFCI 0 Flow 7
    Byte array
iuup.rfci.0.flow.7.len RFCI 0 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.0.ipti RFCI 0 IPTI
    Unsigned 8-bit integer
iuup.rfci.0.li RFCI 0 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.0.lri RFCI 0 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.1 RFCI 1
    Unsigned 8-bit integer
iuup.rfci.1.flow.0 RFCI 1 Flow 0
    Byte array
iuup.rfci.1.flow.0.len RFCI 1 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.1.flow.1 RFCI 1 Flow 1
    Byte array
iuup.rfci.1.flow.1.len RFCI 1 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.1.flow.2 RFCI 1 Flow 2
    Byte array
iuup.rfci.1.flow.2.len RFCI 1 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.1.flow.3 RFCI 1 Flow 3
    Byte array
iuup.rfci.1.flow.3.len RFCI 1 Flow 3 Len
    Unsigned 16-bit integer
```



```
iuup.rfci.1.flow.4 RFCI 1 Flow 4
    Byte array
iuup.rfci.1.flow.4.len RFCI 1 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.1.flow.5 RFCI 1 Flow 5
    Byte array
iuup.rfci.1.flow.5.len RFCI 1 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.1.flow.6 RFCI 1 Flow 6
    Byte array
iuup.rfci.1.flow.6.len RFCI 1 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.1.flow.7 RFCI 1 Flow 7
    Byte array
iuup.rfci.1.flow.7.len RFCI 1 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.1.ipti RFCI 1 IPTI
    Unsigned 8-bit integer
iuup.rfci.1.li RFCI 1 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.1.lri RFCI 1 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.10 RFCI 10
    Unsigned 8-bit integer
iuup.rfci.10.flow.0 RFCI 10 Flow 0
    Byte array
iuup.rfci.10.flow.0.len RFCI 10 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.10.flow.1 RFCI 10 Flow 1
    Byte array
iuup.rfci.10.flow.1.len RFCI 10 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.10.flow.2 RFCI 10 Flow 2
    Byte array
iuup.rfci.10.flow.2.len RFCI 10 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.10.flow.3 RFCI 10 Flow 3
    Byte array
iuup.rfci.10.flow.3.len RFCI 10 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.10.flow.4 RFCI 10 Flow 4
    Byte array
```

```
iuup.rfci.10.flow.4.len  RFCI 10 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.10.flow.5    RFCI 10 Flow 5
    Byte array
iuup.rfci.10.flow.5.len RFCI 10 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.10.flow.6    RFCI 10 Flow 6
    Byte array
iuup.rfci.10.flow.6.len RFCI 10 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.10.flow.7    RFCI 10 Flow 7
    Byte array
iuup.rfci.10.flow.7.len RFCI 10 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.10.ipti      RFCI 10 IPTI
    Unsigned 8-bit integer
iuup.rfci.10.li        RFCI 10 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.10.lri       RFCI 10 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.11          RFCI 11
    Unsigned 8-bit integer
iuup.rfci.11.flow.0    RFCI 11 Flow 0
    Byte array
iuup.rfci.11.flow.0.len RFCI 11 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.11.flow.1    RFCI 11 Flow 1
    Byte array
iuup.rfci.11.flow.1.len RFCI 11 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.11.flow.2    RFCI 11 Flow 2
    Byte array
iuup.rfci.11.flow.2.len RFCI 11 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.11.flow.3    RFCI 11 Flow 3
    Byte array
iuup.rfci.11.flow.3.len RFCI 11 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.11.flow.4    RFCI 11 Flow 4
    Byte array
iuup.rfci.11.flow.4.len RFCI 11 Flow 4 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.11.flow.5  RFCI 11 Flow 5
    Byte array
iuup.rfci.11.flow.5.len  RFCI 11 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.11.flow.6  RFCI 11 Flow 6
    Byte array
iuup.rfci.11.flow.6.len  RFCI 11 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.11.flow.7  RFCI 11 Flow 7
    Byte array
iuup.rfci.11.flow.7.len  RFCI 11 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.11.ipti  RFCI 11 IPTI
    Unsigned 8-bit integer
iuup.rfci.11.li  RFCI 11 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.11.lri  RFCI 11 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.12  RFCI 12
    Unsigned 8-bit integer
iuup.rfci.12.flow.0  RFCI 12 Flow 0
    Byte array
iuup.rfci.12.flow.0.len  RFCI 12 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.12.flow.1  RFCI 12 Flow 1
    Byte array
iuup.rfci.12.flow.1.len  RFCI 12 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.12.flow.2  RFCI 12 Flow 2
    Byte array
iuup.rfci.12.flow.2.len  RFCI 12 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.12.flow.3  RFCI 12 Flow 3
    Byte array
iuup.rfci.12.flow.3.len  RFCI 12 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.12.flow.4  RFCI 12 Flow 4
    Byte array
iuup.rfci.12.flow.4.len  RFCI 12 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.12.flow.5  RFCI 12 Flow 5
    Byte array
```

```
iuup.rfci.12.flow.5.len  RFCI 12 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.12.flow.6    RFCI 12 Flow 6
    Byte array
iuup.rfci.12.flow.6.len RFCI 12 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.12.flow.7    RFCI 12 Flow 7
    Byte array
iuup.rfci.12.flow.7.len RFCI 12 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.12.ipti     RFCI 12 IPTI
    Unsigned 8-bit integer
iuup.rfci.12.li       RFCI 12 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.12.lri      RFCI 12 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.13         RFCI 13
    Unsigned 8-bit integer
iuup.rfci.13.flow.0  RFCI 13 Flow 0
    Byte array
iuup.rfci.13.flow.0.len RFCI 13 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.13.flow.1  RFCI 13 Flow 1
    Byte array
iuup.rfci.13.flow.1.len RFCI 13 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.13.flow.2  RFCI 13 Flow 2
    Byte array
iuup.rfci.13.flow.2.len RFCI 13 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.13.flow.3  RFCI 13 Flow 3
    Byte array
iuup.rfci.13.flow.3.len RFCI 13 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.13.flow.4  RFCI 13 Flow 4
    Byte array
iuup.rfci.13.flow.4.len RFCI 13 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.13.flow.5  RFCI 13 Flow 5
    Byte array
iuup.rfci.13.flow.5.len RFCI 13 Flow 5 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.13.flow.6  RFCI 13 Flow 6
    Byte array
iuup.rfci.13.flow.6.len  RFCI 13 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.13.flow.7  RFCI 13 Flow 7
    Byte array
iuup.rfci.13.flow.7.len  RFCI 13 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.13.ipti  RFCI 13 IPTI
    Unsigned 8-bit integer
iuup.rfci.13.li  RFCI 13 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.13.lri  RFCI 13 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.14  RFCI 14
    Unsigned 8-bit integer
iuup.rfci.14.flow.0  RFCI 14 Flow 0
    Byte array
iuup.rfci.14.flow.0.len  RFCI 14 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.14.flow.1  RFCI 14 Flow 1
    Byte array
iuup.rfci.14.flow.1.len  RFCI 14 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.14.flow.2  RFCI 14 Flow 2
    Byte array
iuup.rfci.14.flow.2.len  RFCI 14 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.14.flow.3  RFCI 14 Flow 3
    Byte array
iuup.rfci.14.flow.3.len  RFCI 14 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.14.flow.4  RFCI 14 Flow 4
    Byte array
iuup.rfci.14.flow.4.len  RFCI 14 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.14.flow.5  RFCI 14 Flow 5
    Byte array
iuup.rfci.14.flow.5.len  RFCI 14 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.14.flow.6  RFCI 14 Flow 6
    Byte array
```

```
iuup.rfci.14.flow.6.len  RFCI 14 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.14.flow.7    RFCI 14 Flow 7
                        Byte array
iuup.rfci.14.flow.7.len RFCI 14 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.14.ipti     RFCI 14 IPTI
                        Unsigned 8-bit integer
iuup.rfci.14.li      RFCI 14 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.14.lri     RFCI 14 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.15         RFCI 15
                        Unsigned 8-bit integer
iuup.rfci.15.flow.0  RFCI 15 Flow 0
                        Byte array
iuup.rfci.15.flow.0.len RFCI 15 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.15.flow.1  RFCI 15 Flow 1
                        Byte array
iuup.rfci.15.flow.1.len RFCI 15 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.15.flow.2  RFCI 15 Flow 2
                        Byte array
iuup.rfci.15.flow.2.len RFCI 15 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.15.flow.3  RFCI 15 Flow 3
                        Byte array
iuup.rfci.15.flow.3.len RFCI 15 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.15.flow.4  RFCI 15 Flow 4
                        Byte array
iuup.rfci.15.flow.4.len RFCI 15 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.15.flow.5  RFCI 15 Flow 5
                        Byte array
iuup.rfci.15.flow.5.len RFCI 15 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.15.flow.6  RFCI 15 Flow 6
                        Byte array
iuup.rfci.15.flow.6.len RFCI 15 Flow 6 Len
                        Unsigned 16-bit integer
```

```
iuup.rfci.15.flow.7  RFCI 15 Flow 7
    Byte array
iuup.rfci.15.flow.7.len  RFCI 15 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.15.ipti  RFCI 15 IPTI
    Unsigned 8-bit integer
iuup.rfci.15.li  RFCI 15 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.15.lri  RFCI 15 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.16  RFCI 16
    Unsigned 8-bit integer
iuup.rfci.16.flow.0  RFCI 16 Flow 0
    Byte array
iuup.rfci.16.flow.0.len  RFCI 16 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.16.flow.1  RFCI 16 Flow 1
    Byte array
iuup.rfci.16.flow.1.len  RFCI 16 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.16.flow.2  RFCI 16 Flow 2
    Byte array
iuup.rfci.16.flow.2.len  RFCI 16 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.16.flow.3  RFCI 16 Flow 3
    Byte array
iuup.rfci.16.flow.3.len  RFCI 16 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.16.flow.4  RFCI 16 Flow 4
    Byte array
iuup.rfci.16.flow.4.len  RFCI 16 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.16.flow.5  RFCI 16 Flow 5
    Byte array
iuup.rfci.16.flow.5.len  RFCI 16 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.16.flow.6  RFCI 16 Flow 6
    Byte array
iuup.rfci.16.flow.6.len  RFCI 16 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.16.flow.7  RFCI 16 Flow 7
    Byte array
```

```
iuup.rfci.16.flow.7.len RFCI 16 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.16.ipti RFCI 16 IPTI
    Unsigned 8-bit integer
iuup.rfci.16.li RFCI 16 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.16.lri RFCI 16 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.17 RFCI 17
    Unsigned 8-bit integer
iuup.rfci.17.flow.0 RFCI 17 Flow 0
    Byte array
iuup.rfci.17.flow.0.len RFCI 17 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.17.flow.1 RFCI 17 Flow 1
    Byte array
iuup.rfci.17.flow.1.len RFCI 17 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.17.flow.2 RFCI 17 Flow 2
    Byte array
iuup.rfci.17.flow.2.len RFCI 17 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.17.flow.3 RFCI 17 Flow 3
    Byte array
iuup.rfci.17.flow.3.len RFCI 17 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.17.flow.4 RFCI 17 Flow 4
    Byte array
iuup.rfci.17.flow.4.len RFCI 17 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.17.flow.5 RFCI 17 Flow 5
    Byte array
iuup.rfci.17.flow.5.len RFCI 17 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.17.flow.6 RFCI 17 Flow 6
    Byte array
iuup.rfci.17.flow.6.len RFCI 17 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.17.flow.7 RFCI 17 Flow 7
    Byte array
iuup.rfci.17.flow.7.len RFCI 17 Flow 7 Len
    Unsigned 16-bit integer
```



```
iuup.rfci.17.ipti RFCI 17 IPTI
    Unsigned 8-bit integer
iuup.rfci.17.li RFCI 17 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.17.lri RFCI 17 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.18 RFCI 18
    Unsigned 8-bit integer
iuup.rfci.18.flow.0 RFCI 18 Flow 0
    Byte array
iuup.rfci.18.flow.0.len RFCI 18 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.18.flow.1 RFCI 18 Flow 1
    Byte array
iuup.rfci.18.flow.1.len RFCI 18 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.18.flow.2 RFCI 18 Flow 2
    Byte array
iuup.rfci.18.flow.2.len RFCI 18 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.18.flow.3 RFCI 18 Flow 3
    Byte array
iuup.rfci.18.flow.3.len RFCI 18 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.18.flow.4 RFCI 18 Flow 4
    Byte array
iuup.rfci.18.flow.4.len RFCI 18 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.18.flow.5 RFCI 18 Flow 5
    Byte array
iuup.rfci.18.flow.5.len RFCI 18 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.18.flow.6 RFCI 18 Flow 6
    Byte array
iuup.rfci.18.flow.6.len RFCI 18 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.18.flow.7 RFCI 18 Flow 7
    Byte array
iuup.rfci.18.flow.7.len RFCI 18 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.18.ipti RFCI 18 IPTI
    Unsigned 8-bit integer
```

```
iuup.rfci.18.li RFCI 18 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.18.lri RFCI 18 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.19 RFCI 19
    Unsigned 8-bit integer
iuup.rfci.19.flow.0 RFCI 19 Flow 0
    Byte array
iuup.rfci.19.flow.0.len RFCI 19 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.19.flow.1 RFCI 19 Flow 1
    Byte array
iuup.rfci.19.flow.1.len RFCI 19 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.19.flow.2 RFCI 19 Flow 2
    Byte array
iuup.rfci.19.flow.2.len RFCI 19 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.19.flow.3 RFCI 19 Flow 3
    Byte array
iuup.rfci.19.flow.3.len RFCI 19 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.19.flow.4 RFCI 19 Flow 4
    Byte array
iuup.rfci.19.flow.4.len RFCI 19 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.19.flow.5 RFCI 19 Flow 5
    Byte array
iuup.rfci.19.flow.5.len RFCI 19 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.19.flow.6 RFCI 19 Flow 6
    Byte array
iuup.rfci.19.flow.6.len RFCI 19 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.19.flow.7 RFCI 19 Flow 7
    Byte array
iuup.rfci.19.flow.7.len RFCI 19 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.19.ipti RFCI 19 IPTI
    Unsigned 8-bit integer
iuup.rfci.19.li RFCI 19 LI
    Unsigned 8-bit integer
    Length Indicator
```

```
iuup.rfci.19.lri RFCI 19 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.2 RFCI 2
    Unsigned 8-bit integer
iuup.rfci.2.flow.0 RFCI 2 Flow 0
    Byte array
iuup.rfci.2.flow.0.len RFCI 2 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.2.flow.1 RFCI 2 Flow 1
    Byte array
iuup.rfci.2.flow.1.len RFCI 2 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.2.flow.2 RFCI 2 Flow 2
    Byte array
iuup.rfci.2.flow.2.len RFCI 2 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.2.flow.3 RFCI 2 Flow 3
    Byte array
iuup.rfci.2.flow.3.len RFCI 2 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.2.flow.4 RFCI 2 Flow 4
    Byte array
iuup.rfci.2.flow.4.len RFCI 2 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.2.flow.5 RFCI 2 Flow 5
    Byte array
iuup.rfci.2.flow.5.len RFCI 2 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.2.flow.6 RFCI 2 Flow 6
    Byte array
iuup.rfci.2.flow.6.len RFCI 2 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.2.flow.7 RFCI 2 Flow 7
    Byte array
iuup.rfci.2.flow.7.len RFCI 2 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.2.ipti RFCI 2 IPTI
    Unsigned 8-bit integer
iuup.rfci.2.li RFCI 2 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.2.lri RFCI 2 LRI
    Unsigned 8-bit integer
    Last Record Indicator
```

```
iuup.rfci.20 RFCI 20
    Unsigned 8-bit integer
iuup.rfci.20.flow.0 RFCI 20 Flow 0
    Byte array
iuup.rfci.20.flow.0.len RFCI 20 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.20.flow.1 RFCI 20 Flow 1
    Byte array
iuup.rfci.20.flow.1.len RFCI 20 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.20.flow.2 RFCI 20 Flow 2
    Byte array
iuup.rfci.20.flow.2.len RFCI 20 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.20.flow.3 RFCI 20 Flow 3
    Byte array
iuup.rfci.20.flow.3.len RFCI 20 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.20.flow.4 RFCI 20 Flow 4
    Byte array
iuup.rfci.20.flow.4.len RFCI 20 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.20.flow.5 RFCI 20 Flow 5
    Byte array
iuup.rfci.20.flow.5.len RFCI 20 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.20.flow.6 RFCI 20 Flow 6
    Byte array
iuup.rfci.20.flow.6.len RFCI 20 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.20.flow.7 RFCI 20 Flow 7
    Byte array
iuup.rfci.20.flow.7.len RFCI 20 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.20.ipti RFCI 20 IPTI
    Unsigned 8-bit integer
iuup.rfci.20.li RFCI 20 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.20.lri RFCI 20 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.21 RFCI 21
    Unsigned 8-bit integer
```

```
iuup.rfci.21.flow.0 RFCI 21 Flow 0
    Byte array
iuup.rfci.21.flow.0.len RFCI 21 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.21.flow.1 RFCI 21 Flow 1
    Byte array
iuup.rfci.21.flow.1.len RFCI 21 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.21.flow.2 RFCI 21 Flow 2
    Byte array
iuup.rfci.21.flow.2.len RFCI 21 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.21.flow.3 RFCI 21 Flow 3
    Byte array
iuup.rfci.21.flow.3.len RFCI 21 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.21.flow.4 RFCI 21 Flow 4
    Byte array
iuup.rfci.21.flow.4.len RFCI 21 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.21.flow.5 RFCI 21 Flow 5
    Byte array
iuup.rfci.21.flow.5.len RFCI 21 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.21.flow.6 RFCI 21 Flow 6
    Byte array
iuup.rfci.21.flow.6.len RFCI 21 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.21.flow.7 RFCI 21 Flow 7
    Byte array
iuup.rfci.21.flow.7.len RFCI 21 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.21.ipti RFCI 21 IPTI
    Unsigned 8-bit integer
iuup.rfci.21.li RFCI 21 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.21.lri RFCI 21 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.22 RFCI 22
    Unsigned 8-bit integer
iuup.rfci.22.flow.0 RFCI 22 Flow 0
    Byte array
```

```
iuup.rfci.22.flow.0.len  RFCI 22 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.22.flow.1    RFCI 22 Flow 1
                        Byte array
iuup.rfci.22.flow.1.len RFCI 22 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.22.flow.2    RFCI 22 Flow 2
                        Byte array
iuup.rfci.22.flow.2.len RFCI 22 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.22.flow.3    RFCI 22 Flow 3
                        Byte array
iuup.rfci.22.flow.3.len RFCI 22 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.22.flow.4    RFCI 22 Flow 4
                        Byte array
iuup.rfci.22.flow.4.len RFCI 22 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.22.flow.5    RFCI 22 Flow 5
                        Byte array
iuup.rfci.22.flow.5.len RFCI 22 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.22.flow.6    RFCI 22 Flow 6
                        Byte array
iuup.rfci.22.flow.6.len RFCI 22 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.22.flow.7    RFCI 22 Flow 7
                        Byte array
iuup.rfci.22.flow.7.len RFCI 22 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.22.ipti     RFCI 22 IPTI
                        Unsigned 8-bit integer
iuup.rfci.22.li       RFCI 22 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.22.lri      RFCI 22 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.23         RFCI 23
                        Unsigned 8-bit integer
iuup.rfci.23.flow.0   RFCI 23 Flow 0
                        Byte array
iuup.rfci.23.flow.0.len RFCI 23 Flow 0 Len
                        Unsigned 16-bit integer
```

```
iuup.rfci.23.flow.1 RFCI 23 Flow 1
    Byte array
iuup.rfci.23.flow.1.len RFCI 23 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.23.flow.2 RFCI 23 Flow 2
    Byte array
iuup.rfci.23.flow.2.len RFCI 23 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.23.flow.3 RFCI 23 Flow 3
    Byte array
iuup.rfci.23.flow.3.len RFCI 23 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.23.flow.4 RFCI 23 Flow 4
    Byte array
iuup.rfci.23.flow.4.len RFCI 23 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.23.flow.5 RFCI 23 Flow 5
    Byte array
iuup.rfci.23.flow.5.len RFCI 23 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.23.flow.6 RFCI 23 Flow 6
    Byte array
iuup.rfci.23.flow.6.len RFCI 23 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.23.flow.7 RFCI 23 Flow 7
    Byte array
iuup.rfci.23.flow.7.len RFCI 23 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.23.ipti RFCI 23 IPTI
    Unsigned 8-bit integer
iuup.rfci.23.li RFCI 23 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.23.lri RFCI 23 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.24 RFCI 24
    Unsigned 8-bit integer
iuup.rfci.24.flow.0 RFCI 24 Flow 0
    Byte array
iuup.rfci.24.flow.0.len RFCI 24 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.24.flow.1 RFCI 24 Flow 1
    Byte array
```

```
iuup.rfci.24.flow.1.len  RFCI 24 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.24.flow.2    RFCI 24 Flow 2
                        Byte array
iuup.rfci.24.flow.2.len RFCI 24 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.24.flow.3    RFCI 24 Flow 3
                        Byte array
iuup.rfci.24.flow.3.len RFCI 24 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.24.flow.4    RFCI 24 Flow 4
                        Byte array
iuup.rfci.24.flow.4.len RFCI 24 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.24.flow.5    RFCI 24 Flow 5
                        Byte array
iuup.rfci.24.flow.5.len RFCI 24 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.24.flow.6    RFCI 24 Flow 6
                        Byte array
iuup.rfci.24.flow.6.len RFCI 24 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.24.flow.7    RFCI 24 Flow 7
                        Byte array
iuup.rfci.24.flow.7.len RFCI 24 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.24.ipti      RFCI 24 IPTI
                        Unsigned 8-bit integer
iuup.rfci.24.li        RFCI 24 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.24.lri       RFCI 24 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.25           RFCI 25
                        Unsigned 8-bit integer
iuup.rfci.25.flow.0    RFCI 25 Flow 0
                        Byte array
iuup.rfci.25.flow.0.len RFCI 25 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.25.flow.1    RFCI 25 Flow 1
                        Byte array
iuup.rfci.25.flow.1.len RFCI 25 Flow 1 Len
                        Unsigned 16-bit integer
```



```
iuup.rfci.25.flow.2  RFCI 25 Flow 2
    Byte array
iuup.rfci.25.flow.2.len  RFCI 25 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.25.flow.3  RFCI 25 Flow 3
    Byte array
iuup.rfci.25.flow.3.len  RFCI 25 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.25.flow.4  RFCI 25 Flow 4
    Byte array
iuup.rfci.25.flow.4.len  RFCI 25 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.25.flow.5  RFCI 25 Flow 5
    Byte array
iuup.rfci.25.flow.5.len  RFCI 25 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.25.flow.6  RFCI 25 Flow 6
    Byte array
iuup.rfci.25.flow.6.len  RFCI 25 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.25.flow.7  RFCI 25 Flow 7
    Byte array
iuup.rfci.25.flow.7.len  RFCI 25 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.25.ipti  RFCI 25 IPTI
    Unsigned 8-bit integer
iuup.rfci.25.li  RFCI 25 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.25.lri  RFCI 25 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.26  RFCI 26
    Unsigned 8-bit integer
iuup.rfci.26.flow.0  RFCI 26 Flow 0
    Byte array
iuup.rfci.26.flow.0.len  RFCI 26 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.26.flow.1  RFCI 26 Flow 1
    Byte array
iuup.rfci.26.flow.1.len  RFCI 26 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.26.flow.2  RFCI 26 Flow 2
    Byte array
```

```
iuup.rfci.26.flow.2.len  RFCI 26 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.26.flow.3    RFCI 26 Flow 3
    Byte array
iuup.rfci.26.flow.3.len RFCI 26 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.26.flow.4    RFCI 26 Flow 4
    Byte array
iuup.rfci.26.flow.4.len RFCI 26 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.26.flow.5    RFCI 26 Flow 5
    Byte array
iuup.rfci.26.flow.5.len RFCI 26 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.26.flow.6    RFCI 26 Flow 6
    Byte array
iuup.rfci.26.flow.6.len RFCI 26 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.26.flow.7    RFCI 26 Flow 7
    Byte array
iuup.rfci.26.flow.7.len RFCI 26 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.26.ipti     RFCI 26 IPTI
    Unsigned 8-bit integer
iuup.rfci.26.li       RFCI 26 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.26.lri      RFCI 26 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.27          RFCI 27
    Unsigned 8-bit integer
iuup.rfci.27.flow.0   RFCI 27 Flow 0
    Byte array
iuup.rfci.27.flow.0.len RFCI 27 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.27.flow.1   RFCI 27 Flow 1
    Byte array
iuup.rfci.27.flow.1.len RFCI 27 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.27.flow.2   RFCI 27 Flow 2
    Byte array
iuup.rfci.27.flow.2.len RFCI 27 Flow 2 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.27.flow.3  RFCI 27 Flow 3
    Byte array
iuup.rfci.27.flow.3.len  RFCI 27 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.27.flow.4  RFCI 27 Flow 4
    Byte array
iuup.rfci.27.flow.4.len  RFCI 27 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.27.flow.5  RFCI 27 Flow 5
    Byte array
iuup.rfci.27.flow.5.len  RFCI 27 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.27.flow.6  RFCI 27 Flow 6
    Byte array
iuup.rfci.27.flow.6.len  RFCI 27 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.27.flow.7  RFCI 27 Flow 7
    Byte array
iuup.rfci.27.flow.7.len  RFCI 27 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.27.ipti  RFCI 27 IPTI
    Unsigned 8-bit integer
iuup.rfci.27.li  RFCI 27 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.27.lri  RFCI 27 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.28  RFCI 28
    Unsigned 8-bit integer
iuup.rfci.28.flow.0  RFCI 28 Flow 0
    Byte array
iuup.rfci.28.flow.0.len  RFCI 28 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.28.flow.1  RFCI 28 Flow 1
    Byte array
iuup.rfci.28.flow.1.len  RFCI 28 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.28.flow.2  RFCI 28 Flow 2
    Byte array
iuup.rfci.28.flow.2.len  RFCI 28 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.28.flow.3  RFCI 28 Flow 3
    Byte array
```

```
iuup.rfci.28.flow.3.len  RFCI 28 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.28.flow.4    RFCI 28 Flow 4
                        Byte array
iuup.rfci.28.flow.4.len RFCI 28 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.28.flow.5    RFCI 28 Flow 5
                        Byte array
iuup.rfci.28.flow.5.len RFCI 28 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.28.flow.6    RFCI 28 Flow 6
                        Byte array
iuup.rfci.28.flow.6.len RFCI 28 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.28.flow.7    RFCI 28 Flow 7
                        Byte array
iuup.rfci.28.flow.7.len RFCI 28 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.28.ipti      RFCI 28 IPTI
                        Unsigned 8-bit integer
iuup.rfci.28.li        RFCI 28 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.28.lri       RFCI 28 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.29           RFCI 29
                        Unsigned 8-bit integer
iuup.rfci.29.flow.0    RFCI 29 Flow 0
                        Byte array
iuup.rfci.29.flow.0.len RFCI 29 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.29.flow.1    RFCI 29 Flow 1
                        Byte array
iuup.rfci.29.flow.1.len RFCI 29 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.29.flow.2    RFCI 29 Flow 2
                        Byte array
iuup.rfci.29.flow.2.len RFCI 29 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.29.flow.3    RFCI 29 Flow 3
                        Byte array
iuup.rfci.29.flow.3.len RFCI 29 Flow 3 Len
                        Unsigned 16-bit integer
```

```
iuup.rfci.29.flow.4 RFCI 29 Flow 4
    Byte array
iuup.rfci.29.flow.4.len RFCI 29 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.29.flow.5 RFCI 29 Flow 5
    Byte array
iuup.rfci.29.flow.5.len RFCI 29 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.29.flow.6 RFCI 29 Flow 6
    Byte array
iuup.rfci.29.flow.6.len RFCI 29 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.29.flow.7 RFCI 29 Flow 7
    Byte array
iuup.rfci.29.flow.7.len RFCI 29 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.29.ipti RFCI 29 IPTI
    Unsigned 8-bit integer
iuup.rfci.29.li RFCI 29 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.29.lri RFCI 29 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.3 RFCI 3
    Unsigned 8-bit integer
iuup.rfci.3.flow.0 RFCI 3 Flow 0
    Byte array
iuup.rfci.3.flow.0.len RFCI 3 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.3.flow.1 RFCI 3 Flow 1
    Byte array
iuup.rfci.3.flow.1.len RFCI 3 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.3.flow.2 RFCI 3 Flow 2
    Byte array
iuup.rfci.3.flow.2.len RFCI 3 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.3.flow.3 RFCI 3 Flow 3
    Byte array
iuup.rfci.3.flow.3.len RFCI 3 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.3.flow.4 RFCI 3 Flow 4
    Byte array
```

```
iuup.rfci.3.flow.4.len RFCI 3 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.3.flow.5 RFCI 3 Flow 5
    Byte array
iuup.rfci.3.flow.5.len RFCI 3 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.3.flow.6 RFCI 3 Flow 6
    Byte array
iuup.rfci.3.flow.6.len RFCI 3 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.3.flow.7 RFCI 3 Flow 7
    Byte array
iuup.rfci.3.flow.7.len RFCI 3 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.3.ipti RFCI 3 IPTI
    Unsigned 8-bit integer
iuup.rfci.3.li RFCI 3 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.3.lri RFCI 3 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.30 RFCI 30
    Unsigned 8-bit integer
iuup.rfci.30.flow.0 RFCI 30 Flow 0
    Byte array
iuup.rfci.30.flow.0.len RFCI 30 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.30.flow.1 RFCI 30 Flow 1
    Byte array
iuup.rfci.30.flow.1.len RFCI 30 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.30.flow.2 RFCI 30 Flow 2
    Byte array
iuup.rfci.30.flow.2.len RFCI 30 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.30.flow.3 RFCI 30 Flow 3
    Byte array
iuup.rfci.30.flow.3.len RFCI 30 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.30.flow.4 RFCI 30 Flow 4
    Byte array
iuup.rfci.30.flow.4.len RFCI 30 Flow 4 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.30.flow.5  RFCI 30 Flow 5
    Byte array
iuup.rfci.30.flow.5.len  RFCI 30 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.30.flow.6  RFCI 30 Flow 6
    Byte array
iuup.rfci.30.flow.6.len  RFCI 30 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.30.flow.7  RFCI 30 Flow 7
    Byte array
iuup.rfci.30.flow.7.len  RFCI 30 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.30.ipti  RFCI 30 IPTI
    Unsigned 8-bit integer
iuup.rfci.30.li  RFCI 30 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.30.lri  RFCI 30 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.31  RFCI 31
    Unsigned 8-bit integer
iuup.rfci.31.flow.0  RFCI 31 Flow 0
    Byte array
iuup.rfci.31.flow.0.len  RFCI 31 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.31.flow.1  RFCI 31 Flow 1
    Byte array
iuup.rfci.31.flow.1.len  RFCI 31 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.31.flow.2  RFCI 31 Flow 2
    Byte array
iuup.rfci.31.flow.2.len  RFCI 31 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.31.flow.3  RFCI 31 Flow 3
    Byte array
iuup.rfci.31.flow.3.len  RFCI 31 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.31.flow.4  RFCI 31 Flow 4
    Byte array
iuup.rfci.31.flow.4.len  RFCI 31 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.31.flow.5  RFCI 31 Flow 5
    Byte array
```

```
iuup.rfci.31.flow.5.len  RFCI 31 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.31.flow.6    RFCI 31 Flow 6
    Byte array
iuup.rfci.31.flow.6.len RFCI 31 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.31.flow.7    RFCI 31 Flow 7
    Byte array
iuup.rfci.31.flow.7.len RFCI 31 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.31.ipti     RFCI 31 IPTI
    Unsigned 8-bit integer
iuup.rfci.31.li       RFCI 31 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.31.lri      RFCI 31 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.32          RFCI 32
    Unsigned 8-bit integer
iuup.rfci.32.flow.0   RFCI 32 Flow 0
    Byte array
iuup.rfci.32.flow.0.len RFCI 32 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.32.flow.1   RFCI 32 Flow 1
    Byte array
iuup.rfci.32.flow.1.len RFCI 32 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.32.flow.2   RFCI 32 Flow 2
    Byte array
iuup.rfci.32.flow.2.len RFCI 32 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.32.flow.3   RFCI 32 Flow 3
    Byte array
iuup.rfci.32.flow.3.len RFCI 32 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.32.flow.4   RFCI 32 Flow 4
    Byte array
iuup.rfci.32.flow.4.len RFCI 32 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.32.flow.5   RFCI 32 Flow 5
    Byte array
iuup.rfci.32.flow.5.len RFCI 32 Flow 5 Len
    Unsigned 16-bit integer
```



```
iuup.rfci.32.flow.6  RFCI 32 Flow 6
    Byte array
iuup.rfci.32.flow.6.len  RFCI 32 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.32.flow.7  RFCI 32 Flow 7
    Byte array
iuup.rfci.32.flow.7.len  RFCI 32 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.32.ipti  RFCI 32 IPTI
    Unsigned 8-bit integer
iuup.rfci.32.li  RFCI 32 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.32.lri  RFCI 32 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.33  RFCI 33
    Unsigned 8-bit integer
iuup.rfci.33.flow.0  RFCI 33 Flow 0
    Byte array
iuup.rfci.33.flow.0.len  RFCI 33 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.33.flow.1  RFCI 33 Flow 1
    Byte array
iuup.rfci.33.flow.1.len  RFCI 33 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.33.flow.2  RFCI 33 Flow 2
    Byte array
iuup.rfci.33.flow.2.len  RFCI 33 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.33.flow.3  RFCI 33 Flow 3
    Byte array
iuup.rfci.33.flow.3.len  RFCI 33 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.33.flow.4  RFCI 33 Flow 4
    Byte array
iuup.rfci.33.flow.4.len  RFCI 33 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.33.flow.5  RFCI 33 Flow 5
    Byte array
iuup.rfci.33.flow.5.len  RFCI 33 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.33.flow.6  RFCI 33 Flow 6
    Byte array
```

```
iuup.rfci.33.flow.6.len  RFCI 33 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.33.flow.7    RFCI 33 Flow 7
                        Byte array
iuup.rfci.33.flow.7.len RFCI 33 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.33.ipti     RFCI 33 IPTI
                        Unsigned 8-bit integer
iuup.rfci.33.li       RFCI 33 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.33.lri      RFCI 33 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.34          RFCI 34
                        Unsigned 8-bit integer
iuup.rfci.34.flow.0   RFCI 34 Flow 0
                        Byte array
iuup.rfci.34.flow.0.len RFCI 34 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.34.flow.1   RFCI 34 Flow 1
                        Byte array
iuup.rfci.34.flow.1.len RFCI 34 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.34.flow.2   RFCI 34 Flow 2
                        Byte array
iuup.rfci.34.flow.2.len RFCI 34 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.34.flow.3   RFCI 34 Flow 3
                        Byte array
iuup.rfci.34.flow.3.len RFCI 34 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.34.flow.4   RFCI 34 Flow 4
                        Byte array
iuup.rfci.34.flow.4.len RFCI 34 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.34.flow.5   RFCI 34 Flow 5
                        Byte array
iuup.rfci.34.flow.5.len RFCI 34 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.34.flow.6   RFCI 34 Flow 6
                        Byte array
iuup.rfci.34.flow.6.len RFCI 34 Flow 6 Len
                        Unsigned 16-bit integer
```

```
iuup.rfci.34.flow.7  RFCI 34 Flow 7
    Byte array
iuup.rfci.34.flow.7.len  RFCI 34 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.34.ipti  RFCI 34 IPTI
    Unsigned 8-bit integer
iuup.rfci.34.li  RFCI 34 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.34.lri  RFCI 34 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.35  RFCI 35
    Unsigned 8-bit integer
iuup.rfci.35.flow.0  RFCI 35 Flow 0
    Byte array
iuup.rfci.35.flow.0.len  RFCI 35 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.35.flow.1  RFCI 35 Flow 1
    Byte array
iuup.rfci.35.flow.1.len  RFCI 35 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.35.flow.2  RFCI 35 Flow 2
    Byte array
iuup.rfci.35.flow.2.len  RFCI 35 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.35.flow.3  RFCI 35 Flow 3
    Byte array
iuup.rfci.35.flow.3.len  RFCI 35 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.35.flow.4  RFCI 35 Flow 4
    Byte array
iuup.rfci.35.flow.4.len  RFCI 35 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.35.flow.5  RFCI 35 Flow 5
    Byte array
iuup.rfci.35.flow.5.len  RFCI 35 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.35.flow.6  RFCI 35 Flow 6
    Byte array
iuup.rfci.35.flow.6.len  RFCI 35 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.35.flow.7  RFCI 35 Flow 7
    Byte array
```

```
iuup.rfci.35.flow.7.len  RFCI 35 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.35.ipti  RFCI 35 IPTI
    Unsigned 8-bit integer
iuup.rfci.35.li  RFCI 35 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.35.lri  RFCI 35 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.36  RFCI 36
    Unsigned 8-bit integer
iuup.rfci.36.flow.0  RFCI 36 Flow 0
    Byte array
iuup.rfci.36.flow.0.len  RFCI 36 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.36.flow.1  RFCI 36 Flow 1
    Byte array
iuup.rfci.36.flow.1.len  RFCI 36 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.36.flow.2  RFCI 36 Flow 2
    Byte array
iuup.rfci.36.flow.2.len  RFCI 36 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.36.flow.3  RFCI 36 Flow 3
    Byte array
iuup.rfci.36.flow.3.len  RFCI 36 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.36.flow.4  RFCI 36 Flow 4
    Byte array
iuup.rfci.36.flow.4.len  RFCI 36 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.36.flow.5  RFCI 36 Flow 5
    Byte array
iuup.rfci.36.flow.5.len  RFCI 36 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.36.flow.6  RFCI 36 Flow 6
    Byte array
iuup.rfci.36.flow.6.len  RFCI 36 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.36.flow.7  RFCI 36 Flow 7
    Byte array
iuup.rfci.36.flow.7.len  RFCI 36 Flow 7 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.36.ipti  RFCI 36 IPTI
    Unsigned 8-bit integer
iuup.rfci.36.li   RFCI 36 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.36.lri  RFCI 36 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.37     RFCI 37
    Unsigned 8-bit integer
iuup.rfci.37.flow.0  RFCI 37 Flow 0
    Byte array
iuup.rfci.37.flow.0.len  RFCI 37 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.37.flow.1  RFCI 37 Flow 1
    Byte array
iuup.rfci.37.flow.1.len  RFCI 37 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.37.flow.2  RFCI 37 Flow 2
    Byte array
iuup.rfci.37.flow.2.len  RFCI 37 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.37.flow.3  RFCI 37 Flow 3
    Byte array
iuup.rfci.37.flow.3.len  RFCI 37 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.37.flow.4  RFCI 37 Flow 4
    Byte array
iuup.rfci.37.flow.4.len  RFCI 37 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.37.flow.5  RFCI 37 Flow 5
    Byte array
iuup.rfci.37.flow.5.len  RFCI 37 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.37.flow.6  RFCI 37 Flow 6
    Byte array
iuup.rfci.37.flow.6.len  RFCI 37 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.37.flow.7  RFCI 37 Flow 7
    Byte array
iuup.rfci.37.flow.7.len  RFCI 37 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.37.ipti  RFCI 37 IPTI
    Unsigned 8-bit integer
```

```
iuup.rfci.37.li RFCI 37 LI
  Unsigned 8-bit integer
  Length Indicator
iuup.rfci.37.lri RFCI 37 LRI
  Unsigned 8-bit integer
  Last Record Indicator
iuup.rfci.38 RFCI 38
  Unsigned 8-bit integer
iuup.rfci.38.flow.0 RFCI 38 Flow 0
  Byte array
iuup.rfci.38.flow.0.len RFCI 38 Flow 0 Len
  Unsigned 16-bit integer
iuup.rfci.38.flow.1 RFCI 38 Flow 1
  Byte array
iuup.rfci.38.flow.1.len RFCI 38 Flow 1 Len
  Unsigned 16-bit integer
iuup.rfci.38.flow.2 RFCI 38 Flow 2
  Byte array
iuup.rfci.38.flow.2.len RFCI 38 Flow 2 Len
  Unsigned 16-bit integer
iuup.rfci.38.flow.3 RFCI 38 Flow 3
  Byte array
iuup.rfci.38.flow.3.len RFCI 38 Flow 3 Len
  Unsigned 16-bit integer
iuup.rfci.38.flow.4 RFCI 38 Flow 4
  Byte array
iuup.rfci.38.flow.4.len RFCI 38 Flow 4 Len
  Unsigned 16-bit integer
iuup.rfci.38.flow.5 RFCI 38 Flow 5
  Byte array
iuup.rfci.38.flow.5.len RFCI 38 Flow 5 Len
  Unsigned 16-bit integer
iuup.rfci.38.flow.6 RFCI 38 Flow 6
  Byte array
iuup.rfci.38.flow.6.len RFCI 38 Flow 6 Len
  Unsigned 16-bit integer
iuup.rfci.38.flow.7 RFCI 38 Flow 7
  Byte array
iuup.rfci.38.flow.7.len RFCI 38 Flow 7 Len
  Unsigned 16-bit integer
iuup.rfci.38.ipti RFCI 38 IPTI
  Unsigned 8-bit integer
iuup.rfci.38.li RFCI 38 LI
  Unsigned 8-bit integer
  Length Indicator
```

```
iuup.rfci.38.lri RFCI 38 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.39 RFCI 39
    Unsigned 8-bit integer
iuup.rfci.39.flow.0 RFCI 39 Flow 0
    Byte array
iuup.rfci.39.flow.0.len RFCI 39 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.39.flow.1 RFCI 39 Flow 1
    Byte array
iuup.rfci.39.flow.1.len RFCI 39 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.39.flow.2 RFCI 39 Flow 2
    Byte array
iuup.rfci.39.flow.2.len RFCI 39 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.39.flow.3 RFCI 39 Flow 3
    Byte array
iuup.rfci.39.flow.3.len RFCI 39 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.39.flow.4 RFCI 39 Flow 4
    Byte array
iuup.rfci.39.flow.4.len RFCI 39 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.39.flow.5 RFCI 39 Flow 5
    Byte array
iuup.rfci.39.flow.5.len RFCI 39 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.39.flow.6 RFCI 39 Flow 6
    Byte array
iuup.rfci.39.flow.6.len RFCI 39 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.39.flow.7 RFCI 39 Flow 7
    Byte array
iuup.rfci.39.flow.7.len RFCI 39 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.39.ipti RFCI 39 IPTI
    Unsigned 8-bit integer
iuup.rfci.39.li RFCI 39 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.39.lri RFCI 39 LRI
    Unsigned 8-bit integer
    Last Record Indicator
```

```
iuup.rfci.4 RFCI 4
    Unsigned 8-bit integer
iuup.rfci.4.flow.0 RFCI 4 Flow 0
    Byte array
iuup.rfci.4.flow.0.len RFCI 4 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.4.flow.1 RFCI 4 Flow 1
    Byte array
iuup.rfci.4.flow.1.len RFCI 4 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.4.flow.2 RFCI 4 Flow 2
    Byte array
iuup.rfci.4.flow.2.len RFCI 4 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.4.flow.3 RFCI 4 Flow 3
    Byte array
iuup.rfci.4.flow.3.len RFCI 4 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.4.flow.4 RFCI 4 Flow 4
    Byte array
iuup.rfci.4.flow.4.len RFCI 4 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.4.flow.5 RFCI 4 Flow 5
    Byte array
iuup.rfci.4.flow.5.len RFCI 4 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.4.flow.6 RFCI 4 Flow 6
    Byte array
iuup.rfci.4.flow.6.len RFCI 4 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.4.flow.7 RFCI 4 Flow 7
    Byte array
iuup.rfci.4.flow.7.len RFCI 4 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.4.ipti RFCI 4 IPTI
    Unsigned 8-bit integer
iuup.rfci.4.li RFCI 4 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.4.lri RFCI 4 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.40 RFCI 40
    Unsigned 8-bit integer
```



```
iuup.rfci.40.flow.0  RFCI 40 Flow 0
    Byte array
iuup.rfci.40.flow.0.len  RFCI 40 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.40.flow.1  RFCI 40 Flow 1
    Byte array
iuup.rfci.40.flow.1.len  RFCI 40 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.40.flow.2  RFCI 40 Flow 2
    Byte array
iuup.rfci.40.flow.2.len  RFCI 40 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.40.flow.3  RFCI 40 Flow 3
    Byte array
iuup.rfci.40.flow.3.len  RFCI 40 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.40.flow.4  RFCI 40 Flow 4
    Byte array
iuup.rfci.40.flow.4.len  RFCI 40 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.40.flow.5  RFCI 40 Flow 5
    Byte array
iuup.rfci.40.flow.5.len  RFCI 40 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.40.flow.6  RFCI 40 Flow 6
    Byte array
iuup.rfci.40.flow.6.len  RFCI 40 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.40.flow.7  RFCI 40 Flow 7
    Byte array
iuup.rfci.40.flow.7.len  RFCI 40 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.40.ipti  RFCI 40 IPTI
    Unsigned 8-bit integer
iuup.rfci.40.li  RFCI 40 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.40.lri  RFCI 40 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.41  RFCI 41
    Unsigned 8-bit integer
iuup.rfci.41.flow.0  RFCI 41 Flow 0
    Byte array
```

```
iuup.rfci.41.flow.0.len  RFCI 41 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.41.flow.1  RFCI 41 Flow 1
    Byte array
iuup.rfci.41.flow.1.len  RFCI 41 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.41.flow.2  RFCI 41 Flow 2
    Byte array
iuup.rfci.41.flow.2.len  RFCI 41 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.41.flow.3  RFCI 41 Flow 3
    Byte array
iuup.rfci.41.flow.3.len  RFCI 41 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.41.flow.4  RFCI 41 Flow 4
    Byte array
iuup.rfci.41.flow.4.len  RFCI 41 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.41.flow.5  RFCI 41 Flow 5
    Byte array
iuup.rfci.41.flow.5.len  RFCI 41 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.41.flow.6  RFCI 41 Flow 6
    Byte array
iuup.rfci.41.flow.6.len  RFCI 41 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.41.flow.7  RFCI 41 Flow 7
    Byte array
iuup.rfci.41.flow.7.len  RFCI 41 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.41.ipti  RFCI 41 IPTI
    Unsigned 8-bit integer
iuup.rfci.41.li  RFCI 41 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.41.lri  RFCI 41 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.42  RFCI 42
    Unsigned 8-bit integer
iuup.rfci.42.flow.0  RFCI 42 Flow 0
    Byte array
iuup.rfci.42.flow.0.len  RFCI 42 Flow 0 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.42.flow.1  RFCI 42 Flow 1
    Byte array
iuup.rfci.42.flow.1.len  RFCI 42 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.42.flow.2  RFCI 42 Flow 2
    Byte array
iuup.rfci.42.flow.2.len  RFCI 42 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.42.flow.3  RFCI 42 Flow 3
    Byte array
iuup.rfci.42.flow.3.len  RFCI 42 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.42.flow.4  RFCI 42 Flow 4
    Byte array
iuup.rfci.42.flow.4.len  RFCI 42 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.42.flow.5  RFCI 42 Flow 5
    Byte array
iuup.rfci.42.flow.5.len  RFCI 42 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.42.flow.6  RFCI 42 Flow 6
    Byte array
iuup.rfci.42.flow.6.len  RFCI 42 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.42.flow.7  RFCI 42 Flow 7
    Byte array
iuup.rfci.42.flow.7.len  RFCI 42 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.42.ipti  RFCI 42 IPTI
    Unsigned 8-bit integer
iuup.rfci.42.li  RFCI 42 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.42.lri  RFCI 42 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.43  RFCI 43
    Unsigned 8-bit integer
iuup.rfci.43.flow.0  RFCI 43 Flow 0
    Byte array
iuup.rfci.43.flow.0.len  RFCI 43 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.43.flow.1  RFCI 43 Flow 1
    Byte array
```

```
iuup.rfci.43.flow.1.len  RFCI 43 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.43.flow.2    RFCI 43 Flow 2
                        Byte array
iuup.rfci.43.flow.2.len RFCI 43 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.43.flow.3    RFCI 43 Flow 3
                        Byte array
iuup.rfci.43.flow.3.len RFCI 43 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.43.flow.4    RFCI 43 Flow 4
                        Byte array
iuup.rfci.43.flow.4.len RFCI 43 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.43.flow.5    RFCI 43 Flow 5
                        Byte array
iuup.rfci.43.flow.5.len RFCI 43 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.43.flow.6    RFCI 43 Flow 6
                        Byte array
iuup.rfci.43.flow.6.len RFCI 43 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.43.flow.7    RFCI 43 Flow 7
                        Byte array
iuup.rfci.43.flow.7.len RFCI 43 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.43.ipti      RFCI 43 IPTI
                        Unsigned 8-bit integer
iuup.rfci.43.li        RFCI 43 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.43.lri       RFCI 43 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.44           RFCI 44
                        Unsigned 8-bit integer
iuup.rfci.44.flow.0    RFCI 44 Flow 0
                        Byte array
iuup.rfci.44.flow.0.len RFCI 44 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.44.flow.1    RFCI 44 Flow 1
                        Byte array
iuup.rfci.44.flow.1.len RFCI 44 Flow 1 Len
                        Unsigned 16-bit integer
```

```
iuup.rfci.44.flow.2  RFCI 44 Flow 2
    Byte array
iuup.rfci.44.flow.2.len  RFCI 44 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.44.flow.3  RFCI 44 Flow 3
    Byte array
iuup.rfci.44.flow.3.len  RFCI 44 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.44.flow.4  RFCI 44 Flow 4
    Byte array
iuup.rfci.44.flow.4.len  RFCI 44 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.44.flow.5  RFCI 44 Flow 5
    Byte array
iuup.rfci.44.flow.5.len  RFCI 44 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.44.flow.6  RFCI 44 Flow 6
    Byte array
iuup.rfci.44.flow.6.len  RFCI 44 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.44.flow.7  RFCI 44 Flow 7
    Byte array
iuup.rfci.44.flow.7.len  RFCI 44 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.44.ipti  RFCI 44 IPTI
    Unsigned 8-bit integer
iuup.rfci.44.li  RFCI 44 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.44.lri  RFCI 44 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.45  RFCI 45
    Unsigned 8-bit integer
iuup.rfci.45.flow.0  RFCI 45 Flow 0
    Byte array
iuup.rfci.45.flow.0.len  RFCI 45 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.45.flow.1  RFCI 45 Flow 1
    Byte array
iuup.rfci.45.flow.1.len  RFCI 45 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.45.flow.2  RFCI 45 Flow 2
    Byte array
```

```
iuup.rfci.45.flow.2.len  RFCI 45 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.45.flow.3    RFCI 45 Flow 3
    Byte array
iuup.rfci.45.flow.3.len RFCI 45 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.45.flow.4    RFCI 45 Flow 4
    Byte array
iuup.rfci.45.flow.4.len RFCI 45 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.45.flow.5    RFCI 45 Flow 5
    Byte array
iuup.rfci.45.flow.5.len RFCI 45 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.45.flow.6    RFCI 45 Flow 6
    Byte array
iuup.rfci.45.flow.6.len RFCI 45 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.45.flow.7    RFCI 45 Flow 7
    Byte array
iuup.rfci.45.flow.7.len RFCI 45 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.45.ipti     RFCI 45 IPTI
    Unsigned 8-bit integer
iuup.rfci.45.li       RFCI 45 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.45.lri      RFCI 45 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.46         RFCI 46
    Unsigned 8-bit integer
iuup.rfci.46.flow.0   RFCI 46 Flow 0
    Byte array
iuup.rfci.46.flow.0.len RFCI 46 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.46.flow.1   RFCI 46 Flow 1
    Byte array
iuup.rfci.46.flow.1.len RFCI 46 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.46.flow.2   RFCI 46 Flow 2
    Byte array
iuup.rfci.46.flow.2.len RFCI 46 Flow 2 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.46.flow.3  RFCI 46 Flow 3
    Byte array
iuup.rfci.46.flow.3.len  RFCI 46 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.46.flow.4  RFCI 46 Flow 4
    Byte array
iuup.rfci.46.flow.4.len  RFCI 46 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.46.flow.5  RFCI 46 Flow 5
    Byte array
iuup.rfci.46.flow.5.len  RFCI 46 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.46.flow.6  RFCI 46 Flow 6
    Byte array
iuup.rfci.46.flow.6.len  RFCI 46 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.46.flow.7  RFCI 46 Flow 7
    Byte array
iuup.rfci.46.flow.7.len  RFCI 46 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.46.ipti  RFCI 46 IPTI
    Unsigned 8-bit integer
iuup.rfci.46.li  RFCI 46 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.46.lri  RFCI 46 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.47  RFCI 47
    Unsigned 8-bit integer
iuup.rfci.47.flow.0  RFCI 47 Flow 0
    Byte array
iuup.rfci.47.flow.0.len  RFCI 47 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.47.flow.1  RFCI 47 Flow 1
    Byte array
iuup.rfci.47.flow.1.len  RFCI 47 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.47.flow.2  RFCI 47 Flow 2
    Byte array
iuup.rfci.47.flow.2.len  RFCI 47 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.47.flow.3  RFCI 47 Flow 3
    Byte array
```

```
iuup.rfci.47.flow.3.len  RFCI 47 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.47.flow.4    RFCI 47 Flow 4
    Byte array
iuup.rfci.47.flow.4.len RFCI 47 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.47.flow.5    RFCI 47 Flow 5
    Byte array
iuup.rfci.47.flow.5.len RFCI 47 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.47.flow.6    RFCI 47 Flow 6
    Byte array
iuup.rfci.47.flow.6.len RFCI 47 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.47.flow.7    RFCI 47 Flow 7
    Byte array
iuup.rfci.47.flow.7.len RFCI 47 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.47.ipti     RFCI 47 IPTI
    Unsigned 8-bit integer
iuup.rfci.47.li       RFCI 47 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.47.lri     RFCI 47 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.48         RFCI 48
    Unsigned 8-bit integer
iuup.rfci.48.flow.0  RFCI 48 Flow 0
    Byte array
iuup.rfci.48.flow.0.len RFCI 48 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.48.flow.1  RFCI 48 Flow 1
    Byte array
iuup.rfci.48.flow.1.len RFCI 48 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.48.flow.2  RFCI 48 Flow 2
    Byte array
iuup.rfci.48.flow.2.len RFCI 48 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.48.flow.3  RFCI 48 Flow 3
    Byte array
iuup.rfci.48.flow.3.len RFCI 48 Flow 3 Len
    Unsigned 16-bit integer
```



```
iuup.rfci.48.flow.4  RFCI 48 Flow 4
    Byte array
iuup.rfci.48.flow.4.len  RFCI 48 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.48.flow.5  RFCI 48 Flow 5
    Byte array
iuup.rfci.48.flow.5.len  RFCI 48 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.48.flow.6  RFCI 48 Flow 6
    Byte array
iuup.rfci.48.flow.6.len  RFCI 48 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.48.flow.7  RFCI 48 Flow 7
    Byte array
iuup.rfci.48.flow.7.len  RFCI 48 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.48.ipti  RFCI 48 IPTI
    Unsigned 8-bit integer
iuup.rfci.48.li  RFCI 48 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.48.lri  RFCI 48 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.49  RFCI 49
    Unsigned 8-bit integer
iuup.rfci.49.flow.0  RFCI 49 Flow 0
    Byte array
iuup.rfci.49.flow.0.len  RFCI 49 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.49.flow.1  RFCI 49 Flow 1
    Byte array
iuup.rfci.49.flow.1.len  RFCI 49 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.49.flow.2  RFCI 49 Flow 2
    Byte array
iuup.rfci.49.flow.2.len  RFCI 49 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.49.flow.3  RFCI 49 Flow 3
    Byte array
iuup.rfci.49.flow.3.len  RFCI 49 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.49.flow.4  RFCI 49 Flow 4
    Byte array
```

```
iuup.rfci.49.flow.4.len  RFCI 49 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.49.flow.5    RFCI 49 Flow 5
    Byte array
iuup.rfci.49.flow.5.len RFCI 49 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.49.flow.6    RFCI 49 Flow 6
    Byte array
iuup.rfci.49.flow.6.len RFCI 49 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.49.flow.7    RFCI 49 Flow 7
    Byte array
iuup.rfci.49.flow.7.len RFCI 49 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.49.ipti      RFCI 49 IPTI
    Unsigned 8-bit integer
iuup.rfci.49.li        RFCI 49 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.49.lri       RFCI 49 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.5            RFCI 5
    Unsigned 8-bit integer
iuup.rfci.5.flow.0     RFCI 5 Flow 0
    Byte array
iuup.rfci.5.flow.0.len RFCI 5 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.5.flow.1     RFCI 5 Flow 1
    Byte array
iuup.rfci.5.flow.1.len RFCI 5 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.5.flow.2     RFCI 5 Flow 2
    Byte array
iuup.rfci.5.flow.2.len RFCI 5 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.5.flow.3     RFCI 5 Flow 3
    Byte array
iuup.rfci.5.flow.3.len RFCI 5 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.5.flow.4     RFCI 5 Flow 4
    Byte array
iuup.rfci.5.flow.4.len RFCI 5 Flow 4 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.5.flow.5 RFCI 5 Flow 5
    Byte array
iuup.rfci.5.flow.5.len RFCI 5 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.5.flow.6 RFCI 5 Flow 6
    Byte array
iuup.rfci.5.flow.6.len RFCI 5 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.5.flow.7 RFCI 5 Flow 7
    Byte array
iuup.rfci.5.flow.7.len RFCI 5 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.5.ipti RFCI 5 IPTI
    Unsigned 8-bit integer
iuup.rfci.5.li RFCI 5 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.5.lri RFCI 5 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.50 RFCI 50
    Unsigned 8-bit integer
iuup.rfci.50.flow.0 RFCI 50 Flow 0
    Byte array
iuup.rfci.50.flow.0.len RFCI 50 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.50.flow.1 RFCI 50 Flow 1
    Byte array
iuup.rfci.50.flow.1.len RFCI 50 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.50.flow.2 RFCI 50 Flow 2
    Byte array
iuup.rfci.50.flow.2.len RFCI 50 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.50.flow.3 RFCI 50 Flow 3
    Byte array
iuup.rfci.50.flow.3.len RFCI 50 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.50.flow.4 RFCI 50 Flow 4
    Byte array
iuup.rfci.50.flow.4.len RFCI 50 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.50.flow.5 RFCI 50 Flow 5
    Byte array
```

```
iuup.rfci.50.flow.5.len  RFCI 50 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.50.flow.6    RFCI 50 Flow 6
    Byte array
iuup.rfci.50.flow.6.len RFCI 50 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.50.flow.7    RFCI 50 Flow 7
    Byte array
iuup.rfci.50.flow.7.len RFCI 50 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.50.ipti     RFCI 50 IPTI
    Unsigned 8-bit integer
iuup.rfci.50.li       RFCI 50 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.50.lri      RFCI 50 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.51         RFCI 51
    Unsigned 8-bit integer
iuup.rfci.51.flow.0  RFCI 51 Flow 0
    Byte array
iuup.rfci.51.flow.0.len RFCI 51 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.51.flow.1  RFCI 51 Flow 1
    Byte array
iuup.rfci.51.flow.1.len RFCI 51 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.51.flow.2  RFCI 51 Flow 2
    Byte array
iuup.rfci.51.flow.2.len RFCI 51 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.51.flow.3  RFCI 51 Flow 3
    Byte array
iuup.rfci.51.flow.3.len RFCI 51 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.51.flow.4  RFCI 51 Flow 4
    Byte array
iuup.rfci.51.flow.4.len RFCI 51 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.51.flow.5  RFCI 51 Flow 5
    Byte array
iuup.rfci.51.flow.5.len RFCI 51 Flow 5 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.51.flow.6  RFCI 51 Flow 6
    Byte array
iuup.rfci.51.flow.6.len  RFCI 51 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.51.flow.7  RFCI 51 Flow 7
    Byte array
iuup.rfci.51.flow.7.len  RFCI 51 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.51.ipti  RFCI 51 IPTI
    Unsigned 8-bit integer
iuup.rfci.51.li  RFCI 51 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.51.lri  RFCI 51 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.52  RFCI 52
    Unsigned 8-bit integer
iuup.rfci.52.flow.0  RFCI 52 Flow 0
    Byte array
iuup.rfci.52.flow.0.len  RFCI 52 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.52.flow.1  RFCI 52 Flow 1
    Byte array
iuup.rfci.52.flow.1.len  RFCI 52 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.52.flow.2  RFCI 52 Flow 2
    Byte array
iuup.rfci.52.flow.2.len  RFCI 52 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.52.flow.3  RFCI 52 Flow 3
    Byte array
iuup.rfci.52.flow.3.len  RFCI 52 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.52.flow.4  RFCI 52 Flow 4
    Byte array
iuup.rfci.52.flow.4.len  RFCI 52 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.52.flow.5  RFCI 52 Flow 5
    Byte array
iuup.rfci.52.flow.5.len  RFCI 52 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.52.flow.6  RFCI 52 Flow 6
    Byte array
```

```
iuup.rfci.52.flow.6.len  RFCI 52 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.52.flow.7    RFCI 52 Flow 7
                        Byte array
iuup.rfci.52.flow.7.len RFCI 52 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.52.ipti     RFCI 52 IPTI
                        Unsigned 8-bit integer
iuup.rfci.52.li      RFCI 52 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.52.lri     RFCI 52 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.53         RFCI 53
                        Unsigned 8-bit integer
iuup.rfci.53.flow.0  RFCI 53 Flow 0
                        Byte array
iuup.rfci.53.flow.0.len RFCI 53 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.53.flow.1  RFCI 53 Flow 1
                        Byte array
iuup.rfci.53.flow.1.len RFCI 53 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.53.flow.2  RFCI 53 Flow 2
                        Byte array
iuup.rfci.53.flow.2.len RFCI 53 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.53.flow.3  RFCI 53 Flow 3
                        Byte array
iuup.rfci.53.flow.3.len RFCI 53 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.53.flow.4  RFCI 53 Flow 4
                        Byte array
iuup.rfci.53.flow.4.len RFCI 53 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.53.flow.5  RFCI 53 Flow 5
                        Byte array
iuup.rfci.53.flow.5.len RFCI 53 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.53.flow.6  RFCI 53 Flow 6
                        Byte array
iuup.rfci.53.flow.6.len RFCI 53 Flow 6 Len
                        Unsigned 16-bit integer
```

```
iuup.rfci.53.flow.7  RFCI 53 Flow 7
    Byte array
iuup.rfci.53.flow.7.len  RFCI 53 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.53.ipti  RFCI 53 IPTI
    Unsigned 8-bit integer
iuup.rfci.53.li  RFCI 53 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.53.lri  RFCI 53 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.54  RFCI 54
    Unsigned 8-bit integer
iuup.rfci.54.flow.0  RFCI 54 Flow 0
    Byte array
iuup.rfci.54.flow.0.len  RFCI 54 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.54.flow.1  RFCI 54 Flow 1
    Byte array
iuup.rfci.54.flow.1.len  RFCI 54 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.54.flow.2  RFCI 54 Flow 2
    Byte array
iuup.rfci.54.flow.2.len  RFCI 54 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.54.flow.3  RFCI 54 Flow 3
    Byte array
iuup.rfci.54.flow.3.len  RFCI 54 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.54.flow.4  RFCI 54 Flow 4
    Byte array
iuup.rfci.54.flow.4.len  RFCI 54 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.54.flow.5  RFCI 54 Flow 5
    Byte array
iuup.rfci.54.flow.5.len  RFCI 54 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.54.flow.6  RFCI 54 Flow 6
    Byte array
iuup.rfci.54.flow.6.len  RFCI 54 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.54.flow.7  RFCI 54 Flow 7
    Byte array
```

```
iuup.rfci.54.flow.7.len  RFCI 54 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.54.ipti  RFCI 54 IPTI
    Unsigned 8-bit integer
iuup.rfci.54.li  RFCI 54 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.54.lri  RFCI 54 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.55  RFCI 55
    Unsigned 8-bit integer
iuup.rfci.55.flow.0  RFCI 55 Flow 0
    Byte array
iuup.rfci.55.flow.0.len  RFCI 55 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.55.flow.1  RFCI 55 Flow 1
    Byte array
iuup.rfci.55.flow.1.len  RFCI 55 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.55.flow.2  RFCI 55 Flow 2
    Byte array
iuup.rfci.55.flow.2.len  RFCI 55 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.55.flow.3  RFCI 55 Flow 3
    Byte array
iuup.rfci.55.flow.3.len  RFCI 55 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.55.flow.4  RFCI 55 Flow 4
    Byte array
iuup.rfci.55.flow.4.len  RFCI 55 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.55.flow.5  RFCI 55 Flow 5
    Byte array
iuup.rfci.55.flow.5.len  RFCI 55 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.55.flow.6  RFCI 55 Flow 6
    Byte array
iuup.rfci.55.flow.6.len  RFCI 55 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.55.flow.7  RFCI 55 Flow 7
    Byte array
iuup.rfci.55.flow.7.len  RFCI 55 Flow 7 Len
    Unsigned 16-bit integer
```



```
iuup.rfci.55.ipti  RFCI 55 IPTI
    Unsigned 8-bit integer
iuup.rfci.55.li    RFCI 55 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.55.lri  RFCI 55 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.56      RFCI 56
    Unsigned 8-bit integer
iuup.rfci.56.flow.0  RFCI 56 Flow 0
    Byte array
iuup.rfci.56.flow.0.len  RFCI 56 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.56.flow.1  RFCI 56 Flow 1
    Byte array
iuup.rfci.56.flow.1.len  RFCI 56 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.56.flow.2  RFCI 56 Flow 2
    Byte array
iuup.rfci.56.flow.2.len  RFCI 56 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.56.flow.3  RFCI 56 Flow 3
    Byte array
iuup.rfci.56.flow.3.len  RFCI 56 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.56.flow.4  RFCI 56 Flow 4
    Byte array
iuup.rfci.56.flow.4.len  RFCI 56 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.56.flow.5  RFCI 56 Flow 5
    Byte array
iuup.rfci.56.flow.5.len  RFCI 56 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.56.flow.6  RFCI 56 Flow 6
    Byte array
iuup.rfci.56.flow.6.len  RFCI 56 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.56.flow.7  RFCI 56 Flow 7
    Byte array
iuup.rfci.56.flow.7.len  RFCI 56 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.56.ipti  RFCI 56 IPTI
    Unsigned 8-bit integer
```

```
iuup.rfci.56.li RFCI 56 LI
  Unsigned 8-bit integer
  Length Indicator
iuup.rfci.56.lri RFCI 56 LRI
  Unsigned 8-bit integer
  Last Record Indicator
iuup.rfci.57 RFCI 57
  Unsigned 8-bit integer
iuup.rfci.57.flow.0 RFCI 57 Flow 0
  Byte array
iuup.rfci.57.flow.0.len RFCI 57 Flow 0 Len
  Unsigned 16-bit integer
iuup.rfci.57.flow.1 RFCI 57 Flow 1
  Byte array
iuup.rfci.57.flow.1.len RFCI 57 Flow 1 Len
  Unsigned 16-bit integer
iuup.rfci.57.flow.2 RFCI 57 Flow 2
  Byte array
iuup.rfci.57.flow.2.len RFCI 57 Flow 2 Len
  Unsigned 16-bit integer
iuup.rfci.57.flow.3 RFCI 57 Flow 3
  Byte array
iuup.rfci.57.flow.3.len RFCI 57 Flow 3 Len
  Unsigned 16-bit integer
iuup.rfci.57.flow.4 RFCI 57 Flow 4
  Byte array
iuup.rfci.57.flow.4.len RFCI 57 Flow 4 Len
  Unsigned 16-bit integer
iuup.rfci.57.flow.5 RFCI 57 Flow 5
  Byte array
iuup.rfci.57.flow.5.len RFCI 57 Flow 5 Len
  Unsigned 16-bit integer
iuup.rfci.57.flow.6 RFCI 57 Flow 6
  Byte array
iuup.rfci.57.flow.6.len RFCI 57 Flow 6 Len
  Unsigned 16-bit integer
iuup.rfci.57.flow.7 RFCI 57 Flow 7
  Byte array
iuup.rfci.57.flow.7.len RFCI 57 Flow 7 Len
  Unsigned 16-bit integer
iuup.rfci.57.ipti RFCI 57 IPTI
  Unsigned 8-bit integer
iuup.rfci.57.li RFCI 57 LI
  Unsigned 8-bit integer
  Length Indicator
```

```
iuup.rfci.57.lri RFCI 57 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.58 RFCI 58
    Unsigned 8-bit integer
iuup.rfci.58.flow.0 RFCI 58 Flow 0
    Byte array
iuup.rfci.58.flow.0.len RFCI 58 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.58.flow.1 RFCI 58 Flow 1
    Byte array
iuup.rfci.58.flow.1.len RFCI 58 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.58.flow.2 RFCI 58 Flow 2
    Byte array
iuup.rfci.58.flow.2.len RFCI 58 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.58.flow.3 RFCI 58 Flow 3
    Byte array
iuup.rfci.58.flow.3.len RFCI 58 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.58.flow.4 RFCI 58 Flow 4
    Byte array
iuup.rfci.58.flow.4.len RFCI 58 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.58.flow.5 RFCI 58 Flow 5
    Byte array
iuup.rfci.58.flow.5.len RFCI 58 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.58.flow.6 RFCI 58 Flow 6
    Byte array
iuup.rfci.58.flow.6.len RFCI 58 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.58.flow.7 RFCI 58 Flow 7
    Byte array
iuup.rfci.58.flow.7.len RFCI 58 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.58.ipti RFCI 58 IPTI
    Unsigned 8-bit integer
iuup.rfci.58.li RFCI 58 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.58.lri RFCI 58 LRI
    Unsigned 8-bit integer
    Last Record Indicator
```

```
iuup.rfci.59 RFCI 59
    Unsigned 8-bit integer
iuup.rfci.59.flow.0 RFCI 59 Flow 0
    Byte array
iuup.rfci.59.flow.0.len RFCI 59 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.59.flow.1 RFCI 59 Flow 1
    Byte array
iuup.rfci.59.flow.1.len RFCI 59 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.59.flow.2 RFCI 59 Flow 2
    Byte array
iuup.rfci.59.flow.2.len RFCI 59 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.59.flow.3 RFCI 59 Flow 3
    Byte array
iuup.rfci.59.flow.3.len RFCI 59 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.59.flow.4 RFCI 59 Flow 4
    Byte array
iuup.rfci.59.flow.4.len RFCI 59 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.59.flow.5 RFCI 59 Flow 5
    Byte array
iuup.rfci.59.flow.5.len RFCI 59 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.59.flow.6 RFCI 59 Flow 6
    Byte array
iuup.rfci.59.flow.6.len RFCI 59 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.59.flow.7 RFCI 59 Flow 7
    Byte array
iuup.rfci.59.flow.7.len RFCI 59 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.59.ipti RFCI 59 IPTI
    Unsigned 8-bit integer
iuup.rfci.59.li RFCI 59 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.59.lri RFCI 59 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.6 RFCI 6
    Unsigned 8-bit integer
```

```
iuup.rfci.6.flow.0 RFCI 6 Flow 0
    Byte array
iuup.rfci.6.flow.0.len RFCI 6 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.6.flow.1 RFCI 6 Flow 1
    Byte array
iuup.rfci.6.flow.1.len RFCI 6 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.6.flow.2 RFCI 6 Flow 2
    Byte array
iuup.rfci.6.flow.2.len RFCI 6 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.6.flow.3 RFCI 6 Flow 3
    Byte array
iuup.rfci.6.flow.3.len RFCI 6 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.6.flow.4 RFCI 6 Flow 4
    Byte array
iuup.rfci.6.flow.4.len RFCI 6 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.6.flow.5 RFCI 6 Flow 5
    Byte array
iuup.rfci.6.flow.5.len RFCI 6 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.6.flow.6 RFCI 6 Flow 6
    Byte array
iuup.rfci.6.flow.6.len RFCI 6 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.6.flow.7 RFCI 6 Flow 7
    Byte array
iuup.rfci.6.flow.7.len RFCI 6 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.6.ipti RFCI 6 IPTI
    Unsigned 8-bit integer
iuup.rfci.6.li RFCI 6 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.6.lri RFCI 6 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.60 RFCI 60
    Unsigned 8-bit integer
iuup.rfci.60.flow.0 RFCI 60 Flow 0
    Byte array
```

```
iuup.rfci.60.flow.0.len  RFCI 60 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.60.flow.1  RFCI 60 Flow 1
    Byte array
iuup.rfci.60.flow.1.len  RFCI 60 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.60.flow.2  RFCI 60 Flow 2
    Byte array
iuup.rfci.60.flow.2.len  RFCI 60 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.60.flow.3  RFCI 60 Flow 3
    Byte array
iuup.rfci.60.flow.3.len  RFCI 60 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.60.flow.4  RFCI 60 Flow 4
    Byte array
iuup.rfci.60.flow.4.len  RFCI 60 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.60.flow.5  RFCI 60 Flow 5
    Byte array
iuup.rfci.60.flow.5.len  RFCI 60 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.60.flow.6  RFCI 60 Flow 6
    Byte array
iuup.rfci.60.flow.6.len  RFCI 60 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.60.flow.7  RFCI 60 Flow 7
    Byte array
iuup.rfci.60.flow.7.len  RFCI 60 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.60.ipti  RFCI 60 IPTI
    Unsigned 8-bit integer
iuup.rfci.60.li  RFCI 60 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.60.lri  RFCI 60 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.61  RFCI 61
    Unsigned 8-bit integer
iuup.rfci.61.flow.0  RFCI 61 Flow 0
    Byte array
iuup.rfci.61.flow.0.len  RFCI 61 Flow 0 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.61.flow.1  RFCI 61 Flow 1
    Byte array
iuup.rfci.61.flow.1.len  RFCI 61 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.61.flow.2  RFCI 61 Flow 2
    Byte array
iuup.rfci.61.flow.2.len  RFCI 61 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.61.flow.3  RFCI 61 Flow 3
    Byte array
iuup.rfci.61.flow.3.len  RFCI 61 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.61.flow.4  RFCI 61 Flow 4
    Byte array
iuup.rfci.61.flow.4.len  RFCI 61 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.61.flow.5  RFCI 61 Flow 5
    Byte array
iuup.rfci.61.flow.5.len  RFCI 61 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.61.flow.6  RFCI 61 Flow 6
    Byte array
iuup.rfci.61.flow.6.len  RFCI 61 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.61.flow.7  RFCI 61 Flow 7
    Byte array
iuup.rfci.61.flow.7.len  RFCI 61 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.61.ipti  RFCI 61 IPTI
    Unsigned 8-bit integer
iuup.rfci.61.li  RFCI 61 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.61.lri  RFCI 61 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.62  RFCI 62
    Unsigned 8-bit integer
iuup.rfci.62.flow.0  RFCI 62 Flow 0
    Byte array
iuup.rfci.62.flow.0.len  RFCI 62 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.62.flow.1  RFCI 62 Flow 1
    Byte array
```

```
iuup.rfci.62.flow.1.len  RFCI 62 Flow 1 Len
                        Unsigned 16-bit integer
iuup.rfci.62.flow.2    RFCI 62 Flow 2
                        Byte array
iuup.rfci.62.flow.2.len RFCI 62 Flow 2 Len
                        Unsigned 16-bit integer
iuup.rfci.62.flow.3    RFCI 62 Flow 3
                        Byte array
iuup.rfci.62.flow.3.len RFCI 62 Flow 3 Len
                        Unsigned 16-bit integer
iuup.rfci.62.flow.4    RFCI 62 Flow 4
                        Byte array
iuup.rfci.62.flow.4.len RFCI 62 Flow 4 Len
                        Unsigned 16-bit integer
iuup.rfci.62.flow.5    RFCI 62 Flow 5
                        Byte array
iuup.rfci.62.flow.5.len RFCI 62 Flow 5 Len
                        Unsigned 16-bit integer
iuup.rfci.62.flow.6    RFCI 62 Flow 6
                        Byte array
iuup.rfci.62.flow.6.len RFCI 62 Flow 6 Len
                        Unsigned 16-bit integer
iuup.rfci.62.flow.7    RFCI 62 Flow 7
                        Byte array
iuup.rfci.62.flow.7.len RFCI 62 Flow 7 Len
                        Unsigned 16-bit integer
iuup.rfci.62.ipti     RFCI 62 IPTI
                        Unsigned 8-bit integer
iuup.rfci.62.li       RFCI 62 LI
                        Unsigned 8-bit integer
                        Length Indicator
iuup.rfci.62.lri     RFCI 62 LRI
                        Unsigned 8-bit integer
                        Last Record Indicator
iuup.rfci.63         RFCI 63
                        Unsigned 8-bit integer
iuup.rfci.63.flow.0  RFCI 63 Flow 0
                        Byte array
iuup.rfci.63.flow.0.len RFCI 63 Flow 0 Len
                        Unsigned 16-bit integer
iuup.rfci.63.flow.1  RFCI 63 Flow 1
                        Byte array
iuup.rfci.63.flow.1.len RFCI 63 Flow 1 Len
                        Unsigned 16-bit integer
```



```
iuup.rfci.63.flow.2 RFCI 63 Flow 2
    Byte array
iuup.rfci.63.flow.2.len RFCI 63 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.63.flow.3 RFCI 63 Flow 3
    Byte array
iuup.rfci.63.flow.3.len RFCI 63 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.63.flow.4 RFCI 63 Flow 4
    Byte array
iuup.rfci.63.flow.4.len RFCI 63 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.63.flow.5 RFCI 63 Flow 5
    Byte array
iuup.rfci.63.flow.5.len RFCI 63 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.63.flow.6 RFCI 63 Flow 6
    Byte array
iuup.rfci.63.flow.6.len RFCI 63 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.63.flow.7 RFCI 63 Flow 7
    Byte array
iuup.rfci.63.flow.7.len RFCI 63 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.63.ipti RFCI 63 IPTI
    Unsigned 8-bit integer
iuup.rfci.63.li RFCI 63 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.63.lri RFCI 63 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.7 RFCI 7
    Unsigned 8-bit integer
iuup.rfci.7.flow.0 RFCI 7 Flow 0
    Byte array
iuup.rfci.7.flow.0.len RFCI 7 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.7.flow.1 RFCI 7 Flow 1
    Byte array
iuup.rfci.7.flow.1.len RFCI 7 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.7.flow.2 RFCI 7 Flow 2
    Byte array
```

```
iuup.rfci.7.flow.2.len RFCI 7 Flow 2 Len
    Unsigned 16-bit integer
iuup.rfci.7.flow.3 RFCI 7 Flow 3
    Byte array
iuup.rfci.7.flow.3.len RFCI 7 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.7.flow.4 RFCI 7 Flow 4
    Byte array
iuup.rfci.7.flow.4.len RFCI 7 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.7.flow.5 RFCI 7 Flow 5
    Byte array
iuup.rfci.7.flow.5.len RFCI 7 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.7.flow.6 RFCI 7 Flow 6
    Byte array
iuup.rfci.7.flow.6.len RFCI 7 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.7.flow.7 RFCI 7 Flow 7
    Byte array
iuup.rfci.7.flow.7.len RFCI 7 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.7.ipti RFCI 7 IPTI
    Unsigned 8-bit integer
iuup.rfci.7.li RFCI 7 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.7.lri RFCI 7 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.8 RFCI 8
    Unsigned 8-bit integer
iuup.rfci.8.flow.0 RFCI 8 Flow 0
    Byte array
iuup.rfci.8.flow.0.len RFCI 8 Flow 0 Len
    Unsigned 16-bit integer
iuup.rfci.8.flow.1 RFCI 8 Flow 1
    Byte array
iuup.rfci.8.flow.1.len RFCI 8 Flow 1 Len
    Unsigned 16-bit integer
iuup.rfci.8.flow.2 RFCI 8 Flow 2
    Byte array
iuup.rfci.8.flow.2.len RFCI 8 Flow 2 Len
    Unsigned 16-bit integer
```

```
iuup.rfci.8.flow.3  RFCI 8 Flow 3
  Byte array
iuup.rfci.8.flow.3.len  RFCI 8 Flow 3 Len
  Unsigned 16-bit integer
iuup.rfci.8.flow.4  RFCI 8 Flow 4
  Byte array
iuup.rfci.8.flow.4.len  RFCI 8 Flow 4 Len
  Unsigned 16-bit integer
iuup.rfci.8.flow.5  RFCI 8 Flow 5
  Byte array
iuup.rfci.8.flow.5.len  RFCI 8 Flow 5 Len
  Unsigned 16-bit integer
iuup.rfci.8.flow.6  RFCI 8 Flow 6
  Byte array
iuup.rfci.8.flow.6.len  RFCI 8 Flow 6 Len
  Unsigned 16-bit integer
iuup.rfci.8.flow.7  RFCI 8 Flow 7
  Byte array
iuup.rfci.8.flow.7.len  RFCI 8 Flow 7 Len
  Unsigned 16-bit integer
iuup.rfci.8.ipti  RFCI 8 IPTI
  Unsigned 8-bit integer
iuup.rfci.8.li  RFCI 8 LI
  Unsigned 8-bit integer
  Length Indicator
iuup.rfci.8.lri  RFCI 8 LRI
  Unsigned 8-bit integer
  Last Record Indicator
iuup.rfci.9  RFCI 9
  Unsigned 8-bit integer
iuup.rfci.9.flow.0  RFCI 9 Flow 0
  Byte array
iuup.rfci.9.flow.0.len  RFCI 9 Flow 0 Len
  Unsigned 16-bit integer
iuup.rfci.9.flow.1  RFCI 9 Flow 1
  Byte array
iuup.rfci.9.flow.1.len  RFCI 9 Flow 1 Len
  Unsigned 16-bit integer
iuup.rfci.9.flow.2  RFCI 9 Flow 2
  Byte array
iuup.rfci.9.flow.2.len  RFCI 9 Flow 2 Len
  Unsigned 16-bit integer
iuup.rfci.9.flow.3  RFCI 9 Flow 3
  Byte array
```

```
iuup.rfci.9.flow.3.len  RFCI 9 Flow 3 Len
    Unsigned 16-bit integer
iuup.rfci.9.flow.4    RFCI 9 Flow 4
    Byte array
iuup.rfci.9.flow.4.len RFCI 9 Flow 4 Len
    Unsigned 16-bit integer
iuup.rfci.9.flow.5    RFCI 9 Flow 5
    Byte array
iuup.rfci.9.flow.5.len RFCI 9 Flow 5 Len
    Unsigned 16-bit integer
iuup.rfci.9.flow.6    RFCI 9 Flow 6
    Byte array
iuup.rfci.9.flow.6.len RFCI 9 Flow 6 Len
    Unsigned 16-bit integer
iuup.rfci.9.flow.7    RFCI 9 Flow 7
    Byte array
iuup.rfci.9.flow.7.len RFCI 9 Flow 7 Len
    Unsigned 16-bit integer
iuup.rfci.9.ipti      RFCI 9 IPTI
    Unsigned 8-bit integer
iuup.rfci.9.li        RFCI 9 LI
    Unsigned 8-bit integer
    Length Indicator
iuup.rfci.9.lri       RFCI 9 LRI
    Unsigned 8-bit integer
    Last Record Indicator
iuup.rfci.init        RFCI Initialization
    Byte array
iuup.spare            Spare
    Unsigned 8-bit integer
iuup.subflows         Subflows
    Unsigned 8-bit integer
    Number of Subflows
iuup.support_mode     Iu UP Mode Versions Supported
    Unsigned 16-bit integer
iuup.support_mode.version1  Version 1
    Unsigned 16-bit integer
iuup.support_mode.version10  Version 10
    Unsigned 16-bit integer
iuup.support_mode.version11  Version 11
    Unsigned 16-bit integer
iuup.support_mode.version12  Version 12
    Unsigned 16-bit integer
iuup.support_mode.version13  Version 13
    Unsigned 16-bit integer
```

```

iuup.support_mode.version14  Version 14
    Unsigned 16-bit integer
iuup.support_mode.version15  Version 15
    Unsigned 16-bit integer
iuup.support_mode.version16  Version 16
    Unsigned 16-bit integer
iuup.support_mode.version2   Version  2
    Unsigned 16-bit integer
iuup.support_mode.version3   Version  3
    Unsigned 16-bit integer
iuup.support_mode.version4   Version  4
    Unsigned 16-bit integer
iuup.support_mode.version5   Version  5
    Unsigned 16-bit integer
iuup.support_mode.version6   Version  6
    Unsigned 16-bit integer
iuup.support_mode.version7   Version  7
    Unsigned 16-bit integer
iuup.support_mode.version8   Version  8
    Unsigned 16-bit integer
iuup.support_mode.version9   Version  9
    Unsigned 16-bit integer
iuup.ti  TI
    Unsigned 8-bit integer
    Timing Information
iuup.time_align  Time Align
    Unsigned 8-bit integer

```

#### **JPEG File Interchange Format (image-jfif)**

```

image-jfif.RGB  RGB values of thumbnail pixels
    Byte array
    RGB values of the thumbnail pixels (24 bit per pixel, Xthumbnail x Ythumbnail)
image-jfif.Xdensity  Xdensity
    Unsigned 16-bit integer
    Horizontal pixel density
image-jfif.Xthumbnail  Xthumbnail
    Unsigned 16-bit integer
    Thumbnail horizontal pixel count
image-jfif.Ydensity  Ydensity
    Unsigned 16-bit integer
    Vertical pixel density
image-jfif.Ythumbnail  Ythumbnail
    Unsigned 16-bit integer
    Thumbnail vertical pixel count

```

```
image-jfif.extension.code  Extension code
    Unsigned 8-bit integer
    JFXX extension code for thumbnail encoding
image-jfif.header.sos      Start of Segment header
    No value
    Start of Segment header
image-jfif.identifier      Identifier
    String
    Identifier of the segment
image-jfif.length          Length
    Unsigned 16-bit integer
    Length of segment (including length field)
image-jfif.marker          Marker
    Unsigned 8-bit integer
    JFIF Marker
image-jfif.sof             Start of Frame header
    No value
    Start of Frame header
image-jfif.sof.c_i         Component identifier
    Unsigned 8-bit integer
    Assigns a unique label to the ith component in the sequence of frame compone
image-jfif.sof.h_i         Horizontal sampling factor
    Unsigned 8-bit integer
    Specifies the relationship between the component horizontal dimension and ma
image-jfif.sof.lines       Lines
    Unsigned 16-bit integer
    Specifies the maximum number of lines in the source image.
image-jfif.sof.nf          Number of image components in frame
    Unsigned 8-bit integer
    Specifies the number of source image components in the frame.
image-jfif.sof.precision  Sample Precision (bits)
    Unsigned 8-bit integer
    Specifies the precision in bits for the samples of the components in the fra
image-jfif.sof.samples_per_line  Samples per line
    Unsigned 16-bit integer
    Specifies the maximum number of samples per line in the source image.
image-jfif.sof.tq_i        Quantization table destination selector
    Unsigned 8-bit integer
    Specifies one of four possible quantization table destinations from which th
image-jfif.sof.v_i         Vertical sampling factor
    Unsigned 8-bit integer
    Specifies the relationship between the component vertical dimension and maxi
image-jfif.sos.ac_entropy_selector  AC entropy coding table destination selector
    Unsigned 8-bit integer
    Specifies one of four possible AC entropy coding table destinations from whi
image-jfif.sos.ah          Successive approximation bit position high
    Unsigned 8-bit integer
    This parameter specifies the point transform used in the preceding scan (i.e
```

image-jfif.sos.al Successive approximation bit position low or point transform  
 Unsigned 8-bit integer  
 In the DCT modes of operation this parameter specifies the point transform,

image-jfif.sos.component\_selector Scan component selector  
 Unsigned 8-bit integer  
 Selects which of the Nf image components specified in the frame parameters s

image-jfif.sos.dc\_entropy\_selector DC entropy coding table destination selector  
 Unsigned 8-bit integer  
 Specifies one of four possible DC entropy coding table destinations from whi

image-jfif.sos.ns Number of image components in scan  
 Unsigned 8-bit integer  
 Specifies the number of source image components in the scan.

image-jfif.sos.se End of spectral selection  
 Unsigned 8-bit integer  
 Specifies the last DCT coefficient in each block in zig-zag order which shal

image-jfif.sos.ss Start of spectral or predictor selection  
 Unsigned 8-bit integer  
 In the DCT modes of operation, this parameter specifies the first DCT coeffi

image-jfif.units Units  
 Unsigned 8-bit integer  
 Units used in this segment

image-jfif.version Version  
 No value  
 JFIF Version

image-jfif.version.major Major Version  
 Unsigned 8-bit integer  
 JFIF Major Version

image-jfif.version.minor Minor Version  
 Unsigned 8-bit integer  
 JFIF Minor Version

image-jfifmarker\_segment Marker segment  
 No value  
 Marker segment

**JXTA Message (jxta.message)****JXTA P2P (jxta)**

jxta.framing Framing  
 No value  
 JXTA Message Framing

jxta.framing.header Header  
 No value  
 JXTA Message Framing Header

jxta.framing.header.name Name  
 String  
 JXTA Message Framing Header Name

```
jxta.framing.header.value Value
  Byte array
  JXTA Message Framing Header Value
jxta.framing.header.valuelen Value Length
  Unsigned 16-bit integer
  JXTA Message Framing Header Value Length
jxta.message.address Address
  String
  JXTA Message Address (source or destination)
jxta.message.destination Destination
  String
  JXTA Message Destination
jxta.message.element JXTA Message Element
  No value
  JXTA Message Element
jxta.message.element.content Element Content
  Byte array
  JXTA Message Element Content
jxta.message.element.content.length Element Content Length
  Unsigned 32-bit integer
  JXTA Message Element Content Length
jxta.message.element.encoding Element Type
  String
  JXTA Message Element Encoding
jxta.message.element.encodingid Encoding ID
  Unsigned 16-bit integer
  JXTA Message Element Encoding ID
jxta.message.element.flags Flags
  Unsigned 8-bit integer
  JXTA Message Element Flags
jxta.message.element.flags.hasEncoding hasEncoding
  Boolean
  JXTA Message Element Flag -- hasEncoding
jxta.message.element.flags.hasSignature hasSignature
  Boolean
  JXTA Message Element Flag -- hasSignature
jxta.message.element.flags.hasType hasType
  Boolean
  JXTA Message Element Flag -- hasType
jxta.message.element.flags.nameLiteral nameLiteral
  Boolean
  JXTA Message Element Flag -- nameLiteral
jxta.message.element.flags.sigOfEncoded sigOfEncoded
  Boolean
  JXTA Message Element Flag -- sigOfEncoded
jxta.message.element.flags.uint64Lens uint64Lens
  Boolean
  JXTA Message Element Flag -- uint64Lens
```



```
jxta.message.element.mimeid  MIME ID
    Unsigned 16-bit integer
    JXTA Message Element MIME ID

jxta.message.element.name  Element Name
    String
    JXTA Message Element Name

jxta.message.element.nameid  Name ID
    Unsigned 16-bit integer
    JXTA Message Element Name ID

jxta.message.element.namespaceid  Namespace ID
    Unsigned 8-bit integer
    JXTA Message Element Namespace ID

jxta.message.element.signature  Signature
    String
    JXTA Message Element Signature

jxta.message.element.type  Element Type
    String
    JXTA Message Element Name

jxta.message.elements  Element Count
    Unsigned 16-bit integer
    JXTA Message Element Count

jxta.message.flags  Flags
    Unsigned 8-bit integer
    JXTA Message Flags

jxta.message.flags.UCS32BE  UCS32BE
    Boolean
    JXTA Message Flag -- UCS32-BE Strings

jxta.message.flags.UTF-16BE  UTF16BE
    Boolean
    JXTA Message Element Flag -- UTF16-BE Strings

jxta.message.names  Names Count
    Unsigned 16-bit integer
    JXTA Message Names Table

jxta.message.names.name  Names Table Name
    String
    JXTA Message Names Table Name

jxta.message.signature  Signature
    String
    JXTA Message Signature

jxta.message.source  Source
    String
    JXTA Message Source

jxta.message.version  Version
    Unsigned 8-bit integer
    JXTA Message Version

jxta.udp  JXTA UDP
    No value
    JXTA UDP
```

```
jxta.udpsig  Signature
             String
             JXTA UDP Signature
jxta.welcome  Welcome
             No value
             JXTA Connection Welcome Message
jxta.welcome.destAddr  Destination Address
             String
             JXTA Connection Welcome Message Destination Address
jxta.welcome.initiator  Initiator
             Boolean
             JXTA Connection Welcome Message Initiator
jxta.welcome.msgVersion  Preferred Message Version
             String
             JXTA Connection Welcome Message Preferred Message Version
jxta.welcome.noPropFlag  No Propagate Flag
             String
             JXTA Connection Welcome Message No Propagate Flag
jxta.welcome.peerid  PeerID
             String
             JXTA Connection Welcome Message PeerID
jxta.welcome.pubAddr  Public Address
             String
             JXTA Connection Welcome Message Public Address
jxta.welcome.signature  Signature
             String
             JXTA Connection Welcome Message Signature
jxta.welcome.variable  Variable Parameter
             String
             JXTA Connection Welcome Message Variable Parameter
jxta.welcome.version  Version
             String
             JXTA Connection Welcome Message Version
uri.addr  Address
          String
          URI Address (source or destination)
uri.dst  Destination
        String
        URI Destination
uri.src  Source
        String
        URI Source
```

#### **Jabber XML Messaging (jabber)**

```
jabber.request  Request
               Boolean
               TRUE if Jabber request
```

```
jabber.response Response
  Boolean
  TRUE if Jabber response
```

**Java RMI (rmi)**

```
rmi.endpoint_id.hostname Hostname
  String
  RMI Endpointidentifier Hostname

rmi.endpoint_id.length Length
  Unsigned 16-bit integer
  RMI Endpointidentifier Length

rmi.endpoint_id.port Port
  Unsigned 16-bit integer
  RMI Endpointindentifier Port

rmi.inputstream.message Input Stream Message
  Unsigned 8-bit integer
  RMI Inputstream Message Token

rmi.magic Magic
  Unsigned 32-bit integer
  RMI Header Magic

rmi.outputstream.message Output Stream Message
  Unsigned 8-bit integer
  RMI Outputstream Message token

rmi.protocol Protocol
  Unsigned 8-bit integer
  RMI Protocol Type

rmi.ser.magic Magic
  Unsigned 16-bit integer
  Java Serialization Magic

rmi.ser.version Version
  Unsigned 16-bit integer
  Java Serialization Version

rmi.version Version
  Unsigned 16-bit integer
  RMI Protocol Version
```

**Java Serialization (serialization)****Juniper (juniper)**

```
juniper.aspic.cookie Cookie
  Unsigned 64-bit integer

juniper.atm1.cookie Cookie
  Unsigned 32-bit integer

juniper.atm2.cookie Cookie
  Unsigned 64-bit integer

juniper.direction Direction
  Unsigned 8-bit integer
```

```
juniper.ext.ifd Device Interface Index
    Unsigned 32-bit integer
juniper.ext.ifl Logical Interface Index
    Unsigned 32-bit integer
juniper.ext.ifle Logical Interface Encapsulation
    Unsigned 16-bit integer
juniper.ext.ifmt Device Media Type
    Unsigned 16-bit integer
juniper.ext.ttp_ifle TTP derived Logical Interface Encapsulation
    Unsigned 16-bit integer
juniper.ext.ttp_ifmt TTP derived Device Media Type
    Unsigned 16-bit integer
juniper.ext.unit Logical Unit Number
    Unsigned 32-bit integer
juniper.ext_total_len Extension(s) Total length
    Unsigned 16-bit integer
juniper.l2hdr L2 header presence
    Unsigned 8-bit integer
juniper.lspic.cookie Cookie
    Unsigned 32-bit integer
juniper.magic-number Magic Number
    Unsigned 24-bit integer
juniper.mlpic.cookie Cookie
    Unsigned 16-bit integer
juniper.proto Protocol
    Unsigned 16-bit integer
juniper.vlan Vlan ID
    Unsigned 16-bit integer
```

#### **Juniper Netscreen Redundant Protocol (nsrp)**

```
nsrp.authchecksum Checksum
    Unsigned 16-bit integer
    NSRP AUTH CHECKSUM
nsrp.authflag AuthFlag
    Unsigned 8-bit integer
    NSRP Auth Flag
nsrp.checksum Checksum
    Unsigned 16-bit integer
    NSRP PACKET CHECKSUM
nsrp.clustid Clust ID
    Unsigned 8-bit integer
    NSRP CLUST ID
nsrp.data Data
    String
    PADDING
```

```
nsrp.dst Destination
    Unsigned 32-bit integer
    DESTINATION UNIT INFORMATION

nsrp.dummy Dummy
    Unsigned 8-bit integer
    NSRP Dummy

nsrp.encflag Enc Flag
    Unsigned 8-bit integer
    NSRP ENCRYPT FLAG

nsrp.flag Flag
    Unsigned 8-bit integer
    NSRP FLAG

nsrp.haport Port
    Unsigned 8-bit integer
    NSRP HA Port

nsrp.hst Hst group
    Unsigned 8-bit integer
    NSRP HST GROUP

nsrp.ifnum Ifnum
    Unsigned 16-bit integer
    NSRP IfNum

nsrp.length Length
    Unsigned 16-bit integer
    NSRP Length

nsrp.msgflag Msgflag
    Unsigned 8-bit integer
    NSRP MSG FLAG

nsrp.msglen Msg Length
    Unsigned 16-bit integer
    NSRP MESSAGE LENGTH

nsrp.msgtype MsgType
    Unsigned 8-bit integer
    Message Type

nsrp.notused Not used
    Unsigned 8-bit integer
    NOT USED

nsrp.nr Nr
    Unsigned 16-bit integer
    Nr

nsrp.ns Ns
    Unsigned 16-bit integer
    Ns

nsrp.priority Priority
    Unsigned 8-bit integer
    NSRP Priority

nsrp.reserved Reserved
    Unsigned 16-bit integer
    RESERVED
```

```
nsrp.src Source
    Unsigned 32-bit integer
    SOURCE UNIT INFORMATION

nsrp.totalsize Total Size
    Unsigned 32-bit integer
    NSRP MSG TOTAL MESSAGE

nsrp.type Type
    Unsigned 8-bit integer
    NSRP Message Type

nsrp.version Version
    Unsigned 8-bit integer
    NSRP Version

nsrp.wst Wst group
    Unsigned 8-bit integer
    NSRP WST GROUP
```

**K12xx (k12)**

```
aal2.cid AAL2 CID
    Unsigned 16-bit integer

k12.ds0.ts Timeslot mask
    Unsigned 32-bit integer

k12.input_type Port type
    Unsigned 32-bit integer

k12.port_id Port Id
    Unsigned 32-bit integer

k12.port_name Port Name
    String

k12.stack_file Stack file used
    String
```

**Kerberized Internet Negotiation of Key (kink)**

```
kink.A A
    Unsigned 8-bit integer
    the A of kink

kink.checkSum Checksum
    Byte array
    the checkSum of kink

kink.checkSumLength Checksum Length
    Unsigned 8-bit integer
    the check sum length of kink

kink.length Length
    Unsigned 16-bit integer
    the length of the kink length

kink.nextPayload Next Payload
    Unsigned 8-bit integer
    the next payload of kink
```

kink.reserved Reserved  
Unsigned 16-bit integer  
the reserved of kink

kink.transactionId Transaction ID  
Unsigned 32-bit integer  
the transactionID of kink

kink.type Type  
Unsigned 8-bit integer  
the type of the kink

**Kerberos (kerberos)**

kerberos.Authenticator Authenticator  
No value  
This is a decrypted Kerberos Authenticator sequence

kerberos.AuthorizationData AuthorizationData  
No value  
This is a Kerberos AuthorizationData sequence

kerberos.Checksum Checksum  
No value  
This is a Kerberos Checksum sequence

kerberos.ENC\_PRIV enc PRIV  
Byte array  
Encrypted PRIV blob

kerberos.EncAPRepPart EncAPRepPart  
No value  
This is a decrypted Kerberos EncAPRepPart sequence

kerberos.EncKDCRepPart EncKDCRepPart  
No value  
This is a decrypted Kerberos EncKDCRepPart sequence

kerberos.EncKrbCredPart EncKrbCredPart  
No value  
This is a decrypted Kerberos EncKrbCredPart sequence

kerberos.EncKrbCredPart.encrypted enc EncKrbCredPart  
Byte array  
Encrypted EncKrbCredPart blob

kerberos.EncKrbPrivPart EncKrbPrivPart  
No value  
This is a decrypted Kerberos EncKrbPrivPart sequence

kerberos.EncTicketPart EncTicketPart  
No value  
This is a decrypted Kerberos EncTicketPart sequence

kerberos.IF\_RELEVANT.type Type  
Unsigned 32-bit integer  
IF-RELEVANT Data Type

kerberos.IF\_RELEVANT.value Data  
Byte array  
IF\_RELEVANT Data

```
kerberos.KrbCredInfo  KrbCredInfo
    No value
    This is a Kerberos KrbCredInfo
kerberos.KrbCredInfos  Sequence of KrbCredInfo
    No value
    This is a list of KrbCredInfo
kerberos.LastReq  LastReq
    No value
    This is a LastReq sequence
kerberos.LastReqs  LastReqs
    No value
    This is a list of LastReq structures
kerberos.PAC_CLIENT_INFO_TYPE  PAC_CLIENT_INFO_TYPE
    Byte array
    PAC_CLIENT_INFO_TYPE structure
kerberos.PAC_CONSTRAINED_DELEGATION  PAC_CONSTRAINED_DELEGATION
    Byte array
    PAC_CONSTRAINED_DELEGATION structure
kerberos.PAC_CREDENTIAL_TYPE  PAC_CREDENTIAL_TYPE
    Byte array
    PAC_CREDENTIAL_TYPE structure
kerberos.PAC_LOGON_INFO  PAC_LOGON_INFO
    Byte array
    PAC_LOGON_INFO structure
kerberos.PAC_PRIVSVR_CHECKSUM  PAC_PRIVSVR_CHECKSUM
    Byte array
    PAC_PRIVSVR_CHECKSUM structure
kerberos.PAC_SERVER_CHECKSUM  PAC_SERVER_CHECKSUM
    Byte array
    PAC_SERVER_CHECKSUM structure
kerberos.PA_ENC_TIMESTAMP.encrypted  enc PA_ENC_TIMESTAMP
    Byte array
    Encrypted PA-ENC-TIMESTAMP blob
kerberos.PRIV_BODY.user_data  User Data
    Byte array
    PRIV BODY userdata field
kerberos.SAFE_BODY.timestamp  Timestamp
    String
    Timestamp of this SAFE_BODY
kerberos.SAFE_BODY.usec  usec
    Unsigned 32-bit integer
    micro second component of SAFE_BODY time
kerberos.SAFE_BODY.user_data  User Data
    Byte array
    SAFE BODY userdata field
kerberos.TransitedEncoding  TransitedEncoding
    No value
    This is a Kerberos TransitedEncoding sequence
```



```
kerberos.addr_ip  IP Address
  IPv4 address
  IP Address
kerberos.addr_nb  NetBIOS Address
  String
  NetBIOS Address and type
kerberos.addr_type  Addr-type
  Unsigned 32-bit integer
  Address Type
kerberos.adtype  Type
  Unsigned 32-bit integer
  Authorization Data Type
kerberos.advalue  Data
  Byte array
  Authentication Data
kerberos.apoptions  APOptions
  Byte array
  Kerberos APOptions bitstring
kerberos.apoptions.mutual_required  Mutual required
  Boolean
kerberos.apoptions.use_session_key  Use Session Key
  Boolean
kerberos.aprep.data  enc-part
  Byte array
  The encrypted part of AP-REP
kerberos.aprep.enc_part  enc-part
  No value
  The structure holding the encrypted part of AP-REP
kerberos.authenticator  Authenticator
  No value
  Encrypted authenticator blob
kerberos.authenticator.data  Authenticator data
  Byte array
  Data content of an encrypted authenticator
kerberos.authenticator_vno  Authenticator vno
  Unsigned 32-bit integer
  Version Number for the Authenticator
kerberos.authtime  Authtime
  String
  Time of initial authentication
kerberos.checksum.checksum  checksum
  Byte array
  Kerberos Checksum
kerberos.checksum.type  Type
  Unsigned 32-bit integer
  Type of checksum
```

kerberos.cname Client Name  
No value  
The name part of the client principal identifier

kerberos.crealm Client Realm  
String  
Name of the Clients Kerberos Realm

kerberos.cred\_body CRED\_BODY  
No value  
Kerberos CREDential BODY

kerberos.ctime ctime  
String  
Current Time on the client host

kerberos.cusec cusec  
Unsigned 32-bit integer  
micro second component of client time

kerberos.e\_checksum e-checksum  
No value  
This is a Kerberos e-checksum

kerberos.e\_data e-data  
No value  
The e-data blob

kerberos.e\_text e-text  
String  
Additional (human readable) error description

kerberos.enc\_priv Encrypted PRIV  
No value  
Kerberos Encrypted PRIVate blob data

kerberos.encrypted\_cred EncKrbCredPart  
No value  
Encrypted Cred blob

kerberos.endtime End time  
String  
The time after which the ticket has expired

kerberos.error\_code error\_code  
Unsigned 32-bit integer  
Kerberos error code

kerberos.etype Encryption type  
Signed 32-bit integer  
Encryption Type

kerberos.etype\_info.s2kparams Salt  
Byte array  
S2kparams

kerberos.etype\_info.salt Salt  
Byte array  
Salt

kerberos.etype\_info2.salt Salt  
Byte array  
Salt

```
kerberos.etypes  Encryption Types
  No value
  This is a list of Kerberos encryption types
kerberos.from    from
  String
  From when the ticket is to be valid (postdating)
kerberos.gssapi.bdn  Bnd
  Byte array
  GSSAPI Bnd field
kerberos.gssapi.checksum.flags.conf  Conf
  Boolean
kerberos.gssapi.checksum.flags.dce-style  DCE-style
  Boolean
kerberos.gssapi.checksum.flags.deleg  Deleg
  Boolean
kerberos.gssapi.checksum.flags.integ  Integ
  Boolean
kerberos.gssapi.checksum.flags.mutual  Mutual
  Boolean
kerberos.gssapi.checksum.flags.replay  Replay
  Boolean
kerberos.gssapi.checksum.flags.sequence  Sequence
  Boolean
kerberos.gssapi.dlglen  DlgLen
  Unsigned 16-bit integer
  GSSAPI DlgLen
kerberos.gssapi.dlgopt  DlgOpt
  Unsigned 16-bit integer
  GSSAPI DlgOpt
kerberos.gssapi.len  Length
  Unsigned 32-bit integer
  Length of GSSAPI Bnd field
kerberos.hostaddress  HostAddress
  No value
  This is a Kerberos HostAddress sequence
kerberos.hostaddresses  HostAddresses
  No value
  This is a list of Kerberos HostAddress sequences
kerberos.if_relevant  IF_RELEVANT
  No value
  This is a list of IF-RELEVANT sequences
kerberos.kdc_req_body  KDC_REQ_BODY
  No value
  Kerberos KDC REQuest BODY
kerberos.kdcoptions  KDCOptions
  Byte array
  Kerberos KDCOptions bitstring
```

kerberos.kdcoptions.allow\_postdate Allow Postdate  
Boolean  
Flag controlling whether we allow postdated tickets or not

kerberos.kdcoptions.canonicalize Canonicalize  
Boolean  
Do we want the KDC to canonicalize the principal or not

kerberos.kdcoptions.constrained\_delegation Constrained Delegation  
Boolean  
Do we want a PAC containing constrained delegation info or not

kerberos.kdcoptions.disable\_transited\_check Disable Transited Check  
Boolean  
Whether we should do transited checking or not

kerberos.kdcoptions.enc\_tkt\_in\_skey Enc-Tkt-in-Skey  
Boolean  
Whether the ticket is encrypted in the skey or not

kerberos.kdcoptions.forwardable Forwardable  
Boolean  
Flag controlling whether the tickes are forwardable or not

kerberos.kdcoptions.forwarded Forwarded  
Boolean  
Has this ticket been forwarded?

kerberos.kdcoptions.opt\_hardware\_auth Opt HW Auth  
Boolean  
Opt HW Auth flag

kerberos.kdcoptions.postdated Postdated  
Boolean  
Whether this ticket is postdated or not

kerberos.kdcoptions.proxy Proxy  
Boolean  
Has this ticket been proxied?

kerberos.kdcoptions.proxyable Proxyable  
Boolean  
Flag controlling whether the tickes are proxyable or not

kerberos.kdcoptions.renew Renew  
Boolean  
Is this a request to renew a ticket?

kerberos.kdcoptions.renewable Renewable  
Boolean  
Whether this ticket is renewable or not

kerberos.kdcoptions.renewable\_ok Renewable OK  
Boolean  
Whether we accept renewed tickets or not

kerberos.kdcoptions.validate Validate  
Boolean  
Is this a request to validate a postdated ticket?

kerberos.kdcrep.data enc-part  
Byte array  
The encrypted part of KDC-REP

```
kerberos.kdcprep.enc_part  enc-part
    No value
    The structure holding the encrypted part of KDC-REP
kerberos.key  key
    No value
    This is a Kerberos EncryptionKey sequence
kerberos.key_expiration  Key Expiration
    String
    The time after which the key will expire
kerberos.keytype  Key type
    Unsigned 32-bit integer
    Key Type
kerberos.keyvalue  Key value
    Byte array
    Key value (encryption key)
kerberos.kvno  Kvno
    Unsigned 32-bit integer
    Version Number for the encryption Key
kerberos.lr_time  Lr-time
    String
    Time of LR-entry
kerberos.lr_type  Lr-type
    Unsigned 32-bit integer
    Type of lastreq value
kerberos.midl.fill_bytes  Fill bytes
    Unsigned 32-bit integer
    Just some fill bytes
kerberos.midl.hdr_len  HDR Length
    Unsigned 16-bit integer
    Length of header
kerberos.midl.version  Version
    Unsigned 8-bit integer
    Version of pickling
kerberos.midl_blob_len  Blob Length
    Unsigned 64-bit integer
    Length of NDR encoded data that follows
kerberos.msg.type  MSG Type
    Unsigned 32-bit integer
    Kerberos Message Type
kerberos.name_string  Name
    String
    String component that is part of a PrincipalName
kerberos.name_type  Name-type
    Signed 32-bit integer
    Type of principal name
kerberos.nonce  Nonce
    Unsigned 32-bit integer
    Kerberos Nonce random number
```

```
kerberos.pac.clientid  ClientID
    Date/Time stamp
    ClientID Timestamp

kerberos.pac.entries  Num Entries
    Unsigned 32-bit integer
    Number of W2k PAC entries

kerberos.pac.name     Name
    String
    Name of the Client in the PAC structure

kerberos.pac.namelen  Name Length
    Unsigned 16-bit integer
    Length of client name

kerberos.pac.offset   Offset
    Unsigned 32-bit integer
    Offset to W2k PAC entry

kerberos.pac.signature.signature  Signature
    Byte array
    A PAC signature blob

kerberos.pac.signature.type  Type
    Signed 32-bit integer
    PAC Signature Type

kerberos.pac.size     Size
    Unsigned 32-bit integer
    Size of W2k PAC entry

kerberos.pac.type     Type
    Unsigned 32-bit integer
    Type of W2k PAC entry

kerberos.pac.version  Version
    Unsigned 32-bit integer
    Version of PAC structures

kerberos.pac_request.flag  PAC Request
    Unsigned 32-bit integer
    This is a MS PAC Request Flag

kerberos.padata       padata
    No value
    Sequence of preauthentication data

kerberos.padata.type  Type
    Unsigned 32-bit integer
    Type of preauthentication data

kerberos.padata.value  Value
    Byte array
    Content of the PADATA blob

kerberos.patimestamp  patimestamp
    String
    Time of client

kerberos.pausec       pausec
    Unsigned 32-bit integer
    Microsecond component of client time
```

```
kerberos.pname  Delegated Principal Name
  No value
  Identity of the delegated principal
kerberos.prealm Delegated Principal Realm
  String
  Name of the Kerberos PRealm
kerberos.priv_body  PRIV_BODY
  No value
  Kerberos PRIVate BODY
kerberos.provsrv_location  PROVSRV Location
  String
  PacketCable PROV SRV Location
kerberos.pvno  Pvno
  Unsigned 32-bit integer
  Kerberos Protocol Version Number
kerberos.r_address  R-Address
  No value
  This is the Recipient address
kerberos.realm  Realm
  String
  Name of the Kerberos Realm
kerberos.renew_till  Renew-till
  String
  The maximum time we can renew the ticket until
kerberos.rm.length  Record Length
  Unsigned 32-bit integer
  Record length
kerberos.rm.reserved  Reserved
  Boolean
  Record mark reserved bit
kerberos.rtime  rtime
  String
  Renew Until timestamp
kerberos.s4u2self.auth  S4U2Self Auth
  String
  S4U2Self authentication string
kerberos.s_address  S-Address
  No value
  This is the Senders address
kerberos.seq_number  Seq Number
  Unsigned 32-bit integer
  This is a Kerberos sequence number
kerberos.smb.nt_status  NT Status
  Unsigned 32-bit integer
  NT Status code
kerberos.smb.unknown  Unknown
  Unsigned 32-bit integer
  unknown
```

kerberos.sname Server Name  
No value  
This is the name part server's identity

kerberos.sq.tickets Tickets  
No value  
This is a list of Kerberos Tickets

kerberos.srealm SRealm  
String  
Name of the Kerberos SRealm

kerberos.starttime Start time  
String  
The time after which the ticket is valid

kerberos.stime stime  
String  
Current Time on the server host

kerberos.subkey Subkey  
No value  
This is a Kerberos subkey

kerberos.susec susec  
Unsigned 32-bit integer  
micro second component of server time

kerberos.ticket Ticket  
No value  
This is a Kerberos Ticket

kerberos.ticket.data enc-part  
Byte array  
The encrypted part of a ticket

kerberos.ticket.enc\_part enc-part  
No value  
The structure holding the encrypted part of a ticket

kerberos.ticketflags Ticket Flags  
No value  
Kerberos Ticket Flags

kerberos.ticketflags.allow\_postdate Allow Postdate  
Boolean  
Flag controlling whether we allow postdated tickets or not

kerberos.ticketflags.forwardable Forwardable  
Boolean  
Flag controlling whether the tickets are forwardable or not

kerberos.ticketflags.forwarded Forwarded  
Boolean  
Has this ticket been forwarded?

kerberos.ticketflags.hw\_auth HW-Auth  
Boolean  
Whether this ticket is hardware-authenticated or not

kerberos.ticketflags.initial Initial  
Boolean  
Whether this ticket is an initial ticket or not



```
kerberos.ticketflags.invalid  Invalid
    Boolean
    Whether this ticket is invalid or not
kerberos.ticketflags.ok_as_delegate  Ok As Delegate
    Boolean
    Whether this ticket is Ok As Delegate or not
kerberos.ticketflags.postdated  Postdated
    Boolean
    Whether this ticket is postdated or not
kerberos.ticketflags.pre_auth  Pre-Auth
    Boolean
    Whether this ticket is pre-authenticated or not
kerberos.ticketflags.proxy  Proxy
    Boolean
    Has this ticket been proxied?
kerberos.ticketflags.proxyable  Proxyable
    Boolean
    Flag controlling whether the tickes are proxyable or not
kerberos.ticketflags.renewable  Renewable
    Boolean
    Whether this ticket is renewable or not
kerberos.ticketflags.transited_policy_checked  Transited Policy Checked
    Boolean
    Whether this ticket is transited policy checked or not
kerberos.till  till
    String
    When the ticket will expire
kerberos.tkt_vno  Tkt-vno
    Unsigned 32-bit integer
    Version number for the Ticket format
kerberos.transited.contents  Contents
    Byte array
    Transient Contents string
kerberos.transited.type  Type
    Unsigned 32-bit integer
    Transited Type
```

#### **Kerberos Administration (kadm5)**

```
kadm5.procedure_v2  V2 Procedure
    Unsigned 32-bit integer
    V2 Procedure
```

#### **Kerberos v4 (krb4)**

```
krb4.auth_msg_type  Msg Type
    Unsigned 8-bit integer
    Message Type/Byte Order
```

```
krb4.byte_order  Byte Order
    Unsigned 8-bit integer
    Byte Order

krb4.encrypted_blob  Encrypted Blob
    Byte array
    Encrypted blob

krb4.exp_date  Exp Date
    Date/Time stamp
    Exp Date

krb4.instance  Instance
    String
    Instance

krb4.kvno  Kvno
    Unsigned 8-bit integer
    Key Version No

krb4.length  Length
    Unsigned 32-bit integer
    Length of encrypted blob

krb4.lifetime  Lifetime
    Unsigned 8-bit integer
    Lifetime (in 5 min units)

krb4.m_type  M Type
    Unsigned 8-bit integer
    Message Type

krb4.name  Name
    String
    Name

krb4.realm  Realm
    String
    Realm

krb4.req_date  Req Date
    Date/Time stamp
    Req Date

krb4.request.blob  Request Blob
    Byte array
    Request Blob

krb4.request.length  Request Length
    Unsigned 8-bit integer
    Length of request

krb4.s_instance  Service Instance
    String
    Service Instance

krb4.s_name  Service Name
    String
    Service Name

krb4.ticket.blob  Ticket Blob
    Byte array
    Ticket blob
```

```
krb4.ticket.length  Ticket Length
    Unsigned 8-bit integer
    Length of ticket

krb4.time_sec      Time Sec
    Date/Time stamp
    Time Sec

krb4.unknown_transarc_blob  Unknown Transarc Blob
    Byte array
    Unknown blob only present in Transarc packets

krb4.version      Version
    Unsigned 8-bit integer
    Kerberos(v4) version number
```

**Kernel Lock Manager (klm)**

```
klm.block  block
    Boolean
    Block

klm.exclusive  exclusive
    Boolean
    Exclusive lock

klm.holder  holder
    No value
    KLM lock holder

klm.len  length
    Unsigned 32-bit integer
    Length of lock region

klm.lock  lock
    No value
    KLM lock structure

klm.offset  offset
    Unsigned 32-bit integer
    File offset

klm.pid  pid
    Unsigned 32-bit integer
    ProcessID

klm.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

klm.servername  server name
    String
    Server name

klm.stats  stats
    Unsigned 32-bit integer
    stats
```

**Kingfisher (kf)**

```
kingfisher.checksum  Checksum
    Unsigned 16-bit integer
kingfisher.from      From RTU
    Unsigned 16-bit integer
kingfisher.function  Function Code
    Unsigned 8-bit integer
kingfisher.length    Length
    Unsigned 8-bit integer
kingfisher.message   Message Number
    Unsigned 8-bit integer
kingfisher.system    System Identifier
    Unsigned 8-bit integer
kingfisher.target    Target RTU
    Unsigned 16-bit integer
kingfisher.version   Version
    Unsigned 8-bit integer
kingfisher.via       Via RTU
    Unsigned 16-bit integer
```

**Kismet Client/Server Protocol (kismet)**

```
kismet.request       Request
    Boolean
    TRUE if kismet request
kismet.response      Response
    Boolean
    TRUE if kismet response
```

**LGE Monitor (lge\_monitor)**

```
lge_monitor.dir      Direction
    Unsigned 32-bit integer
    Direction
lge_monitor.length   Payload Length
    Unsigned 32-bit integer
    Payload Length
lge_monitor.prot     Protocol Identifier
    Unsigned 32-bit integer
    Protocol Identifier
```

**LWAPP Control Message (lwapp-ctrl)****LWAPP Encapsulated Packet (lwapp)**

```
lwapp.Length         Length
    Unsigned 16-bit integer
lwapp.apid           AP Identity
    6-byte Hardware (MAC) Address
    Access Point Identity
```

```
lwapp.control    Control Data (not dissected yet)
                 Byte array
lwapp.control.length  Control Length
                 Unsigned 16-bit integer
lwapp.control.seqno  Control Sequence Number
                 Unsigned 8-bit integer
lwapp.control.type   Control Type
                 Unsigned 8-bit integer
lwapp.flags.fragment  Fragment
                 Boolean
lwapp.flags.fragmentType  Fragment Type
                 Boolean
lwapp.flags.type     Type
                 Boolean
lwapp.fragmentId    Fragment Id
                 Unsigned 8-bit integer
lwapp.rssi          RSSI
                 Unsigned 8-bit integer
lwapp.slotId       slotId
                 Unsigned 24-bit integer
lwapp.snr          SNR
                 Unsigned 8-bit integer
lwapp.version      Version
                 Unsigned 8-bit integer
```

### **LWAPP Layer 3 Packet (lwapp-l3)**

#### **Label Distribution Protocol (ldp)**

```
ldp.hdr.ldpid.lsid  Label Space ID
                   Unsigned 16-bit integer
                   LDP Label Space ID
ldp.hdr.ldpid.lsr   LSR ID
                   IPv4 address
                   LDP Label Space Router ID
ldp.hdr.pdu_len     PDU Length
                   Unsigned 16-bit integer
                   LDP PDU Length
ldp.hdr.version     Version
                   Unsigned 16-bit integer
                   LDP Version Number
ldp.msg.experiment.id  Experiment ID
                   Unsigned 32-bit integer
                   LDP Experimental Message ID
ldp.msg.id          Message ID
                   Unsigned 32-bit integer
                   LDP Message ID
```

```
ldp.msg.len    Message Length
               Unsigned 16-bit integer
               LDP Message Length (excluding message type and len)

ldp.msg.tlv.addr1.addr  Address
                       String
                       Address

ldp.msg.tlv.addr1.addr_family  Address Family
                               Unsigned 16-bit integer
                               Address Family List

ldp.msg.tlv.atm.label.vbits  V-bits
                              Unsigned 8-bit integer
                              ATM Label V Bits

ldp.msg.tlv.atm.label.vci  VCI
                           Unsigned 16-bit integer
                           ATM Label VCI

ldp.msg.tlv.atm.label.vpi  VPI
                           Unsigned 16-bit integer
                           ATM Label VPI

ldp.msg.tlv.cbs  CBS
                 Double-precision floating point
                 Committed Burst Size

ldp.msg.tlv.cdr  CDR
                 Double-precision floating point
                 Committed Data Rate

ldp.msg.tlv.diffserv  Diff-Serv TLV
                     No value
                     Diffserv TLV

ldp.msg.tlv.diffserv.map  MAP
                          No value
                          MAP entry

ldp.msg.tlv.diffserv.map.exp  EXP
                              Unsigned 8-bit integer
                              EXP bit code

ldp.msg.tlv.diffserv.mapnb  MAPnb
                            Unsigned 8-bit integer
                            Number of MAP entries

ldp.msg.tlv.diffserv.phbid  PHBID
                             No value
                             PHBID

ldp.msg.tlv.diffserv.phbid.bit14  Bit 14
                                   Unsigned 16-bit integer
                                   Bit 14

ldp.msg.tlv.diffserv.phbid.bit15  Bit 15
                                   Unsigned 16-bit integer
                                   Bit 15

ldp.msg.tlv.diffserv.phbid.code  PHB id code
                                  Unsigned 16-bit integer
                                  PHB id code
```

```
ldp.msg.tlv.diffserv.phbid.dscp  DSCP
    Unsigned 16-bit integer
    DSCP

ldp.msg.tlv.diffserv.type  LSP Type
    Unsigned 8-bit integer
    LSP Type

ldp.msg.tlv.ebs  EBS
    Double-precision floating point
    Excess Burst Size

ldp.msg.tlv.er_hop.as  AS Number
    Unsigned 16-bit integer
    AS Number

ldp.msg.tlv.er_hop.localldspid  Local CR-LSP ID
    Unsigned 16-bit integer
    Local CR-LSP ID

ldp.msg.tlv.er_hop.loose  Loose route bit
    Unsigned 24-bit integer
    Loose route bit

ldp.msg.tlv.er_hop.lsrld  Local CR-LSP ID
    IPv4 address
    Local CR-LSP ID

ldp.msg.tlv.er_hop.prefix4  IPv4 Address
    IPv4 address
    IPv4 Address

ldp.msg.tlv.er_hop.prefix6  IPv6 Address
    IPv6 address
    IPv6 Address

ldp.msg.tlv.er_hop.prefixlen  Prefix length
    Unsigned 8-bit integer
    Prefix len

ldp.msg.tlv.experiment_id  Experiment ID
    Unsigned 32-bit integer
    Experiment ID

ldp.msg.tlv.extstatus.data  Extended Status Data
    Unsigned 32-bit integer
    Extended Status Data

ldp.msg.tlv.fec.af  FEC Element Address Type
    Unsigned 16-bit integer
    Forwarding Equivalence Class Element Address Family

ldp.msg.tlv.fec.hoval  FEC Element Host Address Value
    String
    Forwarding Equivalence Class Element Address

ldp.msg.tlv.fec.len  FEC Element Length
    Unsigned 8-bit integer
    Forwarding Equivalence Class Element Length

ldp.msg.tlv.fec.pfval  FEC Element Prefix Value
    String
    Forwarding Equivalence Class Element Prefix
```

```
ldp.msg.tlv.fec.type    FEC Element Type
    Unsigned 8-bit integer
    Forwarding Equivalence Class Element Types

ldp.msg.tlv.fec.vc.controlword  C-bit
    Boolean
    Control Word Present

ldp.msg.tlv.fec.vc.groupid  Group ID
    Unsigned 32-bit integer
    VC FEC Group ID

ldp.msg.tlv.fec.vc.infolength  VC Info Length
    Unsigned 8-bit integer
    VC FEC Info Length

ldp.msg.tlv.fec.vc.intparam.cepbytes  Payload Bytes
    Unsigned 16-bit integer
    VC FEC Interface Param CEP/TDM Payload Bytes

ldp.msg.tlv.fec.vc.intparam.cepopt_ais  AIS
    Boolean
    VC FEC Interface Param CEP Option AIS

ldp.msg.tlv.fec.vc.intparam.cepopt_ceptype  CEP Type
    Unsigned 16-bit integer
    VC FEC Interface Param CEP Option CEP Type

ldp.msg.tlv.fec.vc.intparam.cepopt_e3  Async E3
    Boolean
    VC FEC Interface Param CEP Option Async E3

ldp.msg.tlv.fec.vc.intparam.cepopt_ebm  EBM
    Boolean
    VC FEC Interface Param CEP Option EBM Header

ldp.msg.tlv.fec.vc.intparam.cepopt_mah  MAH
    Boolean
    VC FEC Interface Param CEP Option MPLS Adaptation header

ldp.msg.tlv.fec.vc.intparam.cepopt_res  Reserved
    Unsigned 16-bit integer
    VC FEC Interface Param CEP Option Reserved

ldp.msg.tlv.fec.vc.intparam.cepopt_rtp  RTP
    Boolean
    VC FEC Interface Param CEP Option RTP Header

ldp.msg.tlv.fec.vc.intparam.cepopt_t3  Async T3
    Boolean
    VC FEC Interface Param CEP Option Async T3

ldp.msg.tlv.fec.vc.intparam.cepopt_une  UNE
    Boolean
    VC FEC Interface Param CEP Option Unequipped

ldp.msg.tlv.fec.vc.intparam.desc  Description
    String
    VC FEC Interface Description

ldp.msg.tlv.fec.vc.intparam.dlcilen  DLCI Length
    Unsigned 16-bit integer
    VC FEC Interface Parameter Frame-Relay DLCI Length
```



```
ldp.msg.tlv.fec.vc.intparam.fcslen  FCS Length
    Unsigned 16-bit integer
    VC FEC Interface Paramater FCS Length

ldp.msg.tlv.fec.vc.intparam.id      ID
    Unsigned 8-bit integer
    VC FEC Interface Paramater ID

ldp.msg.tlv.fec.vc.intparam.length  Length
    Unsigned 8-bit integer
    VC FEC Interface Paramater Length

ldp.msg.tlv.fec.vc.intparam.maxatm  Number of Cells
    Unsigned 16-bit integer
    VC FEC Interface Param Max ATM Concat Cells

ldp.msg.tlv.fec.vc.intparam.mtu     MTU
    Unsigned 16-bit integer
    VC FEC Interface Paramater MTU

ldp.msg.tlv.fec.vc.intparam.tdmbps  BPS
    Unsigned 32-bit integer
    VC FEC Interface Parameter CEP/TDM bit-rate

ldp.msg.tlv.fec.vc.intparam.tdmopt_d  D Bit
    Boolean
    VC FEC Interface Param TDM Options Dynamic Timestamp

ldp.msg.tlv.fec.vc.intparam.tdmopt_f  F Bit
    Boolean
    VC FEC Interface Param TDM Options Flavor bit

ldp.msg.tlv.fec.vc.intparam.tdmopt_freq  FREQ
    Unsigned 16-bit integer
    VC FEC Interface Param TDM Options Frequency

ldp.msg.tlv.fec.vc.intparam.tdmopt_pt  PT
    Unsigned 8-bit integer
    VC FEC Interface Param TDM Options Payload Type

ldp.msg.tlv.fec.vc.intparam.tdmopt_r  R Bit
    Boolean
    VC FEC Interface Param TDM Options RTP Header

ldp.msg.tlv.fec.vc.intparam.tdmopt_res1  RSVD-1
    Unsigned 16-bit integer
    VC FEC Interface Param TDM Options Reserved

ldp.msg.tlv.fec.vc.intparam.tdmopt_res2  RSVD-2
    Unsigned 8-bit integer
    VC FEC Interface Param TDM Options Reserved

ldp.msg.tlv.fec.vc.intparam.tdmopt_ssrc  SSRC
    Unsigned 32-bit integer
    VC FEC Interface Param TDM Options SSRC

ldp.msg.tlv.fec.vc.intparam.vccv.cctype_cw  PWE3 Control Word
    Boolean
    VC FEC Interface Param VCCV CC Type PWE3 CW

ldp.msg.tlv.fec.vc.intparam.vccv.cctype_mplsra  MPLS Router Alert
    Boolean
    VC FEC Interface Param VCCV CC Type MPLS Router Alert
```

```
ldp.msg.tlv.fec.vc.intparam.vccv.cctype_ttl1  MPLS Inner Label TTL = 1
Boolean
VC FEC Interface Param VCCV CC Type Inner Label TTL 1

ldp.msg.tlv.fec.vc.intparam.vccv.cvtype_bfd    BFD
Boolean
VC FEC Interface Param VCCV CV Type BFD

ldp.msg.tlv.fec.vc.intparam.vccv.cvtype_icmpping ICMP Ping
Boolean
VC FEC Interface Param VCCV CV Type ICMP Ping

ldp.msg.tlv.fec.vc.intparam.vccv.cvtype_lspping LSP Ping
Boolean
VC FEC Interface Param VCCV CV Type LSP Ping

ldp.msg.tlv.fec.vc.intparam.vlanid  VLAN Id
Unsigned 16-bit integer
VC FEC Interface Param VLAN Id

ldp.msg.tlv.fec.vc.vcid  VC ID
Unsigned 32-bit integer
VC FEC VCID

ldp.msg.tlv.fec.vc.vctype  VC Type
Unsigned 16-bit integer
Virtual Circuit Type

ldp.msg.tlv.flags_cbs  CBS
Boolean
CBS negotiability flag

ldp.msg.tlv.flags_cdr  CDR
Boolean
CDR negotiability flag

ldp.msg.tlv.flags_ebs  EBS
Boolean
EBS negotiability flag

ldp.msg.tlv.flags_pbs  PBS
Boolean
PBS negotiability flag

ldp.msg.tlv.flags_pdr  PDR
Boolean
PDR negotiability flag

ldp.msg.tlv.flags_reserv  Reserved
Unsigned 8-bit integer
Reserved

ldp.msg.tlv.flags_weight  Weight
Boolean
Weight negotiability flag

ldp.msg.tlv.fr.label.dlci  DLCI
Unsigned 24-bit integer
FRAME RELAY Label DLCI

ldp.msg.tlv.fr.label.len  Number of DLCI bits
Unsigned 16-bit integer
DLCI Number of bits
```

```
ldp.msg.tlv.frequency      Frequency
    Unsigned 8-bit integer
    Frequency

ldp.msg.tlv.ft_ack.sequence_num  FT ACK Sequence Number
    Unsigned 32-bit integer
    FT ACK Sequence Number

ldp.msg.tlv.ft_protect.sequence_num  FT Sequence Number
    Unsigned 32-bit integer
    FT Sequence Number

ldp.msg.tlv.ft_sess.flag_a  A bit
    Boolean
    All-Label protection Required

ldp.msg.tlv.ft_sess.flag_c  C bit
    Boolean
    Check-Pointint Flag

ldp.msg.tlv.ft_sess.flag_l  L bit
    Boolean
    Learn From network Flag

ldp.msg.tlv.ft_sess.flag_r  R bit
    Boolean
    FT Reconnect Flag

ldp.msg.tlv.ft_sess.flag_res  Reserved
    Unsigned 16-bit integer
    Reserved bits

ldp.msg.tlv.ft_sess.flag_s  S bit
    Boolean
    Save State Flag

ldp.msg.tlv.ft_sess.flags  Flags
    Unsigned 16-bit integer
    FT Session Flags

ldp.msg.tlv.ft_sess.reconn_to  Reconnect Timeout
    Unsigned 32-bit integer
    FT Reconnect Timeout

ldp.msg.tlv.ft_sess.recovery_time  Recovery Time
    Unsigned 32-bit integer
    Recovery Time

ldp.msg.tlv.ft_sess.res  Reserved
    Unsigned 16-bit integer
    Reserved

ldp.msg.tlv.generic.label  Generic Label
    Unsigned 32-bit integer
    Generic Label

ldp.msg.tlv.hc.value  Hop Count Value
    Unsigned 8-bit integer
    Hop Count

ldp.msg.tlv.hello.cnf_seqno  Configuration Sequence Number
    Unsigned 32-bit integer
    Hello Configuration Sequence Number
```

```
ldp.msg.tlv.hello.hold  Hold Time
    Unsigned 16-bit integer
    Hello Common Parameters Hold Time

ldp.msg.tlv.hello.requested  Hello Requested
    Boolean
    Hello Common Parameters Hello Requested Bit

ldp.msg.tlv.hello.res  Reserved
    Unsigned 16-bit integer
    Hello Common Parameters Reserved Field

ldp.msg.tlv.hello.targeted  Targeted Hello
    Boolean
    Hello Common Parameters Targeted Bit

ldp.msg.tlv.hold_prio  Hold Prio
    Unsigned 8-bit integer
    LSP hold priority

ldp.msg.tlv.ipv4.taddr  IPv4 Transport Address
    IPv4 address
    IPv4 Transport Address

ldp.msg.tlv.ipv6.taddr  IPv6 Transport Address
    IPv6 address
    IPv6 Transport Address

ldp.msg.tlv.len  TLV Length
    Unsigned 16-bit integer
    TLV Length Field

ldp.msg.tlv.lspid.actflg  Action Indicator Flag
    Unsigned 16-bit integer
    Action Indicator Flag

ldp.msg.tlv.lspid.local lspid  Local CR-LSP ID
    Unsigned 16-bit integer
    Local CR-LSP ID

ldp.msg.tlv.lspid.lsr id  Ingress LSR Router ID
    IPv4 address
    Ingress LSR Router ID

ldp.msg.tlv.mac  MAC address
    6-byte Hardware (MAC) Address
    MAC address

ldp.msg.tlv.pbs  PBS
    Double-precision floating point
    Peak Burst Size

ldp.msg.tlv.pdr  PDR
    Double-precision floating point
    Peak Data Rate

ldp.msg.tlv.pv.lsr id  LSR Id
    IPv4 address
    Path Vector LSR Id

ldp.msg.tlv.resource_class  Resource Class
    Unsigned 32-bit integer
    Resource Class (Color)
```

ldp.msg.tlv.returned.ldpid.lsid Returned PDU Label Space ID  
Unsigned 16-bit integer  
LDP Label Space ID

ldp.msg.tlv.returned.ldpid.lsr Returned PDU LSR ID  
IPv4 address  
LDP Label Space Router ID

ldp.msg.tlv.returned.msg.id Returned Message ID  
Unsigned 32-bit integer  
LDP Message ID

ldp.msg.tlv.returned.msg.len Returned Message Length  
Unsigned 16-bit integer  
LDP Message Length (excluding message type and len)

ldp.msg.tlv.returned.msg.type Returned Message Type  
Unsigned 16-bit integer  
LDP message type

ldp.msg.tlv.returned.msg.ubit Returned Message Unknown bit  
Boolean  
Message Unknown bit

ldp.msg.tlv.returned.pdu\_len Returned PDU Length  
Unsigned 16-bit integer  
LDP PDU Length

ldp.msg.tlv.returned.version Returned PDU Version  
Unsigned 16-bit integer  
LDP Version Number

ldp.msg.tlv.route\_pinning Route Pinning  
Unsigned 32-bit integer  
Route Pinning

ldp.msg.tlv.sess.advbit Session Label Advertisement Discipline  
Boolean  
Common Session Parameters Label Advertisement Discipline

ldp.msg.tlv.sess.atm.dir Directionality  
Boolean  
Label Directionality

ldp.msg.tlv.sess.atm.lr Number of ATM Label Ranges  
Unsigned 8-bit integer  
Number of Label Ranges

ldp.msg.tlv.sess.atm.maxvci Maximum VCI  
Unsigned 16-bit integer  
Maximum VCI

ldp.msg.tlv.sess.atm.maxvpi Maximum VPI  
Unsigned 16-bit integer  
Maximum VPI

ldp.msg.tlv.sess.atm.merge Session ATM Merge Parameter  
Unsigned 8-bit integer  
Merge ATM Session Parameters

ldp.msg.tlv.sess.atm.minvci Minimum VCI  
Unsigned 16-bit integer  
Minimum VCI

```
ldp.msg.tlv.sess.atm.minvpi  Minimum VPI
    Unsigned 16-bit integer
    Minimum VPI

ldp.msg.tlv.sess.fr.dir  Directionality
    Boolean
    Label Directionality

ldp.msg.tlv.sess.fr.len  Number of DLCI bits
    Unsigned 16-bit integer
    DLCI Number of bits

ldp.msg.tlv.sess.fr.lr  Number of Frame Relay Label Ranges
    Unsigned 8-bit integer
    Number of Label Ranges

ldp.msg.tlv.sess.fr.maxdlci  Maximum DLCI
    Unsigned 24-bit integer
    Maximum DLCI

ldp.msg.tlv.sess.fr.merge  Session Frame Relay Merge Parameter
    Unsigned 8-bit integer
    Merge Frame Relay Session Parameters

ldp.msg.tlv.sess.fr.mindlci  Minimum DLCI
    Unsigned 24-bit integer
    Minimum DLCI

ldp.msg.tlv.sess.ka  Session KeepAlive Time
    Unsigned 16-bit integer
    Common Session Parameters KeepAlive Time

ldp.msg.tlv.sess.ldetbit  Session Loop Detection
    Boolean
    Common Session Parameters Loop Detection

ldp.msg.tlv.sess.mxpdu  Session Max PDU Length
    Unsigned 16-bit integer
    Common Session Parameters Max PDU Length

ldp.msg.tlv.sess.pvlim  Session Path Vector Limit
    Unsigned 8-bit integer
    Common Session Parameters Path Vector Limit

ldp.msg.tlv.sess.rxlslr  Session Receiver LSR Identifier
    IPv4 address
    Common Session Parameters LSR Identifier

ldp.msg.tlv.sess.ver  Session Protocol Version
    Unsigned 16-bit integer
    Common Session Parameters Protocol Version

ldp.msg.tlv.set_prio  Set Prio
    Unsigned 8-bit integer
    LSP setup priority

ldp.msg.tlv.status.data  Status Data
    Unsigned 32-bit integer
    Status Data

ldp.msg.tlv.status.ebit  E Bit
    Boolean
    Fatal Error Bit
```

```
ldp.msg.tlv.status.fbit  F Bit
    Boolean
    Forward Bit

ldp.msg.tlv.status.msg.id  Message ID
    Unsigned 32-bit integer
    Identifies peer message to which Status TLV refers

ldp.msg.tlv.status.msg.type  Message Type
    Unsigned 16-bit integer
    Type of peer message to which Status TLV refers

ldp.msg.tlv.type  TLV Type
    Unsigned 16-bit integer
    TLV Type Field

ldp.msg.tlv.unknown  TLV Unknown bits
    Unsigned 8-bit integer
    TLV Unknown bits Field

ldp.msg.tlv.value  TLV Value
    Byte array
    TLV Value Bytes

ldp.msg.tlv.vendor_id  Vendor ID
    Unsigned 32-bit integer
    IEEE 802 Assigned Vendor ID

ldp.msg.tlv.weight  Weight
    Unsigned 8-bit integer
    Weight of the CR-LSP

ldp.msg.type  Message Type
    Unsigned 16-bit integer
    LDP message type

ldp.msg.ubit  U bit
    Boolean
    Unknown Message Bit

ldp.msg.vendor.id  Vendor ID
    Unsigned 32-bit integer
    LDP Vendor-private Message ID

ldp.req  Request
    Boolean

ldp.rsp  Response
    Boolean

ldp.tlv.lbl_req_msg_id  Label Request Message ID
    Unsigned 32-bit integer
    Label Request Message to be aborted
```

**Laplink (laplink)**

```
laplink.tcp_data  Unknown TCP data
    Byte array
    TCP data

laplink.tcp_ident  TCP Ident
    Unsigned 32-bit integer
    Unknown magic
```

```
laplink.tcp_length  TCP Data payload length
                    Unsigned 16-bit integer
                    Length of remaining payload

laplink.udp_ident   UDP Ident
                    Unsigned 32-bit integer
                    Unknown magic

laplink.udp_name    UDP Name
                    String
                    Machine name
```

**Layer 2 Tunneling Protocol (l2tp)**

```
l2tp.Nr  Nr
         Unsigned 16-bit integer

l2tp.Ns  Ns
         Unsigned 16-bit integer

l2tp.avp.ciscotype  Type
                   Unsigned 16-bit integer
                   AVP Type

l2tp.avp.hidden    Hidden
                   Boolean
                   Hidden AVP

l2tp.avp.length    Length
                   Unsigned 16-bit integer
                   AVP Length

l2tp.avp.mandatory  Mandatory
                    Boolean
                    Mandatory AVP

l2tp.avp.type      Type
                   Unsigned 16-bit integer
                   AVP Type

l2tp.avp.vendor_id  Vendor ID
                    Unsigned 16-bit integer
                    AVP Vendor ID

l2tp.ccid          Control Connection ID
                   Unsigned 32-bit integer
                   Control Connection ID

l2tp.length        Length
                   Unsigned 16-bit integer

l2tp.length_bit    Length Bit
                   Boolean
                   Length bit

l2tp.offset        Offset
                   Unsigned 16-bit integer
                   Number of octest past the L2TP header at which thepayload data starts.

l2tp.offset_bit    Offset bit
                   Boolean
                   Offset bit
```



```
l2tp.priority  Priority
  Boolean
  Priority bit

l2tp.res  Reserved
  Unsigned 16-bit integer
  Reserved

l2tp.seq_bit  Sequence Bit
  Boolean
  Sequence bit

l2tp.session  Session ID
  Unsigned 16-bit integer
  Session ID

l2tp.sid  Session ID
  Unsigned 32-bit integer
  Session ID

l2tp.tie_breaker  Tie Breaker
  Unsigned 64-bit integer
  Tie Breaker

l2tp.tunnel  Tunnel ID
  Unsigned 16-bit integer
  Tunnel ID

l2tp.type  Type
  Unsigned 16-bit integer
  Type bit

l2tp.version  Version
  Unsigned 16-bit integer
  Version

lt2p.cookie  Cookie
  Byte array
  Cookie

lt2p.l2_spec_atm  ATM-Specific Sublayer
  No value
  ATM-Specific Sublayer

lt2p.l2_spec_c  C-bit
  Boolean
  CLP Bit

lt2p.l2_spec_def  Default L2-Specific Sublayer
  No value
  Default L2-Specific Sublayer

lt2p.l2_spec_g  G-bit
  Boolean
  EFCI Bit

lt2p.l2_spec_s  S-bit
  Boolean
  Sequence Bit

lt2p.l2_spec_sequence  Sequence Number
  Unsigned 24-bit integer
  Sequence Number
```

```
lt2p.l2_spec_t  T-bit
  Boolean
  Transport Type Bit
lt2p.l2_spec_u  U-bit
  Boolean
  C/R Bit
```

**Light Weight DNS RESolver (BIND9) (lwres)**

```
lwres.adn.addr.addr  IP Address
  String
  lwres adn addr addr
lwres.adn.addr.family  Address family
  Unsigned 32-bit integer
  lwres adn addr family
lwres.adn.addr.length  Address length
  Unsigned 16-bit integer
  lwres adn addr length
lwres.adn.addrtype  Address type
  Unsigned 32-bit integer
  lwres adn addrtype
lwres.adn.aliasname  Alias name
  String
  lwres adn aliasname
lwres.adn.flags  Flags
  Unsigned 32-bit integer
  lwres adn flags
lwres.adn.naddrs  Number of addresses
  Unsigned 16-bit integer
  lwres adn naddrs
lwres.adn.naliases  Number of aliases
  Unsigned 16-bit integer
  lwres adn naliases
lwres.adn.name  Name
  String
  lwres adn name
lwres.adn.namelen  Name length
  Unsigned 16-bit integer
  lwres adn namelen
lwres.adn.realname  Real name
  String
  lwres adn realname
lwres.areclen  Length
  Unsigned 16-bit integer
  lwres areclen
lwres.arecord  IPv4 Address
  Unsigned 32-bit integer
  lwres arecord
```

```
lwres.authlen  Auth. length
                Unsigned 16-bit integer
                lwres authlen

lwres.authtype Auth. type
                Unsigned 16-bit integer
                lwres authtype

lwres.class    Class
                Unsigned 16-bit integer
                lwres class

lwres.flags    Packet Flags
                Unsigned 16-bit integer
                lwres flags

lwres.length   Length
                Unsigned 32-bit integer
                lwres length

lwres.namelen  Name length
                Unsigned 16-bit integer
                lwres namelen

lwres.nrdatas  Number of rdata records
                Unsigned 16-bit integer
                lwres nrdatas

lwres.nsig     Number of signature records
                Unsigned 16-bit integer
                lwres nsigs

lwres.opcode   Operation code
                Unsigned 32-bit integer
                lwres opcode

lwres.realname Real doname name
                String
                lwres realname

lwres.realnamelen Real name length
                Unsigned 16-bit integer
                lwres realnamelen

lwres.recvlen  Received length
                Unsigned 32-bit integer
                lwres recvlen

lwres.reqdname Domain name
                String
                lwres reqdname

lwres.result   Result
                Unsigned 32-bit integer
                lwres result

lwres.rflags   Flags
                Unsigned 32-bit integer
                lwres rflags

lwres.serial   Serial
                Unsigned 32-bit integer
                lwres serial
```

```
lwres.srv.port  Port
  Unsigned 16-bit integer
  lwres srv port

lwres.srv.priority  Priority
  Unsigned 16-bit integer
  lwres srv prio

lwres.srv.weight  Weight
  Unsigned 16-bit integer
  lwres srv weight

lwres.ttl  Time To Live
  Unsigned 32-bit integer
  lwres ttl

lwres.type  Type
  Unsigned 16-bit integer
  lwres type

lwres.version  Version
  Unsigned 16-bit integer
  lwres version
```

#### **Lightweight User Datagram Protocol (udplite)**

```
udp.checksum_coverage  Checksum coverage
  Unsigned 16-bit integer

udp.checksum_coverage_bad  Bad Checksum coverage
  Boolean
```

#### **Lightweight-Directory-Access-Protocol (ldap)**

```
ldap.AccessMask.ADS_CONTROL_ACCESS  Control Access
  Boolean

ldap.AccessMask.ADS_CREATE_CHILD  Create Child
  Boolean

ldap.AccessMask.ADS_DELETE_CHILD  Delete Child
  Boolean

ldap.AccessMask.ADS_DELETE_TREE  Delete Tree
  Boolean

ldap.AccessMask.ADS_LIST  List
  Boolean

ldap.AccessMask.ADS_LIST_OBJECT  List Object
  Boolean

ldap.AccessMask.ADS_READ_PROP  Read Prop
  Boolean

ldap.AccessMask.ADS_SELF_WRITE  Self Write
  Boolean

ldap.AccessMask.ADS_WRITE_PROP  Write Prop
  Boolean

ldap.AttributeDescriptionList_item  Item
  String
  ldap.AttributeDescription
```

```
ldap.AttributeList_item  Item
    No value
    ldap.AttributeList_item
ldap.CancelRequestValue  CancelRequestValue
    No value
    ldap.CancelRequestValue
ldap.Controls_item      Item
    No value
    ldap.Control
ldap.LDAPMessage        LDAPMessage
    No value
    ldap.LDAPMessage
ldap.PartialAttributeList_item  Item
    No value
    ldap.PartialAttributeList_item
ldap.PasswdModifyRequestValue  PasswdModifyRequestValue
    No value
    ldap.PasswdModifyRequestValue
ldap.Referral_item      Item
    String
    ldap.LDAPURL
ldap.ReplControlValue    ReplControlValue
    No value
    ldap.ReplControlValue
ldap.SearchControlValue  SearchControlValue
    No value
    ldap.SearchControlValue
ldap.SortKeyList         SortKeyList
    Unsigned 32-bit integer
    ldap.SortKeyList
ldap.SortKeyList_item    Item
    No value
    ldap.SortKeyList_item
ldap.SortResult          SortResult
    No value
    ldap.SortResult
ldap._untag_item         Item
    String
    ldap.LDAPURL
ldap.abandonRequest      abandonRequest
    Unsigned 32-bit integer
    ldap.AbandonRequest
ldap.addRequest          addRequest
    No value
    ldap.AddRequest
ldap.addResponse         addResponse
    No value
    ldap.AddResponse
```

```
ldap.and and
    Unsigned 32-bit integer
    ldap.T_and

ldap.and_item Item
    Unsigned 32-bit integer
    ldap.T_and_item

ldap.any any
    String
    ldap.LDAPString

ldap.approxMatch approxMatch
    No value
    ldap.T_approxMatch

ldap.assertionValue assertionValue
    String
    ldap.AssertionValue

ldap.attributeDesc attributeDesc
    String
    ldap.AttributeDescription

ldap.attributeType attributeType
    String
    ldap.AttributeDescription

ldap.attributes attributes
    Unsigned 32-bit integer
    ldap.AttributeDescriptionList

ldap.authentication authentication
    Unsigned 32-bit integer
    ldap.AuthenticationChoice

ldap.ava ava
    No value
    ldap.AttributeValueAssertion

ldap.baseObject baseObject
    String
    ldap.LDAPDN

ldap.bindRequest bindRequest
    No value
    ldap.BindRequest

ldap.bindResponse bindResponse
    No value
    ldap.BindResponse

ldap.cancelID cancelID
    Unsigned 32-bit integer
    ldap.MessageID

ldap.compareRequest compareRequest
    No value
    ldap.CompareRequest

ldap.compareResponse compareResponse
    No value
    ldap.CompareResponse
```

```
ldap.controlType  controlType
    String
    ldap.ControlType
ldap.controlValue  controlValue
    Byte array
    ldap.T_controlValue
ldap.controls      controls
    Unsigned 32-bit integer
    ldap.Controls
ldap.cookie        cookie
    Byte array
    ldap.OCTET_STRING
ldap.credentials   credentials
    Byte array
    ldap.Credentials
ldap.criticality   criticality
    Boolean
    ldap.BOOLEAN
ldap.delRequest    delRequest
    String
    ldap.DelRequest
ldap.delResponse   delResponse
    No value
    ldap.DelResponse
ldap.deleteoldrdn  deleteoldrdn
    Boolean
    ldap.BOOLEAN
ldap.derefAliases  derefAliases
    Unsigned 32-bit integer
    ldap.T_derefAliases
ldap.dnAttributes  dnAttributes
    Boolean
    ldap.T_dnAttributes
ldap.entry         entry
    String
    ldap.LDAPDN
ldap.equalityMatch equalityMatch
    No value
    ldap.T_equalityMatch
ldap.errorMessage  errorMessage
    String
    ldap.ErrorMessage
ldap.extendedReq   extendedReq
    No value
    ldap.ExtendedRequest
ldap.extendedResp  extendedResp
    No value
    ldap.ExtendedResponse
```

```
ldap.extensibleMatch  extensibleMatch
    No value
    ldap.T_extensibleMatch
ldap.filter  filter
    Unsigned 32-bit integer
    ldap.T_filter
ldap.final  final
    String
    ldap.LDAPString
ldap.genPasswd  genPasswd
    Byte array
    ldap.OCTET_STRING
ldap.greaterOrEqual  greaterOrEqual
    No value
    ldap.T_greaterOrEqual
ldap.guid  GUID
    GUID
ldap.initial  initial
    String
    ldap.LDAPString
ldap.lessOrEqual  lessOrEqual
    No value
    ldap.T_lessOrEqual
ldap.matchValue  matchValue
    String
    ldap.AssertionValue
ldap.matchedDN  matchedDN
    String
    ldap.LDAPDN
ldap.matchingRule  matchingRule
    String
    ldap.MatchingRuleId
ldap.maxReturnLength  maxReturnLength
    Signed 32-bit integer
    ldap.INTEGER
ldap.mechanism  mechanism
    String
    ldap.Mechanism
ldap.messageID  messageID
    Unsigned 32-bit integer
    ldap.MessageID
ldap.modDNRequest  modDNRequest
    No value
    ldap.ModifyDNRequest
ldap.modDNResponse  modDNResponse
    No value
    ldap.ModifyDNResponse
```



```
ldap.modification  modification
    Unsigned 32-bit integer
    ldap.ModifyRequest_modification

ldap.modification_item  Item
    No value
    ldap.T_modifyRequest_modification_item

ldap.modifyRequest  modifyRequest
    No value
    ldap.ModifyRequest

ldap.modifyResponse  modifyResponse
    No value
    ldap.ModifyResponse

ldap.name  name
    String
    ldap.LDAPDN

ldap.newPasswd  newPasswd
    Byte array
    ldap.OCTET_STRING

ldap.newSuperior  newSuperior
    String
    ldap.LDAPDN

ldap.newrdn  newrdn
    String
    ldap.RelativeLDAPDN

ldap.not  not
    Unsigned 32-bit integer
    ldap.T_not

ldap.ntlmsspAuth  ntlmsspAuth
    Byte array
    ldap.T_ntlmsspAuth

ldap.ntlmsspNegotiate  ntlmsspNegotiate
    Byte array
    ldap.T_ntlmsspNegotiate

ldap.object  object
    String
    ldap.LDAPDN

ldap.objectName  objectName
    String
    ldap.LDAPDN

ldap.oldPasswd  oldPasswd
    Byte array
    ldap.OCTET_STRING

ldap.operation  operation
    Unsigned 32-bit integer
    ldap.T_operation

ldap.or  or
    Unsigned 32-bit integer
    ldap.T_or
```

```
ldap.or_item Item
    Unsigned 32-bit integer
    ldap.T_or_item

ldap.orderingRule orderingRule
    String
    ldap.MatchingRuleId

ldap.parentsFirst parentsFirst
    Signed 32-bit integer
    ldap.INTEGER

ldap.present present
    String
    ldap.T_present

ldap.protocolOp protocolOp
    Unsigned 32-bit integer
    ldap.ProtocolOp

ldap.referral referral
    Unsigned 32-bit integer
    ldap.Referral

ldap.requestName requestName
    String
    ldap.LDAPOID

ldap.requestValue requestValue
    Byte array
    ldap.T_requestValue

ldap.response response
    Byte array
    ldap.OCTET_STRING

ldap.responseName responseName
    String
    ldap.ResponseName

ldap.response_in Response In
    Frame number
    The response to this LDAP request is in this frame

ldap.response_to Response To
    Frame number
    This is a response to the LDAP request in this frame

ldap.resultCode resultCode
    Unsigned 32-bit integer
    ldap.T_resultCode

ldap.reverseOrder reverseOrder
    Boolean
    ldap.BOOLEAN

ldap.sasl sasl
    No value
    ldap.SaslCredentials

ldap.sasl_buffer_length SASL Buffer Length
    Unsigned 32-bit integer
    SASL Buffer Length
```

```
ldap.scope scope
    Unsigned 32-bit integer
    ldap.T_scope

ldap.searchRequest searchRequest
    No value
    ldap.SearchRequest

ldap.searchResDone searchResDone
    No value
    ldap.SearchResultDone

ldap.searchResEntry searchResEntry
    No value
    ldap.SearchResultEntry

ldap.searchResRef searchResRef
    Unsigned 32-bit integer
    ldap.SearchResultReference

ldap.serverSaslCreds serverSaslCreds
    Byte array
    ldap.ServerSaslCreds

ldap.sid Sid
    String
    Sid

ldap.simple simple
    Byte array
    ldap.Simple

ldap.size size
    Signed 32-bit integer
    ldap.INTEGER

ldap.sizeLimit sizeLimit
    Unsigned 32-bit integer
    ldap.INTEGER_0_maxInt

ldap.sortResult sortResult
    Unsigned 32-bit integer
    ldap.T_sortResult

ldap.substrings substrings
    No value
    ldap.SubstringFilter

ldap.substrings_item Item
    Unsigned 32-bit integer
    ldap.T_substringFilter_substrings_item

ldap.time Time
    Time duration
    The time between the Call and the Reply

ldap.timeLimit timeLimit
    Unsigned 32-bit integer
    ldap.INTEGER_0_maxInt

ldap.type type
    String
    ldap.AttributeDescription
```

```
ldap.typesOnly  typesOnly
  Boolean
  ldap.BOOLEAN

ldap.unbindRequest  unbindRequest
  No value
  ldap.UnbindRequest

ldap.userIdentity  userIdentity
  Byte array
  ldap.OCTET_STRING

ldap.vals  vals
  Unsigned 32-bit integer
  ldap.SET_OF_AttributeValue

ldap.vals_item  Item
  Byte array
  ldap.AttributeValue

ldap.version  version
  Unsigned 32-bit integer
  ldap.INTEGER_1_127

msldap.clientsitename  Client Site
  String
  Client Site name

msldap.domain  Domain
  String
  Domainname

msldap.domain.guid  Domain GUID
  Byte array
  Domain GUID

msldap.forest  Forest
  String
  Forest

msldap.hostname  Hostname
  String
  Hostname

msldap.nb_domain  NetBios Domain
  String
  NetBios Domainname

msldap.nb_hostname  NetBios Hostname
  String
  NetBios Hostname

msldap.netlogon.flags  Flags
  Unsigned 32-bit integer
  Netlogon flags describing the DC properties

msldap.netlogon.flags.closest  Closest
  Boolean
  Is this the closest dc? (is this used at all?)

msldap.netlogon.flags.ds  DS
  Boolean
  Does this dc provide DS services?
```

```

msclldap.netlogon.flags.gc  GC
    Boolean
    Does this dc service as a GLOBAL CATALOGUE?
msclldap.netlogon.flags.good_timeserv  Good Time Serv
    Boolean
    Is this a Good Time Server? (i.e. does it have a hardware clock)
msclldap.netlogon.flags.kdc  KDC
    Boolean
    Does this dc act as a KDC?
msclldap.netlogon.flags.ldap  LDAP
    Boolean
    Does this DC act as an LDAP server?
msclldap.netlogon.flags.ndnc  NDNC
    Boolean
    Is this an NDNC dc?
msclldap.netlogon.flags.pdc  PDC
    Boolean
    Is this DC a PDC or not?
msclldap.netlogon.flags.timeserv  Time Serv
    Boolean
    Does this dc provide time services (ntp) ?
msclldap.netlogon.flags.writable  Writable
    Boolean
    Is this dc writable? (i.e. can it update the AD?)
msclldap.netlogon.lm_token  LM Token
    Unsigned 16-bit integer
    LM Token
msclldap.netlogon.nt_token  NT Token
    Unsigned 16-bit integer
    NT Token
msclldap.netlogon.type  Type
    Unsigned 32-bit integer
    Type of <please tell Wireshark developers what this type is>
msclldap.netlogon.version  Version
    Unsigned 32-bit integer
    Version of <please tell Wireshark developers what this type is>
msclldap.sitename  Site
    String
    Site name
msclldap.username  User
    String
    User name

```

#### **Line Printer Daemon Protocol (lpd)**

```

lpd.request  Request
    Boolean
    TRUE if LPD request

```

```
lpd.response  Response
              Boolean
              TRUE if LPD response
```

#### **Line-based text data (data-text-lines)**

#### **Link Access Procedure Balanced (LAPB) (lapb)**

```
lapb.address  Address Field
              Unsigned 8-bit integer
              Address

lapb.control  Control Field
              Unsigned 8-bit integer
              Control field

lapb.control.f  Final
              Boolean

lapb.control.ftype  Frame type
                  Unsigned 8-bit integer

lapb.control.n_r  N(R)
                  Unsigned 8-bit integer

lapb.control.n_s  N(S)
                  Unsigned 8-bit integer

lapb.control.p  Poll
              Boolean

lapb.control.s_ftype  Supervisory frame type
                    Unsigned 8-bit integer

lapb.control.u_modifier_cmd  Command
                             Unsigned 8-bit integer

lapb.control.u_modifier_resp  Response
                              Unsigned 8-bit integer
```

#### **Link Access Procedure Balanced Ethernet (LAPBETHER) (lapbether)**

```
lapbether.length  Length Field
                  Unsigned 16-bit integer
                  LAPBEther Length Field
```

#### **Link Access Procedure, Channel D (LAPD) (lapd)**

```
lapd.address  Address Field
              Unsigned 16-bit integer
              Address

lapd.control  Control Field
              Unsigned 16-bit integer
              Control field

lapd.control.f  Final
              Boolean

lapd.control.ftype  Frame type
                  Unsigned 16-bit integer
```

lapd.control.n\_r N(R)  
Unsigned 16-bit integer

lapd.control.n\_s N(S)  
Unsigned 16-bit integer

lapd.control.p Poll  
Boolean

lapd.control.s\_ftype Supervisory frame type  
Unsigned 16-bit integer

lapd.control.u\_modifier\_cmd Command  
Unsigned 8-bit integer

lapd.control.u\_modifier\_resp Response  
Unsigned 8-bit integer

lapd.cr C/R  
Unsigned 16-bit integer  
Command/Response bit

lapd.direction Direction  
Unsigned 8-bit integer  
Direction

lapd.ea1 EA1  
Unsigned 16-bit integer  
First Address Extension bit

lapd.ea2 EA2  
Unsigned 16-bit integer  
Second Address Extension bit

lapd.sapi SAPI  
Unsigned 16-bit integer  
Service Access Point Identifier

lapd.tei TEI  
Unsigned 16-bit integer  
Terminal Endpoint Identifier

#### **Link Layer Discovery Protocol (lldp)**

lldp.chassis.id Chassis Id  
Byte array

lldp.chassis.id.ip4 Chassis Id  
IPv4 address

lldp.chassis.id.ip6 Chassis Id  
IPv6 address

lldp.chassis.id.mac Chassis Id  
6-byte Hardware (MAC) Address

lldp.chassis.subtype Chassis Id Subtype  
Unsigned 8-bit integer

lldp.ieee.802\_1.subtype IEEE 802.1 Subtype  
Unsigned 8-bit integer

lldp.ieee.802\_3.subtype IEEE 802.3 Subtype  
Unsigned 8-bit integer

```
lldp.media.subtype  Media Subtype
    Unsigned 8-bit integer

lldp.mgn.addr.hex   Management Address
    Byte array

lldp.mgn.addr.ip4   Management Address
    IPv4 address

lldp.mgn.addr.ip6   Management Address
    IPv6 address

lldp.mgn.obj.id     Object Identifier
    Byte array

lldp.network_address.subtype  Network Address family
    Unsigned 8-bit integer
    Network Address family

lldp.orgtlv.oui     Organization Unique Code
    Unsigned 24-bit integer

lldp.port.id.ip4    Port Id
    IPv4 address

lldp.port.id.ip6    Port Id
    IPv6 address

lldp.port.id.mac    Port Id
    6-byte Hardware (MAC) Address

lldp.port.subtype   Port Id Subtype
    Unsigned 8-bit integer

lldp.profinet.cable_delay_local  Port Cable Delay Local
    Unsigned 32-bit integer

lldp.profinet.cm_mac_add  CMMacAdd
    6-byte Hardware (MAC) Address
    CMResponderMacAdd or CMInitiatorMacAdd

lldp.profinet.green_period_begin_offset  GreenPeriodBegin.Offset
    Unsigned 32-bit integer
    Unrestricted period, offset to cycle begin in nanoseconds

lldp.profinet.green_period_begin_valid  GreenPeriodBegin.Valid
    Unsigned 32-bit integer
    Offset field is valid/invalid

lldp.profinet.ir_data_uuid  IRDataUUID

lldp.profinet.length_of_period_length  LengthOfPeriod.Length
    Unsigned 32-bit integer
    Duration of a cycle in nanoseconds

lldp.profinet.length_of_period_valid  LengthOfPeriod.Valid
    Unsigned 32-bit integer
    Length field is valid/invalid

lldp.profinet.master_source_address  MasterSourceAddress
    6-byte Hardware (MAC) Address

lldp.profinet.mrp_domain_uuid  MRP DomainUUID

lldp.profinet.mrrt_port_status  MRRT PortStatus
    Unsigned 16-bit integer
```



```

lldp.profinet.orange_period_begin_offset  OrangePeriodBegin.Offset
    Unsigned 32-bit integer
    RT_CLASS_2 period, offset to cycle begin in nanoseconds
lldp.profinet.orange_period_begin_valid  OrangePeriodBegin.Valid
    Unsigned 32-bit integer
    Offset field is valid/invalid
lldp.profinet.port_rx_delay_local  Port RX Delay Local
    Unsigned 32-bit integer
lldp.profinet.port_rx_delay_remote  Port RX Delay Remote
    Unsigned 32-bit integer
lldp.profinet.port_tx_delay_local  Port TX Delay Local
    Unsigned 32-bit integer
lldp.profinet.port_tx_delay_remote  Port TX Delay Remote
    Unsigned 32-bit integer
lldp.profinet.red_period_begin_offset  RedPeriodBegin.Offset
    Unsigned 32-bit integer
    RT_CLASS_3 period, offset to cycle begin in nanoseconds
lldp.profinet.red_period_begin_valid  RedPeriodBegin.Valid
    Unsigned 32-bit integer
    Offset field is valid/invalid
lldp.profinet.rtc2_port_status  RTClass2 Port Status
    Unsigned 16-bit integer
lldp.profinet.rtc3_port_status  RTClass3 Port Status
    Unsigned 16-bit integer
lldp.profinet.subdomain_uuid  SubdomainUUID
lldp.profinet.subtype  Subtype
    Unsigned 8-bit integer
    PROFINET Subtype
lldp.time_to_live  Seconds
    Unsigned 16-bit integer
lldp.tlv.len  TLV Length
    Unsigned 16-bit integer
lldp.tlv.type  TLV Type
    Unsigned 16-bit integer
lldp.unknown_subtype  Unknown Subtype Content
    Byte array

```

#### Link Management Protocol (LMP) (Imp)

```

lmp.begin_verify.all_links  Verify All Links
    Boolean
lmp.begin_verify.enctype  Encoding Type
    Unsigned 8-bit integer
lmp.begin_verify.flags  Flags
    Unsigned 16-bit integer
lmp.begin_verify.link_type  Data Link Type
    Boolean

```

```
lmp.data_link.link_verify  Data-Link is Allocated
    Boolean
lmp.data_link.local_ipv4   Data-Link Local ID - IPv4
    IPv4 address
lmp.data_link.local_unnum  Data-Link Local ID - Unnumbered
    Unsigned 32-bit integer
lmp.data_link.port        Data-Link is Individual Port
    Boolean
lmp.data_link.remote_ipv4  Data-Link Remote ID - IPv4
    IPv4 address
lmp.data_link.remote_unnum Data-Link Remote ID - Unnumbered
    Unsigned 32-bit integer
lmp.data_link_encoding    LSP Encoding Type
    Unsigned 8-bit integer
lmp.data_link_flags       Data-Link Flags
    Unsigned 8-bit integer
lmp.data_link_subobj      Subobject
    No value
lmp.data_link_switching   Interface Switching Capability
    Unsigned 8-bit integer
lmp.error                 Error Code
    Unsigned 32-bit integer
lmp.error.config_bad_ccid Config - Bad CC ID
    Boolean
lmp.error.config_bad_params Config - Unacceptable non-negotiable parameters
    Boolean
lmp.error.config_renegotiate Config - Renegotiate Parametere
    Boolean
lmp.error.summary_bad_data_link Summary - Bad Data Link Object
    Boolean
lmp.error.summary_bad_params Summary - Unacceptable non-negotiable parameters
    Boolean
lmp.error.summary_bad_remote_link_id Summary - Bad Remote Link ID
    Boolean
lmp.error.summary_bad_te_link Summary - Bad TE Link Object
    Boolean
lmp.error.summary_renegotiate Summary - Renegotiate Parametere
    Boolean
lmp.error.summary_unknown_dl_ctype Summary - Bad Data Link C-Type
    Boolean
lmp.error.summary_unknown_tel_ctype Summary - Bad TE Link C-Type
    Boolean
lmp.error.verify_te_link_id Verification - TE Link ID Configuration Error
    Boolean
```

lmp.error.verify\_unknown\_ctype Verification - Unknown Object C-Type  
Boolean

lmp.error.verify\_unsupported\_link Verification - Unsupported for this TE-Link  
Boolean

lmp.error.verify\_unsupported\_transport Verification - Transport Unsupported  
Boolean

lmp.error.verify\_unwilling Verification - Unwilling to Verify at this time  
Boolean

lmp.hdr.ccdown ControlChannelDown  
Boolean

lmp.hdr.flags LMP Header - Flags  
Unsigned 8-bit integer

lmp.hdr.reboot Reboot  
Boolean

lmp.hellodeadinterval HelloDeadInterval  
Unsigned 32-bit integer

lmp.hellointerval HelloInterval  
Unsigned 32-bit integer

lmp.local\_ccid Local CCID Value  
Unsigned 32-bit integer

lmp.local\_interfaceid\_ipv4 Local Interface ID - IPv4  
IPv4 address

lmp.local\_interfaceid\_unnum Local Interface ID - Unnumbered  
Unsigned 32-bit integer

lmp.local\_linkid\_ipv4 Local Link ID - IPv4  
IPv4 address

lmp.local\_linkid\_unnum Local Link ID - Unnumbered  
Unsigned 32-bit integer

lmp.local\_nodeid Local Node ID Value  
IPv4 address

lmp.messageid Message-ID Value  
Unsigned 32-bit integer

lmp.messageid\_ack Message-ID Ack Value  
Unsigned 32-bit integer

lmp.msg Message Type  
Unsigned 8-bit integer

lmp.msg.beginverify BeginVerify Message  
Boolean

lmp.msg.beginverifyack BeginVerifyAck Message  
Boolean

lmp.msg.beginverifynack BeginVerifyNack Message  
Boolean

lmp.msg.channelstatus ChannelStatus Message  
Boolean

```
lmp.msg.channelstatusack ChannelStatusAck Message
  Boolean

lmp.msg.channelstatusrequest ChannelStatusRequest Message
  Boolean

lmp.msg.channelstatusresponse ChannelStatusResponse Message
  Boolean

lmp.msg.config Config Message
  Boolean

lmp.msg.configack ConfigAck Message
  Boolean

lmp.msg.confignack ConfigNack Message
  Boolean

lmp.msg.endverify EndVerify Message
  Boolean

lmp.msg.endverifyack EndVerifyAck Message
  Boolean

lmp.msg.hello HELLO Message
  Boolean

lmp.msg.linksummary LinkSummary Message
  Boolean

lmp.msg.linksummaryack LinkSummaryAck Message
  Boolean

lmp.msg.linksummarynack LinkSummaryNack Message
  Boolean

lmp.msg.serviceconfig ServiceConfig Message
  Boolean

lmp.msg.serviceconfigack ServiceConfigAck Message
  Boolean

lmp.msg.serviceconfignack ServiceConfigNack Message
  Boolean

lmp.msg.test Test Message
  Boolean

lmp.msg.teststatusack TestStatusAck Message
  Boolean

lmp.msg.teststatusfailure TestStatusFailure Message
  Boolean

lmp.msg.teststatussuccess TestStatusSuccess Message
  Boolean

lmp.obj.Nodeid NODE_ID
  No value

lmp.obj.begin_verify BEGIN_VERIFY
  No value

lmp.obj.begin_verify_ack BEGIN_VERIFY_ACK
  No value
```

```
lmp.obj.ccid    CCID
               No value

lmp.obj.channel_status    CHANNEL_STATUS
               No value

lmp.obj.channel_status_request    CHANNEL_STATUS_REQUEST
               No value

lmp.obj.config    CONFIG
               No value

lmp.obj.ctype    Object C-Type
               Unsigned 8-bit integer

lmp.obj.data_link    DATA_LINK
               No value

lmp.obj.error    ERROR
               No value

lmp.obj.hello    HELLO
               No value

lmp.obj.interfaceid    INTERFACE_ID
               No value

lmp.obj.linkid    LINK_ID
               No value

lmp.obj.messageid    MESSAGE_ID
               No value

lmp.obj.serviceconfig    SERVICE_CONFIG
               No value

lmp.obj.te_link    TE_LINK
               No value

lmp.obj.verifyid    VERIFY_ID
               No value

lmp.object    LOCAL_CCID
               Unsigned 8-bit integer

lmp.remote_ccid    Remote CCID Value
               Unsigned 32-bit integer

lmp.remote_interfaceid_ipv4    Remote Interface ID - IPv4
               IPv4 address

lmp.remote_interfaceid_unnum    Remote Interface ID - Unnumbered
               Unsigned 32-bit integer

lmp.remote_linkid_ipv4    Remote Link ID - IPv4
               Unsigned 32-bit integer

lmp.remote_linkid_unnum    Remote Link ID - Unnumbered
               Unsigned 32-bit integer

lmp.remote_nodeid    Remote Node ID Value
               IPv4 address

lmp.rxseqnum    RxSeqNum
               Unsigned 32-bit integer
```

```
lmp.service_config.cct    Contiguous Concatenation Types
                          Unsigned 8-bit integer
lmp.service_config.cpsa  Client Port Service Attributes
                          Unsigned 8-bit integer
lmp.service_config.cpsa.line_overhead  Line/MS Overhead Transparency Supported
                          Boolean
lmp.service_config.cpsa.local_ifid  Local interface id of the client interface r
                          IPv4 address
lmp.service_config.cpsa.max_ncc  Maximum Number of Contiguously Concatenated Com
                          Unsigned 8-bit integer
lmp.service_config.cpsa.max_nvc  Minimum Number of Virtually Concatenated Compon
                          Unsigned 8-bit integer
lmp.service_config.cpsa.min_ncc  Minimum Number of Contiguously Concatenated Com
                          Unsigned 8-bit integer
lmp.service_config.cpsa.min_nvc  Maximum Number of Contiguously Concatenated Com
                          Unsigned 8-bit integer
lmp.service_config.cpsa.path_overhead  Path/VC Overhead Transparency Supported
                          Boolean
lmp.service_config.cpsa.section_overhead  Section/RS Overhead Transparency Suppo
                          Boolean
lmp.service_config.nsa.diversity  Network Diversity Flags
                          Unsigned 8-bit integer
lmp.service_config.nsa.diversity.link  Link diversity supported
                          Boolean
lmp.service_config.nsa.diversity.node  Node diversity supported
                          Boolean
lmp.service_config.nsa.diversity.srlg  SRLG diversity supported
                          Boolean
lmp.service_config.nsa.tcm  TCM Monitoring
                          Unsigned 8-bit integer
lmp.service_config.nsa.transparency  Network Transparency Flags
                          Unsigned 32-bit integer
lmp.service_config.nsa.transparency.loh  Standard LOH/MSOH transparency supporte
                          Boolean
lmp.service_config.nsa.transparency.soh  Standard SOH/RSOH transparency supporte
                          Boolean
lmp.service_config.nsa.transparency.tcm  TCM Monitoring Supported
                          Boolean
lmp.service_config.sp  Service Config - Supported Signalling Protocols
                          Unsigned 8-bit integer
lmp.service_config.sp.ldap  LDP is supported
                          Boolean
lmp.service_config.sp.rsvp  RSVP is supported
                          Boolean
```

```

lmp.te_link.fault_mgmt  Fault Management Supported
                        Boolean

lmp.te_link.link_verify  Link Verification Supported
                        Boolean

lmp.te_link.local_ipv4  TE-Link Local ID - IPv4
                        IPv4 address

lmp.te_link.local_unnum  TE-Link Local ID - Unnumbered
                        Unsigned 32-bit integer

lmp.te_link.remote_ipv4  TE-Link Remote ID - IPv4
                        IPv4 address

lmp.te_link.remote_unnum  TE-Link Remote ID - Unnumbered
                        Unsigned 32-bit integer

lmp.te_link.flags  TE-Link Flags
                  Unsigned 8-bit integer

lmp.txseqnum  TxSeqNum
             Unsigned 32-bit integer

lmp.verifyid  Verify-ID
             Unsigned 32-bit integer

```

#### **Linux Kernel Packet Generator (pktgen)**

```

pktgen.magic  Magic number
             Unsigned 32-bit integer
             The pktgen magic number

pktgen.seqnum  Sequence number
             Unsigned 32-bit integer
             Sequence number

pktgen.timestamp  Timestamp
                Date/Time stamp
                Timestamp

pktgen.tvsec  Timestamp tvsec
             Unsigned 32-bit integer
             Timestamp tvsec part

pktgen.tvusec  Timestamp tvusec
             Unsigned 32-bit integer
             Timestamp tvusec part

```

#### **Linux cooked-mode capture (sll)**

```

sll.etype  Protocol
          Unsigned 16-bit integer
          Ethernet protocol type

sll.gretype  Protocol
          Unsigned 16-bit integer
          GRE protocol type

sll.halen  Link-layer address length
          Unsigned 16-bit integer
          Link-layer address length

```

```
sll.hatype  Link-layer address type
            Unsigned 16-bit integer
            Link-layer address type

sll.ltype   Protocol
            Unsigned 16-bit integer
            Linux protocol type

sll.pkttype Packet type
            Unsigned 16-bit integer
            Packet type

sll.src.eth Source
            6-byte Hardware (MAC) Address
            Source link-layer address

sll.src.ipv4 Source
            IPv4 address
            Source link-layer address

sll.src.other Source
            Byte array
            Source link-layer address

sll.trailer Trailer
            Byte array
            Trailer
```

#### **Local Management Interface (lmi)**

```
lmi.cmd    Call reference
            Unsigned 8-bit integer
            Call Reference

lmi.dlci_act  DLCI Active
            Unsigned 8-bit integer
            DLCI Active Flag

lmi.dlci_hi   DLCI High
            Unsigned 8-bit integer
            DLCI High bits

lmi.dlci_low  DLCI Low
            Unsigned 8-bit integer
            DLCI Low bits

lmi.dlci_new  DLCI New
            Unsigned 8-bit integer
            DLCI New Flag

lmi.ele_rcd_type Record Type
            Unsigned 8-bit integer
            Record Type

lmi.inf_ele_len Length
            Unsigned 8-bit integer
            Information Element Length

lmi.inf_ele_type Type
            Unsigned 8-bit integer
            Information Element Type
```



```
lmi.msg_type  Message Type
              Unsigned 8-bit integer
              Message Type

lmi.recv_seq  Recv Seq
              Unsigned 8-bit integer
              Receive Sequence

lmi.send_seq  Send Seq
              Unsigned 8-bit integer
              Send Sequence
```

**LocalTalk Link Access Protocol (llap)**

```
llap.dst  Destination Node
          Unsigned 8-bit integer

llap.src  Source Node
          Unsigned 8-bit integer

llap.type  Type
          Unsigned 8-bit integer
```

**Log Message (log)**

```
log.missed  WARNING: Missed one or more messages while capturing!
           No value

log.msg  Message
        String
```

**Logical Link Control GPRS (llcgprs)**

```
llcgprs.as  Ackn request bit
           Boolean
           Acknowledgement request bit A

llcgprs.cr  Command/Response bit
           Boolean
           Command/Response bit

llcgprs.e  E bit
           Boolean
           Encryption mode bit

llcgprs.frmrcr  C/R
              Unsigned 32-bit integer
              Rejected command response

llcgprs.frmrrfcf  Control Field Octet
                Unsigned 16-bit integer
                Rejected Frame CF

llcgprs.fmrspare  X
                Unsigned 32-bit integer
                Filler

llcgprs.frmrvr  V(R)
                Unsigned 32-bit integer
                Current receive state variable
```

```
llcgprs.frmrvs  V(S)
    Unsigned 32-bit integer
    Current send state variable

llcgprs.frmrw1  W1
    Unsigned 32-bit integer
    Invalid - info not permitted

llcgprs.frmrw2  W2
    Unsigned 32-bit integer
    Info exceeded N201

llcgprs.frmrw3  W3
    Unsigned 32-bit integer
    Undefined control field

llcgprs.frmrw4  W4
    Unsigned 32-bit integer
    LLE was in ABM when rejecting

llcgprs.ia  Ack Bit
    Unsigned 24-bit integer
    I A Bit

llcgprs.ifmt  I Format
    Unsigned 24-bit integer
    I Fmt Bit

llcgprs.iignore  Spare
    Unsigned 24-bit integer
    Ignore Bit

llcgprs.k  k
    Unsigned 8-bit integer
    k counter

llcgprs.kmask  ignored
    Unsigned 8-bit integer
    ignored

llcgprs.nr  Receive sequence number
    Unsigned 16-bit integer
    Receive sequence number N(R)

llcgprs.nu  N(U)
    Unsigned 16-bit integer
    Transmitted unconfirmed sequence number

llcgprs.pd  Protocol Discriminator_bit
    Boolean
    Protocol Discriminator bit (should be 0)

llcgprs.pf  P/F bit
    Boolean
    Poll /Finall bit

llcgprs.pm  PM bit
    Boolean
    Protected mode bit

llcgprs.romr1  Remaining Length of TOM Protocol Header
    Unsigned 8-bit integer
    RL
```

```
llcgprs.s S format
    Unsigned 16-bit integer
    Supervisory format S

llcgprs.sls2 Supervisory function bits
    Unsigned 16-bit integer
    Supervisory functions bits

llcgprs.sacknr N(R)
    Unsigned 24-bit integer
    N(R)

llcgprs.sackns N(S)
    Unsigned 24-bit integer
    N(S)

llcgprs.sackrbits R Bitmap Bits
    Unsigned 8-bit integer
    R Bitmap

llcgprs.sacksfb Supervisory function bits
    Unsigned 24-bit integer
    Supervisory functions bits

llcgprs.sapi SAPI
    Unsigned 8-bit integer
    Service Access Point Identifier

llcgprs.sapib SAPI
    Unsigned 8-bit integer
    Service Access Point Identifier

llcgprs.sspare Spare
    Unsigned 16-bit integer
    Ignore Bit

llcgprs.tomdata TOM Message Capsule Byte
    Unsigned 8-bit integer
    tdb

llcgprs.tomhead TOM Header Byte
    Unsigned 8-bit integer
    thb

llcgprs.tompd TOM Protocol Discriminator
    Unsigned 8-bit integer
    TPD

llcgprs.u U format
    Unsigned 8-bit integer
    U frame format

llcgprs.ucom Command/Response
    Unsigned 8-bit integer
    Commands and Responses

llcgprs.ui UI format
    Unsigned 16-bit integer
    UI frame format

llcgprs.ui_sp_bit Spare bits
    Unsigned 16-bit integer
    Spare bits
```

```
llcgprs.xidbyte  Parameter Byte
                 Unsigned 8-bit integer
                 Data

llcgprs.xidlen1  Length
                 Unsigned 8-bit integer
                 Len

llcgprs.xidlen2  Length continued
                 Unsigned 8-bit integer
                 Len

llcgprs.xidspare Spare
                 Unsigned 8-bit integer
                 Ignore

llcgprs.xidtype  Type
                 Unsigned 8-bit integer
                 Type

llcgprs.xidx1    XL Bit
                 Unsigned 8-bit integer
                 XL
```

#### **Logical-Link Control (llc)**

```
llc.cisco_pid   PID
                 Unsigned 16-bit integer

llc.control     Control
                 Unsigned 16-bit integer

llc.control.f   Final
                 Boolean

llc.control.ftype Frame type
                 Unsigned 16-bit integer

llc.control.n_r N(R)
                 Unsigned 16-bit integer

llc.control.n_s N(S)
                 Unsigned 16-bit integer

llc.control.p   Poll
                 Boolean

llc.control.s_ftype Supervisory frame type
                 Unsigned 16-bit integer

llc.control.u_modifier_cmd Command
                 Unsigned 8-bit integer

llc.control.u_modifier_resp Response
                 Unsigned 8-bit integer

llc.dsap        DSAP
                 Unsigned 8-bit integer
                 DSAP - 7 Most Significant Bits only

llc.dsap.ig     IG Bit
                 Boolean
                 Individual/Group - Least Significant Bit only
```

```

llc.extreme_pid  PID
    Unsigned 16-bit integer

llc.nortel_pid  PID
    Unsigned 16-bit integer

llc.oui  Organization Code
    Unsigned 24-bit integer

llc.pid  Protocol ID
    Unsigned 16-bit integer

llc.ssap  SSAP
    Unsigned 8-bit integer
    SSAP - 7 Most Significant Bits only

llc.ssap.cr  CR Bit
    Boolean
    Command/Response - Least Significant Bit only

llc.type  Type
    Unsigned 16-bit integer

llc.wlccp_pid  PID
    Unsigned 16-bit integer

```

#### **Logical-Link Control Basic Format XID (basicxid)**

```

basicxid.llc.xid.format  XID Format
    Unsigned 8-bit integer

basicxid.llc.xid.types  LLC Types/Classes
    Unsigned 8-bit integer

basicxid.llc.xid.wsize  Receive Window Size
    Unsigned 8-bit integer

```

#### **Logotype Certificate Extensions (logotypecertextn)**

```

logotypecertextn.LogotypeExtn  LogotypeExtn
    No value
    logotypecertextn.LogotypeExtn

logotypecertextn.audio  audio
    Unsigned 32-bit integer
    logotypecertextn.SEQUENCE_OF_LogotypeAudio

logotypecertextn.audioDetails  audioDetails
    No value
    logotypecertextn.LogotypeDetails

logotypecertextn.audioInfo  audioInfo
    No value
    logotypecertextn.LogotypeAudioInfo

logotypecertextn.audio_item  Item
    No value
    logotypecertextn.LogotypeAudio

logotypecertextn.channels  channels
    Signed 32-bit integer
    logotypecertextn.INTEGER

```

```
logotypecertextn.communityLogos  communityLogos
    Unsigned 32-bit integer
    logotypecertextn.SEQUENCE_OF_LogotypeInfo
logotypecertextn.communityLogos_item  Item
    Unsigned 32-bit integer
    logotypecertextn.LogotypeInfo
logotypecertextn.direct  direct
    No value
    logotypecertextn.LogotypeData
logotypecertextn.fileSize  fileSize
    Signed 32-bit integer
    logotypecertextn.INTEGER
logotypecertextn.hashAlg  hashAlg
    No value
    x509af.AlgorithmIdentifier
logotypecertextn.hashValue  hashValue
    Byte array
    logotypecertextn.OCTET_STRING
logotypecertextn.image  image
    Unsigned 32-bit integer
    logotypecertextn.SEQUENCE_OF_LogotypeImage
logotypecertextn.imageDetails  imageDetails
    No value
    logotypecertextn.LogotypeDetails
logotypecertextn.imageInfo  imageInfo
    No value
    logotypecertextn.LogotypeImageInfo
logotypecertextn.image_item  Item
    No value
    logotypecertextn.LogotypeImage
logotypecertextn.indirect  indirect
    No value
    logotypecertextn.LogotypeReference
logotypecertextn.info  info
    Unsigned 32-bit integer
    logotypecertextn.LogotypeInfo
logotypecertextn.issuerLogo  issuerLogo
    Unsigned 32-bit integer
    logotypecertextn.LogotypeInfo
logotypecertextn.language  language
    String
    logotypecertextn.IA5String
logotypecertextn.logotypeHash  logotypeHash
    Unsigned 32-bit integer
    logotypecertextn.SEQUENCE_SIZE_1_MAX_OF_HashAlgAndValue
logotypecertextn.logotypeHash_item  Item
    No value
    logotypecertextn.HashAlgAndValue
```

```

logotypecertextn.logotypeType  logotypeType
    logotypecertextn.OBJECT_IDENTIFIER
logotypecertextn.logotypeURI  logotypeURI
    Unsigned 32-bit integer
    logotypecertextn.T_logotypeURI
logotypecertextn.logotypeURI_item  Item
    String
    logotypecertextn.T_logotypeURI_item
logotypecertextn.mediaType  mediaType
    String
    logotypecertextn.IA5String
logotypecertextn.numBits  numBits
    Signed 32-bit integer
    logotypecertextn.INTEGER
logotypecertextn.otherLogos  otherLogos
    Unsigned 32-bit integer
    logotypecertextn.SEQUENCE_OF_OtherLogotypeInfo
logotypecertextn.otherLogos_item  Item
    No value
    logotypecertextn.OtherLogotypeInfo
logotypecertextn.playTime  playTime
    Signed 32-bit integer
    logotypecertextn.INTEGER
logotypecertextn.refStructHash  refStructHash
    Unsigned 32-bit integer
    logotypecertextn.SEQUENCE_SIZE_1_MAX_OF_HashAlgAndValue
logotypecertextn.refStructHash_item  Item
    No value
    logotypecertextn.HashAlgAndValue
logotypecertextn.refStructURI  refStructURI
    Unsigned 32-bit integer
    logotypecertextn.T_refStructURI
logotypecertextn.refStructURI_item  Item
    String
    logotypecertextn.T_refStructURI_item
logotypecertextn.resolution  resolution
    Unsigned 32-bit integer
    logotypecertextn.LogotypeImageResolution
logotypecertextn.sampleRate  sampleRate
    Signed 32-bit integer
    logotypecertextn.INTEGER
logotypecertextn.subjectLogo  subjectLogo
    Unsigned 32-bit integer
    logotypecertextn.LogotypeInfo
logotypecertextn.tableSize  tableSize
    Signed 32-bit integer
    logotypecertextn.INTEGER

```

```
logotypecertextn.type  type
    Signed 32-bit integer
    logotypecertextn.LogotypeImageType

logotypecertextn.xSize  xSize
    Signed 32-bit integer
    logotypecertextn.INTEGER

logotypecertextn.ySize  ySize
    Signed 32-bit integer
    logotypecertextn.INTEGER
```

**Lucent/Ascend debug output (ascend)**

```
ascend.chunk  WDD Chunk
    Unsigned 32-bit integer

ascend.number  Called number
    String

ascend.ssess  Session ID
    Unsigned 32-bit integer

ascend.task  Task
    Unsigned 32-bit integer

ascend.type  Link type
    Unsigned 32-bit integer

ascend.user  User name
    String
```

**MAC Control (macc)**

```
macctrl.pause  Pause
    Unsigned 16-bit integer
    MAC control Pause

macctrl.quanta  Quanta
    Unsigned 16-bit integer
    MAC control quanta
```

**MDS Header (mdshdr)**

```
mdshdr.crc  CRC
    Unsigned 32-bit integer

mdshdr.dstidx  Dst Index
    Unsigned 16-bit integer

mdshdr.eof  EOF
    Unsigned 8-bit integer

mdshdr.plen  Packet Len
    Unsigned 16-bit integer

mdshdr.sof  SOF
    Unsigned 8-bit integer

mdshdr.span  SPAN Frame
    Unsigned 8-bit integer

mdshdr.srcidx  Src Index
    Unsigned 16-bit integer
```



mdshdr.vsan VSAN  
Unsigned 16-bit integer

**MEGACO (megaco)**

megaco.\_h324\_h223capr h324/h223capr  
String  
h324/h223capr

megaco.audit Audit Descriptor  
String  
Audit Descriptor of the megaco Command

megaco.command Command  
String  
Command of this message

megaco.command\_line Command line  
String  
Commands of this message

megaco.context Context  
String  
Context ID of this message

megaco.ctx Context  
Unsigned 32-bit integer

megaco.ctx.cmd Command in Frame  
Frame number

megaco.ctx.term Termination  
String

megaco.ctx.term.bir BIR  
String

megaco.ctx.term.nsap NSAP  
String

megaco.ctx.term.type Type  
Unsigned 32-bit integer

megaco.digitmap DigitMap Descriptor  
String  
DigitMap Descriptor of the megaco Command

megaco.ds\_dscp ds/dscp  
String  
ds/dscp Differentiated Services Code Point

megaco.error ERROR Descriptor  
String  
Error Descriptor of the megaco Command

megaco.error\_frame ERROR frame  
String  
Syntax error

megaco.eventbuffercontrol Event Buffer Control  
String  
Event Buffer Control in Termination State Descriptor

```
megaco.events  Events Descriptor
  String
  Events Descriptor of the megaco Command
megaco.h245    h245
  String
  Embedded H.245 message
megaco.h245.h223Capability  h223Capability
  No value
  megaco.h245.H223Capability
megaco.h324_muxtbl_in  h324/muxtbl_in
  String
  h324/muxtbl_in
megaco.h324_muxtbl_out  h324/muxtbl_out
  String
  h324/muxtbl_out
megaco.localcontroldescriptor  Local Control Descriptor
  String
  Local Control Descriptor in Media Descriptor
megaco.localdescriptor  Local Descriptor
  String
  Local Descriptor in Media Descriptor
megaco.mId  MediagatewayID
  String
  Mediagateway ID
megaco.media  Media Descriptor
  String
  Media Descriptor of the megaco Command
megaco.mode  Mode
  String
  Mode sendonly/receiveonly/inactive/loopback
megaco.modem  Modem Descriptor
  String
  Modem Descriptor of the megaco Command
megaco.multiplex  Multiplex Descriptor
  String
  Multiplex Descriptor of the megaco Command
megaco.observedevents  Observed Events Descriptor
  String
  Observed Events Descriptor of the megaco Command
megaco.packagesdescriptor  Packages Descriptor
  String
  Packages Descriptor
megaco.pkgdname  pkgdName
  String
  PackageName SLASH ItemID
megaco.remotedescriptor  Remote Descriptor
  String
  Remote Descriptor in Media Descriptor
```

megaco.requestid RequestID  
String  
RequestID in Events or Observedevents Descriptor

megaco.reservegroup Reserve Group  
String  
Reserve Group on or off

megaco.reservevalue Reserve Value  
String  
Reserve Value on or off

megaco.servicechange Service Change Descriptor  
String  
Service Change Descriptor of the megaco Command

megaco.servicestates Service State  
String  
Service States in Termination State Descriptor

megaco.signal Signal Descriptor  
String  
Signal Descriptor of the megaco Command

megaco.statistics Statistics Descriptor  
String  
Statistics Descriptor of the megaco Command

megaco.streamid StreamID  
String  
StreamID in the Media Descriptor

megaco.termid Termination ID  
String  
Termination ID of this Command

megaco.terminationstate Termination State Descriptor  
String  
Termination State Descriptor in Media Descriptor

megaco.topology Topology Descriptor  
String  
Topology Descriptor of the megaco Command

megaco.transaction Transaction  
String  
Message Originator

megaco.transid Transaction ID  
String  
Transaction ID of this message

megaco.version Version  
String  
Version

**MIBs (mibs)**

IF-MIB.ifAdminStatus IF-MIB::ifAdminStatus  
Signed 32-bit integer  
IF-MIB::ifAdminStatus

```
IF-MIB.ifAlias IF-MIB::ifAlias
String
IF-MIB::ifAlias

IF-MIB.ifConnectorPresent IF-MIB::ifConnectorPresent
Signed 32-bit integer
IF-MIB::ifConnectorPresent

IF-MIB.ifCounterDiscontinuityTime IF-MIB::ifCounterDiscontinuityTime
Unsigned 64-bit integer
IF-MIB::ifCounterDiscontinuityTime

IF-MIB.ifDescr IF-MIB::ifDescr
String
IF-MIB::ifDescr

IF-MIB.ifEntry.ifIndex IF-MIB::ifEntry.ifIndex
Signed 32-bit integer

IF-MIB.ifHCInBroadcastPkts IF-MIB::ifHCInBroadcastPkts
Unsigned 64-bit integer
IF-MIB::ifHCInBroadcastPkts

IF-MIB.ifHCInMulticastPkts IF-MIB::ifHCInMulticastPkts
Unsigned 64-bit integer
IF-MIB::ifHCInMulticastPkts

IF-MIB.ifHCInOctets IF-MIB::ifHCInOctets
Unsigned 64-bit integer
IF-MIB::ifHCInOctets

IF-MIB.ifHCInUcastPkts IF-MIB::ifHCInUcastPkts
Unsigned 64-bit integer
IF-MIB::ifHCInUcastPkts

IF-MIB.ifHCOutBroadcastPkts IF-MIB::ifHCOutBroadcastPkts
Unsigned 64-bit integer
IF-MIB::ifHCOutBroadcastPkts

IF-MIB.ifHCOutMulticastPkts IF-MIB::ifHCOutMulticastPkts
Unsigned 64-bit integer
IF-MIB::ifHCOutMulticastPkts

IF-MIB.ifHCOutOctets IF-MIB::ifHCOutOctets
Unsigned 64-bit integer
IF-MIB::ifHCOutOctets

IF-MIB.ifHCOutUcastPkts IF-MIB::ifHCOutUcastPkts
Unsigned 64-bit integer
IF-MIB::ifHCOutUcastPkts

IF-MIB.ifHighSpeed IF-MIB::ifHighSpeed
Unsigned 32-bit integer
IF-MIB::ifHighSpeed

IF-MIB.ifInBroadcastPkts IF-MIB::ifInBroadcastPkts
Unsigned 64-bit integer
IF-MIB::ifInBroadcastPkts

IF-MIB.ifInDiscards IF-MIB::ifInDiscards
Unsigned 64-bit integer
IF-MIB::ifInDiscards
```

```
IF-MIB.ifInErrors IF-MIB::ifInErrors
    Unsigned 64-bit integer
    IF-MIB::ifInErrors

IF-MIB.ifInMulticastPkts IF-MIB::ifInMulticastPkts
    Unsigned 64-bit integer
    IF-MIB::ifInMulticastPkts

IF-MIB.ifInNUcastPkts IF-MIB::ifInNUcastPkts
    Unsigned 64-bit integer
    IF-MIB::ifInNUcastPkts

IF-MIB.ifInOctets IF-MIB::ifInOctets
    Unsigned 64-bit integer
    IF-MIB::ifInOctets

IF-MIB.ifInUcastPkts IF-MIB::ifInUcastPkts
    Unsigned 64-bit integer
    IF-MIB::ifInUcastPkts

IF-MIB.ifInUnknownProtos IF-MIB::ifInUnknownProtos
    Unsigned 64-bit integer
    IF-MIB::ifInUnknownProtos

IF-MIB.ifIndex IF-MIB::ifIndex
    Signed 32-bit integer
    IF-MIB::ifIndex

IF-MIB.ifLastChange IF-MIB::ifLastChange
    Unsigned 64-bit integer
    IF-MIB::ifLastChange

IF-MIB.ifLinkUpDownTrapEnable IF-MIB::ifLinkUpDownTrapEnable
    Signed 32-bit integer
    IF-MIB::ifLinkUpDownTrapEnable

IF-MIB.ifMtu IF-MIB::ifMtu
    Signed 32-bit integer
    IF-MIB::ifMtu

IF-MIB.ifName IF-MIB::ifName
    String
    IF-MIB::ifName

IF-MIB.ifNumber IF-MIB::ifNumber
    Signed 32-bit integer
    IF-MIB::ifNumber

IF-MIB.ifOperStatus IF-MIB::ifOperStatus
    Signed 32-bit integer
    IF-MIB::ifOperStatus

IF-MIB.ifOutBroadcastPkts IF-MIB::ifOutBroadcastPkts
    Unsigned 64-bit integer
    IF-MIB::ifOutBroadcastPkts

IF-MIB.ifOutDiscards IF-MIB::ifOutDiscards
    Unsigned 64-bit integer
    IF-MIB::ifOutDiscards

IF-MIB.ifOutErrors IF-MIB::ifOutErrors
    Unsigned 64-bit integer
    IF-MIB::ifOutErrors
```

```
IF-MIB.ifOutMulticastPkts  IF-MIB::ifOutMulticastPkts
    Unsigned 64-bit integer
    IF-MIB::ifOutMulticastPkts

IF-MIB.ifOutNUcastPkts  IF-MIB::ifOutNUcastPkts
    Unsigned 64-bit integer
    IF-MIB::ifOutNUcastPkts

IF-MIB.ifOutOctets  IF-MIB::ifOutOctets
    Unsigned 64-bit integer
    IF-MIB::ifOutOctets

IF-MIB.ifOutQLen  IF-MIB::ifOutQLen
    Unsigned 32-bit integer
    IF-MIB::ifOutQLen

IF-MIB.ifOutUcastPkts  IF-MIB::ifOutUcastPkts
    Unsigned 64-bit integer
    IF-MIB::ifOutUcastPkts

IF-MIB.ifPhysAddress  IF-MIB::ifPhysAddress
    Byte array
    IF-MIB::ifPhysAddress

IF-MIB.ifPromiscuousMode  IF-MIB::ifPromiscuousMode
    Signed 32-bit integer
    IF-MIB::ifPromiscuousMode

IF-MIB.ifRcvAddressAddress  IF-MIB::ifRcvAddressAddress
    Byte array
    IF-MIB::ifRcvAddressAddress

IF-MIB.ifRcvAddressEntry.ifIndex  IF-MIB::ifRcvAddressEntry.ifIndex
    Signed 32-bit integer

IF-MIB.ifRcvAddressEntry.ifRcvAddressAddress  IF-MIB::ifRcvAddressEntry.ifRcvAdd
    Byte array

IF-MIB.ifRcvAddressStatus  IF-MIB::ifRcvAddressStatus
    Signed 32-bit integer
    IF-MIB::ifRcvAddressStatus

IF-MIB.ifRcvAddressType  IF-MIB::ifRcvAddressType
    Signed 32-bit integer
    IF-MIB::ifRcvAddressType

IF-MIB.ifSpecific  IF-MIB::ifSpecific
    IF-MIB::ifSpecific

IF-MIB.ifSpeed  IF-MIB::ifSpeed
    Unsigned 32-bit integer
    IF-MIB::ifSpeed

IF-MIB.ifStackEntry.ifStackHigherLayer  IF-MIB::ifStackEntry.ifStackHigherLayer
    Signed 32-bit integer

IF-MIB.ifStackEntry.ifStackLowerLayer  IF-MIB::ifStackEntry.ifStackLowerLayer
    Signed 32-bit integer

IF-MIB.ifStackHigherLayer  IF-MIB::ifStackHigherLayer
    Signed 32-bit integer
    IF-MIB::ifStackHigherLayer
```

```
IF-MIB.ifStackLastChange  IF-MIB::ifStackLastChange
    Unsigned 64-bit integer
    IF-MIB::ifStackLastChange

IF-MIB.ifStackLowerLayer  IF-MIB::ifStackLowerLayer
    Signed 32-bit integer
    IF-MIB::ifStackLowerLayer

IF-MIB.ifStackStatus      IF-MIB::ifStackStatus
    Signed 32-bit integer
    IF-MIB::ifStackStatus

IF-MIB.ifTableLastChange  IF-MIB::ifTableLastChange
    Unsigned 64-bit integer
    IF-MIB::ifTableLastChange

IF-MIB.ifTestCode         IF-MIB::ifTestCode
    IF-MIB::ifTestCode

IF-MIB.ifTestId           IF-MIB::ifTestId
    Signed 32-bit integer
    IF-MIB::ifTestId

IF-MIB.ifTestOwner        IF-MIB::ifTestOwner
    Byte array
    IF-MIB::ifTestOwner

IF-MIB.ifTestResult       IF-MIB::ifTestResult
    Signed 32-bit integer
    IF-MIB::ifTestResult

IF-MIB.ifTestStatus       IF-MIB::ifTestStatus
    Signed 32-bit integer
    IF-MIB::ifTestStatus

IF-MIB.ifTestType         IF-MIB::ifTestType
    IF-MIB::ifTestType

IF-MIB.ifType             IF-MIB::ifType
    Signed 32-bit integer
    IF-MIB::ifType

IP-MIB.icmpInAddrMaskReps  IP-MIB::icmpInAddrMaskReps
    Unsigned 64-bit integer
    IP-MIB::icmpInAddrMaskReps

IP-MIB.icmpInAddrMasks    IP-MIB::icmpInAddrMasks
    Unsigned 64-bit integer
    IP-MIB::icmpInAddrMasks

IP-MIB.icmpInDestUnreachs  IP-MIB::icmpInDestUnreachs
    Unsigned 64-bit integer
    IP-MIB::icmpInDestUnreachs

IP-MIB.icmpInEchoReps     IP-MIB::icmpInEchoReps
    Unsigned 64-bit integer
    IP-MIB::icmpInEchoReps

IP-MIB.icmpInEchos        IP-MIB::icmpInEchos
    Unsigned 64-bit integer
    IP-MIB::icmpInEchos
```

```
IP-MIB.icmpInErrors IP-MIB::icmpInErrors
    Unsigned 64-bit integer
    IP-MIB::icmpInErrors

IP-MIB.icmpInMsgs IP-MIB::icmpInMsgs
    Unsigned 64-bit integer
    IP-MIB::icmpInMsgs

IP-MIB.icmpInParmProbs IP-MIB::icmpInParmProbs
    Unsigned 64-bit integer
    IP-MIB::icmpInParmProbs

IP-MIB.icmpInRedirects IP-MIB::icmpInRedirects
    Unsigned 64-bit integer
    IP-MIB::icmpInRedirects

IP-MIB.icmpInSrcQuenchs IP-MIB::icmpInSrcQuenchs
    Unsigned 64-bit integer
    IP-MIB::icmpInSrcQuenchs

IP-MIB.icmpInTimeExcds IP-MIB::icmpInTimeExcds
    Unsigned 64-bit integer
    IP-MIB::icmpInTimeExcds

IP-MIB.icmpInTimestampReps IP-MIB::icmpInTimestampReps
    Unsigned 64-bit integer
    IP-MIB::icmpInTimestampReps

IP-MIB.icmpInTimestamps IP-MIB::icmpInTimestamps
    Unsigned 64-bit integer
    IP-MIB::icmpInTimestamps

IP-MIB.icmpMsgStatsEntry.icmpMsgStatsIPVersion IP-MIB::icmpMsgStatsEntry.icmpMsgStatsIPVersion
    Signed 32-bit integer

IP-MIB.icmpMsgStatsEntry.icmpMsgStatsType IP-MIB::icmpMsgStatsEntry.icmpMsgStatsType
    Signed 32-bit integer

IP-MIB.icmpMsgStatsIPVersion IP-MIB::icmpMsgStatsIPVersion
    Signed 32-bit integer
    IP-MIB::icmpMsgStatsIPVersion

IP-MIB.icmpMsgStatsInPkts IP-MIB::icmpMsgStatsInPkts
    Unsigned 64-bit integer
    IP-MIB::icmpMsgStatsInPkts

IP-MIB.icmpMsgStatsOutPkts IP-MIB::icmpMsgStatsOutPkts
    Unsigned 64-bit integer
    IP-MIB::icmpMsgStatsOutPkts

IP-MIB.icmpMsgStatsType IP-MIB::icmpMsgStatsType
    Signed 32-bit integer
    IP-MIB::icmpMsgStatsType

IP-MIB.icmpOutAddrMaskReps IP-MIB::icmpOutAddrMaskReps
    Unsigned 64-bit integer
    IP-MIB::icmpOutAddrMaskReps

IP-MIB.icmpOutAddrMasks IP-MIB::icmpOutAddrMasks
    Unsigned 64-bit integer
    IP-MIB::icmpOutAddrMasks
```



```
IP-MIB.icmpOutDestUnreachs  IP-MIB::icmpOutDestUnreachs
    Unsigned 64-bit integer
    IP-MIB::icmpOutDestUnreachs

IP-MIB.icmpOutEchoReps  IP-MIB::icmpOutEchoReps
    Unsigned 64-bit integer
    IP-MIB::icmpOutEchoReps

IP-MIB.icmpOutEchos  IP-MIB::icmpOutEchos
    Unsigned 64-bit integer
    IP-MIB::icmpOutEchos

IP-MIB.icmpOutErrors  IP-MIB::icmpOutErrors
    Unsigned 64-bit integer
    IP-MIB::icmpOutErrors

IP-MIB.icmpOutMsgs  IP-MIB::icmpOutMsgs
    Unsigned 64-bit integer
    IP-MIB::icmpOutMsgs

IP-MIB.icmpOutParmProbs  IP-MIB::icmpOutParmProbs
    Unsigned 64-bit integer
    IP-MIB::icmpOutParmProbs

IP-MIB.icmpOutRedirects  IP-MIB::icmpOutRedirects
    Unsigned 64-bit integer
    IP-MIB::icmpOutRedirects

IP-MIB.icmpOutSrcQuenchs  IP-MIB::icmpOutSrcQuenchs
    Unsigned 64-bit integer
    IP-MIB::icmpOutSrcQuenchs

IP-MIB.icmpOutTimeExcds  IP-MIB::icmpOutTimeExcds
    Unsigned 64-bit integer
    IP-MIB::icmpOutTimeExcds

IP-MIB.icmpOutTimestampReps  IP-MIB::icmpOutTimestampReps
    Unsigned 64-bit integer
    IP-MIB::icmpOutTimestampReps

IP-MIB.icmpOutTimestamps  IP-MIB::icmpOutTimestamps
    Unsigned 64-bit integer
    IP-MIB::icmpOutTimestamps

IP-MIB.icmpStatsEntry.icmpStatsIPVersion  IP-MIB::icmpStatsEntry.icmpStatsIPVers
    Signed 32-bit integer

IP-MIB.icmpStatsIPVersion  IP-MIB::icmpStatsIPVersion
    Signed 32-bit integer
    IP-MIB::icmpStatsIPVersion

IP-MIB.icmpStatsInErrors  IP-MIB::icmpStatsInErrors
    Unsigned 64-bit integer
    IP-MIB::icmpStatsInErrors

IP-MIB.icmpStatsInMsgs  IP-MIB::icmpStatsInMsgs
    Unsigned 64-bit integer
    IP-MIB::icmpStatsInMsgs

IP-MIB.icmpStatsOutErrors  IP-MIB::icmpStatsOutErrors
    Unsigned 64-bit integer
    IP-MIB::icmpStatsOutErrors
```

```
IP-MIB.icmpStatsOutMsgs IP-MIB::icmpStatsOutMsgs
    Unsigned 64-bit integer
    IP-MIB::icmpStatsOutMsgs

IP-MIB.ipAdEntAddr IP-MIB::ipAdEntAddr
    IPv4 address
    IP-MIB::ipAdEntAddr

IP-MIB.ipAdEntBcastAddr IP-MIB::ipAdEntBcastAddr
    Signed 32-bit integer
    IP-MIB::ipAdEntBcastAddr

IP-MIB.ipAdEntIfIndex IP-MIB::ipAdEntIfIndex
    Signed 32-bit integer
    IP-MIB::ipAdEntIfIndex

IP-MIB.ipAdEntNetMask IP-MIB::ipAdEntNetMask
    IPv4 address
    IP-MIB::ipAdEntNetMask

IP-MIB.ipAdEntReasmMaxSize IP-MIB::ipAdEntReasmMaxSize
    Signed 32-bit integer
    IP-MIB::ipAdEntReasmMaxSize

IP-MIB.ipAddrEntry.ipAdEntAddr IP-MIB::ipAddrEntry.ipAdEntAddr
    IPv4 address

IP-MIB.ipAddressAddr IP-MIB::ipAddressAddr
    Byte array
    IP-MIB::ipAddressAddr

IP-MIB.ipAddressAddrType IP-MIB::ipAddressAddrType
    Signed 32-bit integer
    IP-MIB::ipAddressAddrType

IP-MIB.ipAddressCreated IP-MIB::ipAddressCreated
    Unsigned 64-bit integer
    IP-MIB::ipAddressCreated

IP-MIB.ipAddressEntry.ipAddressAddr IP-MIB::ipAddressEntry.ipAddressAddr
    Byte array

IP-MIB.ipAddressEntry.ipAddressAddrType IP-MIB::ipAddressEntry.ipAddressAddrType
    Signed 32-bit integer

IP-MIB.ipAddressIfIndex IP-MIB::ipAddressIfIndex
    Signed 32-bit integer
    IP-MIB::ipAddressIfIndex

IP-MIB.ipAddressLastChanged IP-MIB::ipAddressLastChanged
    Unsigned 64-bit integer
    IP-MIB::ipAddressLastChanged

IP-MIB.ipAddressOrigin IP-MIB::ipAddressOrigin
    Signed 32-bit integer
    IP-MIB::ipAddressOrigin

IP-MIB.ipAddressPrefix IP-MIB::ipAddressPrefix
    IP-MIB::ipAddressPrefix

IP-MIB.ipAddressPrefixAdvPreferredLifetime IP-MIB::ipAddressPrefixAdvPreferredLifetime
    Unsigned 32-bit integer
    IP-MIB::ipAddressPrefixAdvPreferredLifetime
```

```

IP-MIB.ipAddressPrefixAdvValidLifetime  IP-MIB::ipAddressPrefixAdvValidLifetime
    Unsigned 32-bit integer
    IP-MIB::ipAddressPrefixAdvValidLifetime
IP-MIB.ipAddressPrefixAutonomousFlag  IP-MIB::ipAddressPrefixAutonomousFlag
    Signed 32-bit integer
    IP-MIB::ipAddressPrefixAutonomousFlag
IP-MIB.ipAddressPrefixEntry.ipAddressPrefixIfIndex  IP-MIB::ipAddressPrefixEntry
    Signed 32-bit integer
IP-MIB.ipAddressPrefixEntry.ipAddressPrefixLength  IP-MIB::ipAddressPrefixEntry.
    Unsigned 32-bit integer
IP-MIB.ipAddressPrefixEntry.ipAddressPrefixPrefix  IP-MIB::ipAddressPrefixEntry.
    Byte array
IP-MIB.ipAddressPrefixEntry.ipAddressPrefixType  IP-MIB::ipAddressPrefixEntry.ip
    Signed 32-bit integer
IP-MIB.ipAddressPrefixIfIndex  IP-MIB::ipAddressPrefixIfIndex
    Signed 32-bit integer
    IP-MIB::ipAddressPrefixIfIndex
IP-MIB.ipAddressPrefixLength  IP-MIB::ipAddressPrefixLength
    Unsigned 32-bit integer
    IP-MIB::ipAddressPrefixLength
IP-MIB.ipAddressPrefixOnLinkFlag  IP-MIB::ipAddressPrefixOnLinkFlag
    Signed 32-bit integer
    IP-MIB::ipAddressPrefixOnLinkFlag
IP-MIB.ipAddressPrefixOrigin  IP-MIB::ipAddressPrefixOrigin
    Signed 32-bit integer
    IP-MIB::ipAddressPrefixOrigin
IP-MIB.ipAddressPrefixPrefix  IP-MIB::ipAddressPrefixPrefix
    Byte array
    IP-MIB::ipAddressPrefixPrefix
IP-MIB.ipAddressPrefixType  IP-MIB::ipAddressPrefixType
    Signed 32-bit integer
    IP-MIB::ipAddressPrefixType
IP-MIB.ipAddressRowStatus  IP-MIB::ipAddressRowStatus
    Signed 32-bit integer
    IP-MIB::ipAddressRowStatus
IP-MIB.ipAddressSpinLock  IP-MIB::ipAddressSpinLock
    Signed 32-bit integer
    IP-MIB::ipAddressSpinLock
IP-MIB.ipAddressStatus  IP-MIB::ipAddressStatus
    Signed 32-bit integer
    IP-MIB::ipAddressStatus
IP-MIB.ipAddressStorageType  IP-MIB::ipAddressStorageType
    Signed 32-bit integer
    IP-MIB::ipAddressStorageType
IP-MIB.ipAddressType  IP-MIB::ipAddressType
    Signed 32-bit integer
    IP-MIB::ipAddressType

```

```
IP-MIB.ipDefaultRouterAddress  IP-MIB::ipDefaultRouterAddress
    Byte array
    IP-MIB::ipDefaultRouterAddress
IP-MIB.ipDefaultRouterAddressType  IP-MIB::ipDefaultRouterAddressType
    Signed 32-bit integer
    IP-MIB::ipDefaultRouterAddressType
IP-MIB.ipDefaultRouterEntry.ipDefaultRouterAddress  IP-MIB::ipDefaultRouterEntry
    Byte array
IP-MIB.ipDefaultRouterEntry.ipDefaultRouterAddressType  IP-MIB::ipDefaultRouterE
    Signed 32-bit integer
IP-MIB.ipDefaultRouterEntry.ipDefaultRouterIfIndex  IP-MIB::ipDefaultRouterEntry
    Signed 32-bit integer
IP-MIB.ipDefaultRouterIfIndex  IP-MIB::ipDefaultRouterIfIndex
    Signed 32-bit integer
    IP-MIB::ipDefaultRouterIfIndex
IP-MIB.ipDefaultRouterLifetime  IP-MIB::ipDefaultRouterLifetime
    Unsigned 32-bit integer
    IP-MIB::ipDefaultRouterLifetime
IP-MIB.ipDefaultRouterPreference  IP-MIB::ipDefaultRouterPreference
    Signed 32-bit integer
    IP-MIB::ipDefaultRouterPreference
IP-MIB.ipDefaultTTL  IP-MIB::ipDefaultTTL
    Signed 32-bit integer
    IP-MIB::ipDefaultTTL
IP-MIB.ipForwDatagrams  IP-MIB::ipForwDatagrams
    Unsigned 64-bit integer
    IP-MIB::ipForwDatagrams
IP-MIB.ipForwarding  IP-MIB::ipForwarding
    Signed 32-bit integer
    IP-MIB::ipForwarding
IP-MIB.ipFragCreates  IP-MIB::ipFragCreates
    Unsigned 64-bit integer
    IP-MIB::ipFragCreates
IP-MIB.ipFragFails  IP-MIB::ipFragFails
    Unsigned 64-bit integer
    IP-MIB::ipFragFails
IP-MIB.ipFragOKs  IP-MIB::ipFragOKs
    Unsigned 64-bit integer
    IP-MIB::ipFragOKs
IP-MIB.ipIfStatsDiscontinuityTime  IP-MIB::ipIfStatsDiscontinuityTime
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsDiscontinuityTime
IP-MIB.ipIfStatsEntry.ipIfStatsIPVersion  IP-MIB::ipIfStatsEntry.ipIfStatsIPVers
    Signed 32-bit integer
IP-MIB.ipIfStatsEntry.ipIfStatsIfIndex  IP-MIB::ipIfStatsEntry.ipIfStatsIfIndex
    Signed 32-bit integer
```

```
IP-MIB.ipIfStatsHCInBcastPkts  IP-MIB::ipIfStatsHCInBcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCInBcastPkts
IP-MIB.ipIfStatsHCInDelivers  IP-MIB::ipIfStatsHCInDelivers
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCInDelivers
IP-MIB.ipIfStatsHCInForwDatagrams  IP-MIB::ipIfStatsHCInForwDatagrams
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCInForwDatagrams
IP-MIB.ipIfStatsHCInMcastOctets  IP-MIB::ipIfStatsHCInMcastOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCInMcastOctets
IP-MIB.ipIfStatsHCInMcastPkts  IP-MIB::ipIfStatsHCInMcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCInMcastPkts
IP-MIB.ipIfStatsHCInOctets  IP-MIB::ipIfStatsHCInOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCInOctets
IP-MIB.ipIfStatsHCInReceives  IP-MIB::ipIfStatsHCInReceives
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCInReceives
IP-MIB.ipIfStatsHCOutBcastPkts  IP-MIB::ipIfStatsHCOutBcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCOutBcastPkts
IP-MIB.ipIfStatsHCOutForwDatagrams  IP-MIB::ipIfStatsHCOutForwDatagrams
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCOutForwDatagrams
IP-MIB.ipIfStatsHCOutMcastOctets  IP-MIB::ipIfStatsHCOutMcastOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCOutMcastOctets
IP-MIB.ipIfStatsHCOutMcastPkts  IP-MIB::ipIfStatsHCOutMcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCOutMcastPkts
IP-MIB.ipIfStatsHCOutOctets  IP-MIB::ipIfStatsHCOutOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCOutOctets
IP-MIB.ipIfStatsHCOutRequests  IP-MIB::ipIfStatsHCOutRequests
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCOutRequests
IP-MIB.ipIfStatsHCOutTransmits  IP-MIB::ipIfStatsHCOutTransmits
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsHCOutTransmits
IP-MIB.ipIfStatsIPVersion  IP-MIB::ipIfStatsIPVersion
    Signed 32-bit integer
    IP-MIB::ipIfStatsIPVersion
IP-MIB.ipIfStatsIfIndex  IP-MIB::ipIfStatsIfIndex
    Signed 32-bit integer
    IP-MIB::ipIfStatsIfIndex
```

```
IP-MIB.ipIfStatsInAddrErrors  IP-MIB::ipIfStatsInAddrErrors
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInAddrErrors
IP-MIB.ipIfStatsInBcastPkts  IP-MIB::ipIfStatsInBcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInBcastPkts
IP-MIB.ipIfStatsInDelivers  IP-MIB::ipIfStatsInDelivers
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInDelivers
IP-MIB.ipIfStatsInDiscards  IP-MIB::ipIfStatsInDiscards
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInDiscards
IP-MIB.ipIfStatsInForwDatagrams  IP-MIB::ipIfStatsInForwDatagrams
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInForwDatagrams
IP-MIB.ipIfStatsInHdrErrors  IP-MIB::ipIfStatsInHdrErrors
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInHdrErrors
IP-MIB.ipIfStatsInMcastOctets  IP-MIB::ipIfStatsInMcastOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInMcastOctets
IP-MIB.ipIfStatsInMcastPkts  IP-MIB::ipIfStatsInMcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInMcastPkts
IP-MIB.ipIfStatsInNoRoutes  IP-MIB::ipIfStatsInNoRoutes
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInNoRoutes
IP-MIB.ipIfStatsInOctets  IP-MIB::ipIfStatsInOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInOctets
IP-MIB.ipIfStatsInReceives  IP-MIB::ipIfStatsInReceives
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInReceives
IP-MIB.ipIfStatsInTruncatedPkts  IP-MIB::ipIfStatsInTruncatedPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInTruncatedPkts
IP-MIB.ipIfStatsInUnknownProtos  IP-MIB::ipIfStatsInUnknownProtos
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsInUnknownProtos
IP-MIB.ipIfStatsOutBcastPkts  IP-MIB::ipIfStatsOutBcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutBcastPkts
IP-MIB.ipIfStatsOutDiscards  IP-MIB::ipIfStatsOutDiscards
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutDiscards
IP-MIB.ipIfStatsOutForwDatagrams  IP-MIB::ipIfStatsOutForwDatagrams
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutForwDatagrams
```

```
IP-MIB.ipIfStatsOutFragCreates IP-MIB::ipIfStatsOutFragCreates
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutFragCreates
IP-MIB.ipIfStatsOutFragFails IP-MIB::ipIfStatsOutFragFails
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutFragFails
IP-MIB.ipIfStatsOutFragOKs IP-MIB::ipIfStatsOutFragOKs
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutFragOKs
IP-MIB.ipIfStatsOutFragReqds IP-MIB::ipIfStatsOutFragReqds
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutFragReqds
IP-MIB.ipIfStatsOutMcastOctets IP-MIB::ipIfStatsOutMcastOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutMcastOctets
IP-MIB.ipIfStatsOutMcastPkts IP-MIB::ipIfStatsOutMcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutMcastPkts
IP-MIB.ipIfStatsOutOctets IP-MIB::ipIfStatsOutOctets
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutOctets
IP-MIB.ipIfStatsOutRequests IP-MIB::ipIfStatsOutRequests
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutRequests
IP-MIB.ipIfStatsOutTransmits IP-MIB::ipIfStatsOutTransmits
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsOutTransmits
IP-MIB.ipIfStatsReasmFails IP-MIB::ipIfStatsReasmFails
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsReasmFails
IP-MIB.ipIfStatsReasmOKs IP-MIB::ipIfStatsReasmOKs
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsReasmOKs
IP-MIB.ipIfStatsReasmReqds IP-MIB::ipIfStatsReasmReqds
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsReasmReqds
IP-MIB.ipIfStatsRefreshRate IP-MIB::ipIfStatsRefreshRate
    Unsigned 32-bit integer
    IP-MIB::ipIfStatsRefreshRate
IP-MIB.ipIfStatsTableLastChange IP-MIB::ipIfStatsTableLastChange
    Unsigned 64-bit integer
    IP-MIB::ipIfStatsTableLastChange
IP-MIB.ipInAddrErrors IP-MIB::ipInAddrErrors
    Unsigned 64-bit integer
    IP-MIB::ipInAddrErrors
IP-MIB.ipInDelivers IP-MIB::ipInDelivers
    Unsigned 64-bit integer
    IP-MIB::ipInDelivers
```

```
IP-MIB.ipInDiscards IP-MIB::ipInDiscards
    Unsigned 64-bit integer
    IP-MIB::ipInDiscards

IP-MIB.ipInHdrErrors IP-MIB::ipInHdrErrors
    Unsigned 64-bit integer
    IP-MIB::ipInHdrErrors

IP-MIB.ipInReceives IP-MIB::ipInReceives
    Unsigned 64-bit integer
    IP-MIB::ipInReceives

IP-MIB.ipInUnknownProtos IP-MIB::ipInUnknownProtos
    Unsigned 64-bit integer
    IP-MIB::ipInUnknownProtos

IP-MIB.ipNetToMediaEntry.ipNetToMediaIfIndex IP-MIB::ipNetToMediaEntry.ipNetToMediaIfIndex
    Signed 32-bit integer

IP-MIB.ipNetToMediaEntry.ipNetToMediaNetAddress IP-MIB::ipNetToMediaEntry.ipNetToMediaNetAddress
    IPv4 address

IP-MIB.ipNetToMediaIfIndex IP-MIB::ipNetToMediaIfIndex
    Signed 32-bit integer
    IP-MIB::ipNetToMediaIfIndex

IP-MIB.ipNetToMediaNetAddress IP-MIB::ipNetToMediaNetAddress
    IPv4 address
    IP-MIB::ipNetToMediaNetAddress

IP-MIB.ipNetToMediaPhysAddress IP-MIB::ipNetToMediaPhysAddress
    Byte array
    IP-MIB::ipNetToMediaPhysAddress

IP-MIB.ipNetToMediaType IP-MIB::ipNetToMediaType
    Signed 32-bit integer
    IP-MIB::ipNetToMediaType

IP-MIB.ipNetToPhysicalEntry.ipNetToPhysicalIfIndex IP-MIB::ipNetToPhysicalEntry.ipNetToPhysicalIfIndex
    Signed 32-bit integer

IP-MIB.ipNetToPhysicalEntry.ipNetToPhysicalNetAddress IP-MIB::ipNetToPhysicalEntry.ipNetToPhysicalNetAddress
    Byte array

IP-MIB.ipNetToPhysicalEntry.ipNetToPhysicalNetAddressType IP-MIB::ipNetToPhysicalEntry.ipNetToPhysicalNetAddressType
    Signed 32-bit integer

IP-MIB.ipNetToPhysicalIfIndex IP-MIB::ipNetToPhysicalIfIndex
    Signed 32-bit integer
    IP-MIB::ipNetToPhysicalIfIndex

IP-MIB.ipNetToPhysicalLastUpdated IP-MIB::ipNetToPhysicalLastUpdated
    Unsigned 64-bit integer
    IP-MIB::ipNetToPhysicalLastUpdated

IP-MIB.ipNetToPhysicalNetAddress IP-MIB::ipNetToPhysicalNetAddress
    Byte array
    IP-MIB::ipNetToPhysicalNetAddress

IP-MIB.ipNetToPhysicalNetAddressType IP-MIB::ipNetToPhysicalNetAddressType
    Signed 32-bit integer
    IP-MIB::ipNetToPhysicalNetAddressType
```



```
IP-MIB.ipNetToPhysicalPhysAddress  IP-MIB::ipNetToPhysicalPhysAddress
    Byte array
    IP-MIB::ipNetToPhysicalPhysAddress
IP-MIB.ipNetToPhysicalRowStatus  IP-MIB::ipNetToPhysicalRowStatus
    Signed 32-bit integer
    IP-MIB::ipNetToPhysicalRowStatus
IP-MIB.ipNetToPhysicalState  IP-MIB::ipNetToPhysicalState
    Signed 32-bit integer
    IP-MIB::ipNetToPhysicalState
IP-MIB.ipNetToPhysicalType  IP-MIB::ipNetToPhysicalType
    Signed 32-bit integer
    IP-MIB::ipNetToPhysicalType
IP-MIB.ipOutDiscards  IP-MIB::ipOutDiscards
    Unsigned 64-bit integer
    IP-MIB::ipOutDiscards
IP-MIB.ipOutNoRoutes  IP-MIB::ipOutNoRoutes
    Unsigned 64-bit integer
    IP-MIB::ipOutNoRoutes
IP-MIB.ipOutRequests  IP-MIB::ipOutRequests
    Unsigned 64-bit integer
    IP-MIB::ipOutRequests
IP-MIB.ipReasmFails  IP-MIB::ipReasmFails
    Unsigned 64-bit integer
    IP-MIB::ipReasmFails
IP-MIB.ipReasmOKs  IP-MIB::ipReasmOKs
    Unsigned 64-bit integer
    IP-MIB::ipReasmOKs
IP-MIB.ipReasmReqds  IP-MIB::ipReasmReqds
    Unsigned 64-bit integer
    IP-MIB::ipReasmReqds
IP-MIB.ipReasmTimeout  IP-MIB::ipReasmTimeout
    Signed 32-bit integer
    IP-MIB::ipReasmTimeout
IP-MIB.ipRoutingDiscards  IP-MIB::ipRoutingDiscards
    Unsigned 64-bit integer
    IP-MIB::ipRoutingDiscards
IP-MIB.ipSystemStatsDiscontinuityTime  IP-MIB::ipSystemStatsDiscontinuityTime
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsDiscontinuityTime
IP-MIB.ipSystemStatsEntry.ipSystemStatsIPVersion  IP-MIB::ipSystemStatsEntry.ipS
    Signed 32-bit integer
IP-MIB.ipSystemStatsHCInBcastPkts  IP-MIB::ipSystemStatsHCInBcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsHCInBcastPkts
IP-MIB.ipSystemStatsHCInDelivers  IP-MIB::ipSystemStatsHCInDelivers
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsHCInDelivers
```

```
IP-MIB.ipSystemStatsHCInForwDatagrams IP-MIB::ipSystemStatsHCInForwDatagrams
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCInForwDatagrams
IP-MIB.ipSystemStatsHCInMcastOctets IP-MIB::ipSystemStatsHCInMcastOctets
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCInMcastOctets
IP-MIB.ipSystemStatsHCInMcastPkts IP-MIB::ipSystemStatsHCInMcastPkts
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCInMcastPkts
IP-MIB.ipSystemStatsHCInOctets IP-MIB::ipSystemStatsHCInOctets
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCInOctets
IP-MIB.ipSystemStatsHCInReceives IP-MIB::ipSystemStatsHCInReceives
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCInReceives
IP-MIB.ipSystemStatsHCOutBcastPkts IP-MIB::ipSystemStatsHCOutBcastPkts
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCOutBcastPkts
IP-MIB.ipSystemStatsHCOutForwDatagrams IP-MIB::ipSystemStatsHCOutForwDatagrams
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCOutForwDatagrams
IP-MIB.ipSystemStatsHCOutMcastOctets IP-MIB::ipSystemStatsHCOutMcastOctets
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCOutMcastOctets
IP-MIB.ipSystemStatsHCOutMcastPkts IP-MIB::ipSystemStatsHCOutMcastPkts
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCOutMcastPkts
IP-MIB.ipSystemStatsHCOutOctets IP-MIB::ipSystemStatsHCOutOctets
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCOutOctets
IP-MIB.ipSystemStatsHCOutRequests IP-MIB::ipSystemStatsHCOutRequests
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCOutRequests
IP-MIB.ipSystemStatsHCOutTransmits IP-MIB::ipSystemStatsHCOutTransmits
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsHCOutTransmits
IP-MIB.ipSystemStatsIPVersion IP-MIB::ipSystemStatsIPVersion
  Signed 32-bit integer
  IP-MIB::ipSystemStatsIPVersion
IP-MIB.ipSystemStatsInAddrErrors IP-MIB::ipSystemStatsInAddrErrors
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsInAddrErrors
IP-MIB.ipSystemStatsInBcastPkts IP-MIB::ipSystemStatsInBcastPkts
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsInBcastPkts
IP-MIB.ipSystemStatsInDelivers IP-MIB::ipSystemStatsInDelivers
  Unsigned 64-bit integer
  IP-MIB::ipSystemStatsInDelivers
```

```
IP-MIB.ipSystemStatsInDiscards IP-MIB::ipSystemStatsInDiscards
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInDiscards
IP-MIB.ipSystemStatsInForwDatagrams IP-MIB::ipSystemStatsInForwDatagrams
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInForwDatagrams
IP-MIB.ipSystemStatsInHdrErrors IP-MIB::ipSystemStatsInHdrErrors
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInHdrErrors
IP-MIB.ipSystemStatsInMcastOctets IP-MIB::ipSystemStatsInMcastOctets
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInMcastOctets
IP-MIB.ipSystemStatsInMcastPkts IP-MIB::ipSystemStatsInMcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInMcastPkts
IP-MIB.ipSystemStatsInNoRoutes IP-MIB::ipSystemStatsInNoRoutes
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInNoRoutes
IP-MIB.ipSystemStatsInOctets IP-MIB::ipSystemStatsInOctets
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInOctets
IP-MIB.ipSystemStatsInReceives IP-MIB::ipSystemStatsInReceives
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInReceives
IP-MIB.ipSystemStatsInTruncatedPkts IP-MIB::ipSystemStatsInTruncatedPkts
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInTruncatedPkts
IP-MIB.ipSystemStatsInUnknownProtos IP-MIB::ipSystemStatsInUnknownProtos
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsInUnknownProtos
IP-MIB.ipSystemStatsOutBcastPkts IP-MIB::ipSystemStatsOutBcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutBcastPkts
IP-MIB.ipSystemStatsOutDiscards IP-MIB::ipSystemStatsOutDiscards
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutDiscards
IP-MIB.ipSystemStatsOutForwDatagrams IP-MIB::ipSystemStatsOutForwDatagrams
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutForwDatagrams
IP-MIB.ipSystemStatsOutFragCreates IP-MIB::ipSystemStatsOutFragCreates
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutFragCreates
IP-MIB.ipSystemStatsOutFragFails IP-MIB::ipSystemStatsOutFragFails
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutFragFails
IP-MIB.ipSystemStatsOutFragOKs IP-MIB::ipSystemStatsOutFragOKs
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutFragOKs
```

```
IP-MIB.ipSystemStatsOutFragReqds  IP-MIB::ipSystemStatsOutFragReqds
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutFragReqds
IP-MIB.ipSystemStatsOutMcastOctets  IP-MIB::ipSystemStatsOutMcastOctets
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutMcastOctets
IP-MIB.ipSystemStatsOutMcastPkts  IP-MIB::ipSystemStatsOutMcastPkts
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutMcastPkts
IP-MIB.ipSystemStatsOutNoRoutes  IP-MIB::ipSystemStatsOutNoRoutes
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutNoRoutes
IP-MIB.ipSystemStatsOutOctets  IP-MIB::ipSystemStatsOutOctets
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutOctets
IP-MIB.ipSystemStatsOutRequests  IP-MIB::ipSystemStatsOutRequests
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutRequests
IP-MIB.ipSystemStatsOutTransmits  IP-MIB::ipSystemStatsOutTransmits
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsOutTransmits
IP-MIB.ipSystemStatsReasmFails  IP-MIB::ipSystemStatsReasmFails
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsReasmFails
IP-MIB.ipSystemStatsReasmOKs  IP-MIB::ipSystemStatsReasmOKs
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsReasmOKs
IP-MIB.ipSystemStatsReasmReqds  IP-MIB::ipSystemStatsReasmReqds
    Unsigned 64-bit integer
    IP-MIB::ipSystemStatsReasmReqds
IP-MIB.ipSystemStatsRefreshRate  IP-MIB::ipSystemStatsRefreshRate
    Unsigned 32-bit integer
    IP-MIB::ipSystemStatsRefreshRate
IP-MIB.ipv4InterfaceEnableStatus  IP-MIB::ipv4InterfaceEnableStatus
    Signed 32-bit integer
    IP-MIB::ipv4InterfaceEnableStatus
IP-MIB.ipv4InterfaceEntry.ipv4InterfaceIfIndex  IP-MIB::ipv4InterfaceEntry.ipv4I
    Signed 32-bit integer
IP-MIB.ipv4InterfaceIfIndex  IP-MIB::ipv4InterfaceIfIndex
    Signed 32-bit integer
    IP-MIB::ipv4InterfaceIfIndex
IP-MIB.ipv4InterfaceReasmMaxSize  IP-MIB::ipv4InterfaceReasmMaxSize
    Signed 32-bit integer
    IP-MIB::ipv4InterfaceReasmMaxSize
IP-MIB.ipv4InterfaceRetransmitTime  IP-MIB::ipv4InterfaceRetransmitTime
    Unsigned 32-bit integer
    IP-MIB::ipv4InterfaceRetransmitTime
```

```
IP-MIB.ipv4InterfaceTableLastChange  IP-MIB::ipv4InterfaceTableLastChange
    Unsigned 64-bit integer
    IP-MIB::ipv4InterfaceTableLastChange
IP-MIB.ipv6InterfaceEnableStatus  IP-MIB::ipv6InterfaceEnableStatus
    Signed 32-bit integer
    IP-MIB::ipv6InterfaceEnableStatus
IP-MIB.ipv6InterfaceEntry.ipv6InterfaceIfIndex  IP-MIB::ipv6InterfaceEntry.ipv6I
    Signed 32-bit integer
IP-MIB.ipv6InterfaceForwarding  IP-MIB::ipv6InterfaceForwarding
    Signed 32-bit integer
    IP-MIB::ipv6InterfaceForwarding
IP-MIB.ipv6InterfaceIdentifier  IP-MIB::ipv6InterfaceIdentifier
    Byte array
    IP-MIB::ipv6InterfaceIdentifier
IP-MIB.ipv6InterfaceIfIndex  IP-MIB::ipv6InterfaceIfIndex
    Signed 32-bit integer
    IP-MIB::ipv6InterfaceIfIndex
IP-MIB.ipv6InterfaceReachableTime  IP-MIB::ipv6InterfaceReachableTime
    Unsigned 32-bit integer
    IP-MIB::ipv6InterfaceReachableTime
IP-MIB.ipv6InterfaceReasmMaxSize  IP-MIB::ipv6InterfaceReasmMaxSize
    Unsigned 32-bit integer
    IP-MIB::ipv6InterfaceReasmMaxSize
IP-MIB.ipv6InterfaceRetransmitTime  IP-MIB::ipv6InterfaceRetransmitTime
    Unsigned 32-bit integer
    IP-MIB::ipv6InterfaceRetransmitTime
IP-MIB.ipv6InterfaceTableLastChange  IP-MIB::ipv6InterfaceTableLastChange
    Unsigned 64-bit integer
    IP-MIB::ipv6InterfaceTableLastChange
IP-MIB.ipv6IpDefaultHopLimit  IP-MIB::ipv6IpDefaultHopLimit
    Signed 32-bit integer
    IP-MIB::ipv6IpDefaultHopLimit
IP-MIB.ipv6IpForwarding  IP-MIB::ipv6IpForwarding
    Signed 32-bit integer
    IP-MIB::ipv6IpForwarding
IP-MIB.ipv6RouterAdvertCurHopLimit  IP-MIB::ipv6RouterAdvertCurHopLimit
    Unsigned 32-bit integer
    IP-MIB::ipv6RouterAdvertCurHopLimit
IP-MIB.ipv6RouterAdvertDefaultLifetime  IP-MIB::ipv6RouterAdvertDefaultLifetime
    Unsigned 32-bit integer
    IP-MIB::ipv6RouterAdvertDefaultLifetime
IP-MIB.ipv6RouterAdvertEntry.ipv6RouterAdvertIfIndex  IP-MIB::ipv6RouterAdvertEn
    Signed 32-bit integer
IP-MIB.ipv6RouterAdvertIfIndex  IP-MIB::ipv6RouterAdvertIfIndex
    Signed 32-bit integer
    IP-MIB::ipv6RouterAdvertIfIndex
```

```
IP-MIB.ipv6RouterAdvertLinkMTU  IP-MIB::ipv6RouterAdvertLinkMTU
    Unsigned 32-bit integer
    IP-MIB::ipv6RouterAdvertLinkMTU
IP-MIB.ipv6RouterAdvertManagedFlag  IP-MIB::ipv6RouterAdvertManagedFlag
    Signed 32-bit integer
    IP-MIB::ipv6RouterAdvertManagedFlag
IP-MIB.ipv6RouterAdvertMaxInterval  IP-MIB::ipv6RouterAdvertMaxInterval
    Unsigned 32-bit integer
    IP-MIB::ipv6RouterAdvertMaxInterval
IP-MIB.ipv6RouterAdvertMinInterval  IP-MIB::ipv6RouterAdvertMinInterval
    Unsigned 32-bit integer
    IP-MIB::ipv6RouterAdvertMinInterval
IP-MIB.ipv6RouterAdvertOtherConfigFlag  IP-MIB::ipv6RouterAdvertOtherConfigFlag
    Signed 32-bit integer
    IP-MIB::ipv6RouterAdvertOtherConfigFlag
IP-MIB.ipv6RouterAdvertReachableTime  IP-MIB::ipv6RouterAdvertReachableTime
    Unsigned 32-bit integer
    IP-MIB::ipv6RouterAdvertReachableTime
IP-MIB.ipv6RouterAdvertRetransmitTime  IP-MIB::ipv6RouterAdvertRetransmitTime
    Unsigned 32-bit integer
    IP-MIB::ipv6RouterAdvertRetransmitTime
IP-MIB.ipv6RouterAdvertRowStatus  IP-MIB::ipv6RouterAdvertRowStatus
    Signed 32-bit integer
    IP-MIB::ipv6RouterAdvertRowStatus
IP-MIB.ipv6RouterAdvertSendAdverts  IP-MIB::ipv6RouterAdvertSendAdverts
    Signed 32-bit integer
    IP-MIB::ipv6RouterAdvertSendAdverts
IP-MIB.ipv6RouterAdvertSpinLock  IP-MIB::ipv6RouterAdvertSpinLock
    Signed 32-bit integer
    IP-MIB::ipv6RouterAdvertSpinLock
IP-MIB.ipv6ScopeZoneIndex3  IP-MIB::ipv6ScopeZoneIndex3
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndex3
IP-MIB.ipv6ScopeZoneIndex6  IP-MIB::ipv6ScopeZoneIndex6
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndex6
IP-MIB.ipv6ScopeZoneIndex7  IP-MIB::ipv6ScopeZoneIndex7
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndex7
IP-MIB.ipv6ScopeZoneIndex9  IP-MIB::ipv6ScopeZoneIndex9
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndex9
IP-MIB.ipv6ScopeZoneIndexA  IP-MIB::ipv6ScopeZoneIndexA
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexA
IP-MIB.ipv6ScopeZoneIndexAdminLocal  IP-MIB::ipv6ScopeZoneIndexAdminLocal
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexAdminLocal
```

```
IP-MIB.ipv6ScopeZoneIndexB  IP-MIB::ipv6ScopeZoneIndexB
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexB
IP-MIB.ipv6ScopeZoneIndexC  IP-MIB::ipv6ScopeZoneIndexC
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexC
IP-MIB.ipv6ScopeZoneIndexD  IP-MIB::ipv6ScopeZoneIndexD
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexD
IP-MIB.ipv6ScopeZoneIndexEntry.ipv6ScopeZoneIndexIfIndex  IP-MIB::ipv6ScopeZoneIndexIfIndex
    Signed 32-bit integer
IP-MIB.ipv6ScopeZoneIndexIfIndex  IP-MIB::ipv6ScopeZoneIndexIfIndex
    Signed 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexIfIndex
IP-MIB.ipv6ScopeZoneIndexLinkLocal  IP-MIB::ipv6ScopeZoneIndexLinkLocal
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexLinkLocal
IP-MIB.ipv6ScopeZoneIndexOrganizationLocal  IP-MIB::ipv6ScopeZoneIndexOrganizationLocal
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexOrganizationLocal
IP-MIB.ipv6ScopeZoneIndexSiteLocal  IP-MIB::ipv6ScopeZoneIndexSiteLocal
    Unsigned 32-bit integer
    IP-MIB::ipv6ScopeZoneIndexSiteLocal
IPV6-ICMP-MIB.ipv6IfIcmpInAdminProhibs  IPV6-ICMP-MIB::ipv6IfIcmpInAdminProhibs
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInAdminProhibs
IPV6-ICMP-MIB.ipv6IfIcmpInDestUnreachs  IPV6-ICMP-MIB::ipv6IfIcmpInDestUnreachs
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInDestUnreachs
IPV6-ICMP-MIB.ipv6IfIcmpInEchoReplies  IPV6-ICMP-MIB::ipv6IfIcmpInEchoReplies
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInEchoReplies
IPV6-ICMP-MIB.ipv6IfIcmpInEchos  IPV6-ICMP-MIB::ipv6IfIcmpInEchos
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInEchos
IPV6-ICMP-MIB.ipv6IfIcmpInErrors  IPV6-ICMP-MIB::ipv6IfIcmpInErrors
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInErrors
IPV6-ICMP-MIB.ipv6IfIcmpInGroupMembQueries  IPV6-ICMP-MIB::ipv6IfIcmpInGroupMembQueries
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInGroupMembQueries
IPV6-ICMP-MIB.ipv6IfIcmpInGroupMembReductions  IPV6-ICMP-MIB::ipv6IfIcmpInGroupMembReductions
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInGroupMembReductions
IPV6-ICMP-MIB.ipv6IfIcmpInGroupMembResponses  IPV6-ICMP-MIB::ipv6IfIcmpInGroupMembResponses
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInGroupMembResponses
```

```
IPV6-ICMP-MIB.ipv6IfIcmpInMsgs    IPV6-ICMP-MIB::ipv6IfIcmpInMsgs
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInMsgs
IPV6-ICMP-MIB.ipv6IfIcmpInNeighborAdvertisements    IPV6-ICMP-MIB::ipv6IfIcmpInNei
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInNeighborAdvertisements
IPV6-ICMP-MIB.ipv6IfIcmpInNeighborSolicits    IPV6-ICMP-MIB::ipv6IfIcmpInNeighborS
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInNeighborSolicits
IPV6-ICMP-MIB.ipv6IfIcmpInParmProblems    IPV6-ICMP-MIB::ipv6IfIcmpInParmProblems
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInParmProblems
IPV6-ICMP-MIB.ipv6IfIcmpInPktTooBigs    IPV6-ICMP-MIB::ipv6IfIcmpInPktTooBigs
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInPktTooBigs
IPV6-ICMP-MIB.ipv6IfIcmpInRedirects    IPV6-ICMP-MIB::ipv6IfIcmpInRedirects
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInRedirects
IPV6-ICMP-MIB.ipv6IfIcmpInRouterAdvertisements    IPV6-ICMP-MIB::ipv6IfIcmpInRoute
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInRouterAdvertisements
IPV6-ICMP-MIB.ipv6IfIcmpInRouterSolicits    IPV6-ICMP-MIB::ipv6IfIcmpInRouterSolic
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInRouterSolicits
IPV6-ICMP-MIB.ipv6IfIcmpInTimeExcds    IPV6-ICMP-MIB::ipv6IfIcmpInTimeExcds
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpInTimeExcds
IPV6-ICMP-MIB.ipv6IfIcmpOutAdminProhibs    IPV6-ICMP-MIB::ipv6IfIcmpOutAdminProhib
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpOutAdminProhibs
IPV6-ICMP-MIB.ipv6IfIcmpOutDestUnreachs    IPV6-ICMP-MIB::ipv6IfIcmpOutDestUnreach
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpOutDestUnreachs
IPV6-ICMP-MIB.ipv6IfIcmpOutEchoReplies    IPV6-ICMP-MIB::ipv6IfIcmpOutEchoReplies
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpOutEchoReplies
IPV6-ICMP-MIB.ipv6IfIcmpOutEchos    IPV6-ICMP-MIB::ipv6IfIcmpOutEchos
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpOutEchos
IPV6-ICMP-MIB.ipv6IfIcmpOutErrors    IPV6-ICMP-MIB::ipv6IfIcmpOutErrors
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpOutErrors
IPV6-ICMP-MIB.ipv6IfIcmpOutGroupMembQueries    IPV6-ICMP-MIB::ipv6IfIcmpOutGroupMemb
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpOutGroupMembQueries
IPV6-ICMP-MIB.ipv6IfIcmpOutGroupMembReductions    IPV6-ICMP-MIB::ipv6IfIcmpOutGrou
    Unsigned 64-bit integer
    IPV6-ICMP-MIB::ipv6IfIcmpOutGroupMembReductions
```



```

IPV6-ICMP-MIB.ipv6IfIcmpOutGroupMembResponses  IPV6-ICMP-MIB::ipv6IfIcmpOutGroup
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutGroupMembResponses
IPV6-ICMP-MIB.ipv6IfIcmpOutMsgs  IPV6-ICMP-MIB::ipv6IfIcmpOutMsgs
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutMsgs
IPV6-ICMP-MIB.ipv6IfIcmpOutNeighborAdvertisements  IPV6-ICMP-MIB::ipv6IfIcmpOutN
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutNeighborAdvertisements
IPV6-ICMP-MIB.ipv6IfIcmpOutNeighborSolicits  IPV6-ICMP-MIB::ipv6IfIcmpOutNeighbo
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutNeighborSolicits
IPV6-ICMP-MIB.ipv6IfIcmpOutParmProblems  IPV6-ICMP-MIB::ipv6IfIcmpOutParmProblem
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutParmProblems
IPV6-ICMP-MIB.ipv6IfIcmpOutPktTooBigs  IPV6-ICMP-MIB::ipv6IfIcmpOutPktTooBigs
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutPktTooBigs
IPV6-ICMP-MIB.ipv6IfIcmpOutRedirects  IPV6-ICMP-MIB::ipv6IfIcmpOutRedirects
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutRedirects
IPV6-ICMP-MIB.ipv6IfIcmpOutRouterAdvertisements  IPV6-ICMP-MIB::ipv6IfIcmpOutRou
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutRouterAdvertisements
IPV6-ICMP-MIB.ipv6IfIcmpOutRouterSolicits  IPV6-ICMP-MIB::ipv6IfIcmpOutRouterSol
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutRouterSolicits
IPV6-ICMP-MIB.ipv6IfIcmpOutTimeExcds  IPV6-ICMP-MIB::ipv6IfIcmpOutTimeExcds
  Unsigned 64-bit integer
  IPV6-ICMP-MIB::ipv6IfIcmpOutTimeExcds
IPV6-MIB.ipv6AddrAddress  IPV6-MIB::ipv6AddrAddress
  IPv6 address
  IPV6-MIB::ipv6AddrAddress
IPV6-MIB.ipv6AddrAnycastFlag  IPV6-MIB::ipv6AddrAnycastFlag
  Signed 32-bit integer
  IPV6-MIB::ipv6AddrAnycastFlag
IPV6-MIB.ipv6AddrEntry.ipv6AddrAddress  IPV6-MIB::ipv6AddrEntry.ipv6AddrAddress
  IPv6 address
IPV6-MIB.ipv6AddrEntry.ipv6IfIndex  IPV6-MIB::ipv6AddrEntry.ipv6IfIndex
  Signed 32-bit integer
IPV6-MIB.ipv6AddrPfxLength  IPV6-MIB::ipv6AddrPfxLength
  Signed 32-bit integer
  IPV6-MIB::ipv6AddrPfxLength
IPV6-MIB.ipv6AddrPrefix  IPV6-MIB::ipv6AddrPrefix
  Byte array
  IPV6-MIB::ipv6AddrPrefix

```

```
IPV6-MIB.ipv6AddrPrefixAdvPreferredLifetime  IPV6-MIB::ipv6AddrPrefixAdvPreferredLifetime
    Unsigned 32-bit integer
    IPV6-MIB::ipv6AddrPrefixAdvPreferredLifetime
IPV6-MIB.ipv6AddrPrefixAdvValidLifetime  IPV6-MIB::ipv6AddrPrefixAdvValidLifetime
    Unsigned 32-bit integer
    IPV6-MIB::ipv6AddrPrefixAdvValidLifetime
IPV6-MIB.ipv6AddrPrefixAutonomousFlag  IPV6-MIB::ipv6AddrPrefixAutonomousFlag
    Signed 32-bit integer
    IPV6-MIB::ipv6AddrPrefixAutonomousFlag
IPV6-MIB.ipv6AddrPrefixEntry.ipv6AddrPrefix  IPV6-MIB::ipv6AddrPrefixEntry.ipv6AddrPrefix
    Byte array
IPV6-MIB.ipv6AddrPrefixEntry.ipv6AddrPrefixLength  IPV6-MIB::ipv6AddrPrefixEntry.ipv6AddrPrefixLength
    Signed 32-bit integer
IPV6-MIB.ipv6AddrPrefixEntry.ipv6IfIndex  IPV6-MIB::ipv6AddrPrefixEntry.ipv6IfIndex
    Signed 32-bit integer
IPV6-MIB.ipv6AddrPrefixLength  IPV6-MIB::ipv6AddrPrefixLength
    Signed 32-bit integer
    IPV6-MIB::ipv6AddrPrefixLength
IPV6-MIB.ipv6AddrPrefixOnLinkFlag  IPV6-MIB::ipv6AddrPrefixOnLinkFlag
    Signed 32-bit integer
    IPV6-MIB::ipv6AddrPrefixOnLinkFlag
IPV6-MIB.ipv6AddrStatus  IPV6-MIB::ipv6AddrStatus
    Signed 32-bit integer
    IPV6-MIB::ipv6AddrStatus
IPV6-MIB.ipv6AddrType  IPV6-MIB::ipv6AddrType
    Signed 32-bit integer
    IPV6-MIB::ipv6AddrType
IPV6-MIB.ipv6DefaultHopLimit  IPV6-MIB::ipv6DefaultHopLimit
    Signed 32-bit integer
    IPV6-MIB::ipv6DefaultHopLimit
IPV6-MIB.ipv6DiscardedRoutes  IPV6-MIB::ipv6DiscardedRoutes
    Unsigned 64-bit integer
    IPV6-MIB::ipv6DiscardedRoutes
IPV6-MIB.ipv6Forwarding  IPV6-MIB::ipv6Forwarding
    Signed 32-bit integer
    IPV6-MIB::ipv6Forwarding
IPV6-MIB.ipv6IfAdminStatus  IPV6-MIB::ipv6IfAdminStatus
    Signed 32-bit integer
    IPV6-MIB::ipv6IfAdminStatus
IPV6-MIB.ipv6IfDescr  IPV6-MIB::ipv6IfDescr
    String
    IPV6-MIB::ipv6IfDescr
IPV6-MIB.ipv6IfEffectiveMtu  IPV6-MIB::ipv6IfEffectiveMtu
    Unsigned 32-bit integer
    IPV6-MIB::ipv6IfEffectiveMtu
IPV6-MIB.ipv6IfEntry.ipv6IfIndex  IPV6-MIB::ipv6IfEntry.ipv6IfIndex
    Signed 32-bit integer
```

```
IPV6-MIB.ipv6IfIdentifier  IPV6-MIB::ipv6IfIdentifier
    Byte array
    IPV6-MIB::ipv6IfIdentifier
IPV6-MIB.ipv6IfIdentifierLength  IPV6-MIB::ipv6IfIdentifierLength
    Signed 32-bit integer
    IPV6-MIB::ipv6IfIdentifierLength
IPV6-MIB.ipv6IfIndex  IPV6-MIB::ipv6IfIndex
    Signed 32-bit integer
    IPV6-MIB::ipv6IfIndex
IPV6-MIB.ipv6IfLastChange  IPV6-MIB::ipv6IfLastChange
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfLastChange
IPV6-MIB.ipv6IfLowerLayer  IPV6-MIB::ipv6IfLowerLayer
    IPV6-MIB::ipv6IfLowerLayer
IPV6-MIB.ipv6IfNetToMediaLastUpdated  IPV6-MIB::ipv6IfNetToMediaLastUpdated
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfNetToMediaLastUpdated
IPV6-MIB.ipv6IfNetToMediaState  IPV6-MIB::ipv6IfNetToMediaState
    Signed 32-bit integer
    IPV6-MIB::ipv6IfNetToMediaState
IPV6-MIB.ipv6IfOperStatus  IPV6-MIB::ipv6IfOperStatus
    Signed 32-bit integer
    IPV6-MIB::ipv6IfOperStatus
IPV6-MIB.ipv6IfPhysicalAddress  IPV6-MIB::ipv6IfPhysicalAddress
    Byte array
    IPV6-MIB::ipv6IfPhysicalAddress
IPV6-MIB.ipv6IfReasmMaxSize  IPV6-MIB::ipv6IfReasmMaxSize
    Unsigned 32-bit integer
    IPV6-MIB::ipv6IfReasmMaxSize
IPV6-MIB.ipv6IfStatsInAddrErrors  IPV6-MIB::ipv6IfStatsInAddrErrors
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInAddrErrors
IPV6-MIB.ipv6IfStatsInDelivers  IPV6-MIB::ipv6IfStatsInDelivers
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInDelivers
IPV6-MIB.ipv6IfStatsInDiscards  IPV6-MIB::ipv6IfStatsInDiscards
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInDiscards
IPV6-MIB.ipv6IfStatsInHdrErrors  IPV6-MIB::ipv6IfStatsInHdrErrors
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInHdrErrors
IPV6-MIB.ipv6IfStatsInMcastPkts  IPV6-MIB::ipv6IfStatsInMcastPkts
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInMcastPkts
IPV6-MIB.ipv6IfStatsInNoRoutes  IPV6-MIB::ipv6IfStatsInNoRoutes
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInNoRoutes
```

```
IPV6-MIB.ipv6IfStatsInReceives  IPV6-MIB::ipv6IfStatsInReceives
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInReceives
IPV6-MIB.ipv6IfStatsInTooBigErrors  IPV6-MIB::ipv6IfStatsInTooBigErrors
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInTooBigErrors
IPV6-MIB.ipv6IfStatsInTruncatedPkts  IPV6-MIB::ipv6IfStatsInTruncatedPkts
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInTruncatedPkts
IPV6-MIB.ipv6IfStatsInUnknownProtos  IPV6-MIB::ipv6IfStatsInUnknownProtos
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsInUnknownProtos
IPV6-MIB.ipv6IfStatsOutDiscards  IPV6-MIB::ipv6IfStatsOutDiscards
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsOutDiscards
IPV6-MIB.ipv6IfStatsOutForwDatagrams  IPV6-MIB::ipv6IfStatsOutForwDatagrams
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsOutForwDatagrams
IPV6-MIB.ipv6IfStatsOutFragCreates  IPV6-MIB::ipv6IfStatsOutFragCreates
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsOutFragCreates
IPV6-MIB.ipv6IfStatsOutFragFails  IPV6-MIB::ipv6IfStatsOutFragFails
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsOutFragFails
IPV6-MIB.ipv6IfStatsOutFragOKs  IPV6-MIB::ipv6IfStatsOutFragOKs
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsOutFragOKs
IPV6-MIB.ipv6IfStatsOutMcastPkts  IPV6-MIB::ipv6IfStatsOutMcastPkts
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsOutMcastPkts
IPV6-MIB.ipv6IfStatsOutRequests  IPV6-MIB::ipv6IfStatsOutRequests
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsOutRequests
IPV6-MIB.ipv6IfStatsReasmFails  IPV6-MIB::ipv6IfStatsReasmFails
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsReasmFails
IPV6-MIB.ipv6IfStatsReasmOKs  IPV6-MIB::ipv6IfStatsReasmOKs
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsReasmOKs
IPV6-MIB.ipv6IfStatsReasmReqds  IPV6-MIB::ipv6IfStatsReasmReqds
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfStatsReasmReqds
IPV6-MIB.ipv6IfTableLastChange  IPV6-MIB::ipv6IfTableLastChange
    Unsigned 64-bit integer
    IPV6-MIB::ipv6IfTableLastChange
IPV6-MIB.ipv6Interfaces  IPV6-MIB::ipv6Interfaces
    Unsigned 32-bit integer
    IPV6-MIB::ipv6Interfaces
```

```
IPV6-MIB.ipv6NetToMediaEntry.ipv6IfIndex  IPV6-MIB::ipv6NetToMediaEntry.ipv6IfIn
Signed 32-bit integer
IPV6-MIB.ipv6NetToMediaEntry.ipv6NetToMediaNetAddress  IPV6-MIB::ipv6NetToMediaE
IPv6 address
IPV6-MIB.ipv6NetToMediaNetAddress  IPV6-MIB::ipv6NetToMediaNetAddress
IPv6 address
IPV6-MIB::ipv6NetToMediaNetAddress
IPV6-MIB.ipv6NetToMediaPhysAddress  IPV6-MIB::ipv6NetToMediaPhysAddress
Byte array
IPV6-MIB::ipv6NetToMediaPhysAddress
IPV6-MIB.ipv6NetToMediaType  IPV6-MIB::ipv6NetToMediaType
Signed 32-bit integer
IPV6-MIB::ipv6NetToMediaType
IPV6-MIB.ipv6NetToMediaValid  IPV6-MIB::ipv6NetToMediaValid
Signed 32-bit integer
IPV6-MIB::ipv6NetToMediaValid
IPV6-MIB.ipv6RouteAge  IPV6-MIB::ipv6RouteAge
Unsigned 32-bit integer
IPV6-MIB::ipv6RouteAge
IPV6-MIB.ipv6RouteDest  IPV6-MIB::ipv6RouteDest
IPv6 address
IPV6-MIB::ipv6RouteDest
IPV6-MIB.ipv6RouteEntry.ipv6RouteDest  IPV6-MIB::ipv6RouteEntry.ipv6RouteDest
IPv6 address
IPV6-MIB.ipv6RouteEntry.ipv6RouteIndex  IPV6-MIB::ipv6RouteEntry.ipv6RouteIndex
Unsigned 32-bit integer
IPV6-MIB.ipv6RouteEntry.ipv6RoutePfxLength  IPV6-MIB::ipv6RouteEntry.ipv6RoutePf
Signed 32-bit integer
IPV6-MIB.ipv6RouteIfIndex  IPV6-MIB::ipv6RouteIfIndex
Signed 32-bit integer
IPV6-MIB::ipv6RouteIfIndex
IPV6-MIB.ipv6RouteIndex  IPV6-MIB::ipv6RouteIndex
Unsigned 32-bit integer
IPV6-MIB::ipv6RouteIndex
IPV6-MIB.ipv6RouteInfo  IPV6-MIB::ipv6RouteInfo
IPV6-MIB::ipv6RouteInfo
IPV6-MIB.ipv6RouteMetric  IPV6-MIB::ipv6RouteMetric
Unsigned 32-bit integer
IPV6-MIB::ipv6RouteMetric
IPV6-MIB.ipv6RouteNextHop  IPV6-MIB::ipv6RouteNextHop
IPv6 address
IPV6-MIB::ipv6RouteNextHop
IPV6-MIB.ipv6RouteNextHopRDI  IPV6-MIB::ipv6RouteNextHopRDI
Unsigned 32-bit integer
IPV6-MIB::ipv6RouteNextHopRDI
```

```
IPV6-MIB.ipv6RouteNumber  IPV6-MIB::ipv6RouteNumber
    Unsigned 32-bit integer
    IPV6-MIB::ipv6RouteNumber

IPV6-MIB.ipv6RoutePfxLength  IPV6-MIB::ipv6RoutePfxLength
    Signed 32-bit integer
    IPV6-MIB::ipv6RoutePfxLength

IPV6-MIB.ipv6RoutePolicy  IPV6-MIB::ipv6RoutePolicy
    Signed 32-bit integer
    IPV6-MIB::ipv6RoutePolicy

IPV6-MIB.ipv6RouteProtocol  IPV6-MIB::ipv6RouteProtocol
    Signed 32-bit integer
    IPV6-MIB::ipv6RouteProtocol

IPV6-MIB.ipv6RouteType  IPV6-MIB::ipv6RouteType
    Signed 32-bit integer
    IPV6-MIB::ipv6RouteType

IPV6-MIB.ipv6RouteValid  IPV6-MIB::ipv6RouteValid
    Signed 32-bit integer
    IPV6-MIB::ipv6RouteValid

IPV6-MIB.ipv6RouteWeight  IPV6-MIB::ipv6RouteWeight
    Unsigned 32-bit integer
    IPV6-MIB::ipv6RouteWeight

RFC1213-MIB.atEntry.atIfIndex  RFC1213-MIB::atEntry.atIfIndex
    Signed 32-bit integer

RFC1213-MIB.atEntry.atNetAddress  RFC1213-MIB::atEntry.atNetAddress
    IPv4 address

RFC1213-MIB.atIfIndex  RFC1213-MIB::atIfIndex
    Signed 32-bit integer
    RFC1213-MIB::atIfIndex

RFC1213-MIB.atNetAddress  RFC1213-MIB::atNetAddress
    IPv4 address
    RFC1213-MIB::atNetAddress

RFC1213-MIB.atPhysAddress  RFC1213-MIB::atPhysAddress
    Byte array
    RFC1213-MIB::atPhysAddress

RFC1213-MIB.egpAs  RFC1213-MIB::egpAs
    Signed 32-bit integer
    RFC1213-MIB::egpAs

RFC1213-MIB.egpInErrors  RFC1213-MIB::egpInErrors
    Unsigned 64-bit integer
    RFC1213-MIB::egpInErrors

RFC1213-MIB.egpInMsgs  RFC1213-MIB::egpInMsgs
    Unsigned 64-bit integer
    RFC1213-MIB::egpInMsgs

RFC1213-MIB.egpNeighAddr  RFC1213-MIB::egpNeighAddr
    IPv4 address
    RFC1213-MIB::egpNeighAddr
```

```
RFC1213-MIB.egpNeighAs RFC1213-MIB::egpNeighAs
Signed 32-bit integer
RFC1213-MIB::egpNeighAs

RFC1213-MIB.egpNeighEntry.egpNeighAddr RFC1213-MIB::egpNeighEntry.egpNeighAddr
IPv4 address

RFC1213-MIB.egpNeighEventTrigger RFC1213-MIB::egpNeighEventTrigger
Signed 32-bit integer
RFC1213-MIB::egpNeighEventTrigger

RFC1213-MIB.egpNeighInErrMsgs RFC1213-MIB::egpNeighInErrMsgs
Unsigned 64-bit integer
RFC1213-MIB::egpNeighInErrMsgs

RFC1213-MIB.egpNeighInErrs RFC1213-MIB::egpNeighInErrs
Unsigned 64-bit integer
RFC1213-MIB::egpNeighInErrs

RFC1213-MIB.egpNeighInMsgs RFC1213-MIB::egpNeighInMsgs
Unsigned 64-bit integer
RFC1213-MIB::egpNeighInMsgs

RFC1213-MIB.egpNeighIntervalHello RFC1213-MIB::egpNeighIntervalHello
Signed 32-bit integer
RFC1213-MIB::egpNeighIntervalHello

RFC1213-MIB.egpNeighIntervalPoll RFC1213-MIB::egpNeighIntervalPoll
Signed 32-bit integer
RFC1213-MIB::egpNeighIntervalPoll

RFC1213-MIB.egpNeighMode RFC1213-MIB::egpNeighMode
Signed 32-bit integer
RFC1213-MIB::egpNeighMode

RFC1213-MIB.egpNeighOutErrMsgs RFC1213-MIB::egpNeighOutErrMsgs
Unsigned 64-bit integer
RFC1213-MIB::egpNeighOutErrMsgs

RFC1213-MIB.egpNeighOutErrs RFC1213-MIB::egpNeighOutErrs
Unsigned 64-bit integer
RFC1213-MIB::egpNeighOutErrs

RFC1213-MIB.egpNeighOutMsgs RFC1213-MIB::egpNeighOutMsgs
Unsigned 64-bit integer
RFC1213-MIB::egpNeighOutMsgs

RFC1213-MIB.egpNeighState RFC1213-MIB::egpNeighState
Signed 32-bit integer
RFC1213-MIB::egpNeighState

RFC1213-MIB.egpNeighStateDowns RFC1213-MIB::egpNeighStateDowns
Unsigned 64-bit integer
RFC1213-MIB::egpNeighStateDowns

RFC1213-MIB.egpNeighStateUps RFC1213-MIB::egpNeighStateUps
Unsigned 64-bit integer
RFC1213-MIB::egpNeighStateUps

RFC1213-MIB.egpOutErrors RFC1213-MIB::egpOutErrors
Unsigned 64-bit integer
RFC1213-MIB::egpOutErrors
```

```
RFC1213-MIB.egpOutMsgs RFC1213-MIB::egpOutMsgs
  Unsigned 64-bit integer
  RFC1213-MIB::egpOutMsgs

RFC1213-MIB.ipRouteAge RFC1213-MIB::ipRouteAge
  Signed 32-bit integer
  RFC1213-MIB::ipRouteAge

RFC1213-MIB.ipRouteDest RFC1213-MIB::ipRouteDest
  IPv4 address
  RFC1213-MIB::ipRouteDest

RFC1213-MIB.ipRouteEntry.ipRouteDest RFC1213-MIB::ipRouteEntry.ipRouteDest
  IPv4 address

RFC1213-MIB.ipRouteIfIndex RFC1213-MIB::ipRouteIfIndex
  Signed 32-bit integer
  RFC1213-MIB::ipRouteIfIndex

RFC1213-MIB.ipRouteInfo RFC1213-MIB::ipRouteInfo
  RFC1213-MIB::ipRouteInfo

RFC1213-MIB.ipRouteMask RFC1213-MIB::ipRouteMask
  IPv4 address
  RFC1213-MIB::ipRouteMask

RFC1213-MIB.ipRouteMetric1 RFC1213-MIB::ipRouteMetric1
  Signed 32-bit integer
  RFC1213-MIB::ipRouteMetric1

RFC1213-MIB.ipRouteMetric2 RFC1213-MIB::ipRouteMetric2
  Signed 32-bit integer
  RFC1213-MIB::ipRouteMetric2

RFC1213-MIB.ipRouteMetric3 RFC1213-MIB::ipRouteMetric3
  Signed 32-bit integer
  RFC1213-MIB::ipRouteMetric3

RFC1213-MIB.ipRouteMetric4 RFC1213-MIB::ipRouteMetric4
  Signed 32-bit integer
  RFC1213-MIB::ipRouteMetric4

RFC1213-MIB.ipRouteMetric5 RFC1213-MIB::ipRouteMetric5
  Signed 32-bit integer
  RFC1213-MIB::ipRouteMetric5

RFC1213-MIB.ipRouteNextHop RFC1213-MIB::ipRouteNextHop
  IPv4 address
  RFC1213-MIB::ipRouteNextHop

RFC1213-MIB.ipRouteProto RFC1213-MIB::ipRouteProto
  Signed 32-bit integer
  RFC1213-MIB::ipRouteProto

RFC1213-MIB.ipRouteType RFC1213-MIB::ipRouteType
  Signed 32-bit integer
  RFC1213-MIB::ipRouteType

SNMP-COMMUNITY-MIB.snmpCommunityContextEngineID SNMP-COMMUNITY-MIB::snmpCommuni
  Byte array
  SNMP-COMMUNITY-MIB::snmpCommunityContextEngineID
```



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SNMP-COMMUNITY-MIB.snmpCommunityContextName  SNMP-COMMUNITY-MIB::snmpCommunityCo
String
SNMP-COMMUNITY-MIB::snmpCommunityContextName

SNMP-COMMUNITY-MIB.snmpCommunityEntry.snmpCommunityIndex  SNMP-COMMUNITY-MIB::sn
String

SNMP-COMMUNITY-MIB.snmpCommunityIndex  SNMP-COMMUNITY-MIB::snmpCommunityIndex
String
SNMP-COMMUNITY-MIB::snmpCommunityIndex

SNMP-COMMUNITY-MIB.snmpCommunityName  SNMP-COMMUNITY-MIB::snmpCommunityName
Byte array
SNMP-COMMUNITY-MIB::snmpCommunityName

SNMP-COMMUNITY-MIB.snmpCommunitySecurityName  SNMP-COMMUNITY-MIB::snmpCommunityS
String
SNMP-COMMUNITY-MIB::snmpCommunitySecurityName

SNMP-COMMUNITY-MIB.snmpCommunityStatus  SNMP-COMMUNITY-MIB::snmpCommunityStatus
Signed 32-bit integer
SNMP-COMMUNITY-MIB::snmpCommunityStatus

SNMP-COMMUNITY-MIB.snmpCommunityStorageType  SNMP-COMMUNITY-MIB::snmpCommunitySt
Signed 32-bit integer
SNMP-COMMUNITY-MIB::snmpCommunityStorageType

SNMP-COMMUNITY-MIB.snmpCommunityTransportTag  SNMP-COMMUNITY-MIB::snmpCommunityT
Byte array
SNMP-COMMUNITY-MIB::snmpCommunityTransportTag

SNMP-COMMUNITY-MIB.snmpTargetAddrMMS  SNMP-COMMUNITY-MIB::snmpTargetAddrMMS
Signed 32-bit integer
SNMP-COMMUNITY-MIB::snmpTargetAddrMMS

SNMP-COMMUNITY-MIB.snmpTargetAddrTMask  SNMP-COMMUNITY-MIB::snmpTargetAddrTMask
Byte array
SNMP-COMMUNITY-MIB::snmpTargetAddrTMask

SNMP-COMMUNITY-MIB.snmpTrapAddress  SNMP-COMMUNITY-MIB::snmpTrapAddress
IPv4 address
SNMP-COMMUNITY-MIB::snmpTrapAddress

SNMP-COMMUNITY-MIB.snmpTrapCommunity  SNMP-COMMUNITY-MIB::snmpTrapCommunity
Byte array
SNMP-COMMUNITY-MIB::snmpTrapCommunity

SNMP-FRAMEWORK-MIB.snmpEngineBoots  SNMP-FRAMEWORK-MIB::snmpEngineBoots
Signed 32-bit integer
SNMP-FRAMEWORK-MIB::snmpEngineBoots

SNMP-FRAMEWORK-MIB.snmpEngineID  SNMP-FRAMEWORK-MIB::snmpEngineID
Byte array
SNMP-FRAMEWORK-MIB::snmpEngineID

SNMP-FRAMEWORK-MIB.snmpEngineMaxMessageSize  SNMP-FRAMEWORK-MIB::snmpEngineMaxMe
Signed 32-bit integer
SNMP-FRAMEWORK-MIB::snmpEngineMaxMessageSize

SNMP-FRAMEWORK-MIB.snmpEngineTime  SNMP-FRAMEWORK-MIB::snmpEngineTime
Signed 32-bit integer
SNMP-FRAMEWORK-MIB::snmpEngineTime

```

```

SNMP-MPD-MIB.snmpInvalidMsgs    SNMP-MPD-MIB::snmpInvalidMsgs
    Unsigned 64-bit integer
    SNMP-MPD-MIB::snmpInvalidMsgs

SNMP-MPD-MIB.snmpUnknownPDUHandlers    SNMP-MPD-MIB::snmpUnknownPDUHandlers
    Unsigned 64-bit integer
    SNMP-MPD-MIB::snmpUnknownPDUHandlers

SNMP-MPD-MIB.snmpUnknownSecurityModels    SNMP-MPD-MIB::snmpUnknownSecurityModels
    Unsigned 64-bit integer
    SNMP-MPD-MIB::snmpUnknownSecurityModels

SNMP-NOTIFICATION-MIB.snmpNotifyEntry.snmpNotifyName    SNMP-NOTIFICATION-MIB::snmpNotifyName
    String

SNMP-NOTIFICATION-MIB.snmpNotifyFilterEntry.snmpNotifyFilterProfileName    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileName
    String

SNMP-NOTIFICATION-MIB.snmpNotifyFilterEntry.snmpNotifyFilterSubtree    SNMP-NOTIFICATION-MIB::snmpNotifyFilterSubtree
    String

SNMP-NOTIFICATION-MIB.snmpNotifyFilterMask    SNMP-NOTIFICATION-MIB::snmpNotifyFilterMask
    Byte array
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterMask

SNMP-NOTIFICATION-MIB.snmpNotifyFilterProfileEntry.snmpTargetParamsName    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileEntry.snmpTargetParamsName
    String

SNMP-NOTIFICATION-MIB.snmpNotifyFilterProfileName    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileName
    String
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileName

SNMP-NOTIFICATION-MIB.snmpNotifyFilterProfileRowStatus    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileRowStatus
    Signed 32-bit integer
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileRowStatus

SNMP-NOTIFICATION-MIB.snmpNotifyFilterProfileStorType    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileStorType
    Signed 32-bit integer
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterProfileStorType

SNMP-NOTIFICATION-MIB.snmpNotifyFilterRowStatus    SNMP-NOTIFICATION-MIB::snmpNotifyFilterRowStatus
    Signed 32-bit integer
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterRowStatus

SNMP-NOTIFICATION-MIB.snmpNotifyFilterStorageType    SNMP-NOTIFICATION-MIB::snmpNotifyFilterStorageType
    Signed 32-bit integer
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterStorageType

SNMP-NOTIFICATION-MIB.snmpNotifyFilterSubtree    SNMP-NOTIFICATION-MIB::snmpNotifyFilterSubtree
    String
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterSubtree

SNMP-NOTIFICATION-MIB.snmpNotifyFilterType    SNMP-NOTIFICATION-MIB::snmpNotifyFilterType
    Signed 32-bit integer
    SNMP-NOTIFICATION-MIB::snmpNotifyFilterType

SNMP-NOTIFICATION-MIB.snmpNotifyName    SNMP-NOTIFICATION-MIB::snmpNotifyName
    String
    SNMP-NOTIFICATION-MIB::snmpNotifyName

SNMP-NOTIFICATION-MIB.snmpNotifyRowStatus    SNMP-NOTIFICATION-MIB::snmpNotifyRowStatus
    Signed 32-bit integer
    SNMP-NOTIFICATION-MIB::snmpNotifyRowStatus

```

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SNMP-NOTIFICATION-MIB.snmpNotifyStorageType  SNMP-NOTIFICATION-MIB::snmpNotifySt
Signed 32-bit integer
SNMP-NOTIFICATION-MIB::snmpNotifyStorageType

SNMP-NOTIFICATION-MIB.snmpNotifyTag  SNMP-NOTIFICATION-MIB::snmpNotifyTag
Byte array
SNMP-NOTIFICATION-MIB::snmpNotifyTag

SNMP-NOTIFICATION-MIB.snmpNotifyType  SNMP-NOTIFICATION-MIB::snmpNotifyType
Signed 32-bit integer
SNMP-NOTIFICATION-MIB::snmpNotifyType

SNMP-PROXY-MIB.snmpProxyContextEngineID  SNMP-PROXY-MIB::snmpProxyContextEngineID
Byte array
SNMP-PROXY-MIB::snmpProxyContextEngineID

SNMP-PROXY-MIB.snmpProxyContextName  SNMP-PROXY-MIB::snmpProxyContextName
String
SNMP-PROXY-MIB::snmpProxyContextName

SNMP-PROXY-MIB.snmpProxyEntry.snmpProxyName  SNMP-PROXY-MIB::snmpProxyEntry.snmp
String

SNMP-PROXY-MIB.snmpProxyMultipleTargetOut  SNMP-PROXY-MIB::snmpProxyMultipleTarg
Byte array
SNMP-PROXY-MIB::snmpProxyMultipleTargetOut

SNMP-PROXY-MIB.snmpProxyName  SNMP-PROXY-MIB::snmpProxyName
String
SNMP-PROXY-MIB::snmpProxyName

SNMP-PROXY-MIB.snmpProxyRowStatus  SNMP-PROXY-MIB::snmpProxyRowStatus
Signed 32-bit integer
SNMP-PROXY-MIB::snmpProxyRowStatus

SNMP-PROXY-MIB.snmpProxySingleTargetOut  SNMP-PROXY-MIB::snmpProxySingleTargetOu
String
SNMP-PROXY-MIB::snmpProxySingleTargetOut

SNMP-PROXY-MIB.snmpProxyStorageType  SNMP-PROXY-MIB::snmpProxyStorageType
Signed 32-bit integer
SNMP-PROXY-MIB::snmpProxyStorageType

SNMP-PROXY-MIB.snmpProxyTargetParamsIn  SNMP-PROXY-MIB::snmpProxyTargetParamsIn
String
SNMP-PROXY-MIB::snmpProxyTargetParamsIn

SNMP-PROXY-MIB.snmpProxyType  SNMP-PROXY-MIB::snmpProxyType
Signed 32-bit integer
SNMP-PROXY-MIB::snmpProxyType

SNMP-TARGET-MIB.snmpTargetAddrEntry.snmpTargetAddrName  SNMP-TARGET-MIB::snmpTar
String

SNMP-TARGET-MIB.snmpTargetAddrName  SNMP-TARGET-MIB::snmpTargetAddrName
String
SNMP-TARGET-MIB::snmpTargetAddrName

SNMP-TARGET-MIB.snmpTargetAddrParams  SNMP-TARGET-MIB::snmpTargetAddrParams
String
SNMP-TARGET-MIB::snmpTargetAddrParams

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SNMP-TARGET-MIB.snmpTargetAddrRetryCount  SNMP-TARGET-MIB::snmpTargetAddrRetryCo
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetAddrRetryCount

SNMP-TARGET-MIB.snmpTargetAddrRowStatus  SNMP-TARGET-MIB::snmpTargetAddrRowStatu
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetAddrRowStatus

SNMP-TARGET-MIB.snmpTargetAddrStorageType  SNMP-TARGET-MIB::snmpTargetAddrStorag
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetAddrStorageType

SNMP-TARGET-MIB.snmpTargetAddrTAddress  SNMP-TARGET-MIB::snmpTargetAddrTAddress
Byte array
SNMP-TARGET-MIB::snmpTargetAddrTAddress

SNMP-TARGET-MIB.snmpTargetAddrTDomain  SNMP-TARGET-MIB::snmpTargetAddrTDomain
SNMP-TARGET-MIB::snmpTargetAddrTDomain

SNMP-TARGET-MIB.snmpTargetAddrTagList  SNMP-TARGET-MIB::snmpTargetAddrTagList
Byte array
SNMP-TARGET-MIB::snmpTargetAddrTagList

SNMP-TARGET-MIB.snmpTargetAddrTimeout  SNMP-TARGET-MIB::snmpTargetAddrTimeout
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetAddrTimeout

SNMP-TARGET-MIB.snmpTargetParamsEntry.snmpTargetParamsName  SNMP-TARGET-MIB::snm
String
SNMP-TARGET-MIB::snmpTargetParamsName

SNMP-TARGET-MIB.snmpTargetParamsMPPModel  SNMP-TARGET-MIB::snmpTargetParamsMPMode
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetParamsMPPModel

SNMP-TARGET-MIB.snmpTargetParamsName  SNMP-TARGET-MIB::snmpTargetParamsName
String
SNMP-TARGET-MIB::snmpTargetParamsName

SNMP-TARGET-MIB.snmpTargetParamsRowStatus  SNMP-TARGET-MIB::snmpTargetParamsRowS
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetParamsRowStatus

SNMP-TARGET-MIB.snmpTargetParamsSecurityLevel  SNMP-TARGET-MIB::snmpTargetParams
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetParamsSecurityLevel

SNMP-TARGET-MIB.snmpTargetParamsSecurityModel  SNMP-TARGET-MIB::snmpTargetParams
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetParamsSecurityModel

SNMP-TARGET-MIB.snmpTargetParamsSecurityName  SNMP-TARGET-MIB::snmpTargetParamsS
String
SNMP-TARGET-MIB::snmpTargetParamsSecurityName

SNMP-TARGET-MIB.snmpTargetParamsStorageType  SNMP-TARGET-MIB::snmpTargetParamsSt
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetParamsStorageType

SNMP-TARGET-MIB.snmpTargetSpinLock  SNMP-TARGET-MIB::snmpTargetSpinLock
Signed 32-bit integer
SNMP-TARGET-MIB::snmpTargetSpinLock
```

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SNMP-TARGET-MIB.snmpUnavailableContexts  SNMP-TARGET-MIB::snmpUnavailableContexts
    Unsigned 64-bit integer
    SNMP-TARGET-MIB::snmpUnavailableContexts

SNMP-TARGET-MIB.snmpUnknownContexts  SNMP-TARGET-MIB::snmpUnknownContexts
    Unsigned 64-bit integer
    SNMP-TARGET-MIB::snmpUnknownContexts

SNMP-USER-BASED-SM-MIB.usmStatsDecryptionErrors  SNMP-USER-BASED-SM-MIB::usmStat
    Unsigned 64-bit integer
    SNMP-USER-BASED-SM-MIB::usmStatsDecryptionErrors

SNMP-USER-BASED-SM-MIB.usmStatsNotInTimeWindows  SNMP-USER-BASED-SM-MIB::usmStat
    Unsigned 64-bit integer
    SNMP-USER-BASED-SM-MIB::usmStatsNotInTimeWindows

SNMP-USER-BASED-SM-MIB.usmStatsUnknownEngineIDs  SNMP-USER-BASED-SM-MIB::usmStat
    Unsigned 64-bit integer
    SNMP-USER-BASED-SM-MIB::usmStatsUnknownEngineIDs

SNMP-USER-BASED-SM-MIB.usmStatsUnknownUserNames  SNMP-USER-BASED-SM-MIB::usmStat
    Unsigned 64-bit integer
    SNMP-USER-BASED-SM-MIB::usmStatsUnknownUserNames

SNMP-USER-BASED-SM-MIB.usmStatsUnsupportedSecLevels  SNMP-USER-BASED-SM-MIB::usm
    Unsigned 64-bit integer
    SNMP-USER-BASED-SM-MIB::usmStatsUnsupportedSecLevels

SNMP-USER-BASED-SM-MIB.usmStatsWrongDigests  SNMP-USER-BASED-SM-MIB::usmStatsWro
    Unsigned 64-bit integer
    SNMP-USER-BASED-SM-MIB::usmStatsWrongDigests

SNMP-USER-BASED-SM-MIB.usmUserAuthKeyChange  SNMP-USER-BASED-SM-MIB::usmUserAuth
    Byte array
    SNMP-USER-BASED-SM-MIB::usmUserAuthKeyChange

SNMP-USER-BASED-SM-MIB.usmUserAuthProtocol  SNMP-USER-BASED-SM-MIB::usmUserAuthP
    SNMP-USER-BASED-SM-MIB::usmUserAuthProtocol

SNMP-USER-BASED-SM-MIB.usmUserCloneFrom  SNMP-USER-BASED-SM-MIB::usmUserCloneFro
    SNMP-USER-BASED-SM-MIB::usmUserCloneFrom

SNMP-USER-BASED-SM-MIB.usmUserEngineID  SNMP-USER-BASED-SM-MIB::usmUserEngineID
    Byte array
    SNMP-USER-BASED-SM-MIB::usmUserEngineID

SNMP-USER-BASED-SM-MIB.usmUserEntry.usmUserEngineID  SNMP-USER-BASED-SM-MIB::usm
    Byte array

SNMP-USER-BASED-SM-MIB.usmUserEntry.usmUserName  SNMP-USER-BASED-SM-MIB::usmUser
    String

SNMP-USER-BASED-SM-MIB.usmUserName  SNMP-USER-BASED-SM-MIB::usmUserName
    String
    SNMP-USER-BASED-SM-MIB::usmUserName

SNMP-USER-BASED-SM-MIB.usmUserOwnAuthKeyChange  SNMP-USER-BASED-SM-MIB::usmUserO
    Byte array
    SNMP-USER-BASED-SM-MIB::usmUserOwnAuthKeyChange

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SNMP-USER-BASED-SM-MIB.usmUserOwnPrivKeyChange  SNMP-USER-BASED-SM-MIB::usmUserOwnPrivKeyChange
    Byte array
    SNMP-USER-BASED-SM-MIB::usmUserOwnPrivKeyChange
SNMP-USER-BASED-SM-MIB.usmUserPrivKeyChange  SNMP-USER-BASED-SM-MIB::usmUserPrivKeyChange
    Byte array
    SNMP-USER-BASED-SM-MIB::usmUserPrivKeyChange
SNMP-USER-BASED-SM-MIB.usmUserPrivProtocol  SNMP-USER-BASED-SM-MIB::usmUserPrivProtocol
    SNMP-USER-BASED-SM-MIB::usmUserPrivProtocol
SNMP-USER-BASED-SM-MIB.usmUserPublic  SNMP-USER-BASED-SM-MIB::usmUserPublic
    Byte array
    SNMP-USER-BASED-SM-MIB::usmUserPublic
SNMP-USER-BASED-SM-MIB.usmUserSecurityName  SNMP-USER-BASED-SM-MIB::usmUserSecurityName
    String
    SNMP-USER-BASED-SM-MIB::usmUserSecurityName
SNMP-USER-BASED-SM-MIB.usmUserSpinLock  SNMP-USER-BASED-SM-MIB::usmUserSpinLock
    Signed 32-bit integer
    SNMP-USER-BASED-SM-MIB::usmUserSpinLock
SNMP-USER-BASED-SM-MIB.usmUserStatus  SNMP-USER-BASED-SM-MIB::usmUserStatus
    Signed 32-bit integer
    SNMP-USER-BASED-SM-MIB::usmUserStatus
SNMP-USER-BASED-SM-MIB.usmUserStorageType  SNMP-USER-BASED-SM-MIB::usmUserStorageType
    Signed 32-bit integer
    SNMP-USER-BASED-SM-MIB::usmUserStorageType
SNMP-USM-DH-OBJECTS-MIB.usmDHKickstartEntry.usmDHKickstartIndex  SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartIndex
    Signed 32-bit integer
SNMP-USM-DH-OBJECTS-MIB.usmDHKickstartIndex  SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartIndex
    Signed 32-bit integer
    SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartIndex
SNMP-USM-DH-OBJECTS-MIB.usmDHKickstartMgrPublic  SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartMgrPublic
    Byte array
    SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartMgrPublic
SNMP-USM-DH-OBJECTS-MIB.usmDHKickstartMyPublic  SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartMyPublic
    Byte array
    SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartMyPublic
SNMP-USM-DH-OBJECTS-MIB.usmDHKickstartSecurityName  SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartSecurityName
    String
    SNMP-USM-DH-OBJECTS-MIB::usmDHKickstartSecurityName
SNMP-USM-DH-OBJECTS-MIB.usmDHParameters  SNMP-USM-DH-OBJECTS-MIB::usmDHParameters
    Byte array
    SNMP-USM-DH-OBJECTS-MIB::usmDHParameters
SNMP-USM-DH-OBJECTS-MIB.usmDHUserAuthKeyChange  SNMP-USM-DH-OBJECTS-MIB::usmDHUserAuthKeyChange
    Byte array
    SNMP-USM-DH-OBJECTS-MIB::usmDHUserAuthKeyChange
SNMP-USM-DH-OBJECTS-MIB.usmDHUserOwnAuthKeyChange  SNMP-USM-DH-OBJECTS-MIB::usmDHUserOwnAuthKeyChange
    Byte array
    SNMP-USM-DH-OBJECTS-MIB::usmDHUserOwnAuthKeyChange

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SNMP-USM-DH-OBJECTS-MIB.usmDHUserOwnPrivKeyChange  SNMP-USM-DH-OBJECTS-MIB::usmDHUserOwnPrivKeyChange
    Byte array
    SNMP-USM-DH-OBJECTS-MIB::usmDHUserOwnPrivKeyChange
SNMP-USM-DH-OBJECTS-MIB.usmDHUserPrivKeyChange  SNMP-USM-DH-OBJECTS-MIB::usmDHUserPrivKeyChange
    Byte array
    SNMP-USM-DH-OBJECTS-MIB::usmDHUserPrivKeyChange
SNMP-VIEW-BASED-ACM-MIB.vacmAccessContextMatch  SNMP-VIEW-BASED-ACM-MIB::vacmAccessContextMatch
    Signed 32-bit integer
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessContextMatch
SNMP-VIEW-BASED-ACM-MIB.vacmAccessContextPrefix  SNMP-VIEW-BASED-ACM-MIB::vacmAccessContextPrefix
    String
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessContextPrefix
SNMP-VIEW-BASED-ACM-MIB.vacmAccessEntry.vacmAccessContextPrefix  SNMP-VIEW-BASED-ACM-MIB::vacmAccessContextPrefix
    String
SNMP-VIEW-BASED-ACM-MIB.vacmAccessEntry.vacmAccessSecurityLevel  SNMP-VIEW-BASED-ACM-MIB::vacmAccessSecurityLevel
    Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB.vacmAccessEntry.vacmAccessSecurityModel  SNMP-VIEW-BASED-ACM-MIB::vacmAccessSecurityModel
    Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB.vacmAccessEntry.vacmGroupName  SNMP-VIEW-BASED-ACM-MIB::vacmGroupName
    String
SNMP-VIEW-BASED-ACM-MIB.vacmAccessNotifyViewName  SNMP-VIEW-BASED-ACM-MIB::vacmAccessNotifyViewName
    String
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessNotifyViewName
SNMP-VIEW-BASED-ACM-MIB.vacmAccessReadViewName  SNMP-VIEW-BASED-ACM-MIB::vacmAccessReadViewName
    String
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessReadViewName
SNMP-VIEW-BASED-ACM-MIB.vacmAccessSecurityLevel  SNMP-VIEW-BASED-ACM-MIB::vacmAccessSecurityLevel
    Signed 32-bit integer
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessSecurityLevel
SNMP-VIEW-BASED-ACM-MIB.vacmAccessSecurityModel  SNMP-VIEW-BASED-ACM-MIB::vacmAccessSecurityModel
    Signed 32-bit integer
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessSecurityModel
SNMP-VIEW-BASED-ACM-MIB.vacmAccessStatus  SNMP-VIEW-BASED-ACM-MIB::vacmAccessStatus
    Signed 32-bit integer
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessStatus
SNMP-VIEW-BASED-ACM-MIB.vacmAccessStorageType  SNMP-VIEW-BASED-ACM-MIB::vacmAccessStorageType
    Signed 32-bit integer
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessStorageType
SNMP-VIEW-BASED-ACM-MIB.vacmAccessWriteViewName  SNMP-VIEW-BASED-ACM-MIB::vacmAccessWriteViewName
    String
    SNMP-VIEW-BASED-ACM-MIB::vacmAccessWriteViewName
SNMP-VIEW-BASED-ACM-MIB.vacmContextEntry.vacmContextName  SNMP-VIEW-BASED-ACM-MIB::vacmContextName
    String
SNMP-VIEW-BASED-ACM-MIB.vacmContextName  SNMP-VIEW-BASED-ACM-MIB::vacmContextName
    String
    SNMP-VIEW-BASED-ACM-MIB::vacmContextName

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SNMP-VIEW-BASED-ACM-MIB.vacmGroupName  SNMP-VIEW-BASED-ACM-MIB::vacmGroupName
String
SNMP-VIEW-BASED-ACM-MIB::vacmGroupName

SNMP-VIEW-BASED-ACM-MIB.vacmSecurityModel  SNMP-VIEW-BASED-ACM-MIB::vacmSecurity
Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB::vacmSecurityModel

SNMP-VIEW-BASED-ACM-MIB.vacmSecurityName  SNMP-VIEW-BASED-ACM-MIB::vacmSecurityN
String
SNMP-VIEW-BASED-ACM-MIB::vacmSecurityName

SNMP-VIEW-BASED-ACM-MIB.vacmSecurityToGroupEntry.vacmSecurityModel  SNMP-VIEW-BA
Signed 32-bit integer

SNMP-VIEW-BASED-ACM-MIB.vacmSecurityToGroupEntry.vacmSecurityName  SNMP-VIEW-BAS
String

SNMP-VIEW-BASED-ACM-MIB.vacmSecurityToGroupStatus  SNMP-VIEW-BASED-ACM-MIB::vacm
Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB::vacmSecurityToGroupStatus

SNMP-VIEW-BASED-ACM-MIB.vacmSecurityToGroupStorageType  SNMP-VIEW-BASED-ACM-MIB:
Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB::vacmSecurityToGroupStorageType

SNMP-VIEW-BASED-ACM-MIB.vacmViewSpinLock  SNMP-VIEW-BASED-ACM-MIB::vacmViewSpinL
Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB::vacmViewSpinLock

SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilyEntry.vacmViewTreeFamilySubtree  SNMP-
SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilyEntry.vacmViewTreeFamilyViewName  SNMP
String

SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilyMask  SNMP-VIEW-BASED-ACM-MIB::vacmVie
Byte array
SNMP-VIEW-BASED-ACM-MIB::vacmViewTreeFamilyMask

SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilyStatus  SNMP-VIEW-BASED-ACM-MIB::vacmV
Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB::vacmViewTreeFamilyStatus

SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilyStorageType  SNMP-VIEW-BASED-ACM-MIB::
Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB::vacmViewTreeFamilyStorageType

SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilySubtree  SNMP-VIEW-BASED-ACM-MIB::vacm
SNMP-VIEW-BASED-ACM-MIB::vacmViewTreeFamilySubtree

SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilyType  SNMP-VIEW-BASED-ACM-MIB::vacmVie
Signed 32-bit integer
SNMP-VIEW-BASED-ACM-MIB::vacmViewTreeFamilyType

SNMP-VIEW-BASED-ACM-MIB.vacmViewTreeFamilyViewName  SNMP-VIEW-BASED-ACM-MIB::vac
String
SNMP-VIEW-BASED-ACM-MIB::vacmViewTreeFamilyViewName

SNMPv2-MIB.snmpEnableAuthenTraps  SNMPv2-MIB::snmpEnableAuthenTraps
Signed 32-bit integer
SNMPv2-MIB::snmpEnableAuthenTraps

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SNMPv2-MIB.snmpInASNParseErrs  SNMPv2-MIB::snmpInASNParseErrs
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInASNParseErrs

SNMPv2-MIB.snmpInBadCommunityNames  SNMPv2-MIB::snmpInBadCommunityNames
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInBadCommunityNames

SNMPv2-MIB.snmpInBadCommunityUses  SNMPv2-MIB::snmpInBadCommunityUses
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInBadCommunityUses

SNMPv2-MIB.snmpInBadValues  SNMPv2-MIB::snmpInBadValues
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInBadValues

SNMPv2-MIB.snmpInBadVersions  SNMPv2-MIB::snmpInBadVersions
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInBadVersions

SNMPv2-MIB.snmpInGenErrs  SNMPv2-MIB::snmpInGenErrs
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInGenErrs

SNMPv2-MIB.snmpInGetNexts  SNMPv2-MIB::snmpInGetNexts
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInGetNexts

SNMPv2-MIB.snmpInGetRequests  SNMPv2-MIB::snmpInGetRequests
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInGetRequests

SNMPv2-MIB.snmpInGetResponses  SNMPv2-MIB::snmpInGetResponses
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInGetResponses

SNMPv2-MIB.snmpInNoSuchNames  SNMPv2-MIB::snmpInNoSuchNames
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInNoSuchNames

SNMPv2-MIB.snmpInPkts  SNMPv2-MIB::snmpInPkts
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInPkts

SNMPv2-MIB.snmpInReadOnlys  SNMPv2-MIB::snmpInReadOnlys
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInReadOnlys

SNMPv2-MIB.snmpInSetRequests  SNMPv2-MIB::snmpInSetRequests
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInSetRequests

SNMPv2-MIB.snmpInTooBig  SNMPv2-MIB::snmpInTooBig
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInTooBig

SNMPv2-MIB.snmpInTotalReqVars  SNMPv2-MIB::snmpInTotalReqVars
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInTotalReqVars

SNMPv2-MIB.snmpInTotalSetVars  SNMPv2-MIB::snmpInTotalSetVars
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInTotalSetVars
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SNMPv2-MIB.snmpInTraps  SNMPv2-MIB::snmpInTraps
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpInTraps

SNMPv2-MIB.snmpOutBadValues  SNMPv2-MIB::snmpOutBadValues
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutBadValues

SNMPv2-MIB.snmpOutGenErrs  SNMPv2-MIB::snmpOutGenErrs
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutGenErrs

SNMPv2-MIB.snmpOutGetNexts  SNMPv2-MIB::snmpOutGetNexts
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutGetNexts

SNMPv2-MIB.snmpOutGetRequests  SNMPv2-MIB::snmpOutGetRequests
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutGetRequests

SNMPv2-MIB.snmpOutGetResponses  SNMPv2-MIB::snmpOutGetResponses
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutGetResponses

SNMPv2-MIB.snmpOutNoSuchNames  SNMPv2-MIB::snmpOutNoSuchNames
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutNoSuchNames

SNMPv2-MIB.snmpOutPkts  SNMPv2-MIB::snmpOutPkts
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutPkts

SNMPv2-MIB.snmpOutSetRequests  SNMPv2-MIB::snmpOutSetRequests
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutSetRequests

SNMPv2-MIB.snmpOutTooBigs  SNMPv2-MIB::snmpOutTooBigs
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutTooBigs

SNMPv2-MIB.snmpOutTraps  SNMPv2-MIB::snmpOutTraps
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpOutTraps

SNMPv2-MIB.snmpProxyDrops  SNMPv2-MIB::snmpProxyDrops
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpProxyDrops

SNMPv2-MIB.snmpSetSerialNo  SNMPv2-MIB::snmpSetSerialNo
    Signed 32-bit integer
    SNMPv2-MIB::snmpSetSerialNo

SNMPv2-MIB.snmpSilentDrops  SNMPv2-MIB::snmpSilentDrops
    Unsigned 64-bit integer
    SNMPv2-MIB::snmpSilentDrops

SNMPv2-MIB.snmpTrapEnterprise  SNMPv2-MIB::snmpTrapEnterprise
    SNMPv2-MIB::snmpTrapEnterprise

SNMPv2-MIB.snmpTrapOID  SNMPv2-MIB::snmpTrapOID
    SNMPv2-MIB::snmpTrapOID
```

```
SNMPv2-MIB.sysContact    SNMPv2-MIB::sysContact
    String
    SNMPv2-MIB::sysContact

SNMPv2-MIB.sysDescr     SNMPv2-MIB::sysDescr
    String
    SNMPv2-MIB::sysDescr

SNMPv2-MIB.sysLocation  SNMPv2-MIB::sysLocation
    String
    SNMPv2-MIB::sysLocation

SNMPv2-MIB.sysName      SNMPv2-MIB::sysName
    String
    SNMPv2-MIB::sysName

SNMPv2-MIB.sysORDescr   SNMPv2-MIB::sysORDescr
    String
    SNMPv2-MIB::sysORDescr

SNMPv2-MIB.sysOREntry.sysORIndex  SNMPv2-MIB::sysOREntry.sysORIndex
    Signed 32-bit integer

SNMPv2-MIB.sysORID      SNMPv2-MIB::sysORID
    SNMPv2-MIB::sysORID

SNMPv2-MIB.sysORIndex   SNMPv2-MIB::sysORIndex
    Signed 32-bit integer
    SNMPv2-MIB::sysORIndex

SNMPv2-MIB.sysORLastChange  SNMPv2-MIB::sysORLastChange
    Unsigned 64-bit integer
    SNMPv2-MIB::sysORLastChange

SNMPv2-MIB.sysORUpTime  SNMPv2-MIB::sysORUpTime
    Unsigned 64-bit integer
    SNMPv2-MIB::sysORUpTime

SNMPv2-MIB.sysObjectID  SNMPv2-MIB::sysObjectID
    SNMPv2-MIB::sysObjectID

SNMPv2-MIB.sysServices  SNMPv2-MIB::sysServices
    Signed 32-bit integer
    SNMPv2-MIB::sysServices

SNMPv2-MIB.sysUpTime    SNMPv2-MIB::sysUpTime
    Unsigned 64-bit integer
    SNMPv2-MIB::sysUpTime

TCP-MIB.tcpActiveOpens  TCP-MIB::tcpActiveOpens
    Unsigned 64-bit integer
    TCP-MIB::tcpActiveOpens

TCP-MIB.tcpAttemptFails  TCP-MIB::tcpAttemptFails
    Unsigned 64-bit integer
    TCP-MIB::tcpAttemptFails

TCP-MIB.tcpConnEntry.tcpConnLocalAddress  TCP-MIB::tcpConnEntry.tcpConnLocalAddr
    IPv4 address

TCP-MIB.tcpConnEntry.tcpConnLocalPort     TCP-MIB::tcpConnEntry.tcpConnLocalPort
    Signed 32-bit integer
```

```
TCP-MIB.tcpConnEntry.tcpConnRemAddress  TCP-MIB::tcpConnEntry.tcpConnRemAddress
    IPv4 address

TCP-MIB.tcpConnEntry.tcpConnRemPort  TCP-MIB::tcpConnEntry.tcpConnRemPort
    Signed 32-bit integer

TCP-MIB.tcpConnLocalAddress  TCP-MIB::tcpConnLocalAddress
    IPv4 address
    TCP-MIB::tcpConnLocalAddress

TCP-MIB.tcpConnLocalPort  TCP-MIB::tcpConnLocalPort
    Signed 32-bit integer
    TCP-MIB::tcpConnLocalPort

TCP-MIB.tcpConnRemAddress  TCP-MIB::tcpConnRemAddress
    IPv4 address
    TCP-MIB::tcpConnRemAddress

TCP-MIB.tcpConnRemPort  TCP-MIB::tcpConnRemPort
    Signed 32-bit integer
    TCP-MIB::tcpConnRemPort

TCP-MIB.tcpConnState  TCP-MIB::tcpConnState
    Signed 32-bit integer
    TCP-MIB::tcpConnState

TCP-MIB.tcpConnectionEntry.tcpConnectionLocalAddress  TCP-MIB::tcpConnectionEntry.t
    Byte array

TCP-MIB.tcpConnectionEntry.tcpConnectionLocalAddressType  TCP-MIB::tcpConnection
    Signed 32-bit integer

TCP-MIB.tcpConnectionEntry.tcpConnectionLocalPort  TCP-MIB::tcpConnectionEntry.t
    Unsigned 32-bit integer

TCP-MIB.tcpConnectionEntry.tcpConnectionRemAddress  TCP-MIB::tcpConnectionEntry.
    Byte array

TCP-MIB.tcpConnectionEntry.tcpConnectionRemAddressType  TCP-MIB::tcpConnectionEn
    Signed 32-bit integer

TCP-MIB.tcpConnectionEntry.tcpConnectionRemPort  TCP-MIB::tcpConnectionEntry.tcp
    Unsigned 32-bit integer

TCP-MIB.tcpConnectionLocalAddress  TCP-MIB::tcpConnectionLocalAddress
    Byte array
    TCP-MIB::tcpConnectionLocalAddress

TCP-MIB.tcpConnectionLocalAddressType  TCP-MIB::tcpConnectionLocalAddressType
    Signed 32-bit integer
    TCP-MIB::tcpConnectionLocalAddressType

TCP-MIB.tcpConnectionLocalPort  TCP-MIB::tcpConnectionLocalPort
    Unsigned 32-bit integer
    TCP-MIB::tcpConnectionLocalPort

TCP-MIB.tcpConnectionProcess  TCP-MIB::tcpConnectionProcess
    Unsigned 32-bit integer
    TCP-MIB::tcpConnectionProcess

TCP-MIB.tcpConnectionRemAddress  TCP-MIB::tcpConnectionRemAddress
    Byte array
    TCP-MIB::tcpConnectionRemAddress
```

```
TCP-MIB.tcpConnectionRemAddressType  TCP-MIB::tcpConnectionRemAddressType
Signed 32-bit integer
TCP-MIB::tcpConnectionRemAddressType

TCP-MIB.tcpConnectionRemPort  TCP-MIB::tcpConnectionRemPort
Unsigned 32-bit integer
TCP-MIB::tcpConnectionRemPort

TCP-MIB.tcpConnectionState  TCP-MIB::tcpConnectionState
Signed 32-bit integer
TCP-MIB::tcpConnectionState

TCP-MIB.tcpCurrEstab  TCP-MIB::tcpCurrEstab
Unsigned 32-bit integer
TCP-MIB::tcpCurrEstab

TCP-MIB.tcpEstabResets  TCP-MIB::tcpEstabResets
Unsigned 64-bit integer
TCP-MIB::tcpEstabResets

TCP-MIB.tcpHCInSegs  TCP-MIB::tcpHCInSegs
Unsigned 64-bit integer
TCP-MIB::tcpHCInSegs

TCP-MIB.tcpHCOutSegs  TCP-MIB::tcpHCOutSegs
Unsigned 64-bit integer
TCP-MIB::tcpHCOutSegs

TCP-MIB.tcpInErrs  TCP-MIB::tcpInErrs
Unsigned 64-bit integer
TCP-MIB::tcpInErrs

TCP-MIB.tcpInSegs  TCP-MIB::tcpInSegs
Unsigned 64-bit integer
TCP-MIB::tcpInSegs

TCP-MIB.tcpListenerEntry.tcpListenerLocalAddress  TCP-MIB::tcpListenerEntry.tcpL
Byte array

TCP-MIB.tcpListenerEntry.tcpListenerLocalAddressType  TCP-MIB::tcpListenerEntry.
Signed 32-bit integer

TCP-MIB.tcpListenerEntry.tcpListenerLocalPort  TCP-MIB::tcpListenerEntry.tcpList
Unsigned 32-bit integer

TCP-MIB.tcpListenerLocalAddress  TCP-MIB::tcpListenerLocalAddress
Byte array
TCP-MIB::tcpListenerLocalAddress

TCP-MIB.tcpListenerLocalAddressType  TCP-MIB::tcpListenerLocalAddressType
Signed 32-bit integer
TCP-MIB::tcpListenerLocalAddressType

TCP-MIB.tcpListenerLocalPort  TCP-MIB::tcpListenerLocalPort
Unsigned 32-bit integer
TCP-MIB::tcpListenerLocalPort

TCP-MIB.tcpListenerProcess  TCP-MIB::tcpListenerProcess
Unsigned 32-bit integer
TCP-MIB::tcpListenerProcess
```

```
TCP-MIB.tcpMaxConn TCP-MIB::tcpMaxConn
Signed 32-bit integer
TCP-MIB::tcpMaxConn

TCP-MIB.tcpOutRsts TCP-MIB::tcpOutRsts
Unsigned 64-bit integer
TCP-MIB::tcpOutRsts

TCP-MIB.tcpOutSegs TCP-MIB::tcpOutSegs
Unsigned 64-bit integer
TCP-MIB::tcpOutSegs

TCP-MIB.tcpPassiveOpens TCP-MIB::tcpPassiveOpens
Unsigned 64-bit integer
TCP-MIB::tcpPassiveOpens

TCP-MIB.tcpRetransSegs TCP-MIB::tcpRetransSegs
Unsigned 64-bit integer
TCP-MIB::tcpRetransSegs

TCP-MIB.tcpRtoAlgorithm TCP-MIB::tcpRtoAlgorithm
Signed 32-bit integer
TCP-MIB::tcpRtoAlgorithm

TCP-MIB.tcpRtoMax TCP-MIB::tcpRtoMax
Signed 32-bit integer
TCP-MIB::tcpRtoMax

TCP-MIB.tcpRtoMin TCP-MIB::tcpRtoMin
Signed 32-bit integer
TCP-MIB::tcpRtoMin

UDP-MIB.udpEndpointEntry.udpEndpointInstance UDP-MIB::udpEndpointEntry.udpEndpo
Unsigned 32-bit integer

UDP-MIB.udpEndpointEntry.udpEndpointLocalAddress UDP-MIB::udpEndpointEntry.udpE
Byte array

UDP-MIB.udpEndpointEntry.udpEndpointLocalAddressType UDP-MIB::udpEndpointEntry.
Signed 32-bit integer

UDP-MIB.udpEndpointEntry.udpEndpointLocalPort UDP-MIB::udpEndpointEntry.udpEndp
Unsigned 32-bit integer

UDP-MIB.udpEndpointEntry.udpEndpointRemoteAddress UDP-MIB::udpEndpointEntry.udp
Byte array

UDP-MIB.udpEndpointEntry.udpEndpointRemoteAddressType UDP-MIB::udpEndpointEntry
Signed 32-bit integer

UDP-MIB.udpEndpointEntry.udpEndpointRemotePort UDP-MIB::udpEndpointEntry.udpEnd
Unsigned 32-bit integer

UDP-MIB.udpEndpointInstance UDP-MIB::udpEndpointInstance
Unsigned 32-bit integer
UDP-MIB::udpEndpointInstance

UDP-MIB.udpEndpointLocalAddress UDP-MIB::udpEndpointLocalAddress
Byte array
UDP-MIB::udpEndpointLocalAddress

UDP-MIB.udpEndpointLocalAddressType UDP-MIB::udpEndpointLocalAddressType
Signed 32-bit integer
UDP-MIB::udpEndpointLocalAddressType
```

```
UDP-MIB.udpEndpointLocalPort  UDP-MIB::udpEndpointLocalPort
    Unsigned 32-bit integer
    UDP-MIB::udpEndpointLocalPort

UDP-MIB.udpEndpointProcess  UDP-MIB::udpEndpointProcess
    Unsigned 32-bit integer
    UDP-MIB::udpEndpointProcess

UDP-MIB.udpEndpointRemoteAddress  UDP-MIB::udpEndpointRemoteAddress
    Byte array
    UDP-MIB::udpEndpointRemoteAddress

UDP-MIB.udpEndpointRemoteAddressType  UDP-MIB::udpEndpointRemoteAddressType
    Signed 32-bit integer
    UDP-MIB::udpEndpointRemoteAddressType

UDP-MIB.udpEndpointRemotePort  UDP-MIB::udpEndpointRemotePort
    Unsigned 32-bit integer
    UDP-MIB::udpEndpointRemotePort

UDP-MIB.udpEntry.udpLocalAddress  UDP-MIB::udpEntry.udpLocalAddress
    IPv4 address

UDP-MIB.udpEntry.udpLocalPort  UDP-MIB::udpEntry.udpLocalPort
    Signed 32-bit integer

UDP-MIB.udpHCInDatagrams  UDP-MIB::udpHCInDatagrams
    Unsigned 64-bit integer
    UDP-MIB::udpHCInDatagrams

UDP-MIB.udpHCOutDatagrams  UDP-MIB::udpHCOutDatagrams
    Unsigned 64-bit integer
    UDP-MIB::udpHCOutDatagrams

UDP-MIB.udpInDatagrams  UDP-MIB::udpInDatagrams
    Unsigned 64-bit integer
    UDP-MIB::udpInDatagrams

UDP-MIB.udpInErrors  UDP-MIB::udpInErrors
    Unsigned 64-bit integer
    UDP-MIB::udpInErrors

UDP-MIB.udpLocalAddress  UDP-MIB::udpLocalAddress
    IPv4 address
    UDP-MIB::udpLocalAddress

UDP-MIB.udpLocalPort  UDP-MIB::udpLocalPort
    Signed 32-bit integer
    UDP-MIB::udpLocalPort

UDP-MIB.udpNoPorts  UDP-MIB::udpNoPorts
    Unsigned 64-bit integer
    UDP-MIB::udpNoPorts

UDP-MIB.udpOutDatagrams  UDP-MIB::udpOutDatagrams
    Unsigned 64-bit integer
    UDP-MIB::udpOutDatagrams
```

**MIME Multipart Media Encapsulation (mime\_multipart)**

```

mime_multipart.header.content-disposition  Content-Disposition
String
RFC 2183: Content-Disposition Header

mime_multipart.header.content-encoding  Content-Encoding
String
Content-Encoding Header

mime_multipart.header.content-id  Content-Id
String
RFC 2045: Content-Id Header

mime_multipart.header.content-language  Content-Language
String
Content-Language Header

mime_multipart.header.content-length  Content-Length
String
Content-Length Header

mime_multipart.header.content-transfer-encoding  Content-Transfer-Encoding
String
RFC 2045: Content-Transfer-Encoding Header

mime_multipart.header.content-type  Content-Type
String
Content-Type Header

mime_multipart.part  Encapsulated multipart part
String
Encapsulated multipart part

mime_multipart.type  Type
String
MIME multipart encapsulation type

```

**MMS (mms)**

```

mms.AlternateAccess_item  Item
Unsigned 32-bit integer
mms.AlternateAccess_item

mms.FileName_item  Item
String
mms.GraphicString

mms.ScatteredAccessDescription_item  Item
No value
mms.ScatteredAccessDescription_item

mms.Write_Response_item  Item
Unsigned 32-bit integer
mms.Write_Response_item

mms.aaSpecific  aaSpecific
No value
mms.NULL

mms.aa_specific  aa-specific
String
mms.Identifier

```



```
mms.abortOnTimeOut abortOnTimeOut
  Boolean
  mms.BOOLEAN

mms.acceptableDelay acceptableDelay
  Signed 32-bit integer
  mms.Unsigned32

mms.access access
  Signed 32-bit integer
  mms.T_access

mms.accesst accesst
  Unsigned 32-bit integer
  mms.AlternateAccessSelection

mms.acknowledgeEventNotification acknowledgeEventNotification
  No value
  mms.AcknowledgeEventNotification_Request

mms.acknowledgedState acknowledgedState
  Signed 32-bit integer
  mms.EC_State

mms.acknowledgmentFilter acknowledgmentFilter
  Signed 32-bit integer
  mms.T_acknowledgmentFilter

mms.actionResult actionResult
  No value
  mms.T_actionResult

mms.active-to-disabled active-to-disabled
  Boolean

mms.active-to-idle active-to-idle
  Boolean

mms.activeAlarmsOnly activeAlarmsOnly
  Boolean
  mms.BOOLEAN

mms.additionalCode additionalCode
  Signed 32-bit integer
  mms.INTEGER

mms.additionalDescription additionalDescription
  String
  mms.VisibleString

mms.additionalDetail additionalDetail
  No value
  mms.JOU_Additional_Detail

mms.address address
  Unsigned 32-bit integer
  mms.Address

mms.ae_invocation_id ae-invocation-id
  Signed 32-bit integer
  mms.T_ae_invocation_id
```

```
mms.ae_qualifier ae-qualifier
    Unsigned 32-bit integer
    mms.T_ae_qualifier

mms.alarmAcknowledgementRule alarmAcknowledgementRule
    Signed 32-bit integer
    mms.AlarmAckRule

mms.alarmAcknowledgmentRule alarmAcknowledgmentRule
    Signed 32-bit integer
    mms.AlarmAckRule

mms.alarmSummaryReports alarmSummaryReports
    Boolean
    mms.BOOLEAN

mms.allElements allElements
    No value
    mms.NULL

mms.alterEventConditionMonitoring alterEventConditionMonitoring
    No value
    mms.AlterEventConditionMonitoring_Request

mms.alterEventEnrollment alterEventEnrollment
    No value
    mms.AlterEventEnrollment_Request

mms.alternateAccess alternateAccess
    Unsigned 32-bit integer
    mms.AlternateAccess

mms.annotation annotation
    String
    mms.VisibleString

mms.any-to-deleted any-to-deleted
    Boolean

mms.ap_invocation_id ap-invocation-id
    Signed 32-bit integer
    mms.T_ap_invocation_id

mms.ap_title ap-title
    Unsigned 32-bit integer
    mms.T_ap_title

mms.applicationReference applicationReference
    No value
    mms.ApplicationReference

mms.applicationToPreempt applicationToPreempt
    No value
    mms.ApplicationReference

mms.application_reference application-reference
    Signed 32-bit integer
    mms.T_application_reference

mms.array array
    No value
    mms.T_array
```

```
mms.array_item Item
    Unsigned 32-bit integer
    mms.Data

mms.attachToEventCondition attachToEventCondition
    Boolean

mms.attachToSemaphore attachToSemaphore
    Boolean

mms.attach_To_Event_Condition attach-To-Event-Condition
    No value
    mms.AttachToEventCondition

mms.attach_To_Semaphore attach-To-Semaphore
    No value
    mms.AttachToSemaphore

mms.bcd bcd
    Signed 32-bit integer
    mms.Unsigned8

mms.binary_time binary-time
    Boolean
    mms.BOOLEAN

mms.bit_string bit-string
    Signed 32-bit integer
    mms.Integer32

mms.boolean boolean
    No value
    mms.NULL

mms.booleanArray booleanArray
    Byte array
    mms.BIT_STRING

mms.cancel cancel
    Signed 32-bit integer
    mms.T_cancel

mms.cancel_ErrorPDU cancel-ErrorPDU
    No value
    mms.Cancel_ErrorPDU

mms.cancel_RequestPDU cancel-RequestPDU
    Signed 32-bit integer
    mms.Cancel_RequestPDU

mms.cancel_ResponsePDU cancel-ResponsePDU
    Signed 32-bit integer
    mms.Cancel_ResponsePDU

mms.cancel_errorPDU cancel-errorPDU
    Signed 32-bit integer
    mms.T_cancel_errorPDU

mms.cancel_requestPDU cancel-requestPDU
    Signed 32-bit integer
    mms.T_cancel_requestPDU
```

```
mms.cancel_responsePDU  cancel-responsePDU
    Signed 32-bit integer
    mms.T_cancel_responsePDU

mms.causingTransitions  causingTransitions
    Byte array
    mms.Transitions

mms.cei  cei
    Boolean

mms.class  class
    Signed 32-bit integer
    mms.T_class

mms.clientApplication  clientApplication
    No value
    mms.ApplicationReference

mms.coded  coded
    No value
    acse.EXTERNALt

mms.component  component
    String
    mms.Identifier

mms.componentName  componentName
    String
    mms.Identifier

mms.componentType  componentType
    Unsigned 32-bit integer
    mms.TypeSpecification

mms.components  components
    Unsigned 32-bit integer
    mms.T_components

mms.components_item  Item
    No value
    mms.T_components_item

mms.conclude  conclude
    Signed 32-bit integer
    mms.T_conclude

mms.conclude_ErrorPDU  conclude-ErrorPDU
    No value
    mms.Conclude_ErrorPDU

mms.conclude_RequestPDU  conclude-RequestPDU
    No value
    mms.Conclude_RequestPDU

mms.conclude_ResponsePDU  conclude-ResponsePDU
    No value
    mms.Conclude_ResponsePDU

mms.conclude_errorPDU  conclude-errorPDU
    Signed 32-bit integer
    mms.T_conclude_errorPDU
```

```
mms.conclude_requestPDU  conclude-requestPDU
    Signed 32-bit integer
    mms.T_conclude_requestPDU
mms.conclude_responsePDU  conclude-responsePDU
    Signed 32-bit integer
    mms.T_conclude_responsePDU
mms.confirmedServiceRequest  confirmedServiceRequest
    Unsigned 32-bit integer
    mms.ConfirmedServiceRequest
mms.confirmedServiceResponse  confirmedServiceResponse
    Unsigned 32-bit integer
    mms.ConfirmedServiceResponse
mms.confirmed_ErrorPDU  confirmed-ErrorPDU
    No value
    mms.Confirmed_ErrorPDU
mms.confirmed_RequestPDU  confirmed-RequestPDU
    No value
    mms.Confirmed_RequestPDU
mms.confirmed_ResponsePDU  confirmed-ResponsePDU
    No value
    mms.Confirmed_ResponsePDU
mms.confirmed_errorPDU  confirmed-errorPDU
    Signed 32-bit integer
    mms.T_confirmed_errorPDU
mms.confirmed_requestPDU  confirmed-requestPDU
    Signed 32-bit integer
    mms.T_confirmed_requestPDU
mms.confirmed_responsePDU  confirmed-responsePDU
    Signed 32-bit integer
    mms.T_confirmed_responsePDU
mms.continueAfter  continueAfter
    String
    mms.Identifier
mms.controlTimeOut  controlTimeOut
    Signed 32-bit integer
    mms.Unsigned32
mms.createJournal  createJournal
    No value
    mms.CreateJournal_Request
mms.createProgramInvocation  createProgramInvocation
    No value
    mms.CreateProgramInvocation_Request
mms.cs_request_detail  cs-request-detail
    Unsigned 32-bit integer
    mms.CS_Request_Detail
mms.currentEntries  currentEntries
    Signed 32-bit integer
    mms.Unsigned32
```

```
mms.currentFileName  currentFileName
    Unsigned 32-bit integer
    mms.FileName

mms.currentName      currentName
    Unsigned 32-bit integer
    mms.ObjectName

mms.currentState    currentState
    Signed 32-bit integer
    mms.EC_State

mms.data            data
    No value
    mms.T_data

mms.defineEventAction  defineEventAction
    No value
    mms.DefineEventAction_Request

mms.defineEventCondition  defineEventCondition
    No value
    mms.DefineEventCondition_Request

mms.defineEventEnrollment  defineEventEnrollment
    No value
    mms.DefineEventEnrollment_Request

mms.defineEventEnrollment_Error  defineEventEnrollment-Error
    Unsigned 32-bit integer
    mms.DefineEventEnrollment_Error

mms.defineNamedType  defineNamedType
    No value
    mms.DefineNamedType_Request

mms.defineNamedVariable  defineNamedVariable
    No value
    mms.DefineNamedVariable_Request

mms.defineNamedVariableList  defineNamedVariableList
    No value
    mms.DefineNamedVariableList_Request

mms.defineScatteredAccess  defineScatteredAccess
    No value
    mms.DefineScatteredAccess_Request

mms.defineSemaphore  defineSemaphore
    No value
    mms.DefineSemaphore_Request

mms.definition  definition
    Signed 32-bit integer
    mms.T_definition

mms.deleteDomain  deleteDomain
    String
    mms.DeleteDomain_Request

mms.deleteEventAction  deleteEventAction
    Unsigned 32-bit integer
    mms.DeleteEventAction_Request
```

```
mms.deleteEventCondition deleteEventCondition
    Unsigned 32-bit integer
    mms.DeleteEventCondition_Request
mms.deleteEventEnrollment deleteEventEnrollment
    Unsigned 32-bit integer
    mms.DeleteEventEnrollment_Request
mms.deleteJournal deleteJournal
    No value
    mms.DeleteJournal_Request
mms.deleteNamedType deleteNamedType
    No value
    mms.DeleteNamedType_Request
mms.deleteNamedVariableList deleteNamedVariableList
    No value
    mms.DeleteNamedVariableList_Request
mms.deleteProgramInvocation deleteProgramInvocation
    String
    mms.DeleteProgramInvocation_Request
mms.deleteSemaphore deleteSemaphore
    Unsigned 32-bit integer
    mms.DeleteSemaphore_Request
mms.deleteVariableAccess deleteVariableAccess
    No value
    mms.DeleteVariableAccess_Request
mms.destinationFile destinationFile
    Unsigned 32-bit integer
    mms.FileName
mms.disabled-to-active disabled-to-active
    Boolean
mms.disabled-to-idle disabled-to-idle
    Boolean
mms.discard discard
    No value
    mms.ServiceError
mms.domain domain
    String
    mms.Identifier
mms.domainId domainId
    String
    mms.Identifier
mms.domainName domainName
    String
    mms.Identifier
mms.domainSpecific domainSpecific
    String
    mms.Identifier
```

```
mms.domain_specific  domain-specific
    No value
    mms.T_domain_specific

mms.downloadSegment  downloadSegment
    String
    mms.DownloadSegment_Request

mms.duration  duration
    Signed 32-bit integer
    mms.EE_Duration

mms.ea  ea
    Unsigned 32-bit integer
    mms.ObjectName

mms.ec  ec
    Unsigned 32-bit integer
    mms.ObjectName

mms.echo  echo
    Boolean
    mms.BOOLEAN

mms.elementType  elementType
    Unsigned 32-bit integer
    mms.TypeSpecification

mms.enabled  enabled
    Boolean
    mms.BOOLEAN

mms.encodedString  encodedString
    No value
    acse.EXTERNALt

mms.endingTime  endingTime
    Byte array
    mms.TimeOfDay

mms.enrollementState  enrollementState
    Signed 32-bit integer
    mms.EE_State

mms.enrollmentClass  enrollmentClass
    Signed 32-bit integer
    mms.EE_Class

mms.enrollmentsOnly  enrollmentsOnly
    Boolean
    mms.BOOLEAN

mms.entryClass  entryClass
    Signed 32-bit integer
    mms.T_entryClass

mms.entryContent  entryContent
    No value
    mms.EntryContent

mms.entryForm  entryForm
    Unsigned 32-bit integer
    mms.T_entryForm
```



```
mms.entryId entryId
    Byte array
    mms.OCTET_STRING

mms.entryIdToStartAfter entryIdToStartAfter
    Byte array
    mms.OCTET_STRING

mms.entryIdentifier entryIdentifier
    Byte array
    mms.OCTET_STRING

mms.entrySpecification entrySpecification
    Byte array
    mms.OCTET_STRING

mms.entryToStartAfter entryToStartAfter
    No value
    mms.T_entryToStartAfter

mms.errorClass errorClass
    Unsigned 32-bit integer
    mms.T_errorClass

mms.evaluationInterval evaluationInterval
    Signed 32-bit integer
    mms.Unsigned32

mms.event event
    No value
    mms.T_event

mms.eventActionName eventActionName
    Unsigned 32-bit integer
    mms.ObjectName

mms.eventAction eventAction
    Unsigned 32-bit integer
    mms.ObjectName

mms.eventActionName eventActionName
    Unsigned 32-bit integer
    mms.ObjectName

mms.eventActionResult eventActionResult
    Unsigned 32-bit integer
    mms.T_eventActionResult

mms.eventCondition eventCondition
    Unsigned 32-bit integer
    mms.ObjectName

mms.eventConditionName eventConditionName
    Unsigned 32-bit integer
    mms.ObjectName

mms.eventConditionTransition eventConditionTransition
    Byte array
    mms.Transitions

mms.eventConditionTransitions eventConditionTransitions
    Byte array
    mms.Transitions
```

```
mms.eventEnrollmentName eventEnrollmentName
    Unsigned 32-bit integer
    mms.ObjectName

mms.eventEnrollmentNames eventEnrollmentNames
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_ObjectName

mms.eventEnrollmentNames_item Item
    Unsigned 32-bit integer
    mms.ObjectName

mms.eventNotification eventNotification
    No value
    mms.EventNotification

mms.executionArgument executionArgument
    Unsigned 32-bit integer
    mms.T_executionArgument

mms.extendedObjectClass extendedObjectClass
    Unsigned 32-bit integer
    mms.T_extendedObjectClass

mms.failure failure
    Signed 32-bit integer
    mms.DataAccessError

mms.file file
    Signed 32-bit integer
    mms.T_file

mms.fileAttributes fileAttributes
    No value
    mms.FileAttributes

mms.fileClose fileClose
    Signed 32-bit integer
    mms.FileClose_Request

mms.fileData fileData
    Byte array
    mms.OCTET_STRING

mms.fileDelete fileDelete
    Unsigned 32-bit integer
    mms.FileDelete_Request

mms.fileDirectory fileDirectory
    No value
    mms.FileDirectory_Request

mms.fileName fileName
    Unsigned 32-bit integer
    mms.FileName

mms.fileOpen fileOpen
    No value
    mms.FileOpen_Request

mms.fileRead fileRead
    Signed 32-bit integer
    mms.FileRead_Request
```

```
mms.fileRename fileRename
    No value
    mms.FileRename_Request

mms.fileSpecification fileSpecification
    Unsigned 32-bit integer
    mms.FileName

mms.fileName fileName
    Unsigned 32-bit integer
    mms.FileName

mms.filename filename
    Unsigned 32-bit integer
    mms.FileName

mms.floating_point floating-point
    Byte array
    mms.FloatingPoint

mms.foo foo
    Signed 32-bit integer
    mms.INTEGER

mms.freeNamedToken freeNamedToken
    String
    mms.Identifier

mms.frsmID frsmID
    Signed 32-bit integer
    mms.Integer32

mms.generalized_time generalized-time
    No value
    mms.NULL

mms.getAlarmEnrollmentSummary getAlarmEnrollmentSummary
    No value
    mms.GetAlarmEnrollmentSummary_Request

mms.getAlarmSummary getAlarmSummary
    No value
    mms.GetAlarmSummary_Request

mms.getCapabilityList getCapabilityList
    No value
    mms.GetCapabilityList_Request

mms.getDomainAttributes getDomainAttributes
    String
    mms.GetDomainAttributes_Request

mms.getEventActionAttributes getEventActionAttributes
    Unsigned 32-bit integer
    mms.GetEventActionAttributes_Request

mms.getEventConditionAttributes getEventConditionAttributes
    Unsigned 32-bit integer
    mms.GetEventConditionAttributes_Request

mms.getEventEnrollmentAttributes getEventEnrollmentAttributes
    No value
    mms.GetEventEnrollmentAttributes_Request
```

```
mms.getNameList getNameList
    No value
    mms.GetNameList_Request

mms.getNamedTypeAttributes getNamedTypeAttributes
    Unsigned 32-bit integer
    mms.GetNamedTypeAttributes_Request

mms.getNamedVariableListAttributes getNamedVariableListAttributes
    Unsigned 32-bit integer
    mms.GetNamedVariableListAttributes_Request

mms.getProgramInvocationAttributes getProgramInvocationAttributes
    String
    mms.GetProgramInvocationAttributes_Request

mms.getScatteredAccessAttributes getScatteredAccessAttributes
    Unsigned 32-bit integer
    mms.GetScatteredAccessAttributes_Request

mms.getVariableAccessAttributes getVariableAccessAttributes
    Unsigned 32-bit integer
    mms.GetVariableAccessAttributes_Request

mms.hungNamedToken hungNamedToken
    String
    mms.Identifier

mms.identify identify
    No value
    mms.Identify_Request

mms.idle-to-active idle-to-active
    Boolean

mms.idle-to-disabled idle-to-disabled
    Boolean

mms.index index
    Signed 32-bit integer
    mms.Unsigned32

mms.indexRange indexRange
    No value
    mms.T_indexRange

mms.informationReport informationReport
    No value
    mms.InformationReport

mms.initialPosition initialPosition
    Signed 32-bit integer
    mms.Unsigned32

mms.initializeJournal initializeJournal
    No value
    mms.InitializeJournal_Request

mms.initiate initiate
    Signed 32-bit integer
    mms.T_initiate
```

```
mms.initiateDownloadSequence initiateDownloadSequence
    No value
    mms.InitiateDownloadSequence_Request
mms.initiateUploadSequence initiateUploadSequence
    String
    mms.InitiateUploadSequence_Request
mms.initiate_ErrorPDU initiate-ErrorPDU
    No value
    mms.Initiate_ErrorPDU
mms.initiate_RequestPDU initiate-RequestPDU
    No value
    mms.Initiate_RequestPDU
mms.initiate_ResponsePDU initiate-ResponsePDU
    No value
    mms.Initiate_ResponsePDU
mms.input input
    No value
    mms.Input_Request
mms.inputTimeOut inputTimeOut
    Signed 32-bit integer
    mms.Unsigned32
mms.integer integer
    Signed 32-bit integer
    mms.Unsigned8
mms.invalidated invalidated
    No value
    mms.NULL
mms.invokeID invokeID
    Signed 32-bit integer
    mms.Unsigned32
mms.itemId itemId
    String
    mms.Identifier
mms.journalName journalName
    Unsigned 32-bit integer
    mms.ObjectName
mms.kill kill
    No value
    mms.Kill_Request
mms.lastModified lastModified
    String
    mms.GeneralizedTime
mms.leastSevere leastSevere
    Signed 32-bit integer
    mms.Unsigned8
mms.limitSpecification limitSpecification
    No value
    mms.T_limitSpecification
```

```
mms.limitingEntry limitingEntry
    Byte array
    mms.OCTET_STRING

mms.limitingTime limitingTime
    Byte array
    mms.TimeOfDay

mms.listOfAbstractSyntaxes listOfAbstractSyntaxes
    Unsigned 32-bit integer
    mms.T_listOfAbstractSyntaxes

mms.listOfAbstractSyntaxes_item Item
    mms.OBJECT_IDENTIFIER

mms.listOfAccessResult listOfAccessResult
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_AccessResult

mms.listOfAccessResult_item Item
    Unsigned 32-bit integer
    mms.AccessResult

mms.listOfAlarmEnrollmentSummary listOfAlarmEnrollmentSummary
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_AlarmEnrollmentSummary

mms.listOfAlarmEnrollmentSummary_item Item
    No value
    mms.AlarmEnrollmentSummary

mms.listOfAlarmSummary listOfAlarmSummary
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_AlarmSummary

mms.listOfAlarmSummary_item Item
    No value
    mms.AlarmSummary

mms.listOfCapabilities listOfCapabilities
    Unsigned 32-bit integer
    mms.T_listOfCapabilities

mms.listOfCapabilities_item Item
    String
    mms.VisibleString

mms.listOfData listOfData
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_Data

mms.listOfData_item Item
    Unsigned 32-bit integer
    mms.Data

mms.listOfDirectoryEntry listOfDirectoryEntry
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_DirectoryEntry

mms.listOfDirectoryEntry_item Item
    No value
    mms.DirectoryEntry
```

```
mms.listOfDomainName  listOfDomainName
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_Identifier
mms.listOfDomainName_item  Item
    String
    mms.Identifier
mms.listOfDomainNames  listOfDomainNames
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_Identifier
mms.listOfDomainNames_item  Item
    String
    mms.Identifier
mms.listOfEventEnrollment  listOfEventEnrollment
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_EventEnrollment
mms.listOfEventEnrollment_item  Item
    No value
    mms.EventEnrollment
mms.listOfIdentifier  listOfIdentifier
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_Identifier
mms.listOfIdentifier_item  Item
    String
    mms.Identifier
mms.listOfJournalEntry  listOfJournalEntry
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_JournalEntry
mms.listOfJournalEntry_item  Item
    No value
    mms.JournalEntry
mms.listOfModifier  listOfModifier
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_Modifier
mms.listOfModifier_item  Item
    Unsigned 32-bit integer
    mms.Modifier
mms.listOfName  listOfName
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_ObjectName
mms.listOfName_item  Item
    Unsigned 32-bit integer
    mms.ObjectName
mms.listOfNamedTokens  listOfNamedTokens
    Unsigned 32-bit integer
    mms.T_listOfNamedTokens
mms.listOfNamedTokens_item  Item
    Unsigned 32-bit integer
    mms.T_listOfNamedTokens_item
```

```
mms.listOfOutputData listOfOutputData
    Unsigned 32-bit integer
    mms.T_listOfOutputData
mms.listOfOutputData_item Item
    String
    mms.VisibleString
mms.listOfProgramInvocations listOfProgramInvocations
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_Identifier
mms.listOfProgramInvocations_item Item
    String
    mms.Identifier
mms.listOfPromptData listOfPromptData
    Unsigned 32-bit integer
    mms.T_listOfPromptData
mms.listOfPromptData_item Item
    String
    mms.VisibleString
mms.listOfSemaphoreEntry listOfSemaphoreEntry
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_SemaphoreEntry
mms.listOfSemaphoreEntry_item Item
    No value
    mms.SemaphoreEntry
mms.listOfTypeName listOfTypeName
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_ObjectName
mms.listOfTypeName_item Item
    Unsigned 32-bit integer
    mms.ObjectName
mms.listOfVariable listOfVariable
    Unsigned 32-bit integer
    mms.T_listOfVariable
mms.listOfVariableListName listOfVariableListName
    Unsigned 32-bit integer
    mms.SEQUENCE_OF_ObjectName
mms.listOfVariableListName_item Item
    Unsigned 32-bit integer
    mms.ObjectName
mms.listOfVariable_item Item
    No value
    mms.T_listOfVariable_item
mms.listOfVariables listOfVariables
    Unsigned 32-bit integer
    mms.T_listOfVariables
mms.listOfVariables_item Item
    String
    mms.VisibleString
```



```
mms.loadData loadData
    Unsigned 32-bit integer
    mms.T_loadData

mms.loadDomainContent loadDomainContent
    No value
    mms.LoadDomainContent_Request

mms.localDetail localDetail
    Byte array
    mms.BIT_STRING_SIZE_0_128

mms.localDetailCalled localDetailCalled
    Signed 32-bit integer
    mms.Integer32

mms.localDetailCalling localDetailCalling
    Signed 32-bit integer
    mms.Integer32

mms.lowIndex lowIndex
    Signed 32-bit integer
    mms.Unsigned32

mms.mmsDeletable mmsDeletable
    Boolean
    mms.BOOLEAN

mms.mmsInitRequestDetail mmsInitRequestDetail
    No value
    mms.InitRequestDetail

mms.mmsInitResponseDetail mmsInitResponseDetail
    No value
    mms.InitResponseDetail

mms.modelName modelName
    String
    mms.VisibleString

mms.modifierPosition modifierPosition
    Signed 32-bit integer
    mms.Unsigned32

mms.monitor monitor
    Boolean
    mms.BOOLEAN

mms.monitorType monitorType
    Boolean
    mms.BOOLEAN

mms.monitoredVariable monitoredVariable
    Unsigned 32-bit integer
    mms.VariableSpecification

mms.moreFollows moreFollows
    Boolean
    mms.BOOLEAN

mms.mostSevere mostSevere
    Signed 32-bit integer
    mms.Unsigned8
```

```
mms.name name
    Unsigned 32-bit integer
    mms.ObjectName

mms.nameToStartAfter nameToStartAfter
    String
    mms.Identifier

mms.named named
    No value
    mms.T_named

mms.namedToken namedToken
    String
    mms.Identifier

mms.negotiatedDataStructureNestingLevel negotiatedDataStructureNestingLevel
    Signed 32-bit integer
    mms.Integer8

mms.negotiatedMaxServOutstandingCalled negotiatedMaxServOutstandingCalled
    Signed 32-bit integer
    mms.Integer16

mms.negotiatedMaxServOutstandingCalling negotiatedMaxServOutstandingCalling
    Signed 32-bit integer
    mms.Integer16

mms.negotiatedParameterCBB negotiatedParameterCBB
    Byte array
    mms.ParameterSupportOptions

mms.negotiatedVersionNumber negotiatedVersionNumber
    Signed 32-bit integer
    mms.Integer16

mms.newFileName newFileName
    Unsigned 32-bit integer
    mms.FileName

mms.newIdentifier newIdentifier
    String
    mms.Identifier

mms.noResult noResult
    No value
    mms.NULL

mms.non_coded non-coded
    Byte array
    mms.OCTET_STRING

mms.notificationLost notificationLost
    Boolean
    mms.BOOLEAN

mms.numberDeleted numberDeleted
    Signed 32-bit integer
    mms.Unsigned32

mms.numberMatched numberMatched
    Signed 32-bit integer
    mms.Unsigned32
```

```
mms.numberOfElements  numberOfElements
    Signed 32-bit integer
    mms.Unsigned32

mms.numberOfEntries  numberOfEntries
    Signed 32-bit integer
    mms.Integer32

mms.numberOfEventEnrollments  numberOfEventEnrollments
    Signed 32-bit integer
    mms.Unsigned32

mms.numberOfHungTokens  numberOfHungTokens
    Signed 32-bit integer
    mms.Unsigned16

mms.numberOfOwnedTokens  numberOfOwnedTokens
    Signed 32-bit integer
    mms.Unsigned16

mms.numberOfTokens  numberOfTokens
    Signed 32-bit integer
    mms.Unsigned16

mms.numbersOfTokens  numbersOfTokens
    Signed 32-bit integer
    mms.Unsigned16

mms.numericAddress  numericAddress
    Signed 32-bit integer
    mms.Unsigned32

mms.objId  objId
    No value
    mms.NULL

mms.objectClass  objectClass
    Signed 32-bit integer
    mms.T_objectClass

mms.objectScope  objectScope
    Unsigned 32-bit integer
    mms.T_objectScope

mms.obtainFile  obtainFile
    No value
    mms.ObtainFile_Request

mms.occurrenceTime  occurrenceTime
    Byte array
    mms.TimeOfDay

mms.octet_string  octet-string
    Signed 32-bit integer
    mms.Integer32

mms.operatorStationName  operatorStationName
    String
    mms.Identifier

mms.originalInvokeID  originalInvokeID
    Signed 32-bit integer
    mms.Unsigned32
```

```
mms.originatingApplication  originatingApplication
    No value
    mms.ApplicationReference

mms.others  others
    Signed 32-bit integer
    mms.INTEGER

mms.output  output
    No value
    mms.Output_Request

mms.ownedNamedToken  ownedNamedToken
    String
    mms.Identifier

mms.packed  packed
    Boolean
    mms.BOOLEAN

mms.pdu_error  pdu-error
    Signed 32-bit integer
    mms.T_pdu_error

mms.prio_rity  prio-rity
    Signed 32-bit integer
    mms.Priority

mms.priority  priority
    Signed 32-bit integer
    mms.Priority

mms.programInvocationName  programInvocationName
    String
    mms.Identifier

mms.proposedDataStructureNestingLevel  proposedDataStructureNestingLevel
    Signed 32-bit integer
    mms.Integer8

mms.proposedMaxServOutstandingCalled  proposedMaxServOutstandingCalled
    Signed 32-bit integer
    mms.Integer16

mms.proposedMaxServOutstandingCalling  proposedMaxServOutstandingCalling
    Signed 32-bit integer
    mms.Integer16

mms.proposedParameterCBB  proposedParameterCBB
    Byte array
    mms.ParameterSupportOptions

mms.proposedVersionNumber  proposedVersionNumber
    Signed 32-bit integer
    mms.Integer16

mms.rangeStartSpecification  rangeStartSpecification
    Unsigned 32-bit integer
    mms.T_rangeStartSpecification

mms.rangeStopSpecification  rangeStopSpecification
    Unsigned 32-bit integer
    mms.T_rangeStopSpecification
```

```
mms.read read
    No value
    mms.Read_Request

mms.readJournal readJournal
    No value
    mms.ReadJournal_Request

mms.real real
    Boolean

mms.rejectPDU rejectPDU
    No value
    mms.RejectPDU

mms.rejectReason rejectReason
    Unsigned 32-bit integer
    mms.T_rejectReason

mms.relinquishControl relinquishControl
    No value
    mms.RelinquishControl_Request

mms.relinquishIfConnectionLost relinquishIfConnectionLost
    Boolean
    mms.BOOLEAN

mms.remainingAcceptableDelay remainingAcceptableDelay
    Signed 32-bit integer
    mms.Unsigned32

mms.remainingTimeOut remainingTimeOut
    Signed 32-bit integer
    mms.Unsigned32

mms.rename rename
    No value
    mms.Rename_Request

mms.reportActionStatus reportActionStatus
    Signed 32-bit integer
    mms.ReportEventActionStatus_Response

mms.reportEventActionStatus reportEventActionStatus
    Unsigned 32-bit integer
    mms.ReportEventActionStatus_Request

mms.reportEventConditionStatus reportEventConditionStatus
    Unsigned 32-bit integer
    mms.ReportEventConditionStatus_Request

mms.reportEventEnrollmentStatus reportEventEnrollmentStatus
    Unsigned 32-bit integer
    mms.ReportEventEnrollmentStatus_Request

mms.reportJournalStatus reportJournalStatus
    Unsigned 32-bit integer
    mms.ReportJournalStatus_Request

mms.reportPoolSemaphoreStatus reportPoolSemaphoreStatus
    No value
    mms.ReportPoolSemaphoreStatus_Request
```

```
mms.reportSemaphoreEntryStatus  reportSemaphoreEntryStatus
    No value
    mms.ReportSemaphoreEntryStatus_Request

mms.reportSemaphoreStatus  reportSemaphoreStatus
    Unsigned 32-bit integer
    mms.ReportSemaphoreStatus_Request

mms.requestDomainDownload  requestDomainDownload
    No value
    mms.RequestDomainDownload_Response

mms.requestDomainDownload  requestDomainDownload
    No value
    mms.RequestDomainDownload_Request

mms.requestDomainUpload  requestDomainUpload
    No value
    mms.RequestDomainUpload_Request

mms.reset  reset
    No value
    mms.Reset_Request

mms.resource  resource
    Signed 32-bit integer
    mms.T_resource

mms.resume  resume
    No value
    mms.Resume_Request

mms.reusable  reusable
    Boolean
    mms.BOOLEAN

mms.revision  revision
    String
    mms.VisibleString

mms.scatteredAccessDescription  scatteredAccessDescription
    Unsigned 32-bit integer
    mms.ScatteredAccessDescription

mms.scatteredAccessName  scatteredAccessName
    Unsigned 32-bit integer
    mms.ObjectName

mms.scopeOfDelete  scopeOfDelete
    Signed 32-bit integer
    mms.T_scopeOfDelete

mms.scopeOfRequest  scopeOfRequest
    Signed 32-bit integer
    mms.T_scopeOfRequest

mms.selectAccess  selectAccess
    Unsigned 32-bit integer
    mms.T_selectAccess

mms.semaphoreName  semaphoreName
    Unsigned 32-bit integer
    mms.ObjectName
```

```
mms.service service
Signed 32-bit integer
mms.T_service

mms.serviceError serviceError
No value
mms.ServiceError

mms.serviceSpecificInformation serviceSpecificInformation
Unsigned 32-bit integer
mms.T_serviceSpecificInformation

mms.service_preempt service-preempt
Signed 32-bit integer
mms.T_service_preempt

mms.servicesSupportedCalled servicesSupportedCalled
Byte array
mms.ServiceSupportOptions

mms.servicesSupportedCalling servicesSupportedCalling
Byte array
mms.ServiceSupportOptions

mms.severity severity
Signed 32-bit integer
mms.Unsigned8

mms.severityFilter severityFilter
No value
mms.T_severityFilter

mms.sharable sharable
Boolean
mms.BOOLEAN

mms.simpleString simpleString
String
mms.VisibleString

mms.sizeOfFile sizeOfFile
Signed 32-bit integer
mms.Unsigned32

mms.sourceFile sourceFile
Unsigned 32-bit integer
mms.FileName

mms.sourceFileServer sourceFileServer
No value
mms.ApplicationReference

mms.specific specific
Unsigned 32-bit integer
mms.SEQUENCE_OF_ObjectName

mms.specific_item Item
Unsigned 32-bit integer
mms.ObjectName

mms.specificationWithResult specificationWithResult
Boolean
mms.BOOLEAN
```

```
mms.start start
    No value
    mms.Start_Request

mms.startArgument startArgument
    String
    mms.VisibleString

mms.startingEntry startingEntry
    Byte array
    mms.OCTET_STRING

mms.startingTime startingTime
    Byte array
    mms.TimeOfDay

mms.state state
    Signed 32-bit integer
    mms.DomainState

mms.status status
    Boolean
    mms.Status_Request

mms.stop stop
    No value
    mms.Stop_Request

mms.storeDomainContent storeDomainContent
    No value
    mms.StoreDomainContent_Request

mms.str1 str1
    Boolean

mms.str2 str2
    Boolean

mms.structure structure
    No value
    mms.T_structure

mms.structure_item Item
    Unsigned 32-bit integer
    mms.Data

mms.success success
    No value
    mms.NULL

mms.symbolicAddress symbolicAddress
    String
    mms.VisibleString

mms.takeControl takeControl
    No value
    mms.TakeControl_Request

mms.terminateDownloadSequence terminateDownloadSequence
    No value
    mms.TerminateDownloadSequence_Request
```



```
mms.terminateUploadSequence  terminateUploadSequence
    Signed 32-bit integer
    mms.TerminateUploadSequence_Request

mms.thirdParty  thirdParty
    No value
    mms.ApplicationReference

mms.timeActiveAcknowledged  timeActiveAcknowledged
    Unsigned 32-bit integer
    mms.EventTime

mms.timeIdleAcknowledged  timeIdleAcknowledged
    Unsigned 32-bit integer
    mms.EventTime

mms.timeOfAcknowledgedTransition  timeOfAcknowledgedTransition
    Unsigned 32-bit integer
    mms.EventTime

mms.timeOfDayT  timeOfDayT
    Byte array
    mms.TimeOfDay

mms.timeOfLastTransitionToActive  timeOfLastTransitionToActive
    Unsigned 32-bit integer
    mms.EventTime

mms.timeOfLastTransitionToIdle  timeOfLastTransitionToIdle
    Unsigned 32-bit integer
    mms.EventTime

mms.timeSequenceIdentifier  timeSequenceIdentifier
    Signed 32-bit integer
    mms.Unsigned32

mms.timeSpecification  timeSpecification
    Byte array
    mms.TimeOfDay

mms.time_resolution  time-resolution
    Signed 32-bit integer
    mms.T_time_resolution

mms.tpy  tpy
    Boolean

mms.transitionTime  transitionTime
    Unsigned 32-bit integer
    mms.EventTime

mms.triggerEvent  triggerEvent
    No value
    mms.TriggerEvent_Request

mms.typeName  typeName
    Unsigned 32-bit integer
    mms.ObjectName

mms.typeSpecification  typeSpecification
    Unsigned 32-bit integer
    mms.TypeSpecification
```

```
mms.ulsmID ulsmID
Signed 32-bit integer
mms.Integer32

mms.unacknowledgedState unacknowledgedState
Signed 32-bit integer
mms.T_unacknowledgedState

mms.unconfirmedPDU unconfirmedPDU
Signed 32-bit integer
mms.T_unconfirmedPDU

mms.unconfirmedService unconfirmedService
Unsigned 32-bit integer
mms.UnconfirmedService

mms.unconfirmed_PDU unconfirmed-PDU
No value
mms.Unconfirmed_PDU

mms.unconstrainedAddress unconstrainedAddress
Byte array
mms.OCTET_STRING

mms.undefined undefined
No value
mms.NULL

mms.unnamed unnamed
Unsigned 32-bit integer
mms.AlternateAccessSelection

mms.unsigned unsigned
Signed 32-bit integer
mms.Unsigned8

mms.unsolicitedStatus unsolicitedStatus
No value
mms.UnsolicitedStatus

mms.uploadInProgress uploadInProgress
Signed 32-bit integer
mms.Integer8

mms.uploadSegment uploadSegment
Signed 32-bit integer
mms.UploadSegment_Request

mms.vadr vadr
Boolean

mms.valt valt
Boolean

mms.valueSpecification valueSpecification
Unsigned 32-bit integer
mms.Data

mms.variableAccessSpecification variableAccessSpecification
Unsigned 32-bit integer
mms.VariableAccessSpecification
```

```
mms.variableAccessSpecificatn  variableAccessSpecificatn
    Unsigned 32-bit integer
    mms.VariableAccessSpecification
mms.variableDescription  variableDescription
    No value
    mms.T_variableDescription
mms.variableListName  variableListName
    Unsigned 32-bit integer
    mms.ObjectName
mms.variableName  variableName
    Unsigned 32-bit integer
    mms.ObjectName
mms.variableReference  variableReference
    Unsigned 32-bit integer
    mms.VariableSpecification
mms.variableSpecification  variableSpecification
    Unsigned 32-bit integer
    mms.VariableSpecification
mms.variableTag  variableTag
    String
    mms.VisibleString
mms.vendorName  vendorName
    String
    mms.VisibleString
mms.visible_string  visible-string
    Signed 32-bit integer
    mms.Integer32
mms.vlis  vlis
    Boolean
mms.vmd  vmd
    No value
    mms.NULL
mms.vmdLogicalStatus  vmdLogicalStatus
    Signed 32-bit integer
    mms.T_vmdLogicalStatus
mms.vmdPhysicalStatus  vmdPhysicalStatus
    Signed 32-bit integer
    mms.T_vmdPhysicalStatus
mms.vmdSpecific  vmdSpecific
    No value
    mms.NULL
mms.vmd_specific  vmd-specific
    String
    mms.Identifier
mms.vmd_state  vmd-state
    Signed 32-bit integer
    mms.T_vmd_state
```

```
mms.vnam vnam
  Boolean

mms.vsca vsca
  Boolean

mms.write write
  No value
  mms.Write_Request

mms.writeJournal writeJournal
  No value
  mms.WriteJournal_Request
```

### **MMS Message Encapsulation (mmse)**

```
mmse.bcc Bcc
  String
  Blind carbon copy.

mmse.cc Cc
  String
  Carbon copy.

mmse.content_location X-Mms-Content-Location
  String
  Defines the location of the message.

mmse.content_type Data
  No value
  Media content of the message.

mmse.date Date
  Date/Time stamp
  Arrival timestamp of the message or sending timestamp.

mmse.delivery_report X-Mms-Delivery-Report
  Unsigned 8-bit integer
  Whether a report of message delivery is wanted or not.

mmse.delivery_time.abs X-Mms-Delivery-Time
  Date/Time stamp
  The time at which message delivery is desired.

mmse.delivery_time.rel X-Mms-Delivery-Time
  Time duration
  The desired message delivery delay.

mmse.expiry.abs X-Mms-Expiry
  Date/Time stamp
  Time when message expires and need not be delivered anymore.

mmse.expiry.rel X-Mms-Expiry
  Time duration
  Delay before message expires and need not be delivered anymore.

mmse.ffheader Free format (not encoded) header
  String
  Application header without corresponding encoding.

mmse.from From
  String
  Address of the message sender.
```

```
mmse.message_class.id X-Mms-Message-Class
    Unsigned 8-bit integer
    Of what category is the message.
mmse.message_class.str X-Mms-Message-Class
    String
    Of what category is the message.
mmse.message_id Message-Id
    String
    Unique identification of the message.
mmse.message_size X-Mms-Message-Size
    Unsigned 32-bit integer
    The size of the message in octets.
mmse.message_type X-Mms-Message-Type
    Unsigned 8-bit integer
    Specifies the transaction type. Effectively defines PDU.
mmse.mms_version X-Mms-MMS-Version
    String
    Version of the protocol used.
mmse.previously_sent_by X-Mms-Previously-Sent-By
    String
    Indicates that the MM has been previously sent by this user.
mmse.previously_sent_by.address Address
    String
    Indicates from whom the MM has been previously sent.
mmse.previously_sent_by.forward_count Forward Count
    Unsigned 32-bit integer
    Forward count of the previously sent MM.
mmse.previously_sent_date X-Mms-Previously-Sent-Date
    String
    Indicates the date that the MM has been previously sent.
mmse.previously_sent_date.date Date
    String
    Time when the MM has been previously sent.
mmse.previously_sent_date.forward_count Forward Count
    Unsigned 32-bit integer
    Forward count of the previously sent MM.
mmse.priority X-Mms-Priority
    Unsigned 8-bit integer
    Priority of the message.
mmse.read_reply X-Mms-Read-Reply
    Unsigned 8-bit integer
    Whether a read report from every recipient is wanted.
mmse.read_report X-Mms-Read-Report
    Unsigned 8-bit integer
    Whether a read report from every recipient is wanted.
mmse.read_status X-Mms-Read-Status
    Unsigned 8-bit integer
    MMS-specific message read status.
```

mmse.reply\_charging X-Mms-Reply-Charging  
Unsigned 8-bit integer  
MMS-specific message reply charging method.

mmse.reply\_charging\_deadline.abs X-Mms-Reply-Charging-Deadline  
Date/Time stamp  
The latest time of the recipient(s) to submit the Reply MM.

mmse.reply\_charging\_deadline.rel X-Mms-Reply-Charging-Deadline  
Time duration  
The latest time of the recipient(s) to submit the Reply MM.

mmse.reply\_charging\_id X-Mms-Reply-Charging-Id  
String  
Unique reply charging identification of the message.

mmse.reply\_charging\_size X-Mms-Reply-Charging-Size  
Unsigned 32-bit integer  
The size of the reply charging in octets.

mmse.report\_allowed X-Mms-Report-Allowed  
Unsigned 8-bit integer  
Sending of delivery report allowed or not.

mmse.response\_status Response-Status  
Unsigned 8-bit integer  
MMS-specific result of a message submission or retrieval.

mmse.response\_text Response-Text  
String  
Additional information on MMS-specific result.

mmse.retrieve\_status X-Mms-Retrieve-Status  
Unsigned 8-bit integer  
MMS-specific result of a message retrieval.

mmse.retrieve\_text X-Mms-Retrieve-Text  
String  
Status text of a MMS message retrieval.

mmse.sender\_visibility Sender-Visibility  
Unsigned 8-bit integer  
Disclose sender identity to receiver or not.

mmse.status Status  
Unsigned 8-bit integer  
Current status of the message.

mmse.subject Subject  
String  
Subject of the message.

mmse.to To  
String  
Recipient(s) of the message.

mmse.transaction\_id X-Mms-Transaction-ID  
String  
A unique identifier for this transaction. Identifies request and correspondi

**MS Kpasswd (kpasswd)**

```

kpasswd.ChangePasswdData  ChangePasswdData
    No value
    Change Password Data structure

kpasswd.ap_req  AP_REQ
    No value
    AP_REQ structure

kpasswd.ap_req_len  AP_REQ Length
    Unsigned 16-bit integer
    Length of AP_REQ data

kpasswd.krb_priv  KRB-PRIV
    No value
    KRB-PRIV message

kpasswd.message_len  Message Length
    Unsigned 16-bit integer
    Message Length

kpasswd.new_password  New Password
    String
    New Password

kpasswd.result  Result
    Unsigned 16-bit integer
    Result

kpasswd.result_string  Result String
    String
    Result String

kpasswd.version  Version
    Unsigned 16-bit integer
    Version

```

**MS Network Load Balancing (msnlb)**

```

msnlb.cluster_virtual_ip  Cluster Virtual IP
    IPv4 address
    Cluster Virtual IP address

msnlb.count  Count
    Unsigned 32-bit integer
    Count

msnlb.host_ip  Host IP
    IPv4 address
    Host IP address

msnlb.host_name  Host name
    String
    Host name

msnlb.hpn  Host Priority Number
    Unsigned 32-bit integer
    Host Priority Number

msnlb.unknown  Unknown
    Byte array

```

**MS Proxy Protocol (msproxy)**

```
msproxy.bindaddr  Destination
                  IPv4 address

msproxy.bindid   Bound Port Id
                  Unsigned 32-bit integer

msproxy.bindport Bind Port
                  Unsigned 16-bit integer

msproxy.boundport Bound Port
                  Unsigned 16-bit integer

msproxy.clntport Client Port
                  Unsigned 16-bit integer

msproxy.command  Command
                  Unsigned 16-bit integer

msproxy.dstaddr  Destination Address
                  IPv4 address

msproxy.dstport  Destination Port
                  Unsigned 16-bit integer

msproxy.resolvaddr Address
                  IPv4 address

msproxy.server_ext_addr  Server External Address
                          IPv4 address

msproxy.server_ext_port  Server External Port
                          Unsigned 16-bit integer

msproxy.server_int_addr  Server Internal Address
                          IPv4 address

msproxy.server_int_port  Server Internal Port
                          Unsigned 16-bit integer

msproxy.serveraddr  Server Address
                    IPv4 address

msproxy.serverport  Server Port
                    Unsigned 16-bit integer

msproxy.srcport     Source Port
                    Unsigned 16-bit integer
```

**MSN Messenger Service (msnms)****MSNIP: Multicast Source Notification of Interest Protocol (msnip)**

```
msnip.checksum  Checksum
                 Unsigned 16-bit integer
                 MSNIP Checksum

msnip.checksum_bad  Bad Checksum
                    Boolean
                    Bad MSNIP Checksum

msnip.count  Count
             Unsigned 8-bit integer
             MSNIP Number of groups
```



msnip.genid Generation ID  
Unsigned 16-bit integer  
MSNIP Generation ID

msnip.groups Groups  
No value  
MSNIP Groups

msnip.holdtime Holdtime  
Unsigned 32-bit integer  
MSNIP Holdtime in seconds

msnip.holdtime16 Holdtime  
Unsigned 16-bit integer  
MSNIP Holdtime in seconds

msnip.maddr Multicast group  
IPv4 address  
MSNIP Multicast Group

msnip.netmask Netmask  
Unsigned 8-bit integer  
MSNIP Netmask

msnip.rec\_type Record Type  
Unsigned 8-bit integer  
MSNIP Record Type

msnip.type Type  
Unsigned 8-bit integer  
MSNIP Packet Type

### **MTP 2 Transparent Proxy (m2tp)**

m2tp.diagnostic\_info Diagnostic information  
Byte array

m2tp.error\_code Error code  
Unsigned 32-bit integer

m2tp.heartbeat\_data Heartbeat data  
Byte array

m2tp.info\_string Info string  
String

m2tp.interface\_identifier Interface Identifier  
Unsigned 32-bit integer

m2tp.master\_slave Master Slave Indicator  
Unsigned 32-bit integer

m2tp.message\_class Message class  
Unsigned 8-bit integer

m2tp.message\_length Message length  
Unsigned 32-bit integer

m2tp.message\_type Message Type  
Unsigned 8-bit integer

m2tp.parameter\_length Parameter length  
Unsigned 16-bit integer

```
m2tp.parameter_padding  Padding
    Byte array
m2tp.parameter_tag      Parameter Tag
    Unsigned 16-bit integer
m2tp.parameter_value    Parameter Value
    Byte array
m2tp.reason             Reason
    Unsigned 32-bit integer
m2tp.reserved           Reserved
    Unsigned 8-bit integer
m2tp.user_identifier    M2tp User Identifier
    Unsigned 32-bit integer
m2tp.version            Version
    Unsigned 8-bit integer
```

### **MTP 2 User Adaptation Layer (m2ua)**

```
m2ua.action             Actions
    Unsigned 32-bit integer
m2ua.asp_identifier      ASP identifier
    Unsigned 32-bit integer
m2ua.congestion_status  Congestion status
    Unsigned 32-bit integer
m2ua.correlation_identifier  Correlation identifier
    Unsigned 32-bit integer
m2ua.data_2_li          Length indicator
    Unsigned 8-bit integer
m2ua.deregistration_status  Deregistration status
    Unsigned 32-bit integer
m2ua.diagnostic_information  Diagnostic information
    Byte array
m2ua.discard_status     Discard status
    Unsigned 32-bit integer
m2ua.error_code         Error code
    Unsigned 32-bit integer
m2ua.event              Event
    Unsigned 32-bit integer
m2ua.heartbeat_data     Heartbeat data
    Byte array
m2ua.info_string        Info string
    String
m2ua.interface_identifier_int  Interface Identifier (integer)
    Unsigned 32-bit integer
m2ua.interface_identifier_start  Interface Identifier (start)
    Unsigned 32-bit integer
```

```
m2ua.interface_identifier_stop  Interface Identifier (stop)
    Unsigned 32-bit integer
m2ua.interface_identifier_text  Interface identifier (text)
    String
m2ua.local_lk_identifier        Local LK identifier
    Unsigned 32-bit integer
m2ua.message_class             Message class
    Unsigned 8-bit integer
m2ua.message_length            Message length
    Unsigned 32-bit integer
m2ua.message_type              Message Type
    Unsigned 8-bit integer
m2ua.parameter_length          Parameter length
    Unsigned 16-bit integer
m2ua.parameter_padding         Padding
    Byte array
m2ua.parameter_tag             Parameter Tag
    Unsigned 16-bit integer
m2ua.parameter_value          Parameter value
    Byte array
m2ua.registration_status       Registration status
    Unsigned 32-bit integer
m2ua.reserved                  Reserved
    Unsigned 8-bit integer
m2ua.retrieval_result          Retrieval result
    Unsigned 32-bit integer
m2ua.sdl_identifier            SDL identifier
    Unsigned 16-bit integer
m2ua.sdl_reserved              Reserved
    Unsigned 16-bit integer
m2ua.sdt_identifier            SDT identifier
    Unsigned 16-bit integer
m2ua.sdt_reserved              Reserved
    Unsigned 16-bit integer
m2ua.sequence_number           Sequence number
    Unsigned 32-bit integer
m2ua.state                     State
    Unsigned 32-bit integer
m2ua.status_info               Status info
    Unsigned 16-bit integer
m2ua.status_type               Status type
    Unsigned 16-bit integer
m2ua.traffic_mode_type         Traffic mode Type
    Unsigned 32-bit integer
```

m2ua.version Version  
Unsigned 8-bit integer

### MTP 3 User Adaptation Layer (m3ua)

m3ua.affected\_point\_code\_mask Mask  
Unsigned 8-bit integer

m3ua.affected\_point\_code\_pc Affected point code  
Unsigned 24-bit integer

m3ua.asp\_identifier ASP identifier  
Unsigned 32-bit integer

m3ua.cic\_range\_lower Lower CIC value  
Unsigned 16-bit integer

m3ua.cic\_range\_mask Mask  
Unsigned 8-bit integer

m3ua.cic\_range\_pc Originating point code  
Unsigned 24-bit integer

m3ua.cic\_range\_upper Upper CIC value  
Unsigned 16-bit integer

m3ua.concerned\_dpc Concerned DPC  
Unsigned 24-bit integer

m3ua.concerned\_reserved Reserved  
Byte array

m3ua.congestion\_level Congestion level  
Unsigned 8-bit integer

m3ua.congestion\_reserved Reserved  
Byte array

m3ua.correlation\_identifier Correlation Identifier  
Unsigned 32-bit integer

m3ua.deregistration\_result\_routing\_context Routing context  
Unsigned 32-bit integer

m3ua.deregistration\_results\_status De-Registration status  
Unsigned 32-bit integer

m3ua.deregistration\_status Deregistration status  
Unsigned 32-bit integer

m3ua.diagnostic\_information Diagnostic information  
Byte array

m3ua.dpc\_mask Mask  
Unsigned 8-bit integer

m3ua.dpc\_pc Destination point code  
Unsigned 24-bit integer

m3ua.error\_code Error code  
Unsigned 32-bit integer

m3ua.heartbeat\_data Heartbeat data  
Byte array

```
m3ua.info_string  Info string
  String
m3ua.local_rk_identifier  Local routing key identifier
  Unsigned 32-bit integer
m3ua.message_class  Message class
  Unsigned 8-bit integer
m3ua.message_length  Message length
  Unsigned 32-bit integer
m3ua.message_type  Message Type
  Unsigned 8-bit integer
m3ua.network_appearance  Network appearance
  Unsigned 32-bit integer
m3ua.opc_list_mask  Mask
  Unsigned 8-bit integer
m3ua.opc_list_pc  Originating point code
  Unsigned 24-bit integer
m3ua.parameter_length  Parameter length
  Unsigned 16-bit integer
m3ua.parameter_padding  Padding
  Byte array
m3ua.parameter_tag  Parameter Tag
  Unsigned 16-bit integer
m3ua.parameter_value  Parameter value
  Byte array
m3ua.paramter_trailer  Trailer
  Byte array
m3ua.protocol_data_2_li  Length indicator
  Unsigned 8-bit integer
m3ua.protocol_data_dpc  DPC
  Unsigned 32-bit integer
m3ua.protocol_data_mp  MP
  Unsigned 8-bit integer
m3ua.protocol_data_ni  NI
  Unsigned 8-bit integer
m3ua.protocol_data_opc  OPC
  Unsigned 32-bit integer
m3ua.protocol_data_si  SI
  Unsigned 8-bit integer
m3ua.protocol_data_sls  SLS
  Unsigned 8-bit integer
m3ua.reason  Reason
  Unsigned 32-bit integer
m3ua.registration_result_identifier  Local RK-identifier value
  Unsigned 32-bit integer
```

```
m3ua.registration_result_routing_context  Routing context
    Unsigned 32-bit integer
m3ua.registration_results_status  Registration status
    Unsigned 32-bit integer
m3ua.registration_status  Registration status
    Unsigned 32-bit integer
m3ua.reserved  Reserved
    Unsigned 8-bit integer
m3ua.routing_context  Routing context
    Unsigned 32-bit integer
m3ua.si  Service indicator
    Unsigned 8-bit integer
m3ua.ssn  Subsystem number
    Unsigned 8-bit integer
m3ua.status_info  Status info
    Unsigned 16-bit integer
m3ua.status_type  Status type
    Unsigned 16-bit integer
m3ua.traffic_mode_type  Traffic mode Type
    Unsigned 32-bit integer
m3ua.unavailability_cause  Unavailability cause
    Unsigned 16-bit integer
m3ua.user_identity  User Identity
    Unsigned 16-bit integer
m3ua.version  Version
    Unsigned 8-bit integer
mtp3.dpc  DPC
    Unsigned 32-bit integer
mtp3.ni  NI
    Unsigned 8-bit integer
mtp3.opc  OPC
    Unsigned 32-bit integer
mtp3.pc  PC
    Unsigned 32-bit integer
```

#### **MTP2 Peer Adaptation Layer (m2pa)**

```
m2pa.bsn  BSN
    Unsigned 24-bit integer
m2pa.class  Message Class
    Unsigned 8-bit integer
m2pa.filler  Filler
    Byte array
m2pa.fsn  FSN
    Unsigned 24-bit integer
```

```

m2pa.length Message length
    Unsigned 32-bit integer
m2pa.li_priority Priority
    Unsigned 8-bit integer
m2pa.li_spare Spare
    Unsigned 8-bit integer
m2pa.priority Priority
    Unsigned 8-bit integer
m2pa.priority_spare Spare
    Unsigned 8-bit integer
m2pa.spare Spare
    Unsigned 8-bit integer
m2pa.status Link Status
    Unsigned 32-bit integer
m2pa.type Message Type
    Unsigned 16-bit integer
m2pa.unknown_data Unknown Data
    Byte array
m2pa.unused Unused
    Unsigned 8-bit integer
m2pa.version Version
    Unsigned 8-bit integer

```

#### **MULTIMEDIA-SYSTEM-CONTROL (h245)**

```

h245.AlternativeCapabilitySet_item alternativeCapability
    Unsigned 32-bit integer
    h245.CapabilityTableEntryNumber
h245.CertSelectionCriteria_item Item
    No value
    h245.Criteria
h245.EncryptionCapability_item Item
    Unsigned 32-bit integer
    h245.MediaEncryptionAlgorithm
h245.Manufacturer H.245 Manufacturer
    Unsigned 32-bit integer
    h245.H.221 Manufacturer
h245.ModeDescription_item Item
    No value
    h245.ModeElement
h245.OpenLogicalChannel OpenLogicalChannel
    No value
    h245.OpenLogicalChannel
h245.aal aal
    Unsigned 32-bit integer
    h245.Cmd_aal

```

```
h245.aal1 aal1
  No value
  h245.T_aal1
h245.aal1ViaGateway aal1ViaGateway
  No value
  h245.T_aal1ViaGateway
h245.aal5 aal5
  No value
  h245.T_aal5
h245.accept accept
  No value
  h245.NULL
h245.accepted accepted
  No value
  h245.NULL
h245.ackAndNackMessage ackAndNackMessage
  No value
  h245.NULL
h245.ackMessageOnly ackMessageOnly
  No value
  h245.NULL
h245.ackOrNackMessageOnly ackOrNackMessageOnly
  No value
  h245.NULL
h245.adaptationLayerType adaptationLayerType
  Unsigned 32-bit integer
  h245.T_adaptationLayerType
h245.adaptiveClockRecovery adaptiveClockRecovery
  Boolean
  h245.BOOLEAN
h245.addConnection addConnection
  No value
  h245.AddConnectionReq
h245.additionalDecoderBuffer additionalDecoderBuffer
  Unsigned 32-bit integer
  h245.INTEGER_0_262143
h245.additionalPictureMemory additionalPictureMemory
  No value
  h245.T_additionalPictureMemory
h245.address address
  Unsigned 32-bit integer
  h245.T_address
h245.advancedIntraCodingMode advancedIntraCodingMode
  Boolean
  h245.BOOLEAN
h245.advancedPrediction advancedPrediction
  Boolean
  h245.BOOLEAN
```



```
h245.allFramed allFramed
  No value
  h245.T_h223_al_type_allFramed
h245.allM allM
  No value
  h245.T_h223_al_type_allM
h245.allNotFramed allNotFramed
  No value
  h245.T_h223_al_type_allNotFramed
h245.al2M al2M
  No value
  h245.T_h223_al_type_al2M
h245.al2WithSequenceNumbers al2WithSequenceNumbers
  No value
  h245.T_h223_al_type_al2WithSequenceNumbers
h245.al2WithoutSequenceNumbers al2WithoutSequenceNumbers
  No value
  h245.T_h223_al_type_al2WithoutSequenceNumbers
h245.al3 al3
  No value
  h245.T_h223_al_type_al3
h245.al3M al3M
  No value
  h245.T_h223_al_type_al3M
h245.algorithm algorithm
  h245.OBJECT_IDENTIFIER
h245.algorithmOID algorithmOID
  h245.OBJECT_IDENTIFIER
h245.alpduInterleaving alpduInterleaving
  Boolean
  h245.BOOLEAN
h245.alphanumeric alphanumeric
  String
  h245.GeneralString
h245.alsduSplitting alsduSplitting
  Boolean
  h245.BOOLEAN
h245.alternateInterVLMode alternateInterVLMode
  Boolean
  h245.BOOLEAN
h245.annexA annexA
  Boolean
  h245.BOOLEAN
h245.annexB annexB
  Boolean
  h245.BOOLEAN
```

```
h245.annexD annexD
  Boolean
  h245.BOOLEAN

h245.annexE annexE
  Boolean
  h245.BOOLEAN

h245.annexF annexF
  Boolean
  h245.BOOLEAN

h245.annexG annexG
  Boolean
  h245.BOOLEAN

h245.annexH annexH
  Boolean
  h245.BOOLEAN

h245.antiSpamAlgorithm antiSpamAlgorithm
  h245.OBJECT_IDENTIFIER

h245.anyPixelAspectRatio anyPixelAspectRatio
  Boolean
  h245.BOOLEAN

h245.application application
  Unsigned 32-bit integer
  h245.Application

h245.arithmeticCoding arithmeticCoding
  Boolean
  h245.BOOLEAN

h245.arqType arqType
  Unsigned 32-bit integer
  h245.ArqType

h245.associateConference associateConference
  Boolean
  h245.BOOLEAN

h245.associatedAlgorithm associatedAlgorithm
  No value
  h245.NonStandardParameter

h245.associatedSessionID associatedSessionID
  Unsigned 32-bit integer
  h245.INTEGER_1_255

h245.atmABR atmABR
  Boolean
  h245.BOOLEAN

h245.atmCBR atmCBR
  Boolean
  h245.BOOLEAN

h245.atmParameters atmParameters
  No value
  h245.ATMPParameters
```

```
h245.atmUBR atmUBR
  Boolean
  h245.BOOLEAN

h245.atm_AAL5_BIDIR atm-AAL5-BIDIR
  No value
  h245.NULL

h245.atm_AAL5_UNIDIR atm-AAL5-UNIDIR
  No value
  h245.NULL

h245.atm_AAL5_compressed atm-AAL5-compressed
  No value
  h245.T_atm_AAL5_compressed

h245.atmrtVBR atmrtVBR
  Boolean
  h245.BOOLEAN

h245.atmrtVBR atmrtVBR
  Boolean
  h245.BOOLEAN

h245.audioData audioData
  Unsigned 32-bit integer
  h245.AudioCapability

h245.audioHeader audioHeader
  Boolean
  h245.BOOLEAN

h245.audioHeaderPresent audioHeaderPresent
  Boolean
  h245.BOOLEAN

h245.audioLayer audioLayer
  Unsigned 32-bit integer
  h245.T_audioLayer

h245.audioLayer1 audioLayer1
  Boolean
  h245.BOOLEAN

h245.audioLayer2 audioLayer2
  Boolean
  h245.BOOLEAN

h245.audioLayer3 audioLayer3
  Boolean
  h245.BOOLEAN

h245.audioMode audioMode
  Unsigned 32-bit integer
  h245.AudioMode

h245.audioSampling audioSampling
  Unsigned 32-bit integer
  h245.T_audioSampling

h245.audioSampling16k audioSampling16k
  Boolean
  h245.BOOLEAN
```

```
h245.audioSampling22k05  audioSampling22k05
  Boolean
  h245.BOOLEAN

h245.audioSampling24k  audioSampling24k
  Boolean
  h245.BOOLEAN

h245.audioSampling32k  audioSampling32k
  Boolean
  h245.BOOLEAN

h245.audioSampling44k1  audioSampling44k1
  Boolean
  h245.BOOLEAN

h245.audioSampling48k  audioSampling48k
  Boolean
  h245.BOOLEAN

h245.audioTelephoneEvent  audioTelephoneEvent
  String
  h245.GeneralString

h245.audioTelephonyEvent  audioTelephonyEvent
  No value
  h245.NoPTAudioTelephonyEventCapability

h245.audioTone  audioTone
  No value
  h245.NoPTAudioToneCapability

h245.audioUnit  audioUnit
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.audioUnitSize  audioUnitSize
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.audioWithAL1  audioWithAL1
  Boolean
  h245.BOOLEAN

h245.audioWithAL1M  audioWithAL1M
  Boolean
  h245.BOOLEAN

h245.audioWithAL2  audioWithAL2
  Boolean
  h245.BOOLEAN

h245.audioWithAL2M  audioWithAL2M
  Boolean
  h245.BOOLEAN

h245.audioWithAL3  audioWithAL3
  Boolean
  h245.BOOLEAN

h245.audioWithAL3M  audioWithAL3M
  Boolean
  h245.BOOLEAN
```

```
h245.authenticationCapability authenticationCapability
    No value
    h245.AuthenticationCapability
h245.authorizationParameter authorizationParameter
    No value
    h245.AuthorizationParameters
h245.availableBitRates availableBitRates
    No value
    h245.T_availableBitRates
h245.averageRate averageRate
    Unsigned 32-bit integer
    h245.INTEGER_1_4294967295
h245.bPictureEnhancement bPictureEnhancement
    Unsigned 32-bit integer
    h245.SET_SIZE_1_14_OF_BEEnhancementParameters
h245.bPictureEnhancement_item Item
    No value
    h245.BEnhancementParameters
h245.backwardMaximumSDUSize backwardMaximumSDUSize
    Unsigned 32-bit integer
    h245.INTEGER_0_65535
h245.baseBitRateConstrained baseBitRateConstrained
    Boolean
    h245.BOOLEAN
h245.basic basic
    No value
    h245.NULL
h245.basicString basicString
    No value
    h245.NULL
h245.bigCpfAdditionalPictureMemory bigCpfAdditionalPictureMemory
    Unsigned 32-bit integer
    h245.INTEGER_1_256
h245.bitRate bitRate
    Unsigned 32-bit integer
    h245.INTEGER_1_19200
h245.bitRateLockedToNetworkClock bitRateLockedToNetworkClock
    Boolean
    h245.BOOLEAN
h245.bitRateLockedToPCRClock bitRateLockedToPCRClock
    Boolean
    h245.BOOLEAN
h245.booleanArray booleanArray
    Unsigned 32-bit integer
    h245.T_booleanArray
h245.bppMaxKb bppMaxKb
    Unsigned 32-bit integer
    h245.INTEGER_0_65535
```

```
h245.broadcastMyLogicalChannel broadcastMyLogicalChannel
    Unsigned 32-bit integer
    h245.LogicalChannelNumber

h245.broadcastMyLogicalChannelResponse broadcastMyLogicalChannelResponse
    Unsigned 32-bit integer
    h245.T_broadcastMyLogicalChannelResponse

h245.bucketSize bucketSize
    Unsigned 32-bit integer
    h245.INTEGER_1_4294967295

h245.burst burst
    Unsigned 32-bit integer
    h245.INTEGER_1_4294967295

h245.callAssociationNumber callAssociationNumber
    Unsigned 32-bit integer
    h245.INTEGER_0_4294967295

h245.callInformation callInformation
    No value
    h245.CallInformationReq

h245.canNotPerformLoop canNotPerformLoop
    No value
    h245.NULL

h245.cancelBroadcastMyLogicalChannel cancelBroadcastMyLogicalChannel
    Unsigned 32-bit integer
    h245.LogicalChannelNumber

h245.cancelMakeMeChair cancelMakeMeChair
    No value
    h245.NULL

h245.cancelMakeTerminalBroadcaster cancelMakeTerminalBroadcaster
    No value
    h245.NULL

h245.cancelMultipointConference cancelMultipointConference
    No value
    h245.NULL

h245.cancelMultipointModeCommand cancelMultipointModeCommand
    No value
    h245.NULL

h245.cancelMultipointSecondaryStatus cancelMultipointSecondaryStatus
    No value
    h245.NULL

h245.cancelMultipointZeroComm cancelMultipointZeroComm
    No value
    h245.NULL

h245.cancelSeenByAll cancelSeenByAll
    No value
    h245.NULL

h245.cancelSeenByAtLeastOneOther cancelSeenByAtLeastOneOther
    No value
    h245.NULL
```

```
h245.cancelSendThisSource cancelSendThisSource
    No value
    h245.NULL

h245.capabilities capabilities
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_AlternativeCapabilitySet

h245.capabilities_item Item
    Unsigned 32-bit integer
    h245.AlternativeCapabilitySet

h245.capability capability
    Unsigned 32-bit integer
    h245.Capability

h245.capabilityDescriptorNumber capabilityDescriptorNumber
    Unsigned 32-bit integer
    h245.CapabilityDescriptorNumber

h245.capabilityDescriptorNumbers capabilityDescriptorNumbers
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_CapabilityDescriptorNumber

h245.capabilityDescriptorNumbers_item Item
    Unsigned 32-bit integer
    h245.CapabilityDescriptorNumber

h245.capabilityDescriptors capabilityDescriptors
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_CapabilityDescriptor

h245.capabilityDescriptors_item Item
    No value
    h245.CapabilityDescriptor

h245.capabilityIdentifier capabilityIdentifier
    Unsigned 32-bit integer
    h245.CapabilityIdentifier

h245.capabilityOnMuxStream capabilityOnMuxStream
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_AlternativeCapabilitySet

h245.capabilityOnMuxStream_item Item
    Unsigned 32-bit integer
    h245.AlternativeCapabilitySet

h245.capabilityTable capabilityTable
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_CapabilityTableEntry

h245.capabilityTableEntryNumber capabilityTableEntryNumber
    Unsigned 32-bit integer
    h245.CapabilityTableEntryNumber

h245.capabilityTableEntryNumbers capabilityTableEntryNumbers
    Unsigned 32-bit integer
    h245.SET_SIZE_1_65535_OF_CapabilityTableEntryNumber

h245.capabilityTableEntryNumbers_item Item
    Unsigned 32-bit integer
    h245.CapabilityTableEntryNumber
```

```
h245.capabilityTable_item  Item
    No value
    h245.CapabilityTableEntry
h245.cause  cause
    Unsigned 32-bit integer
    h245.MasterSlaveDeterminationRejectCause
h245.ccir601Prog  ccir601Prog
    Boolean
    h245.BOOLEAN
h245.ccir601Seq  ccir601Seq
    Boolean
    h245.BOOLEAN
h245.centralizedAudio  centralizedAudio
    Boolean
    h245.BOOLEAN
h245.centralizedConferenceMC  centralizedConferenceMC
    Boolean
    h245.BOOLEAN
h245.centralizedControl  centralizedControl
    Boolean
    h245.BOOLEAN
h245.centralizedData  centralizedData
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_DataApplicationCapability
h245.centralizedData_item  Item
    No value
    h245.DataApplicationCapability
h245.centralizedVideo  centralizedVideo
    Boolean
    h245.BOOLEAN
h245.certProtectedKey  certProtectedKey
    Boolean
    h245.BOOLEAN
h245.certSelectionCriteria  certSelectionCriteria
    Unsigned 32-bit integer
    h245.CertSelectionCriteria
h245.certificateResponse  certificateResponse
    Byte array
    h245.OCTET_STRING_SIZE_1_65535
h245.chairControlCapability  chairControlCapability
    Boolean
    h245.BOOLEAN
h245.chairTokenOwnerResponse  chairTokenOwnerResponse
    No value
    h245.T_chairTokenOwnerResponse
h245.channelTag  channelTag
    Unsigned 32-bit integer
    h245.INTEGER_0_4294967295
```



```
h245.cif cif
  Boolean
  h245.BOOLEAN

h245.cif16 cif16
  No value
  h245.NULL

h245.cif16AdditionalPictureMemory cif16AdditionalPictureMemory
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.cif16MPI cif16MPI
  Unsigned 32-bit integer
  h245.INTEGER_1_32

h245.cif4 cif4
  No value
  h245.NULL

h245.cif4AdditionalPictureMemory cif4AdditionalPictureMemory
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.cif4MPI cif4MPI
  Unsigned 32-bit integer
  h245.INTEGER_1_32

h245.cifAdditionalPictureMemory cifAdditionalPictureMemory
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.cifMPI cifMPI
  Unsigned 32-bit integer
  h245.INTEGER_1_4

h245.class0 class0
  No value
  h245.NULL

h245.class1 class1
  No value
  h245.NULL

h245.class2 class2
  No value
  h245.NULL

h245.class3 class3
  No value
  h245.NULL

h245.class4 class4
  No value
  h245.NULL

h245.class5 class5
  No value
  h245.NULL

h245.clockConversionCode clockConversionCode
  Unsigned 32-bit integer
  h245.INTEGER_1000_1001
```

```
h245.clockDivisor clockDivisor
    Unsigned 32-bit integer
    h245.INTEGER_1_127

h245.clockRecovery clockRecovery
    Unsigned 32-bit integer
    h245.Cmd_clockRecovery

h245.closeLogicalChannel closeLogicalChannel
    No value
    h245.CloseLogicalChannel

h245.closeLogicalChannelAck closeLogicalChannelAck
    No value
    h245.CloseLogicalChannelAck

h245.collapsing collapsing
    Unsigned 32-bit integer
    h245.T_collapsing

h245.collapsing_item Item
    No value
    h245.T_collapsing_item

h245.comfortNoise comfortNoise
    Boolean
    h245.BOOLEAN

h245.command command
    Unsigned 32-bit integer
    h245.CommandMessage

h245.communicationModeCommand communicationModeCommand
    No value
    h245.CommunicationModeCommand

h245.communicationModeRequest communicationModeRequest
    No value
    h245.CommunicationModeRequest

h245.communicationModeResponse communicationModeResponse
    Unsigned 32-bit integer
    h245.CommunicationModeResponse

h245.communicationModeTable communicationModeTable
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_CommunicationModeTableEntry

h245.communicationModeTable_item Item
    No value
    h245.CommunicationModeTableEntry

h245.compositionNumber compositionNumber
    Unsigned 32-bit integer
    h245.INTEGER_0_255

h245.conferenceCapability conferenceCapability
    No value
    h245.ConferenceCapability

h245.conferenceCommand conferenceCommand
    Unsigned 32-bit integer
    h245.ConferenceCommand
```

```
h245.conferenceID conferenceID
    Byte array
    h245.ConferenceID
h245.conferenceIDResponse conferenceIDResponse
    No value
    h245.T_conferenceIDResponse
h245.conferenceIdentifier conferenceIdentifier
    Byte array
    h245.OCTET_STRING_SIZE_16
h245.conferenceIndication conferenceIndication
    Unsigned 32-bit integer
    h245.ConferenceIndication
h245.conferenceRequest conferenceRequest
    Unsigned 32-bit integer
    h245.ConferenceRequest
h245.conferenceResponse conferenceResponse
    Unsigned 32-bit integer
    h245.ConferenceResponse
h245.connectionIdentifier connectionIdentifier
    No value
    h245.ConnectionIdentifier
h245.connectionsNotAvailable connectionsNotAvailable
    No value
    h245.NULL
h245.constrainedBitstream constrainedBitstream
    Boolean
    h245.BOOLEAN
h245.containedThreads containedThreads
    Unsigned 32-bit integer
    h245.T_containedThreads
h245.containedThreads_item Item
    Unsigned 32-bit integer
    h245.INTEGER_0_15
h245.controlFieldOctets controlFieldOctets
    Unsigned 32-bit integer
    h245.T_controlFieldOctets
h245.controlOnMuxStream controlOnMuxStream
    Boolean
    h245.BOOLEAN
h245.controlledLoad controlledLoad
    No value
    h245.NULL
h245.crc12bit crc12bit
    No value
    h245.NULL
h245.crc16bit crc16bit
    No value
    h245.NULL
```

```
h245.crc16bitCapability  crc16bitCapability
    Boolean
    h245.BOOLEAN

h245.crc20bit  crc20bit
    No value
    h245.NULL

h245.crc28bit  crc28bit
    No value
    h245.NULL

h245.crc32bit  crc32bit
    No value
    h245.NULL

h245.crc32bitCapability  crc32bitCapability
    Boolean
    h245.BOOLEAN

h245.crc4bit  crc4bit
    No value
    h245.NULL

h245.crc8bit  crc8bit
    No value
    h245.NULL

h245.crc8bitCapability  crc8bitCapability
    Boolean
    h245.BOOLEAN

h245.crcDesired  crcDesired
    No value
    h245.T_crcDesired

h245.crcLength  crcLength
    Unsigned 32-bit integer
    h245.ALlCrcLength

h245.crcNotUsed  crcNotUsed
    No value
    h245.NULL

h245.currentInterval  currentInterval
    Unsigned 32-bit integer
    h245.INTEGER_0_65535

h245.currentIntervalInformation  currentIntervalInformation
    No value
    h245.NULL

h245.currentMaximumBitRate  currentMaximumBitRate
    Unsigned 32-bit integer
    h245.MaximumBitRate

h245.currentPictureHeaderRepetition  currentPictureHeaderRepetition
    Boolean
    h245.BOOLEAN

h245.custom  custom
    Unsigned 32-bit integer
    h245.SEQUENCE_SIZE_1_256_OF RTPH263VideoRedundancyFrameMapping
```

```
h245.customMPI    customMPI
    Unsigned 32-bit integer
    h245.INTEGER_1_2048

h245.customPCF    customPCF
    Unsigned 32-bit integer
    h245.T_customPCF

h245.customPCF_item  Item
    No value
    h245.T_customPCF_item

h245.customPictureClockFrequency  customPictureClockFrequency
    Unsigned 32-bit integer
    h245.SET_SIZE_1_16_OF_CustomPictureClockFrequency

h245.customPictureClockFrequency_item  Item
    No value
    h245.CustomPictureClockFrequency

h245.customPictureFormat  customPictureFormat
    Unsigned 32-bit integer
    h245.SET_SIZE_1_16_OF_CustomPictureFormat

h245.customPictureFormat_item  Item
    No value
    h245.CustomPictureFormat

h245.custom_item  Item
    No value
    h245.RTPH263VideoRedundancyFrameMapping

h245.data  data
    Byte array
    h245.T_nsd_data

h245.dataMode  dataMode
    No value
    h245.DataMode

h245.dataPartitionedSlices  dataPartitionedSlices
    Boolean
    h245.BOOLEAN

h245.dataType  dataType
    Unsigned 32-bit integer
    h245.DataType

h245.dataTypeALCombinationNotSupported  dataTypeALCombinationNotSupported
    No value
    h245.NULL

h245.dataTypeNotAvailable  dataTypeNotAvailable
    No value
    h245.NULL

h245.dataTypeNotSupported  dataTypeNotSupported
    No value
    h245.NULL

h245.dataWithAL1  dataWithAL1
    Boolean
    h245.BOOLEAN
```

```
h245.dataWithAL1M  dataWithAL1M
  Boolean
  h245.BOOLEAN
h245.dataWithAL2  dataWithAL2
  Boolean
  h245.BOOLEAN
h245.dataWithAL2M  dataWithAL2M
  Boolean
  h245.BOOLEAN
h245.dataWithAL3  dataWithAL3
  Boolean
  h245.BOOLEAN
h245.dataWithAL3M  dataWithAL3M
  Boolean
  h245.BOOLEAN
h245.deActivate  deActivate
  No value
  h245.NULL
h245.deblockingFilterMode  deblockingFilterMode
  Boolean
  h245.BOOLEAN
h245.decentralizedConferenceMC  decentralizedConferenceMC
  Boolean
  h245.BOOLEAN
h245.decision  decision
  Unsigned 32-bit integer
  h245.T_decision
h245.deniedBroadcastMyLogicalChannel  deniedBroadcastMyLogicalChannel
  No value
  h245.NULL
h245.deniedChairToken  deniedChairToken
  No value
  h245.NULL
h245.deniedMakeTerminalBroadcaster  deniedMakeTerminalBroadcaster
  No value
  h245.NULL
h245.deniedSendThisSource  deniedSendThisSource
  No value
  h245.NULL
h245.depFec  depFec
  Unsigned 32-bit integer
  h245.DepFECData
h245.depFecCapability  depFecCapability
  Unsigned 32-bit integer
  h245.DepFECCapability
h245.depFecMode  depFecMode
  Unsigned 32-bit integer
  h245.DepFECMode
```

```
h245.descriptorCapacityExceeded  descriptorCapacityExceeded
    No value
    h245.NULL

h245.descriptorTooComplex  descriptorTooComplex
    No value
    h245.NULL

h245.desired  desired
    No value
    h245.NULL

h245.destination  destination
    No value
    h245.TerminalLabel

h245.dialingInformation  dialingInformation
    Unsigned 32-bit integer
    h245.DialingInformation

h245.differentPort  differentPort
    No value
    h245.T_differentPort

h245.differential  differential
    Unsigned 32-bit integer
    h245.SET_SIZE_1_65535_OF_DialingInformationNumber

h245.differential_item  Item
    No value
    h245.DialingInformationNumber

h245.digPhotoHighProg  digPhotoHighProg
    Boolean
    h245.BOOLEAN

h245.digPhotoHighSeq  digPhotoHighSeq
    Boolean
    h245.BOOLEAN

h245.digPhotoLow  digPhotoLow
    Boolean
    h245.BOOLEAN

h245.digPhotoMedProg  digPhotoMedProg
    Boolean
    h245.BOOLEAN

h245.digPhotoMedSeq  digPhotoMedSeq
    Boolean
    h245.BOOLEAN

h245.direction  direction
    Unsigned 32-bit integer
    h245.EncryptionUpdateDirection

h245.disconnect  disconnect
    No value
    h245.NULL

h245.distributedAudio  distributedAudio
    Boolean
    h245.BOOLEAN
```

```
h245.distributedControl distributedControl
    Boolean
    h245.BOOLEAN

h245.distributedData distributedData
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_DataApplicationCapability

h245.distributedData_item Item
    No value
    h245.DataApplicationCapability

h245.distributedVideo distributedVideo
    Boolean
    h245.BOOLEAN

h245.distribution distribution
    Unsigned 32-bit integer
    h245.T_distribution

h245.doContinuousIndependentProgressions doContinuousIndependentProgressions
    No value
    h245.NULL

h245.doContinuousProgressions doContinuousProgressions
    No value
    h245.NULL

h245.doOneIndependentProgression doOneIndependentProgression
    No value
    h245.NULL

h245.doOneProgression doOneProgression
    No value
    h245.NULL

h245.domainBased domainBased
    String
    h245.IA5String_SIZE_1_64

h245.dropConference dropConference
    No value
    h245.NULL

h245.dropTerminal dropTerminal
    No value
    h245.TerminalLabel

h245.dscpValue dscpValue
    Unsigned 32-bit integer
    h245.INTEGER_0_63

h245.dsm_cc dsm-cc
    Unsigned 32-bit integer
    h245.DataProtocolCapability

h245.dsvdControl dsvdControl
    No value
    h245.NULL

h245.dtmf dtmf
    No value
    h245.NULL
```



```
h245.duration duration
    Unsigned 32-bit integer
    h245.INTEGER_1_65535

h245.dynamicPictureResizingByFour dynamicPictureResizingByFour
    Boolean
    h245.BOOLEAN

h245.dynamicPictureResizingSixteenthPel dynamicPictureResizingSixteenthPel
    Boolean
    h245.BOOLEAN

h245.dynamicRTPPayloadType dynamicRTPPayloadType
    Unsigned 32-bit integer
    h245.INTEGER_96_127

h245.dynamicWarpingHalfPel dynamicWarpingHalfPel
    Boolean
    h245.BOOLEAN

h245.dynamicWarpingSixteenthPel dynamicWarpingSixteenthPel
    Boolean
    h245.BOOLEAN

h245.e164Address e164Address
    String
    h245.T_e164Address

h245.eRM eRM
    No value
    h245.T_eRM

h245.elementList elementList
    Unsigned 32-bit integer
    h245.T_elementList

h245.elementList_item Item
    No value
    h245.MultiplexElement

h245.elements elements
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_MultiplePayloadStreamElement

h245.elements_item Item
    No value
    h245.MultiplePayloadStreamElement

h245.encrypted encrypted
    Byte array
    h245.OCTET_STRING

h245.encryptedAlphanumeric encryptedAlphanumeric
    No value
    h245.EncryptedAlphanumeric

h245.encryptedBasicString encryptedBasicString
    No value
    h245.NULL

h245.encryptedGeneralString encryptedGeneralString
    No value
    h245.NULL
```

```
h245.encryptedIA5String  encryptedIA5String
    No value
    h245.NULL

h245.encryptedSignalType  encryptedSignalType
    Byte array
    h245.OCTET_STRING_SIZE_1

h245.encryptionAlgorithmID  encryptionAlgorithmID
    No value
    h245.T_encryptionAlgorithmID

h245.encryptionAuthenticationAndIntegrity  encryptionAuthenticationAndIntegrity
    No value
    h245.EncryptionAuthenticationAndIntegrity

h245.encryptionCapability  encryptionCapability
    Unsigned 32-bit integer
    h245.EncryptionCapability

h245.encryptionCommand  encryptionCommand
    Unsigned 32-bit integer
    h245.EncryptionCommand

h245.encryptionData  encryptionData
    Unsigned 32-bit integer
    h245.EncryptionMode

h245.encryptionIVRequest  encryptionIVRequest
    No value
    h245.NULL

h245.encryptionMode  encryptionMode
    Unsigned 32-bit integer
    h245.EncryptionMode

h245.encryptionSE  encryptionSE
    Byte array
    h245.OCTET_STRING

h245.encryptionSync  encryptionSync
    No value
    h245.EncryptionSync

h245.encryptionUpdate  encryptionUpdate
    No value
    h245.EncryptionSync

h245.encryptionUpdateAck  encryptionUpdateAck
    No value
    h245.T_encryptionUpdateAck

h245.encryptionUpdateCommand  encryptionUpdateCommand
    No value
    h245.T_encryptionUpdateCommand

h245.encryptionUpdateRequest  encryptionUpdateRequest
    No value
    h245.EncryptionUpdateRequest

h245.endSessionCommand  endSessionCommand
    Unsigned 32-bit integer
    h245.EndSessionCommand
```

```
h245.enhanced enhanced
    No value
    h245.T_enhanced

h245.enhancedReferencePicSelect enhancedReferencePicSelect
    No value
    h245.T_enhancedReferencePicSelect

h245.enhancementLayerInfo enhancementLayerInfo
    No value
    h245.EnhancementLayerInfo

h245.enhancementOptions enhancementOptions
    No value
    h245.EnhancementOptions

h245.enterExtensionAddress enterExtensionAddress
    No value
    h245.NULL

h245.enterH243ConferenceID enterH243ConferenceID
    No value
    h245.NULL

h245.enterH243Password enterH243Password
    No value
    h245.NULL

h245.enterH243TerminalID enterH243TerminalID
    No value
    h245.NULL

h245.entryNumbers entryNumbers
    Unsigned 32-bit integer
    h245.SET_SIZE_1_15_OF_MultiplexTableEntryNumber

h245.entryNumbers_item Item
    Unsigned 32-bit integer
    h245.MultiplexTableEntryNumber

h245.equaliseDelay equaliseDelay
    No value
    h245.NULL

h245.errorCompensation errorCompensation
    Boolean
    h245.BOOLEAN

h245.errorCorrection errorCorrection
    Unsigned 32-bit integer
    h245.Cmd_errorCorrection

h245.errorCorrectionOnly errorCorrectionOnly
    Boolean
    h245.BOOLEAN

h245.escrowID escrowID
    h245.OBJECT_IDENTIFIER

h245.escrowValue escrowValue
    Byte array
    h245.BIT_STRING_SIZE_1_65535
```

```
h245.escrowentry escrowentry
    Unsigned 32-bit integer
    h245.SEQUENCE_SIZE_1_256_OF_EscrowData

h245.escrowentry_item Item
    No value
    h245.EscrowData

h245.estimatedReceivedJitterExponent estimatedReceivedJitterExponent
    Unsigned 32-bit integer
    h245.INTEGER_0_7

h245.estimatedReceivedJitterMantissa estimatedReceivedJitterMantissa
    Unsigned 32-bit integer
    h245.INTEGER_0_3

h245.excessiveError excessiveError
    No value
    h245.T_excessiveError

h245.expirationTime expirationTime
    Unsigned 32-bit integer
    h245.INTEGER_0_4294967295

h245.extendedAlphanumeric extendedAlphanumeric
    No value
    h245.NULL

h245.extendedPAR extendedPAR
    Unsigned 32-bit integer
    h245.T_extendedPAR

h245.extendedPAR_item Item
    No value
    h245.T_extendedPAR_item

h245.extendedVideoCapability extendedVideoCapability
    No value
    h245.ExtendedVideoCapability

h245.extensionAddress extensionAddress
    Byte array
    h245.TerminalID

h245.extensionAddressResponse extensionAddressResponse
    No value
    h245.T_extensionAddressResponse

h245.externalReference externalReference
    Byte array
    h245.OCTET_STRING_SIZE_1_255

h245.fec fec
    Unsigned 32-bit integer
    h245.FECData

h245.fecCapability fecCapability
    No value
    h245.FECCapability

h245.fecMode fecMode
    No value
    h245.FECMode
```

```
h245.fecScheme fecScheme
    h245.OBJECT_IDENTIFIER
h245.field field
    h245.OBJECT_IDENTIFIER
h245.fillBitRemoval fillBitRemoval
    Boolean
    h245.BOOLEAN
h245.finite finite
    Unsigned 32-bit integer
    h245.INTEGER_0_16
h245.firstGOB firstGOB
    Unsigned 32-bit integer
    h245.INTEGER_0_17
h245.firstMB firstMB
    Unsigned 32-bit integer
    h245.INTEGER_1_8192
h245.fiveChannels3_0_2_0 fiveChannels3-0-2-0
    Boolean
    h245.BOOLEAN
h245.fiveChannels3_2 fiveChannels3-2
    Boolean
    h245.BOOLEAN
h245.fixedPointIDCT0 fixedPointIDCT0
    Boolean
    h245.BOOLEAN
h245.floorRequested floorRequested
    No value
    h245.TerminalLabel
h245.flowControlCommand flowControlCommand
    No value
    h245.FlowControlCommand
h245.flowControlIndication flowControlIndication
    No value
    h245.FlowControlIndication
h245.flowControlToZero flowControlToZero
    Boolean
    h245.BOOLEAN
h245.forwardLogicalChannelDependency forwardLogicalChannelDependency
    Unsigned 32-bit integer
    h245.LogicalChannelNumber
h245.forwardLogicalChannelNumber forwardLogicalChannelNumber
    Unsigned 32-bit integer
    h245.OLC_fw_lcn
h245.forwardLogicalChannelParameters forwardLogicalChannelParameters
    No value
    h245.T_forwardLogicalChannelParameters
```

```
h245.forwardMaximumSDUSize forwardMaximumSDUSize
    Unsigned 32-bit integer
    h245.INTEGER_0_65535

h245.forwardMultiplexAckParameters forwardMultiplexAckParameters
    Unsigned 32-bit integer
    h245.T_forwardMultiplexAckParameters

h245.fourChannels2_0_2_0 fourChannels2-0-2-0
    Boolean
    h245.BOOLEAN

h245.fourChannels2_2 fourChannels2-2
    Boolean
    h245.BOOLEAN

h245.fourChannels3_1 fourChannels3-1
    Boolean
    h245.BOOLEAN

h245.frameSequence frameSequence
    Unsigned 32-bit integer
    h245.T_frameSequence

h245.frameSequence_item Item
    Unsigned 32-bit integer
    h245.INTEGER_0_255

h245.frameToThreadMapping frameToThreadMapping
    Unsigned 32-bit integer
    h245.T_frameToThreadMapping

h245.framed framed
    No value
    h245.NULL

h245.framesBetweenSyncPoints framesBetweenSyncPoints
    Unsigned 32-bit integer
    h245.INTEGER_1_256

h245.framesPerSecond framesPerSecond
    Unsigned 32-bit integer
    h245.INTEGER_0_15

h245.fullPictureFreeze fullPictureFreeze
    Boolean
    h245.BOOLEAN

h245.fullPictureSnapshot fullPictureSnapshot
    Boolean
    h245.BOOLEAN

h245.functionNotSupported functionNotSupported
    No value
    h245.FunctionNotSupported

h245.functionNotUnderstood functionNotUnderstood
    Unsigned 32-bit integer
    h245.FunctionNotUnderstood

h245.g3Facsmh200x100 g3Facsmh200x100
    Boolean
    h245.BOOLEAN
```

```
h245.g3Facsmh200x200  g3Facsmh200x200
  Boolean
  h245.BOOLEAN

h245.g4Facsmmr200x100  g4Facsmmr200x100
  Boolean
  h245.BOOLEAN

h245.g4Facsmmr200x200  g4Facsmmr200x200
  Boolean
  h245.BOOLEAN

h245.g711Alaw56k  g711Alaw56k
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g711Alaw64k  g711Alaw64k
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g711Ulaw56k  g711Ulaw56k
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g711Ulaw64k  g711Ulaw64k
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g722_48k  g722-48k
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g722_56k  g722-56k
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g722_64k  g722-64k
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g7231  g7231
  No value
  h245.T_g7231

h245.g7231AnnexCCapability  g7231AnnexCCapability
  No value
  h245.G7231AnnexCCapability

h245.g7231AnnexCMode  g7231AnnexCMode
  No value
  h245.G7231AnnexCMode

h245.g723AnnexCAudioMode  g723AnnexCAudioMode
  No value
  h245.G723AnnexCAudioMode

h245.g728  g728
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g729  g729
  Unsigned 32-bit integer
  h245.INTEGER_1_256
```

```
h245.g729AnnexA g729AnnexA
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g729AnnexAwAnnexB g729AnnexAwAnnexB
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.g729Extensions g729Extensions
  No value
  h245.G729Extensions

h245.g729wAnnexB g729wAnnexB
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.gatewayAddress gatewayAddress
  Unsigned 32-bit integer
  h245.SET_SIZE_1_256_OF_Q2931Address

h245.gatewayAddress_item Item
  No value
  h245.Q2931Address

h245.generalString generalString
  No value
  h245.NULL

h245.genericAudioCapability genericAudioCapability
  No value
  h245.GenericCapability

h245.genericAudioMode genericAudioMode
  No value
  h245.GenericCapability

h245.genericCommand genericCommand
  No value
  h245.GenericMessage

h245.genericControlCapability genericControlCapability
  No value
  h245.GenericCapability

h245.genericDataCapability genericDataCapability
  No value
  h245.GenericCapability

h245.genericDataMode genericDataMode
  No value
  h245.GenericCapability

h245.genericH235SecurityCapability genericH235SecurityCapability
  No value
  h245.GenericCapability

h245.genericIndication genericIndication
  No value
  h245.GenericMessage

h245.genericInformation genericInformation
  Unsigned 32-bit integer
  h245.SEQUENCE_OF_GenericInformation
```



```
h245.genericInformation_item  Item
    No value
    h245.GenericInformation
h245.genericModeParameters  genericModeParameters
    No value
    h245.GenericCapability
h245.genericMultiplexCapability  genericMultiplexCapability
    No value
    h245.GenericCapability
h245.genericParameter  genericParameter
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_GenericParameter
h245.genericParameter_item  Item
    No value
    h245.GenericParameter
h245.genericRequest  genericRequest
    No value
    h245.GenericMessage
h245.genericResponse  genericResponse
    No value
    h245.GenericMessage
h245.genericTransportParameters  genericTransportParameters
    No value
    h245.GenericTransportParameters
h245.genericUserInputCapability  genericUserInputCapability
    No value
    h245.GenericCapability
h245.genericVideoCapability  genericVideoCapability
    No value
    h245.GenericCapability
h245.genericVideoMode  genericVideoMode
    No value
    h245.GenericCapability
h245.golay24_12  golay24-12
    No value
    h245.NULL
h245.grantedBroadcastMyLogicalChannel  grantedBroadcastMyLogicalChannel
    No value
    h245.NULL
h245.grantedChairToken  grantedChairToken
    No value
    h245.NULL
h245.grantedMakeTerminalBroadcaster  grantedMakeTerminalBroadcaster
    No value
    h245.NULL
h245.grantedSendThisSource  grantedSendThisSource
    No value
    h245.NULL
```

```
h245.gsmEnhancedFullRate  gsmEnhancedFullRate
    No value
    h245.GSMAudioCapability
h245.gsmFullRate  gsmFullRate
    No value
    h245.GSMAudioCapability
h245.gsmHalfRate  gsmHalfRate
    No value
    h245.GSMAudioCapability
h245.gstn  gstn
    No value
    h245.NULL
h245.gstnOptions  gstnOptions
    Unsigned 32-bit integer
    h245.T_gstnOptions
h245.guaranteedQOS  guaranteedQOS
    No value
    h245.NULL
h245.h221NonStandard  h221NonStandard
    No value
    h245.H221NonStandardID
h245.h222Capability  h222Capability
    No value
    h245.H222Capability
h245.h222DataPartitioning  h222DataPartitioning
    Unsigned 32-bit integer
    h245.DataProtocolCapability
h245.h222LogicalChannelParameters  h222LogicalChannelParameters
    No value
    h245.H222LogicalChannelParameters
h245.h223AnnexA  h223AnnexA
    Boolean
    h245.BOOLEAN
h245.h223AnnexADoubleFlag  h223AnnexADoubleFlag
    Boolean
    h245.BOOLEAN
h245.h223AnnexB  h223AnnexB
    Boolean
    h245.BOOLEAN
h245.h223AnnexBwithHeader  h223AnnexBwithHeader
    Boolean
    h245.BOOLEAN
h245.h223AnnexCCapability  h223AnnexCCapability
    No value
    h245.H223AnnexCCapability
h245.h223Capability  h223Capability
    No value
    h245.H223Capability
```

```
h245.h223LogicalChannelParameters h223LogicalChannelParameters
  No value
  h245.OLC_fw_h223_params
h245.h223ModeChange h223ModeChange
  Unsigned 32-bit integer
  h245.T_h223ModeChange
h245.h223ModeParameters h223ModeParameters
  No value
  h245.H223ModeParameters
h245.h223MultiplexReconfiguration h223MultiplexReconfiguration
  Unsigned 32-bit integer
  h245.H223MultiplexReconfiguration
h245.h223MultiplexTableCapability h223MultiplexTableCapability
  Unsigned 32-bit integer
  h245.T_h223MultiplexTableCapability
h245.h223SkewIndication h223SkewIndication
  No value
  h245.H223SkewIndication
h245.h224 h224
  Unsigned 32-bit integer
  h245.DataProtocolCapability
h245.h2250Capability h2250Capability
  No value
  h245.H2250Capability
h245.h2250LogicalChannelAckParameters h2250LogicalChannelAckParameters
  No value
  h245.H2250LogicalChannelAckParameters
h245.h2250LogicalChannelParameters h2250LogicalChannelParameters
  No value
  h245.H2250LogicalChannelParameters
h245.h2250MaximumSkewIndication h2250MaximumSkewIndication
  No value
  h245.H2250MaximumSkewIndication
h245.h2250ModeParameters h2250ModeParameters
  No value
  h245.H2250ModeParameters
h245.h233AlgorithmIdentifier h233AlgorithmIdentifier
  Unsigned 32-bit integer
  h245.SequenceNumber
h245.h233Encryption h233Encryption
  No value
  h245.NULL
h245.h233EncryptionReceiveCapability h233EncryptionReceiveCapability
  No value
  h245.T_h233EncryptionReceiveCapability
h245.h233EncryptionTransmitCapability h233EncryptionTransmitCapability
  Boolean
  h245.BOOLEAN
```

```
h245.h233IVResponseTime h233IVResponseTime
    Unsigned 32-bit integer
    h245.INTEGER_0_255

h245.h235Control h235Control
    No value
    h245.NonStandardParameter

h245.h235Key h235Key
    Byte array
    h245.OCTET_STRING_SIZE_1_65535

h245.h235Media h235Media
    No value
    h245.H235Media

h245.h235Mode h235Mode
    No value
    h245.H235Mode

h245.h235SecurityCapability h235SecurityCapability
    No value
    h245.H235SecurityCapability

h245.h261VideoCapability h261VideoCapability
    No value
    h245.H261VideoCapability

h245.h261VideoMode h261VideoMode
    No value
    h245.H261VideoMode

h245.h261aVideoPacketization h261aVideoPacketization
    Boolean
    h245.BOOLEAN

h245.h262VideoCapability h262VideoCapability
    No value
    h245.H262VideoCapability

h245.h262VideoMode h262VideoMode
    No value
    h245.H262VideoMode

h245.h263Options h263Options
    No value
    h245.H263Options

h245.h263Version3Options h263Version3Options
    No value
    h245.H263Version3Options

h245.h263VideoCapability h263VideoCapability
    No value
    h245.H263VideoCapability

h245.h263VideoCoupledModes h263VideoCoupledModes
    Unsigned 32-bit integer
    h245.SET_SIZE_1_16_OF_H263ModeComboFlags

h245.h263VideoCoupledModes_item Item
    No value
    h245.H263ModeComboFlags
```

```
h245.h263VideoMode h263VideoMode
  No value
  h245.H263VideoMode

h245.h263VideoUncoupledModes h263VideoUncoupledModes
  No value
  h245.H263ModeComboFlags

h245.h310SeparateVCStack h310SeparateVCStack
  No value
  h245.NULL

h245.h310SingleVCStack h310SingleVCStack
  No value
  h245.NULL

h245.hdlcFrameTunnelingwSAR hdlcFrameTunnelingwSAR
  No value
  h245.NULL

h245.hdlcFrameTunnelling hdlcFrameTunnelling
  No value
  h245.NULL

h245.hdlcParameters hdlcParameters
  No value
  h245.V76HDLCPParameters

h245.hdtvProg hdtvProg
  Boolean
  h245.BOOLEAN

h245.hdtvSeq hdtvSeq
  Boolean
  h245.BOOLEAN

h245.headerFEC headerFEC
  Unsigned 32-bit integer
  h245.ALlHeaderFEC

h245.headerFormat headerFormat
  Unsigned 32-bit integer
  h245.T_headerFormat

h245.height height
  Unsigned 32-bit integer
  h245.INTEGER_1_255

h245.highRateMode0 highRateMode0
  Unsigned 32-bit integer
  h245.INTEGER_27_78

h245.highRateModel1 highRateModel1
  Unsigned 32-bit integer
  h245.INTEGER_27_78

h245.higherBitRate higherBitRate
  Unsigned 32-bit integer
  h245.INTEGER_1_65535

h245.highestEntryNumberProcessed highestEntryNumberProcessed
  Unsigned 32-bit integer
  h245.CapabilityTableEntryNumber
```

```
h245.hookflash hookflash
    No value
    h245.NULL

h245.hrd_B hrd-B
    Unsigned 32-bit integer
    h245.INTEGER_0_524287

h245.iA5String iA5String
    No value
    h245.NULL

h245.ip6Address ip6Address
    No value
    h245.T_ip6Address

h245.ipAddress ipAddress
    No value
    h245.T_ipAddress

h245.ipSourceRouteAddress ipSourceRouteAddress
    No value
    h245.T_ipSourceRouteAddress

h245.ipXAddress ipXAddress
    No value
    h245.T_ipXAddress

h245.identicalNumbers identicalNumbers
    No value
    h245.NULL

h245.improvedPBFramesMode improvedPBFramesMode
    Boolean
    h245.BOOLEAN

h245.independentSegmentDecoding independentSegmentDecoding
    Boolean
    h245.BOOLEAN

h245.indication indication
    Unsigned 32-bit integer
    h245.IndicationMessage

h245.infinite infinite
    No value
    h245.NULL

h245.infoNotAvailable infoNotAvailable
    Unsigned 32-bit integer
    h245.INTEGER_1_65535

h245.insufficientBandwidth insufficientBandwidth
    No value
    h245.NULL

h245.insufficientResources insufficientResources
    No value
    h245.NULL

h245.integrityCapability integrityCapability
    No value
    h245.IntegrityCapability
```

```
h245.interlacedFields  interlacedFields
    Boolean
    h245.BOOLEAN

h245.internationalNumber  internationalNumber
    String
    h245.NumericString_SIZE_1_16

h245.invalidDependentChannel  invalidDependentChannel
    No value
    h245.NULL

h245.invalidSessionID  invalidSessionID
    No value
    h245.NULL

h245.ip_TCP  ip-TCP
    No value
    h245.NULL

h245.ip_UDP  ip-UDP
    No value
    h245.NULL

h245.is11172AudioCapability  is11172AudioCapability
    No value
    h245.IS11172AudioCapability

h245.is11172AudioMode  is11172AudioMode
    No value
    h245.IS11172AudioMode

h245.is11172VideoCapability  is11172VideoCapability
    No value
    h245.IS11172VideoCapability

h245.is11172VideoMode  is11172VideoMode
    No value
    h245.IS11172VideoMode

h245.is13818AudioCapability  is13818AudioCapability
    No value
    h245.IS13818AudioCapability

h245.is13818AudioMode  is13818AudioMode
    No value
    h245.IS13818AudioMode

h245.isdnOptions  isdnOptions
    Unsigned 32-bit integer
    h245.T_isdnOptions

h245.issueQuery  issueQuery
    No value
    h245.NULL

h245.iv  iv
    Byte array
    h245.OCTET_STRING

h245.iv16  iv16
    Byte array
    h245.IV16
```

```
h245.iv8 iv8
    Byte array
    h245.IV8

h245.jbig200x200Prog jbig200x200Prog
    Boolean
    h245.BOOLEAN

h245.jbig200x200Seq jbig200x200Seq
    Boolean
    h245.BOOLEAN

h245.jbig300x300Prog jbig300x300Prog
    Boolean
    h245.BOOLEAN

h245.jbig300x300Seq jbig300x300Seq
    Boolean
    h245.BOOLEAN

h245.jitterIndication jitterIndication
    No value
    h245.JitterIndication

h245.keyProtectionMethod keyProtectionMethod
    No value
    h245.KeyProtectionMethod

h245.lcse lcse
    No value
    h245.NULL

h245.linesPerFrame linesPerFrame
    Unsigned 32-bit integer
    h245.INTEGER_0_16383

h245.localAreaAddress localAreaAddress
    Unsigned 32-bit integer
    h245.TransportAddress

h245.localQoS localQoS
    Boolean
    h245.BOOLEAN

h245.localTCF localTCF
    No value
    h245.NULL

h245.logical logical
    No value
    h245.NULL

h245.logicalChannelActive logicalChannelActive
    No value
    h245.NULL

h245.logicalChannelInactive logicalChannelInactive
    No value
    h245.NULL

h245.logicalChannelLoop logicalChannelLoop
    Unsigned 32-bit integer
    h245.LogicalChannelNumber
```



```
h245.logicalChannelNumber logicalChannelNumber
    Unsigned 32-bit integer
    h245.T_logicalChannelNum

h245.logicalChannelNumber1 logicalChannelNumber1
    Unsigned 32-bit integer
    h245.LogicalChannelNumber

h245.logicalChannelNumber2 logicalChannelNumber2
    Unsigned 32-bit integer
    h245.LogicalChannelNumber

h245.logicalChannelRateAcknowledge logicalChannelRateAcknowledge
    No value
    h245.LogicalChannelRateAcknowledge

h245.logicalChannelRateReject logicalChannelRateReject
    No value
    h245.LogicalChannelRateReject

h245.logicalChannelRateRelease logicalChannelRateRelease
    No value
    h245.LogicalChannelRateRelease

h245.logicalChannelRateRequest logicalChannelRateRequest
    No value
    h245.LogicalChannelRateRequest

h245.logicalChannelSwitchingCapability logicalChannelSwitchingCapability
    Boolean
    h245.BOOLEAN

h245.longInterleaver longInterleaver
    Boolean
    h245.BOOLEAN

h245.longTermPictureIndex longTermPictureIndex
    Unsigned 32-bit integer
    h245.INTEGER_0_255

h245.loopBackTestCapability loopBackTestCapability
    Boolean
    h245.BOOLEAN

h245.loopbackTestProcedure loopbackTestProcedure
    Boolean
    h245.BOOLEAN

h245.loose loose
    No value
    h245.NULL

h245.lostPartialPicture lostPartialPicture
    No value
    h245.T_lostPartialPicture

h245.lostPicture lostPicture
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_PictureReference

h245.lostPicture_item Item
    Unsigned 32-bit integer
    h245.PictureReference
```

```
h245.lowFrequencyEnhancement lowFrequencyEnhancement
  Boolean
  h245.BOOLEAN

h245.lowRateMode0 lowRateMode0
  Unsigned 32-bit integer
  h245.INTEGER_23_66

h245.lowRateMode1 lowRateMode1
  Unsigned 32-bit integer
  h245.INTEGER_23_66

h245.lowerBitRate lowerBitRate
  Unsigned 32-bit integer
  h245.INTEGER_1_65535

h245.luminanceSampleRate luminanceSampleRate
  Unsigned 32-bit integer
  h245.INTEGER_0_4294967295

h245.mCTerminalIDResponse mCTerminalIDResponse
  No value
  h245.T_mCTerminalIDResponse

h245.mPI mPI
  No value
  h245.T_mPI

h245.mREJCapability mREJCapability
  Boolean
  h245.BOOLEAN

h245.mSREJ mSREJ
  No value
  h245.NULL

h245.maintenanceLoopAck maintenanceLoopAck
  No value
  h245.MaintenanceLoopAck

h245.maintenanceLoopOffCommand maintenanceLoopOffCommand
  No value
  h245.MaintenanceLoopOffCommand

h245.maintenanceLoopReject maintenanceLoopReject
  No value
  h245.MaintenanceLoopReject

h245.maintenanceLoopRequest maintenanceLoopRequest
  No value
  h245.MaintenanceLoopRequest

h245.makeMeChair makeMeChair
  No value
  h245.NULL

h245.makeMeChairResponse makeMeChairResponse
  Unsigned 32-bit integer
  h245.T_makeMeChairResponse

h245.makeTerminalBroadcaster makeTerminalBroadcaster
  No value
  h245.TerminalLabel
```

```
h245.makeTerminalBroadcasterResponse  makeTerminalBroadcasterResponse
    Unsigned 32-bit integer
    h245.T_makeTerminalBroadcasterResponse

h245.manufacturerCode  manufacturerCode
    Unsigned 32-bit integer
    h245.T_manufacturerCode

h245.master  master
    No value
    h245.NULL

h245.masterActivate  masterActivate
    No value
    h245.NULL

h245.masterSlaveConflict  masterSlaveConflict
    No value
    h245.NULL

h245.masterSlaveDetermination  masterSlaveDetermination
    No value
    h245.MasterSlaveDetermination

h245.masterSlaveDeterminationAck  masterSlaveDeterminationAck
    No value
    h245.MasterSlaveDeterminationAck

h245.masterSlaveDeterminationReject  masterSlaveDeterminationReject
    No value
    h245.MasterSlaveDeterminationReject

h245.masterSlaveDeterminationRelease  masterSlaveDeterminationRelease
    No value
    h245.MasterSlaveDeterminationRelease

h245.masterToSlave  masterToSlave
    No value
    h245.NULL

h245.maxAl_sduAudioFrames  maxAl-sduAudioFrames
    Unsigned 32-bit integer
    h245.INTEGER_1_256

h245.maxBitRate  maxBitRate
    Unsigned 32-bit integer
    h245.INTEGER_1_19200

h245.maxCustomPictureHeight  maxCustomPictureHeight
    Unsigned 32-bit integer
    h245.INTEGER_1_2048

h245.maxCustomPictureWidth  maxCustomPictureWidth
    Unsigned 32-bit integer
    h245.INTEGER_1_2048

h245.maxH223MUXPDUsSize  maxH223MUXPDUsSize
    Unsigned 32-bit integer
    h245.INTEGER_1_65535

h245.maxMUXPDUsSizeCapability  maxMUXPDUsSizeCapability
    Boolean
    h245.BOOLEAN
```

```
h245.maxNTUSize maxNTUSize
  Unsigned 32-bit integer
  h245.INTEGER_0_65535

h245.maxNumberOfAdditionalConnections maxNumberOfAdditionalConnections
  Unsigned 32-bit integer
  h245.INTEGER_1_65535

h245.maxPendingReplacementFor maxPendingReplacementFor
  Unsigned 32-bit integer
  h245.INTEGER_0_255

h245.maxPktSize maxPktSize
  Unsigned 32-bit integer
  h245.INTEGER_1_4294967295

h245.maxWindowSizeCapability maxWindowSizeCapability
  Unsigned 32-bit integer
  h245.INTEGER_1_127

h245.maximumAL1MPDUSize maximumAL1MPDUSize
  Unsigned 32-bit integer
  h245.INTEGER_0_65535

h245.maximumAL2MSDUSize maximumAL2MSDUSize
  Unsigned 32-bit integer
  h245.INTEGER_0_65535

h245.maximumAL3MSDUSize maximumAL3MSDUSize
  Unsigned 32-bit integer
  h245.INTEGER_0_65535

h245.maximumAl2SDUSize maximumAl2SDUSize
  Unsigned 32-bit integer
  h245.INTEGER_0_65535

h245.maximumAl3SDUSize maximumAl3SDUSize
  Unsigned 32-bit integer
  h245.INTEGER_0_65535

h245.maximumAudioDelayJitter maximumAudioDelayJitter
  Unsigned 32-bit integer
  h245.INTEGER_0_1023

h245.maximumBitRate maximumBitRate
  Unsigned 32-bit integer
  h245.MaximumBitRate

h245.maximumDelayJitter maximumDelayJitter
  Unsigned 32-bit integer
  h245.INTEGER_0_1023

h245.maximumElementListSize maximumElementListSize
  Unsigned 32-bit integer
  h245.INTEGER_2_255

h245.maximumHeaderInterval maximumHeaderInterval
  No value
  h245.MaximumHeaderIntervalReq

h245.maximumNestingDepth maximumNestingDepth
  Unsigned 32-bit integer
  h245.INTEGER_1_15
```

```
h245.maximumPayloadLength maximumPayloadLength
    Unsigned 32-bit integer
    h245.INTEGER_1_65025

h245.maximumSampleSize maximumSampleSize
    Unsigned 32-bit integer
    h245.INTEGER_1_255

h245.maximumSkew maximumSkew
    Unsigned 32-bit integer
    h245.INTEGER_0_4095

h245.maximumStringLength maximumStringLength
    Unsigned 32-bit integer
    h245.INTEGER_1_256

h245.maximumSubElementListSize maximumSubElementListSize
    Unsigned 32-bit integer
    h245.INTEGER_2_255

h245.mcCapability mcCapability
    No value
    h245.T_mcCapability

h245.mcLocationIndication mcLocationIndication
    No value
    h245.MCLocationIndication

h245.mcuNumber mcuNumber
    Unsigned 32-bit integer
    h245.McuNumber

h245.mediaCapability mediaCapability
    Unsigned 32-bit integer
    h245.CapabilityTableEntryNumber

h245.mediaChannel mediaChannel
    Unsigned 32-bit integer
    h245.T_mediaChannel

h245.mediaChannelCapabilities mediaChannelCapabilities
    Unsigned 32-bit integer
    h245.SEQUENCE_SIZE_1_256_OF_MediaChannelCapability

h245.mediaChannelCapabilities_item Item
    No value
    h245.MediaChannelCapability

h245.mediaControlChannel mediaControlChannel
    Unsigned 32-bit integer
    h245.T_mediaControlChannel

h245.mediaControlGuaranteedDelivery mediaControlGuaranteedDelivery
    Boolean
    h245.BOOLEAN

h245.mediaDistributionCapability mediaDistributionCapability
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_MediaDistributionCapability

h245.mediaDistributionCapability_item Item
    No value
    h245.MediaDistributionCapability
```

```
h245.mediaGuaranteedDelivery  mediaGuaranteedDelivery
    Boolean
    h245.BOOLEAN

h245.mediaLoop  mediaLoop
    Unsigned 32-bit integer
    h245.LogicalChannelNumber

h245.mediaMode  mediaMode
    Unsigned 32-bit integer
    h245.T_mediaMode

h245.mediaPacketization  mediaPacketization
    Unsigned 32-bit integer
    h245.T_mediaPacketization

h245.mediaPacketizationCapability  mediaPacketizationCapability
    No value
    h245.MediaPacketizationCapability

h245.mediaTransport  mediaTransport
    Unsigned 32-bit integer
    h245.MediaTransportType

h245.mediaType  mediaType
    Unsigned 32-bit integer
    h245.T_mediaType

h245.messageContent  messageContent
    Unsigned 32-bit integer
    h245.T_messageContent

h245.messageContent_item  Item
    No value
    h245.T_messageContent_item

h245.messageIdentifier  messageIdentifier
    Unsigned 32-bit integer
    h245.CapabilityIdentifier

h245.minCustomPictureHeight  minCustomPictureHeight
    Unsigned 32-bit integer
    h245.INTEGER_1_2048

h245.minCustomPictureWidth  minCustomPictureWidth
    Unsigned 32-bit integer
    h245.INTEGER_1_2048

h245.minPoliced  minPoliced
    Unsigned 32-bit integer
    h245.INTEGER_1_4294967295

h245.miscellaneousCommand  miscellaneousCommand
    No value
    h245.MiscellaneousCommand

h245.miscellaneousIndication  miscellaneousIndication
    No value
    h245.MiscellaneousIndication

h245.mobile  mobile
    No value
    h245.NULL
```

```
h245.mobileMultilinkFrameCapability  mobileMultilinkFrameCapability
    No value
    h245.T_mobileMultilinkFrameCapability
h245.mobileMultilinkReconfigurationCommand  mobileMultilinkReconfigurationComman
    No value
    h245.MobileMultilinkReconfigurationCommand
h245.mobileMultilinkReconfigurationIndication  mobileMultilinkReconfigurationInd
    No value
    h245.MobileMultilinkReconfigurationIndication
h245.mobileOperationTransmitCapability  mobileOperationTransmitCapability
    No value
    h245.T_mobileOperationTransmitCapability
h245.mode  mode
    Unsigned 32-bit integer
    h245.V76LCP_mode
h245.modeChangeCapability  modeChangeCapability
    Boolean
    h245.BOOLEAN
h245.modeCombos  modeCombos
    Unsigned 32-bit integer
    h245.SET_SIZE_1_16_OF_H263VideoModeCombos
h245.modeCombos_item  Item
    No value
    h245.H263VideoModeCombos
h245.modeUnavailable  modeUnavailable
    No value
    h245.NULL
h245.modifiedQuantizationMode  modifiedQuantizationMode
    Boolean
    h245.BOOLEAN
h245.mpuHorizMBS  mpuHorizMBS
    Unsigned 32-bit integer
    h245.INTEGER_1_128
h245.mpuTotalNumber  mpuTotalNumber
    Unsigned 32-bit integer
    h245.INTEGER_1_65536
h245.mpuVertMBS  mpuVertMBS
    Unsigned 32-bit integer
    h245.INTEGER_1_72
h245.multiUniCastConference  multiUniCastConference
    Boolean
    h245.BOOLEAN
h245.multicast  multicast
    No value
    h245.NULL
h245.multicastAddress  multicastAddress
    Unsigned 32-bit integer
    h245.MulticastAddress
```

```
h245.multicastCapability multicastCapability
  Boolean
  h245.BOOLEAN

h245.multicastChannelNotAllowed multicastChannelNotAllowed
  No value
  h245.NULL

h245.multichannelType multichannelType
  Unsigned 32-bit integer
  h245.IS11172_multichannelType

h245.multilingual multilingual
  Boolean
  h245.BOOLEAN

h245.multilinkIndication multilinkIndication
  Unsigned 32-bit integer
  h245.MultilinkIndication

h245.multilinkRequest multilinkRequest
  Unsigned 32-bit integer
  h245.MultilinkRequest

h245.multilinkResponse multilinkResponse
  Unsigned 32-bit integer
  h245.MultilinkResponse

h245.multiplePayloadStream multiplePayloadStream
  No value
  h245.MultiplePayloadStream

h245.multiplePayloadStreamCapability multiplePayloadStreamCapability
  No value
  h245.MultiplePayloadStreamCapability

h245.multiplePayloadStreamMode multiplePayloadStreamMode
  No value
  h245.MultiplePayloadStreamMode

h245.multiplex multiplex
  Unsigned 32-bit integer
  h245.Cmd_multiplex

h245.multiplexCapability multiplexCapability
  Unsigned 32-bit integer
  h245.MultiplexCapability

h245.multiplexEntryDescriptors multiplexEntryDescriptors
  Unsigned 32-bit integer
  h245.SET_SIZE_1_15_OF_MultiplexEntryDescriptor

h245.multiplexEntryDescriptors_item Item
  No value
  h245.MultiplexEntryDescriptor

h245.multiplexEntrySend multiplexEntrySend
  No value
  h245.MultiplexEntrySend

h245.multiplexEntrySendAck multiplexEntrySendAck
  No value
  h245.MultiplexEntrySendAck
```



```
h245.multiplexEntrySendReject multiplexEntrySendReject
    No value
    h245.MultiplexEntrySendReject
h245.multiplexEntrySendRelease multiplexEntrySendRelease
    No value
    h245.MultiplexEntrySendRelease
h245.multiplexFormat multiplexFormat
    Unsigned 32-bit integer
    h245.MultiplexFormat
h245.multiplexParameters multiplexParameters
    Unsigned 32-bit integer
    h245.OLC_forw_multiplexParameters
h245.multiplexTableEntryNumber multiplexTableEntryNumber
    Unsigned 32-bit integer
    h245.MultiplexTableEntryNumber
h245.multiplexTableEntryNumber_item Item
    Unsigned 32-bit integer
    h245.MultiplexTableEntryNumber
h245.multiplexedStream multiplexedStream
    No value
    h245.MultiplexedStreamParameter
h245.multiplexedStreamMode multiplexedStreamMode
    No value
    h245.MultiplexedStreamParameter
h245.multiplexedStreamModeParameters multiplexedStreamModeParameters
    No value
    h245.MultiplexedStreamModeParameters
h245.multipointConference multipointConference
    No value
    h245.NULL
h245.multipointConstraint multipointConstraint
    No value
    h245.NULL
h245.multipointModeCommand multipointModeCommand
    No value
    h245.NULL
h245.multipointSecondaryStatus multipointSecondaryStatus
    No value
    h245.NULL
h245.multipointVisualizationCapability multipointVisualizationCapability
    Boolean
    h245.BOOLEAN
h245.multipointZeroComm multipointZeroComm
    No value
    h245.NULL
h245.n401 n401
    Unsigned 32-bit integer
    h245.INTEGER_1_4095
```

```
h245.n401Capability n401Capability
    Unsigned 32-bit integer
    h245.INTEGER_1_4095

h245.n_isdn n-isdn
    No value
    h245.NULL

h245.nackMessageOnly nackMessageOnly
    No value
    h245.NULL

h245.netBios netBios
    Byte array
    h245.OCTET_STRING_SIZE_16

h245.netnum netnum
    Byte array
    h245.OCTET_STRING_SIZE_4

h245.network network
    IPv4 address
    h245.Ipv4_network

h245.networkAddress networkAddress
    Unsigned 32-bit integer
    h245.T_networkAddress

h245.networkType networkType
    Unsigned 32-bit integer
    h245.SET_SIZE_1_255_OF_DialingInformationNetworkType

h245.networkType_item Item
    Unsigned 32-bit integer
    h245.DialingInformationNetworkType

h245.newATMVCCCommand newATMVCCCommand
    No value
    h245.NewATMVCCCommand

h245.newATMVCIndication newATMVCIndication
    No value
    h245.NewATMVCIndication

h245.nextPictureHeaderRepetition nextPictureHeaderRepetition
    Boolean
    h245.BOOLEAN

h245.nlpid nlpid
    No value
    h245.Nlpid

h245.nlpidData nlpidData
    Byte array
    h245.OCTET_STRING

h245.nlpidProtocol nlpidProtocol
    Unsigned 32-bit integer
    h245.DataProtocolCapability

h245.noArq noArq
    No value
    h245.NULL
```

```
h245.noMultiplex  noMultiplex
  No value
  h245.NULL

h245.noRestriction  noRestriction
  No value
  h245.NULL

h245.noSilenceSuppressionHighRate  noSilenceSuppressionHighRate
  No value
  h245.NULL

h245.noSilenceSuppressionLowRate  noSilenceSuppressionLowRate
  No value
  h245.NULL

h245.noSuspendResume  noSuspendResume
  No value
  h245.NULL

h245.node  node
  Byte array
  h245.OCTET_STRING_SIZE_6

h245.nonCollapsing  nonCollapsing
  Unsigned 32-bit integer
  h245.T_nonCollapsing

h245.nonCollapsingRaw  nonCollapsingRaw
  Byte array
  h245.T_nonCollapsingRaw

h245.nonCollapsing_item  Item
  No value
  h245.T_nonCollapsing_item

h245.nonStandard  nonStandard
  No value
  h245.NonStandardMessage

h245.nonStandardAddress  nonStandardAddress
  No value
  h245.NonStandardParameter

h245.nonStandardData  nonStandardData
  No value
  h245.NonStandardParameter

h245.nonStandardData_item  Item
  No value
  h245.NonStandardParameter

h245.nonStandardIdentifier  nonStandardIdentifier
  Unsigned 32-bit integer
  h245.NonStandardIdentifier

h245.nonStandardParameter  nonStandardParameter
  No value
  h245.NonStandardParameter

h245.nonStandard_item  Item
  No value
  h245.NonStandardParameter
```

```
h245.none none
    No value
    h245.NULL

h245.noneProcessed noneProcessed
    No value
    h245.NULL

h245.normal normal
    No value
    h245.NULL

h245.nsap nsap
    Byte array
    h245.OCTET_STRING_SIZE_1_20

h245.nsapAddress nsapAddress
    Byte array
    h245.OCTET_STRING_SIZE_1_20

h245.nsrpSupport nsrpSupport
    Boolean
    h245.BOOLEAN

h245.nullClockRecovery nullClockRecovery
    Boolean
    h245.BOOLEAN

h245.nullData nullData
    No value
    h245.NULL

h245.nullErrorCorrection nullErrorCorrection
    Boolean
    h245.BOOLEAN

h245.numOfDLCS numOfDLCS
    Unsigned 32-bit integer
    h245.INTEGER_2_8191

h245.numberOfBPictures numberOfBPictures
    Unsigned 32-bit integer
    h245.INTEGER_1_64

h245.numberOfCodewords numberOfCodewords
    Unsigned 32-bit integer
    h245.INTEGER_1_65536

h245.numberOfGOBs numberOfGOBs
    Unsigned 32-bit integer
    h245.INTEGER_1_18

h245.numberOfMBs numberOfMBs
    Unsigned 32-bit integer
    h245.INTEGER_1_8192

h245.numberOfRetransmissions numberOfRetransmissions
    Unsigned 32-bit integer
    h245.T_numberOfRetransmissions

h245.numberOfThreads numberOfThreads
    Unsigned 32-bit integer
    h245.INTEGER_1_16
```

```
h245.numberOfVCs  numberOfVCs
    Unsigned 32-bit integer
    h245.INTEGER_1_256

h245.object  object
    h245.T_object

h245.octetString  octetString
    Unsigned 32-bit integer
    h245.T_octetString

h245.offset_x  offset-x
    Signed 32-bit integer
    h245.INTEGER_M262144_262143

h245.offset_y  offset-y
    Signed 32-bit integer
    h245.INTEGER_M262144_262143

h245.oid  oid
    h245.OBJECT_IDENTIFIER

h245.oneOfCapabilities  oneOfCapabilities
    Unsigned 32-bit integer
    h245.AlternativeCapabilitySet

h245.openLogicalChannel  openLogicalChannel
    No value
    h245.OpenLogicalChannel

h245.openLogicalChannelAck  openLogicalChannelAck
    No value
    h245.OpenLogicalChannelAck

h245.openLogicalChannelConfirm  openLogicalChannelConfirm
    No value
    h245.OpenLogicalChannelConfirm

h245.openLogicalChannelReject  openLogicalChannelReject
    No value
    h245.OpenLogicalChannelReject

h245.originateCall  originateCall
    No value
    h245.NULL

h245.paramS  paramS
    No value
    h245.Params

h245.parameterIdentifier  parameterIdentifier
    Unsigned 32-bit integer
    h245.ParameterIdentifier

h245.parameterValue  parameterValue
    Unsigned 32-bit integer
    h245.ParameterValue

h245.partialPictureFreezeAndRelease  partialPictureFreezeAndRelease
    Boolean
    h245.BOOLEAN
```

```
h245.partialPictureSnapshot  partialPictureSnapshot
    Boolean
    h245.BOOLEAN

h245.partiallyFilledCells  partiallyFilledCells
    Boolean
    h245.BOOLEAN

h245.password  password
    Byte array
    h245.Password

h245.passwordResponse  passwordResponse
    No value
    h245.T_passwordResponse

h245.payloadDescriptor  payloadDescriptor
    Unsigned 32-bit integer
    h245.T_payloadDescriptor

h245.payloadType  payloadType
    Unsigned 32-bit integer
    h245.T_payloadType

h245.pbFrames  pbFrames
    Boolean
    h245.BOOLEAN

h245.pcr_pid  pcr-pid
    Unsigned 32-bit integer
    h245.INTEGER_0_8191

h245.pdu_type  PDU Type
    Unsigned 32-bit integer
    Type of H.245 PDU

h245.peakRate  peakRate
    Unsigned 32-bit integer
    h245.INTEGER_1_4294967295

h245.pictureNumber  pictureNumber
    Boolean
    h245.BOOLEAN

h245.pictureRate  pictureRate
    Unsigned 32-bit integer
    h245.INTEGER_0_15

h245.pictureReference  pictureReference
    Unsigned 32-bit integer
    h245.PictureReference

h245.pixelAspectCode  pixelAspectCode
    Unsigned 32-bit integer
    h245.T_pixelAspectCode

h245.pixelAspectCode_item  Item
    Unsigned 32-bit integer
    h245.INTEGER_1_14

h245.pixelAspectInformation  pixelAspectInformation
    Unsigned 32-bit integer
    h245.T_pixelAspectInformation
```

```
h245.pktMode      pktMode
  Unsigned 32-bit integer
  h245.T_pktMode

h245.portNumber   portNumber
  Unsigned 32-bit integer
  h245.INTEGER_0_65535

h245.presentationOrder presentationOrder
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.previousPictureHeaderRepetition previousPictureHeaderRepetition
  Boolean
  h245.BOOLEAN

h245.primary      primary
  No value
  h245.RedundancyEncodingElement

h245.primaryEncoding primaryEncoding
  Unsigned 32-bit integer
  h245.CapabilityTableEntryNumber

h245.productNumber productNumber
  String
  h245.OCTET_STRING_SIZE_1_256

h245.profileAndLevel profileAndLevel
  Unsigned 32-bit integer
  h245.T_profileAndLevel

h245.profileAndLevel_HPatHL profileAndLevel-HPatHL
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_HPatH_14 profileAndLevel-HPatH-14
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_HPatML profileAndLevel-HPatML
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_MPatHL profileAndLevel-MPatHL
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_MPatH_14 profileAndLevel-MPatH-14
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_MPatLL profileAndLevel-MPatLL
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_MPatML profileAndLevel-MPatML
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_SNRatLL profileAndLevel-SNRatLL
  Boolean
  h245.BOOLEAN
```

```
h245.profileAndLevel_SNRatML  profileAndLevel-SNRatML
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_SPatML  profileAndLevel-SPatML
  Boolean
  h245.BOOLEAN

h245.profileAndLevel_SpatialatH_14  profileAndLevel-SpatialatH-14
  Boolean
  h245.BOOLEAN

h245.programDescriptors  programDescriptors
  Byte array
  h245.OCTET_STRING

h245.programStream  programStream
  Boolean
  h245.BOOLEAN

h245.progressiveRefinement  progressiveRefinement
  Boolean
  h245.BOOLEAN

h245.progressiveRefinementAbortContinuous  progressiveRefinementAbortContinuous
  No value
  h245.NULL

h245.progressiveRefinementAbortOne  progressiveRefinementAbortOne
  No value
  h245.NULL

h245.progressiveRefinementStart  progressiveRefinementStart
  No value
  h245.T_progressiveRefinementStart

h245.protectedCapability  protectedCapability
  Unsigned 32-bit integer
  h245.CapabilityTableEntryNumber

h245.protectedChannel  protectedChannel
  Unsigned 32-bit integer
  h245.LogicalChannelNumber

h245.protectedElement  protectedElement
  Unsigned 32-bit integer
  h245.ModeElementType

h245.protectedPayloadType  protectedPayloadType
  Unsigned 32-bit integer
  h245.INTEGER_0_127

h245.protectedSessionID  protectedSessionID
  Unsigned 32-bit integer
  h245.INTEGER_1_255

h245.protocolIdentifier  protocolIdentifier
  h245.OBJECT_IDENTIFIER

h245.q2931Address  q2931Address
  No value
  h245.Q2931Address
```



```
h245.qOSCapabilities qOSCapabilities
  Unsigned 32-bit integer
  h245.SEQUENCE_SIZE_1_256_OF_QOSCapability

h245.qOSCapabilities_item Item
  No value
  h245.QOSCapability

h245.qcif qcif
  Boolean
  h245.BOOLEAN

h245.qcifAdditionalPictureMemory qcifAdditionalPictureMemory
  Unsigned 32-bit integer
  h245.INTEGER_1_256

h245.qcifMPI qcifMPI
  Unsigned 32-bit integer
  h245.INTEGER_1_4

h245.qosCapability qosCapability
  No value
  h245.QOSCapability

h245.qosClass qosClass
  Unsigned 32-bit integer
  h245.QOSClass

h245.qosDescriptor qosDescriptor
  No value
  h245.QOSDescriptor

h245.qosMode qosMode
  Unsigned 32-bit integer
  h245.QOSMode

h245.qosType qosType
  Unsigned 32-bit integer
  h245.QOSType

h245.rangeOfBitRates rangeOfBitRates
  No value
  h245.T_rangeOfBitRates

h245.rcpcCodeRate rcpcCodeRate
  Unsigned 32-bit integer
  h245.INTEGER_8_32

h245.reason reason
  Unsigned 32-bit integer
  h245.Clc_reason

h245.receiveAndTransmitAudioCapability receiveAndTransmitAudioCapability
  Unsigned 32-bit integer
  h245.AudioCapability

h245.receiveAndTransmitDataApplicationCapability receiveAndTransmitDataApplicat
  No value
  h245.DataApplicationCapability

h245.receiveAndTransmitMultiplexedStreamCapability receiveAndTransmitMultiplexe
  No value
  h245.MultiplexedStreamCapability
```

```
h245.receiveAndTransmitMultipointCapability receiveAndTransmitMultipointCapabil
  No value
  h245.MultipointCapability
h245.receiveAndTransmitUserInputCapability receiveAndTransmitUserInputCapabilit
  Unsigned 32-bit integer
  h245.UserInputCapability
h245.receiveAndTransmitVideoCapability receiveAndTransmitVideoCapability
  Unsigned 32-bit integer
  h245.VideoCapability
h245.receiveAudioCapability receiveAudioCapability
  Unsigned 32-bit integer
  h245.AudioCapability
h245.receiveCompression receiveCompression
  Unsigned 32-bit integer
  h245.CompressionType
h245.receiveDataApplicationCapability receiveDataApplicationCapability
  No value
  h245.DataApplicationCapability
h245.receiveMultiplexedStreamCapability receiveMultiplexedStreamCapability
  No value
  h245.MultiplexedStreamCapability
h245.receiveMultipointCapability receiveMultipointCapability
  No value
  h245.MultipointCapability
h245.receiveRTPAudioTelephonyEventCapability receiveRTPAudioTelephonyEventCapab
  No value
  h245.AudioTelephonyEventCapability
h245.receiveRTPAudioToneCapability receiveRTPAudioToneCapability
  No value
  h245.AudioToneCapability
h245.receiveUserInputCapability receiveUserInputCapability
  Unsigned 32-bit integer
  h245.UserInputCapability
h245.receiveVideoCapability receiveVideoCapability
  Unsigned 32-bit integer
  h245.VideoCapability
h245.reconfiguration reconfiguration
  No value
  h245.NULL
h245.recovery recovery
  Unsigned 32-bit integer
  h245.T_recovery
h245.recoveryReferencePicture recoveryReferencePicture
  Unsigned 32-bit integer
  h245.SEQUENCE_OF_PictureReference
h245.recoveryReferencePicture_item Item
  Unsigned 32-bit integer
  h245.PictureReference
```

```
h245.reducedResolutionUpdate reducedResolutionUpdate
    Boolean
    h245.BOOLEAN

h245.redundancyEncoding redundancyEncoding
    Boolean
    h245.BOOLEAN

h245.redundancyEncodingCap redundancyEncodingCap
    No value
    h245.RedundancyEncodingCapability

h245.redundancyEncodingCapability redundancyEncodingCapability
    Unsigned 32-bit integer
    h245.SEQUENCE_SIZE_1_256_OF_RedundancyEncodingCapability

h245.redundancyEncodingCapability_item Item
    No value
    h245.RedundancyEncodingCapability

h245.redundancyEncodingDTMode redundancyEncodingDTMode
    No value
    h245.RedundancyEncodingDTMode

h245.redundancyEncodingMethod redundancyEncodingMethod
    Unsigned 32-bit integer
    h245.RedundancyEncodingMethod

h245.redundancyEncodingMode redundancyEncodingMode
    No value
    h245.RedundancyEncodingMode

h245.refPictureSelection refPictureSelection
    No value
    h245.RefPictureSelection

h245.referencePicSelect referencePicSelect
    Boolean
    h245.BOOLEAN

h245.rej rej
    No value
    h245.NULL

h245.rejCapability rejCapability
    Boolean
    h245.BOOLEAN

h245.reject reject
    Unsigned 32-bit integer
    h245.T_reject

h245.rejectReason rejectReason
    Unsigned 32-bit integer
    h245.LogicalChannelRateRejectReason

h245.rejected rejected
    Unsigned 32-bit integer
    h245.T_rejected

h245.rejectionDescriptions rejectionDescriptions
    Unsigned 32-bit integer
    h245.SET_SIZE_1_15_OF_MultiplexEntryRejectionDescriptions
```

```
h245.rejectionDescriptions_item  Item
    No value
    h245.MultiplexEntryRejectionDescriptions
h245.remoteMCRequest  remoteMCRequest
    Unsigned 32-bit integer
    h245.RemoteMCRequest
h245.remoteMCResponse  remoteMCResponse
    Unsigned 32-bit integer
    h245.RemoteMCResponse
h245.removeConnection  removeConnection
    No value
    h245.RemoveConnectionReq
h245.reopen  reopen
    No value
    h245.NULL
h245.repeatCount  repeatCount
    Unsigned 32-bit integer
    h245.ME_repeatCount
h245.replacementFor  replacementFor
    Unsigned 32-bit integer
    h245.LogicalChannelNumber
h245.replacementForRejected  replacementForRejected
    No value
    h245.NULL
h245.request  request
    Unsigned 32-bit integer
    h245.RequestMessage
h245.requestAllTerminalIDs  requestAllTerminalIDs
    No value
    h245.NULL
h245.requestAllTerminalIDsResponse  requestAllTerminalIDsResponse
    No value
    h245.RequestAllTerminalIDsResponse
h245.requestChairTokenOwner  requestChairTokenOwner
    No value
    h245.NULL
h245.requestChannelClose  requestChannelClose
    No value
    h245.RequestChannelClose
h245.requestChannelCloseAck  requestChannelCloseAck
    No value
    h245.RequestChannelCloseAck
h245.requestChannelCloseReject  requestChannelCloseReject
    No value
    h245.RequestChannelCloseReject
h245.requestChannelCloseRelease  requestChannelCloseRelease
    No value
    h245.RequestChannelCloseRelease
```

```
h245.requestDenied requestDenied
    No value
    h245.NULL

h245.requestForFloor requestForFloor
    No value
    h245.NULL

h245.requestMode requestMode
    No value
    h245.RequestMode

h245.requestModeAck requestModeAck
    No value
    h245.RequestModeAck

h245.requestModeReject requestModeReject
    No value
    h245.RequestModeReject

h245.requestModeRelease requestModeRelease
    No value
    h245.RequestModeRelease

h245.requestMultiplexEntry requestMultiplexEntry
    No value
    h245.RequestMultiplexEntry

h245.requestMultiplexEntryAck requestMultiplexEntryAck
    No value
    h245.RequestMultiplexEntryAck

h245.requestMultiplexEntryReject requestMultiplexEntryReject
    No value
    h245.RequestMultiplexEntryReject

h245.requestMultiplexEntryRelease requestMultiplexEntryRelease
    No value
    h245.RequestMultiplexEntryRelease

h245.requestTerminalCertificate requestTerminalCertificate
    No value
    h245.T_requestTerminalCertificate

h245.requestTerminalID requestTerminalID
    No value
    h245.TerminalLabel

h245.requestType requestType
    Unsigned 32-bit integer
    h245.T_requestType

h245.requestedInterval requestedInterval
    Unsigned 32-bit integer
    h245.INTEGER_0_65535

h245.requestedModes requestedModes
    Unsigned 32-bit integer
    h245.SEQUENCE_SIZE_1_256_OF_ModeDescription

h245.requestedModes_item Item
    Unsigned 32-bit integer
    h245.ModeDescription
```

```
h245.required    required
                 No value
                 h245.NULL

h245.reservationFailure reservationFailure
                 No value
                 h245.NULL

h245.resizingPartPicFreezeAndRelease resizingPartPicFreezeAndRelease
                 Boolean
                 h245.BOOLEAN

h245.resolution  resolution
                 Unsigned 32-bit integer
                 h245.H261Resolution

h245.resourceID  resourceID
                 Unsigned 32-bit integer
                 h245.INTEGER_0_65535

h245.response    response
                 Unsigned 32-bit integer
                 h245.ResponseMessage

h245.responseCode responseCode
                 Unsigned 32-bit integer
                 h245.T_responseCode

h245.restriction restriction
                 Unsigned 32-bit integer
                 h245.Restriction

h245.returnedFunction returnedFunction
                 Byte array
                 h245.T_returnedFunction

h245.reverseLogicalChannelDependency reverseLogicalChannelDependency
                 Unsigned 32-bit integer
                 h245.LogicalChannelNumber

h245.reverseLogicalChannelNumber reverseLogicalChannelNumber
                 Unsigned 32-bit integer
                 h245.T_reverseLogicalChannelNumber

h245.reverseLogicalChannelParameters reverseLogicalChannelParameters
                 No value
                 h245.OLC_reverseLogicalChannelParameters

h245.reverseParameters reverseParameters
                 No value
                 h245.Cmd_reverseParameters

h245.rfc2198coding rfc2198coding
                 No value
                 h245.NULL

h245.rfc2733     rfc2733
                 No value
                 h245.FECC_rfc2733

h245.rfc2733Format rfc2733Format
                 Unsigned 32-bit integer
                 h245.Rfc2733Format
```

```
h245.rfc2733Mode  rfc2733Mode
    No value
    h245.T_rfc2733Mode

h245.rfc2733diffport  rfc2733diffport
    Unsigned 32-bit integer
    h245.MaxRedundancy

h245.rfc2733rfc2198  rfc2733rfc2198
    Unsigned 32-bit integer
    h245.MaxRedundancy

h245.rfc2733sameport  rfc2733sameport
    Unsigned 32-bit integer
    h245.MaxRedundancy

h245.rfc_number  rfc-number
    Unsigned 32-bit integer
    h245.T_rfc_number

h245.roundTripDelayRequest  roundTripDelayRequest
    No value
    h245.RoundTripDelayRequest

h245.roundTripDelayResponse  roundTripDelayResponse
    No value
    h245.RoundTripDelayResponse

h245.roundrobin  roundrobin
    No value
    h245.NULL

h245.route  route
    Unsigned 32-bit integer
    h245.T_route

h245.route_item  Item
    Byte array
    h245.OCTET_STRING_SIZE_4

h245.routing  routing
    Unsigned 32-bit integer
    h245.T_routing

h245.rsCodeCapability  rsCodeCapability
    Boolean
    h245.BOOLEAN

h245.rsCodeCorrection  rsCodeCorrection
    Unsigned 32-bit integer
    h245.INTEGER_0_127

h245.rsvpParameters  rsvpParameters
    No value
    h245.RSVPPParameters

h245.rtcpVideoControlCapability  rtcpVideoControlCapability
    Boolean
    h245.BOOLEAN

h245.rtp  rtp
    No value
    h245.T_rtp
```

```
h245.rtpAudioRedundancyEncoding rtpAudioRedundancyEncoding
  No value
  h245.NULL

h245.rtpH263VideoRedundancyEncoding rtpH263VideoRedundancyEncoding
  No value
  h245.RTPH263VideoRedundancyEncoding

h245.rtpPayloadIndication rtpPayloadIndication
  No value
  h245.NULL

h245.rtpPayloadType rtpPayloadType
  Unsigned 32-bit integer
  h245.SEQUENCE_SIZE_1_256_OF_RTPPayloadType

h245.rtpPayloadType_item Item
  No value
  h245.RTPPayloadType

h245.rtpRedundancyEncoding rtpRedundancyEncoding
  No value
  h245.T_rtpRedundancyEncoding

h245.sREJ sREJ
  No value
  h245.NULL

h245.sREJCapability sREJCapability
  Boolean
  h245.BOOLEAN

h245.sRandom sRandom
  Unsigned 32-bit integer
  h245.INTEGER_1_4294967295

h245.samePort samePort
  Boolean
  h245.BOOLEAN

h245.sampleSize sampleSize
  Unsigned 32-bit integer
  h245.INTEGER_1_255

h245.samplesPerFrame samplesPerFrame
  Unsigned 32-bit integer
  h245.INTEGER_1_255

h245.samplesPerLine samplesPerLine
  Unsigned 32-bit integer
  h245.INTEGER_0_16383

h245.sbeNumber sbeNumber
  Unsigned 32-bit integer
  h245.INTEGER_0_9

h245.scale_x scale-x
  Unsigned 32-bit integer
  h245.INTEGER_1_255

h245.scale_y scale-y
  Unsigned 32-bit integer
  h245.INTEGER_1_255
```



```
h245.scope scope
    Unsigned 32-bit integer
    h245.Scope

h245.scrambled scrambled
    Boolean
    h245.BOOLEAN

h245.sebch16_5 sebch16-5
    No value
    h245.NULL

h245.sebch16_7 sebch16-7
    No value
    h245.NULL

h245.secondary secondary
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_RedundancyEncodingElement

h245.secondaryEncoding secondaryEncoding
    Unsigned 32-bit integer
    h245.SEQUENCE_SIZE_1_256_OF_CapabilityTableEntryNumber

h245.secondaryEncoding_item Item
    Unsigned 32-bit integer
    h245.CapabilityTableEntryNumber

h245.secondary_item Item
    No value
    h245.RedundancyEncodingElement

h245.secureChannel secureChannel
    Boolean
    h245.BOOLEAN

h245.secureDTMF secureDTMF
    No value
    h245.NULL

h245.securityDenied securityDenied
    No value
    h245.NULL

h245.seenByAll seenByAll
    No value
    h245.NULL

h245.seenByAtLeastOneOther seenByAtLeastOneOther
    No value
    h245.NULL

h245.segmentableFlag segmentableFlag
    Boolean
    h245.T_h223_lc_segmentableFlag

h245.segmentationAndReassembly segmentationAndReassembly
    No value
    h245.NULL

h245.semanticError semanticError
    No value
    h245.NULL
```

```
h245.sendBufferSize  sendBufferSize
    Unsigned 32-bit integer
    h245.T_al3_sendBufferSize

h245.sendTerminalCapabilitySet  sendTerminalCapabilitySet
    Unsigned 32-bit integer
    h245.SendTerminalCapabilitySet

h245.sendThisSource  sendThisSource
    No value
    h245.TerminalLabel

h245.sendThisSourceResponse  sendThisSourceResponse
    Unsigned 32-bit integer
    h245.T_sendThisSourceResponse

h245.separateLANStack  separateLANStack
    No value
    h245.NULL

h245.separatePort  separatePort
    Boolean
    h245.BOOLEAN

h245.separateStack  separateStack
    No value
    h245.NetworkAccessParameters

h245.separateStackEstablishmentFailed  separateStackEstablishmentFailed
    No value
    h245.NULL

h245.separateStream  separateStream
    No value
    h245.T_separateStreamBool

h245.separateVideoBackChannel  separateVideoBackChannel
    Boolean
    h245.BOOLEAN

h245.sequenceNumber  sequenceNumber
    Unsigned 32-bit integer
    h245.SequenceNumber

h245.servicePriority  servicePriority
    No value
    h245.ServicePriority

h245.servicePrioritySignalled  servicePrioritySignalled
    Boolean
    h245.BOOLEAN

h245.servicePriorityValue  servicePriorityValue
    No value
    h245.ServicePriorityValue

h245.sessionDependency  sessionDependency
    Unsigned 32-bit integer
    h245.INTEGER_1_255

h245.sessionDescription  sessionDescription
    String
    h245.BMPString_SIZE_1_128
```

```
h245.sessionID sessionID
    Unsigned 32-bit integer
    h245.INTEGER_0_255

h245.sharedSecret sharedSecret
    Boolean
    h245.BOOLEAN

h245.shortInterleaver shortInterleaver
    Boolean
    h245.BOOLEAN

h245.sidMode0 sidMode0
    Unsigned 32-bit integer
    h245.INTEGER_6_17

h245.sidModel1 sidModel1
    Unsigned 32-bit integer
    h245.INTEGER_6_17

h245.signal signal
    No value
    h245.T_signal

h245.signalAddress signalAddress
    Unsigned 32-bit integer
    h245.TransportAddress

h245.signalType signalType
    String
    h245.T_signalType

h245.signalUpdate signalUpdate
    No value
    h245.T_signalUpdate

h245.silenceSuppression silenceSuppression
    Boolean
    h245.BOOLEAN

h245.silenceSuppressionHighRate silenceSuppressionHighRate
    No value
    h245.NULL

h245.silenceSuppressionLowRate silenceSuppressionLowRate
    No value
    h245.NULL

h245.simultaneousCapabilities simultaneousCapabilities
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_AlternativeCapabilitySet

h245.simultaneousCapabilities_item Item
    Unsigned 32-bit integer
    h245.AlternativeCapabilitySet

h245.singleBitRate singleBitRate
    Unsigned 32-bit integer
    h245.INTEGER_1_65535

h245.singleChannel singleChannel
    Boolean
    h245.BOOLEAN
```

```
h245.skew skew
  Unsigned 32-bit integer
  h245.INTEGER_0_4095

h245.skippedFrameCount skippedFrameCount
  Unsigned 32-bit integer
  h245.INTEGER_0_15

h245.slave slave
  No value
  h245.NULL

h245.slaveActivate slaveActivate
  No value
  h245.NULL

h245.slaveToMaster slaveToMaster
  No value
  h245.NULL

h245.slicesInOrder_NonRect slicesInOrder-NonRect
  Boolean
  h245.BOOLEAN

h245.slicesInOrder_Rect slicesInOrder-Rect
  Boolean
  h245.BOOLEAN

h245.slicesNoOrder_NonRect slicesNoOrder-NonRect
  Boolean
  h245.BOOLEAN

h245.slicesNoOrder_Rect slicesNoOrder-Rect
  Boolean
  h245.BOOLEAN

h245.slowCif16MPI slowCif16MPI
  Unsigned 32-bit integer
  h245.INTEGER_1_3600

h245.slowCif4MPI slowCif4MPI
  Unsigned 32-bit integer
  h245.INTEGER_1_3600

h245.slowCifMPI slowCifMPI
  Unsigned 32-bit integer
  h245.INTEGER_1_3600

h245.slowQcifMPI slowQcifMPI
  Unsigned 32-bit integer
  h245.INTEGER_1_3600

h245.slowSqcifMPI slowSqcifMPI
  Unsigned 32-bit integer
  h245.INTEGER_1_3600

h245.snrEnhancement snrEnhancement
  Unsigned 32-bit integer
  h245.SET_SIZE_1_14_OF_EnhancementOptions

h245.snrEnhancement_item Item
  No value
  h245.EnhancementOptions
```

```
h245.source source
    No value
    h245.TerminalLabel

h245.spareReferencePictures spareReferencePictures
    Boolean
    h245.BOOLEAN

h245.spatialEnhancement spatialEnhancement
    Unsigned 32-bit integer
    h245.SET_SIZE_1_14_OF_EnhancementOptions

h245.spatialEnhancement_item Item
    No value
    h245.EnhancementOptions

h245.specificRequest specificRequest
    No value
    h245.T_specificRequest

h245.sqcif sqcif
    No value
    h245.NULL

h245.sqcifAdditionalPictureMemory sqcifAdditionalPictureMemory
    Unsigned 32-bit integer
    h245.INTEGER_1_256

h245.sqcifMPI sqcifMPI
    Unsigned 32-bit integer
    h245.INTEGER_1_32

h245.srtsClockRecovery srtsClockRecovery
    Boolean
    h245.BOOLEAN

h245.standard standard
    h245.T_standardOid

h245.standardMPI standardMPI
    Unsigned 32-bit integer
    h245.INTEGER_1_31

h245.start start
    No value
    h245.NULL

h245.status status
    Unsigned 32-bit integer
    h245.T_status

h245.statusDeterminationNumber statusDeterminationNumber
    Unsigned 32-bit integer
    h245.INTEGER_0_16777215

h245.stillImageTransmission stillImageTransmission
    Boolean
    h245.BOOLEAN

h245.stop stop
    No value
    h245.NULL
```

```
h245.streamDescriptors  streamDescriptors
    Byte array
    h245.OCTET_STRING

h245.strict  strict
    No value
    h245.NULL

h245.structuredDataTransfer  structuredDataTransfer
    Boolean
    h245.BOOLEAN

h245.subAddress  subAddress
    String
    h245.IA5String_SIZE_1_40

h245.subChannelID  subChannelID
    Unsigned 32-bit integer
    h245.INTEGER_0_8191

h245.subElementList  subElementList
    Unsigned 32-bit integer
    h245.T_subElementList

h245.subElementList_item  Item
    No value
    h245.MultiplexElement

h245.subMessageIdentifier  subMessageIdentifier
    Unsigned 32-bit integer
    h245.T_subMessageIdentifier

h245.subPictureNumber  subPictureNumber
    Unsigned 32-bit integer
    h245.INTEGER_0_255

h245.subPictureRemovalParameters  subPictureRemovalParameters
    No value
    h245.T_subPictureRemovalParameters

h245.subaddress  subaddress
    Byte array
    h245.OCTET_STRING_SIZE_1_20

h245.substituteConferenceIDCommand  substituteConferenceIDCommand
    No value
    h245.SubstituteConferenceIDCommand

h245.supersedes  supersedes
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_ParameterIdentifier

h245.supersedes_item  Item
    Unsigned 32-bit integer
    h245.ParameterIdentifier

h245.suspendResume  suspendResume
    Unsigned 32-bit integer
    h245.T_suspendResume

h245.suspendResumeCapabilitywAddress  suspendResumeCapabilitywAddress
    Boolean
    h245.BOOLEAN
```

```
h245.suspendResumeCapabilitywoAddress  suspendResumeCapabilitywoAddress
Boolean
h245.BOOLEAN

h245.suspendResumewAddress  suspendResumewAddress
No value
h245.NULL

h245.suspendResumewoAddress  suspendResumewoAddress
No value
h245.NULL

h245.switchReceiveMediaOff  switchReceiveMediaOff
No value
h245.NULL

h245.switchReceiveMediaOn  switchReceiveMediaOn
No value
h245.NULL

h245.synchFlag  synchFlag
Unsigned 32-bit integer
h245.INTEGER_0_255

h245.synchronized  synchronized
No value
h245.NULL

h245.syntaxError  syntaxError
No value
h245.NULL

h245.systemLoop  systemLoop
No value
h245.NULL

h245.t120  t120
Unsigned 32-bit integer
h245.DataProtocolCapability

h245.t120DynamicPortCapability  t120DynamicPortCapability
Boolean
h245.BOOLEAN

h245.t120SetupProcedure  t120SetupProcedure
Unsigned 32-bit integer
h245.T_t120SetupProcedure

h245.t140  t140
Unsigned 32-bit integer
h245.DataProtocolCapability

h245.t30fax  t30fax
Unsigned 32-bit integer
h245.DataProtocolCapability

h245.t35CountryCode  t35CountryCode
Unsigned 32-bit integer
h245.T_t35CountryCode

h245.t35Extension  t35Extension
Unsigned 32-bit integer
h245.T_t35Extension
```

```
h245.t38FaxMaxBuffer t38FaxMaxBuffer
Signed 32-bit integer
h245.INTEGER

h245.t38FaxMaxDatagram t38FaxMaxDatagram
Signed 32-bit integer
h245.INTEGER

h245.t38FaxProfile t38FaxProfile
No value
h245.T38FaxProfile

h245.t38FaxProtocol t38FaxProtocol
Unsigned 32-bit integer
h245.DataProtocolCapability

h245.t38FaxRateManagement t38FaxRateManagement
Unsigned 32-bit integer
h245.T38FaxRateManagement

h245.t38FaxTcpOptions t38FaxTcpOptions
No value
h245.T38FaxTcpOptions

h245.t38FaxUdpEC t38FaxUdpEC
Unsigned 32-bit integer
h245.T_t38FaxUdpEC

h245.t38FaxUdpOptions t38FaxUdpOptions
No value
h245.T38FaxUdpOptions

h245.t38TCPBidirectionalMode t38TCPBidirectionalMode
Boolean
h245.BOOLEAN

h245.t38UDPFEC t38UDPFEC
No value
h245.NULL

h245.t38UDPRedundancy t38UDPRedundancy
No value
h245.NULL

h245.t38fax t38fax
No value
h245.T_t38fax

h245.t434 t434
Unsigned 32-bit integer
h245.DataProtocolCapability

h245.t84 t84
No value
h245.T_t84

h245.t84Profile t84Profile
Unsigned 32-bit integer
h245.T84Profile

h245.t84Protocol t84Protocol
Unsigned 32-bit integer
h245.DataProtocolCapability
```



```
h245.t84Restricted t84Restricted
  No value
  h245.T_t84Restricted
h245.t84Unrestricted t84Unrestricted
  No value
  h245.NULL
h245.tableEntryCapacityExceeded tableEntryCapacityExceeded
  Unsigned 32-bit integer
  h245.T_tableEntryCapacityExceeded
h245.tcp tcp
  No value
  h245.NULL
h245.telephonyMode telephonyMode
  No value
  h245.NULL
h245.temporalReference temporalReference
  Unsigned 32-bit integer
  h245.INTEGER_0_1023
h245.temporalSpatialTradeOffCapability temporalSpatialTradeOffCapability
  Boolean
  h245.BOOLEAN
h245.terminalCapabilitySet terminalCapabilitySet
  No value
  h245.TerminalCapabilitySet
h245.terminalCapabilitySetAck terminalCapabilitySetAck
  No value
  h245.TerminalCapabilitySetAck
h245.terminalCapabilitySetReject terminalCapabilitySetReject
  No value
  h245.TerminalCapabilitySetReject
h245.terminalCapabilitySetRelease terminalCapabilitySetRelease
  No value
  h245.TerminalCapabilitySetRelease
h245.terminalCertificateResponse terminalCertificateResponse
  No value
  h245.T_terminalCertificateResponse
h245.terminalDropReject terminalDropReject
  No value
  h245.NULL
h245.terminalID terminalID
  Byte array
  h245.TerminalID
h245.terminalIDResponse terminalIDResponse
  No value
  h245.T_terminalIDResponse
h245.terminalInformation terminalInformation
  Unsigned 32-bit integer
  h245.SEQUENCE_OF_TerminalInformation
```

```
h245.terminalInformation_item  Item
    No value
    h245.TerminalInformation
h245.terminalJoinedConference  terminalJoinedConference
    No value
    h245.TerminalLabel
h245.terminalLabel  terminalLabel
    No value
    h245.TerminalLabel
h245.terminalLeftConference  terminalLeftConference
    No value
    h245.TerminalLabel
h245.terminalListRequest  terminalListRequest
    No value
    h245.NULL
h245.terminalListResponse  terminalListResponse
    Unsigned 32-bit integer
    h245.SET_SIZE_1_256_OF_TerminalLabel
h245.terminalListResponse_item  Item
    No value
    h245.TerminalLabel
h245.terminalNumber  terminalNumber
    Unsigned 32-bit integer
    h245.TerminalNumber
h245.terminalNumberAssign  terminalNumberAssign
    No value
    h245.TerminalLabel
h245.terminalOnHold  terminalOnHold
    No value
    h245.NULL
h245.terminalType  terminalType
    Unsigned 32-bit integer
    h245.INTEGER_0_255
h245.terminalYouAreSeeing  terminalYouAreSeeing
    No value
    h245.TerminalLabel
h245.terminalYouAreSeeingInSubPictureNumber  terminalYouAreSeeingInSubPictureNum
    No value
    h245.TerminalYouAreSeeingInSubPictureNumber
h245.threadNumber  threadNumber
    Unsigned 32-bit integer
    h245.INTEGER_0_15
h245.threeChannels2_1  threeChannels2-1
    Boolean
    h245.BOOLEAN
h245.threeChannels3_0  threeChannels3-0
    Boolean
    h245.BOOLEAN
```

```
h245.timestamp    timestamp
                  Unsigned 32-bit integer
                  h245.INTEGER_0_4294967295

h245.toLevel0     toLevel0
                  No value
                  h245.NULL

h245.toLevel1     toLevel1
                  No value
                  h245.NULL

h245.toLevel2     toLevel2
                  No value
                  h245.NULL

h245.toLevel2withOptionalHeader  toLevel2withOptionalHeader
                  No value
                  h245.NULL

h245.tokenRate    tokenRate
                  Unsigned 32-bit integer
                  h245.INTEGER_1_4294967295

h245.transcodingJBIG  transcodingJBIG
                  Boolean
                  h245.BOOLEAN

h245.transcodingMMR  transcodingMMR
                  Boolean
                  h245.BOOLEAN

h245.transferMode  transferMode
                  Unsigned 32-bit integer
                  h245.T_transferMode

h245.transferredTCF  transferredTCF
                  No value
                  h245.NULL

h245.transmitAndReceiveCompression  transmitAndReceiveCompression
                  Unsigned 32-bit integer
                  h245.CompressionType

h245.transmitAudioCapability  transmitAudioCapability
                  Unsigned 32-bit integer
                  h245.AudioCapability

h245.transmitCompression  transmitCompression
                  Unsigned 32-bit integer
                  h245.CompressionType

h245.transmitDataApplicationCapability  transmitDataApplicationCapability
                  No value
                  h245.DataApplicationCapability

h245.transmitMultiplexedStreamCapability  transmitMultiplexedStreamCapability
                  No value
                  h245.MultiplexedStreamCapability

h245.transmitMultipointCapability  transmitMultipointCapability
                  No value
                  h245.MultipointCapability
```

```
h245.transmitUserInputCapability transmitUserInputCapability
    Unsigned 32-bit integer
    h245.UserInputCapability

h245.transmitVideoCapability transmitVideoCapability
    Unsigned 32-bit integer
    h245.VideoCapability

h245.transparencyParameters transparencyParameters
    No value
    h245.TransparencyParameters

h245.transparent transparent
    No value
    h245.NULL

h245.transport transport
    Unsigned 32-bit integer
    h245.DataProtocolCapability

h245.transportCapability transportCapability
    No value
    h245.TransportCapability

h245.transportStream transportStream
    Boolean
    h245.BOOLEAN

h245.transportWithI_frames transportWithI-frames
    Boolean
    h245.BOOLEAN

h245.tsapIdentifier tsapIdentifier
    Unsigned 32-bit integer
    h245.TsapIdentifier

h245.twoChannelDual twoChannelDual
    No value
    h245.NULL

h245.twoChannelStereo twoChannelStereo
    No value
    h245.NULL

h245.twoChannels twoChannels
    Boolean
    h245.BOOLEAN

h245.twoOctetAddressFieldCapability twoOctetAddressFieldCapability
    Boolean
    h245.BOOLEAN

h245.type type
    Unsigned 32-bit integer
    h245.Avb_type

h245.typeIARq typeIARq
    No value
    h245.H223AnnexCARqParameters

h245.typeIIARq typeIIARq
    No value
    h245.H223AnnexCARqParameters
```

```
h245.uIH uIH
  Boolean
  h245.BOOLEAN

h245.uNERM uNERM
  No value
  h245.NULL

h245.udp udp
  No value
  h245.NULL

h245.uihCapability uihCapability
  Boolean
  h245.BOOLEAN

h245.undefinedReason undefinedReason
  No value
  h245.NULL

h245.undefinedTableEntryUsed undefinedTableEntryUsed
  No value
  h245.NULL

h245.unframed unframed
  No value
  h245.NULL

h245.unicast unicast
  No value
  h245.NULL

h245.unicastAddress unicastAddress
  Unsigned 32-bit integer
  h245.UnicastAddress

h245.unknown unknown
  No value
  h245.NULL

h245.unknownDataType unknownDataType
  No value
  h245.NULL

h245.unknownFunction unknownFunction
  No value
  h245.NULL

h245.unlimitedMotionVectors unlimitedMotionVectors
  Boolean
  h245.BOOLEAN

h245.unrestrictedVector unrestrictedVector
  Boolean
  h245.BOOLEAN

h245.unsigned32Max unsigned32Max
  Unsigned 32-bit integer
  h245.INTEGER_0_4294967295

h245.unsigned32Min unsigned32Min
  Unsigned 32-bit integer
  h245.INTEGER_0_4294967295
```

```
h245.unsignedMax  unsignedMax
    Unsigned 32-bit integer
    h245.INTEGER_0_65535

h245.unsignedMin  unsignedMin
    Unsigned 32-bit integer
    h245.T_unsignedMin

h245.unspecified  unspecified
    No value
    h245.NULL

h245.unspecifiedCause  unspecifiedCause
    No value
    h245.NULL

h245.unsuitableReverseParameters  unsuitableReverseParameters
    No value
    h245.NULL

h245.untilClosingFlag  untilClosingFlag
    No value
    h245.T_untilClosingFlag

h245.user  user
    No value
    h245.NULL

h245.userData  userData
    Unsigned 32-bit integer
    h245.DataProtocolCapability

h245.userInput  userInput
    Unsigned 32-bit integer
    h245.UserInputIndication

h245.userInputSupportIndication  userInputSupportIndication
    Unsigned 32-bit integer
    h245.T_userInputSupportIndication

h245.userRejected  userRejected
    No value
    h245.NULL

h245.uuid  uuid
    Byte array
    h245.OCTET_STRING_SIZE_16

h245.v120  v120
    No value
    h245.NULL

h245.v140  v140
    No value
    h245.NULL

h245.v14buffered  v14buffered
    No value
    h245.NULL

h245.v34DSVD  v34DSVD
    No value
    h245.NULL
```

```
h245.v34DuplexFAX v34DuplexFAX
  No value
  h245.NULL

h245.v34H324 v34H324
  No value
  h245.NULL

h245.v42bis v42bis
  No value
  h245.V42bis

h245.v42lapm v42lapm
  No value
  h245.NULL

h245.v75Capability v75Capability
  No value
  h245.V75Capability

h245.v75Parameters v75Parameters
  No value
  h245.V75Parameters

h245.v76Capability v76Capability
  No value
  h245.V76Capability

h245.v76LogicalChannelParameters v76LogicalChannelParameters
  No value
  h245.V76LogicalChannelParameters

h245.v76ModeParameters v76ModeParameters
  Unsigned 32-bit integer
  h245.V76ModeParameters

h245.v76wCompression v76wCompression
  Unsigned 32-bit integer
  h245.T_v76wCompression

h245.v8bis v8bis
  No value
  h245.NULL

h245.value value
  Byte array
  h245.OCTET_STRING_SIZE_1_65535

h245.variable_delta variable-delta
  Boolean
  h245.BOOLEAN

h245.vbd vbd
  No value
  h245.VBDCapability

h245.vbvBufferSize vbvBufferSize
  Unsigned 32-bit integer
  h245.INTEGER_0_262143

h245.vcCapability vcCapability
  Unsigned 32-bit integer
  h245.SET_OF_VCCapability
```

```
h245.vcCapability_item  Item
    No value
    h245.VCCapability

h245.vendor  vendor
    Unsigned 32-bit integer
    h245.NonStandardIdentifier

h245.vendorIdentification  vendorIdentification
    No value
    h245.VendorIdentification

h245.version  version
    Unsigned 32-bit integer
    h245.INTEGER_0_255

h245.versionNumber  versionNumber
    String
    h245.OCTET_STRING_SIZE_1_256

h245.videoBackChannelSend  videoBackChannelSend
    Unsigned 32-bit integer
    h245.T_videoBackChannelSend

h245.videoBadMBs  videoBadMBs
    No value
    h245.T_videoBadMBs

h245.videoBadMBsCap  videoBadMBsCap
    Boolean
    h245.BOOLEAN

h245.videoBitRate  videoBitRate
    Unsigned 32-bit integer
    h245.INTEGER_0_1073741823

h245.videoCapability  videoCapability
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_VideoCapability

h245.videoCapabilityExtension  videoCapabilityExtension
    Unsigned 32-bit integer
    h245.SEQUENCE_OF_GenericCapability

h245.videoCapabilityExtension_item  Item
    No value
    h245.GenericCapability

h245.videoCapability_item  Item
    Unsigned 32-bit integer
    h245.VideoCapability

h245.videoCommandReject  videoCommandReject
    No value
    h245.NULL

h245.videoData  videoData
    Unsigned 32-bit integer
    h245.VideoCapability

h245.videoFastUpdateGOB  videoFastUpdateGOB
    No value
    h245.T_videoFastUpdateGOB
```



```
h245.videoFastUpdateMB videoFastUpdateMB
    No value
    h245.T_videoFastUpdateMB
h245.videoFastUpdatePicture videoFastUpdatePicture
    No value
    h245.NULL
h245.videoFreezePicture videoFreezePicture
    No value
    h245.NULL
h245.videoIndicateCompose videoIndicateCompose
    No value
    h245.VideoIndicateCompose
h245.videoIndicateMixingCapability videoIndicateMixingCapability
    Boolean
    h245.BOOLEAN
h245.videoIndicateReadyToActivate videoIndicateReadyToActivate
    No value
    h245.NULL
h245.videoMode videoMode
    Unsigned 32-bit integer
    h245.VideoMode
h245.videoMux videoMux
    Boolean
    h245.BOOLEAN
h245.videoNotDecodedMBS videoNotDecodedMBS
    No value
    h245.T_videoNotDecodedMBS
h245.videoSegmentTagging videoSegmentTagging
    Boolean
    h245.BOOLEAN
h245.videoSendSyncEveryGOB videoSendSyncEveryGOB
    No value
    h245.NULL
h245.videoSendSyncEveryGOBCancel videoSendSyncEveryGOBCancel
    No value
    h245.NULL
h245.videoTemporalSpatialTradeOff videoTemporalSpatialTradeOff
    Unsigned 32-bit integer
    h245.INTEGER_0_31
h245.videoWithAL1 videoWithAL1
    Boolean
    h245.BOOLEAN
h245.videoWithAL1M videoWithAL1M
    Boolean
    h245.BOOLEAN
h245.videoWithAL2 videoWithAL2
    Boolean
    h245.BOOLEAN
```

```

h245.videoWithAL2M  videoWithAL2M
    Boolean
    h245.BOOLEAN

h245.videoWithAL3  videoWithAL3
    Boolean
    h245.BOOLEAN

h245.videoWithAL3M  videoWithAL3M
    Boolean
    h245.BOOLEAN

h245.waitForCall  waitForCall
    No value
    h245.NULL

h245.waitForCommunicationMode  waitForCommunicationMode
    No value
    h245.NULL

h245.wholeMultiplex  wholeMultiplex
    No value
    h245.NULL

h245.width  width
    Unsigned 32-bit integer
    h245.INTEGER_1_255

h245.willTransmitLessPreferredMode  willTransmitLessPreferredMode
    No value
    h245.NULL

h245.willTransmitMostPreferredMode  willTransmitMostPreferredMode
    No value
    h245.NULL

h245.windowSize  windowSize
    Unsigned 32-bit integer
    h245.INTEGER_1_127

h245.withdrawChairToken  withdrawChairToken
    No value
    h245.NULL

h245.zeroDelay  zeroDelay
    No value
    h245.NULL

```

#### **MULTIPOINT-COMMUNICATION-SERVICE T.125 (t125)**

```

t125.ConnectMCSPDU  ConnectMCSPDU
    Unsigned 32-bit integer
    t125.ConnectMCSPDU

t125.DomainMCSPDU  DomainMCSPDU
    Unsigned 32-bit integer
    t125.DomainMCSPDU

t125.admitted  admitted
    Unsigned 32-bit integer
    t125.SET_OF_UserId

```

```
t125.admitted_item  Item
    Unsigned 32-bit integer
    t125.UserId

t125.assigned  assigned
    No value
    t125.T_assigned

t125.attachUserConfirm  attachUserConfirm
    No value
    t125.AttachUserConfirm

t125.attachUserRequest  attachUserRequest
    No value
    t125.AttachUserRequest

t125.begin  begin
    Boolean

t125.calledConnectId  calledConnectId
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.calledDomainSelector  calledDomainSelector
    Byte array
    t125.OCTET_STRING

t125.callingDomainSelector  callingDomainSelector
    Byte array
    t125.OCTET_STRING

t125.channelAdmitIndication  channelAdmitIndication
    No value
    t125.ChannelAdmitIndication

t125.channelAdmitRequest  channelAdmitRequest
    No value
    t125.ChannelAdmitRequest

t125.channelConveneConfirm  channelConveneConfirm
    No value
    t125.ChannelConveneConfirm

t125.channelConveneRequest  channelConveneRequest
    No value
    t125.ChannelConveneRequest

t125.channelDisbandIndication  channelDisbandIndication
    No value
    t125.ChannelDisbandIndication

t125.channelDisbandRequest  channelDisbandRequest
    No value
    t125.ChannelDisbandRequest

t125.channelExpelIndication  channelExpelIndication
    No value
    t125.ChannelExpelIndication

t125.channelExpelRequest  channelExpelRequest
    No value
    t125.ChannelExpelRequest
```

```
t125.channelId  channelId
  Unsigned 32-bit integer
  t125.StaticChannelId

t125.channelIds  channelIds
  Unsigned 32-bit integer
  t125.SET_OF_ChannelId

t125.channelIds_item  Item
  Unsigned 32-bit integer
  t125.ChannelId

t125.channelJoinConfirm  channelJoinConfirm
  No value
  t125.ChannelJoinConfirm

t125.channelJoinRequest  channelJoinRequest
  No value
  t125.ChannelJoinRequest

t125.channelLeaveRequest  channelLeaveRequest
  No value
  t125.ChannelLeaveRequest

t125.connect_additional  connect-additional
  No value
  t125.Connect_Additional

t125.connect_initial  connect-initial
  No value
  t125.Connect_Initial

t125.connect_response  connect-response
  No value
  t125.Connect_Response

t125.connect_result  connect-result
  No value
  t125.Connect_Result

t125.dataPriority  dataPriority
  Unsigned 32-bit integer
  t125.DataPriority

t125.detachUserIds  detachUserIds
  Unsigned 32-bit integer
  t125.SET_OF_UserId

t125.detachUserIds_item  Item
  Unsigned 32-bit integer
  t125.UserId

t125.detachUserIndication  detachUserIndication
  No value
  t125.DetachUserIndication

t125.detachUserRequest  detachUserRequest
  No value
  t125.DetachUserRequest

t125.diagnostic  diagnostic
  Unsigned 32-bit integer
  t125.Diagnostic
```

```
t125.disconnectProviderUltimatum disconnectProviderUltimatum
    No value
    t125.DisconnectProviderUltimatum
t125.domainParameters domainParameters
    No value
    t125.DomainParameters
t125.end end
    Boolean
t125.erectDomainRequest erectDomainRequest
    No value
    t125.ErectDomainRequest
t125.given given
    No value
    t125.T_given
t125.giving giving
    No value
    t125.T_giving
t125.grabbed grabbed
    No value
    t125.T_grabbed
t125.grabber grabber
    Unsigned 32-bit integer
    t125.UserId
t125.heightLimit heightLimit
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX
t125.inhibited inhibited
    No value
    t125.T_inhibited
t125.inhibitors inhibitors
    Unsigned 32-bit integer
    t125.SET_OF_UserId
t125.inhibitors_item Item
    Unsigned 32-bit integer
    t125.UserId
t125.initialOctets initialOctets
    Byte array
    t125.OCTET_STRING
t125.initiator initiator
    Unsigned 32-bit integer
    t125.UserId
t125.joined joined
    Boolean
    t125.BOOLEAN
t125.manager manager
    Unsigned 32-bit integer
    t125.UserId
```

```
t125.maxChannelIds  maxChannelIds
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.maxHeight  maxHeight
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.maxMCSPDUsizes  maxMCSPDUsizes
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.maxTokenIds  maxTokenIds
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.maxUserIds  maxUserIds
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.maximumParameters  maximumParameters
    No value
    t125.DomainParameters

t125.mergeChannels  mergeChannels
    Unsigned 32-bit integer
    t125.SET_OF_ChannelAttributes

t125.mergeChannelsConfirm  mergeChannelsConfirm
    No value
    t125.MergeChannelsConfirm

t125.mergeChannelsRequest  mergeChannelsRequest
    No value
    t125.MergeChannelsRequest

t125.mergeChannels_item  Item
    Unsigned 32-bit integer
    t125.ChannelAttributes

t125.mergeTokens  mergeTokens
    Unsigned 32-bit integer
    t125.SET_OF_TokenAttributes

t125.mergeTokensConfirm  mergeTokensConfirm
    No value
    t125.MergeTokensConfirm

t125.mergeTokensRequest  mergeTokensRequest
    No value
    t125.MergeTokensRequest

t125.mergeTokens_item  Item
    Unsigned 32-bit integer
    t125.TokenAttributes

t125.minThroughput  minThroughput
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.minimumParameters  minimumParameters
    No value
    t125.DomainParameters
```

```
t125.numPriorities  numPriorities
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.plumbDomainIndication  plumbDomainIndication
    No value
    t125.PlumbDomainIndication

t125.private  private
    No value
    t125.T_private

t125.protocolVersion  protocolVersion
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX

t125.purgeChannelIds  purgeChannelIds
    Unsigned 32-bit integer
    t125.SET_OF_ChannelId

t125.purgeChannelIds_item  Item
    Unsigned 32-bit integer
    t125.ChannelId

t125.purgeChannelsIndication  purgeChannelsIndication
    No value
    t125.PurgeChannelsIndication

t125.purgeTokenIds  purgeTokenIds
    Unsigned 32-bit integer
    t125.SET_OF_TokenId

t125.purgeTokenIds_item  Item
    Unsigned 32-bit integer
    t125.TokenId

t125.purgeTokensIndication  purgeTokensIndication
    No value
    t125.PurgeTokensIndication

t125.reason  reason
    Unsigned 32-bit integer
    t125.Reason

t125.recipient  recipient
    Unsigned 32-bit integer
    t125.UserId

t125.rejectMCSPDUUltimatum  rejectMCSPDUUltimatum
    No value
    t125.RejectMCSPDUUltimatum

t125.requested  requested
    Unsigned 32-bit integer
    t125.ChannelId

t125.result  result
    Unsigned 32-bit integer
    t125.Result

t125.segmentation  segmentation
    Byte array
    t125.Segmentation
```

```
t125.sendDataIndication  sendDataIndication
    No value
    t125.SendDataIndication
t125.sendDataRequest  sendDataRequest
    No value
    t125.SendDataRequest
t125.static  static
    No value
    t125.T_static
t125.subHeight  subHeight
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX
t125.subInterval  subInterval
    Unsigned 32-bit integer
    t125.INTEGER_0_MAX
t125.targetParameters  targetParameters
    No value
    t125.DomainParameters
t125.tokenGiveConfirm  tokenGiveConfirm
    No value
    t125.TokenGiveConfirm
t125.tokenGiveIndication  tokenGiveIndication
    No value
    t125.TokenGiveIndication
t125.tokenGiveRequest  tokenGiveRequest
    No value
    t125.TokenGiveRequest
t125.tokenGiveResponse  tokenGiveResponse
    No value
    t125.TokenGiveResponse
t125.tokenGrabConfirm  tokenGrabConfirm
    No value
    t125.TokenGrabConfirm
t125.tokenGrabRequest  tokenGrabRequest
    No value
    t125.TokenGrabRequest
t125.tokenId  tokenId
    Unsigned 32-bit integer
    t125.TokenId
t125.tokenInhibitConfirm  tokenInhibitConfirm
    No value
    t125.TokenInhibitConfirm
t125.tokenInhibitRequest  tokenInhibitRequest
    No value
    t125.TokenInhibitRequest
t125.tokenPleaseIndication  tokenPleaseIndication
    No value
    t125.TokenPleaseIndication
```



```
t125.tokenPleaseRequest tokenPleaseRequest
    No value
    t125.TokenPleaseRequest
t125.tokenReleaseConfirm tokenReleaseConfirm
    No value
    t125.TokenReleaseConfirm
t125.tokenReleaseRequest tokenReleaseRequest
    No value
    t125.TokenReleaseRequest
t125.tokenStatus tokenStatus
    Unsigned 32-bit integer
    t125.TokenStatus
t125.tokenTestConfirm tokenTestConfirm
    No value
    t125.TokenTestConfirm
t125.tokenTestRequest tokenTestRequest
    No value
    t125.TokenTestRequest
t125.ungivable ungivable
    No value
    t125.T_ungivable
t125.uniformSendDataIndication uniformSendDataIndication
    No value
    t125.UniformSendDataIndication
t125.uniformSendDataRequest uniformSendDataRequest
    No value
    t125.UniformSendDataRequest
t125.upwardFlag upwardFlag
    Boolean
    t125.BOOLEAN
t125.userData userData
    Byte array
    t125.OCTET_STRING
t125.userId userId
    No value
    t125.T_userId
t125.userIds userIds
    Unsigned 32-bit integer
    t125.SET_OF_UserId
t125.userIds_item Item
    Unsigned 32-bit integer
    t125.UserId
```

**Malformed Packet (malformed)**

**Media Gateway Control Protocol (mgcp)**

mgcp.dup Duplicate Message  
Unsigned 32-bit integer  
Duplicate Message

mgcp.messagecount MGCP Message Count  
Unsigned 32-bit integer  
Number of MGCP message in a packet

mgcp.param.bearerinfo BearerInformation (B)  
String  
Bearer Information

mgcp.param.callid CallId (C)  
String  
Call Id

mgcp.param.capabilities Capabilities (A)  
String  
Capabilities

mgcp.param.connectionid ConnectionIdentifier (I)  
String  
Connection Identifier

mgcp.param.connectionmode ConnectionMode (M)  
String  
Connection Mode

mgcp.param.connectionparam ConnectionParameters (P)  
String  
Connection Parameters

mgcp.param.connectionparam.ji Jitter (JI)  
Unsigned 32-bit integer  
Average inter-packet arrival jitter in milliseconds (P:JI)

mgcp.param.connectionparam.la Latency (LA)  
Unsigned 32-bit integer  
Average latency in milliseconds (P:LA)

mgcp.param.connectionparam.or Octets received (OR)  
Unsigned 32-bit integer  
Octets received (P:OR)

mgcp.param.connectionparam.os Octets sent (OS)  
Unsigned 32-bit integer  
Octets sent (P:OS)

mgcp.param.connectionparam.pcrji Remote Jitter (PC/RJI)  
Unsigned 32-bit integer  
Remote Jitter (P:PC/RJI)

mgcp.param.connectionparam.pcross Remote Octets sent (PC/ROS)  
Unsigned 32-bit integer  
Remote Octets sent (P:PC/ROS)

mgcp.param.connectionparam.pcrpl Remote Packets lost (PC/RPL)  
Unsigned 32-bit integer  
Remote Packets lost (P:PC/RPL)

```
mgcp.param.connectionparam.pcrps  Remote Packets sent (PC/RPS)
    Unsigned 32-bit integer
    Remote Packets sent (P:PC/RPS)
mgcp.param.connectionparam.pl  Packets lost (PL)
    Unsigned 32-bit integer
    Packets lost (P:PL)
mgcp.param.connectionparam.pr  Packets received (PR)
    Unsigned 32-bit integer
    Packets received (P:PR)
mgcp.param.connectionparam.ps  Packets sent (PS)
    Unsigned 32-bit integer
    Packets sent (P:PS)
mgcp.param.connectionparam.x  Vendor Extension
    String
    Vendor Extension (P:X-*)
mgcp.param.detectedevents  DetectedEvents (T)
    String
    Detected Events
mgcp.param.digitmap  DigitMap (D)
    String
    Digit Map
mgcp.param.eventstates  EventStates (ES)
    String
    Event States
mgcp.param.extension  Extension Parameter (non-critical)
    String
    Extension Parameter
mgcp.param.extensioncritical  Extension Parameter (critical)
    String
    Critical Extension Parameter
mgcp.param.invalid  Invalid Parameter
    String
    Invalid Parameter
mgcp.param.localconnectionoptions  LocalConnectionOptions (L)
    String
    Local Connection Options
mgcp.param.localconnectionoptions.a  Codecs (a)
    String
    Codecs
mgcp.param.localconnectionoptions.b  Bandwidth (b)
    String
    Bandwidth
mgcp.param.localconnectionoptions.dqgi  D-QoS GateID (dq-gi)
    String
    D-QoS GateID
mgcp.param.localconnectionoptions.dqrd  D-QoS Reserve Destination (dq-rd)
    String
    D-QoS Reserve Destination
```

```
mgcp.param.localconnectionoptions.dqri  D-QoS Resource ID (dq-ri)
    String
    D-QoS Resource ID
mgcp.param.localconnectionoptions.dqrr  D-QoS Resource Reservation (dq-rr)
    String
    D-QoS Resource Reservation
mgcp.param.localconnectionoptions.e     Echo Cancellation (e)
    String
    Echo Cancellation
mgcp.param.localconnectionoptions.esccd Content Destination (es-ccd)
    String
    Content Destination
mgcp.param.localconnectionoptions.escci Content Identifier (es-cci)
    String
    Content Identifier
mgcp.param.localconnectionoptions.fmtpl Media Format (fmtpl)
    String
    Media Format
mgcp.param.localconnectionoptions.gc    Gain Control (gc)
    Unsigned 32-bit integer
    Gain Control
mgcp.param.localconnectionoptions.k     Encryption Key (k)
    String
    Encryption Key
mgcp.param.localconnectionoptions.nt    Network Type (nt)
    String
    Network Type
mgcp.param.localconnectionoptions.ofmtpl Optional Media Format (o-fmtpl)
    String
    Optional Media Format
mgcp.param.localconnectionoptions.p     Packetization period (p)
    Unsigned 32-bit integer
    Packetization period
mgcp.param.localconnectionoptions.r     Resource Reservation (r)
    String
    Resource Reservation
mgcp.param.localconnectionoptions.rcnfl Reservation Confirmation (r-cnfl)
    String
    Reservation Confirmation
mgcp.param.localconnectionoptions.rdir  Reservation Direction (r-dir)
    String
    Reservation Direction
mgcp.param.localconnectionoptions.rsh   Resource Sharing (r-sh)
    String
    Resource Sharing
mgcp.param.localconnectionoptions.s     Silence Suppression (s)
    String
    Silence Suppression
```

```
mgcp.param.localconnectionoptions.scrtcp  RTCP ciphersuite (sc-rtcp)
    String
    RTCP ciphersuite
mgcp.param.localconnectionoptions.scrtp  RTP ciphersuite (sc-rtp)
    String
    RTP ciphersuite
mgcp.param.localconnectionoptions.t  Type of Service (r)
    String
    Type of Service
mgcp.param.maxmgcpdatagram  MaxMGCPDatagram (MD)
    String
    Maximum MGCP Datagram size
mgcp.param.notifiedentity  NotifiedEntity (N)
    String
    Notified Entity
mgcp.param.observedevents  ObservedEvents (O)
    String
    Observed Events
mgcp.param.packagelist  PackageList (PL)
    String
    Package List
mgcp.param.quarantinehandling  QuarantineHandling (Q)
    String
    Quarantine Handling
mgcp.param.reasoncode  ReasonCode (E)
    String
    Reason Code
mgcp.param.reqevents  RequestedEvents (R)
    String
    Requested Events
mgcp.param.reqinfo  RequestedInfo (F)
    String
    Requested Info
mgcp.param.requestid  RequestIdentifier (X)
    String
    Request Identifier
mgcp.param.restartdelay  RestartDelay (RD)
    String
    Restart Delay
mgcp.param.restartmethod  RestartMethod (RM)
    String
    Restart Method
mgcp.param.rspack  ResponseAck (K)
    String
    Response Ack
mgcp.param.secondconnectionid  SecondConnectionID (I2)
    String
    Second Connection Identifier
```

mgcp.param.seconddendpointid SecondEndpointID (Z)  
String  
Second Endpoing ID

mgcp.param.signalreq SignalRequests (S)  
String  
Signal Request

mgcp.param.specificendpointid SpecificEndpointID (Z)  
String  
Specific Endpoint ID

mgcp.params Parameters  
No value  
MGCP parameters

mgcp.req Request  
Boolean  
True if MGCP request

mgcp.req.dup Duplicate Request  
Unsigned 32-bit integer  
Duplicate Request

mgcp.req.dup.frame Original Request Frame  
Frame number  
Frame containing original request

mgcp.req.endpoint Endpoint  
String  
Endpoint referenced by the message

mgcp.req.verb Verb  
String  
Name of the verb

mgcp.reqframe Request Frame  
Frame number  
Request Frame

mgcp.rsp Response  
Boolean  
TRUE if MGCP response

mgcp.rsp.dup Duplicate Response  
Unsigned 32-bit integer  
Duplicate Response

mgcp.rsp.dup.frame Original Response Frame  
Frame number  
Frame containing original response

mgcp.rsp.rspcode Response Code  
Unsigned 32-bit integer  
Response Code

mgcp.rsp.rspstring Response String  
String  
Response String

mgcp.rspframe Response Frame  
Frame number  
Response Frame

```
mgcp.time    Time from request
             Time duration
             Timedelta between Request and Response
mgcp.transid Transaction ID
             String
             Transaction ID of this message
mgcp.version Version
             String
             MGCP Version
```

**Media Server Control Markup Language – draft 07 (mscml)**

```
mscml.activetalkers activetalkers
                     String
mscml.activetalkers.interval interval
                     String
mscml.activetalkers.report report
                     String
mscml.activetalkers.talker talker
                     String
mscml.activetalkers.talker.callid callid
                     String
mscml.audio audio
                     String
mscml.audio.encoding encoding
                     String
mscml.audio.gain gain
                     String
mscml.audio.gaindelta gaindelta
                     String
mscml.audio.rate rate
                     String
mscml.audio.ratedelta ratedelta
                     String
mscml.audio.url url
                     String
mscml.auto auto
                     String
mscml.auto.silencethreshold silencethreshold
                     String
mscml.auto.startlevel startlevel
                     String
mscml.auto.targetlevel targetlevel
                     String
mscml.conference conference
                     String
```

```
mscml.conference.activetalkers  activetalkers
    String
mscml.conference.activetalkers.interval  interval
    String
mscml.conference.activetalkers.report  report
    String
mscml.conference.activetalkers.talker  talker
    String
mscml.conference.activetalkers.talker.callid  callid
    String
mscml.conference.numtalkers  numtalkers
    String
mscml.conference.uniqueid  uniqueid
    String
mscml.configure_conference  configure_conference
    String
mscml.configure_conference.id  id
    String
mscml.configure_conference.reserveconfmedia  reserveconfmedia
    String
mscml.configure_conference.reservedtalkers  reservedtalkers
    String
mscml.configure_conference.subscribe  subscribe
    String
mscml.configure_conference.subscribe.events  events
    String
mscml.configure_conference.subscribe.events.activetalkers  activetalkers
    String
mscml.configure_conference.subscribe.events.activetalkers.interval  interval
    String
mscml.configure_conference.subscribe.events.activetalkers.report  report
    String
mscml.configure_conference.subscribe.events.activetalkers.talker  talker
    String
mscml.configure_conference.subscribe.events.activetalkers.talker.callid  callid
    String
mscml.configure_conference.subscribe.events.keypress  keypress
    String
mscml.configure_conference.subscribe.events.keypress.digit  digit
    String
mscml.configure_conference.subscribe.events.keypress.interdigittime  interdigittime
    String
mscml.configure_conference.subscribe.events.keypress.length  length
    String
```



```
mscml.configure_conference.subscribe.events.keypress.maskdigits  maskdigits
String
mscml.configure_conference.subscribe.events.keypress.method  method
String
mscml.configure_conference.subscribe.events.keypress.report  report
String
mscml.configure_conference.subscribe.events.keypress.status  status
String
mscml.configure_conference.subscribe.events.keypress.status.command  command
String
mscml.configure_conference.subscribe.events.keypress.status.duration  duration
String
mscml.configure_conference.subscribe.events.signal  signal
String
mscml.configure_conference.subscribe.events.signal.report  report
String
mscml.configure_conference.subscribe.events.signal.type  type
String
mscml.configure_leg  configure_leg
String
mscml.configure_leg.configure_team  configure_team
String
mscml.configure_leg.configure_team.action  action
String
mscml.configure_leg.configure_team.id  id
String
mscml.configure_leg.configure_team.teammate  teammate
String
mscml.configure_leg.configure_team.teammate.id  id
String
mscml.configure_leg.dtmfclamp  dtmfclamp
String
mscml.configure_leg.id  id
String
mscml.configure_leg.inputgain  inputgain
String
mscml.configure_leg.inputgain.auto  auto
String
mscml.configure_leg.inputgain.auto.silencethreshold  silencethreshold
String
mscml.configure_leg.inputgain.auto.startlevel  startlevel
String
mscml.configure_leg.inputgain.auto.targetlevel  targetlevel
String
```

```
mscml.configure_leg.inputgain.fixed    fixed
String
mscml.configure_leg.inputgain.fixed.level  level
String
mscml.configure_leg.mixmode    mixmode
String
mscml.configure_leg.outputgain    outputgain
String
mscml.configure_leg.outputgain.auto    auto
String
mscml.configure_leg.outputgain.auto.silencethreshold  silencethreshold
String
mscml.configure_leg.outputgain.auto.startlevel  startlevel
String
mscml.configure_leg.outputgain.auto.targetlevel  targetlevel
String
mscml.configure_leg.outputgain.fixed    fixed
String
mscml.configure_leg.outputgain.fixed.level  level
String
mscml.configure_leg.subscribe    subscribe
String
mscml.configure_leg.subscribe.events    events
String
mscml.configure_leg.subscribe.events.activetalkers  activetalkers
String
mscml.configure_leg.subscribe.events.activetalkers.interval  interval
String
mscml.configure_leg.subscribe.events.activetalkers.report  report
String
mscml.configure_leg.subscribe.events.activetalkers.talker  talker
String
mscml.configure_leg.subscribe.events.activetalkers.talker.callid  callid
String
mscml.configure_leg.subscribe.events.keypress  keypress
String
mscml.configure_leg.subscribe.events.keypress.digit  digit
String
mscml.configure_leg.subscribe.events.keypress.interdigittime  interdigittime
String
mscml.configure_leg.subscribe.events.keypress.length  length
String
mscml.configure_leg.subscribe.events.keypress.maskdigits  maskdigits
String
```

```
mscml.configure_leg.subscribe.events.keypress.method  method
String
mscml.configure_leg.subscribe.events.keypress.report  report
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mscml.configure_leg.subscribe.events.keypress.status  status
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mscml.configure_leg.subscribe.events.keypress.status.command  command
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mscml.configure_leg.subscribe.events.keypress.status.duration  duration
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mscml.configure_leg.subscribe.events.signal  signal
String
mscml.configure_leg.subscribe.events.signal.report  report
String
mscml.configure_leg.subscribe.events.signal.type  type
String
mscml.configure_leg.toneclamp  toneclamp
String
mscml.configure_leg.type  type
String
mscml.configure_team  configure_team
String
mscml.configure_team.action  action
String
mscml.configure_team.id  id
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mscml.configure_team.teammate  teammate
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mscml.configure_team.teammate.id  id
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mscml.error_info  error_info
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mscml.error_info.code  code
String
mscml.error_info.context  context
String
mscml.error_info.text  text
String
mscml.events  events
String
mscml.events.activetalkers  activetalkers
String
mscml.events.activetalkers.interval  interval
String
```

```
mscml.events.activetalkers.report  report
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mscml.events.activetalkers.talker  talker
    String
mscml.events.activetalkers.talker.callid  callid
    String
mscml.events.keypress  keypress
    String
mscml.events.keypress.digit  digit
    String
mscml.events.keypress.interdigittime  interdigittime
    String
mscml.events.keypress.length  length
    String
mscml.events.keypress.maskdigits  maskdigits
    String
mscml.events.keypress.method  method
    String
mscml.events.keypress.report  report
    String
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mscml.events.keypress.status.command  command
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mscml.events.keypress.status.duration  duration
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mscml.events.signal  signal
    String
mscml.events.signal.report  report
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mscml.events.signal.type  type
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mscml.faxplay  faxplay
    String
mscml.faxplay.id  id
    String
mscml.faxplay.lclid  lclid
    String
mscml.faxplay.prompt  prompt
    String
mscml.faxplay.prompt.audio  audio
    String
mscml.faxplay.prompt.audio.encoding  encoding
    String
```

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mscml.faxplay.prompt.audio.gain gain
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mscml.faxplay.prompt.audio.gaindelta gaindelta
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mscml.faxplay.prompt.audio.rate rate
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mscml.faxplay.prompt.audio.ratedelta ratedelta
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mscml.faxplay.prompt.audio.url url
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mscml.faxplay.prompt.baseurl baseurl
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mscml.faxplay.prompt.delay delay
String
mscml.faxplay.prompt.duration duration
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mscml.faxplay.prompt.gain gain
String
mscml.faxplay.prompt.gaindelta gaindelta
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mscml.faxplay.prompt.locale locale
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mscml.faxplay.prompt.offset offset
String
mscml.faxplay.prompt.rate rate
String
mscml.faxplay.prompt.ratedelta ratedelta
String
mscml.faxplay.prompt.repeat repeat
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mscml.faxplay.prompt.stoponerror stoponerror
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mscml.faxplay.prompt.variable variable
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mscml.faxplay.prompt.variable.subtype subtype
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mscml.faxplay.prompt.variable.type type
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mscml.faxplay.prompt.variable.value value
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mscml.faxplay.prompturl prompturl
String
mscml.faxplay.recurl recur1
String
```

```
mscml.faxplay.rmtid rmtid
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mscml.faxrecord faxrecord
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mscml.faxrecord.id id
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mscml.faxrecord.lclid lclid
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mscml.faxrecord.prompt prompt
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mscml.faxrecord.prompt.audio audio
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mscml.faxrecord.prompt.audio.encoding encoding
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mscml.faxrecord.prompt.audio.gain gain
    String
mscml.faxrecord.prompt.audio.gaindelta gaindelta
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mscml.faxrecord.prompt.audio.rate rate
    String
mscml.faxrecord.prompt.audio.ratedelta ratedelta
    String
mscml.faxrecord.prompt.audio.url url
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mscml.faxrecord.prompt.baseurl baseurl
    String
mscml.faxrecord.prompt.delay delay
    String
mscml.faxrecord.prompt.duration duration
    String
mscml.faxrecord.prompt.gain gain
    String
mscml.faxrecord.prompt.gaindelta gaindelta
    String
mscml.faxrecord.prompt.locale locale
    String
mscml.faxrecord.prompt.offset offset
    String
mscml.faxrecord.prompt.rate rate
    String
mscml.faxrecord.prompt.ratedelta ratedelta
    String
mscml.faxrecord.prompt.repeat repeat
    String
```

```
mscml.faxrecord.prompt.stoponerror  stoponerror
String
mscml.faxrecord.prompt.variable  variable
String
mscml.faxrecord.prompt.variable.subtype  subtype
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mscml.faxrecord.prompt.variable.type  type
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mscml.faxrecord.prompt.variable.value  value
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mscml.faxrecord.prompturl  prompturl
String
mscml.faxrecord.recurl  recurl
String
mscml.faxrecord.rmtid  rmtid
String
mscml.fixed  fixed
String
mscml.fixed.level  level
String
mscml.inputgain  inputgain
String
mscml.inputgain.auto  auto
String
mscml.inputgain.auto.silencethreshold  silencethreshold
String
mscml.inputgain.auto.startlevel  startlevel
String
mscml.inputgain.auto.targetlevel  targetlevel
String
mscml.inputgain.fixed  fixed
String
mscml.inputgain.fixed.level  level
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mscml.keypress  keypress
String
mscml.keypress.digit  digit
String
mscml.keypress.interdigittime  interdigittime
String
mscml.keypress.length  length
String
mscml.keypress.maskdigits  maskdigits
String
```

```
mscml.keypress.method  method
    String
mscml.keypress.report  report
    String
mscml.keypress.status  status
    String
mscml.keypress.status.command  command
    String
mscml.keypress.status.duration  duration
    String
mscml.managecontent  managecontent
    String
mscml.managecontent.action  action
    String
mscml.managecontent.dest  dest
    String
mscml.managecontent.fetchtimeout  fetchtimeout
    String
mscml.managecontent.httpmethod  httpmethod
    String
mscml.managecontent.id  id
    String
mscml.managecontent.mimetype  mimetype
    String
mscml.managecontent.name  name
    String
mscml.managecontent.src  src
    String
mscml.megacodigitmap  megacodigitmap
    String
mscml.megacodigitmap.name  name
    String
mscml.megacodigitmap.value  value
    String
mscml.mgcpdigitmap  mgcpdigitmap
    String
mscml.mgcpdigitmap.name  name
    String
mscml.mgcpdigitmap.value  value
    String
mscml.notification  notification
    String
mscml.notification.conference  conference
    String
```



```
mscml.notification.conference.activetalkers  activetalkers
String
mscml.notification.conference.activetalkers.interval  interval
String
mscml.notification.conference.activetalkers.report  report
String
mscml.notification.conference.activetalkers.talker  talker
String
mscml.notification.conference.activetalkers.talker.callid  callid
String
mscml.notification.conference.numtalkers  numtalkers
String
mscml.notification.conference.uniqueid  uniqueid
String
mscml.notification.keypress  keypress
String
mscml.notification.keypress.digit  digit
String
mscml.notification.keypress.interdigittime  interdigittime
String
mscml.notification.keypress.length  length
String
mscml.notification.keypress.maskdigits  maskdigits
String
mscml.notification.keypress.method  method
String
mscml.notification.keypress.report  report
String
mscml.notification.keypress.status  status
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mscml.notification.keypress.status.command  command
String
mscml.notification.keypress.status.duration  duration
String
mscml.notification.signal  signal
String
mscml.notification.signal.report  report
String
mscml.notification.signal.type  type
String
mscml.outputgain  outputgain
String
mscml.outputgain.auto  auto
String
```

```
mscml.outputgain.auto.silencethreshold  silencethreshold
    String
mscml.outputgain.auto.startlevel  startlevel
    String
mscml.outputgain.auto.targetlevel  targetlevel
    String
mscml.outputgain.fixed  fixed
    String
mscml.outputgain.fixed.level  level
    String
mscml.pattern  pattern
    String
mscml.pattern.megacodigitmap  megacodigitmap
    String
mscml.pattern.megacodigitmap.name  name
    String
mscml.pattern.megacodigitmap.value  value
    String
mscml.pattern.mgcpdigitmap  mgcpdigitmap
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mscml.pattern.mgcpdigitmap.name  name
    String
mscml.pattern.mgcpdigitmap.value  value
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mscml.pattern.regex  regex
    String
mscml.pattern.regex.name  name
    String
mscml.pattern.regex.value  value
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mscml.play  play
    String
mscml.play.id  id
    String
mscml.play.offset  offset
    String
mscml.play.prompt  prompt
    String
mscml.play.prompt.audio  audio
    String
mscml.play.prompt.audio.encoding  encoding
    String
mscml.play.prompt.audio.gain  gain
    String
```

```
mscml.play.prompt.audio.gaindelta  gaindelta
String
mscml.play.prompt.audio.rate  rate
String
mscml.play.prompt.audio.ratedelta  ratedelta
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mscml.play.prompt.audio.url  url
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mscml.play.prompt.baseurl  baseurl
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mscml.play.prompt.delay  delay
String
mscml.play.prompt.duration  duration
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mscml.play.prompt.gain  gain
String
mscml.play.prompt.gaindelta  gaindelta
String
mscml.play.prompt.locale  locale
String
mscml.play.prompt.offset  offset
String
mscml.play.prompt.rate  rate
String
mscml.play.prompt.ratedelta  ratedelta
String
mscml.play.prompt.repeat  repeat
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mscml.play.prompt.stoponerror  stoponerror
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mscml.play.prompt.variable  variable
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mscml.play.prompt.variable.subtype  subtype
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mscml.play.prompt.variable.type  type
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mscml.play.prompt.variable.value  value
String
mscml.play.promptencoding  promptencoding
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mscml.play.prompturl  prompturl
String
mscml.playcollect  playcollect
String
```

```
mscml.playcollect.barge barge
String
mscml.playcollect.cleardigits cleardigits
String
mscml.playcollect.escapekey escapekey
String
mscml.playcollect.extradigittimer extradigittimer
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mscml.playcollect.ffkey ffkey
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mscml.playcollect.firstdigittimer firstdigittimer
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mscml.playcollect.id id
String
mscml.playcollect.interdigitcriticaltimer interdigitcriticaltimer
String
mscml.playcollect.interdigittimer interdigittimer
String
mscml.playcollect.maskdigits maskdigits
String
mscml.playcollect.maxdigits maxdigits
String
mscml.playcollect.offset offset
String
mscml.playcollect.pattern pattern
String
mscml.playcollect.pattern.megacodigitmap megacodigitmap
String
mscml.playcollect.pattern.megacodigitmap.name name
String
mscml.playcollect.pattern.megacodigitmap.value value
String
mscml.playcollect.pattern.mgcpdigitmap mgcpdigitmap
String
mscml.playcollect.pattern.mgcpdigitmap.name name
String
mscml.playcollect.pattern.mgcpdigitmap.value value
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mscml.playcollect.pattern.regex regex
String
mscml.playcollect.pattern.regex.name name
String
mscml.playcollect.pattern.regex.value value
String
```

```
mscml.playcollect.prompt  prompt
    String
mscml.playcollect.prompt.audio  audio
    String
mscml.playcollect.prompt.audio.encoding  encoding
    String
mscml.playcollect.prompt.audio.gain  gain
    String
mscml.playcollect.prompt.audio.gaindelta  gaindelta
    String
mscml.playcollect.prompt.audio.rate  rate
    String
mscml.playcollect.prompt.audio.ratedelta  ratedelta
    String
mscml.playcollect.prompt.audio.url  url
    String
mscml.playcollect.prompt.baseurl  baseurl
    String
mscml.playcollect.prompt.delay  delay
    String
mscml.playcollect.prompt.duration  duration
    String
mscml.playcollect.prompt.gain  gain
    String
mscml.playcollect.prompt.gaindelta  gaindelta
    String
mscml.playcollect.prompt.locale  locale
    String
mscml.playcollect.prompt.offset  offset
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mscml.playcollect.prompt.rate  rate
    String
mscml.playcollect.prompt.ratedelta  ratedelta
    String
mscml.playcollect.prompt.repeat  repeat
    String
mscml.playcollect.prompt.stoponerror  stoponerror
    String
mscml.playcollect.prompt.variable  variable
    String
mscml.playcollect.prompt.variable.subtype  subtype
    String
mscml.playcollect.prompt.variable.type  type
    String
```

```
mscml.playcollect.prompt.variable.value  value
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mscml.playcollect.promptencoding  promptencoding
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mscml.playcollect.prompturl  prompturl
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mscml.playcollect.returnkey  returnkey
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mscml.playcollect.rwkey  rwkey
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mscml.playcollect.skipinterval  skipinterval
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mscml.playrecord  playrecord
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mscml.playrecord.barge  barge
String
mscml.playrecord.beep  beep
String
mscml.playrecord.cleardigits  cleardigits
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mscml.playrecord.duration  duration
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mscml.playrecord.endsilence  endsilence
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mscml.playrecord.escapekey  escapekey
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mscml.playrecord.id  id
String
mscml.playrecord.initsilence  initsilence
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mscml.playrecord.mode  mode
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mscml.playrecord.offset  offset
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mscml.playrecord.prompt  prompt
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mscml.playrecord.prompt.audio  audio
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mscml.playrecord.prompt.audio.encoding  encoding
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mscml.playrecord.prompt.audio.gain  gain
String
mscml.playrecord.prompt.audio.gaindelta  gaindelta
String
```

```
mscml.playrecord.prompt.audio.rate rate
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mscml.playrecord.prompt.audio.ratedelta ratedelta
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mscml.playrecord.prompt.audio.url url
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mscml.playrecord.prompt.baseurl baseurl
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mscml.playrecord.prompt.delay delay
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mscml.playrecord.prompt.duration duration
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mscml.playrecord.prompt.gain gain
String
mscml.playrecord.prompt.gaindelta gaindelta
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mscml.playrecord.prompt.locale locale
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mscml.playrecord.prompt.offset offset
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mscml.playrecord.prompt.rate rate
String
mscml.playrecord.prompt.ratedelta ratedelta
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mscml.playrecord.prompt.repeat repeat
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mscml.playrecord.prompturl prompturl
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mscml.playrecord.recencoding recencoding
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mscml.playrecord.recstopmask recstopmask
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```

```
mscml.playrecord.recurl  recurl
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    String
mscml.prompt.audio.encoding  encoding
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mscml.prompt.audio.gain  gain
    String
mscml.prompt.audio.gaindelta  gaindelta
    String
mscml.prompt.audio.rate  rate
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mscml.prompt.audio.ratedelta  ratedelta
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mscml.prompt.audio.url  url
    String
mscml.prompt.baseurl  baseurl
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mscml.prompt.delay  delay
    String
mscml.prompt.duration  duration
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mscml.prompt.gain  gain
    String
mscml.prompt.gaindelta  gaindelta
    String
mscml.prompt.locale  locale
    String
mscml.prompt.offset  offset
    String
mscml.prompt.rate  rate
    String
mscml.prompt.ratedelta  ratedelta
    String
mscml.prompt.repeat  repeat
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mscml.prompt.stoponerror  stoponerror
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mscml.prompt.variable  variable
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mscml.prompt.variable.subtype  subtype
    String
```



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mscml.prompt.variable.type  type
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mscml.prompt.variable.value  value
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mscml.regex  regex
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mscml.regex.value  value
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mscml.request.configure_conference.reserveconfmedia  reserveconfmedia
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mscml.request.configure_conference.reservedtalkers  reservedtalkers
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mscml.request.configure_conference.subscribe.events  events
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mscml.request.configure_conference.subscribe.events.activetalkers.report  report
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mscml.request.configure_conference.subscribe.events.keypress.digit  digit
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mscml.request.configure_conference.subscribe.events.keypress.interdigittime  int
    String
mscml.request.configure_conference.subscribe.events.keypress.length  length
    String
mscml.request.configure_conference.subscribe.events.keypress.maskdigits  maskdig
    String
```

```
mscml.request.configure_conference.subscribe.events.keypress.method  method
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mscml.request.configure_conference.subscribe.events.keypress.report  report
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mscml.request.configure_conference.subscribe.events.keypress.status  status
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mscml.request.configure_conference.subscribe.events.keypress.status.command  com
String
mscml.request.configure_conference.subscribe.events.keypress.status.duration  du
String
mscml.request.configure_conference.subscribe.events.signal  signal
String
mscml.request.configure_conference.subscribe.events.signal.report  report
String
mscml.request.configure_conference.subscribe.events.signal.type  type
String
mscml.request.configure_leg  configure_leg
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mscml.request.configure_leg.configure_team  configure_team
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mscml.request.configure_leg.configure_team.action  action
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mscml.request.configure_leg.configure_team.id  id
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mscml.request.configure_leg.configure_team.teammate  teammate
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mscml.request.configure_leg.configure_team.teammate.id  id
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mscml.request.configure_leg.dtmfclamp  dtmfclamp
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mscml.request.configure_leg.inputgain  inputgain
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mscml.request.configure_leg.inputgain.auto.silencethreshold  silencethreshold
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mscml.request.configure_leg.inputgain.auto.startlevel  startlevel
String
mscml.request.configure_leg.inputgain.auto.targetlevel  targetlevel
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mscml.request.configure_leg.inputgain.fixed  fixed
String
```

```
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mscml.request.configure_leg.mixmode mixmode
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mscml.request.configure_leg.outputgain outputgain
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mscml.request.configure_leg.outputgain.auto auto
String
mscml.request.configure_leg.outputgain.auto.silencethreshold silencethreshold
String
mscml.request.configure_leg.outputgain.auto.startlevel startlevel
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mscml.request.configure_leg.outputgain.auto.targetlevel targetlevel
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mscml.request.configure_leg.outputgain.fixed fixed
String
mscml.request.configure_leg.outputgain.fixed.level level
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mscml.request.configure_leg.subscribe subscribe
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mscml.request.configure_leg.subscribe.events events
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mscml.request.configure_leg.subscribe.events.activetalkers activetalkers
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mscml.request.configure_leg.subscribe.events.activetalkers.interval interval
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mscml.request.configure_leg.subscribe.events.activetalkers.report report
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mscml.request.configure_leg.subscribe.events.activetalkers.talker talker
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mscml.request.configure_leg.subscribe.events.activetalkers.talker.callid callid
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mscml.request.configure_leg.subscribe.events.keypress keypress
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mscml.request.configure_leg.subscribe.events.keypress.digit digit
String
mscml.request.configure_leg.subscribe.events.keypress.interdigittime interdigit
String
mscml.request.configure_leg.subscribe.events.keypress.length length
String
mscml.request.configure_leg.subscribe.events.keypress.maskdigits maskdigits
String
mscml.request.configure_leg.subscribe.events.keypress.method method
String
```

```
mscml.request.configure_leg.subscribe.events.keypress.report  report
String
mscml.request.configure_leg.subscribe.events.keypress.status  status
String
mscml.request.configure_leg.subscribe.events.keypress.status.command  command
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mscml.request.configure_leg.subscribe.events.keypress.status.duration  duration
String
mscml.request.configure_leg.subscribe.events.signal  signal
String
mscml.request.configure_leg.subscribe.events.signal.report  report
String
mscml.request.configure_leg.subscribe.events.signal.type  type
String
mscml.request.configure_leg.toneclamp  toneclamp
String
mscml.request.configure_leg.type  type
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mscml.request.faxplay  faxplay
String
mscml.request.faxplay.id  id
String
mscml.request.faxplay.lclid  lclid
String
mscml.request.faxplay.prompt  prompt
String
mscml.request.faxplay.prompt.audio  audio
String
mscml.request.faxplay.prompt.audio.encoding  encoding
String
mscml.request.faxplay.prompt.audio.gain  gain
String
mscml.request.faxplay.prompt.audio.gaindelta  gaindelta
String
mscml.request.faxplay.prompt.audio.rate  rate
String
mscml.request.faxplay.prompt.audio.ratedelta  ratedelta
String
mscml.request.faxplay.prompt.audio.url  url
String
mscml.request.faxplay.prompt.baseurl  baseurl
String
mscml.request.faxplay.prompt.delay  delay
String
```

```
mscml.request.faxplay.prompt.duration  duration
String
mscml.request.faxplay.prompt.gain  gain
String
mscml.request.faxplay.prompt.gaindelta  gaindelta
String
mscml.request.faxplay.prompt.locale  locale
String
mscml.request.faxplay.prompt.offset  offset
String
mscml.request.faxplay.prompt.rate  rate
String
mscml.request.faxplay.prompt.ratedelta  ratedelta
String
mscml.request.faxplay.prompt.repeat  repeat
String
mscml.request.faxplay.prompt.stoponerror  stoponerror
String
mscml.request.faxplay.prompt.variable  variable
String
mscml.request.faxplay.prompt.variable.subtype  subtype
String
mscml.request.faxplay.prompt.variable.type  type
String
mscml.request.faxplay.prompt.variable.value  value
String
mscml.request.faxplay.prompturl  prompturl
String
mscml.request.faxplay.recurl  recurl
String
mscml.request.faxplay.rmtid  rmtid
String
mscml.request.faxrecord  faxrecord
String
mscml.request.faxrecord.id  id
String
mscml.request.faxrecord.lclid  lclid
String
mscml.request.faxrecord.prompt  prompt
String
mscml.request.faxrecord.prompt.audio  audio
String
mscml.request.faxrecord.prompt.audio.encoding  encoding
String
```

```
mscml.request.faxrecord.prompt.audio.gain gain
String
mscml.request.faxrecord.prompt.audio.gaindelta gaindelta
String
mscml.request.faxrecord.prompt.audio.rate rate
String
mscml.request.faxrecord.prompt.audio.ratedelta ratedelta
String
mscml.request.faxrecord.prompt.audio.url url
String
mscml.request.faxrecord.prompt.baseurl baseurl
String
mscml.request.faxrecord.prompt.delay delay
String
mscml.request.faxrecord.prompt.duration duration
String
mscml.request.faxrecord.prompt.gain gain
String
mscml.request.faxrecord.prompt.gaindelta gaindelta
String
mscml.request.faxrecord.prompt.locale locale
String
mscml.request.faxrecord.prompt.offset offset
String
mscml.request.faxrecord.prompt.rate rate
String
mscml.request.faxrecord.prompt.ratedelta ratedelta
String
mscml.request.faxrecord.prompt.repeat repeat
String
mscml.request.faxrecord.prompt.stoponerror stoponerror
String
mscml.request.faxrecord.prompt.variable variable
String
mscml.request.faxrecord.prompt.variable.subtype subtype
String
mscml.request.faxrecord.prompt.variable.type type
String
mscml.request.faxrecord.prompt.variable.value value
String
mscml.request.faxrecord.prompturl prompturl
String
mscml.request.faxrecord.recurl recur1
String
```

```
mscml.request.faxrecord.rmtid  rmtid
    String
mscml.request.managecontent  managecontent
    String
mscml.request.managecontent.action  action
    String
mscml.request.managecontent.dest  dest
    String
mscml.request.managecontent.fetchtimeout  fetchtimeout
    String
mscml.request.managecontent.httpmethod  httpmethod
    String
mscml.request.managecontent.id  id
    String
mscml.request.managecontent.mimetype  mimetype
    String
mscml.request.managecontent.name  name
    String
mscml.request.managecontent.src  src
    String
mscml.request.play  play
    String
mscml.request.play.id  id
    String
mscml.request.play.offset  offset
    String
mscml.request.play.prompt  prompt
    String
mscml.request.play.prompt.audio  audio
    String
mscml.request.play.prompt.audio.encoding  encoding
    String
mscml.request.play.prompt.audio.gain  gain
    String
mscml.request.play.prompt.audio.gaindelta  gaindelta
    String
mscml.request.play.prompt.audio.rate  rate
    String
mscml.request.play.prompt.audio.ratedelta  ratedelta
    String
mscml.request.play.prompt.audio.url  url
    String
mscml.request.play.prompt.baseurl  baseurl
    String
```

```
mscml.request.play.prompt.delay    delay
    String
mscml.request.play.prompt.duration  duration
    String
mscml.request.play.prompt.gain      gain
    String
mscml.request.play.prompt.gaindelta gaindelta
    String
mscml.request.play.prompt.locale    locale
    String
mscml.request.play.prompt.offset    offset
    String
mscml.request.play.prompt.rate      rate
    String
mscml.request.play.prompt.ratedelta ratedelta
    String
mscml.request.play.prompt.repeat    repeat
    String
mscml.request.play.prompt.stoponerror stoponerror
    String
mscml.request.play.prompt.variable  variable
    String
mscml.request.play.prompt.variable.subtype subtype
    String
mscml.request.play.prompt.variable.type type
    String
mscml.request.play.prompt.variable.value value
    String
mscml.request.play.promptencoding   promptencoding
    String
mscml.request.play.prompturl        prompturl
    String
mscml.request.playcollect           playcollect
    String
mscml.request.playcollect.barge     barge
    String
mscml.request.playcollect.cleardigits cleardigits
    String
mscml.request.playcollect.escapekey escapekey
    String
mscml.request.playcollect.extradigittimer extradigittimer
    String
mscml.request.playcollect.ffkey     ffkey
    String
```



```
mscml.request.playcollect.firstdigittimer  firstdigittimer
String
mscml.request.playcollect.id  id
String
mscml.request.playcollect.interdigitcriticaltimer  interdigitcriticaltimer
String
mscml.request.playcollect.interdigittimer  interdigittimer
String
mscml.request.playcollect.maskdigits  maskdigits
String
mscml.request.playcollect.maxdigits  maxdigits
String
mscml.request.playcollect.offset  offset
String
mscml.request.playcollect.pattern  pattern
String
mscml.request.playcollect.pattern.megacodigitmap  megacodigitmap
String
mscml.request.playcollect.pattern.megacodigitmap.name  name
String
mscml.request.playcollect.pattern.megacodigitmap.value  value
String
mscml.request.playcollect.pattern.mgcpdigitmap  mgcpdigitmap
String
mscml.request.playcollect.pattern.mgcpdigitmap.name  name
String
mscml.request.playcollect.pattern.mgcpdigitmap.value  value
String
mscml.request.playcollect.pattern.regex  regex
String
mscml.request.playcollect.pattern.regex.name  name
String
mscml.request.playcollect.pattern.regex.value  value
String
mscml.request.playcollect.prompt  prompt
String
mscml.request.playcollect.prompt.audio  audio
String
mscml.request.playcollect.prompt.audio.encoding  encoding
String
mscml.request.playcollect.prompt.audio.gain  gain
String
mscml.request.playcollect.prompt.audio.gaindelta  gaindelta
String
```

```
mscml.request.playcollect.prompt.audio.rate  rate
String
mscml.request.playcollect.prompt.audio.ratedelta  ratedelta
String
mscml.request.playcollect.prompt.audio.url  url
String
mscml.request.playcollect.prompt.baseurl  baseurl
String
mscml.request.playcollect.prompt.delay  delay
String
mscml.request.playcollect.prompt.duration  duration
String
mscml.request.playcollect.prompt.gain  gain
String
mscml.request.playcollect.prompt.gaindelta  gaindelta
String
mscml.request.playcollect.prompt.locale  locale
String
mscml.request.playcollect.prompt.offset  offset
String
mscml.request.playcollect.prompt.rate  rate
String
mscml.request.playcollect.prompt.ratedelta  ratedelta
String
mscml.request.playcollect.prompt.repeat  repeat
String
mscml.request.playcollect.prompt.stoponerror  stoponerror
String
mscml.request.playcollect.prompt.variable  variable
String
mscml.request.playcollect.prompt.variable.subtype  subtype
String
mscml.request.playcollect.prompt.variable.type  type
String
mscml.request.playcollect.prompt.variable.value  value
String
mscml.request.playcollect.promptencoding  promptencoding
String
mscml.request.playcollect.prompturl  prompturl
String
mscml.request.playcollect.returnkey  returnkey
String
mscml.request.playcollect.rwkey  rwkey
String
```

```
mscml.request.playcollect.skipinterval skipinterval
String
mscml.request.playrecord playrecord
String
mscml.request.playrecord.barge barge
String
mscml.request.playrecord.beep beep
String
mscml.request.playrecord.cleardigits cleardigits
String
mscml.request.playrecord.duration duration
String
mscml.request.playrecord.endsilence endsilence
String
mscml.request.playrecord.escapekey escapekey
String
mscml.request.playrecord.id id
String
mscml.request.playrecord.initsilence initsilence
String
mscml.request.playrecord.mode mode
String
mscml.request.playrecord.offset offset
String
mscml.request.playrecord.prompt prompt
String
mscml.request.playrecord.prompt.audio audio
String
mscml.request.playrecord.prompt.audio.encoding encoding
String
mscml.request.playrecord.prompt.audio.gain gain
String
mscml.request.playrecord.prompt.audio.gaindelta gaindelta
String
mscml.request.playrecord.prompt.audio.rate rate
String
mscml.request.playrecord.prompt.audio.ratedelta ratedelta
String
mscml.request.playrecord.prompt.audio.url url
String
mscml.request.playrecord.prompt.baseurl baseurl
String
mscml.request.playrecord.prompt.delay delay
String
```

```
mscml.request.playrecord.prompt.duration  duration
String
mscml.request.playrecord.prompt.gain  gain
String
mscml.request.playrecord.prompt.gaindelta  gaindelta
String
mscml.request.playrecord.prompt.locale  locale
String
mscml.request.playrecord.prompt.offset  offset
String
mscml.request.playrecord.prompt.rate  rate
String
mscml.request.playrecord.prompt.ratedelta  ratedelta
String
mscml.request.playrecord.prompt.repeat  repeat
String
mscml.request.playrecord.prompt.stoponerror  stoponerror
String
mscml.request.playrecord.prompt.variable  variable
String
mscml.request.playrecord.prompt.variable.subtype  subtype
String
mscml.request.playrecord.prompt.variable.type  type
String
mscml.request.playrecord.prompt.variable.value  value
String
mscml.request.playrecord.promptencoding  promptencoding
String
mscml.request.playrecord.prompturl  prompturl
String
mscml.request.playrecord.recencoding  recencoding
String
mscml.request.playrecord.recstopmask  recstopmask
String
mscml.request.playrecord.recurl  recurl
String
mscml.request.stop  stop
String
mscml.request.stop.id  id
String
mscml.response  response
String
mscml.response.code  code
String
```

```
mscml.response.digits  digits
    String
mscml.response.error_info  error_info
    String
mscml.response.error_info.code  code
    String
mscml.response.error_info.context  context
    String
mscml.response.error_info.text  text
    String
mscml.response.faxcode  faxcode
    String
mscml.response.id  id
    String
mscml.response.name  name
    String
mscml.response.pages_recv  pages_recv
    String
mscml.response.pages_sent  pages_sent
    String
mscml.response.playduration  playduration
    String
mscml.response.playoffset  playoffset
    String
mscml.response.reason  reason
    String
mscml.response.recduration  recduration
    String
mscml.response.reclength  reclength
    String
mscml.response.request  request
    String
mscml.response.team  team
    String
mscml.response.team.id  id
    String
mscml.response.team.numteam  numteam
    String
mscml.response.team.teammate  teammate
    String
mscml.response.team.teammate.id  id
    String
mscml.response.text  text
    String
```

```
mscml.signal signal
    String
mscml.signal.report report
    String
mscml.signal.type type
    String
mscml.status status
    String
mscml.status.command command
    String
mscml.status.duration duration
    String
mscml.stop stop
    String
mscml.stop.id id
    String
mscml.subscribe subscribe
    String
mscml.subscribe.events events
    String
mscml.subscribe.events.activetalkers activetalkers
    String
mscml.subscribe.events.activetalkers.interval interval
    String
mscml.subscribe.events.activetalkers.report report
    String
mscml.subscribe.events.activetalkers.talker talker
    String
mscml.subscribe.events.activetalkers.talker.callid callid
    String
mscml.subscribe.events.keypress keypress
    String
mscml.subscribe.events.keypress.digit digit
    String
mscml.subscribe.events.keypress.interdigittime interdigittime
    String
mscml.subscribe.events.keypress.length length
    String
mscml.subscribe.events.keypress.maskdigits maskdigits
    String
mscml.subscribe.events.keypress.method method
    String
mscml.subscribe.events.keypress.report report
    String
```

```
mscml.subscribe.events.keypress.status  status
String
mscml.subscribe.events.keypress.status.command  command
String
mscml.subscribe.events.keypress.status.duration  duration
String
mscml.subscribe.events.signal  signal
String
mscml.subscribe.events.signal.report  report
String
mscml.subscribe.events.signal.type  type
String
mscml.talker  talker
String
mscml.talker.callid  callid
String
mscml.team  team
String
mscml.team.id  id
String
mscml.team.numteam  numteam
String
mscml.team.teammate  teammate
String
mscml.team.teammate.id  id
String
mscml.teammate  teammate
String
mscml.teammate.id  id
String
mscml.variable  variable
String
mscml.variable.subtype  subtype
String
mscml.variable.type  type
String
mscml.variable.value  value
String
mscml.version  version
String
```

**Media Type (media)**

**Media Type: message/http (message-http)****Message Session Relay Protocol (msrp)**

```
msrp.authentication.info  Authentication-Info
    String
    Authentication-Info

msrp.authorization  Authorization
    String
    Authorization

msrp.byte.range  Byte Range
    String
    Byte Range

msrp.cnt.flg  Continuation-flag
    String
    Continuation-flag

msrp.content.description  Content-Description
    String
    Content-Description

msrp.content.disposition  Content-Disposition
    String
    Content-Disposition

msrp.content.id  Content-ID
    String
    Content-ID

msrp.content.type  Content-Type
    String
    Content-Type

msrp.data  Data
    String
    Data

msrp.end.line  End Line
    String
    End Line

msrp.failure.report  Failure Report
    String
    Failure Report

msrp.from.path  From Path
    String
    From Path

msrp.messageid  Message ID
    String
    Message ID

msrp.method  Method
    String
    Method
```



```
msrp.msg.hdr  Message Header
  No value
  Message Header
msrp.request.line  Request Line
  String
  Request Line
msrp.response.line  Response Line
  String
  Response Line
msrp.setup  Stream setup
  String
  Stream setup, method and frame number
msrp.setup-frame  Setup frame
  Frame number
  Frame that set up this stream
msrp.setup-method  Setup Method
  String
  Method used to set up this stream
msrp.status  Status
  String
  Status
msrp.status.code  Status code
  Unsigned 16-bit integer
  Status code
msrp.success.report  Success Report
  String
  Success Report
msrp.to.path  To Path
  String
  To Path
msrp.transaction.id  Transaction Id
  String
  Transaction Id
msrp.use.path  Use-Path
  String
  Use-Path
msrp.www.authenticate  WWW-Authenticate
  String
  WWW-Authenticate
```

### **Message Transfer Part Level 2 (mtp2)**

```
mtp2.bib  Backward indicator bit
  Unsigned 8-bit integer
mtp2.bsn  Backward sequence number
  Unsigned 8-bit integer
mtp2.fib  Forward indicator bit
  Unsigned 8-bit integer
```

```
mtp2.fsn  Forward sequence number
          Unsigned 8-bit integer
mtp2.li   Length Indicator
          Unsigned 8-bit integer
mtp2.res  Reserved
          Unsigned 16-bit integer
mtp2.sf   Status field
          Unsigned 8-bit integer
mtp2.spare Spare
          Unsigned 8-bit integer
```

### Message Transfer Part Level 3 (mtp3)

```
mtp3.ansi_dpc  DPC
               String
mtp3.ansi_opc  OPC
               String
mtp3.chinese_dpc  DPC
                  String
mtp3.chinese_opc  OPC
                  String
mtp3.dpc.cluster  DPC Cluster
                  Unsigned 24-bit integer
mtp3.dpc.member   DPC Member
                  Unsigned 24-bit integer
mtp3.dpc.network  DPC Network
                  Unsigned 24-bit integer
mtp3.network_indicator  Network indicator
                        Unsigned 8-bit integer
mtp3.opc.cluster  OPC Cluster
                  Unsigned 24-bit integer
mtp3.opc.member   OPC Member
                  Unsigned 24-bit integer
mtp3.opc.network  OPC Network
                  Unsigned 24-bit integer
mtp3.priority     ITU priority
                  Unsigned 8-bit integer
mtp3.service_indicator  Service indicator
                        Unsigned 8-bit integer
mtp3.sls          Signalling Link Selector
                  Unsigned 32-bit integer
mtp3.sls_spare    SLS Spare
                  Unsigned 8-bit integer
mtp3.spare        Spare
                  Unsigned 8-bit integer
```

**Message Transfer Part Level 3 Management (mtp3mg)**

mtp3mg.ansi\_apc Affected Point Code  
String

mtp3mg.apc Affected Point Code (ITU)  
Unsigned 16-bit integer

mtp3mg.apc.cluster Affected Point Code cluster  
Unsigned 24-bit integer

mtp3mg.apc.member Affected Point Code member  
Unsigned 24-bit integer

mtp3mg.apc.network Affected Point Code network  
Unsigned 24-bit integer

mtp3mg.cause Cause  
Unsigned 8-bit integer  
Cause of user unavailability

mtp3mg.cbc Change Back Code  
Unsigned 16-bit integer

mtp3mg.chinese\_apc Affected Point Code  
String

mtp3mg.fsn Forward Sequence Number  
Unsigned 8-bit integer  
Forward Sequence Number of last accepted message

mtp3mg.h0 H0 (Message Group)  
Unsigned 8-bit integer  
Message group identifier

mtp3mg.h1 H1 (Message)  
Unsigned 8-bit integer  
Message type

mtp3mg.japan\_apc Affected Point Code  
Unsigned 16-bit integer

mtp3mg.japan\_count Count of Affected Point Codes (Japan)  
Unsigned 8-bit integer

mtp3mg.japan\_spare TFC spare (Japan)  
Unsigned 8-bit integer

mtp3mg.japan\_status Status  
Unsigned 8-bit integer

mtp3mg.link Link  
Unsigned 8-bit integer  
CIC of BIC used to carry data

mtp3mg.slc Signalling Link Code  
Unsigned 8-bit integer  
SLC of affected link

mtp3mg.spare Japan management spare  
Unsigned 8-bit integer  
Japan management spare

```
mtp3mg.status  Status
  Unsigned 8-bit integer
  Congestion status

mtp3mg.test  Japan test message
  Unsigned 8-bit integer
  Japan test message type

mtp3mg.test.h0  H0 (Message Group)
  Unsigned 8-bit integer
  Message group identifier

mtp3mg.test.h1  H1 (Message)
  Unsigned 8-bit integer
  SLT message type

mtp3mg.test.length  Test length
  Unsigned 8-bit integer
  Signalling link test pattern length

mtp3mg.test.pattern  Japan test message pattern
  Unsigned 16-bit integer
  Japan test message pattern

mtp3mg.test.spare  Japan test message spare
  Unsigned 8-bit integer
  Japan test message spare

mtp3mg.user  User
  Unsigned 8-bit integer
  Unavailable user part
```

#### **Meta Analysis Tracing Engine (mate)**

#### **Microsoft AT-Scheduler Service (atsvc)**

```
atcv.s.job_info  JobInfo
  No value
  JobInfo structure

atsvc.DaysOfMonth.Eight  Eight
  Boolean

atsvc.DaysOfMonth.Eighteenth  Eighteenth
  Boolean

atsvc.DaysOfMonth.Eleventh  Eleventh
  Boolean

atsvc.DaysOfMonth.Fifteenth  Fifteenth
  Boolean

atsvc.DaysOfMonth.Fifth  Fifth
  Boolean

atsvc.DaysOfMonth.First  First
  Boolean

atsvc.DaysOfMonth.Fourteenth  Fourteenth
  Boolean

atsvc.DaysOfMonth.Fourth  Fourth
  Boolean
```

```
atsvc.DaysOfMonth.Nineteenth  Nineteenth
    Boolean
atsvc.DaysOfMonth.Ninth  Ninth
    Boolean
atsvc.DaysOfMonth.Second  Second
    Boolean
atsvc.DaysOfMonth.Seventeenth  Seventeenth
    Boolean
atsvc.DaysOfMonth.Seventh  Seventh
    Boolean
atsvc.DaysOfMonth.Sixteenth  Sixteenth
    Boolean
atsvc.DaysOfMonth.Sixth  Sixth
    Boolean
atsvc.DaysOfMonth.Tenth  Tenth
    Boolean
atsvc.DaysOfMonth.Third  Third
    Boolean
atsvc.DaysOfMonth.Thirtieth  Thirtieth
    Boolean
atsvc.DaysOfMonth.Thirtyfirst  Thirtyfirst
    Boolean
atsvc.DaysOfMonth.Thitteenth  Thitteenth
    Boolean
atsvc.DaysOfMonth.Twelfth  Twelfth
    Boolean
atsvc.DaysOfMonth.Twentyeighth  Twentyeighth
    Boolean
atsvc.DaysOfMonth.Twentyfifth  Twentyfifth
    Boolean
atsvc.DaysOfMonth.Twentyfirst  Twentyfirst
    Boolean
atsvc.DaysOfMonth.Twentyfourth  Twentyfourth
    Boolean
atsvc.DaysOfMonth.Twenty ninth  Twentyninth
    Boolean
atsvc.DaysOfMonth.Twentysecond  Twentysecond
    Boolean
atsvc.DaysOfMonth.Twentyseventh  Twentyseventh
    Boolean
atsvc.DaysOfMonth.Twentsixth  Twentsixth
    Boolean
atsvc.DaysOfMonth.Twentyth  Twentyth
    Boolean
```

```
atsvc.DaysOfMonth.Twentythird  Twentythird
  Boolean
atsvc.DaysOfWeek.DAYSOFWEEK_FRIDAY  DaysOfWeek Friday
  Boolean
atsvc.DaysOfWeek.DAYSOFWEEK_MONDAY  DaysOfWeek Monday
  Boolean
atsvc.DaysOfWeek.DAYSOFWEEK_SATURDAY  DaysOfWeek Saturday
  Boolean
atsvc.DaysOfWeek.DAYSOFWEEK_SUNDAY  DaysOfWeek Sunday
  Boolean
atsvc.DaysOfWeek.DAYSOFWEEK_THURSDAY  DaysOfWeek Thursday
  Boolean
atsvc.DaysOfWeek.DAYSOFWEEK_TUESDAY  DaysOfWeek Tuesday
  Boolean
atsvc.DaysOfWeek.DAYSOFWEEK_WEDNESDAY  DaysOfWeek Wednesday
  Boolean
atsvc.Flags.JOB_ADD_CURRENT_DATE  Job Add Current Date
  Boolean
atsvc.Flags.JOB_EXEC_ERROR  Job Exec Error
  Boolean
atsvc.Flags.JOB_NONINTERACTIVE  Job Noninteractive
  Boolean
atsvc.Flags.JOB_RUNS_TODAY  Job Runs Today
  Boolean
atsvc.Flags.JOB_RUN_PERIODICALLY  Job Run Periodically
  Boolean
atsvc.JobDel.max_job_id  Max Job Id
  Unsigned 32-bit integer
atsvc.JobDel.min_job_id  Min Job Id
  Unsigned 32-bit integer
atsvc.JobEnum.ctr  Ctr
  No value
atsvc.JobEnum.preferred_max_len  Preferred Max Len
  Unsigned 32-bit integer
atsvc.JobEnum.resume_handle  Resume Handle
  Unsigned 32-bit integer
atsvc.JobEnum.total_entries  Total Entries
  Unsigned 32-bit integer
atsvc.JobEnumInfo.command  Command
  String
atsvc.JobEnumInfo.days_of_month  Days Of Month
  Unsigned 32-bit integer
atsvc.JobEnumInfo.days_of_week  Days Of Week
  Unsigned 8-bit integer
```

```
atsvc.JobEnumInfo.flags  Flags
    Unsigned 8-bit integer
atsvc.JobEnumInfo.job_time  Job Time
    Unsigned 32-bit integer
atsvc.JobInfo.command  Command
    String
atsvc.JobInfo.days_of_month  Days Of Month
    Unsigned 32-bit integer
atsvc.JobInfo.days_of_week  Days Of Week
    Unsigned 8-bit integer
atsvc.JobInfo.flags  Flags
    Unsigned 8-bit integer
atsvc.JobInfo.job_time  Job Time
    Unsigned 32-bit integer
atsvc.enum_ctr.entries_read  Entries Read
    Unsigned 32-bit integer
atsvc.enum_ctr.first_entry  First Entry
    No value
atsvc.job_id  Job Id
    Unsigned 32-bit integer
    Identifier of the scheduled job
atsvc.opnum  Operation
    Unsigned 16-bit integer
atsvc.server  Server
    String
    Name of the server
atsvc.status  NT Error
    Unsigned 32-bit integer
```

#### **Microsoft Distributed Link Tracking Server Service (trksvr)**

```
trksvr.opnum  Operation
    Unsigned 16-bit integer
trksvr.rc  Return code
    Unsigned 32-bit integer
    TRKSVR return code
```

#### **Microsoft Exchange MAPI (mapi)**

```
mapi.decrypted.data  Decrypted data
    Byte array
    Decrypted data
mapi.decrypted.data.len  Length
    Unsigned 32-bit integer
    Used size of buffer for decrypted data
mapi.decrypted.data.maxlen  Max Length
    Unsigned 32-bit integer
    Maximum size of buffer for decrypted data
```

```
mapi.decrypted.data.offset  Offset
    Unsigned 32-bit integer
    Offset into buffer for decrypted data

mapi.encap_len  Length
    Unsigned 16-bit integer
    Length of encapsulated/encrypted data

mapi.encrypted_data  Encrypted data
    Byte array
    Encrypted data

mapi.hnd  Context Handle
    Byte array

mapi.notification_payload  Notification payload
    Byte array
    Payload to be sent in newmail protocol notification packets

mapi.notification_port  Notification port
    Unsigned 16-bit integer
    UDP port which newmail protocol notifications are sent to on the client

mapi.opnum  Operation
    Unsigned 16-bit integer

mapi.pdu.len  Length
    Unsigned 16-bit integer
    Size of the command PDU

mapi.rc  Return code
    Unsigned 32-bit integer

mapi.unknown_long  Unknown long
    Unsigned 32-bit integer
    Unknown long. If you know what this is, contact wireshark developers.

mapi.unknown_short  Unknown short
    Unsigned 16-bit integer
    Unknown short. If you know what this is, contact wireshark developers.

mapi.unknown_string  Unknown string
    String
    Unknown string. If you know what this is, contact wireshark developers.
```

#### **Microsoft Exchange New Mail Notification (newmail)**

```
newmail.notification_payload  Notification payload
    Byte array
    Payload requested by client in the MAPI register push notification packet
```

#### **Microsoft File Replication Service (frsrpc)**

```
frsrpc.dsrv  DSRV
    String

frsrpc.dsrv.guid  DSRV GUID

frsrpc.guid.size  Guid Size
    Unsigned 32-bit integer
```



```
frsrpc.opnum  Operation
              Unsigned 16-bit integer
              Operation

frsrpc.ssrvc  SSRV
              String

frsrpc.ssrvc.guid  SSRV GUID

frsrpc.str.size  String Size
                 Unsigned 32-bit integer

frsrpc.timestamp  Timestamp
                  Date/Time stamp

frsrpc.tlv  TLV
            No value
            A tlv blob

frsrpc.tlv.data  TLV Data
                 Byte array

frsrpc.tlv.size  TLV Size
                 Unsigned 32-bit integer

frsrpc.tlv.tag  TLV Tag
                Unsigned 16-bit integer

frsrpc.tlv_item  TLV
                 No value
                 A tlv item

frsrpc.tlv_size  TLV Size
                 Unsigned 32-bit integer
                 Size of tlv blob in bytes

frsrpc.unknown32  unknown32
                  Unsigned 32-bit integer
                  unknown int32

frsrpc.unknownbytes  unknown
                     Byte array
                     unknown bytes
```

#### **Microsoft File Replication Service API (frsapi)**

```
frsapi.opnum  Operation
              Unsigned 16-bit integer
              Operation
```

#### **Microsoft Local Security Architecture (lsa)**

```
lsa.access_mask  Access Mask
                 Unsigned 32-bit integer
                 LSA Access Mask

lsa.access_mask.audit_log_admin  Administer audit log attributes
                                  Boolean
                                  Administer audit log attributes

lsa.access_mask.create_account  Create special accounts (for assignment of user
                                  Boolean
                                  Create special accounts (for assignment of user rights)
```

```
lsa.access_mask.create_priv  Create a privilege
    Boolean
    Create a privilege

lsa.access_mask.create_secret  Create a secret object
    Boolean
    Create a secret object

lsa.access_mask.get_privateinfo  Get sensitive policy information
    Boolean
    Get sensitive policy information

lsa.access_mask.lookup_names  Lookup Names/SIDs
    Boolean
    Lookup Names/SIDs

lsa.access_mask.server_admin  Enable/Disable LSA
    Boolean
    Enable/Disable LSA

lsa.access_mask.set_audit_requirements  Change system audit requirements
    Boolean
    Change system audit requirements

lsa.access_mask.set_default_quota_limits  Set default quota limits
    Boolean
    Set default quota limits

lsa.access_mask.trust_admin  Modify domain trust relationships
    Boolean
    Modify domain trust relationships

lsa.access_mask.view_audit_info  View system audit requirements
    Boolean
    View system audit requirements

lsa.access_mask.view_local_info  View non-sensitive policy information
    Boolean
    View non-sensitive policy information

lsa.acct  Account
    String
    Account

lsa.attr  Attr
    Unsigned 64-bit integer
    LSA Attributes

lsa.auth.blob  Auth blob
    Byte array

lsa.auth.len  Auth Len
    Unsigned 32-bit integer
    Auth Info len

lsa.auth.type  Auth Type
    Unsigned 32-bit integer
    Auth Info type

lsa.auth.update  Update
    Unsigned 64-bit integer
    LSA Auth Info update
```

```
lsa.controller  Controller
                String
                Name of Domain Controller

lsa.count      Count
                Unsigned 32-bit integer
                Count of objects

lsa.cur.mtime   Current MTime
                Date/Time stamp
                Current MTime to set

lsa.domain     Domain
                String
                Domain

lsa.flat_name   Flat Name
                String

lsa.forest     Forest
                String

lsa.fqdn_domain FQDN
                String
                Fully Qualified Domain Name

lsa.hnd        Context Handle
                Byte array
                LSA policy handle

lsa.index      Index
                Unsigned 32-bit integer

lsa.info.level  Level
                Unsigned 16-bit integer
                Information level of requested data

lsa.info_type  Info Type
                Unsigned 32-bit integer

lsa.key        Key
                String

lsa.max_count   Max Count
                Unsigned 32-bit integer

lsa.mod.mtime   MTime
                Date/Time stamp
                Time when this modification occurred

lsa.mod.seq_no  Seq No
                Unsigned 64-bit integer
                Sequence number for this modification

lsa.name       Name
                String

lsa.new_pwd     New Password
                Byte array
                New password

lsa.num_mapped  Num Mapped
                Unsigned 32-bit integer
```

```
lsa.obj_attr  Attributes
    Unsigned 32-bit integer
    LSA Attributes

lsa.obj_attr.len  Length
    Unsigned 32-bit integer
    Length of object attribute structure

lsa.obj_attr.name  Name
    String
    Name of object attribute

lsa.old.mtime  Old MTime
    Date/Time stamp
    Old MTime for this object

lsa.old_pwd  Old Password
    Byte array
    Old password

lsa.opnum  Operation
    Unsigned 16-bit integer
    Operation

lsa.paei.enabled  Auditing enabled
    Unsigned 8-bit integer
    If Security auditing is enabled or not

lsa.paei.settings  Settings
    Unsigned 32-bit integer
    Audit Events Information settings

lsa.pali.log_size  Log Size
    Unsigned 32-bit integer
    Size of audit log

lsa.pali.next_audit_record  Next Audit Record
    Unsigned 32-bit integer
    Next audit record

lsa.pali.percent_full  Percent Full
    Unsigned 32-bit integer
    How full audit log is in percentage

lsa.pali.retention_period  Retention Period
    Time duration

lsa.pali.shutdown_in_progress  Shutdown in progress
    Unsigned 8-bit integer
    Flag whether shutdown is in progress or not

lsa.pali.time_to_shutdown  Time to shutdown
    Time duration
    Time to shutdown

lsa.policy.info  Info Class
    Unsigned 16-bit integer
    Policy information class

lsa.policy_information  POLICY INFO
    No value
    Policy Information union
```

```
lsa.privilege.display__name.size  Size Needed
    Unsigned 32-bit integer
    Number of characters in the privilege display name

lsa.privilege.display_name  Display Name
    String
    LSA Privilege Display Name

lsa.privilege.name  Name
    String
    LSA Privilege Name

lsa.qos.effective_only  Effective only
    Unsigned 8-bit integer
    QOS Flag whether this is Effective Only or not

lsa.qos.imp_lev  Impersonation level
    Unsigned 16-bit integer
    QOS Impersonation Level

lsa.qos.len  Length
    Unsigned 32-bit integer
    Length of quality of service structure

lsa.qos.track_ctx  Context Tracking
    Unsigned 8-bit integer
    QOS Context Tracking Mode

lsa.quota.max_wss  Max WSS
    Unsigned 32-bit integer
    Size of Quota Max WSS

lsa.quota.min_wss  Min WSS
    Unsigned 32-bit integer
    Size of Quota Min WSS

lsa.quota.non_paged_pool  Non Paged Pool
    Unsigned 32-bit integer
    Size of Quota non-Paged Pool

lsa.quota.paged_pool  Paged Pool
    Unsigned 32-bit integer
    Size of Quota Paged Pool

lsa.quota.pagefile  Pagefile
    Unsigned 32-bit integer
    Size of quota pagefile usage

lsa.rc  Return code
    Unsigned 32-bit integer
    LSA return status code

lsa.remove_all  Remove All
    Unsigned 8-bit integer
    Flag whether all rights should be removed or only the specified ones

lsa.resume_handle  Resume Handle
    Unsigned 32-bit integer
    Resume Handle

lsa.rid  RID
    Unsigned 32-bit integer
    RID
```

```
lsa.rid.offset  RID Offset
                Unsigned 32-bit integer
                RID Offset

lsa.rights     Rights
                String
                Account Rights

lsa.sd_size    Size
                Unsigned 32-bit integer
                Size of lsa security descriptor

lsa.secret     LSA Secret
                Byte array

lsa.server     Server
                String
                Name of Server

lsa.server_role Role
                Unsigned 16-bit integer
                LSA Server Role

lsa.sid_type   SID Type
                Unsigned 16-bit integer
                Type of SID

lsa.size       Size
                Unsigned 32-bit integer

lsa.source     Source
                String
                Replica Source

lsa.trust.attr Trust Attr
                Unsigned 32-bit integer
                Trust attributes

lsa.trust.attr.non_trans Non Transitive
                Boolean
                Non Transitive trust

lsa.trust.attr.tree_parent Tree Parent
                Boolean
                Tree Parent trust

lsa.trust.attr.tree_root Tree Root
                Boolean
                Tree Root trust

lsa.trust.attr.uplevel_only Upleve only
                Boolean
                Uplevel only trust

lsa.trust.direction Trust Direction
                Unsigned 32-bit integer
                Trust direction

lsa.trust.type Trust Type
                Unsigned 32-bit integer
                Trust type
```

lsa.trusted.info\_level Info Level  
Unsigned 16-bit integer  
Information level of requested Trusted Domain Information

lsa.unknown.char Unknown char  
Unsigned 8-bit integer  
Unknown char. If you know what this is, contact wireshark developers.

lsa.unknown.hyper Unknown hyper  
Unsigned 64-bit integer  
Unknown hyper. If you know what this is, contact wireshark developers.

lsa.unknown.long Unknown long  
Unsigned 32-bit integer  
Unknown long. If you know what this is, contact wireshark developers.

lsa.unknown.short Unknown short  
Unsigned 16-bit integer  
Unknown short. If you know what this is, contact wireshark developers.

lsa.unknown\_string Unknown string  
String  
Unknown string. If you know what this is, contact wireshark developers.

nt.luid.high High  
Unsigned 32-bit integer  
LUID High component

nt.luid.low Low  
Unsigned 32-bit integer  
LUID Low component

#### Microsoft Media Server (msmms)

msmms.command Command  
String  
MSMMS command hidden filter

msmms.command.broadcast-indexing Broadcast indexing  
Unsigned 8-bit integer

msmms.command.broadcast-liveness Broadcast liveness  
Unsigned 8-bit integer

msmms.command.client-transport-info Client transport info  
String

msmms.command.common-header Command common header  
String  
MSMMS command common header

msmms.command.direction Command direction  
Unsigned 16-bit integer

msmms.command.download-update-player-url Download update player URL  
String

msmms.command.download-update-player-url-length Download update URL length  
Unsigned 32-bit integer

msmms.command.length Command length  
Unsigned 32-bit integer

```
msmms.command.length-remaining  Length until end (8-byte blocks)
    Unsigned 32-bit integer
msmms.command.length-remaining2  Length until end (8-byte blocks)
    Unsigned 32-bit integer
msmms.command.password-encryption-type  Password encryption type
    String
msmms.command.password-encryption-type-length  Password encryption type length
    Unsigned 32-bit integer
msmms.command.player-info  Player info
    String
msmms.command.prefix1  Prefix 1
    Unsigned 32-bit integer
msmms.command.prefix1-command-level  Prefix 1 Command Level
    Unsigned 32-bit integer
msmms.command.prefix1-error-code  Prefix 1 ErrorCode
    Unsigned 32-bit integer
msmms.command.prefix2  Prefix 2
    Unsigned 32-bit integer
msmms.command.protocol-type  Protocol type
    String
msmms.command.result-flags  Result flags
    Unsigned 32-bit integer
msmms.command.sequence-number  Sequence number
    Unsigned 32-bit integer
msmms.command.server-file  Server file
    String
msmms.command.server-version  Server version
    String
msmms.command.server-version-length  Server Version Length
    Unsigned 32-bit integer
msmms.command.signature  Command signature
    Unsigned 32-bit integer
msmms.command.strange-string  Strange string
    String
msmms.command.timestamp  Time stamp (s)
    Double-precision floating point
msmms.command.to-client-id  Command
    Unsigned 16-bit integer
msmms.command.to-server-id  Command
    Unsigned 16-bit integer
msmms.command.tool-version  Tool version
    String
msmms.command.tool-version-length  Tool Version Length
    Unsigned 32-bit integer
```



```
msmms.command.version  Version
    Unsigned 32-bit integer
msmms.data  Data
    No value
msmms.data.client-id  Client ID
    Unsigned 32-bit integer
msmms.data.command-id  Command ID
    Unsigned 16-bit integer
msmms.data.header-id  Header ID
    Unsigned 32-bit integer
msmms.data.header-packet-id-type  Header packet ID type
    Unsigned 32-bit integer
msmms.data.media-packet-length  Media packet length (bytes)
    Unsigned 32-bit integer
msmms.data.packet-id-type  Packet ID type
    Unsigned 8-bit integer
msmms.data.packet-length  Packet length
    Unsigned 16-bit integer
msmms.data.packet-to-resend  Packet to resend
    Unsigned 32-bit integer
msmms.data.prerecorded-media-length  Pre-recorded media length (seconds)
    Unsigned 32-bit integer
msmms.data.selection-stream-action  Action
    Unsigned 16-bit integer
msmms.data.selection-stream-id  Stream id
    Unsigned 16-bit integer
msmms.data.sequence  Sequence number
    Unsigned 32-bit integer
msmms.data.stream-selection-flags  Stream selection flags
    Unsigned 16-bit integer
msmms.data.stream-structure-count  Stream structure count
    Unsigned 32-bit integer
msmms.data.tcp-flags  TCP flags
    Unsigned 8-bit integer
msmms.data.timing-pair  Data timing pair
    No value
msmms.data.timing-pair.flag  Flag
    Unsigned 8-bit integer
msmms.data.timing-pair.flags  Flags
    Unsigned 24-bit integer
msmms.data.timing-pair.id  ID
    Unsigned 8-bit integer
msmms.data.timing-pair.packet-length  Packet length
    Unsigned 16-bit integer
```

msmms.data.timing-pair.sequence-number Sequence number  
Unsigned 8-bit integer

msmms.data.udp-sequence UDP Sequence  
Unsigned 8-bit integer

msmms.data.unparsed Unparsed data  
No value

msmms.data.words-in-structure Number of 4 byte fields in structure  
Unsigned 32-bit integer

#### **Microsoft Messenger Service (messenger)**

messenger.client Client  
String  
Client that sent the message

messenger.message Message  
String  
The message being sent

messenger.opnum Operation  
Unsigned 16-bit integer  
Operation

messenger.rc Return code  
Unsigned 32-bit integer

messenger.server Server  
String  
Server to send the message to

#### **Microsoft Network Logon (rpc\_netlogon)**

netlogon.acct.expiry\_time Acct Expiry Time  
Date/Time stamp  
When this account will expire

netlogon.acct\_desc Acct Desc  
String  
Account Description

netlogon.acct\_name Acct Name  
String  
Account Name

netlogon.alias\_name Alias Name  
String  
Alias Name

netlogon.alias\_rid Alias RID  
Unsigned 32-bit integer

netlogon.attrs Attributes  
Unsigned 32-bit integer  
Attributes

netlogon.audit\_retention\_period Audit Retention Period  
Time duration  
Audit retention period

```
netlogon.auditing_mode  Auditing Mode
    Unsigned 8-bit integer
    Auditing Mode

netlogon.auth.data  Auth Data
    Byte array
    Auth Data

netlogon.auth.size  Auth Size
    Unsigned 32-bit integer
    Size of AuthData in bytes

netlogon.auth_flags  Auth Flags
    Unsigned 32-bit integer

netlogon.authoritative  Authoritative
    Unsigned 8-bit integer

netlogon.bad_pw_count  Bad PW Count
    Unsigned 32-bit integer
    Number of failed logins

netlogon.bad_pw_count16  Bad PW Count
    Unsigned 16-bit integer
    Number of failed logins

netlogon.blob  BLOB
    Byte array
    BLOB

netlogon.blob.size  Size
    Unsigned 32-bit integer
    Size in bytes of BLOB

netlogon.challenge  Challenge
    Byte array
    Netlogon challenge

netlogon.cipher_current_data  Cipher Current Data
    Byte array

netlogon.cipher_current_set_time  Cipher Current Set Time
    Date/Time stamp
    Time when current cipher was initiated

netlogon.cipher_len  Cipher Len
    Unsigned 32-bit integer

netlogon.cipher_maxlen  Cipher Max Len
    Unsigned 32-bit integer

netlogon.cipher_old_data  Cipher Old Data
    Byte array

netlogon.cipher_old_set_time  Cipher Old Set Time
    Date/Time stamp
    Time when previous cipher was initiated

netlogon.client.site_name  Client Site Name
    String
    Client Site Name
```

```
netlogon.code    Code
    Unsigned 32-bit integer
    Code

netlogon.codepage    Codepage
    Unsigned 16-bit integer
    Codepage setting for this account

netlogon.comment    Comment
    String
    Comment

netlogon.computer_name    Computer Name
    String
    Computer Name

netlogon.count    Count
    Unsigned 32-bit integer

netlogon.country    Country
    Unsigned 16-bit integer
    Country setting for this account

netlogon.credential    Credential
    Byte array
    Netlogon Credential

netlogon.database_id    Database Id
    Unsigned 32-bit integer
    Database Id

netlogon.db_create_time    DB Create Time
    Date/Time stamp
    Time when created

netlogon.db_modify_time    DB Modify Time
    Date/Time stamp
    Time when last modified

netlogon.dc.address    DC Address
    String
    DC Address

netlogon.dc.address_type    DC Address Type
    Unsigned 32-bit integer
    DC Address Type

netlogon.dc.flags    Domain Controller Flags
    Unsigned 32-bit integer
    Domain Controller Flags

netlogon.dc.flags.closest    Closest
    Boolean
    If this is the closest server

netlogon.dc.flags.dns_controller    DNS Controller
    Boolean
    If this server is a DNS Controller

netlogon.dc.flags.dns_domain    DNS Domain
    Boolean
```

```
netlogon.dc.flags.dns_forest  DNS Forest
    Boolean
    If this server is a DNS

netlogon.dc.flags.ds  DS
    Boolean
    If this server is a DS

netlogon.dc.flags.gc  GC
    Boolean
    If this server is a GC

netlogon.dc.flags.good_timeserv  Good Timeserv
    Boolean
    If this is a Good TimeServer

netlogon.dc.flags.kdc  KDC
    Boolean
    If this is a KDC

netlogon.dc.flags.ldap  LDAP
    Boolean
    If this is an LDAP server

netlogon.dc.flags.ndnc  NDNC
    Boolean
    If this is an NDNC server

netlogon.dc.flags.pdc  PDC
    Boolean
    If this server is a PDC

netlogon.dc.flags.timeserv  Timeserv
    Boolean
    If this server is a TimeServer

netlogon.dc.flags.writable  Writable
    Boolean
    If this server can do updates to the database

netlogon.dc.name  DC Name
    String
    DC Name

netlogon.dc.site_name  DC Site Name
    String
    DC Site Name

netlogon.delta_type  Delta Type
    Unsigned 16-bit integer
    Delta Type

netlogon.dir_drive  Dir Drive
    String
    Drive letter for home directory

netlogon.dns.forest_name  DNS Forest Name
    String
    DNS Forest Name

netlogon.dns_domain  DNS Domain
    String
    DNS Domain Name
```

```
netlogon.dns_host  DNS Host
    String
    DNS Host

netlogon.domain  Domain
    String
    Domain

netlogon.domain_create_time  Domain Create Time
    Date/Time stamp
    Time when this domain was created

netlogon.domain_modify_time  Domain Modify Time
    Date/Time stamp
    Time when this domain was last modified

netlogon.dos.rc  DOS error code
    Unsigned 32-bit integer
    DOS Error Code

netlogon.downlevel_domain  Downlevel Domain
    String
    Downlevel Domain Name

netlogon.dummy  Dummy
    String
    Dummy string

netlogon.entries  Entries
    Unsigned 32-bit integer

netlogon.event_audit_option  Event Audit Option
    Unsigned 32-bit integer
    Event audit option

netlogon.flags  Flags
    Unsigned 32-bit integer

netlogon.full_name  Full Name
    String
    Full Name

netlogon.get_dcname.request.flags  Flags
    Unsigned 32-bit integer
    Flags for DSGetDCName request

netlogon.get_dcname.request.flags.avoid_self  Avoid Self
    Boolean
    Return another DC than the one we ask

netlogon.get_dcname.request.flags.background_only  Background Only
    Boolean
    If we want cached data, even if it may have expired

netlogon.get_dcname.request.flags.ds_preferred  DS Preferred
    Boolean
    Whether we prefer the call to return a w2k server (if available)

netlogon.get_dcname.request.flags.ds_required  DS Required
    Boolean
    Whether we require that the returned DC supports w2k or not
```

```
netlogon.get_dcname.request.flags.force_rediscovery  Force Rediscovery
Boolean
Whether to allow the server to returned cached information or not
netlogon.get_dcname.request.flags.gc_server_required  GC Required
Boolean
Whether we require that the returned DC is a Global Catalog server
netlogon.get_dcname.request.flags.good_timeserv_preferred  Timeserv Preferred
Boolean
If we prefer Windows Time Servers
netlogon.get_dcname.request.flags.ip_required  IP Required
Boolean
If we require the IP of the DC in the reply
netlogon.get_dcname.request.flags.is_dns_name  Is DNS Name
Boolean
If the specified domain name is a DNS name
netlogon.get_dcname.request.flags.is_flat_name  Is Flat Name
Boolean
If the specified domain name is a NetBIOS name
netlogon.get_dcname.request.flags.kdc_required  KDC Required
Boolean
If we require that the returned server is a KDC
netlogon.get_dcname.request.flags.only_ldap_needed  Only LDAP Needed
Boolean
We just want an LDAP server, it does not have to be a DC
netlogon.get_dcname.request.flags.pdc_required  PDC Required
Boolean
Whether we require the returned DC to be the PDC
netlogon.get_dcname.request.flags.return_dns_name  Return DNS Name
Boolean
Only return a DNS name (or an error)
netlogon.get_dcname.request.flags.return_flat_name  Return Flat Name
Boolean
Only return a NetBIOS name (or an error)
netlogon.get_dcname.request.flags.timeserv_required  Timeserv Required
Boolean
If we require the returned server to be a WindowsTimeServ server
netlogon.get_dcname.request.flags.writable_required  Writable Required
Boolean
If we require that the returned server is writable
netlogon.group_desc  Group Desc
String
Group Description
netlogon.group_name  Group Name
String
Group Name
netlogon.group_rid  Group RID
Unsigned 32-bit integer
```

netlogon.groups.attrs.enabled Enabled  
Boolean  
The group attributes ENABLED flag

netlogon.groups.attrs.enabled\_by\_default Enabled By Default  
Boolean  
The group attributes ENABLED\_BY\_DEFAULT flag

netlogon.groups.attrs.mandatory Mandatory  
Boolean  
The group attributes MANDATORY flag

netlogon.handle Handle  
String  
Logon Srv Handle

netlogon.home\_dir Home Dir  
String  
Home Directory

netlogon.kickoff\_time Kickoff Time  
Date/Time stamp  
Time when this user will be kicked off

netlogon.last\_logoff\_time Last Logoff Time  
Date/Time stamp  
Time for last time this user logged off

netlogon.len Len  
Unsigned 32-bit integer  
Length

netlogon.level Level  
Unsigned 32-bit integer  
Which option of the union is represented here

netlogon.level16 Level  
Unsigned 16-bit integer  
Which option of the union is represented here

netlogon.lm\_chal\_resp LM Chal resp  
Byte array  
Challenge response for LM authentication

netlogon.lm\_owf\_pwd LM Pwd  
Byte array  
LanManager OWF Password

netlogon.lm\_owf\_pwd.encrypted Encrypted LM Pwd  
Byte array  
Encrypted LanManager OWF Password

netlogon.lm\_pwd\_present LM PWD Present  
Unsigned 8-bit integer  
Is LanManager password present for this account?

netlogon.logoff\_time Logoff Time  
Date/Time stamp  
Time for last time this user logged off

netlogon.logon\_attempts Logon Attempts  
Unsigned 32-bit integer  
Number of logon attempts



```
netlogon.logon_count  Logon Count
    Unsigned 32-bit integer
    Number of successful logins

netlogon.logon_count16  Logon Count
    Unsigned 16-bit integer
    Number of successful logins

netlogon.logon_id  Logon ID
    Unsigned 64-bit integer
    Logon ID

netlogon.logon_script  Logon Script
    String
    Logon Script

netlogon.logon_time  Logon Time
    Date/Time stamp
    Time for last time this user logged on

netlogon.max_audit_event_count  Max Audit Event Count
    Unsigned 32-bit integer
    Max audit event count

netlogon.max_log_size  Max Log Size
    Unsigned 32-bit integer
    Max Size of log

netlogon.max_size  Max Size
    Unsigned 32-bit integer
    Max Size of database

netlogon.max_working_set_size  Max Working Set Size
    Unsigned 32-bit integer

netlogon.min_passwd_len  Min Password Len
    Unsigned 16-bit integer
    Minimum length of password

netlogon.min_working_set_size  Min Working Set Size
    Unsigned 32-bit integer

netlogon.modify_count  Modify Count
    Unsigned 64-bit integer
    How many times the object has been modified

netlogon.neg_flags  Neg Flags
    Unsigned 32-bit integer
    Negotiation Flags

netlogon.next_reference  Next Reference
    Unsigned 32-bit integer

netlogon.nonpaged_pool_limit  Non-Paged Pool Limit
    Unsigned 32-bit integer

netlogon.nt_chal_resp  NT Chal resp
    Byte array
    Challenge response for NT authentication

netlogon.nt_owf_pwd  NT Pwd
    Byte array
    NT OWF Password
```

```
netlogon.nt_pwd_present  NT PWD Present
    Unsigned 8-bit integer
    Is NT password present for this account?

netlogon.num_dc  Num DCs
    Unsigned 32-bit integer
    Number of domain controllers

netlogon.num_deltas  Num Deltas
    Unsigned 32-bit integer
    Number of SAM Deltas in array

netlogon.num_other_groups  Num Other Groups
    Unsigned 32-bit integer

netlogon.num_rids  Num RIDs
    Unsigned 32-bit integer
    Number of RIDs

netlogon.num_trusts  Num Trusts
    Unsigned 32-bit integer

netlogon.oem_info  OEM Info
    String
    OEM Info

netlogon.opnum  Operation
    Unsigned 16-bit integer
    Operation

netlogon.pac.data  Pac Data
    Byte array
    Pac Data

netlogon.pac.size  Pac Size
    Unsigned 32-bit integer
    Size of PacData in bytes

netlogon.page_file_limit  Page File Limit
    Unsigned 32-bit integer

netlogon.paged_pool_limit  Paged Pool Limit
    Unsigned 32-bit integer

netlogon.param_ctrl  Param Ctrl
    Unsigned 32-bit integer
    Param ctrl

netlogon.parameters  Parameters
    String
    Parameters

netlogon.parent_index  Parent Index
    Unsigned 32-bit integer
    Parent Index

netlogon.passwd_history_len  Passwd History Len
    Unsigned 16-bit integer
    Length of password history

netlogon.pdc_connection_status  PDC Connection Status
    Unsigned 32-bit integer
    PDC Connection Status
```

```
netlogon.principal  Principal
    String
    Principal
netlogon.priv  Priv
    Unsigned 32-bit integer
netlogon.privilege_control  Privilege Control
    Unsigned 32-bit integer
netlogon.privilege_entries  Privilege Entries
    Unsigned 32-bit integer
netlogon.privilege_name  Privilege Name
    String
netlogon.profile_path  Profile Path
    String
    Profile Path
netlogon.pwd_age  PWD Age
    Time duration
    Time since this users password was changed
netlogon.pwd_can_change_time  PWD Can Change
    Date/Time stamp
    When this users password may be changed
netlogon.pwd_expired  PWD Expired
    Unsigned 8-bit integer
    Whether this password has expired or not
netlogon.pwd_last_set_time  PWD Last Set
    Date/Time stamp
    Last time this users password was changed
netlogon.pwd_must_change_time  PWD Must Change
    Date/Time stamp
    When this users password must be changed
netlogon.rc  Return code
    Unsigned 32-bit integer
    Netlogon return code
netlogon.reference  Reference
    Unsigned 32-bit integer
netlogon.reserved  Reserved
    Unsigned 32-bit integer
    Reserved
netlogon.resourcegroupcount  ResourceGroup count
    Unsigned 32-bit integer
    Number of Resource Groups
netlogon.restart_state  Restart State
    Unsigned 16-bit integer
    Restart State
netlogon.rid  User RID
    Unsigned 32-bit integer
```

```
netlogon.sec_chan_type  Sec Chan Type
    Unsigned 16-bit integer
    Secure Channel Type

netlogon.secchan.bind.unknown1  Unknown1
    Unsigned 32-bit integer

netlogon.secchan.bind.unknown2  Unknown2
    Unsigned 32-bit integer

netlogon.secchan.bind_ack.unknown1  Unknown1
    Unsigned 32-bit integer

netlogon.secchan.bind_ack.unknown2  Unknown2
    Unsigned 32-bit integer

netlogon.secchan.bind_ack.unknown3  Unknown3
    Unsigned 32-bit integer

netlogon.secchan.digest  Packet Digest
    Byte array
    Packet Digest

netlogon.secchan.domain  Domain
    String

netlogon.secchan.host  Host
    String

netlogon.secchan.nonce  Nonce
    Byte array
    Nonce

netlogon.secchan.seq  Sequence No
    Byte array
    Sequence No

netlogon.secchan.sig  Signature
    Byte array
    Signature

netlogon.secchan.verifier  Secure Channel Verifier
    No value
    Verifier

netlogon.security_information  Security Information
    Unsigned 32-bit integer
    Security Information

netlogon.sensitive_data  Data
    Byte array
    Sensitive Data

netlogon.sensitive_data_flag  Sensitive Data
    Unsigned 8-bit integer
    Sensitive data flag

netlogon.sensitive_data_len  Length
    Unsigned 32-bit integer
    Length of sensitive data

netlogon.serial_number  Serial Number
    Unsigned 32-bit integer
```

```
netlogon.server      Server
    String
    Server

netlogon.site_name  Site Name
    String
    Site Name

netlogon.sync_context  Sync Context
    Unsigned 32-bit integer
    Sync Context

netlogon.system_flags  System Flags
    Unsigned 32-bit integer

netlogon.tc_connection_status  TC Connection Status
    Unsigned 32-bit integer
    TC Connection Status

netlogon.time_limit  Time Limit
    Time duration

netlogon.timestamp  Timestamp
    Date/Time stamp

netlogon.trust.attrs.cross_organization  Cross Organization
    Boolean

netlogon.trust.attrs.forest_transitive  Forest Transitive
    Boolean

netlogon.trust.attrs.non_transitive  Non Transitive
    Boolean

netlogon.trust.attrs.quarantined_domain  Quarantined Domain
    Boolean

netlogon.trust.attrs.treat_as_external  Treat As External
    Boolean

netlogon.trust.attrs.uplevel_only  Uplevel Only
    Boolean

netlogon.trust.attrs.within_forest  Within Forest
    Boolean

netlogon.trust.flags.in_forest  In Forest
    Boolean
    Whether this domain is a member of the same forest as the servers domain

netlogon.trust.flags.inbound  Inbound Trust
    Boolean
    Inbound trust. Whether the domain directly trusts the queried servers domain

netlogon.trust.flags.native_mode  Native Mode
    Boolean
    Whether the domain is a w2k native mode domain or not

netlogon.trust.flags.outbound  Outbound Trust
    Boolean
    Outbound Trust. Whether the domain is directly trusted by the servers domain
```

```
netlogon.trust.flags.primary Primary
  Boolean
  Whether the domain is the primary domain for the queried server or not
netlogon.trust.flags.tree_root Tree Root
  Boolean
  Whether the domain is the root of the tree for the queried server
netlogon.trust_attribs Trust Attributes
  Unsigned 32-bit integer
  Trust Attributes
netlogon.trust_flags Trust Flags
  Unsigned 32-bit integer
  Trust Flags
netlogon.trust_type Trust Type
  Unsigned 32-bit integer
  Trust Type
netlogon.trusted_dc Trusted DC
  String
  Trusted DC
netlogon.unknown.char Unknown char
  Unsigned 8-bit integer
  Unknown char. If you know what this is, contact wireshark developers.
netlogon.unknown.long Unknown long
  Unsigned 32-bit integer
  Unknown long. If you know what this is, contact wireshark developers.
netlogon.unknown.short Unknown short
  Unsigned 16-bit integer
  Unknown short. If you know what this is, contact wireshark developers.
netlogon.unknown_string Unknown string
  String
  Unknown string. If you know what this is, contact wireshark developers.
netlogon.user.account_control.account_auto_locked Account Auto Locked
  Boolean
  The user account control account_auto_locked flag
netlogon.user.account_control.account_disabled Account Disabled
  Boolean
  The user account control account_disabled flag
netlogon.user.account_control.dont_expire_password Dont Expire Password
  Boolean
  The user account control dont_expire_password flag
netlogon.user.account_control.dont_require_preauth Dont Require PreAuth
  Boolean
  The user account control DONT_REQUIRE_PREAUTH flag
netlogon.user.account_control.encrypted_text_password_allowed Encrypted Text Pa
  Boolean
  The user account control encrypted_text_password_allowed flag
netlogon.user.account_control.home_directory_required Home Directory Required
  Boolean
  The user account control home_directory_required flag
```

netlogon.user.account\_control.interdomain\_trust\_account Interdomain trust Account  
Boolean  
The user account control interdomain\_trust\_account flag

netlogon.user.account\_control.mns\_logon\_account MNS Logon Account  
Boolean  
The user account control mns\_logon\_account flag

netlogon.user.account\_control.normal\_account Normal Account  
Boolean  
The user account control normal\_account flag

netlogon.user.account\_control.not\_delegated Not Delegated  
Boolean  
The user account control not\_delegated flag

netlogon.user.account\_control.password\_not\_required Password Not Required  
Boolean  
The user account control password\_not\_required flag

netlogon.user.account\_control.server\_trust\_account Server Trust Account  
Boolean  
The user account control server\_trust\_account flag

netlogon.user.account\_control.smartcard\_required SmartCard Required  
Boolean  
The user account control smartcard\_required flag

netlogon.user.account\_control.temp\_duplicate\_account Temp Duplicate Account  
Boolean  
The user account control temp\_duplicate\_account flag

netlogon.user.account\_control.trusted\_for\_delegation Trusted For Delegation  
Boolean  
The user account control trusted\_for\_delegation flag

netlogon.user.account\_control.use\_des\_key\_only Use DES Key Only  
Boolean  
The user account control use\_des\_key\_only flag

netlogon.user.account\_control.workstation\_trust\_account Workstation Trust Account  
Boolean  
The user account control workstation\_trust\_account flag

netlogon.user.flags.extra\_sids Extra SIDs  
Boolean  
The user flags EXTRA\_SIDS

netlogon.user.flags.resource\_groups Resource Groups  
Boolean  
The user flags RESOURCE\_GROUPS

netlogon.user\_account\_control User Account Control  
Unsigned 32-bit integer  
User Account control

netlogon.user\_flags User Flags  
Unsigned 32-bit integer  
User flags

netlogon.user\_session\_key User Session Key  
Byte array  
User Session Key

```
netlogon.validation_level  Validation Level
    Unsigned 16-bit integer
    Requested level of validation
netlogon.werr.rc  WERR error code
    Unsigned 32-bit integer
    WERR Error Code
netlogon.wkst.fqdn  Wkst FQDN
    String
    Workstation FQDN
netlogon.wkst.name  Wkst Name
    String
    Workstation Name
netlogon.wkst.os  Wkst OS
    String
    Workstation OS
netlogon.wkst.site_name  Wkst Site Name
    String
    Workstation Site Name
netlogon.wksts  Workstations
    String
    Workstations
```

#### **Microsoft Plug and Play service (pnp)**

```
pnp.opnum  Operation
    Unsigned 16-bit integer
    Operation
```

#### **Microsoft Routing and Remote Access Service (rras)**

```
rras.opnum  Operation
    Unsigned 16-bit integer
    Operation
```

#### **Microsoft Service Control (svcctl)**

```
svcctl.access_mask  Access Mask
    Unsigned 32-bit integer
    SVCCTL Access Mask
svcctl.database  Database
    String
    Name of the database to open
svcctl.hnd  Context Handle
    Byte array
    SVCCTL Context handle
svcctl.is_locked  IsLocked
    Unsigned 32-bit integer
    SVCCTL whether the database is locked or not
svcctl.lock  Lock
    Byte array
    SVCCTL Database Lock
```



```
svcctl.lock_duration  Duration
    Unsigned 32-bit integer
    SVCCTL number of seconds the database has been locked

svcctl.lock_owner    Owner
    String
    SVCCTL the user that holds the database lock

svcctl.machinename  MachineName
    String
    Name of the host we want to open the database on

svcctl.opnum        Operation
    Unsigned 16-bit integer
    Operation

svcctl.rc           Return code
    Unsigned 32-bit integer
    SVCCTL return code

svcctl.required_size  Required Size
    Unsigned 32-bit integer
    SVCCTL required size of buffer for data to fit

svcctl.resume       Resume Handle
    Unsigned 32-bit integer
    SVCCTL resume handle

svcctl.scm_rights_connect  Connect
    Boolean
    SVCCTL Rights to connect to SCM

svcctl.scm_rights_create_service  Create Service
    Boolean
    SVCCTL Rights to create services

svcctl.scm_rights_enumerate_service  Enumerate Service
    Boolean
    SVCCTL Rights to enumerate services

svcctl.scm_rights_lock  Lock
    Boolean
    SVCCTL Rights to lock database

svcctl.scm_rights_modify_boot_config  Modify Boot Config
    Boolean
    SVCCTL Rights to modify boot config

svcctl.scm_rights_query_lock_status  Query Lock Status
    Boolean
    SVCCTL Rights to query database lock status

svcctl.service_state  State
    Unsigned 32-bit integer
    SVCCTL service state

svcctl.service_type  Type
    Unsigned 32-bit integer
    SVCCTL type of service

svcctl.size          Size
    Unsigned 32-bit integer
    SVCCTL size of buffer
```

**Microsoft Spool Subsystem (spoolss)**

```
secdescbuf.len      Length
  Unsigned 32-bit integer
  Length

secdescbuf.max_len  Max len
  Unsigned 32-bit integer
  Max len

secdescbuf.undoc    Undocumented
  Unsigned 32-bit integer
  Undocumented

setprinterdataex.data  Data
  Byte array
  Data

setprinterdataex.max_len  Max len
  Unsigned 32-bit integer
  Max len

setprinterdataex.real_len  Real len
  Unsigned 32-bit integer
  Real len

spoolprinterinfo.devmode_ptr  Devmode pointer
  Unsigned 32-bit integer
  Devmode pointer

spoolprinterinfo.secdesc_ptr  Secdesc pointer
  Unsigned 32-bit integer
  Secdesc pointer

spoolss.Datatype  Datatype
  String
  Datatype

spoolss.access_mask.job_admin  Job admin
  Boolean
  Job admin

spoolss.access_mask.printer_admin  Printer admin
  Boolean
  Printer admin

spoolss.access_mask.printer_use  Printer use
  Boolean
  Printer use

spoolss.access_mask.server_admin  Server admin
  Boolean
  Server admin

spoolss.access_mask.server_enum  Server enum
  Boolean
  Server enum

spoolss.access_required  Access required
  Unsigned 32-bit integer
  Access required
```

```
spoolss.architecture  Architecture name
    String
    Architecture name
spoolss.buffer.data   Buffer data
    Byte array
    Contents of buffer
spoolss.buffer.size   Buffer size
    Unsigned 32-bit integer
    Size of buffer
spoolss.clientmajorversion  Client major version
    Unsigned 32-bit integer
    Client printer driver major version
spoolss.clientminorversion  Client minor version
    Unsigned 32-bit integer
    Client printer driver minor version
spoolss.configfile    Config file
    String
    Printer name
spoolss.datafile     Data file
    String
    Data file
spoolss.defaultdatatype  Default data type
    String
    Default data type
spoolss.dependentfiles  Dependent files
    String
    Dependent files
spoolss.devicemodectr.size  Devicemode ctr size
    Unsigned 32-bit integer
    Devicemode ctr size
spoolss.devmode       Devicemode
    Unsigned 32-bit integer
    Devicemode
spoolss.devmode.bits_per_pel  Bits per pel
    Unsigned 32-bit integer
    Bits per pel
spoolss.devmode.collate  Collate
    Unsigned 16-bit integer
    Collate
spoolss.devmode.color    Color
    Unsigned 16-bit integer
    Color
spoolss.devmode.copies   Copies
    Unsigned 16-bit integer
    Copies
spoolss.devmode.default_source  Default source
    Unsigned 16-bit integer
    Default source
```

```
spoolss.devmode.display_flags  Display flags
    Unsigned 32-bit integer
    Display flags

spoolss.devmode.display_freq  Display frequency
    Unsigned 32-bit integer
    Display frequency

spoolss.devmode.dither_type  Dither type
    Unsigned 32-bit integer
    Dither type

spoolss.devmode.driver_extra  Driver extra
    Byte array
    Driver extra

spoolss.devmode.driver_extra_len  Driver extra length
    Unsigned 32-bit integer
    Driver extra length

spoolss.devmode.driver_version  Driver version
    Unsigned 16-bit integer
    Driver version

spoolss.devmode.duplex  Duplex
    Unsigned 16-bit integer
    Duplex

spoolss.devmode.fields  Fields
    Unsigned 32-bit integer
    Fields

spoolss.devmode.fields.bits_per_pel  Bits per pel
    Boolean
    Bits per pel

spoolss.devmode.fields.collate  Collate
    Boolean
    Collate

spoolss.devmode.fields.color  Color
    Boolean
    Color

spoolss.devmode.fields.copies  Copies
    Boolean
    Copies

spoolss.devmode.fields.default_source  Default source
    Boolean
    Default source

spoolss.devmode.fields.display_flags  Display flags
    Boolean
    Display flags

spoolss.devmode.fields.display_frequency  Display frequency
    Boolean
    Display frequency

spoolss.devmode.fields.dither_type  Dither type
    Boolean
    Dither type
```

```
spoolss.devmode.fields.duplex Duplex
  Boolean
  Duplex

spoolss.devmode.fields.form_name Form name
  Boolean
  Form name

spoolss.devmode.fields.icm_intent ICM intent
  Boolean
  ICM intent

spoolss.devmode.fields.icm_method ICM method
  Boolean
  ICM method

spoolss.devmode.fields.log_pixels Log pixels
  Boolean
  Log pixels

spoolss.devmode.fields.media_type Media type
  Boolean
  Media type

spoolss.devmode.fields.nup N-up
  Boolean
  N-up

spoolss.devmode.fields.orientation Orientation
  Boolean
  Orientation

spoolss.devmode.fields.panning_height Panning height
  Boolean
  Panning height

spoolss.devmode.fields.panning_width Panning width
  Boolean
  Panning width

spoolss.devmode.fields.paper_length Paper length
  Boolean
  Paper length

spoolss.devmode.fields.paper_size Paper size
  Boolean
  Paper size

spoolss.devmode.fields.paper_width Paper width
  Boolean
  Paper width

spoolss.devmode.fields.pels_height Pels height
  Boolean
  Pels height

spoolss.devmode.fields.pels_width Pels width
  Boolean
  Pels width

spoolss.devmode.fields.position Position
  Boolean
  Position
```

```
spoolss.devmode.fields.print_quality  Print quality
    Boolean
    Print quality

spoolss.devmode.fields.scale  Scale
    Boolean
    Scale

spoolss.devmode.fields.tt_option  TT option
    Boolean
    TT option

spoolss.devmode.fields.y_resolution  Y resolution
    Boolean
    Y resolution

spoolss.devmode.icm_intent  ICM intent
    Unsigned 32-bit integer
    ICM intent

spoolss.devmode.icm_method  ICM method
    Unsigned 32-bit integer
    ICM method

spoolss.devmode.log_pixels  Log pixels
    Unsigned 16-bit integer
    Log pixels

spoolss.devmode.media_type  Media type
    Unsigned 32-bit integer
    Media type

spoolss.devmode.orientation  Orientation
    Unsigned 16-bit integer
    Orientation

spoolss.devmode.panning_height  Panning height
    Unsigned 32-bit integer
    Panning height

spoolss.devmode.panning_width  Panning width
    Unsigned 32-bit integer
    Panning width

spoolss.devmode.paper_length  Paper length
    Unsigned 16-bit integer
    Paper length

spoolss.devmode.paper_size  Paper size
    Unsigned 16-bit integer
    Paper size

spoolss.devmode.paper_width  Paper width
    Unsigned 16-bit integer
    Paper width

spoolss.devmode.pels_height  Pels height
    Unsigned 32-bit integer
    Pels height

spoolss.devmode.pels_width  Pels width
    Unsigned 32-bit integer
    Pels width
```

```
spoolss.devmode.print_quality  Print quality
    Unsigned 16-bit integer
    Print quality

spoolss.devmode.reserved1  Reserved1
    Unsigned 32-bit integer
    Reserved1

spoolss.devmode.reserved2  Reserved2
    Unsigned 32-bit integer
    Reserved2

spoolss.devmode.scale  Scale
    Unsigned 16-bit integer
    Scale

spoolss.devmode.size  Size
    Unsigned 32-bit integer
    Size

spoolss.devmode.size2  Size2
    Unsigned 16-bit integer
    Size2

spoolss.devmode.spec_version  Spec version
    Unsigned 16-bit integer
    Spec version

spoolss.devmode.tt_option  TT option
    Unsigned 16-bit integer
    TT option

spoolss.devmode.y_resolution  Y resolution
    Unsigned 16-bit integer
    Y resolution

spoolss.document  Document name
    String
    Document name

spoolss.driverdate  Driver Date
    Date/Time stamp
    Date of driver creation

spoolss.drivername  Driver name
    String
    Driver name

spoolss.driverpath  Driver path
    String
    Driver path

spoolss.driverversion  Driver version
    Unsigned 32-bit integer
    Printer name

spoolss.elapsed_time  Elapsed time
    Unsigned 32-bit integer
    Elapsed time

spoolss.end_time  End time
    Unsigned 32-bit integer
    End time
```

```
spoolss.enumforms.num    Num
    Unsigned 32-bit integer
    Num

spoolss.enumjobs.firstjob  First job
    Unsigned 32-bit integer
    Index of first job to return

spoolss.enumjobs.level    Info level
    Unsigned 32-bit integer
    Info level

spoolss.enumjobs.numjobs  Num jobs
    Unsigned 32-bit integer
    Number of jobs to return

spoolss.enumprinterdata.data_needed  Data size needed
    Unsigned 32-bit integer
    Buffer size needed for printerdata data

spoolss.enumprinterdata.data_offered  Data size offered
    Unsigned 32-bit integer
    Buffer size offered for printerdata data

spoolss.enumprinterdata.enumindex  Enum index
    Unsigned 32-bit integer
    Index for start of enumeration

spoolss.enumprinterdata.value_len  Value length
    Unsigned 32-bit integer
    Size of printerdata value

spoolss.enumprinterdata.value_needed  Value size needed
    Unsigned 32-bit integer
    Buffer size needed for printerdata value

spoolss.enumprinterdata.value_offered  Value size offered
    Unsigned 32-bit integer
    Buffer size offered for printerdata value

spoolss.enumprinterdataex.name  Name
    String
    Name

spoolss.enumprinterdataex.name_len  Name len
    Unsigned 32-bit integer
    Name len

spoolss.enumprinterdataex.name_offset  Name offset
    Unsigned 32-bit integer
    Name offset

spoolss.enumprinterdataex.num_values  Num values
    Unsigned 32-bit integer
    Number of values returned

spoolss.enumprinterdataex.val_dword.high  DWORD value (high)
    Unsigned 16-bit integer
    DWORD value (high)

spoolss.enumprinterdataex.val_dword.low  DWORD value (low)
    Unsigned 16-bit integer
    DWORD value (low)
```



```
spoolss.enumprinterdataex.value_len  Value len
    Unsigned 32-bit integer
    Value len

spoolss.enumprinterdataex.value_offset  Value offset
    Unsigned 32-bit integer
    Value offset

spoolss.enumprinterdataex.value_type  Value type
    Unsigned 32-bit integer
    Value type

spoolss.enumprinters.flags  Flags
    Unsigned 32-bit integer
    Flags

spoolss.enumprinters.flags.enum_connections  Enum connections
    Boolean
    Enum connections

spoolss.enumprinters.flags.enum_default  Enum default
    Boolean
    Enum default

spoolss.enumprinters.flags.enum_local  Enum local
    Boolean
    Enum local

spoolss.enumprinters.flags.enum_name  Enum name
    Boolean
    Enum name

spoolss.enumprinters.flags.enum_network  Enum network
    Boolean
    Enum network

spoolss.enumprinters.flags.enum_remote  Enum remote
    Boolean
    Enum remote

spoolss.enumprinters.flags.enum_shared  Enum shared
    Boolean
    Enum shared

spoolss.form  Data
    Unsigned 32-bit integer
    Data

spoolss.form.flags  Flags
    Unsigned 32-bit integer
    Flags

spoolss.form.height  Height
    Unsigned 32-bit integer
    Height

spoolss.form.horiz  Horizontal
    Unsigned 32-bit integer
    Horizontal

spoolss.form.left  Left margin
    Unsigned 32-bit integer
    Left
```

```
spoolss.form.level  Level
    Unsigned 32-bit integer
    Level

spoolss.form.name  Name
    String
    Name

spoolss.form.top   Top
    Unsigned 32-bit integer
    Top

spoolss.form.unknown  Unknown
    Unsigned 32-bit integer
    Unknown

spoolss.form.vert  Vertical
    Unsigned 32-bit integer
    Vertical

spoolss.form.width  Width
    Unsigned 32-bit integer
    Width

spoolss.hardwareid  Hardware ID
    String
    Hardware Identification Information

spoolss.helpfile   Help file
    String
    Help file

spoolss.hnd        Context handle
    Byte array
    SPOOLSS policy handle

spoolss.job.bytesprinted  Job bytes printed
    Unsigned 32-bit integer
    Job bytes printed

spoolss.job.id     Job ID
    Unsigned 32-bit integer
    Job identification number

spoolss.job.pagesprinted  Job pages printed
    Unsigned 32-bit integer
    Job pages printed

spoolss.job.position  Job position
    Unsigned 32-bit integer
    Job position

spoolss.job.priority  Job priority
    Unsigned 32-bit integer
    Job priority

spoolss.job.size     Job size
    Unsigned 32-bit integer
    Job size

spoolss.job.status   Job status
    Unsigned 32-bit integer
    Job status
```

```
spoolss.job.status.blocked  Blocked
    Boolean
    Blocked

spoolss.job.status.deleted  Deleted
    Boolean
    Deleted

spoolss.job.status.deleting  Deleting
    Boolean
    Deleting

spoolss.job.status.error    Error
    Boolean
    Error

spoolss.job.status.offline  Offline
    Boolean
    Offline

spoolss.job.status.paperout  Paperout
    Boolean
    Paperout

spoolss.job.status.paused   Paused
    Boolean
    Paused

spoolss.job.status.printed  Printed
    Boolean
    Printed

spoolss.job.status.printing  Printing
    Boolean
    Printing

spoolss.job.status.spooling  Spooling
    Boolean
    Spooling

spoolss.job.status.user_intervention  User intervention
    Boolean
    User intervention

spoolss.job.totalbytes      Job total bytes
    Unsigned 32-bit integer
    Job total bytes

spoolss.job.totalpages      Job total pages
    Unsigned 32-bit integer
    Job total pages

spoolss.keybuffer.data      Key Buffer data
    Byte array
    Contents of buffer

spoolss.keybuffer.size      Key Buffer size
    Unsigned 32-bit integer
    Size of buffer

spoolss.machinename         Machine name
    String
    Machine name
```

```
spoolss.majordriverversion  Major Driver Version
    Unsigned 32-bit integer
    Driver Version High

spoolss.mfgname  Mfgname
    String
    Manufacturer Name

spoolss.minordriverversion  Minor Driver Version
    Unsigned 32-bit integer
    Driver Version Low

spoolss.monitorname  Monitor name
    String
    Monitor name

spoolss.needed  Needed
    Unsigned 32-bit integer
    Size of buffer required for request

spoolss.notify_field  Field
    Unsigned 16-bit integer
    Field

spoolss.notify_info.count  Count
    Unsigned 32-bit integer
    Count

spoolss.notify_info.flags  Flags
    Unsigned 32-bit integer
    Flags

spoolss.notify_info.version  Version
    Unsigned 32-bit integer
    Version

spoolss.notify_info_data.buffer  Buffer
    Unsigned 32-bit integer
    Buffer

spoolss.notify_info_data.buffer.data  Buffer data
    Byte array
    Buffer data

spoolss.notify_info_data.buffer.len  Buffer length
    Unsigned 32-bit integer
    Buffer length

spoolss.notify_info_data.bufsize  Buffer size
    Unsigned 32-bit integer
    Buffer size

spoolss.notify_info_data.count  Count
    Unsigned 32-bit integer
    Count

spoolss.notify_info_data.jobid  Job Id
    Unsigned 32-bit integer
    Job Id

spoolss.notify_info_data.type  Type
    Unsigned 16-bit integer
    Type
```

```
spoolss.notify_info_data.value1  Value1
    Unsigned 32-bit integer
    Value1
spoolss.notify_info_data.value2  Value2
    Unsigned 32-bit integer
    Value2
spoolss.notify_option.count      Count
    Unsigned 32-bit integer
    Count
spoolss.notify_option.reserved1  Reserved1
    Unsigned 16-bit integer
    Reserved1
spoolss.notify_option.reserved2  Reserved2
    Unsigned 32-bit integer
    Reserved2
spoolss.notify_option.reserved3  Reserved3
    Unsigned 32-bit integer
    Reserved3
spoolss.notify_option.type       Type
    Unsigned 16-bit integer
    Type
spoolss.notify_option_data.count  Count
    Unsigned 32-bit integer
    Count
spoolss.notify_options.count     Count
    Unsigned 32-bit integer
    Count
spoolss.notify_options.flags     Flags
    Unsigned 32-bit integer
    Flags
spoolss.notify_options.version   Version
    Unsigned 32-bit integer
    Version
spoolss.notifyname               Notify name
    String
    Notify name
spoolss.oemrul                   OEM URL
    String
    OEM URL - Website of Vendor
spoolss.offered                  Offered
    Unsigned 32-bit integer
    Size of buffer offered in this request
spoolss.offset                   Offset
    Unsigned 32-bit integer
    Offset of data
spoolss.opnum                    Operation
    Unsigned 16-bit integer
    Operation
```

```
spoolss.outputfile  Output file
    String
    Output File

spoolss.padding  Padding
    Unsigned 32-bit integer
    Some padding - conveys no semantic information

spoolss.parameters  Parameters
    String
    Parameters

spoolss.portname  Port name
    String
    Port name

spoolss.previousdrivernames  Previous Driver Names
    String
    Previous Driver Names

spoolss.printer.action  Action
    Unsigned 32-bit integer
    Action

spoolss.printer.averageppm  Average PPM
    Unsigned 32-bit integer
    Average PPM

spoolss.printer.build_version  Build version
    Unsigned 16-bit integer
    Build version

spoolss.printer.c_setprinter  Csetprinter
    Unsigned 32-bit integer
    Csetprinter

spoolss.printer.changeid  Change id
    Unsigned 32-bit integer
    Change id

spoolss.printer.cjobs  CJobs
    Unsigned 32-bit integer
    CJobs

spoolss.printer.default_priority  Default Priority
    Unsigned 32-bit integer
    Default Priority

spoolss.printer.flags  Flags
    Unsigned 32-bit integer
    Flags

spoolss.printer.global_counter  Global counter
    Unsigned 32-bit integer
    Global counter

spoolss.printer.guid  GUID
    String
    GUID

spoolss.printer.jobs  Jobs
    Unsigned 32-bit integer
    Jobs
```

```
spoolss.printer.major_version  Major version
    Unsigned 16-bit integer
    Major version

spoolss.printer.printer_errors  Printer errors
    Unsigned 32-bit integer
    Printer errors

spoolss.printer.priority  Priority
    Unsigned 32-bit integer
    Priority

spoolss.printer.session_ctr  Session counter
    Unsigned 32-bit integer
    Sessopm counter

spoolss.printer.total_bytes  Total bytes
    Unsigned 32-bit integer
    Total bytes

spoolss.printer.total_jobs  Total jobs
    Unsigned 32-bit integer
    Total jobs

spoolss.printer.total_pages  Total pages
    Unsigned 32-bit integer
    Total pages

spoolss.printer.unknown11  Unknown 11
    Unsigned 32-bit integer
    Unknown 11

spoolss.printer.unknown13  Unknown 13
    Unsigned 32-bit integer
    Unknown 13

spoolss.printer.unknown14  Unknown 14
    Unsigned 32-bit integer
    Unknown 14

spoolss.printer.unknown15  Unknown 15
    Unsigned 32-bit integer
    Unknown 15

spoolss.printer.unknown16  Unknown 16
    Unsigned 32-bit integer
    Unknown 16

spoolss.printer.unknown18  Unknown 18
    Unsigned 32-bit integer
    Unknown 18

spoolss.printer.unknown20  Unknown 20
    Unsigned 32-bit integer
    Unknown 20

spoolss.printer.unknown22  Unknown 22
    Unsigned 16-bit integer
    Unknown 22

spoolss.printer.unknown23  Unknown 23
    Unsigned 16-bit integer
    Unknown 23
```

```
spoolss.printer.unknown24  Unknown 24
    Unsigned 16-bit integer
    Unknown 24

spoolss.printer.unknown25  Unknown 25
    Unsigned 16-bit integer
    Unknown 25

spoolss.printer.unknown26  Unknown 26
    Unsigned 16-bit integer
    Unknown 26

spoolss.printer.unknown27  Unknown 27
    Unsigned 16-bit integer
    Unknown 27

spoolss.printer.unknown28  Unknown 28
    Unsigned 16-bit integer
    Unknown 28

spoolss.printer.unknown29  Unknown 29
    Unsigned 16-bit integer
    Unknown 29

spoolss.printer.unknown7   Unknown 7
    Unsigned 32-bit integer
    Unknown 7

spoolss.printer.unknown8   Unknown 8
    Unsigned 32-bit integer
    Unknown 8

spoolss.printer.unknown9   Unknown 9
    Unsigned 32-bit integer
    Unknown 9

spoolss.printer_attributes  Attributes
    Unsigned 32-bit integer
    Attributes

spoolss.printer_attributes.default  Default (9x/ME only)
    Boolean
    Default

spoolss.printer_attributes.direct  Direct
    Boolean
    Direct

spoolss.printer_attributes.do_complete_first  Do complete first
    Boolean
    Do complete first

spoolss.printer_attributes.enable_bidi  Enable bidi (9x/ME only)
    Boolean
    Enable bidi

spoolss.printer_attributes.enable_devq  Enable devq
    Boolean
    Enable evq

spoolss.printer_attributes.hidden  Hidden
    Boolean
    Hidden
```



```
spoolss.printer_attributes.keep_printed_jobs  Keep printed jobs
  Boolean
  Keep printed jobs

spoolss.printer_attributes.local  Local
  Boolean
  Local

spoolss.printer_attributes.network  Network
  Boolean
  Network

spoolss.printer_attributes.published  Published
  Boolean
  Published

spoolss.printer_attributes.queued  Queued
  Boolean
  Queued

spoolss.printer_attributes.raw_only  Raw only
  Boolean
  Raw only

spoolss.printer_attributes.shared  Shared
  Boolean
  Shared

spoolss.printer_attributes.work_offline  Work offline (9x/ME only)
  Boolean
  Work offline

spoolss.printer_local  Printer local
  Unsigned 32-bit integer
  Printer local

spoolss.printer_status  Status
  Unsigned 32-bit integer
  Status

spoolss.printercomment  Printer comment
  String
  Printer comment

spoolss.printerdata  Data
  Unsigned 32-bit integer
  Data

spoolss.printerdata.data  Data
  Byte array
  Printer data

spoolss.printerdata.data.dword  DWORD data
  Unsigned 32-bit integer
  DWORD data

spoolss.printerdata.data.sz  String data
  String
  String data

spoolss.printerdata.key  Key
  String
  Printer data key
```

```
spoolss.printerdata.size  Size
    Unsigned 32-bit integer
    Printer data size

spoolss.printerdata.type  Type
    Unsigned 32-bit integer
    Printer data type

spoolss.printerdata.val_sz  SZ value
    String
    SZ value

spoolss.printerdata.value  Value
    String
    Printer data value

spoolss.printerdesc  Printer description
    String
    Printer description

spoolss.printerlocation  Printer location
    String
    Printer location

spoolss.printername  Printer name
    String
    Printer name

spoolss.printprocessor  Print processor
    String
    Print processor

spoolss.provider  Provider
    String
    Provider of Driver

spoolss.rc  Return code
    Unsigned 32-bit integer
    SPOOLSS return code

spoolss.replyopenprinter.unk0  Unknown 0
    Unsigned 32-bit integer
    Unknown 0

spoolss.replyopenprinter.unk1  Unknown 1
    Unsigned 32-bit integer
    Unknown 1

spoolss.returned  Returned
    Unsigned 32-bit integer
    Number of items returned

spoolss.rffpcnex.flags  RFFPCNEX flags
    Unsigned 32-bit integer
    RFFPCNEX flags

spoolss.rffpcnex.flags.add_driver  Add driver
    Boolean
    Add driver

spoolss.rffpcnex.flags.add_form  Add form
    Boolean
    Add form
```

```
spoolss.rffpcnex.flags.add_job    Add job
    Boolean
    Add job

spoolss.rffpcnex.flags.add_port    Add port
    Boolean
    Add port

spoolss.rffpcnex.flags.add_printer  Add printer
    Boolean
    Add printer

spoolss.rffpcnex.flags.add_processor  Add processor
    Boolean
    Add processor

spoolss.rffpcnex.flags.configure_port  Configure port
    Boolean
    Configure port

spoolss.rffpcnex.flags.delete_driver  Delete driver
    Boolean
    Delete driver

spoolss.rffpcnex.flags.delete_form    Delete form
    Boolean
    Delete form

spoolss.rffpcnex.flags.delete_job     Delete job
    Boolean
    Delete job

spoolss.rffpcnex.flags.delete_port    Delete port
    Boolean
    Delete port

spoolss.rffpcnex.flags.delete_printer  Delete printer
    Boolean
    Delete printer

spoolss.rffpcnex.flags.delete_processor  Delete processor
    Boolean
    Delete processor

spoolss.rffpcnex.flags.failed_connection_printer  Failed printer connection
    Boolean
    Failed printer connection

spoolss.rffpcnex.flags.set_driver     Set driver
    Boolean
    Set driver

spoolss.rffpcnex.flags.set_form       Set form
    Boolean
    Set form

spoolss.rffpcnex.flags.set_job        Set job
    Boolean
    Set job

spoolss.rffpcnex.flags.set_printer    Set printer
    Boolean
    Set printer
```

```
spoolss.rffpcnex.flags.timeout  Timeout
    Boolean
    Timeout

spoolss.rffpcnex.flags.write_job  Write job
    Boolean
    Write job

spoolss.rffpcnex.options  Options
    Unsigned 32-bit integer
    RFFPCNEX options

spoolss.routerreplyprinter.changeid  Change id
    Unsigned 32-bit integer
    Change id

spoolss.routerreplyprinter.condition  Condition
    Unsigned 32-bit integer
    Condition

spoolss.routerreplyprinter.unknown1  Unknown1
    Unsigned 32-bit integer
    Unknown1

spoolss.rrpcn.changehigh  Change high
    Unsigned 32-bit integer
    Change high

spoolss.rrpcn.changelow  Change low
    Unsigned 32-bit integer
    Change low

spoolss.rrpcn.unk0  Unknown 0
    Unsigned 32-bit integer
    Unknown 0

spoolss.rrpcn.unk1  Unknown 1
    Unsigned 32-bit integer
    Unknown 1

spoolss.servermajorversion  Server major version
    Unsigned 32-bit integer
    Server printer driver major version

spoolss.serverminorversion  Server minor version
    Unsigned 32-bit integer
    Server printer driver minor version

spoolss.servername  Server name
    String
    Server name

spoolss.setjob.cmd  Set job command
    Unsigned 32-bit integer
    Printer data name

spoolss.setpfile  Separator file
    String
    Separator file

spoolss.setprinter_cmd  Command
    Unsigned 32-bit integer
    Command
```

```
spoolss.sharename  Share name
    String
    Share name

spoolss.start_time  Start time
    Unsigned 32-bit integer
    Start time

spoolss.textstatus  Text status
    String
    Text status

spoolss.time.day    Day
    Unsigned 32-bit integer
    Day

spoolss.time.dow    Day of week
    Unsigned 32-bit integer
    Day of week

spoolss.time.hour   Hour
    Unsigned 32-bit integer
    Hour

spoolss.time.minute Minute
    Unsigned 32-bit integer
    Minute

spoolss.time.month  Month
    Unsigned 32-bit integer
    Month

spoolss.time.msec   Millisecond
    Unsigned 32-bit integer
    Millisecond

spoolss.time.second Second
    Unsigned 32-bit integer
    Second

spoolss.time.year   Year
    Unsigned 32-bit integer
    Year

spoolss.userlevel.build  Build
    Unsigned 32-bit integer
    Build

spoolss.userlevel.client  Client
    String
    Client

spoolss.userlevel.major  Major
    Unsigned 32-bit integer
    Major

spoolss.userlevel.minor  Minor
    Unsigned 32-bit integer
    Minor

spoolss.userlevel.processor  Processor
    Unsigned 32-bit integer
    Processor
```

```
spoolss.userlevel.size  Size
    Unsigned 32-bit integer
    Size

spoolss.userlevel.user  User
    String
    User

spoolss.username  User name
    String
    User name

spoolss.writeprinter.numwritten  Num written
    Unsigned 32-bit integer
    Number of bytes written
```

#### **Microsoft Telephony API Service (tapi)**

```
tapi.hnd  Context Handle
    Byte array
    Context handle

tapi.opnum  Operation
    Unsigned 16-bit integer

tapi.rc  Return code
    Unsigned 32-bit integer
    TAPI return code

tapi.unknown.bytes  Unknown bytes
    Byte array
    Unknown bytes. If you know what this is, contact wireshark developers.

tapi.unknown.long  Unknown long
    Unsigned 32-bit integer
    Unknown long. If you know what this is, contact wireshark developers.

tapi.unknown.string  Unknown string
    String
    Unknown string. If you know what this is, contact wireshark developers.
```

#### **Microsoft Windows Browser Protocol (browser)**

```
browser.backup.count  Backup List Requested Count
    Unsigned 8-bit integer
    Backup list requested count

browser.backup.server  Backup Server
    String
    Backup Server Name

browser.backup.token  Backup Request Token
    Unsigned 32-bit integer
    Backup requested/response token

browser.browser_to_promote  Browser to Promote
    String
    Browser to Promote

browser.command  Command
    Unsigned 8-bit integer
    Browse command opcode
```

```
browser.comment    Host Comment
    String
    Server Comment

browser.election.criteria Election Criteria
    Unsigned 32-bit integer
    Election Criteria

browser.election.desire Election Desire
    Unsigned 8-bit integer
    Election Desire

browser.election.desire.backup Backup
    Boolean
    Is this a backup server

browser.election.desire.domain_master Domain Master
    Boolean
    Is this a domain master

browser.election.desire.master Master
    Boolean
    Is this a master server

browser.election.desire.nt NT
    Boolean
    Is this a NT server

browser.election.desire.standby Standby
    Boolean
    Is this a standby server?

browser.election.desire.wins WINS
    Boolean
    Is this a WINS server

browser.election.os Election OS
    Unsigned 8-bit integer
    Election OS

browser.election.os.nts NT Server
    Boolean
    Is this a NT Server?

browser.election.os.ntw NT Workstation
    Boolean
    Is this a NT Workstation?

browser.election.os.wfw WfW
    Boolean
    Is this a WfW host?

browser.election.revision Election Revision
    Unsigned 16-bit integer
    Election Revision

browser.election.version Election Version
    Unsigned 8-bit integer
    Election Version

browser.mb_server Master Browser Server Name
    String
    BROWSE Master Browser Server Name
```

```
browser.os_major  OS Major Version
  Unsigned 8-bit integer
  Operating System Major Version

browser.os_minor  OS Minor Version
  Unsigned 8-bit integer
  Operating System Minor Version

browser.period    Update Periodicity
  Unsigned 32-bit integer
  Update Periodicity in ms

browser.proto_major  Browser Protocol Major Version
  Unsigned 8-bit integer
  Browser Protocol Major Version

browser.proto_minor  Browser Protocol Minor Version
  Unsigned 8-bit integer
  Browser Protocol Minor Version

browser.reset_cmd  ResetBrowserState Command
  Unsigned 8-bit integer
  ResetBrowserState Command

browser.reset_cmd.demote  Demote LMB
  Boolean
  Demote LMB

browser.reset_cmd.flush  Flush Browse List
  Boolean
  Flush Browse List

browser.reset_cmd.stop_lmb  Stop Being LMB
  Boolean
  Stop Being LMB

browser.response_computer_name  Response Computer Name
  String
  Response Computer Name

browser.server  Server Name
  String
  BROWSE Server Name

browser.server_type  Server Type
  Unsigned 32-bit integer
  Server Type Flags

browser.server_type.apple  Apple
  Boolean
  Is This An Apple Server ?

browser.server_type.backup_controller  Backup Controller
  Boolean
  Is This A Backup Domain Controller?

browser.server_type.browser.backup  Backup Browser
  Boolean
  Is This A Backup Browser?

browser.server_type.browser.domain_master  Domain Master Browser
  Boolean
  Is This A Domain Master Browser?
```



```
browser.server_type.browser.master  Master Browser
  Boolean
  Is This A Master Browser?
browser.server_type.browser.potential  Potential Browser
  Boolean
  Is This A Potential Browser?
browser.server_type.dialin  Dialin
  Boolean
  Is This A Dialin Server?
browser.server_type.domain_controller  Domain Controller
  Boolean
  Is This A Domain Controller?
browser.server_type.domainenum  Domain Enum
  Boolean
  Is This A Domain Enum request?
browser.server_type.local  Local
  Boolean
  Is This A Local List Only request?
browser.server_type.member  Member
  Boolean
  Is This A Domain Member Server?
browser.server_type.novell  Novell
  Boolean
  Is This A Novell Server?
browser.server_type.nts  NT Server
  Boolean
  Is This A NT Server?
browser.server_type.ntw  NT Workstation
  Boolean
  Is This A NT Workstation?
browser.server_type.osf  OSF
  Boolean
  Is This An OSF server ?
browser.server_type.print  Print
  Boolean
  Is This A Print Server?
browser.server_type.server  Server
  Boolean
  Is This A Server?
browser.server_type.sql  SQL
  Boolean
  Is This A SQL Server?
browser.server_type.time  Time Source
  Boolean
  Is This A Time Source?
browser.server_type.vms  VMS
  Boolean
  Is This A VMS Server?
```

```

browser.server_type.w95  Windows 95+
  Boolean
  Is This A Windows 95 or above server?
browser.server_type.wfw  WfW
  Boolean
  Is This A Windows For Workgroups Server?
browser.server_type.workstation  Workstation
  Boolean
  Is This A Workstation?
browser.server_type.xenix  Xenix
  Boolean
  Is This A Xenix Server?
browser.sig  Signature
  Unsigned 16-bit integer
  Signature Constant
browser.unused  Unused flags
  Unsigned 8-bit integer
  Unused/unknown flags
browser.update_count  Update Count
  Unsigned 8-bit integer
  Browse Update Count
browser.uptime  Uptime
  Unsigned 32-bit integer
  Server uptime in ms

```

#### Microsoft Windows Lanman Remote API Protocol (lanman)

```

lanman.aux_data_desc  Auxiliary Data Descriptor
  String
  LANMAN Auxiliary Data Descriptor
lanman.available_bytes  Available Bytes
  Unsigned 16-bit integer
  LANMAN Number of Available Bytes
lanman.available_count  Available Entries
  Unsigned 16-bit integer
  LANMAN Number of Available Entries
lanman.bad_pw_count  Bad Password Count
  Unsigned 16-bit integer
  LANMAN Number of incorrect passwords entered since last successful login
lanman.code_page  Code Page
  Unsigned 16-bit integer
  LANMAN Code Page
lanman.comment  Comment
  String
  LANMAN Comment
lanman.computer_name  Computer Name
  String
  LANMAN Computer Name

```

lanman.continuation\_from Continuation from message in frame  
Unsigned 32-bit integer  
This is a LANMAN continuation from the message in the frame in question

lanman.convert Convert  
Unsigned 16-bit integer  
LANMAN Convert

lanman.country\_code Country Code  
Unsigned 16-bit integer  
LANMAN Country Code

lanman.current\_time Current Date/Time  
Date/Time stamp  
LANMAN Current date and time, in seconds since 00:00:00, January 1, 1970

lanman.day Day  
Unsigned 8-bit integer  
LANMAN Current day

lanman.duration Duration of Session  
Time duration  
LANMAN Number of seconds the user was logged on

lanman.entry\_count Entry Count  
Unsigned 16-bit integer  
LANMAN Number of Entries

lanman.enumeration\_domain Enumeration Domain  
String  
LANMAN Domain in which to enumerate servers

lanman.full\_name Full Name  
String  
LANMAN Full Name

lanman.function\_code Function Code  
Unsigned 16-bit integer  
LANMAN Function Code/Command

lanman.group\_name Group Name  
String  
LANMAN Group Name

lanman.homedir Home Directory  
String  
LANMAN Home Directory

lanman.hour Hour  
Unsigned 8-bit integer  
LANMAN Current hour

lanman.hundredths Hundredths of a second  
Unsigned 8-bit integer  
LANMAN Current hundredths of a second

lanman.kickoff\_time Kickoff Date/Time  
Date/Time stamp  
LANMAN Date and time when user will be logged off

lanman.last\_entry Last Entry  
String  
LANMAN last reported entry of the enumerated servers

```
lanman.last_logoff  Last Logoff Date/Time
                    Date/Time stamp
                    LANMAN Date and time of last logoff

lanman.last_logon   Last Logon Date/Time
                    Date/Time stamp
                    LANMAN Date and time of last logon

lanman.level        Detail Level
                    Unsigned 16-bit integer
                    LANMAN Detail Level

lanman.logoff_code  Logoff Code
                    Unsigned 16-bit integer
                    LANMAN Logoff Code

lanman.logoff_time  Logoff Date/Time
                    Date/Time stamp
                    LANMAN Date and time when user should log off

lanman.logon_code   Logon Code
                    Unsigned 16-bit integer
                    LANMAN Logon Code

lanman.logon_domain Logon Domain
                    String
                    LANMAN Logon Domain

lanman.logon_hours  Logon Hours
                    Byte array
                    LANMAN Logon Hours

lanman.logon_server Logon Server
                    String
                    LANMAN Logon Server

lanman.max_storage  Max Storage
                    Unsigned 32-bit integer
                    LANMAN Max Storage

lanman.minute       Minute
                    Unsigned 8-bit integer
                    LANMAN Current minute

lanman.month        Month
                    Unsigned 8-bit integer
                    LANMAN Current month

lanman.msecs        Milliseconds
                    Unsigned 32-bit integer
                    LANMAN Milliseconds since arbitrary time in the past (typically boot time)

lanman.new_password New Password
                    Byte array
                    LANMAN New Password (encrypted)

lanman.num_logons   Number of Logons
                    Unsigned 16-bit integer
                    LANMAN Number of Logons

lanman.old_password Old Password
                    Byte array
                    LANMAN Old Password (encrypted)
```

```
lanman.operator_privileges  Operator Privileges
    Unsigned 32-bit integer
    LANMAN Operator Privileges

lanman.other_domains  Other Domains
    String
    LANMAN Other Domains

lanman.param_desc  Parameter Descriptor
    String
    LANMAN Parameter Descriptor

lanman.parameters  Parameters
    String
    LANMAN Parameters

lanman.password  Password
    String
    LANMAN Password

lanman.password_age  Password Age
    Time duration
    LANMAN Time since user last changed his/her password

lanman.password_can_change  Password Can Change
    Date/Time stamp
    LANMAN Date and time when user can change their password

lanman.password_must_change  Password Must Change
    Date/Time stamp
    LANMAN Date and time when user must change their password

lanman.privilege_level  Privilege Level
    Unsigned 16-bit integer
    LANMAN Privilege Level

lanman.recv_buf_len  Receive Buffer Length
    Unsigned 16-bit integer
    LANMAN Receive Buffer Length

lanman.reserved  Reserved
    Unsigned 32-bit integer
    LANMAN Reserved

lanman.ret_desc  Return Descriptor
    String
    LANMAN Return Descriptor

lanman.script_path  Script Path
    String
    LANMAN Pathname of user's logon script

lanman.second  Second
    Unsigned 8-bit integer
    LANMAN Current second

lanman.send_buf_len  Send Buffer Length
    Unsigned 16-bit integer
    LANMAN Send Buffer Length

lanman.server.comment  Server Comment
    String
    LANMAN Server Comment
```

```
lanman.server.major  Major Version
    Unsigned 8-bit integer
    LANMAN Server Major Version

lanman.server.minor  Minor Version
    Unsigned 8-bit integer
    LANMAN Server Minor Version

lanman.server.name   Server Name
    String
    LANMAN Name of Server

lanman.share.comment  Share Comment
    String
    LANMAN Share Comment

lanman.share.current_uses  Share Current Uses
    Unsigned 16-bit integer
    LANMAN Current connections to share

lanman.share.max_uses  Share Max Uses
    Unsigned 16-bit integer
    LANMAN Max connections allowed to share

lanman.share.name    Share Name
    String
    LANMAN Name of Share

lanman.share.password  Share Password
    String
    LANMAN Share Password

lanman.share.path     Share Path
    String
    LANMAN Share Path

lanman.share.permissions  Share Permissions
    Unsigned 16-bit integer
    LANMAN Permissions on share

lanman.share.type     Share Type
    Unsigned 16-bit integer
    LANMAN Type of Share

lanman.status         Status
    Unsigned 16-bit integer
    LANMAN Return status

lanman.timeinterval  Time Interval
    Unsigned 16-bit integer
    LANMAN .0001 second units per clock tick

lanman.tzoffset      Time Zone Offset
    Signed 16-bit integer
    LANMAN Offset of time zone from GMT, in minutes

lanman.units_per_week  Units Per Week
    Unsigned 16-bit integer
    LANMAN Units Per Week

lanman.user_comment  User Comment
    String
    LANMAN User Comment
```

```
lanman.user_name  User Name
  String
  LANMAN User Name

lanman.ustruct_size  Length of UStruct
  Unsigned 16-bit integer
  LANMAN UStruct Length

lanman.weekday  Weekday
  Unsigned 8-bit integer
  LANMAN Current day of the week

lanman.workstation_domain  Workstation Domain
  String
  LANMAN Workstation Domain

lanman.workstation_major  Workstation Major Version
  Unsigned 8-bit integer
  LANMAN Workstation Major Version

lanman.workstation_minor  Workstation Minor Version
  Unsigned 8-bit integer
  LANMAN Workstation Minor Version

lanman.workstation_name  Workstation Name
  String
  LANMAN Workstation Name

lanman.workstations  Workstations
  String
  LANMAN Workstations

lanman.year  Year
  Unsigned 16-bit integer
  LANMAN Current year
```

#### **Microsoft Windows Logon Protocol (Old) (smb\_netlogon)**

```
smb_netlogon.client_site_name  Client Site Name
  String
  SMB NETLOGON Client Site Name

smb_netlogon.command  Command
  Unsigned 8-bit integer
  SMB NETLOGON Command

smb_netlogon.computer_name  Computer Name
  String
  SMB NETLOGON Computer Name

smb_netlogon.date_time  Date/Time
  Unsigned 32-bit integer
  SMB NETLOGON Date/Time

smb_netlogon.db_count  DB Count
  Unsigned 32-bit integer
  SMB NETLOGON DB Count

smb_netlogon.db_index  Database Index
  Unsigned 32-bit integer
  SMB NETLOGON Database Index
```

```
smb_netlogon.domain.guid    Domain GUID
    Byte array
    Domain GUID

smb_netlogon.domain_dns_name  Domain DNS Name
    String
    SMB NETLOGON Domain DNS Name

smb_netlogon.domain_name    Domain Name
    String
    SMB NETLOGON Domain Name

smb_netlogon.domain_sid_size  Domain SID Size
    Unsigned 32-bit integer
    SMB NETLOGON Domain SID Size

smb_netlogon.flags.autolock  Autolock
    Boolean
    SMB NETLOGON Account Autolock

smb_netlogon.flags.enabled   Enabled
    Boolean
    SMB NETLOGON Is This Account Enabled

smb_netlogon.flags.expire    Expire
    Boolean
    SMB NETLOGON Will Account Expire

smb_netlogon.flags.homedir  Homedir
    Boolean
    SMB NETLOGON Homedir Required

smb_netlogon.flags.interdomain  Interdomain Trust
    Boolean
    SMB NETLOGON Inter-domain Trust Account

smb_netlogon.flags.mns      MNS User
    Boolean
    SMB NETLOGON MNS User Account

smb_netlogon.flags.normal   Normal User
    Boolean
    SMB NETLOGON Normal User Account

smb_netlogon.flags.password Password
    Boolean
    SMB NETLOGON Password Required

smb_netlogon.flags.server   Server Trust
    Boolean
    SMB NETLOGON Server Trust Account

smb_netlogon.flags.temp_dup  Temp Duplicate User
    Boolean
    SMB NETLOGON Temp Duplicate User Account

smb_netlogon.flags.workstation  Workstation Trust
    Boolean
    SMB NETLOGON Workstation Trust Account

smb_netlogon.forest_dns_name  Forest DNS Name
    String
    SMB NETLOGON Forest DNS Name
```



```
smb_netlogon.large_serial  Large Serial Number
    Unsigned 64-bit integer
    SMB NETLOGON Large Serial Number

smb_netlogon.lm_token      LM Token
    Unsigned 16-bit integer
    SMB NETLOGON LM Token

smb_netlogon.lmnt_token    LMNT Token
    Unsigned 16-bit integer
    SMB NETLOGON LMNT Token

smb_netlogon.low_serial    Low Serial Number
    Unsigned 32-bit integer
    SMB NETLOGON Low Serial Number

smb_netlogon.mailslot_name Mailslot Name
    String
    SMB NETLOGON Mailslot Name

smb_netlogon.major_version Workstation Major Version
    Unsigned 8-bit integer
    SMB NETLOGON Workstation Major Version

smb_netlogon.minor_version Workstation Minor Version
    Unsigned 8-bit integer
    SMB NETLOGON Workstation Minor Version

smb_netlogon.nt_date_time  NT Date/Time
    Date/Time stamp
    SMB NETLOGON NT Date/Time

smb_netlogon.nt_version    NT Version
    Unsigned 32-bit integer
    SMB NETLOGON NT Version

smb_netlogon.os_version    Workstation OS Version
    Unsigned 8-bit integer
    SMB NETLOGON Workstation OS Version

smb_netlogon.pdc_name      PDC Name
    String
    SMB NETLOGON PDC Name

smb_netlogon.pulse         Pulse
    Unsigned 32-bit integer
    SMB NETLOGON Pulse

smb_netlogon.random        Random
    Unsigned 32-bit integer
    SMB NETLOGON Random

smb_netlogon.request_count Request Count
    Unsigned 16-bit integer
    SMB NETLOGON Request Count

smb_netlogon.script_name   Script Name
    String
    SMB NETLOGON Script Name

smb_netlogon.server_dns_name Server DNS Name
    String
    SMB NETLOGON Server DNS Name
```

```
smb_netlogon.server_ip  Server IP
    IPv4 address
    Server IP Address

smb_netlogon.server_name  Server Name
    String
    SMB NETLOGON Server Name

smb_netlogon.server_site_name  Server Site Name
    String
    SMB NETLOGON Server Site Name

smb_netlogon.unicode_computer_name  Unicode Computer Name
    String
    SMB NETLOGON Unicode Computer Name

smb_netlogon.unicode_pdc_name  Unicode PDC Name
    String
    SMB NETLOGON Unicode PDC Name

smb_netlogon.unknown  Unknown
    Unsigned 8-bit integer
    Unknown

smb_netlogon.update  Update Type
    Unsigned 16-bit integer
    SMB NETLOGON Update Type

smb_netlogon.user_name  User Name
    String
    SMB NETLOGON User Name
```

**Mobile IP (mip)**

```
mip.ack.i  Inform
    Boolean
    Inform Mobile Node

mip.ack.reserved  Reserved
    Unsigned 8-bit integer

mip.ack.reserved2  Reserved
    Unsigned 16-bit integer

mip.auth.auth  Authenticator
    Byte array
    Authenticator.

mip.auth.spi  SPI
    Unsigned 32-bit integer
    Authentication Header Security Parameter Index.

mip.b  Broadcast Datagrams
    Boolean
    Broadcast Datagrams requested

mip.coa  Care of Address
    IPv4 address
    Care of Address.

mip.code  Reply Code
    Unsigned 8-bit integer
    Mobile IP Reply code.
```

```
mip.d    Co-located Care-of Address
         Boolean
         MN using Co-located Care-of address
mip.ext.auth.subtype  Gen Auth Ext SubType
         Unsigned 8-bit integer
         Mobile IP Auth Extension Sub Type.
mip.ext.dynha.ha     DynHA Home Agent
         IPv4 address
         Dynamic Home Agent IP Address
mip.ext.dynha.subtype  DynHA Ext SubType
         Unsigned 8-bit integer
         Dynamic HA Extension Sub-type
mip.ext.len     Extension Length
         Unsigned 16-bit integer
         Mobile IP Extension Length.
mip.ext.msgstr.subtype  MsgStr Ext SubType
         Unsigned 8-bit integer
         Message String Extension Sub-type
mip.ext.msgstr.text  MsgStr Text
         String
         Message String Extension Text
mip.ext.rev.flags  Rev Ext Flags
         Unsigned 16-bit integer
         Revocation Support Extension Flags
mip.ext.rev.i     'I' bit Support
         Boolean
         Agent surevidpports Inform bit in Revocation
mip.ext.rev.reserved  Reserved
         Unsigned 16-bit integer
mip.ext.rev.tstamp  Timestamp
         Unsigned 32-bit integer
         Revocation Timestamp of Sending Agent
mip.ext.type     Extension Type
         Unsigned 8-bit integer
         Mobile IP Extension Type.
mip.ext.utrp.code  UDP TunRep Code
         Unsigned 8-bit integer
         UDP Tunnel Reply Code
mip.ext.utrp.f     Rep Forced
         Boolean
         HA wants to Force UDP Tunneling
mip.ext.utrp.flags  UDP TunRep Ext Flags
         Unsigned 16-bit integer
         UDP Tunnel Request Extension Flags
mip.ext.utrp.keepalive  Keepalive Interval
         Unsigned 16-bit integer
         NAT Keepalive Interval
```

```
mip.ext.utrp.reserved  Reserved
    Unsigned 16-bit integer
mip.ext.utrp.subtype  UDP TunRep Ext SubType
    Unsigned 8-bit integer
    UDP Tunnel Reply Extension Sub-type
mip.ext.utrq.encaptype  UDP Encap Type
    Unsigned 8-bit integer
    UDP Encapsulation Type
mip.ext.utrq.f  Req Forced
    Boolean
    MN wants to Force UDP Tunneling
mip.ext.utrq.flags  UDP TunReq Ext Flags
    Unsigned 8-bit integer
    UDP Tunnel Request Extension Flags
mip.ext.utrq.r  FA Registration Required
    Boolean
    Registration through FA Required
mip.ext.utrq.reserved1  Reserved 1
    Unsigned 8-bit integer
mip.ext.utrq.reserved2  Reserved 2
    Unsigned 8-bit integer
mip.ext.utrq.reserved3  Reserved 3
    Unsigned 16-bit integer
mip.ext.utrq.subtype  UDP TunReq Ext SubType
    Unsigned 8-bit integer
    UDP Tunnel Request Extension Sub-type
mip.extension  Extension
    Byte array
    Extension
mip.flags  Flags
    Unsigned 8-bit integer
mip.g  GRE
    Boolean
    MN wants GRE encapsulation
mip.haaddr  Home Agent
    IPv4 address
    Home agent IP Address.
mip.homeaddr  Home Address
    IPv4 address
    Mobile Node's home address.
mip.ident  Identification
    Byte array
    MN Identification.
mip.life  Lifetime
    Unsigned 16-bit integer
    Mobile IP Lifetime.
```

```
mip.m Minimal Encapsulation
  Boolean
  MN wants Minimal encapsulation

mip.nai NAI
  String
  NAI

mip.nattt.nexthdr NATTT NextHeader
  Unsigned 8-bit integer
  NAT Traversal Tunnel Next Header.

mip.nattt.reserved Reserved
  Unsigned 16-bit integer

mip.rev.a Home Agent
  Boolean
  Revocation sent by Home Agent

mip.rev.fda Foreign Domain Address
  IPv4 address
  Revocation Foreign Domain IP Address

mip.rev.hda Home Domain Address
  IPv4 address
  Revocation Home Domain IP Address

mip.rev.i Inform
  Boolean
  Inform Mobile Node

mip.rev.reserved Reserved
  Unsigned 8-bit integer

mip.rev.reserved2 Reserved
  Unsigned 16-bit integer

mip.revid Revocation Identifier
  Unsigned 32-bit integer
  Revocation Identifier of Initiating Agent

mip.s Simultaneous Bindings
  Boolean
  Simultaneous Bindings Allowed

mip.t Reverse Tunneling
  Boolean
  Reverse tunneling requested

mip.type Message Type
  Unsigned 8-bit integer
  Mobile IP Message type.

mip.v Van Jacobson
  Boolean
  Van Jacobson

mip.x Reserved
  Boolean
  Reserved
```

**Mobile IPv6 / Network Mobility (mipv6)**

fmip6.fback.k\_flag Key Management Compatibility (K) flag  
Boolean  
Key Management Compatibility (K) flag

fmip6.fback.lifetime Lifetime  
Unsigned 16-bit integer  
Lifetime

fmip6.fback.seqnr Sequence number  
Unsigned 16-bit integer  
Sequence number

fmip6.fback.status Status  
Unsigned 8-bit integer  
Fast Binding Acknowledgement status

fmip6.fbu.a\_flag Acknowledge (A) flag  
Boolean  
Acknowledge (A) flag

fmip6.fbu.h\_flag Home Registration (H) flag  
Boolean  
Home Registration (H) flag

fmip6.fbu.k\_flag Key Management Compatibility (K) flag  
Boolean  
Key Management Compatibility (K) flag

fmip6.fbu.l\_flag Link-Local Compatibility (L) flag  
Boolean  
Home Registration (H) flag

fmip6.fbu.lifetime Lifetime  
Unsigned 16-bit integer  
Lifetime

fmip6.fbu.seqnr Sequence number  
Unsigned 16-bit integer  
Sequence number

mip6.acoa.acoa Alternate care-of address  
IPv6 address  
Alternate Care-of address

mip6.ba.k\_flag Key Management Compatibility (K) flag  
Boolean  
Key Management Compatibility (K) flag

mip6.ba.lifetime Lifetime  
Unsigned 16-bit integer  
Lifetime

mip6.ba.seqnr Sequence number  
Unsigned 16-bit integer  
Sequence number

mip6.ba.status Status  
Unsigned 8-bit integer  
Binding Acknowledgement status

```
mip6.bad.auth  Authenticator
  Byte array
  Authenticator

mip6.be.haddr  Home Address
  IPv6 address
  Home Address

mip6.be.status  Status
  Unsigned 8-bit integer
  Binding Error status

mip6.bra.interval  Refresh interval
  Unsigned 16-bit integer
  Refresh interval

mip6.bu.a_flag  Acknowledge (A) flag
  Boolean
  Acknowledge (A) flag

mip6.bu.h_flag  Home Registration (H) flag
  Boolean
  Home Registration (H) flag

mip6.bu.k_flag  Key Management Compatibility (K) flag
  Boolean
  Key Management Compatibility (K) flag

mip6.bu.l_flag  Link-Local Compatibility (L) flag
  Boolean
  Home Registration (H) flag

mip6.bu.lifetime  Lifetime
  Unsigned 16-bit integer
  Lifetime

mip6.bu.m_flag  MAP Registration Compatibility (M) flag
  Boolean
  MAP Registration Compatibility (M) flag

mip6.bu.p_flag  Proxy Registration (P) flag
  Boolean
  Proxy Registration (P) flag

mip6.bu.seqnr  Sequence number
  Unsigned 16-bit integer
  Sequence number

mip6.cot.cookie  Care-of Init Cookie
  Unsigned 64-bit integer
  Care-of Init Cookie

mip6.cot.nindex  Care-of Nonce Index
  Unsigned 16-bit integer
  Care-of Nonce Index

mip6.cot.token  Care-of Keygen Token
  Unsigned 64-bit integer
  Care-of Keygen Token

mip6.coti.cookie  Care-of Init Cookie
  Unsigned 64-bit integer
  Care-of Init Cookie
```

```
mip6.csum  Checksum
           Unsigned 16-bit integer
           Header Checksum

mip6.hlen  Header length
           Unsigned 8-bit integer
           Header length

mip6.hot.cookie  Home Init Cookie
                Unsigned 64-bit integer
                Home Init Cookie

mip6.hot.nindex  Home Nonce Index
                Unsigned 16-bit integer
                Home Nonce Index

mip6.hot.token  Home Keygen Token
                Unsigned 64-bit integer
                Home Keygen Token

mip6.hoti.cookie  Home Init Cookie
                  Unsigned 64-bit integer
                  Home Init Cookie

mip6.lla.optcode  Option-Code
                  Unsigned 8-bit integer
                  Option-Code

mip6.mh.type  Mobility Header Type
              Unsigned 8-bit integer
              Mobility Header Type

mip6.mnid.subtype  Subtype
                   Unsigned 8-bit integer
                   Subtype

mip6.ni.cni  Care-of nonce index
             Unsigned 16-bit integer
             Care-of nonce index

mip6.ni.hni  Home nonce index
             Unsigned 16-bit integer
             Home nonce index

mip6.proto  Payload protocol
            Unsigned 8-bit integer
            Payload protocol

mip6.reserved  Reserved
               Unsigned 8-bit integer
               Reserved

nemo.ba.r_flag  Mobile Router (R) flag
                Boolean
                Mobile Router (R) flag

nemo.bu.r_flag  Mobile Router (R) flag
                Boolean
                Mobile Router (R) flag

nemo.mnp.mnp  Mobile Network Prefix
              IPv6 address
              Mobile Network Prefix
```



```
nemo.mnp.pfl  Mobile Network Prefix Length
              Unsigned 8-bit integer
              Mobile Network Prefix Length

pmip6.timestamp  Timestamp
                 Byte array
                 Timestamp

proxy.ba.p_flag  Proxy Registration (P) flag
                 Boolean
                 Proxy Registration (P) flag
```

**Modbus/TCP (mbtcp)**

```
modbus_tcp.and_mask  AND mask
                     Unsigned 16-bit integer

modbus_tcp.bit_cnt  bit count
                     Unsigned 16-bit integer

modbus_tcp.byte_cnt  byte count
                     Unsigned 8-bit integer

modbus_tcp.byte_cnt_16  byte count (16-bit)
                         Unsigned 8-bit integer

modbus_tcp.exception_code  exception code
                            Unsigned 8-bit integer

modbus_tcp.func_code  function code
                       Unsigned 8-bit integer

modbus_tcp.len  length
                 Unsigned 16-bit integer

modbus_tcp.or_mask  OR mask
                    Unsigned 16-bit integer

modbus_tcp.prot_id  protocol identifier
                    Unsigned 16-bit integer

modbus_tcp.read_reference_num  read reference number
                                Unsigned 16-bit integer

modbus_tcp.read_word_cnt  read word count
                           Unsigned 16-bit integer

modbus_tcp.reference_num  reference number
                           Unsigned 16-bit integer

modbus_tcp.reference_num_32  reference number (32 bit)
                              Unsigned 32-bit integer

modbus_tcp.reference_type  reference type
                            Unsigned 8-bit integer

modbus_tcp.trans_id  transaction identifier
                     Unsigned 16-bit integer

modbus_tcp.unit_id  unit identifier
                     Unsigned 8-bit integer

modbus_tcp.word_cnt  word count
                     Unsigned 16-bit integer
```

modbus\_tcp.write\_reference\_num write reference number  
Unsigned 16-bit integer

modbus\_tcp.write\_word\_cnt write word count  
Unsigned 16-bit integer

### **Monotone Netsync (netsync)**

netsync.checksum Checksum  
Unsigned 32-bit integer  
Checksum

netsync.cmd.anonymous.collection Collection  
String  
Collection

netsync.cmd.anonymous.role Role  
Unsigned 8-bit integer  
Role

netsync.cmd.auth.collection Collection  
String  
Collection

netsync.cmd.auth.id ID  
Byte array  
ID

netsync.cmd.auth.noncel Nonce 1  
Byte array  
Nonce 1

netsync.cmd.auth.nonce2 Nonce 2  
Byte array  
Nonce 2

netsync.cmd.auth.role Role  
Unsigned 8-bit integer  
Role

netsync.cmd.auth.sig Signature  
Byte array  
Signature

netsync.cmd.confirm.signature Signature  
Byte array  
Signature

netsync.cmd.data.compressed Compressed  
Unsigned 8-bit integer  
Compressed

netsync.cmd.data.id ID  
Byte array  
ID

netsync.cmd.data.payload Payload  
Byte array  
Payload

netsync.cmd.data.type Type  
Unsigned 8-bit integer  
Type

```
netsync.cmd.delta.base_id  Base ID
    Byte array
    Base ID

netsync.cmd.delta.compressed  Compressed
    Unsigned 8-bit integer
    Compressed

netsync.cmd.delta.ident_id  Ident ID
    Byte array
    Ident ID

netsync.cmd.delta.payload  Payload
    Byte array
    Payload

netsync.cmd.delta.type  Type
    Unsigned 8-bit integer
    Type

netsync.cmd.done.level  Level
    Unsigned 32-bit integer
    Level

netsync.cmd.done.type  Type
    Unsigned 8-bit integer
    Type

netsync.cmd.error.msg  Message
    String
    Message

netsync.cmd.hello.key  Key
    Byte array
    Key

netsync.cmd.hello.keyname  Key Name
    String
    Key Name

netsync.cmd.nonce  Nonce
    Byte array
    Nonce

netsync.cmd.nonexistent.id  ID
    Byte array
    ID

netsync.cmd.nonexistent.type  Type
    Unsigned 8-bit integer
    Type

netsync.cmd.refine.tree_node  Tree Node
    Byte array
    Tree Node

netsync.cmd.send_data.id  ID
    Byte array
    ID

netsync.cmd.send_data.type  Type
    Unsigned 8-bit integer
    Type
```

```
netsync.cmd.send_delta.base_id  Base ID
    Byte array
    Base ID

netsync.cmd.send_delta.ident_id  Ident ID
    Byte array
    Ident ID

netsync.cmd.send_delta.type  Type
    Unsigned 8-bit integer
    Type

netsync.command  Command
    Unsigned 8-bit integer
    Command

netsync.data  Data
    Byte array
    Data

netsync.size  Size
    Unsigned 32-bit integer
    Size

netsync.version  Version
    Unsigned 8-bit integer
    Version
```

**Mount Service (mount)**

```
mount.dump.directory  Directory
    String
    Directory

mount.dump.entry  Mount List Entry
    No value
    Mount List Entry

mount.dump.hostname  Hostname
    String
    Hostname

mount.export.directory  Directory
    String
    Directory

mount.export.entry  Export List Entry
    No value
    Export List Entry

mount.export.group  Group
    String
    Group

mount.export.groups  Groups
    No value
    Groups

mount.export.has_options  Has options
    Unsigned 32-bit integer
    Has options
```

```
mount.export.options  Options
    String
    Options

mount.flavor  Flavor
    Unsigned 32-bit integer
    Flavor

mount.flavors  Flavors
    Unsigned 32-bit integer
    Flavors

mount.path  Path
    String
    Path

mount.pathconf.link_max  Maximum number of links to a file
    Unsigned 32-bit integer
    Maximum number of links allowed to a file

mount.pathconf.mask  Reply error/status bits
    Unsigned 16-bit integer
    Bit mask with error and status bits

mount.pathconf.mask.chown_restricted  CHOWN_RESTRICTED
    Boolean

mount.pathconf.mask.error_all  ERROR_ALL
    Boolean

mount.pathconf.mask.error_link_max  ERROR_LINK_MAX
    Boolean

mount.pathconf.mask.error_max_canon  ERROR_MAX_CANON
    Boolean

mount.pathconf.mask.error_max_input  ERROR_MAX_INPUT
    Boolean

mount.pathconf.mask.error_name_max  ERROR_NAME_MAX
    Boolean

mount.pathconf.mask.error_path_max  ERROR_PATH_MAX
    Boolean

mount.pathconf.mask.error_pipe_buf  ERROR_PIPE_BUF
    Boolean

mount.pathconf.mask.error_vdisable  ERROR_VDISABLE
    Boolean

mount.pathconf.mask.no_trunc  NO_TRUNC
    Boolean

mount.pathconf.max_canon  Maximum terminal input line length
    Unsigned 16-bit integer
    Max tty input line length

mount.pathconf.max_input  Terminal input buffer size
    Unsigned 16-bit integer
    Terminal input buffer size
```

mount.pathconf.name\_max Maximum file name length  
Unsigned 16-bit integer  
Maximum file name length

mount.pathconf.path\_max Maximum path name length  
Unsigned 16-bit integer  
Maximum path name length

mount.pathconf.pipe\_buf Pipe buffer size  
Unsigned 16-bit integer  
Maximum amount of data that can be written atomically to a pipe

mount.pathconf.vdisable\_char VDISABLE character  
Unsigned 8-bit integer  
Character value to disable a terminal special character

mount.procedure\_sgi\_v1 SGI V1 procedure  
Unsigned 32-bit integer  
SGI V1 Procedure

mount.procedure\_v1 V1 Procedure  
Unsigned 32-bit integer  
V1 Procedure

mount.procedure\_v2 V2 Procedure  
Unsigned 32-bit integer  
V2 Procedure

mount.procedure\_v3 V3 Procedure  
Unsigned 32-bit integer  
V3 Procedure

mount.status Status  
Unsigned 32-bit integer  
Status

mount.statvfs.f\_basetype Type  
String  
File system type

mount.statvfs.f\_bavail Blocks Available  
Unsigned 32-bit integer  
Available fragment sized blocks

mount.statvfs.f\_bfree Blocks Free  
Unsigned 32-bit integer  
Free fragment sized blocks

mount.statvfs.f\_blocks Blocks  
Unsigned 32-bit integer  
Total fragment sized blocks

mount.statvfs.f\_bsize Block size  
Unsigned 32-bit integer  
File system block size

mount.statvfs.f\_favail Files Available  
Unsigned 32-bit integer  
Available files/inodes

mount.statvfs.f\_ffree Files Free  
Unsigned 32-bit integer  
Free files/inodes

```

mount.statvfs.f_files  Files
    Unsigned 32-bit integer
    Total files/inodes

mount.statvfs.f_flag  Flags
    Unsigned 32-bit integer
    Flags bit-mask

mount.statvfs.f_flag.st_grpid  ST_GRPID
    Boolean

mount.statvfs.f_flag.st_local  ST_LOCAL
    Boolean

mount.statvfs.f_flag.st_nodev  ST_NODEV
    Boolean

mount.statvfs.f_flag.st_nosuid  ST_NOSUID
    Boolean

mount.statvfs.f_flag.st_notrunc  ST_NOTRUNC
    Boolean

mount.statvfs.f_flag.st_ronly  ST_RDONLY
    Boolean

mount.statvfs.f_frsize  Fragment size
    Unsigned 32-bit integer
    File system fragment size

mount.statvfs.f_fsid  File system ID
    Unsigned 32-bit integer
    File system identifier

mount.statvfs.f_fstr  File system specific string
    Byte array
    File system specific string

mount.statvfs.f_namemax  Maximum file name length
    Unsigned 32-bit integer
    Maximum file name length

```

### **Moving Picture Experts Group (mpeg)**

#### **Moving Picture Experts Group Audio (mpeg.audio)**

```

id3v1  ID3v1
    No value

id3v2  ID3v2
    No value

mpeg-audio.album  album
    String
    mpeg_audio.OCTET_STRING_SIZE_30

mpeg-audio.artist  artist
    String
    mpeg_audio.OCTET_STRING_SIZE_30

mpeg-audio.bitrate  bitrate
    Unsigned 32-bit integer
    mpeg_audio.INTEGER_0_15

```

```
mpeg-audio.channel_mode  channel-mode
    Unsigned 32-bit integer
    mpeg_audio.T_channel_mode
mpeg-audio.comment  comment
    String
    mpeg_audio.OCTET_STRING_SIZE_28
mpeg-audio.copyright  copyright
    Boolean
    mpeg_audio.BOOLEAN
mpeg-audio.emphasis  emphasis
    Unsigned 32-bit integer
    mpeg_audio.T_emphasis
mpeg-audio.frequency  frequency
    Unsigned 32-bit integer
    mpeg_audio.INTEGER_0_3
mpeg-audio.genre  genre
    Unsigned 32-bit integer
    mpeg_audio.T_genre
mpeg-audio.layer  layer
    Unsigned 32-bit integer
    mpeg_audio.T_layer
mpeg-audio.mode_extension  mode-extension
    Unsigned 32-bit integer
    mpeg_audio.INTEGER_0_3
mpeg-audio.must_be_zero  must-be-zero
    Unsigned 32-bit integer
    mpeg_audio.INTEGER_0_255
mpeg-audio.original  original
    Boolean
    mpeg_audio.BOOLEAN
mpeg-audio.padding  padding
    Boolean
    mpeg_audio.BOOLEAN
mpeg-audio.private  private
    Boolean
    mpeg_audio.BOOLEAN
mpeg-audio.protection  protection
    Unsigned 32-bit integer
    mpeg_audio.T_protection
mpeg-audio.sync  sync
    Byte array
    mpeg_audio.BIT_STRING_SIZE_11
mpeg-audio.tag  tag
    String
    mpeg_audio.OCTET_STRING_SIZE_3
mpeg-audio.title  title
    String
    mpeg_audio.OCTET_STRING_SIZE_30
```



```
mpeg-audio.track track
    Unsigned 32-bit integer
    mpeg_audio.INTEGER_0_255
mpeg-audio.version version
    Unsigned 32-bit integer
    mpeg_audio.T_version
mpeg-audio.year year
    String
    mpeg_audio.OCTET_STRING_SIZE_4
mpeg.audio.data Data
    Byte array
mpeg.audio.padbytes Padding
    Byte array
```

### MultiProtocol Label Switching Header (mpls)

```
mpls.bottom MPLS Bottom Of Label Stack
    Unsigned 8-bit integer
mpls.cw.control MPLS Control Channel
    Unsigned 8-bit integer
    First nibble
mpls.cw.res Reserved
    Unsigned 16-bit integer
    Reserved
mpls.exp MPLS Experimental Bits
    Unsigned 8-bit integer
mpls.label MPLS Label
    Unsigned 32-bit integer
mpls.oam.bip16 BIP16
    Unsigned 16-bit integer
    BIP16
mpls.oam.defect_location Defect Location (AS)
    Unsigned 32-bit integer
    Defect Location
mpls.oam.defect_type Defect Type
    Unsigned 16-bit integer
    Defect Type
mpls.oam.frequency Frequency
    Unsigned 8-bit integer
    Frequency of probe injection
mpls.oam.function_type Function Type
    Unsigned 8-bit integer
    Function Type codepoint
mpls.oam.ttsi Trail Termination Source Identifier
    Unsigned 32-bit integer
    Trail Termination Source Identifier
mpls.ttl MPLS TTL
    Unsigned 8-bit integer
```

**Multicast Router DIScovery protocol (mrdisc)**

mrdisc.adv\_int Advertising Interval  
Unsigned 8-bit integer  
MRDISC Advertising Interval in seconds

mrdisc.checksum Checksum  
Unsigned 16-bit integer  
MRDISC Checksum

mrdisc.checksum\_bad Bad Checksum  
Boolean  
Bad MRDISC Checksum

mrdisc.num\_opts Number Of Options  
Unsigned 16-bit integer  
MRDISC Number Of Options

mrdisc.opt\_len Length  
Unsigned 8-bit integer  
MRDISC Option Length

mrdisc.option Option  
Unsigned 8-bit integer  
MRDISC Option Type

mrdisc.option\_data Data  
Byte array  
MRDISC Unknown Option Data

mrdisc.options Options  
No value  
MRDISC Options

mrdisc.query\_int Query Interval  
Unsigned 16-bit integer  
MRDISC Query Interval

mrdisc.rob\_var Robustness Variable  
Unsigned 16-bit integer  
MRDISC Robustness Variable

mrdisc.type Type  
Unsigned 8-bit integer  
MRDISC Packet Type

**Multicast Source Discovery Protocol (msdp)**

msdp.length Length  
Unsigned 16-bit integer  
MSDP TLV Length

msdp.not.entry\_count Entry Count  
Unsigned 24-bit integer  
Entry Count in Notification messages

msdp.not.error Error Code  
Unsigned 8-bit integer  
Indicates the type of Notification

msdp.not.error\_sub Error subcode  
Unsigned 8-bit integer  
Error subcode

msdp.not.ipv4 IPv4 address  
IPv4 address  
Group/RP/Source address in Notification messages

msdp.not.o Open-bit  
Unsigned 8-bit integer  
If clear, the connection will be closed

msdp.not.res Reserved  
Unsigned 24-bit integer  
Reserved field in Notification messages

msdp.not.sprefix\_len Sprefix len  
Unsigned 8-bit integer  
Source prefix length in Notification messages

msdp.sa.entry\_count Entry Count  
Unsigned 8-bit integer  
MSDP SA Entry Count

msdp.sa.group\_addr Group Address  
IPv4 address  
The group address the active source has sent data to

msdp.sa.reserved Reserved  
Unsigned 24-bit integer  
Transmitted as zeros and ignored by a receiver

msdp.sa.rp\_addr RP Address  
IPv4 address  
Active source's RP address

msdp.sa.sprefix\_len Sprefix len  
Unsigned 8-bit integer  
The route prefix length associated with source address

msdp.sa.src\_addr Source Address  
IPv4 address  
The IP address of the active source

msdp.sa\_req.group\_addr Group Address  
IPv4 address  
The group address the MSDP peer is requesting

msdp.sa\_req.res Reserved  
Unsigned 8-bit integer  
Transmitted as zeros and ignored by a receiver

msdp.type Type  
Unsigned 8-bit integer  
MSDP TLV type

**Multimedia Internet KEYing (mikey)**

mikey. Envelope Data (PKE)  
No value

mikey.cert Certificate (CERT)  
No value

mikey.cert.data Certificate  
Byte array

```
mikey.cert.len  Certificate len
                Unsigned 16-bit integer
mikey.cert.type Certificate type
                Unsigned 8-bit integer
mikey.chash     CHASH
                No value
mikey.cs_count  #CS
                Unsigned 8-bit integer
mikey.cs_id_map_type  CS ID map type
                Unsigned 8-bit integer
mikey.csb_id    CSB ID
                Unsigned 32-bit integer
mikey.dh        DH Data (DH)
                No value
mikey.dh.group  DH-Group
                Unsigned 8-bit integer
mikey.dh.kv     KV
                Unsigned 8-bit integer
mikey.dh.reserv Reserv
                Unsigned 8-bit integer
mikey.dh.value  DH-Value
                Byte array
mikey.err       Error (ERR)
                No value
mikey.err.no    Error no.
                Unsigned 8-bit integer
mikey.err.reserved  Reserved
                Byte array
mikey.ext       General Extension (EXT)
                No value
mikey.ext.data  Data
                Byte array
mikey.ext.len   Length
                Unsigned 16-bit integer
mikey.ext.type  Extension type
                Unsigned 8-bit integer
mikey.ext.value Value
                String
mikey.hdr       Common Header (HDR)
                No value
mikey.id        ID
                No value
mikey.id.data   ID
                String
```

```
mikey.id.len  ID len
              Unsigned 16-bit integer
mikey.id.type ID type
              Unsigned 8-bit integer
mikey.kemac  Key Data Transport (KEMAC)
              No value
mikey.kemac.encr_alg  Encr alg
              Unsigned 8-bit integer
mikey.kemac.key_data  Key data
              Byte array
mikey.kemac.key_data_len  Key data len
              Unsigned 16-bit integer
mikey.kemac.mac  MAC
              Byte array
mikey.kemac.mac_alg  Mac alg
              Unsigned 8-bit integer
mikey.key  Key data (KEY)
              No value
mikey.key.data  Key
              Byte array
mikey.key.data.len  Key len
              Unsigned 16-bit integer
mikey.key.kv  KV
              Unsigned 8-bit integer
mikey.key.kv.from  Valid from
              Byte array
mikey.key.kv.from.len  Valid from len
              Unsigned 8-bit integer
mikey.key.kv.spi  Valid SPI
              Byte array
mikey.key.kv.spi.len  Valid SPI len
              Unsigned 8-bit integer
mikey.key.kv.to  Valid to
              Byte array
mikey.key.kv.to.len  Valid to len
              Unsigned 8-bit integer
mikey.key.salt  Salt key
              Byte array
mikey.key.salt.len  Salt key len
              Unsigned 16-bit integer
mikey.key.type  Type
              Unsigned 8-bit integer
mikey.next_payload  Next Payload
              Unsigned 8-bit integer
```

```
mikey.payload  Payload
  String
mikey.pke.c    C
  Unsigned 16-bit integer
mikey.pke.data Data
  Byte array
mikey.pke.len  Data len
  Unsigned 16-bit integer
mikey.prf_func PRF func
  Unsigned 8-bit integer
mikey.rand    RAND
  No value
mikey.rand.data RAND
  Byte array
mikey.rand.len RAND len
  Unsigned 8-bit integer
mikey.sign    Signature (SIGN)
  No value
mikey.sign.data Signature
  Byte array
mikey.sign.len Signature len
  Unsigned 16-bit integer
mikey.sign.type Signature type
  Unsigned 16-bit integer
mikey.sp      Security Policy (SP)
  No value
mikey.sp.auth_alg Authentication algorithm
  Unsigned 8-bit integer
mikey.sp.auth_key_len Session Auth. key length
  Unsigned 8-bit integer
mikey.sp.auth_tag_len Authentication tag length
  Unsigned 8-bit integer
mikey.sp.encr_alg Encryption algorithm
  Unsigned 8-bit integer
mikey.sp.encr_len Session Encr. key length
  Unsigned 8-bit integer
mikey.sp.fec  Sender's FEC order
  Unsigned 8-bit integer
mikey.sp.kd_rate Key derivation rate
  Unsigned 8-bit integer
mikey.sp.no   Policy No
  Unsigned 8-bit integer
mikey.sp.param Policy param
  Byte array
```

```
mikey.sp.param.len  Length
                    Unsigned 8-bit integer
mikey.sp.param.type  Type
                    Unsigned 8-bit integer
mikey.sp.param_len  Policy param length
                    Unsigned 16-bit integer
mikey.sp.patam.value  Value
                    Byte array
mikey.sp.prf  SRTP Pseudo Random Function
                    Unsigned 8-bit integer
mikey.sp.proto_type  Protocol type
                    Unsigned 8-bit integer
mikey.sp.salt_len  Session Salt key length
                    Unsigned 8-bit integer
mikey.sp.srtcp_encr  SRTCP encryption
                    Unsigned 8-bit integer
mikey.sp.srtcp_auth  SRTP authentication
                    Unsigned 8-bit integer
mikey.sp.srtcp_encr  SRTP encryption
                    Unsigned 8-bit integer
mikey.sp.srtcp_prefix  SRTP prefix length
                    Unsigned 8-bit integer
mikey.srtcp_id  SRTP ID
                    No value
mikey.srtcp_id.policy_no  Policy No
                    Unsigned 8-bit integer
mikey.srtcp_id.roc  ROC
                    Unsigned 32-bit integer
mikey.srtcp_id.ssrc  SSRC
                    Unsigned 32-bit integer
mikey.t  Timestamp (T)
                    No value
mikey.t.ntp  NTP timestamp
                    String
mikey.t.ts_type  TS type
                    Unsigned 8-bit integer
mikey.type  Data Type
                    Unsigned 8-bit integer
mikey.v  Ver msg (V)
                    No value
mikey.v.auth_alg  Auth alg
                    Unsigned 8-bit integer
mikey.v.ver_data  Ver data
                    Byte array
```

mikey.version Version  
Unsigned 8-bit integer

### **Multiprotocol Label Switching Echo (mpls-echo)**

mpls\_echo.flag\_sbz Reserved  
Unsigned 16-bit integer  
MPLS ECHO Reserved Flags

mpls\_echo.flag\_v Validate FEC Stack  
Boolean  
MPLS ECHO Validate FEC Stack Flag

mpls\_echo.flags Global Flags  
Unsigned 16-bit integer  
MPLS ECHO Global Flags

mpls\_echo.mbz MBZ  
Unsigned 16-bit integer  
MPLS ECHO Must be Zero

mpls\_echo.msg\_type Message Type  
Unsigned 8-bit integer  
MPLS ECHO Message Type

mpls\_echo.reply\_mode Reply Mode  
Unsigned 8-bit integer  
MPLS ECHO Reply Mode

mpls\_echo.return\_code Return Code  
Unsigned 8-bit integer  
MPLS ECHO Return Code

mpls\_echo.return\_subcode Return Subcode  
Unsigned 8-bit integer  
MPLS ECHO Return Subcode

mpls\_echo.sender\_handle Sender's Handle  
Unsigned 32-bit integer  
MPLS ECHO Sender's Handle

mpls\_echo.sequence Sequence Number  
Unsigned 32-bit integer  
MPLS ECHO Sequence Number

mpls\_echo.timestamp\_rec Timestamp Received  
Byte array  
MPLS ECHO Timestamp Received

mpls\_echo.timestamp\_sent Timestamp Sent  
Byte array  
MPLS ECHO Timestamp Sent

mpls\_echo.tlv.ds\_map.addr\_type Address Type  
Unsigned 8-bit integer  
MPLS ECHO TLV Downstream Map Address Type

mpls\_echo.tlv.ds\_map.depth Depth Limit  
Unsigned 8-bit integer  
MPLS ECHO TLV Downstream Map Depth Limit



```
mpls_echo.tlv.ds_map.ds_ip  Downstream IP Address
    IPv4 address
    MPLS ECHO TLV Downstream Map IP Address
mpls_echo.tlv.ds_map.ds_ipv6  Downstream IPv6 Address
    IPv6 address
    MPLS ECHO TLV Downstream Map IPv6 Address
mpls_echo.tlv.ds_map.flag_i  Interface and Label Stack Request
    Boolean
    MPLS ECHO TLV Downstream Map I-Flag
mpls_echo.tlv.ds_map.flag_n  Treat as Non-IP Packet
    Boolean
    MPLS ECHO TLV Downstream Map N-Flag
mpls_echo.tlv.ds_map.flag_res  MBZ
    Unsigned 8-bit integer
    MPLS ECHO TLV Downstream Map Reserved Flags
mpls_echo.tlv.ds_map.hash_type  Multipath Type
    Unsigned 8-bit integer
    MPLS ECHO TLV Downstream Map Multipath Type
mpls_echo.tlv.ds_map.if_index  Upstream Interface Index
    Unsigned 32-bit integer
    MPLS ECHO TLV Downstream Map Interface Index
mpls_echo.tlv.ds_map.int_ip  Downstream Interface Address
    IPv4 address
    MPLS ECHO TLV Downstream Map Interface Address
mpls_echo.tlv.ds_map.int_ipv6  Downstream Interface IPv6 Address
    IPv6 address
    MPLS ECHO TLV Downstream Map Interface IPv6 Address
mpls_echo.tlv.ds_map.mp_bos  Downstream BOS
    Unsigned 8-bit integer
    MPLS ECHO TLV Downstream Map Downstream BOS
mpls_echo.tlv.ds_map.mp_exp  Downstream Experimental
    Unsigned 8-bit integer
    MPLS ECHO TLV Downstream Map Downstream Experimental
mpls_echo.tlv.ds_map.mp_label  Downstream Label
    Unsigned 24-bit integer
    MPLS ECHO TLV Downstream Map Downstream Label
mpls_echo.tlv.ds_map.mp_proto  Downstream Protocol
    Unsigned 8-bit integer
    MPLS ECHO TLV Downstream Map Downstream Protocol
mpls_echo.tlv.ds_map.mtu  MTU
    Unsigned 16-bit integer
    MPLS ECHO TLV Downstream Map MTU
mpls_echo.tlv.ds_map.multi_len  Multipath Length
    Unsigned 16-bit integer
    MPLS ECHO TLV Downstream Map Multipath Length
mpls_echo.tlv.ds_map.res  DS Flags
    Unsigned 8-bit integer
    MPLS ECHO TLV Downstream Map DS Flags
```

```
mpls_echo.tlv.ds_map_mp.ip  IP Address
    IPv4 address
    MPLS ECHO TLV Downstream Map Multipath IP Address
mpls_echo.tlv.ds_map_mp.ip_high  IP Address High
    IPv4 address
    MPLS ECHO TLV Downstream Map Multipath High IP Address
mpls_echo.tlv.ds_map_mp.ip_low  IP Address Low
    IPv4 address
    MPLS ECHO TLV Downstream Map Multipath Low IP Address
mpls_echo.tlv.ds_map_mp.mask  Mask
    Byte array
    MPLS ECHO TLV Downstream Map Multipath Mask
mpls_echo.tlv.ds_map_mp.value  Multipath Value
    Byte array
    MPLS ECHO TLV Multipath Value
mpls_echo.tlv.errorred.type  Errored TLV Type
    Unsigned 16-bit integer
    MPLS ECHO TLV Errored TLV Type
mpls_echo.tlv.fec.bgp_ipv4  IPv4 Prefix
    IPv4 address
    MPLS ECHO TLV FEC Stack BGP IPv4
mpls_echo.tlv.fec.bgp_len  Prefix Length
    Unsigned 8-bit integer
    MPLS ECHO TLV FEC Stack BGP Prefix Length
mpls_echo.tlv.fec.bgp_nh  BGP Next Hop
    IPv4 address
    MPLS ECHO TLV FEC Stack BGP Next Hop
mpls_echo.tlv.fec.gen_ipv4  IPv4 Prefix
    IPv4 address
    MPLS ECHO TLV FEC Stack Generic IPv4
mpls_echo.tlv.fec.gen_ipv4_mask  Prefix Length
    Unsigned 8-bit integer
    MPLS ECHO TLV FEC Stack Generic IPv4 Prefix Length
mpls_echo.tlv.fec.gen_ipv6  IPv6 Prefix
    IPv6 address
    MPLS ECHO TLV FEC Stack Generic IPv6
mpls_echo.tlv.fec.gen_ipv6_mask  Prefix Length
    Unsigned 8-bit integer
    MPLS ECHO TLV FEC Stack Generic IPv6 Prefix Length
mpls_echo.tlv.fec.l2cid_encap  Encapsulation
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack L2CID Encapsulation
mpls_echo.tlv.fec.l2cid_mbz  MBZ
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack L2CID MBZ
mpls_echo.tlv.fec.l2cid_remote  Remote PE Address
    IPv4 address
    MPLS ECHO TLV FEC Stack L2CID Remote
```

```
mpls_echo.tlv.fec.l2cid_sender  Sender's PE Address
    IPv4 address
    MPLS ECHO TLV FEC Stack L2CID Sender

mpls_echo.tlv.fec.l2cid_vcid  VC ID
    Unsigned 32-bit integer
    MPLS ECHO TLV FEC Stack L2CID VCID

mpls_echo.tlv.fec.ldp_ipv4  IPv4 Prefix
    IPv4 address
    MPLS ECHO TLV FEC Stack LDP IPv4

mpls_echo.tlv.fec.ldp_ipv4_mask  Prefix Length
    Unsigned 8-bit integer
    MPLS ECHO TLV FEC Stack LDP IPv4 Prefix Length

mpls_echo.tlv.fec.ldp_ipv6  IPv6 Prefix
    IPv6 address
    MPLS ECHO TLV FEC Stack LDP IPv6

mpls_echo.tlv.fec.ldp_ipv6_mask  Prefix Length
    Unsigned 8-bit integer
    MPLS ECHO TLV FEC Stack LDP IPv6 Prefix Length

mpls_echo.tlv.fec.len  Length
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack Length

mpls_echo.tlv.fec.nil_label  Label
    Unsigned 24-bit integer
    MPLS ECHO TLV FEC Stack NIL Label

mpls_echo.tlv.fec.rsvp_ip_lsp_id  LSP ID
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack RSVP LSP ID

mpls_echo.tlv.fec.rsvp_ip_mbz1  Must Be Zero
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack RSVP MBZ

mpls_echo.tlv.fec.rsvp_ip_mbz2  Must Be Zero
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack RSVP MBZ

mpls_echo.tlv.fec.rsvp_ip_tun_id  Tunnel ID
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack RSVP Tunnel ID

mpls_echo.tlv.fec.rsvp_ipv4_ep  IPv4 Tunnel endpoint address
    IPv4 address
    MPLS ECHO TLV FEC Stack RSVP IPv4 Tunnel Endpoint Address

mpls_echo.tlv.fec.rsvp_ipv4_ext_tun_id  Extended Tunnel ID
    Unsigned 32-bit integer
    MPLS ECHO TLV FEC Stack RSVP IPv4 Extended Tunnel ID

mpls_echo.tlv.fec.rsvp_ipv4_sender  IPv4 Tunnel sender address
    IPv4 address
    MPLS ECHO TLV FEC Stack RSVP IPv4 Sender

mpls_echo.tlv.fec.rsvp_ipv6_ep  IPv6 Tunnel endpoint address
    IPv6 address
    MPLS ECHO TLV FEC Stack RSVP IPv6 Tunnel Endpoint Address
```

```
mpls_echo.tlv.fec.rsvp_ipv6_ext_tun_id  Extended Tunnel ID
    Byte array
    MPLS ECHO TLV FEC Stack RSVP IPv6 Extended Tunnel ID
mpls_echo.tlv.fec.rsvp_ipv6_sender  IPv6 Tunnel sender address
    IPv6 address
    MPLS ECHO TLV FEC Stack RSVP IPv4 Sender
mpls_echo.tlv.fec.type  Type
    Unsigned 16-bit integer
    MPLS ECHO TLV FEC Stack Type
mpls_echo.tlv.fec.value  Value
    Byte array
    MPLS ECHO TLV FEC Stack Value
mpls_echo.tlv.ilso_ipv4.addr  Downstream IPv4 Address
    IPv4 address
    MPLS ECHO TLV Interface and Label Stack Address
mpls_echo.tlv.ilso_ipv4.bos  BOS
    Unsigned 8-bit integer
    MPLS ECHO TLV Interface and Label Stack BOS
mpls_echo.tlv.ilso_ipv4.exp  Exp
    Unsigned 8-bit integer
    MPLS ECHO TLV Interface and Label Stack Exp
mpls_echo.tlv.ilso_ipv4.int_addr  Downstream Interface Address
    IPv4 address
    MPLS ECHO TLV Interface and Label Stack Address
mpls_echo.tlv.ilso_ipv4.label  Label
    Unsigned 24-bit integer
    MPLS ECHO TLV Interface and Label Stack Label
mpls_echo.tlv.ilso_ipv4.ttl  TTL
    Unsigned 8-bit integer
    MPLS ECHO TLV Interface and Label Stack TTL
mpls_echo.tlv.ilso_ipv6.addr  Downstream IPv6 Address
    IPv6 address
    MPLS ECHO TLV Interface and Label Stack Address
mpls_echo.tlv.ilso_ipv6.int_addr  Downstream Interface Address
    IPv6 address
    MPLS ECHO TLV Interface and Label Stack Address
mpls_echo.tlv.len  Length
    Unsigned 16-bit integer
    MPLS ECHO TLV Length
mpls_echo.tlv.pad_action  Pad Action
    Unsigned 8-bit integer
    MPLS ECHO Pad TLV Action
mpls_echo.tlv.pad_padding  Padding
    Byte array
    MPLS ECHO Pad TLV Padding
mpls_echo.tlv.reply.tos  Reply-TOS Byte
    Unsigned 8-bit integer
    MPLS ECHO TLV Reply-TOS Byte
```

```

mpls_echo.tlv.reply.tos.mbz  MBZ
    Unsigned 24-bit integer
    MPLS ECHO TLV Reply-TOS MBZ

mpls_echo.tlv.rto.ipv4  Reply-to IPv4 Address
    IPv4 address
    MPLS ECHO TLV IPv4 Reply-To Object

mpls_echo.tlv.rto.ipv6  Reply-to IPv6 Address
    IPv6 address
    MPLS ECHO TLV IPv6 Reply-To Object

mpls_echo.tlv.type  Type
    Unsigned 16-bit integer
    MPLS ECHO TLV Type

mpls_echo.tlv.value  Value
    Byte array
    MPLS ECHO TLV Value

mpls_echo.tlv.vendor_id  Vendor Id
    Unsigned 32-bit integer
    MPLS ECHO Vendor Id

mpls_echo.version  Version
    Unsigned 16-bit integer
    MPLS ECHO Version Number

```

### MySQL Protocol (mysql)

```

mysql.affected_rows  Affected Rows
    Unsigned 64-bit integer
    Affected Rows

mysql.caps  Caps
    Unsigned 16-bit integer
    MySQL Capabilities

mysql.caps.cd  Connect With Database
    Boolean

mysql.caps.cp  Can use compression protocol
    Boolean

mysql.caps.cu  Speaks 4.1 protocol (new flag)
    Boolean

mysql.caps.fr  Found Rows
    Boolean

mysql.caps.ia  Interactive Client
    Boolean

mysql.caps.ii  Ignore sigpipes
    Boolean

mysql.caps.is  Ignore Spaces before '('
    Boolean

mysql.caps.lf  Long Column Flags
    Boolean

mysql.caps.li  Can Use LOAD DATA LOCAL
    Boolean

```

```
mysql.caps.lp  Long Password
               Boolean
mysql.caps.mr  Supports multiple results
               Boolean
mysql.caps.ms  Supports multiple statements
               Boolean
mysql.caps.ns  Dont Allow database.table.column
               Boolean
mysql.caps.ob  ODBC Client
               Boolean
mysql.caps.rs  Speaks 4.1 protocol (old flag)
               Boolean
mysql.caps.sc  Can do 4.1 authentication
               Boolean
mysql.caps.sl  Switch to SSL after handshake
               Boolean
mysql.caps.ta  Knows about transactions
               Boolean
mysql.charset  Charset
               Unsigned 8-bit integer
               MySQL Charset
mysql.eof     EOF
               Unsigned 8-bit integer
               EOF
mysql.error.message  Error message
               String
               Error string in case of MySQL error message
mysql.error_code  Error Code
               Unsigned 16-bit integer
               Error Code
mysql.exec_flags  Flags (unused)
               Unsigned 8-bit integer
               Flags (unused)
mysql.exec_iter  Iterations (unused)
               Unsigned 32-bit integer
               Iterations (unused)
mysql.extcaps  Ext. Caps
               Unsigned 16-bit integer
               MySQL Extended Capabilities
mysql.extra  Extra data
               Unsigned 64-bit integer
               Extra data
mysql.insert_id  Last INSERT ID
               Unsigned 64-bit integer
               Last INSERT ID
```

```
mysql.max_packet  MAX Packet
    Unsigned 24-bit integer
    MySQL Max packet

mysql.message  Message
    String
    Message

mysql.num_fields  Number of fields
    Unsigned 64-bit integer
    Number of fields

mysql.num_rows  Rows to fetch
    Unsigned 32-bit integer
    Rows to fetch

mysql.opcode  Command
    Unsigned 8-bit integer
    Command

mysql.option  Option
    Unsigned 16-bit integer
    Option

mysql.packet_length  Packet Length
    Unsigned 24-bit integer
    Packet Length

mysql.packet_number  Packet Number
    Unsigned 8-bit integer
    Packet Number

mysql.param  Parameter
    Unsigned 16-bit integer
    Parameter

mysql.parameter  Parameter
    String
    Parameter

mysql.passwd  Password
    String
    Password

mysql.payload  Payload
    String
    Additional Payload

mysql.protocol  Protocol
    Unsigned 8-bit integer
    Protocol Version

mysql.query  Statement
    String
    Statement

mysql.refresh  Refresh Option
    Unsigned 8-bit integer
    Refresh Option

mysql.response_code  Response Code
    Unsigned 8-bit integer
    Response Code
```

```
mysql.rfsh.grants  reload permissions
  Boolean
mysql.rfsh.hosts  flush hosts
  Boolean
mysql.rfsh.log    flush logfiles
  Boolean
mysql.rfsh.master flush master status
  Boolean
mysql.rfsh.slave  flush slave status
  Boolean
mysql.rfsh.status reset statistics
  Boolean
mysql.rfsh.tables flush tables
  Boolean
mysql.rfsh.threads empty thread cache
  Boolean
mysql.salt  Salt
  String
  Salt
mysql.salt2 Salt
  String
  Salt
mysql.schema Schema
  String
  Login Schema
mysql.sqlstate SQL state
  String
mysql.stat.ac  AUTO_COMMIT
  Boolean
mysql.stat.bi  Bad index used
  Boolean
mysql.stat.bs  No backslash escapes
  Boolean
mysql.stat.cr  Cursor exists
  Boolean
mysql.stat.dr  database dropped
  Boolean
mysql.stat.it  In transaction
  Boolean
mysql.stat.lr  Last row sebd
  Boolean
mysql.stat.mr  More results
  Boolean
mysql.stat.mu  Multi query - more resultsets
  Boolean
```



```
mysql.stat.ni  No index used
               Boolean

mysql.status  Status
               Unsigned 16-bit integer
               MySQL Status

mysql.stmt_id Statement ID
               Unsigned 32-bit integer
               Statement ID

mysql.thd_id  Thread ID
               Unsigned 32-bit integer
               Thread ID

mysql.thread_id Thread ID
               Unsigned 32-bit integer
               MySQL Thread ID

mysql.unused  Unused
               String
               Unused

mysql.user    Username
               String
               Login Username

mysql.version Version
               String
               MySQL Version

mysql.warnings Warnings
               Unsigned 16-bit integer
               Warnings
```

**NBMA Next Hop Resolution Protocol (nhrp)**

```
nhrp.cli.addr.tl  Client Address Type/Len
                  Unsigned 8-bit integer

nhrp.cli.saddr.tl Client Sub Address Type/Len
                  Unsigned 8-bit integer

nhrp.client.nbma.addr  Client NBMA Address
                       IPv4 address

nhrp.client.nbma.saddr Client NBMA Sub Address

nhrp.client.prot.addr  Client Protocol Address
                       IPv4 address

nhrp.code  Code
           Unsigned 8-bit integer

nhrp.dst.prot.addr  Destination Protocol Address
                   IPv4 address

nhrp.dst.prot.len  Destination Protocol Len
                   Unsigned 16-bit integer

nhrp.err.offset  Error Offset
                 Unsigned 16-bit integer

nhrp.err.pkt  Errored Packet
```

```
nhrp.ext.c  Compulsary Flag
            Boolean

nhrp.ext.len  Extension length
            Unsigned 16-bit integer

nhrp.ext.type  Extension Type
            Unsigned 16-bit integer

nhrp.ext.val  Extension Value

nhrp.flag.a  Authoritative
            Boolean
            A bit

nhrp.flag.d  Stable Association
            Boolean
            D bit

nhrp.flag.n  Expected Purge Reply
            Boolean

nhrp.flag.nat  Cisco NAT Supported
            Boolean
            NAT bit

nhrp.flag.q  Is Router
            Boolean

nhrp.flag.s  Stable Binding
            Boolean
            S bit

nhrp.flag.ul  Uniqueness Bit
            Boolean
            U bit

nhrp.flags  Flags
            Unsigned 16-bit integer

nhrp.hdr.afn  Address Family Number
            Unsigned 16-bit integer

nhrp.hdr.chksum  Packet Checksum
            Unsigned 16-bit integer

nhrp.hdr.extoff  Extension Offset
            Unsigned 16-bit integer

nhrp.hdr.hopcnt  Hop Count
            Unsigned 8-bit integer

nhrp.hdr.op.type  NHRP Packet Type
            Unsigned 8-bit integer

nhrp.hdr.pktsz  Packet Length
            Unsigned 16-bit integer

nhrp.hdr.pro.snap  Protocol Type (long form)

nhrp.hdr.pro.type  Protocol Type (short form)
            Unsigned 16-bit integer

nhrp.hdr.shtl  Source Address Type/Len
            Unsigned 8-bit integer
```

```
nhrp.hdr.sst1 Source SubAddress Type/Len
    Unsigned 8-bit integer
nhrp.hdr.version Version
    Unsigned 8-bit integer
nhrp.htime Holding Time (s)
    Unsigned 16-bit integer
nhrp.mtu Max Transmission Unit
    Unsigned 16-bit integer
nhrp.pref CIE Preference Value
    Unsigned 8-bit integer
nhrp.prefix Prefix Length
    Unsigned 8-bit integer
nhrp.prot.len Client Protocol Length
    Unsigned 8-bit integer
nhrp.reqid Request ID
    Unsigned 32-bit integer
nhrp.src.nbma.addr Source NBMA Address
    IPv4 address
nhrp.src.nbma.saddr Source NBMA Sub Address
nhrp.src.prot.addr Source Protocol Address
    IPv4 address
nhrp.src.prot.len Source Protocol Len
    Unsigned 16-bit integer
nhrp.unused Unused
    Unsigned 16-bit integer
```

**NFSACL (nfsacl)**

```
nfsacl.acl ACL
    No value
    ACL
nfsacl.aclcnt ACL count
    Unsigned 32-bit integer
    ACL count
nfsacl.aclent ACL Entry
    No value
    ACL
nfsacl.aclent.perm Permissions
    Unsigned 32-bit integer
    Permissions
nfsacl.aclent.type Type
    Unsigned 32-bit integer
    Type
nfsacl.aclent.uid UID
    Unsigned 32-bit integer
    UID
```

```
nfsacl.create create
  Boolean
  Create?

nfsacl.dfaclcnt Default ACL count
  Unsigned 32-bit integer
  Default ACL count

nfsacl.procedure_v1 V1 Procedure
  Unsigned 32-bit integer
  V1 Procedure

nfsacl.procedure_v2 V2 Procedure
  Unsigned 32-bit integer
  V2 Procedure

nfsacl.procedure_v3 V3 Procedure
  Unsigned 32-bit integer
  V3 Procedure
```

**NFSAUTH (nfsauth)**

```
nfsauth.procedure_v1 V1 Procedure
  Unsigned 32-bit integer
  V1 Procedure
```

**NIS+ (nisplus)**

```
.nisplus.dummy
  Byte array

nisplus.access.mask access mask
  No value
  NIS Access Mask

nisplus.aticks aticks
  Unsigned 32-bit integer

nisplus.attr Attribute
  No value
  Attribute

nisplus.attr.name name
  String
  Attribute Name

nisplus.attr.val val
  Byte array
  Attribute Value

nisplus.attributes Attributes
  No value
  List Of Attributes

nisplus.callback.status status
  Boolean
  Status Of Callback Thread

nisplus.checkpoint.dticks dticks
  Unsigned 32-bit integer
  Database Ticks
```

```
nisplus.checkpoint.status  status
    Unsigned 32-bit integer
    Checkpoint Status

nisplus.checkpoint.zticks  zticks
    Unsigned 32-bit integer
    Service Ticks

nisplus.cookie  cookie
    Byte array
    Cookie

nisplus.cticks  cticks
    Unsigned 32-bit integer

nisplus.ctime  ctime
    Date/Time stamp
    Time Of Creation

nisplus.directory  directory
    No value
    NIS Directory Object

nisplus.directory.mask  mask
    No value
    NIS Directory Create/Destroy Rights

nisplus.directory.mask.group_create  GROUP CREATE
    Boolean
    Group Create Flag

nisplus.directory.mask.group_destroy  GROUP DESTROY
    Boolean
    Group Destroy Flag

nisplus.directory.mask.group_modify  GROUP MODIFY
    Boolean
    Group Modify Flag

nisplus.directory.mask.group_read  GROUP READ
    Boolean
    Group Read Flag

nisplus.directory.mask.nobody_create  NOBODY CREATE
    Boolean
    Nobody Create Flag

nisplus.directory.mask.nobody_destroy  NOBODY DESTROY
    Boolean
    Nobody Destroy Flag

nisplus.directory.mask.nobody_modify  NOBODY MODIFY
    Boolean
    Nobody Modify Flag

nisplus.directory.mask.nobody_read  NOBODY READ
    Boolean
    Nobody Read Flag

nisplus.directory.mask.owner_create  OWNER CREATE
    Boolean
    Owner Create Flag
```

```
nisplus.directory.mask.owner_destroy  OWNER DESTROY
  Boolean
  Owner Destroy Flag
nisplus.directory.mask.owner_modify  OWNER MODIFY
  Boolean
  Owner Modify Flag
nisplus.directory.mask.owner_read  OWNER READ
  Boolean
  Owner Read Flag
nisplus.directory.mask.world_create  WORLD CREATE
  Boolean
  World Create Flag
nisplus.directory.mask.world_destroy  WORLD DESTROY
  Boolean
  World Destroy Flag
nisplus.directory.mask.world_modify  WORLD MODIFY
  Boolean
  World Modify Flag
nisplus.directory.mask.world_read  WORLD READ
  Boolean
  World Read Flag
nisplus.directory.mask_list  mask list
  No value
  List Of Directory Create/Destroy Rights
nisplus.directory.name  directory name
  String
  Name Of Directory Being Served
nisplus.directory.ttl  ttl
  Unsigned 32-bit integer
  Time To Live
nisplus.directory.type  type
  Unsigned 32-bit integer
  NIS Type Of Name Service
nisplus.dticks  dticks
  Unsigned 32-bit integer
nisplus.dump.dir  directory
  String
  Directory To Dump
nisplus.dump.time  time
  Date/Time stamp
  From This Timestamp
nisplus.endpoint  endpoint
  No value
  Endpoint For This NIS Server
nisplus.endpoint.family  family
  String
  Transport Family
```

```
nisplus.endpoint.proto  proto
    String
    Protocol

nisplus.endpoint.uaddr  addr
    String
    Address

nisplus.endpoints  nis endpoints
    No value
    Endpoints For This NIS Server

nisplus.entry  entry
    No value
    Entry Object

nisplus.entry.col  column
    No value
    Entry Column

nisplus.entry.cols  columns
    No value
    Entry Columns

nisplus.entry.flags  flags
    Unsigned 32-bit integer
    Entry Col Flags

nisplus.entry.flags.asn  ASN.1
    Boolean
    Is This Entry ASN.1 Encoded Flag

nisplus.entry.flags.binary  BINARY
    Boolean
    Is This Entry BINARY Flag

nisplus.entry.flags.encrypted  ENCRYPTED
    Boolean
    Is This Entry ENCRYPTED Flag

nisplus.entry.flags.modified  MODIFIED
    Boolean
    Is This Entry MODIFIED Flag

nisplus.entry.flags.xdr  XDR
    Boolean
    Is This Entry XDR Encoded Flag

nisplus.entry.type  type
    String
    Entry Type

nisplus.entry.val  val
    String
    Entry Value

nisplus.fd.dir.data  data
    Byte array
    Directory Data In XDR Format

nisplus.fd.dirname  dirname
    String
    Directory Name
```

```
nisplus.fd.requester  requester
    String
    Host Principal Name For Signature
nisplus.fd.sig  signature
    Byte array
    Signature Of The Source
nisplus.group  Group
    No value
    Group Object
nisplus.group.flags  flags
    Unsigned 32-bit integer
    Group Object Flags
nisplus.group.name  group name
    String
    Name Of Group Member
nisplus.grps  Groups
    No value
    List Of Groups
nisplus.ib.bufsize  bufsize
    Unsigned 32-bit integer
    Optional First/NextBufSize
nisplus.ib.flags  flags
    Unsigned 32-bit integer
    Information Base Flags
nisplus.key.data  key data
    Byte array
    Encryption Key
nisplus.key.type  type
    Unsigned 32-bit integer
    Type Of Key
nisplus.link  link
    No value
    NIS Link Object
nisplus.log.entries  log entries
    No value
    Log Entries
nisplus.log.entry  log entry
    No value
    Log Entry
nisplus.log.entry.type  type
    Unsigned 32-bit integer
    Type Of Entry In Transaction Log
nisplus.log.principal  principal
    String
    Principal Making The Change
nisplus.log.time  time
    Date/Time stamp
    Time Of Log Entry
```



```
nisplus.mtime  mtime
    Date/Time stamp
    Time Last Modified

nisplus.object  NIS Object
    No value
    NIS Object

nisplus.object.domain  domain
    String
    NIS Administrator For This Object

nisplus.object.group  group
    String
    NIS Name Of Access Group

nisplus.object.name  name
    String
    NIS Name For This Object

nisplus.object.oid  Object Identity Verifier
    No value
    NIS Object Identity Verifier

nisplus.object.owner  owner
    String
    NIS Name Of Object Owner

nisplus.object.private  private
    Byte array
    NIS Private Object

nisplus.object.ttl  ttl
    Unsigned 32-bit integer
    NIS Time To Live For This Object

nisplus.object.type  type
    Unsigned 32-bit integer
    NIS Type Of Object

nisplus.ping.dir  directory
    String
    Directory That Had The Change

nisplus.ping.time  time
    Date/Time stamp
    Timestamp Of The Transaction

nisplus.procedure_v3  V3 Procedure
    Unsigned 32-bit integer
    V3 Procedure

nisplus.server  server
    No value
    NIS Server For This Directory

nisplus.server.name  name
    String
    Name Of NIS Server

nisplus.servers  nis servers
    No value
    NIS Servers For This Directory
```

```
nisplus.status  status
    Unsigned 32-bit integer
    NIS Status Code

nisplus.table  table
    No value
    Table Object

nisplus.table.col  column
    No value
    Table Column

nisplus.table.col.flags  flags
    No value
    Flags For This Column

nisplus.table.col.name  column name
    String
    Column Name

nisplus.table.cols  columns
    No value
    Table Columns

nisplus.table.flags.asn  asn
    Boolean
    Is This Column ASN.1 Encoded

nisplus.table.flags.binary  binary
    Boolean
    Is This Column BINARY

nisplus.table.flags.casesensitive  casesensitive
    Boolean
    Is This Column CASESENSITIVE

nisplus.table.flags.encrypted  encrypted
    Boolean
    Is This Column ENCRYPTED

nisplus.table.flags.modified  modified
    Boolean
    Is This Column MODIFIED

nisplus.table.flags.searchable  searchable
    Boolean
    Is This Column SEARCHABLE

nisplus.table.flags.xdr  xdr
    Boolean
    Is This Column XDR Encoded

nisplus.table.maxcol  max columns
    Unsigned 16-bit integer
    Maximum Number Of Columns For Table

nisplus.table.path  path
    String
    Table Path

nisplus.table.separator  separator
    Unsigned 8-bit integer
    Separator Character
```

```
nisplus.table.type  type
    String
    Table Type

nisplus.tag  tag
    No value
    Tag

nisplus.tag.type  type
    Unsigned 32-bit integer
    Type Of Statistics Tag

nisplus.tag.value  value
    String
    Value Of Statistics Tag

nisplus.taglist  taglist
    No value
    List Of Tags

nisplus.zticks  zticks
    Unsigned 32-bit integer
```

**NIS+ Callback (nispluscb)**

```
nispluscb.entries  entries
    No value
    NIS Callback Entries

nispluscb.entry  entry
    No value
    NIS Callback Entry

nispluscb.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure
```

**NTLM Secure Service Provider (ntlmssp)**

```
ntlmssp.auth.domain  Domain name
    String

ntlmssp.auth.hostname  Host name
    String

ntlmssp.auth.lmresponse  Lan Manager Response
    Byte array

ntlmssp.auth.ntresponse  NTLM Response
    Byte array

ntlmssp.auth.sesskey  Session Key
    Byte array

ntlmssp.auth.username  User name
    String

ntlmssp.blob.length  Length
    Unsigned 16-bit integer

ntlmssp.blob.maxlen  Maxlen
    Unsigned 16-bit integer
```

```
ntlmssp.blob.offset    Offset
    Unsigned 32-bit integer
ntlmssp.challenge.addresslist    Address List
    No value
ntlmssp.challenge.addresslist.domaindns    Domain DNS Name
    String
ntlmssp.challenge.addresslist.domainnb    Domain NetBIOS Name
    String
ntlmssp.challenge.addresslist.item.content    Target item Content
    String
ntlmssp.challenge.addresslist.item.length    Target item Length
    Unsigned 16-bit integer
ntlmssp.challenge.addresslist.length    Length
    Unsigned 16-bit integer
ntlmssp.challenge.addresslist.maxlen    Maxlen
    Unsigned 16-bit integer
ntlmssp.challenge.addresslist.offset    Offset
    Unsigned 32-bit integer
ntlmssp.challenge.addresslist.serverdns    Server DNS Name
    String
ntlmssp.challenge.addresslist.servernb    Server NetBIOS Name
    String
ntlmssp.challenge.addresslist.terminator    List Terminator
    No value
ntlmssp.challenge.domain    Domain
    String
ntlmssp.decrypted_payload    NTLM Decrypted Payload
    Byte array
ntlmssp.identifier    NTLMSSP identifier
    String
    NTLMSSP Identifier
ntlmssp.messagesize    NTLM Message Size
    Unsigned 32-bit integer
ntlmssp.message.type    NTLM Message Type
    Unsigned 32-bit integer
ntlmssp.negotiate.callingworkstation    Calling workstation name
    String
ntlmssp.negotiate.callingworkstation.buffer    Calling workstation name buffer
    Unsigned 32-bit integer
ntlmssp.negotiate.callingworkstation.maxlen    Calling workstation name max length
    Unsigned 16-bit integer
ntlmssp.negotiate.callingworkstation.strlen    Calling workstation name length
    Unsigned 16-bit integer
ntlmssp.negotiate.domain    Calling workstation domain
    String
ntlmssp.negotiate.domain.buffer    Calling workstation domain buffer
    Unsigned 32-bit integer
```

```
ntlmssp.negotiate.domain.maxlen  Calling workstation domain max length
    Unsigned 16-bit integer
ntlmssp.negotiate.domain.strlen  Calling workstation domain length
    Unsigned 16-bit integer
ntlmssp.negotiate00000008  Request 0x00000008
    Boolean
ntlmssp.negotiate00000400  Negotiate 0x00000400
    Boolean
ntlmssp.negotiate128  Negotiate 128
    Boolean
    128-bit encryption is supported
ntlmssp.negotiate56  Negotiate 56
    Boolean
    56-bit encryption is supported
ntlmssp.negotiatealwaysign  Negotiate Always Sign
    Boolean
ntlmssp.negotiateanonymous  Negotiate Anonymous
    Boolean
ntlmssp.negotiatechallengeacceptresponse  Negotiate Challenge Accept Response
    Boolean
ntlmssp.negotiatechallengeinitresponse  Negotiate Challenge Init Response
    Boolean
ntlmssp.negotiatechallengenonntsessionkey  Negotiate Challenge Non NT Session Key
    Boolean
ntlmssp.negotiatedatagramstyle  Negotiate Datagram Style
    Boolean
ntlmssp.negotiatedomainsupplied  Negotiate Domain Supplied
    Boolean
ntlmssp.negotiateflags  Flags
    Unsigned 32-bit integer
ntlmssp.negotiatekeyexch  Negotiate Key Exchange
    Boolean
ntlmssp.negotiatelmkey  Negotiate Lan Manager Key
    Boolean
ntlmssp.negotiatenetware  Negotiate Netware
    Boolean
ntlmssp.negotiatent00100000  Negotiate 0x00100000
    Boolean
ntlmssp.negotiatent00200000  Negotiate 0x00200000
    Boolean
ntlmssp.negotiatent00400000  Negotiate 0x00400000
    Boolean
ntlmssp.negotiatent01000000  Negotiate 0x01000000
    Boolean
```

```
ntlmssp.negotiatent02000000  Negotiate 0x02000000
Boolean
ntlmssp.negotiatent04000000  Negotiate 0x04000000
Boolean
ntlmssp.negotiatent08000000  Negotiate 0x08000000
Boolean
ntlmssp.negotiatent10000000  Negotiate 0x10000000
Boolean
ntlmssp.negotiatentlm  Negotiate NTLM key
Boolean
ntlmssp.negotiatentlm2  Negotiate NTLM2 key
Boolean
ntlmssp.negotiateoem  Negotiate OEM
Boolean
ntlmssp.negotiateseal  Negotiate Seal
Boolean
ntlmssp.negotiatesign  Negotiate Sign
Boolean
ntlmssp.negotiatetargetinfo  Negotiate Target Info
Boolean
ntlmssp.negotiatethisislocalcall  Negotiate This is Local Call
Boolean
ntlmssp.negotiateunicode  Negotiate UNICODE
Boolean
ntlmssp.negotiateworkstationsupplied  Negotiate Workstation Supplied
Boolean
ntlmssp.ntlmchallenge  NTLM Challenge
Byte array
ntlmssp.ntlmv2response  NTLMv2 Response
Byte array
ntlmssp.ntlmv2response.chal  Client challenge
Byte array
ntlmssp.ntlmv2response.client_time  Client Time
Date/Time stamp
ntlmssp.ntlmv2response.header  Header
Unsigned 32-bit integer
ntlmssp.ntlmv2response.hmac  HMAC
Byte array
ntlmssp.ntlmv2response.name  Name
String
ntlmssp.ntlmv2response.name.len  Name len
Unsigned 32-bit integer
ntlmssp.ntlmv2response.name.type  Name type
Unsigned 32-bit integer
```

```
ntlmssp.ntlmv2response.reserved  Reserved
    Unsigned 32-bit integer
ntlmssp.ntlmv2response.time      Time
    Date/Time stamp
ntlmssp.ntlmv2response.unknown  Unknown
    Unsigned 32-bit integer
ntlmssp.requesttarget           Request Target
    Boolean
ntlmssp.reserved                Reserved
    Byte array
ntlmssp.string.length           Length
    Unsigned 16-bit integer
ntlmssp.string.maxlen           Maxlen
    Unsigned 16-bit integer
ntlmssp.string.offset           Offset
    Unsigned 32-bit integer
ntlmssp.targetitemtype          Target item type
    Unsigned 16-bit integer
ntlmssp.verf                    NTLMSPP Verifier
    No value
    NTLMSPP Verifier
ntlmssp.verf.body               Verifier Body
    Byte array
ntlmssp.verf.crc32              Verifier CRC32
    Unsigned 32-bit integer
ntlmssp.verf.sequence           Verifier Sequence Number
    Unsigned 32-bit integer
ntlmssp.verf.unknown1          Unknown 1
    Unsigned 32-bit integer
ntlmssp.verf.vers               Version Number
    Unsigned 32-bit integer
```

**Name Binding Protocol (nbp)**

```
nbp.count                       Count
    Unsigned 8-bit integer
    Count
nbp.enum                         Enumerator
    Unsigned 8-bit integer
    Enumerator
nbp.info                         Info
    Unsigned 8-bit integer
    Info
nbp.net                          Network
    Unsigned 16-bit integer
    Network
```

```

nbp.node  Node
  Unsigned 8-bit integer
  Node

nbp.object  Object
  String
  Object

nbp.op  Operation
  Unsigned 8-bit integer
  Operation

nbp.port  Port
  Unsigned 8-bit integer
  Port

nbp.tid  Transaction ID
  Unsigned 8-bit integer
  Transaction ID

nbp.type  Type
  String
  Type

nbp.zone  Zone
  String
  Zone

```

### **Name Management Protocol over IPX (nmpi)**

#### **Negative-acknowledgment Oriented Reliable Multicast (norm)**

```

NORM.fec  Forward Error Correction (FEC) header
  No value

NORM.fec.encoding_id  FEC Encoding ID
  Unsigned 8-bit integer

NORM.fec.esi  Encoding Symbol ID
  Unsigned 32-bit integer

NORM.fec.fti  FEC Object Transmission Information
  No value

NORM.fec.fti.encoding_symbol_length  Encoding Symbol Length
  Unsigned 32-bit integer

NORM.fec.fti.max_number_encoding_symbols  Maximum Number of Encoding Symbols
  Unsigned 32-bit integer

NORM.fec.fti.max_source_block_length  Maximum Source Block Length
  Unsigned 32-bit integer

NORM.fec.fti.transfer_length  Transfer Length
  Unsigned 64-bit integer

NORM.fec.instance_id  FEC Instance ID
  Unsigned 8-bit integer

NORM.fec.sbl  Source Block Length
  Unsigned 32-bit integer

NORM.fec.sbn  Source Block Number
  Unsigned 32-bit integer

```



```
norm.ack.grtt_sec  Ack GRTT Sec
    Unsigned 32-bit integer
norm.ack.grtt_usec  Ack GRTT usec
    Unsigned 32-bit integer
norm.ack.id  Ack ID
    Unsigned 8-bit integer
norm.ack.source  Ack Source
    IPv4 address
norm.ack.type  Ack Type
    Unsigned 8-bit integer
norm.backoff  Backoff
    Unsigned 8-bit integer
norm.cc_flags  CC Flags
    Unsigned 8-bit integer
norm.cc_flags.clr  CLR
    Boolean
norm.cc_flags.leave  Leave
    Boolean
norm.cc_flags.plr  PLR
    Boolean
norm.cc_flags.rtt  RTT
    Boolean
norm.cc_flags.start  Start
    Boolean
norm.cc_node_id  CC Node ID
    IPv4 address
norm.cc_rate  CC Rate
    Double-precision floating point
norm.cc_rtt  CC RTT
    Double-precision floating point
norm.cc_sts  Send Time secs
    Unsigned 32-bit integer
norm.cc_stus  Send Time usecs
    Unsigned 32-bit integer
norm.cc_transport_id  CC Transport ID
    Unsigned 16-bit integer
norm.ccsequence  CC Sequence
    Unsigned 16-bit integer
norm.flag.explicit  Explicit Flag
    Boolean
norm.flag.file  File Flag
    Boolean
norm.flag.info  Info Flag
    Boolean
```

```
norm.flag.msgstart  Msg Start Flag
                    Boolean
norm.flag.repair    Repair Flag
                    Boolean
norm.flag.stream    Stream Flag
                    Boolean
norm.flag.unreliable Unreliable Flag
                    Boolean
norm.flags          Flags
                    Unsigned 8-bit integer
norm.flavor         Flavor
                    Unsigned 8-bit integer
norm.grtt           grtt
                    Double-precision floating point
norm.gsize          Group Size
                    Double-precision floating point
norm.hexext         Hdr Extension
                    Unsigned 16-bit integer
norm.hlen           Header length
                    Unsigned 8-bit integer
norm.instance_id    Instance
                    Unsigned 16-bit integer
norm.nack.flags     NACK Flags
                    Unsigned 8-bit integer
norm.nack.flags.block Block
                    Boolean
norm.nack.flags.info Info
                    Boolean
norm.nack.flags.object Object
                    Boolean
norm.nack.flags.segment Segment
                    Boolean
norm.nack.form      NACK FORM
                    Unsigned 8-bit integer
norm.nack.grtt_sec  NACK GRTT Sec
                    Unsigned 32-bit integer
norm.nack.grtt_usec NACK GRTT usec
                    Unsigned 32-bit integer
norm.nack.length    NACK Length
                    Unsigned 16-bit integer
norm.nack.server    NACK Server
                    IPv4 address
norm.object_transport_id Object Transport ID
                    Unsigned 16-bit integer
```

```
norm.payload Payload
    No value
norm.payload.len Payload Len
    Unsigned 16-bit integer
norm.payload.offset Payload Offset
    Unsigned 32-bit integer
norm.reserved Reserved
    No value
norm.sequence Sequence
    Unsigned 16-bit integer
norm.source_id Source ID
    IPv4 address
norm.type Message Type
    Unsigned 8-bit integer
norm.version Version
    Unsigned 8-bit integer
```

**NetBIOS (netbios)**

```
netbios.ack Acknowledge
    Boolean
netbios.ack_expected Acknowledge expected
    Boolean
netbios.ack_with_data Acknowledge with data
    Boolean
netbios.call_name_type Caller's Name Type
    Unsigned 8-bit integer
netbios.command Command
    Unsigned 8-bit integer
netbios.data1 DATA1 value
    Unsigned 8-bit integer
netbios.data2 DATA2 value
    Unsigned 16-bit integer
netbios.fragment NetBIOS Fragment
    Frame number
    NetBIOS Fragment
netbios.fragment.error Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments
netbios.fragment.multipletails Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet
netbios.fragment.overlap Fragment overlap
    Boolean
    Fragment overlaps with other fragments
```

```
netbios.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
netbios.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet
netbios.fragments  NetBIOS Fragments
    No value
    NetBIOS Fragments
netbios.hdr_len  Header Length
    Unsigned 16-bit integer
netbios.largest_frame  Largest Frame
    Unsigned 8-bit integer
netbios.local_session  Local Session No.
    Unsigned 8-bit integer
netbios.max_data_rcv_size  Maximum data receive size
    Unsigned 16-bit integer
netbios.name_type  Name type
    Unsigned 16-bit integer
netbios.nb_name  NetBIOS Name
    String
netbios.nb_name_type  NetBIOS Name Type
    Unsigned 8-bit integer
netbios.num_data_bytes_accepted  Number of data bytes accepted
    Unsigned 16-bit integer
netbios.rcv_cont_req  RECEIVE_CONTINUE requested
    Boolean
netbios.remote_session  Remote Session No.
    Unsigned 8-bit integer
netbios.resp_corrl  Response Correlator
    Unsigned 16-bit integer
netbios.send_no_ack  Handle SEND.NO.ACK
    Boolean
netbios.status  Status
    Unsigned 8-bit integer
netbios.status_buffer_len  Length of status buffer
    Unsigned 16-bit integer
netbios.termination_indicator  Termination indicator
    Unsigned 16-bit integer
netbios.version  NetBIOS Version
    Boolean
netbios.xmit_corrl  Transmit Correlator
    Unsigned 16-bit integer
```

**NetBIOS Datagram Service (nbdgm)**

nbdgm.dgram\_id Datagram ID  
Unsigned 16-bit integer  
Datagram identifier

nbdgm.first This is first fragment  
Boolean  
TRUE if first fragment

nbdgm.next More fragments follow  
Boolean  
TRUE if more fragments follow

nbdgm.node\_type Node Type  
Unsigned 8-bit integer  
Node type

nbdgm.src.ip Source IP  
IPv4 address  
Source IPv4 address

nbdgm.src.port Source Port  
Unsigned 16-bit integer  
Source port

nbdgm.type Message Type  
Unsigned 8-bit integer  
NBDGM message type

**NetBIOS Name Service (nbns)**

nbns.count.add\_rr Additional RRs  
Unsigned 16-bit integer  
Number of additional records in packet

nbns.count.answers Answer RRs  
Unsigned 16-bit integer  
Number of answers in packet

nbns.count.auth\_rr Authority RRs  
Unsigned 16-bit integer  
Number of authoritative records in packet

nbns.count.queries Questions  
Unsigned 16-bit integer  
Number of queries in packet

nbns.flags Flags  
Unsigned 16-bit integer

nbns.flags.authoritative Authoritative  
Boolean  
Is the server is an authority for the domain?

nbns.flags.broadcast Broadcast  
Boolean  
Is this a broadcast packet?

nbns.flags.opcode Opcode  
Unsigned 16-bit integer  
Operation code

```
nbns.flags.rcode  Reply code
                  Unsigned 16-bit integer
                  Reply code

nbns.flags.recavail  Recursion available
                    Boolean
                    Can the server do recursive queries?

nbns.flags.recdesired  Recursion desired
                      Boolean
                      Do query recursively?

nbns.flags.response  Response
                    Boolean
                    Is the message a response?

nbns.flags.truncated  Truncated
                    Boolean
                    Is the message truncated?

nbns.id  Transaction ID
        Unsigned 16-bit integer
        Identification of transaction
```

#### **NetBIOS Session Service (nbss)**

```
nbss.flags  Flags
            Unsigned 8-bit integer
            NBSS message flags

nbss.type  Message Type
          Unsigned 8-bit integer
          NBSS message type
```

#### **NetBIOS over IPX (nbipx)**

#### **NetScape Certificate Extensions (ns\_cert\_exts)**

```
ns_cert_exts.BaseUrl  BaseUrl
                    String
                    ns_cert_exts.BaseUrl

ns_cert_exts.CaPolicyUrl  CaPolicyUrl
                        String
                        ns_cert_exts.CaPolicyUrl

ns_cert_exts.CaRevocationUrl  CaRevocationUrl
                            String
                            ns_cert_exts.CaRevocationUrl

ns_cert_exts.CertRenewalUrl  CertRenewalUrl
                            String
                            ns_cert_exts.CertRenewalUrl

ns_cert_exts.CertType  CertType
                    Byte array
                    ns_cert_exts.CertType

ns_cert_exts.Comment  Comment
                    String
                    ns_cert_exts.Comment
```

```
ns_cert_exts.RevocationUrl  RevocationUrl
    String
    ns_cert_exts.RevocationUrl
ns_cert_exts.SslServerName  SslServerName
    String
    ns_cert_exts.SslServerName
ns_cert_exts.ca             ca
    Boolean
ns_cert_exts.client        client
    Boolean
ns_cert_exts.server        server
    Boolean
```

**NetWare Core Protocol (ncp)**

```
ncp.64_bit_flag            64 Bit Support
    Unsigned 8-bit integer
ncp.Service_type           Service Type
    Unsigned 16-bit integer
ncp.abort_q_flag           Abort Queue Flag
    Unsigned 8-bit integer
ncp.abs_min_time_since_file_delete  Absolute Minimum Time Since File Delete
    Unsigned 32-bit integer
ncp.acc_mode_comp          Compatibility Mode
    Boolean
ncp.acc_mode_deny_read     Deny Read Access
    Boolean
ncp.acc_mode_deny_write    Deny Write Access
    Boolean
ncp.acc_mode_read          Read Access
    Boolean
ncp.acc_mode_write         Write Access
    Boolean
ncp.acc_priv_create        Create Privileges (files only)
    Boolean
ncp.acc_priv_delete        Delete Privileges (files only)
    Boolean
ncp.acc_priv_modify        Modify File Status Flags Privileges (files and directories)
    Boolean
ncp.acc_priv_open          Open Privileges (files only)
    Boolean
ncp.acc_priv_parent        Parental Privileges (directories only for creating, deleting)
    Boolean
ncp.acc_priv_read          Read Privileges (files only)
    Boolean
ncp.acc_priv_search        Search Privileges (directories only)
    Boolean
```

```
ncp.acc_priv_write  Write Privileges (files only)
  Boolean
ncp.acc_rights1_create  Create Rights
  Boolean
ncp.acc_rights1_delete  Delete Rights
  Boolean
ncp.acc_rights1_modify  Modify Rights
  Boolean
ncp.acc_rights1_open  Open Rights
  Boolean
ncp.acc_rights1_parent  Parental Rights
  Boolean
ncp.acc_rights1_read  Read Rights
  Boolean
ncp.acc_rights1_search  Search Rights
  Boolean
ncp.acc_rights1_supervisor  Supervisor Access Rights
  Boolean
ncp.acc_rights1_write  Write Rights
  Boolean
ncp.acc_rights_create  Create Rights
  Boolean
ncp.acc_rights_delete  Delete Rights
  Boolean
ncp.acc_rights_modify  Modify Rights
  Boolean
ncp.acc_rights_open  Open Rights
  Boolean
ncp.acc_rights_parent  Parental Rights
  Boolean
ncp.acc_rights_read  Read Rights
  Boolean
ncp.acc_rights_search  Search Rights
  Boolean
ncp.acc_rights_write  Write Rights
  Boolean
ncp.accel_cache_node_write  Accelerate Cache Node Write Count
  Unsigned 32-bit integer
ncp.accepted_max_size  Accepted Max Size
  Unsigned 16-bit integer
ncp.access_control  Access Control
  Unsigned 8-bit integer
ncp.access_date  Access Date
  Unsigned 16-bit integer
```



```
ncp.access_mode    Access Mode
                  Unsigned 8-bit integer

ncp.access_privileges  Access Privileges
                  Unsigned 8-bit integer

ncp.access_rights_mask  Access Rights
                  Unsigned 8-bit integer

ncp.access_rights_mask_word  Access Rights
                  Unsigned 16-bit integer

ncp.account_balance  Account Balance
                  Unsigned 32-bit integer

ncp.acct_version    Acct Version
                  Unsigned 8-bit integer

ncp.ack_seqno      ACK Sequence Number
                  Unsigned 16-bit integer
                  Next expected burst sequence number

ncp.act_flag_create  Create
                  Boolean

ncp.act_flag_open   Open
                  Boolean

ncp.act_flag_replace  Replace
                  Boolean

ncp.action_flag    Action Flag
                  Unsigned 8-bit integer

ncp.active_conn_bit_list  Active Connection List
                  String

ncp.active_indexed_files  Active Indexed Files
                  Unsigned 16-bit integer

ncp.actual_max_bindery_objects  Actual Max Bindery Objects
                  Unsigned 16-bit integer

ncp.actual_max_indexed_files  Actual Max Indexed Files
                  Unsigned 16-bit integer

ncp.actual_max_open_files  Actual Max Open Files
                  Unsigned 16-bit integer

ncp.actual_max_sim_trans  Actual Max Simultaneous Transactions
                  Unsigned 16-bit integer

ncp.actual_max_used_directory_entries  Actual Max Used Directory Entries
                  Unsigned 16-bit integer

ncp.actual_max_used_routing_buffers  Actual Max Used Routing Buffers
                  Unsigned 16-bit integer

ncp.actual_response_count  Actual Response Count
                  Unsigned 16-bit integer

ncp.add_nm_spc_and_vol  Add Name Space and Volume
                  String

ncp.aes_event_count  AES Event Count
                  Unsigned 32-bit integer
```

ncp.afp\_entry\_id AFP Entry ID  
Unsigned 32-bit integer

ncp.alloc\_avail\_byte Bytes Available for Allocation  
Unsigned 32-bit integer

ncp.alloc\_blk Allocate Block Count  
Unsigned 32-bit integer

ncp.alloc\_blk\_already\_wait Allocate Block Already Waiting  
Unsigned 32-bit integer

ncp.alloc\_blk\_frm\_avail Allocate Block From Available Count  
Unsigned 32-bit integer

ncp.alloc\_blk\_frm\_lru Allocate Block From LRU Count  
Unsigned 32-bit integer

ncp.alloc\_blk\_i\_had\_to\_wait Allocate Block I Had To Wait Count  
Unsigned 32-bit integer

ncp.alloc\_blk\_i\_had\_to\_wait\_for Allocate Block I Had To Wait For Someone Count  
Unsigned 32-bit integer

ncp.alloc\_dir\_hdl Dir Handle Type  
Unsigned 16-bit integer

ncp.alloc\_dst\_name\_spc Destination Name Space Input Parameter  
Boolean

ncp.alloc\_free\_count Reclaimable Free Bytes  
Unsigned 32-bit integer

ncp.alloc\_mode Allocate Mode  
Unsigned 16-bit integer

ncp.alloc\_reply\_lvl2 Reply Level 2  
Boolean

ncp.alloc\_spec\_temp\_dir\_hdl Special Temporary Directory Handle  
Boolean

ncp.alloc\_waiting Allocate Waiting Count  
Unsigned 32-bit integer

ncp.allocation\_block\_size Allocation Block Size  
Unsigned 32-bit integer

ncp.allow\_hidden Allow Hidden Files and Folders  
Boolean

ncp.allow\_system Allow System Files and Folders  
Boolean

ncp.already\_doing\_realloc Already Doing Re-Allocate Count  
Unsigned 32-bit integer

ncp.application\_number Application Number  
Unsigned 16-bit integer

ncp.archived\_date Archived Date  
Unsigned 16-bit integer

ncp.archived\_time Archived Time  
Unsigned 16-bit integer

```
ncp.archiver_id  Archiver ID
  Unsigned 32-bit integer
ncp.associated_name_space  Associated Name Space
  Unsigned 8-bit integer
ncp.async_internl_dsk_get  Async Internal Disk Get Count
  Unsigned 32-bit integer
ncp.async_internl_dsk_get_need_to_alloc  Async Internal Disk Get Need To Alloc
  Unsigned 32-bit integer
ncp.async_internl_dsk_get_someone_beat  Async Internal Disk Get Someone Beat Me
  Unsigned 32-bit integer
ncp.async_read_error  Async Read Error Count
  Unsigned 32-bit integer
ncp.att_def16_archive  Archive
  Boolean
ncp.att_def16_execute  Execute
  Boolean
ncp.att_def16_hidden  Hidden
  Boolean
ncp.att_def16_read_audit  Read Audit
  Boolean
ncp.att_def16_ro  Read Only
  Boolean
ncp.att_def16_shareable  Shareable
  Boolean
ncp.att_def16_sub_only  Subdirectory
  Boolean
ncp.att_def16_system  System
  Boolean
ncp.att_def16_transaction  Transactional
  Boolean
ncp.att_def16_write_audit  Write Audit
  Boolean
ncp.att_def32_archive  Archive
  Boolean
ncp.att_def32_attr_archive  Archive Attributes
  Boolean
ncp.att_def32_cant_compress  Can't Compress
  Boolean
ncp.att_def32_comp  Compressed
  Boolean
ncp.att_def32_comp_inhibit  Inhibit Compression
  Boolean
ncp.att_def32_cpyinhibit  Copy Inhibit
  Boolean
```

```
ncp.att_def32_data_migrate  Data Migrated
    Boolean
ncp.att_def32_delinhibit  Delete Inhibit
    Boolean
ncp.att_def32_dm_save_key  Data Migration Save Key
    Boolean
ncp.att_def32_execute  Execute
    Boolean
ncp.att_def32_execute_confirm  Execute Confirm
    Boolean
ncp.att_def32_file_audit  File Audit
    Boolean
ncp.att_def32_hidden  Hidden
    Boolean
ncp.att_def32_im_comp  Immediate Compress
    Boolean
ncp.att_def32_inhibit_dm  Inhibit Data Migration
    Boolean
ncp.att_def32_no_suballoc  No Suballoc
    Boolean
ncp.att_def32_purge  Immediate Purge
    Boolean
ncp.att_def32_read_audit  Read Audit
    Boolean
ncp.att_def32_reninhibit  Rename Inhibit
    Boolean
ncp.att_def32_reserved  Reserved
    Boolean
ncp.att_def32_reserved2  Reserved
    Boolean
ncp.att_def32_reserved3  Reserved
    Boolean
ncp.att_def32_ro  Read Only
    Boolean
ncp.att_def32_search  Search Mode
    Unsigned 32-bit integer
ncp.att_def32_shareable  Shareable
    Boolean
ncp.att_def32_sub_only  Subdirectory
    Boolean
ncp.att_def32_system  System
    Boolean
ncp.att_def32_transaction  Transactional
    Boolean
```

```
ncp.att_def32_write_audit  Write Audit
    Boolean
ncp.att_def_archive  Archive
    Boolean
ncp.att_def_execute  Execute
    Boolean
ncp.att_def_hidden  Hidden
    Boolean
ncp.att_def_ro  Read Only
    Boolean
ncp.att_def_shareable  Shareable
    Boolean
ncp.att_def_sub_only  Subdirectory
    Boolean
ncp.att_def_system  System
    Boolean
ncp.attach_during_processing  Attach During Processing
    Unsigned 16-bit integer
ncp.attach_while_processing_attach  Attach While Processing Attach
    Unsigned 16-bit integer
ncp.attached_indexed_files  Attached Indexed Files
    Unsigned 8-bit integer
ncp.attr_def  Attributes
    Unsigned 8-bit integer
ncp.attr_def_16  Attributes
    Unsigned 16-bit integer
ncp.attr_def_32  Attributes
    Unsigned 32-bit integer
ncp.attribute_valid_flag  Attribute Valid Flag
    Unsigned 32-bit integer
ncp.audit_enable_flag  Auditing Enabled Flag
    Unsigned 16-bit integer
ncp.audit_file_max_size  Audit File Maximum Size
    Unsigned 32-bit integer
ncp.audit_file_size  Audit File Size
    Unsigned 32-bit integer
ncp.audit_file_size_threshold  Audit File Size Threshold
    Unsigned 32-bit integer
ncp.audit_file_ver_date  Audit File Version Date
    Unsigned 16-bit integer
ncp.audit_flag  Audit Flag
    Unsigned 8-bit integer
ncp.audit_handle  Audit File Handle
    Unsigned 32-bit integer
```

```
ncp.audit_id      Audit ID
                  Unsigned 32-bit integer
ncp.audit_id_type Audit ID Type
                  Unsigned 16-bit integer
ncp.audit_record_count  Audit Record Count
                  Unsigned 32-bit integer
ncp.audit_ver_date  Auditing Version Date
                  Unsigned 16-bit integer
ncp.auditing_flags  Auditing Flags
                  Unsigned 32-bit integer
ncp.avail_space     Available Space
                  Unsigned 32-bit integer
ncp.available_blocks  Available Blocks
                  Unsigned 32-bit integer
ncp.available_clusters  Available Clusters
                  Unsigned 16-bit integer
ncp.available_dir_entries  Available Directory Entries
                  Unsigned 32-bit integer
ncp.available_directory_slots  Available Directory Slots
                  Unsigned 16-bit integer
ncp.available_indexed_files  Available Indexed Files
                  Unsigned 16-bit integer
ncp.background_aged_writes  Background Aged Writes
                  Unsigned 32-bit integer
ncp.background_dirty_writes  Background Dirty Writes
                  Unsigned 32-bit integer
ncp.bad_logical_connection_count  Bad Logical Connection Count
                  Unsigned 16-bit integer
ncp.banner_name     Banner Name
                  String
ncp.base_directory_id  Base Directory ID
                  Unsigned 32-bit integer
ncp.being_aborted     Being Aborted Count
                  Unsigned 32-bit integer
ncp.being_processed   Being Processed Count
                  Unsigned 32-bit integer
ncp.big_forged_packet  Big Forged Packet Count
                  Unsigned 32-bit integer
ncp.big_invalid_packet  Big Invalid Packet Count
                  Unsigned 32-bit integer
ncp.big_invalid_slot  Big Invalid Slot Count
                  Unsigned 32-bit integer
ncp.big_read_being_torn_down  Big Read Being Torn Down Count
                  Unsigned 32-bit integer
```

```
ncp.big_read_do_it_over  Big Read Do It Over Count
    Unsigned 32-bit integer
ncp.big_read_invalid_mess  Big Read Invalid Message Number Count
    Unsigned 32-bit integer
ncp.big_read_no_data_avail  Big Read No Data Available Count
    Unsigned 32-bit integer
ncp.big_read_phy_read_err  Big Read Physical Read Error Count
    Unsigned 32-bit integer
ncp.big_read_trying_to_read  Big Read Trying To Read Too Much Count
    Unsigned 32-bit integer
ncp.big_repeat_the_file_read  Big Repeat the File Read Count
    Unsigned 32-bit integer
ncp.big_return_abort_mess  Big Return Abort Message Count
    Unsigned 32-bit integer
ncp.big_send_extra_cc_count  Big Send Extra CC Count
    Unsigned 32-bit integer
ncp.big_still_transmitting  Big Still Transmitting Count
    Unsigned 32-bit integer
ncp.big_write_being_abort  Big Write Being Aborted Count
    Unsigned 32-bit integer
ncp.big_write_being_torn_down  Big Write Being Torn Down Count
    Unsigned 32-bit integer
ncp.big_write_inv_message_num  Big Write Invalid Message Number Count
    Unsigned 32-bit integer
ncp.bindery_context  Bindery Context
    String
ncp.bit10acflags  Write Managed
    Boolean
ncp.bit10cflags  Not Defined
    Boolean
ncp.bit10eflags  Temporary Reference
    Boolean
ncp.bit10infoflagsh  Not Defined
    Boolean
ncp.bit10infoflagsl  Revision Count
    Boolean
ncp.bit10l1flagsh  Not Defined
    Boolean
ncp.bit10l1flagsl  Not Defined
    Boolean
ncp.bit10lflags  Not Defined
    Boolean
ncp.bit10nflags  Not Defined
    Boolean
```

```
ncp.bit10outflags  Not Defined
  Boolean
ncp.bit10pingflags1  DS Time
  Boolean
ncp.bit10pingflags2  Not Defined
  Boolean
ncp.bit10pingpflags1  Not Defined
  Boolean
ncp.bit10pingvflags1  Not Defined
  Boolean
ncp.bit10rflags  Not Defined
  Boolean
ncp.bit10siflags  Not Defined
  Boolean
ncp.bit10vflags  Not Defined
  Boolean
ncp.bit11acflags  Per Replica
  Boolean
ncp.bit11cflags  Not Defined
  Boolean
ncp.bit11eflags  Audited
  Boolean
ncp.bit11infoflagsh  Not Defined
  Boolean
ncp.bit11infoflags1  Replica Type
  Boolean
ncp.bit1111flagsh  Not Defined
  Boolean
ncp.bit1111flags1  Not Defined
  Boolean
ncp.bit111flags  Not Defined
  Boolean
ncp.bit11nflags  Not Defined
  Boolean
ncp.bit11outflags  Not Defined
  Boolean
ncp.bit11pingflags1  Server Time
  Boolean
ncp.bit11pingflags2  Not Defined
  Boolean
ncp.bit11pingpflags1  Not Defined
  Boolean
ncp.bit11pingvflags1  Not Defined
  Boolean
```



```
ncp.bit11rflags  Not Defined
Boolean
ncp.bit11siflags  Not Defined
Boolean
ncp.bit11vflags  Not Defined
Boolean
ncp.bit12acflags  Never Schedule Synchronization
Boolean
ncp.bit12cflags  Not Defined
Boolean
ncp.bit12eflags  Entry Not Present
Boolean
ncp.bit12infoflagshs  Not Defined
Boolean
ncp.bit12infoflagsl  Base Class
Boolean
ncp.bit12l1flagsh  Not Defined
Boolean
ncp.bit12l1flagsl  Not Defined
Boolean
ncp.bit12lflags  Not Defined
Boolean
ncp.bit12nflags  Not Defined
Boolean
ncp.bit12outflags  Not Defined
Boolean
ncp.bit12pingflagsl  Create Time
Boolean
ncp.bit12pingflagsl2  Not Defined
Boolean
ncp.bit12pingpflagsl  Not Defined
Boolean
ncp.bit12pingvflagsl  Not Defined
Boolean
ncp.bit12rflags  Not Defined
Boolean
ncp.bit12siflags  Not Defined
Boolean
ncp.bit12vflags  Not Defined
Boolean
ncp.bit13acflags  Operational
Boolean
ncp.bit13cflags  Not Defined
Boolean
```

ncp.bit13eflags Entry Verify CTS  
Boolean

ncp.bit13infoflagsh Not Defined  
Boolean

ncp.bit13infoflagsl Relative Distinguished Name  
Boolean

ncp.bit13l1flagsh Not Defined  
Boolean

ncp.bit13l1flagsl Not Defined  
Boolean

ncp.bit13lflags Not Defined  
Boolean

ncp.bit13nflags Not Defined  
Boolean

ncp.bit13outflags Not Defined  
Boolean

ncp.bit13pingflagsl Not Defined  
Boolean

ncp.bit13pingflags2 Not Defined  
Boolean

ncp.bit13pingpflagsl Not Defined  
Boolean

ncp.bit13pingvflagsl Not Defined  
Boolean

ncp.bit13rflags Not Defined  
Boolean

ncp.bit13siflags Not Defined  
Boolean

ncp.bit13vflags Not Defined  
Boolean

ncp.bit14acflags Not Defined  
Boolean

ncp.bit14cflags Not Defined  
Boolean

ncp.bit14eflags Entry Damaged  
Boolean

ncp.bit14infoflagsh Not Defined  
Boolean

ncp.bit14infoflagsl Distinguished Name  
Boolean

ncp.bit14l1flagsh Not Defined  
Boolean

ncp.bit14l1flagsl Not Defined  
Boolean

```
ncp.bit14lflags  Not Defined
  Boolean
ncp.bit14nflags  Prefer Referrals
  Boolean
ncp.bit14outflags  Not Defined
  Boolean
ncp.bit14pingflags1  Not Defined
  Boolean
ncp.bit14pingflags2  Not Defined
  Boolean
ncp.bit14pingpflags1  Not Defined
  Boolean
ncp.bit14pingvflags1  Not Defined
  Boolean
ncp.bit14rflags  Not Defined
  Boolean
ncp.bit14siflags  Not Defined
  Boolean
ncp.bit14vflags  Not Defined
  Boolean
ncp.bit15acflags  Not Defined
  Boolean
ncp.bit15cflags  Not Defined
  Boolean
ncp.bit15infoflagsh  Not Defined
  Boolean
ncp.bit15infoflagsl  Root Distinguished Name
  Boolean
ncp.bit15l1flagsh  Not Defined
  Boolean
ncp.bit15l1flagsl  Not Defined
  Boolean
ncp.bit15lflags  Not Defined
  Boolean
ncp.bit15nflags  Prefer Only Referrals
  Boolean
ncp.bit15outflags  Not Defined
  Boolean
ncp.bit15pingflags1  Not Defined
  Boolean
ncp.bit15pingflags2  Not Defined
  Boolean
ncp.bit15pingpflags1  Not Defined
  Boolean
```

```
ncp.bit15pingvflags1  Not Defined
  Boolean
ncp.bit15rflags      Not Defined
  Boolean
ncp.bit15siflags     Not Defined
  Boolean
ncp.bit15vflags      Not Defined
  Boolean
ncp.bit16acflags     Not Defined
  Boolean
ncp.bit16cflags      Not Defined
  Boolean
ncp.bit16infoflagsh  Not Defined
  Boolean
ncp.bit16infoflagsl  Parent Distinguished Name
  Boolean
ncp.bit16l1flagsh    Not Defined
  Boolean
ncp.bit16l1flagsl    Not Defined
  Boolean
ncp.bit16lflags      Not Defined
  Boolean
ncp.bit16nflags      Not Defined
  Boolean
ncp.bit16outflags    Not Defined
  Boolean
ncp.bit16pingflags1  Not Defined
  Boolean
ncp.bit16pingflags2  Not Defined
  Boolean
ncp.bit16pingpflags1 Not Defined
  Boolean
ncp.bit16pingvflags1 Not Defined
  Boolean
ncp.bit16rflags      Not Defined
  Boolean
ncp.bit16siflags     Not Defined
  Boolean
ncp.bit16vflags      Not Defined
  Boolean
ncp.bit1acflags      Single Valued
  Boolean
ncp.bit1cflags       Container
  Boolean
```

```
ncp.bit1eflags  Alias Entry
                Boolean

ncp.bit1infoflagsh  Purge Time
                Boolean

ncp.bit1infoflagsl  Output Flags
                Boolean

ncp.bit1ll1flagsh  Not Defined
                Boolean

ncp.bit1ll1flagsl  Output Flags
                Boolean

ncp.bit1l1flags  List Typeless
                Boolean

ncp.bit1n1flags  Entry ID
                Boolean

ncp.bit1outflags  Output Flags
                Boolean

ncp.bit1pingflagsl  Supported Fields
                Boolean

ncp.bit1pingflagsh  Sap Name
                Boolean

ncp.bit1pingpflagsl  Root Most Master Replica
                Boolean

ncp.bit1pingvflagsl  Checksum
                Boolean

ncp.bit1r1flags  Typeless
                Boolean

ncp.bit1s1flags  Names
                Boolean

ncp.bit1v1flags  Naming
                Boolean

ncp.bit2ac1flags  Sized
                Boolean

ncp.bit2c1flags  Effective
                Boolean

ncp.bit2e1flags  Partition Root
                Boolean

ncp.bit2infoflagsh  Dereference Base Class
                Boolean

ncp.bit2infoflagsl  Entry ID
                Boolean

ncp.bit2ll1flagsh  Not Defined
                Boolean

ncp.bit2ll1flagsl  Entry ID
                Boolean
```

```
ncp.bit2lflags  List Containers
                Boolean
ncp.bit2nflags  Readable
                Boolean
ncp.bit2outflags  Entry ID
                Boolean
ncp.bit2pingflags1  Depth
                Boolean
ncp.bit2pingflags2  Tree Name
                Boolean
ncp.bit2pingpflags1  Is Time Synchronized?
                Boolean
ncp.bit2pingvflags1  CRC32
                Boolean
ncp.bit2rflags  Slashed
                Boolean
ncp.bit2siflags  Names and Values
                Boolean
ncp.bit2vflags  Base Class
                Boolean
ncp.bit3acflags  Non-Removable
                Boolean
ncp.bit3cflags  Class Definition Cannot be Removed
                Boolean
ncp.bit3eflags  Container Entry
                Boolean
ncp.bit3infoflagsh  Not Defined
                Boolean
ncp.bit3infoflags1  Entry Flags
                Boolean
ncp.bit3l1flagsh  Not Defined
                Boolean
ncp.bit3l1flags1  Replica State
                Boolean
ncp.bit3lflags  List Slashed
                Boolean
ncp.bit3nflags  Writeable
                Boolean
ncp.bit3outflags  Replica State
                Boolean
ncp.bit3pingflags1  Build Number
                Boolean
ncp.bit3pingflags2  OS Name
                Boolean
```

```
ncp.bit3pingpflags1  Is Time Valid?
  Boolean
ncp.bit3pingvflags1  Not Defined
  Boolean
ncp.bit3rflags  Dotted
  Boolean
ncp.bit3siflags  Effective Privileges
  Boolean
ncp.bit3vflags  Present
  Boolean
ncp.bit4acflags  Read Only
  Boolean
ncp.bit4cflags  Ambiguous Naming
  Boolean
ncp.bit4eflags  Container Alias
  Boolean
ncp.bit4infoflagsh  Not Defined
  Boolean
ncp.bit4infoflagsl  Subordinate Count
  Boolean
ncp.bit4l1flagsh  Not Defined
  Boolean
ncp.bit4l1flagsl  Modification Timestamp
  Boolean
ncp.bit4lflags  List Dotted
  Boolean
ncp.bit4nflags  Master
  Boolean
ncp.bit4outflags  Modification Timestamp
  Boolean
ncp.bit4pingflags1  Flags
  Boolean
ncp.bit4pingflags2  Hardware Name
  Boolean
ncp.bit4pingpflags1  Is DS Time Synchronized?
  Boolean
ncp.bit4pingvflags1  Not Defined
  Boolean
ncp.bit4rflags  Tuned
  Boolean
ncp.bit4siflags  Value Info
  Boolean
ncp.bit4vflags  Value Damaged
  Boolean
```

```
ncp.bit5acflags  Hidden
Boolean

ncp.bit5cflags  Ambiguous Containment
Boolean

ncp.bit5eflags  Matches List Filter
Boolean

ncp.bit5infoflagsh  Not Defined
Boolean

ncp.bit5infoflagsl  Modification Time
Boolean

ncp.bit5l1flagsh  Not Defined
Boolean

ncp.bit5l1flagsl  Purge Time
Boolean

ncp.bit5lflags  Dereference Alias
Boolean

ncp.bit5nflags  Create ID
Boolean

ncp.bit5outflags  Purge Time
Boolean

ncp.bit5pingflags1  Verification Flags
Boolean

ncp.bit5pingflags2  Vendor Name
Boolean

ncp.bit5pingpflags1  Does Agent Have All Replicas?
Boolean

ncp.bit5pingvflags1  Not Defined
Boolean

ncp.bit5rflags  Not Defined
Boolean

ncp.bit5siflags  Abbreviated Value
Boolean

ncp.bit5vflags  Not Defined
Boolean

ncp.bit6acflags  String
Boolean

ncp.bit6cflags  Auxiliary
Boolean

ncp.bit6eflags  Reference Entry
Boolean

ncp.bit6infoflagsh  Not Defined
Boolean

ncp.bit6infoflagsl  Modification Timestamp
Boolean
```



```
ncp.bit6l1flagsh  Not Defined
  Boolean
ncp.bit6l1flagsl  Local Partition ID
  Boolean
ncp.bit6lflags    List All Containers
  Boolean
ncp.bit6nflags    Walk Tree
  Boolean
ncp.bit6outflags  Local Partition ID
  Boolean
ncp.bit6pingflags1  Letter Version
  Boolean
ncp.bit6pingflags2  Not Defined
  Boolean
ncp.bit6pingpflags1  Not Defined
  Boolean
ncp.bit6pingvflags1  Not Defined
  Boolean
ncp.bit6rflags    Not Defined
  Boolean
ncp.bit6siflags   Not Defined
  Boolean
ncp.bit6vflags    Not Defined
  Boolean
ncp.bit7acflags   Synchronize Immediate
  Boolean
ncp.bit7cflags    Operational
  Boolean
ncp.bit7eflags    40x Reference Entry
  Boolean
ncp.bit7infoflagsh  Not Defined
  Boolean
ncp.bit7infoflagsl  Creation Timestamp
  Boolean
ncp.bit7l1flagsh  Not Defined
  Boolean
ncp.bit7l1flagsl  Distinguished Name
  Boolean
ncp.bit7lflags    List Obsolete
  Boolean
ncp.bit7nflags    Dereference Alias
  Boolean
ncp.bit7outflags  Distinguished Name
  Boolean
```

```
ncp.bit7pingflags1  OS Version
  Boolean
ncp.bit7pingflags2  Not Defined
  Boolean
ncp.bit7pingpflags1  Not Defined
  Boolean
ncp.bit7pingvflags1  Not Defined
  Boolean
ncp.bit7rflags      Not Defined
  Boolean
ncp.bit7siflags     Not Defined
  Boolean
ncp.bit7vflags      Not Defined
  Boolean
ncp.bit8acflags     Public Read
  Boolean
ncp.bit8cflags      Sparse Required
  Boolean
ncp.bit8eflags      Back Linked
  Boolean
ncp.bit8infoflagsh  Not Defined
  Boolean
ncp.bit8infoflagsl  Partition Root ID
  Boolean
ncp.bit8l1flagsh    Not Defined
  Boolean
ncp.bit8l1flagsl    Replica Type
  Boolean
ncp.bit8lflags      List Tuned Output
  Boolean
ncp.bit8nflags      Not Defined
  Boolean
ncp.bit8outflags    Replica Type
  Boolean
ncp.bit8pingflags1  Not Defined
  Boolean
ncp.bit8pingflags2  Not Defined
  Boolean
ncp.bit8pingpflags1  Not Defined
  Boolean
ncp.bit8pingvflags1  Not Defined
  Boolean
ncp.bit8rflags      Not Defined
  Boolean
```

```
ncp.bit8siflags  Not Defined
  Boolean
ncp.bit8vflags   Not Defined
  Boolean
ncp.bit9acflags  Server Read
  Boolean
ncp.bit9cflags   Sparse Operational
  Boolean
ncp.bit9eflags   New Entry
  Boolean
ncp.bit9infoflagsh  Not Defined
  Boolean
ncp.bit9infoflagsl  Parent ID
  Boolean
ncp.bit9l1flagsh  Not Defined
  Boolean
ncp.bit9l1flagsl  Partition Busy
  Boolean
ncp.bit9lflags   List External Reference
  Boolean
ncp.bit9nflags   Not Defined
  Boolean
ncp.bit9outflags  Partition Busy
  Boolean
ncp.bit9pingflagsl  License Flags
  Boolean
ncp.bit9pingflags2  Not Defined
  Boolean
ncp.bit9pingpflagsl  Not Defined
  Boolean
ncp.bit9pingvflagsl  Not Defined
  Boolean
ncp.bit9rflags   Not Defined
  Boolean
ncp.bit9siflags  Expanded Class
  Boolean
ncp.bit9vflags   Not Defined
  Boolean
ncp.bit_map      Bit Map
  Byte array
ncp.block_number  Block Number
  Unsigned 32-bit integer
ncp.block_size    Block Size
  Unsigned 16-bit integer
```

ncp.block\_size\_in\_sectors Block Size in Sectors  
Unsigned 32-bit integer

ncp.board\_installed Board Installed  
Unsigned 8-bit integer

ncp.board\_number Board Number  
Unsigned 32-bit integer

ncp.board\_numbers Board Numbers  
Unsigned 32-bit integer

ncp.buffer\_size Buffer Size  
Unsigned 16-bit integer

ncp.bumped\_out\_of\_order Bumped Out Of Order Write Count  
Unsigned 32-bit integer

ncp.burst\_command Burst Command  
Unsigned 32-bit integer  
Packet Burst Command

ncp.burst\_len Burst Length  
Unsigned 32-bit integer  
Total length of data in this burst

ncp.burst\_offset Burst Offset  
Unsigned 32-bit integer  
Offset of data in the burst

ncp.burst\_reserved Reserved  
Byte array

ncp.burst\_seqno Burst Sequence Number  
Unsigned 16-bit integer  
Sequence number of this packet in the burst

ncp.bus\_string Bus String  
String

ncp.bus\_type Bus Type  
Unsigned 8-bit integer

ncp.bytes\_actually\_transferred Bytes Actually Transferred  
Unsigned 32-bit integer

ncp.bytes\_read Bytes Read  
String

ncp.bytes\_to\_copy Bytes to Copy  
Unsigned 32-bit integer

ncp.bytes\_written Bytes Written  
String

ncp.cache\_allocations Cache Allocations  
Unsigned 32-bit integer

ncp.cache\_block\_scrapped Cache Block Scrapped  
Unsigned 16-bit integer

ncp.cache\_buffer\_count Cache Buffer Count  
Unsigned 16-bit integer

ncp.cache\_buffer\_size Cache Buffer Size  
Unsigned 16-bit integer

ncp.cache\_byte\_to\_block Cache Byte To Block Shift Factor  
Unsigned 32-bit integer

ncp.cache\_dirty\_block\_thresh Cache Dirty Block Threshold  
Unsigned 32-bit integer

ncp.cache\_dirty\_wait\_time Cache Dirty Wait Time  
Unsigned 32-bit integer

ncp.cache\_full\_write\_requests Cache Full Write Requests  
Unsigned 32-bit integer

ncp.cache\_get\_requests Cache Get Requests  
Unsigned 32-bit integer

ncp.cache\_hit\_on\_unavailable\_block Cache Hit On Unavailable Block  
Unsigned 16-bit integer

ncp.cache\_hits Cache Hits  
Unsigned 32-bit integer

ncp.cache\_max\_concur\_writes Cache Maximum Concurrent Writes  
Unsigned 32-bit integer

ncp.cache\_misses Cache Misses  
Unsigned 32-bit integer

ncp.cache\_partial\_write\_requests Cache Partial Write Requests  
Unsigned 32-bit integer

ncp.cache\_read\_requests Cache Read Requests  
Unsigned 32-bit integer

ncp.cache\_used\_while\_check Cache Used While Checking  
Unsigned 32-bit integer

ncp.cache\_write\_requests Cache Write Requests  
Unsigned 32-bit integer

ncp.category\_name Category Name  
String

ncp.cc\_file\_handle File Handle  
Unsigned 32-bit integer

ncp.cc\_function OP-Lock Flag  
Unsigned 8-bit integer

ncp.cfg\_max\_simultaneous\_transactions Configured Max Simultaneous Transactions  
Unsigned 16-bit integer

ncp.change\_bits Change Bits  
Unsigned 16-bit integer

ncp.change\_bits\_acc\_date Access Date  
Boolean

ncp.change\_bits\_adata Archive Date  
Boolean

ncp.change\_bits\_aid Archiver ID  
Boolean

ncp.change\_bits\_atime Archive Time  
Boolean

```
ncp.change_bits_cdate  Creation Date
                        Boolean
ncp.change_bits_ctime  Creation Time
                        Boolean
ncp.change_bits_fatt   File Attributes
                        Boolean
ncp.change_bits_max_acc_mask  Maximum Access Mask
                        Boolean
ncp.change_bits_max_space  Maximum Space
                        Boolean
ncp.change_bits_modify  Modify Name
                        Boolean
ncp.change_bits_owner  Owner ID
                        Boolean
ncp.change_bits_udeate  Update Date
                        Boolean
ncp.change_bits_uid    Update ID
                        Boolean
ncp.change_bits_utime  Update Time
                        Boolean
ncp.channel_state     Channel State
                        Unsigned 8-bit integer
ncp.channel_synchronization_state  Channel Synchronization State
                        Unsigned 8-bit integer
ncp.charge_amount     Charge Amount
                        Unsigned 32-bit integer
ncp.charge_information  Charge Information
                        Unsigned 32-bit integer
ncp.checksum_error_count  Checksum Error Count
                        Unsigned 32-bit integer
ncp.checksumming     Checksumming
                        Boolean
ncp.client_comp_flag  Completion Flag
                        Unsigned 16-bit integer
ncp.client_id_number  Client ID Number
                        Unsigned 32-bit integer
ncp.client_list       Client List
                        Unsigned 32-bit integer
ncp.client_list_cnt   Client List Count
                        Unsigned 16-bit integer
ncp.client_list_len   Client List Length
                        Unsigned 8-bit integer
ncp.client_name       Client Name
                        String
```

```
ncp.client_record_area  Client Record Area
    String
ncp.client_station      Client Station
    Unsigned 8-bit integer
ncp.client_station_long Client Station
    Unsigned 32-bit integer
ncp.client_task_number  Client Task Number
    Unsigned 8-bit integer
ncp.client_task_number_long Client Task Number
    Unsigned 32-bit integer
ncp.cluster_count      Cluster Count
    Unsigned 16-bit integer
ncp.clusters_used_by_directories Clusters Used by Directories
    Unsigned 32-bit integer
ncp.clusters_used_by_extended_dirs Clusters Used by Extended Directories
    Unsigned 32-bit integer
ncp.clusters_used_by_fat Clusters Used by FAT
    Unsigned 32-bit integer
ncp.cmd_flags_advanced  Advanced
    Boolean
ncp.cmd_flags_hidden    Hidden
    Boolean
ncp.cmd_flags_later     Restart Server Required to Take Effect
    Boolean
ncp.cmd_flags_secure    Console Secured
    Boolean
ncp.cmd_flags_startup_only Startup.ncf Only
    Boolean
ncp.cmpbyteincount      Compress Byte In Count
    Unsigned 32-bit integer
ncp.cmpbyteoutcnt       Compress Byte Out Count
    Unsigned 32-bit integer
ncp.cmphibyteincnt      Compress High Byte In Count
    Unsigned 32-bit integer
ncp.cmphibyteoutcnt     Compress High Byte Out Count
    Unsigned 32-bit integer
ncp.cmphitickcnt        Compress High Tick Count
    Unsigned 32-bit integer
ncp.cmphitickhigh       Compress High Tick
    Unsigned 32-bit integer
ncp.co_proc_string      CoProcessor String
    String
ncp.co_processor_flag    CoProcessor Present Flag
    Unsigned 32-bit integer
```

```
ncp.code_page    Code Page
                 Unsigned 32-bit integer

ncp.com_cnts     Communication Counters
                 Unsigned 16-bit integer

ncp.comment      Comment
                 String

ncp.comment_type Comment Type
                 Unsigned 16-bit integer

ncp.complete_signatures Complete Signatures
                 Boolean

ncp.completion_code Completion Code
                 Unsigned 8-bit integer

ncp.compress_volume Volume Compression
                 Unsigned 32-bit integer

ncp.compressed_data_streams_count Compressed Data Streams Count
                 Unsigned 32-bit integer

ncp.compressed_limbo_data_streams_count Compressed Limbo Data Streams Count
                 Unsigned 32-bit integer

ncp.compressed_sectors Compressed Sectors
                 Unsigned 32-bit integer

ncp.compression_ios_limit Compression IOs Limit
                 Unsigned 32-bit integer

ncp.compression_lower_limit Compression Lower Limit
                 Unsigned 32-bit integer

ncp.compression_stage Compression Stage
                 Unsigned 32-bit integer

ncp.config_major_vn Configuration Major Version Number
                 Unsigned 8-bit integer

ncp.config_minor_vn Configuration Minor Version Number
                 Unsigned 8-bit integer

ncp.configuration_description Configuration Description
                 String

ncp.configuration_text Configuration Text
                 String

ncp.configured_max_bindery_objects Configured Max Bindery Objects
                 Unsigned 16-bit integer

ncp.configured_max_open_files Configured Max Open Files
                 Unsigned 16-bit integer

ncp.configured_max_routing_buffers Configured Max Routing Buffers
                 Unsigned 16-bit integer

ncp.conn_being_aborted Connection Being Aborted Count
                 Unsigned 32-bit integer

ncp.conn_ctrl_bits Connection Control
                 Unsigned 8-bit integer
```



```
ncp.conn_list      Connection List
                   Unsigned 32-bit integer
ncp.conn_list_count Connection List Count
                   Unsigned 32-bit integer
ncp.conn_list_len  Connection List Length
                   Unsigned 8-bit integer
ncp.conn_lock_status Lock Status
                   Unsigned 8-bit integer
ncp.conn_number_byte Connection Number
                   Unsigned 8-bit integer
ncp.conn_number_word Connection Number
                   Unsigned 16-bit integer
ncp.connected_lan  LAN Adapter
                   Unsigned 32-bit integer
ncp.connection     Connection Number
                   Unsigned 16-bit integer
ncp.connection_code_page Connection Code Page
                   Boolean
ncp.connection_list Connection List
                   Unsigned 32-bit integer
ncp.connection_number Connection Number
                   Unsigned 32-bit integer
ncp.connection_number_list Connection Number List
                   String
ncp.connection_service_type Connection Service Type
                   Unsigned 8-bit integer
ncp.connection_status Connection Status
                   Unsigned 8-bit integer
ncp.connection_type Connection Type
                   Unsigned 8-bit integer
ncp.connections_in_use Connections In Use
                   Unsigned 16-bit integer
ncp.connections_max_used Connections Max Used
                   Unsigned 16-bit integer
ncp.connections_supported_max Connections Supported Max
                   Unsigned 16-bit integer
ncp.control_being_torn_down Control Being Torn Down Count
                   Unsigned 32-bit integer
ncp.control_code   Control Code
                   Unsigned 8-bit integer
ncp.control_flags  Control Flags
                   Unsigned 8-bit integer
ncp.control_invalid_message_number Control Invalid Message Number Count
                   Unsigned 32-bit integer
```

```
ncp.controller_drive_number  Controller Drive Number
    Unsigned 8-bit integer
ncp.controller_number  Controller Number
    Unsigned 8-bit integer
ncp.controller_type  Controller Type
    Unsigned 8-bit integer
ncp.cookie_1  Cookie 1
    Unsigned 32-bit integer
ncp.cookie_2  Cookie 2
    Unsigned 32-bit integer
ncp.copies  Copies
    Unsigned 8-bit integer
ncp.copyright  Copyright
    String
ncp.counter_mask  Counter Mask
    Unsigned 8-bit integer
ncp.cpu_number  CPU Number
    Unsigned 32-bit integer
ncp.cpu_string  CPU String
    String
ncp.cpu_type  CPU Type
    Unsigned 8-bit integer
ncp.creation_date  Creation Date
    Unsigned 16-bit integer
ncp.creation_time  Creation Time
    Unsigned 16-bit integer
ncp.creator_id  Creator ID
    Unsigned 32-bit integer
ncp.creator_name_space_number  Creator Name Space Number
    Unsigned 8-bit integer
ncp.credit_limit  Credit Limit
    Unsigned 32-bit integer
ncp.ctrl_bad_ack_frag_list  Control Bad ACK Fragment List Count
    Unsigned 32-bit integer
ncp.ctrl_no_data_read  Control No Data Read Count
    Unsigned 32-bit integer
ncp.ctrl_flags  Control Flags
    Unsigned 16-bit integer
ncp.cur_comp_blks  Current Compression Blocks
    Unsigned 32-bit integer
ncp.cur_initial_blks  Current Initial Blocks
    Unsigned 32-bit integer
ncp.cur_inter_blks  Current Intermediate Blocks
    Unsigned 32-bit integer
```

ncp.cur\_num\_of\_r\_tags Current Number of Resource Tags  
Unsigned 32-bit integer

ncp.curr\_num\_cache\_buff Current Number Of Cache Buffers  
Unsigned 32-bit integer

ncp.curr\_ref\_id Current Reference ID  
Unsigned 16-bit integer

ncp.current\_changed\_fats Current Changed FAT Entries  
Unsigned 16-bit integer

ncp.current\_entries Current Entries  
Unsigned 32-bit integer

ncp.current\_form\_type Current Form Type  
Unsigned 8-bit integer

ncp.current\_lfs\_counters Current LFS Counters  
Unsigned 32-bit integer

ncp.current\_open\_files Current Open Files  
Unsigned 16-bit integer

ncp.current\_server\_time Time Elapsed Since Server Was Brought Up  
Unsigned 32-bit integer

ncp.current\_servers Current Servers  
Unsigned 32-bit integer

ncp.current\_space Current Space  
Unsigned 32-bit integer

ncp.current\_trans\_count Current Transaction Count  
Unsigned 32-bit integer

ncp.current\_used\_bindery\_objects Current Used Bindery Objects  
Unsigned 16-bit integer

ncp.currently\_used\_routing\_buffers Currently Used Routing Buffers  
Unsigned 16-bit integer

ncp.custom\_cnts Custom Counters  
Unsigned 32-bit integer

ncp.custom\_count Custom Count  
Unsigned 32-bit integer

ncp.custom\_counters Custom Counters  
Unsigned 32-bit integer

ncp.custom\_string Custom String  
String

ncp.custom\_var\_value Custom Variable Value  
Unsigned 32-bit integer

ncp.data Data  
String

ncp.data\_bytes Data Bytes  
Unsigned 16-bit integer  
Number of data bytes in this packet

ncp.data\_fork\_first\_fat Data Fork First FAT Entry  
Unsigned 32-bit integer

```
ncp.data_fork_len  Data Fork Len
    Unsigned 32-bit integer
ncp.data_fork_size  Data Fork Size
    Unsigned 32-bit integer
ncp.data_offset  Data Offset
    Unsigned 32-bit integer
    Offset of this packet
ncp.data_size  Data Size
    Unsigned 32-bit integer
ncp.data_stream  Data Stream
    Unsigned 8-bit integer
ncp.data_stream_fat_blks  Data Stream FAT Blocks
    Unsigned 32-bit integer
ncp.data_stream_name  Data Stream Name
    String
ncp.data_stream_num_long  Data Stream Number
    Unsigned 32-bit integer
ncp.data_stream_number  Data Stream Number
    Unsigned 8-bit integer
ncp.data_stream_size  Size
    Unsigned 32-bit integer
ncp.data_stream_space_alloc  Space Allocated for Data Stream
    Unsigned 32-bit integer
ncp.data_streams_count  Data Streams Count
    Unsigned 32-bit integer
ncp.data_type_flag  Data Type Flag
    Unsigned 8-bit integer
ncp.dc_dirty_wait_time  DC Dirty Wait Time
    Unsigned 32-bit integer
ncp.dc_double_read_flag  DC Double Read Flag
    Unsigned 32-bit integer
ncp.dc_max_concurrent_writes  DC Maximum Concurrent Writes
    Unsigned 32-bit integer
ncp.dc_min_non_ref_time  DC Minimum Non-Referenced Time
    Unsigned 32-bit integer
ncp.dc_wait_time_before_new_buff  DC Wait Time Before New Buffer
    Unsigned 32-bit integer
ncp.dead_mirror_table  Dead Mirror Table
    Byte array
ncp.dealloc_being_proc  De-Allocate Being Processed Count
    Unsigned 32-bit integer
ncp.dealloc_forged_packet  De-Allocate Forged Packet Count
    Unsigned 32-bit integer
ncp.dealloc_invalid_slot  De-Allocate Invalid Slot Count
    Unsigned 32-bit integer
```

ncp.dealloc\_still\_transmit De-Allocate Still Transmitting Count  
Unsigned 32-bit integer

ncp.decpcbyteincnt DeCompress Byte In Count  
Unsigned 32-bit integer

ncp.decpcbyteoutcnt DeCompress Byte Out Count  
Unsigned 32-bit integer

ncp.decpcphybyteincnt DeCompress High Byte In Count  
Unsigned 32-bit integer

ncp.decpcphybyteoutcnt DeCompress High Byte Out Count  
Unsigned 32-bit integer

ncp.decpcphitickcnt DeCompress High Tick Count  
Unsigned 32-bit integer

ncp.decpcphitickhigh DeCompress High Tick  
Unsigned 32-bit integer

ncp.defined\_data\_streams Defined Data Streams  
Unsigned 8-bit integer

ncp.defined\_name\_spaces Defined Name Spaces  
Unsigned 8-bit integer

ncp.delay\_time Delay Time  
Unsigned 32-bit integer  
Delay time between consecutive packet sends (100 us increments)

ncp.delete\_existing\_file\_flag Delete Existing File Flag  
Unsigned 8-bit integer

ncp.delete\_id Deleted ID  
Unsigned 32-bit integer

ncp.deleted\_date Deleted Date  
Unsigned 16-bit integer

ncp.deleted\_file\_time Deleted File Time  
Unsigned 32-bit integer

ncp.deleted\_time Deleted Time  
Unsigned 16-bit integer

ncp.deny\_read\_count Deny Read Count  
Unsigned 16-bit integer

ncp.deny\_write\_count Deny Write Count  
Unsigned 16-bit integer

ncp.description\_string Description  
String

ncp.desired\_access\_rights Desired Access Rights  
Unsigned 16-bit integer

ncp.desired\_response\_count Desired Response Count  
Unsigned 16-bit integer

ncp.dest\_component\_count Destination Path Component Count  
Unsigned 8-bit integer

ncp.dest\_dir\_handle Destination Directory Handle  
Unsigned 8-bit integer

```
ncp.dest_name_space  Destination Name Space
    Unsigned 8-bit integer
ncp.dest_path        Destination Path
    String
ncp.dest_path_16     Destination Path
    String
ncp.detach_during_processing  Detach During Processing
    Unsigned 16-bit integer
ncp.detach_for_bad_connection_number  Detach For Bad Connection Number
    Unsigned 16-bit integer
ncp.dir_base         Directory Base
    Unsigned 32-bit integer
ncp.dir_count        Directory Count
    Unsigned 16-bit integer
ncp.dir_handle       Directory Handle
    Unsigned 8-bit integer
ncp.dir_handle_long  Directory Handle
    Unsigned 32-bit integer
ncp.dir_handle_name  Handle Name
    Unsigned 8-bit integer
ncp.directory_access_rights  Directory Access Rights
    Unsigned 8-bit integer
ncp.directory_attributes  Directory Attributes
    Unsigned 8-bit integer
ncp.directory_entry_number  Directory Entry Number
    Unsigned 32-bit integer
ncp.directory_entry_number_word  Directory Entry Number
    Unsigned 16-bit integer
ncp.directory_id     Directory ID
    Unsigned 16-bit integer
ncp.directory_name_14  Directory Name
    String
ncp.directory_number  Directory Number
    Unsigned 32-bit integer
ncp.directory_path   Directory Path
    String
ncp.directory_services_object_id  Directory Services Object ID
    Unsigned 32-bit integer
ncp.directory_stamp  Directory Stamp (0xD1D1)
    Unsigned 16-bit integer
ncp.dirty_cache_buffers  Dirty Cache Buffers
    Unsigned 16-bit integer
ncp.disable_brcasts   Disable Broadcasts
    Boolean
```

```
ncp.disable_personal_brcasts  Disable Personal Broadcasts
    Boolean
ncp.disable_wdog_messages  Disable Watchdog Message
    Boolean
ncp.disk_channel_number  Disk Channel Number
    Unsigned 8-bit integer
ncp.disk_channel_table  Disk Channel Table
    Unsigned 8-bit integer
ncp.disk_space_limit  Disk Space Limit
    Unsigned 32-bit integer
ncp.dm_flags  DM Flags
    Unsigned 8-bit integer
ncp.dm_info_entries  DM Info Entries
    Unsigned 32-bit integer
ncp.dm_info_level  DM Info Level
    Unsigned 8-bit integer
ncp.dm_major_version  DM Major Version
    Unsigned 32-bit integer
ncp.dm_minor_version  DM Minor Version
    Unsigned 32-bit integer
ncp.dm_present_flag  Data Migration Present Flag
    Unsigned 8-bit integer
ncp.dma_channels_used  DMA Channels Used
    Unsigned 32-bit integer
ncp.dos_directory_base  DOS Directory Base
    Unsigned 32-bit integer
ncp.dos_directory_entry  DOS Directory Entry
    Unsigned 32-bit integer
ncp.dos_directory_entry_number  DOS Directory Entry Number
    Unsigned 32-bit integer
ncp.dos_file_attributes  DOS File Attributes
    Unsigned 8-bit integer
ncp.dos_parent_directory_entry  DOS Parent Directory Entry
    Unsigned 32-bit integer
ncp.dos_sequence  DOS Sequence
    Unsigned 32-bit integer
ncp.drive_cylinders  Drive Cylinders
    Unsigned 16-bit integer
ncp.drive_definition_string  Drive Definition
    String
ncp.drive_heads  Drive Heads
    Unsigned 8-bit integer
ncp.drive_mapping_table  Drive Mapping Table
    Byte array
```

```
ncp.drive_mirror_table  Drive Mirror Table
    Byte array
ncp.drive_removable_flag  Drive Removable Flag
    Unsigned 8-bit integer
ncp.drive_size  Drive Size
    Unsigned 32-bit integer
ncp.driver_board_name  Driver Board Name
    String
ncp.driver_log_name  Driver Logical Name
    String
ncp.driver_short_name  Driver Short Name
    String
ncp.dsired_acc_rights_compat  Compatibility
    Boolean
ncp.dsired_acc_rights_del_file_cls  Delete File Close
    Boolean
ncp.dsired_acc_rights_deny_r  Deny Read
    Boolean
ncp.dsired_acc_rights_deny_w  Deny Write
    Boolean
ncp.dsired_acc_rights_read_o  Read Only
    Boolean
ncp.dsired_acc_rights_w_thru  File Write Through
    Boolean
ncp.dsired_acc_rights_write_o  Write Only
    Boolean
ncp.dst_connection  Destination Connection ID
    Unsigned 32-bit integer
    The server's connection identification number
ncp.dst_ea_flags  Destination EA Flags
    Unsigned 16-bit integer
ncp.dst_ns_indicator  Destination Name Space Indicator
    Unsigned 16-bit integer
ncp.dst_queue_id  Destination Queue ID
    Unsigned 32-bit integer
ncp.dup_is_being_sent  Duplicate Is Being Sent Already Count
    Unsigned 32-bit integer
ncp.duplicate_replies_sent  Duplicate Replies Sent
    Unsigned 16-bit integer
ncp.dyn_mem_struct_cur  Current Used Dynamic Space
    Unsigned 32-bit integer
ncp.dyn_mem_struct_max  Max Used Dynamic Space
    Unsigned 32-bit integer
ncp.dyn_mem_struct_total  Total Dynamic Space
    Unsigned 32-bit integer
```



```
ncp.ea_access_flag  EA Access Flag
    Unsigned 16-bit integer
ncp.ea_bytes_written  Bytes Written
    Unsigned 32-bit integer
ncp.ea_count  Count
    Unsigned 32-bit integer
ncp.ea_data_size  Data Size
    Unsigned 32-bit integer
ncp.ea_data_size_duplicated  Data Size Duplicated
    Unsigned 32-bit integer
ncp.ea_deep_freeze  Deep Freeze
    Boolean
ncp.ea_delete_privileges  Delete Privileges
    Boolean
ncp.ea_duplicate_count  Duplicate Count
    Unsigned 32-bit integer
ncp.ea_error_codes  EA Error Codes
    Unsigned 16-bit integer
ncp.ea_flags  EA Flags
    Unsigned 16-bit integer
ncp.ea_handle  EA Handle
    Unsigned 32-bit integer
ncp.ea_handle_or_netware_handle_or_volume  EAHandle or NetWare Handle or Volume
    Unsigned 32-bit integer
ncp.ea_header_being_enlarged  Header Being Enlarged
    Boolean
ncp.ea_in_progress  In Progress
    Boolean
ncp.ea_key  EA Key
    String
ncp.ea_key_size  Key Size
    Unsigned 32-bit integer
ncp.ea_key_size_duplicated  Key Size Duplicated
    Unsigned 32-bit integer
ncp.ea_need_bit_flag  EA Need Bit Flag
    Boolean
ncp.ea_new_tally_used  New Tally Used
    Boolean
ncp.ea_permanent_memory  Permanent Memory
    Boolean
ncp.ea_read_privileges  Read Privileges
    Boolean
ncp.ea_score_card_present  Score Card Present
    Boolean
```

```
ncp.ea_system_ea_only  System EA Only
  Boolean
ncp.ea_tally_need_update  Tally Need Update
  Boolean
ncp.ea_value  EA Value
  String
ncp.ea_value_length  Value Length
  Unsigned 16-bit integer
ncp.ea_value_rep  EA Value
  String
ncp.ea_write_in_progress  Write In Progress
  Boolean
ncp.ea_write_privileges  Write Privileges
  Boolean
ncp.ecb_cxl_fails  ECB Cancel Failures
  Unsigned 32-bit integer
ncp.echo_socket  Echo Socket
  Unsigned 16-bit integer
ncp.effective_rights  Effective Rights
  Unsigned 8-bit integer
ncp.effective_rights_create  Create Rights
  Boolean
ncp.effective_rights_delete  Delete Rights
  Boolean
ncp.effective_rights_modify  Modify Rights
  Boolean
ncp.effective_rights_open  Open Rights
  Boolean
ncp.effective_rights_parental  Parental Rights
  Boolean
ncp.effective_rights_read  Read Rights
  Boolean
ncp.effective_rights_search  Search Rights
  Boolean
ncp.effective_rights_write  Write Rights
  Boolean
ncp.enable_brcasts  Enable Broadcasts
  Boolean
ncp.enable_personal_brcasts  Enable Personal Broadcasts
  Boolean
ncp.enable_wdog_messages  Enable Watchdog Message
  Boolean
ncp.encryption  Encryption
  Boolean
```

```
ncp.enqueue_send_cnt  Enqueued Send Count
    Unsigned 32-bit integer
ncp.enum_info_account  Accounting Information
    Boolean
ncp.enum_info_auth     Authentication Information
    Boolean
ncp.enum_info_lock     Lock Information
    Boolean
ncp.enum_info_mask     Return Information Mask
    Unsigned 8-bit integer
ncp.enum_info_name     Name Information
    Boolean
ncp.enum_info_print    Print Information
    Boolean
ncp.enum_info_stats    Statistical Information
    Boolean
ncp.enum_info_time     Time Information
    Boolean
ncp.enum_info_transport Transport Information
    Boolean
ncp.err_doing_async_read Error Doing Async Read Count
    Unsigned 32-bit integer
ncp.error_read_last_fat Error Reading Last FAT Count
    Unsigned 32-bit integer
ncp.event_offset      Event Offset
    Byte array
ncp.event_time        Event Time
    Unsigned 32-bit integer
ncp.exc_nds_ver       Exclude NDS Version
    Unsigned 32-bit integer
ncp.expiration_time   Expiration Time
    Unsigned 32-bit integer
ncp.ext_info          Extended Return Information
    Unsigned 16-bit integer
ncp.ext_info_64_bit_fs 64 Bit File Sizes
    Boolean
ncp.ext_info_access   Last Access
    Boolean
ncp.ext_info_dos_name DOS Name
    Boolean
ncp.ext_info_effective Effective
    Boolean
ncp.ext_info_flush    Flush Time
    Boolean
```

```
ncp.ext_info_mac_date  MAC Date
  Boolean

ncp.ext_info_mac_finder  MAC Finder
  Boolean

ncp.ext_info_newstyle  New Style
  Boolean

ncp.ext_info_parental  Parental
  Boolean

ncp.ext_info_sibling  Sibling
  Boolean

ncp.ext_info_update  Last Update
  Boolean

ncp.ext_router_active_flag  External Router Active Flag
  Boolean

ncp.extended_attribute_extants_used  Extended Attribute Extants Used
  Unsigned 32-bit integer

ncp.extended_attributes_defined  Extended Attributes Defined
  Unsigned 32-bit integer

ncp.extra_extra_use_count_node_count  Errors allocating an additional use count
  Unsigned 32-bit integer

ncp.extra_use_count_node_count  Errors allocating a use count node for TTS
  Unsigned 32-bit integer

ncp.f_size_64bit  64bit File Size
  Unsigned 64-bit integer

ncp.failed_alloc_req  Failed Alloc Request Count
  Unsigned 32-bit integer

ncp.fat_moved  Number of times the OS has move the location of FAT
  Unsigned 32-bit integer

ncp.fat_scan_errors  FAT Scan Errors
  Unsigned 16-bit integer

ncp.fat_write_err  Number of write errors in both original and mirrored copies o
  Unsigned 32-bit integer

ncp.fat_write_errors  FAT Write Errors
  Unsigned 16-bit integer

ncp.fatal_fat_write_errors  Fatal FAT Write Errors
  Unsigned 16-bit integer

ncp.fields_len_table  Fields Len Table
  Byte array

ncp.file_count  File Count
  Unsigned 16-bit integer

ncp.file_date  File Date
  Unsigned 16-bit integer

ncp.file_dir_win  File/Dir Window
  Unsigned 16-bit integer
```

```
ncp.file_execute_type  File Execute Type
    Unsigned 8-bit integer
ncp.file_ext_attr      File Extended Attributes
    Unsigned 8-bit integer
ncp.file_flags         File Flags
    Unsigned 32-bit integer
ncp.file_handle        Burst File Handle
    Unsigned 32-bit integer
    Packet Burst File Handle
ncp.file_limbo         File Limbo
    Unsigned 32-bit integer
ncp.file_lock_count    File Lock Count
    Unsigned 16-bit integer
ncp.file_mig_state     File Migration State
    Unsigned 8-bit integer
ncp.file_mode          File Mode
    Unsigned 8-bit integer
ncp.file_name          Filename
    String
ncp.file_name_12       Filename
    String
ncp.file_name_14       Filename
    String
ncp.file_name_16       Filename
    String
ncp.file_name_len      Filename Length
    Unsigned 8-bit integer
ncp.file_offset        File Offset
    Unsigned 32-bit integer
ncp.file_path          File Path
    String
ncp.file_size          File Size
    Unsigned 32-bit integer
ncp.file_system_id     File System ID
    Unsigned 8-bit integer
ncp.file_time          File Time
    Unsigned 16-bit integer
ncp.file_use_count     File Use Count
    Unsigned 16-bit integer
ncp.file_write_flags   File Write Flags
    Unsigned 8-bit integer
ncp.file_write_state   File Write State
    Unsigned 8-bit integer
ncp.filler             Filler
    Unsigned 8-bit integer
```

```
ncp.finder_attr  Finder Info Attributes
  Unsigned 16-bit integer
ncp.finder_attr_bundle  Object Has Bundle
  Boolean
ncp.finder_attr_desktop  Object on Desktop
  Boolean
ncp.finder_attr_invisible  Object is Invisible
  Boolean
ncp.first_packet_isnt_a_write  First Packet Isn't A Write Count
  Unsigned 32-bit integer
ncp.fixed_bit_mask  Fixed Bit Mask
  Unsigned 32-bit integer
ncp.fixed_bits_defined  Fixed Bits Defined
  Unsigned 16-bit integer
ncp.flag_bits  Flag Bits
  Unsigned 8-bit integer
ncp.flags  Flags
  Unsigned 8-bit integer
ncp.flags_def  Flags
  Unsigned 16-bit integer
ncp.flush_time  Flush Time
  Unsigned 32-bit integer
ncp.folder_flag  Folder Flag
  Unsigned 8-bit integer
ncp.force_flag  Force Server Down Flag
  Unsigned 8-bit integer
ncp.forged_detached_requests  Forged Detached Requests
  Unsigned 16-bit integer
ncp.forged_packet  Forged Packet Count
  Unsigned 32-bit integer
ncp.fork_count  Fork Count
  Unsigned 8-bit integer
ncp.fork_indicator  Fork Indicator
  Unsigned 8-bit integer
ncp.form_type  Form Type
  Unsigned 16-bit integer
ncp.form_type_count  Form Types Count
  Unsigned 32-bit integer
ncp.found_some_mem  Found Some Memory
  Unsigned 32-bit integer
ncp.fractional_time  Fractional Time in Seconds
  Unsigned 32-bit integer
ncp.fragger_handle  Fragment Handle
  Unsigned 32-bit integer
```

```
ncp.fragger_hndl  Fragment Handle
    Unsigned 16-bit integer
ncp.fragment_write_occurred  Fragment Write Occurred
    Unsigned 16-bit integer
ncp.free_blocks  Free Blocks
    Unsigned 32-bit integer
ncp.free_directory_entries  Free Directory Entries
    Unsigned 16-bit integer
ncp.freeable_limbo_sectors  Freeable Limbo Sectors
    Unsigned 32-bit integer
ncp.freed_clusters  Freed Clusters
    Unsigned 32-bit integer
ncp.fs_engine_flag  FS Engine Flag
    Boolean
ncp.full_name  Full Name
    String
ncp.func  Function
    Unsigned 8-bit integer
ncp.generic_block_size  Block Size
    Unsigned 32-bit integer
ncp.generic_capacity  Capacity
    Unsigned 32-bit integer
ncp.generic_cartridge_type  Cartridge Type
    Unsigned 32-bit integer
ncp.generic_child_count  Child Count
    Unsigned 32-bit integer
ncp.generic_ctl_mask  Control Mask
    Unsigned 32-bit integer
ncp.generic_func_mask  Function Mask
    Unsigned 32-bit integer
ncp.generic_ident_time  Identification Time
    Unsigned 32-bit integer
ncp.generic_ident_type  Identification Type
    Unsigned 32-bit integer
ncp.generic_label  Label
    String
ncp.generic_media_slot  Media Slot
    Unsigned 32-bit integer
ncp.generic_media_type  Media Type
    Unsigned 32-bit integer
ncp.generic_name  Name
    String
ncp.generic_object_uniq_id  Unique Object ID
    Unsigned 32-bit integer
```

```
ncp.generic_parent_count  Parent Count
    Unsigned 32-bit integer
ncp.generic_pref_unit_size Preferred Unit Size
    Unsigned 32-bit integer
ncp.generic_sib_count     Sibling Count
    Unsigned 32-bit integer
ncp.generic_spec_info_sz  Specific Information Size
    Unsigned 32-bit integer
ncp.generic_status       Status
    Unsigned 32-bit integer
ncp.generic_type         Type
    Unsigned 32-bit integer
ncp.generic_unit_size    Unit Size
    Unsigned 32-bit integer
ncp.get_ecb_buf          Get ECB Buffers
    Unsigned 32-bit integer
ncp.get_ecb_fails        Get ECB Failures
    Unsigned 32-bit integer
ncp.get_set_flag         Get Set Flag
    Unsigned 8-bit integer
ncp.group                NCP Group Type
    Unsigned 8-bit integer
ncp.guid                 GUID
    Byte array
ncp.had_an_out_of_order  Had An Out Of Order Write Count
    Unsigned 32-bit integer
ncp.handle_flag          Handle Flag
    Unsigned 8-bit integer
ncp.handle_info_level    Handle Info Level
    Unsigned 8-bit integer
ncp.hardware_rx_mismatch_count Hardware Receive Mismatch Count
    Unsigned 32-bit integer
ncp.held_bytes_read      Held Bytes Read
    Byte array
ncp.held_bytes_write     Held Bytes Written
    Byte array
ncp.held_conn_time       Held Connect Time in Minutes
    Unsigned 32-bit integer
ncp.hold_amount          Hold Amount
    Unsigned 32-bit integer
ncp.hold_cancel_amount   Hold Cancel Amount
    Unsigned 32-bit integer
ncp.hold_time            Hold Time
    Unsigned 32-bit integer
```



```
ncp.holder_id    Holder ID
                 Unsigned 32-bit integer
ncp.hops_to_net  Hop Count
                 Unsigned 16-bit integer
ncp.horiz_location Horizontal Location
                 Unsigned 16-bit integer
ncp.host_address Host Address
                 Byte array
ncp.hot_fix_blocks_available Hot Fix Blocks Available
                 Unsigned 16-bit integer
ncp.hot_fix_disabled Hot Fix Disabled
                 Unsigned 8-bit integer
ncp.hot_fix_table_size Hot Fix Table Size
                 Unsigned 16-bit integer
ncp.hot_fix_table_start Hot Fix Table Start
                 Unsigned 32-bit integer
ncp.huge_bit_mask Huge Bit Mask
                 Unsigned 32-bit integer
ncp.huge_bits_defined Huge Bits Defined
                 Unsigned 16-bit integer
ncp.huge_data    Huge Data
                 String
ncp.huge_data_used Huge Data Used
                 Unsigned 32-bit integer
ncp.huge_state_info Huge State Info
                 Byte array
ncp.i_ran_out_someone_else_did_it_0 I Ran Out Someone Else Did It Count 0
                 Unsigned 32-bit integer
ncp.i_ran_out_someone_else_did_it_1 I Ran Out Someone Else Did It Count 1
                 Unsigned 32-bit integer
ncp.i_ran_out_someone_else_did_it_2 I Ran Out Someone Else Did It Count 2
                 Unsigned 32-bit integer
ncp.id_get_no_read_no_wait ID Get No Read No Wait Count
                 Unsigned 32-bit integer
ncp.id_get_no_read_no_wait_alloc ID Get No Read No Wait Allocate Count
                 Unsigned 32-bit integer
ncp.id_get_no_read_no_wait_buffer ID Get No Read No Wait No Buffer Count
                 Unsigned 32-bit integer
ncp.id_get_no_read_no_wait_no_alloc ID Get No Read No Wait No Alloc Count
                 Unsigned 32-bit integer
ncp.id_get_no_read_no_wait_no_alloc_alloc ID Get No Read No Wait No Alloc Alloc
                 Unsigned 32-bit integer
ncp.id_get_no_read_no_wait_no_alloc_sema ID Get No Read No Wait No Alloc Semaph
                 Unsigned 32-bit integer
```

ncp.id\_get\_no\_read\_no\_wait\_sema ID Get No Read No Wait Semaphored Count  
Unsigned 32-bit integer

ncp.identification\_number Identification Number  
Unsigned 32-bit integer

ncp.ignored\_rx\_pkts Ignored Receive Packets  
Unsigned 32-bit integer

ncp.in\_use Bytes in Use  
Unsigned 32-bit integer

ncp.inc\_nds\_ver Include NDS Version  
Unsigned 32-bit integer

ncp.incoming\_packet\_discarded\_no\_dgroup Incoming Packet Discarded No DGroup  
Unsigned 16-bit integer

ncp.index\_number Index Number  
Unsigned 8-bit integer

ncp.info\_count Info Count  
Unsigned 16-bit integer

ncp.info\_flags Info Flags  
Unsigned 32-bit integer

ncp.info\_flags\_all\_attr All Attributes  
Boolean

ncp.info\_flags\_all\_dirbase\_num All Directory Base Numbers  
Boolean

ncp.info\_flags\_dos\_attr DOS Attributes  
Boolean

ncp.info\_flags\_dos\_time DOS Time  
Boolean

ncp.info\_flags\_ds\_sizes Data Stream Sizes  
Boolean

ncp.info\_flags\_ea\_present EA Present Flag  
Boolean

ncp.info\_flags\_effect\_rights Effective Rights  
Boolean

ncp.info\_flags\_flags Return Object Flags  
Boolean

ncp.info\_flags\_flush\_time Flush Time  
Boolean

ncp.info\_flags\_ids ID's  
Boolean

ncp.info\_flags\_mac\_finder Mac Finder Information  
Boolean

ncp.info\_flags\_mac\_time Mac Time  
Boolean

ncp.info\_flags\_max\_access\_mask Maximum Access Mask  
Boolean

```
ncp.info_flags_name    Return Object Name
                        Boolean
ncp.info_flags_ns_attr  Name Space Attributes
                        Boolean
ncp.info_flags_prnt_base_id  Parent Base ID
                        Boolean
ncp.info_flags_ref_count  Reference Count
                        Boolean
ncp.info_flags_security  Return Object Security
                        Boolean
ncp.info_flags_sibling_cnt  Sibling Count
                        Boolean
ncp.info_flags_type     Return Object Type
                        Boolean
ncp.info_level_num     Information Level Number
                        Unsigned 8-bit integer
ncp.info_mask          Information Mask
                        Unsigned 32-bit integer
ncp.info_mask_c_name_space  Creator Name Space & Name
                        Boolean
ncp.info_mask_dosname  DOS Name
                        Boolean
ncp.info_mask_name     Name
                        Boolean
ncp.inh_revoke_create  Create Rights
                        Boolean
ncp.inh_revoke_delete  Delete Rights
                        Boolean
ncp.inh_revoke_modify  Modify Rights
                        Boolean
ncp.inh_revoke_open   Open Rights
                        Boolean
ncp.inh_revoke_parent  Change Access
                        Boolean
ncp.inh_revoke_read   Read Rights
                        Boolean
ncp.inh_revoke_search  See Files Flag
                        Boolean
ncp.inh_revoke_supervisor  Supervisor
                        Boolean
ncp.inh_revoke_write  Write Rights
                        Boolean
ncp.inh_rights_create  Create Rights
                        Boolean
```

```
ncp.inh_rights_delete  Delete Rights
                        Boolean
ncp.inh_rights_modify  Modify Rights
                        Boolean
ncp.inh_rights_open    Open Rights
                        Boolean
ncp.inh_rights_parent  Change Access
                        Boolean
ncp.inh_rights_read    Read Rights
                        Boolean
ncp.inh_rights_search  See Files Flag
                        Boolean
ncp.inh_rights_supervisor  Supervisor
                        Boolean
ncp.inh_rights_write   Write Rights
                        Boolean
ncp.inheritance_revoke_mask  Revoke Rights Mask
                        Unsigned 16-bit integer
ncp.inherited_rights_mask  Inherited Rights Mask
                        Unsigned 16-bit integer
ncp.initial_semaphore_value  Initial Semaphore Value
                        Unsigned 8-bit integer
ncp.inspect_size       Inspect Size
                        Unsigned 32-bit integer
ncp.internet_bridge_version  Internet Bridge Version
                        Unsigned 8-bit integer
ncp.internl_dsk_get     Internal Disk Get Count
                        Unsigned 32-bit integer
ncp.internl_dsk_get_need_to_alloc  Internal Disk Get Need To Allocate Count
                        Unsigned 32-bit integer
ncp.internl_dsk_get_no_read  Internal Disk Get No Read Count
                        Unsigned 32-bit integer
ncp.internl_dsk_get_no_read_alloc  Internal Disk Get No Read Allocate Count
                        Unsigned 32-bit integer
ncp.internl_dsk_get_no_read_someone_beat  Internal Disk Get No Read Someone Beat
                        Unsigned 32-bit integer
ncp.internl_dsk_get_no_wait  Internal Disk Get No Wait Count
                        Unsigned 32-bit integer
ncp.internl_dsk_get_no_wait_need  Internal Disk Get No Wait Need To Allocate Cou
                        Unsigned 32-bit integer
ncp.internl_dsk_get_no_wait_no_blk  Internal Disk Get No Wait No Block Count
                        Unsigned 32-bit integer
ncp.internl_dsk_get_part_read  Internal Disk Get Partial Read Count
                        Unsigned 32-bit integer
```

```
ncp.internl_dsk_get_read_err  Internal Disk Get Read Error Count
    Unsigned 32-bit integer
ncp.internl_dsk_get_someone_beat  Internal Disk Get Someone Beat My Count
    Unsigned 32-bit integer
ncp.internl_dsk_write  Internal Disk Write Count
    Unsigned 32-bit integer
ncp.internl_dsk_write_alloc  Internal Disk Write Allocate Count
    Unsigned 32-bit integer
ncp.internl_dsk_write_someone_beat  Internal Disk Write Someone Beat Me Count
    Unsigned 32-bit integer
ncp.interrupt_numbers_used  Interrupt Numbers Used
    Unsigned 32-bit integer
ncp.invalid_control_req  Invalid Control Request Count
    Unsigned 32-bit integer
ncp.invalid_req_type  Invalid Request Type Count
    Unsigned 32-bit integer
ncp.invalid_sequence_number  Invalid Sequence Number Count
    Unsigned 32-bit integer
ncp.invalid_slot  Invalid Slot Count
    Unsigned 32-bit integer
ncp.io_addresses_used  IO Addresses Used
    Byte array
ncp.io_engine_flag  IO Engine Flag
    Boolean
ncp.io_error_count  IO Error Count
    Unsigned 16-bit integer
ncp.io_flag  IO Flag
    Unsigned 32-bit integer
ncp.ip.length  NCP over IP length
    Unsigned 32-bit integer
ncp.ip.packetsig  NCP over IP Packet Signature
    Byte array
ncp.ip.replybufsize  NCP over IP Reply Buffer Size
    Unsigned 32-bit integer
ncp.ip.signature  NCP over IP signature
    Unsigned 32-bit integer
ncp.ip.version  NCP over IP Version
    Unsigned 32-bit integer
ncp.ip_addr  IP Address
    IPv4 address
ncp.ipref  Address Referral
    IPv4 address
ncp.ipx_aes_event  IPX AES Event Count
    Unsigned 32-bit integer
```

```
ncp.ipx_ecb_cancel_fail  IPX ECB Cancel Fail Count
    Unsigned 16-bit integer
ncp.ipx_get_ecb_fail    IPX Get ECB Fail Count
    Unsigned 32-bit integer
ncp.ipx_get_ecb_req    IPX Get ECB Request Count
    Unsigned 32-bit integer
ncp.ipx_get_lcl_targ_fail  IPX Get Local Target Fail Count
    Unsigned 16-bit integer
ncp.ipx_listen_ecb    IPX Listen ECB Count
    Unsigned 32-bit integer
ncp.ipx_malform_pkt    IPX Malformed Packet Count
    Unsigned 16-bit integer
ncp.ipx_max_conf_sock  IPX Max Configured Socket Count
    Unsigned 16-bit integer
ncp.ipx_max_open_sock  IPX Max Open Socket Count
    Unsigned 16-bit integer
ncp.ipx_not_my_network  IPX Not My Network
    Unsigned 16-bit integer
ncp.ipx_open_sock_fail  IPX Open Socket Fail Count
    Unsigned 16-bit integer
ncp.ipx_postponed_aes  IPX Postponed AES Count
    Unsigned 16-bit integer
ncp.ipx_send_pkt    IPX Send Packet Count
    Unsigned 32-bit integer
ncp.items_changed    Items Changed
    Unsigned 32-bit integer
ncp.items_checked    Items Checked
    Unsigned 32-bit integer
ncp.items_count    Items Count
    Unsigned 32-bit integer
ncp.items_in_list    Items in List
    Unsigned 32-bit integer
ncp.items_in_packet  Items in Packet
    Unsigned 32-bit integer
ncp.iter_answer    Iterator Answer
    Boolean
ncp.iter_completion_code  Iteration Completion Code
    Unsigned 32-bit integer
ncp.iter_search    Search Filter
    Unsigned 32-bit integer
ncp.iter_verb_completion_code  Completion Code
    Unsigned 32-bit integer
ncp.itercopy    Iterator Copy
    Unsigned 32-bit integer
```

```
ncp.itercount    Number of Items
                 Unsigned 32-bit integer
ncp.iterdatasize Data Size
                 Unsigned 32-bit integer
ncp.iterindex    Iterator Index
                 Unsigned 32-bit integer
ncp.itermaxentries Maximum Entries
                 Unsigned 32-bit integer
ncp.itermoveposition Move Position
                 Unsigned 32-bit integer
ncp.iternumskipped Number Skipped
                 Unsigned 32-bit integer
ncp.iternumtoget  Number to Get
                 Unsigned 32-bit integer
ncp.iternumtoskip Number to Skip
                 Unsigned 32-bit integer
ncp.iterother     Other Iteration
                 Unsigned 32-bit integer
ncp.iterposition  Iteration Position
                 Unsigned 32-bit integer
ncp.iterpositionable Positionable
                 Boolean
ncp.iterretinfo type Return Information Type
                 Unsigned 32-bit integer
ncp.itertimelimit Time Limit
                 Unsigned 32-bit integer
ncp.job_controll_file_open File Open
                 Boolean
ncp.job_controll_job_recovery Job Recovery
                 Boolean
ncp.job_controll_operator_hold Operator Hold
                 Boolean
ncp.job_controll_reservice ReService Job
                 Boolean
ncp.job_controll_user_hold User Hold
                 Boolean
ncp.job_control_file_open File Open
                 Boolean
ncp.job_control_flags Job Control Flags
                 Unsigned 8-bit integer
ncp.job_control_flags_word Job Control Flags
                 Unsigned 16-bit integer
ncp.job_control_job_recovery Job Recovery
                 Boolean
```

```
ncp.job_control_operator_hold  Operator Hold
    Boolean
ncp.job_control_reservice      ReService Job
    Boolean
ncp.job_control_user_hold      User Hold
    Boolean
ncp.job_count                  Job Count
    Unsigned 32-bit integer
ncp.job_file_handle            Job File Handle
    Byte array
ncp.job_file_handle_long       Job File Handle
    Unsigned 32-bit integer
ncp.job_file_name              Job File Name
    String
ncp.job_number                 Job Number
    Unsigned 16-bit integer
ncp.job_number_long            Job Number
    Unsigned 32-bit integer
ncp.job_position               Job Position
    Unsigned 8-bit integer
ncp.job_position_word          Job Position
    Unsigned 16-bit integer
ncp.job_type                   Job Type
    Unsigned 16-bit integer
ncp.lan_driver_number          LAN Driver Number
    Unsigned 8-bit integer
ncp.lan_drv_bd_inst            LAN Driver Board Instance
    Unsigned 16-bit integer
ncp.lan_drv_bd_num             LAN Driver Board Number
    Unsigned 16-bit integer
ncp.lan_drv_card_id            LAN Driver Card ID
    Unsigned 16-bit integer
ncp.lan_drv_card_name          LAN Driver Card Name
    String
ncp.lan_drv_dma_usage1         Primary DMA Channel
    Unsigned 8-bit integer
ncp.lan_drv_dma_usage2         Secondary DMA Channel
    Unsigned 8-bit integer
ncp.lan_drv_flags              LAN Driver Flags
    Unsigned 16-bit integer
ncp.lan_drv_interrupt1         Primary Interrupt Vector
    Unsigned 8-bit integer
ncp.lan_drv_interrupt2         Secondary Interrupt Vector
    Unsigned 8-bit integer
```



```
ncp.lan_drv_io_ports_and_ranges_1  Primary Base I/O Port
    Unsigned 16-bit integer
ncp.lan_drv_io_ports_and_ranges_2  Number of I/O Ports
    Unsigned 16-bit integer
ncp.lan_drv_io_ports_and_ranges_3  Secondary Base I/O Port
    Unsigned 16-bit integer
ncp.lan_drv_io_ports_and_ranges_4  Number of I/O Ports
    Unsigned 16-bit integer
ncp.lan_drv_io_reserved  LAN Driver IO Reserved
    Byte array
ncp.lan_drv_line_speed  LAN Driver Line Speed
    Unsigned 16-bit integer
ncp.lan_drv_link  LAN Driver Link
    Unsigned 32-bit integer
ncp.lan_drv_log_name  LAN Driver Logical Name
    Byte array
ncp.lan_drv_major_ver  LAN Driver Major Version
    Unsigned 8-bit integer
ncp.lan_drv_max_rcv_size  LAN Driver Maximum Receive Size
    Unsigned 32-bit integer
ncp.lan_drv_max_size  LAN Driver Maximum Size
    Unsigned 32-bit integer
ncp.lan_drv_media_id  LAN Driver Media ID
    Unsigned 16-bit integer
ncp.lan_drv_mem_decode_0  LAN Driver Memory Decode 0
    Unsigned 32-bit integer
ncp.lan_drv_mem_decode_1  LAN Driver Memory Decode 1
    Unsigned 32-bit integer
ncp.lan_drv_mem_length_0  LAN Driver Memory Length 0
    Unsigned 16-bit integer
ncp.lan_drv_mem_length_1  LAN Driver Memory Length 1
    Unsigned 16-bit integer
ncp.lan_drv_minor_ver  LAN Driver Minor Version
    Unsigned 8-bit integer
ncp.lan_drv_rcv_size  LAN Driver Receive Size
    Unsigned 32-bit integer
ncp.lan_drv_reserved  LAN Driver Reserved
    Unsigned 16-bit integer
ncp.lan_drv_share  LAN Driver Sharing Flags
    Unsigned 16-bit integer
ncp.lan_drv_slot  LAN Driver Slot
    Unsigned 16-bit integer
ncp.lan_drv_snd_retries  LAN Driver Send Retries
    Unsigned 16-bit integer
```

```
ncp.lan_drv_src_route  LAN Driver Source Routing
    Unsigned 32-bit integer
ncp.lan_drv_trans_time  LAN Driver Transport Time
    Unsigned 16-bit integer
ncp.lan_dvr_cfg_major_vrs  LAN Driver Config - Major Version
    Unsigned 8-bit integer
ncp.lan_dvr_cfg_minor_vrs  LAN Driver Config - Minor Version
    Unsigned 8-bit integer
ncp.lan_dvr_mode_flags  LAN Driver Mode Flags
    Unsigned 8-bit integer
ncp.lan_dvr_node_addr  LAN Driver Node Address
    Byte array
ncp.large_internet_packets  Large Internet Packets (LIP) Disabled
    Boolean
ncp.last_access_date  Last Accessed Date
    Unsigned 16-bit integer
ncp.last_access_time  Last Accessed Time
    Unsigned 16-bit integer
ncp.last_garbage_collect  Last Garbage Collection
    Unsigned 32-bit integer
ncp.last_instance  Last Instance
    Unsigned 32-bit integer
ncp.last_record_seen  Last Record Seen
    Unsigned 16-bit integer
ncp.last_search_index  Search Index
    Unsigned 16-bit integer
ncp.last_seen  Last Seen
    Unsigned 32-bit integer
ncp.last_sequence_number  Sequence Number
    Unsigned 16-bit integer
ncp.last_time_rx_buff_was_alloc  Last Time a Receive Buffer was Allocated
    Unsigned 32-bit integer
ncp.length  Packet Length
    Unsigned 16-bit integer
ncp.length_64bit  64bit Length
    Byte array
ncp.level  Level
    Unsigned 8-bit integer
ncp.lfs_counters  LFS Counters
    Unsigned 32-bit integer
ncp.limb_count  Limb Count
    Unsigned 32-bit integer
ncp.limb_flags  Limb Flags
    Unsigned 32-bit integer
```

```
ncp.limb_scan_num  Limb Scan Number
    Unsigned 32-bit integer
ncp.limbo_data_streams_count  Limbo Data Streams Count
    Unsigned 32-bit integer
ncp.limbo_used  Limbo Used
    Unsigned 32-bit integer
ncp.lip_echo  Large Internet Packet Echo
    String
ncp.loaded_name_spaces  Loaded Name Spaces
    Unsigned 8-bit integer
ncp.local_connection_id  Local Connection ID
    Unsigned 32-bit integer
ncp.local_login_info_ccode  Local Login Info C Code
    Unsigned 8-bit integer
ncp.local_max_packet_size  Local Max Packet Size
    Unsigned 32-bit integer
ncp.local_max_recv_size  Local Max Recv Size
    Unsigned 32-bit integer
ncp.local_max_send_size  Local Max Send Size
    Unsigned 32-bit integer
ncp.local_target_socket  Local Target Socket
    Unsigned 32-bit integer
ncp.lock_area_len  Lock Area Length
    Unsigned 32-bit integer
ncp.lock_areas_start_offset  Lock Areas Start Offset
    Unsigned 32-bit integer
ncp.lock_flag  Lock Flag
    Unsigned 8-bit integer
ncp.lock_name  Lock Name
    String
ncp.lock_status  Lock Status
    Unsigned 8-bit integer
ncp.lock_timeout  Lock Timeout
    Unsigned 16-bit integer
ncp.lock_type  Lock Type
    Unsigned 8-bit integer
ncp.locked  Locked Flag
    Unsigned 8-bit integer
ncp.log_file_flag_high  Log File Flag (byte 2)
    Unsigned 8-bit integer
ncp.log_file_flag_low  Log File Flag
    Unsigned 8-bit integer
ncp.log_flag_call_back  Call Back Requested
    Boolean
```

```
ncp.log_flag_lock_file  Lock File Immediately
                          Boolean
ncp.log_ttl_rx_pkts    Total Received Packets
                          Unsigned 32-bit integer
ncp.log_ttl_tx_pkts    Total Transmitted Packets
                          Unsigned 32-bit integer
ncp.logged_count       Logged Count
                          Unsigned 16-bit integer
ncp.logged_object_id   Logged in Object ID
                          Unsigned 32-bit integer
ncp.logical_connection_number Logical Connection Number
                          Unsigned 16-bit integer
ncp.logical_drive_count Logical Drive Count
                          Unsigned 8-bit integer
ncp.logical_drive_number Logical Drive Number
                          Unsigned 8-bit integer
ncp.logical_lock_threshold LogicalLockThreshold
                          Unsigned 8-bit integer
ncp.logical_record_name Logical Record Name
                          String
ncp.login_expiration_time Login Expiration Time
                          Unsigned 32-bit integer
ncp.login_key          Login Key
                          Byte array
ncp.login_name         Login Name
                          String
ncp.long_name          Long Name
                          String
ncp.lru_block_was_dirty LRU Block Was Dirty
                          Unsigned 16-bit integer
ncp.lru_sit_time       LRU Sitting Time
                          Unsigned 32-bit integer
ncp.mac_attr           Attributes
                          Unsigned 16-bit integer
ncp.mac_attr_archive   Archive
                          Boolean
ncp.mac_attr_execute_only Execute Only
                          Boolean
ncp.mac_attr_hidden    Hidden
                          Boolean
ncp.mac_attr_index     Index
                          Boolean
ncp.mac_attr_r_audit   Read Audit
                          Boolean
```

```
ncp.mac_attr_r_only  Read Only
  Boolean
ncp.mac_attr_share  Shareable File
  Boolean
ncp.mac_attr_smodel  Search Mode
  Boolean
ncp.mac_attr_smode2  Search Mode
  Boolean
ncp.mac_attr_smode3  Search Mode
  Boolean
ncp.mac_attr_subdirectory  Subdirectory
  Boolean
ncp.mac_attr_system  System
  Boolean
ncp.mac_attr_transaction  Transaction
  Boolean
ncp.mac_attr_w_audit  Write Audit
  Boolean
ncp.mac_backup_date  Mac Backup Date
  Unsigned 16-bit integer
ncp.mac_backup_time  Mac Backup Time
  Unsigned 16-bit integer
ncp.mac_base_directory_id  Mac Base Directory ID
  Unsigned 32-bit integer
ncp.mac_create_date  Mac Create Date
  Unsigned 16-bit integer
ncp.mac_create_time  Mac Create Time
  Unsigned 16-bit integer
ncp.mac_destination_base_id  Mac Destination Base ID
  Unsigned 32-bit integer
ncp.mac_finder_info  Mac Finder Information
  Byte array
ncp.mac_last_seen_id  Mac Last Seen ID
  Unsigned 32-bit integer
ncp.mac_root_ids  MAC Root IDs
  Unsigned 32-bit integer
ncp.mac_source_base_id  Mac Source Base ID
  Unsigned 32-bit integer
ncp.major_version  Major Version
  Unsigned 32-bit integer
ncp.map_hash_node_count  Map Hash Node Count
  Unsigned 32-bit integer
ncp.max_byte_cnt  Maximum Byte Count
  Unsigned 32-bit integer
```

ncp.max\_bytes Maximum Number of Bytes  
Unsigned 16-bit integer

ncp.max\_data\_streams Maximum Data Streams  
Unsigned 32-bit integer

ncp.max\_dir\_depth Maximum Directory Depth  
Unsigned 32-bit integer

ncp.max\_dirty\_time Maximum Dirty Time  
Unsigned 32-bit integer

ncp.max\_num\_of\_conn Maximum Number of Connections  
Unsigned 32-bit integer

ncp.max\_num\_of\_dir\_cache\_buff Maximum Number Of Directory Cache Buffers  
Unsigned 32-bit integer

ncp.max\_num\_of\_lans Maximum Number Of LAN's  
Unsigned 32-bit integer

ncp.max\_num\_of\_media\_types Maximum Number of Media Types  
Unsigned 32-bit integer

ncp.max\_num\_of\_medias Maximum Number Of Media's  
Unsigned 32-bit integer

ncp.max\_num\_of\_nme\_sps Maximum Number Of Name Spaces  
Unsigned 32-bit integer

ncp.max\_num\_of\_protocols Maximum Number of Protocols  
Unsigned 32-bit integer

ncp.max\_num\_of\_spool\_pr Maximum Number Of Spool Printers  
Unsigned 32-bit integer

ncp.max\_num\_of\_stacks Maximum Number Of Stacks  
Unsigned 32-bit integer

ncp.max\_num\_of\_users Maximum Number Of Users  
Unsigned 32-bit integer

ncp.max\_num\_of\_vol Maximum Number of Volumes  
Unsigned 32-bit integer

ncp.max\_phy\_packet\_size Maximum Physical Packet Size  
Unsigned 32-bit integer

ncp.max\_read\_data\_reply\_size Max Read Data Reply Size  
Unsigned 16-bit integer

ncp.max\_reply\_obj\_id\_count Max Reply Object ID Count  
Unsigned 8-bit integer

ncp.max\_space Maximum Space  
Unsigned 16-bit integer

ncp.maxspace Maximum Space  
Unsigned 32-bit integer

ncp.may\_had\_out\_of\_order Maybe Had Out Of Order Writes Count  
Unsigned 32-bit integer

ncp.media\_list Media List  
Unsigned 32-bit integer

```
ncp.media_list_count  Media List Count
    Unsigned 32-bit integer
ncp.media_name        Media Name
    String
ncp.media_number      Media Number
    Unsigned 32-bit integer
ncp.media_object_type Object Type
    Unsigned 8-bit integer
ncp.member_name       Member Name
    String
ncp.member_type       Member Type
    Unsigned 16-bit integer
ncp.message_language  NLM Language
    Unsigned 32-bit integer
ncp.migrated_files    Migrated Files
    Unsigned 32-bit integer
ncp.migrated_sectors  Migrated Sectors
    Unsigned 32-bit integer
ncp.min_cache_report_thresh  Minimum Cache Report Threshold
    Unsigned 32-bit integer
ncp.min_nds_version   Minimum NDS Version
    Unsigned 32-bit integer
ncp.min_num_of_cache_buff  Minimum Number Of Cache Buffers
    Unsigned 32-bit integer
ncp.min_num_of_dir_cache_buff  Minimum Number Of Directory Cache Buffers
    Unsigned 32-bit integer
ncp.min_time_since_file_delete  Minimum Time Since File Delete
    Unsigned 32-bit integer
ncp.minor_version     Minor Version
    Unsigned 32-bit integer
ncp.missing_data_count  Missing Data Count
    Unsigned 16-bit integer
    Number of bytes of missing data
ncp.missing_data_offset  Missing Data Offset
    Unsigned 32-bit integer
    Offset of beginning of missing data
ncp.missing_fraglist_count  Missing Fragment List Count
    Unsigned 16-bit integer
    Number of missing fragments reported
ncp.mixed_mode_path_flag  Mixed Mode Path Flag
    Unsigned 8-bit integer
ncp.modified_counter    Modified Counter
    Unsigned 32-bit integer
ncp.modified_date       Modified Date
    Unsigned 16-bit integer
```

```
ncp.modified_time    Modified Time
                    Unsigned 16-bit integer
ncp.modifier_id      Modifier ID
                    Unsigned 32-bit integer
ncp.modify_dos_create  Creator ID
                    Boolean
ncp.modify_dos_delete  Archive Date
                    Boolean
ncp.modify_dos_info_mask  Modify DOS Info Mask
                    Unsigned 16-bit integer
ncp.modify_dos_inheritance  Inheritance
                    Boolean
ncp.modify_dos_laccess  Last Access
                    Boolean
ncp.modify_dos_max_space  Maximum Space
                    Boolean
ncp.modify_dos_mdate  Modify Date
                    Boolean
ncp.modify_dos_mid  Modifier ID
                    Boolean
ncp.modify_dos_mtime  Modify Time
                    Boolean
ncp.modify_dos_open  Creation Time
                    Boolean
ncp.modify_dos_parent  Archive Time
                    Boolean
ncp.modify_dos_read  Attributes
                    Boolean
ncp.modify_dos_search  Archiver ID
                    Boolean
ncp.modify_dos_write  Creation Date
                    Boolean
ncp.more_flag  More Flag
                    Unsigned 8-bit integer
ncp.more_properties  More Properties
                    Unsigned 8-bit integer
ncp.move_cache_node  Move Cache Node Count
                    Unsigned 32-bit integer
ncp.move_cache_node_from_avai  Move Cache Node From Avail Count
                    Unsigned 32-bit integer
ncp.moved_the_ack_bit_dn  Moved The ACK Bit Down Count
                    Unsigned 32-bit integer
ncp.msg_flag  Broadcast Message Flag
                    Unsigned 8-bit integer
```



```
ncp.mv_string  Attribute Name
               String
ncp.name       Name
               String
ncp.name12     Name
               String
ncp.name_len   Name Space Length
               Unsigned 8-bit integer
ncp.name_length Name Length
               Unsigned 8-bit integer
ncp.name_list  Name List
               Unsigned 32-bit integer
ncp.name_space Name Space
               Unsigned 8-bit integer
ncp.name_space_name Name Space Name
               String
ncp.name_type  nameType
               Unsigned 32-bit integer
ncp.ncompletion_code Completion Code
               Unsigned 32-bit integer
ncp.ncp_data_size NCP Data Size
               Unsigned 32-bit integer
ncp.ncp_encoded_strings NCP Encoded Strings
               Boolean
ncp.ncp_encoded_strings_bits NCP Encoded Strings Bits
               Unsigned 32-bit integer
ncp.ncp_extension_major_version NCP Extension Major Version
               Unsigned 8-bit integer
ncp.ncp_extension_minor_version NCP Extension Minor Version
               Unsigned 8-bit integer
ncp.ncp_extension_name NCP Extension Name
               String
ncp.ncp_extension_number NCP Extension Number
               Unsigned 32-bit integer
ncp.ncp_extension_numbers NCP Extension Numbers
               Unsigned 32-bit integer
ncp.ncp_extension_revision_number NCP Extension Revision Number
               Unsigned 8-bit integer
ncp.ncp_peak_sta_in_use Peak Number of Connections since Server was brought up
               Unsigned 32-bit integer
ncp.ncp_sta_in_use Number of Workstations Connected to Server
               Unsigned 32-bit integer
ncp.ndirty_blocks Number of Dirty Blocks
               Unsigned 32-bit integer
```

```
ncp.nds_acflags  Attribute Constraint Flags
    Unsigned 32-bit integer
ncp.nds_acl_add  Access Control Lists to Add
    Unsigned 32-bit integer
ncp.nds_acl_del  Access Control Lists to Delete
    Unsigned 32-bit integer
ncp.nds_add_delete_self  Add/Delete Self?
    Boolean
ncp.nds_add_entry  Add Entry?
    Boolean
ncp.nds_all_attr  All Attributes
    Unsigned 32-bit integer
    Return all Attributes?
ncp.nds_asn1  ASN.1 ID
    Byte array
ncp.nds_att_add  Attribute to Add
    Unsigned 32-bit integer
ncp.nds_att_del  Attribute to Delete
    Unsigned 32-bit integer
ncp.nds_attribute_dn  Attribute Name
    String
ncp.nds_attributes  Attributes
    Unsigned 32-bit integer
ncp.nds_base  Base Class
    String
ncp.nds_base_class  Base Class
    String
ncp.nds_bit1  Typeless
    Boolean
ncp.nds_bit10  Not Defined
    Boolean
ncp.nds_bit11  Not Defined
    Boolean
ncp.nds_bit12  Not Defined
    Boolean
ncp.nds_bit13  Not Defined
    Boolean
ncp.nds_bit14  Not Defined
    Boolean
ncp.nds_bit15  Not Defined
    Boolean
ncp.nds_bit16  Not Defined
    Boolean
ncp.nds_bit2  All Containers
    Boolean
```

```
ncp.nds_bit3    Slashed
                Boolean
ncp.nds_bit4    Dotted
                Boolean
ncp.nds_bit5    Tuned
                Boolean
ncp.nds_bit6    Not Defined
                Boolean
ncp.nds_bit7    Not Defined
                Boolean
ncp.nds_bit8    Not Defined
                Boolean
ncp.nds_bit9    Not Defined
                Boolean
ncp.nds_browse_entry  Browse Entry?
                Boolean
ncp.nds_cflags  Class Flags
                Unsigned 32-bit integer
ncp.nds_child_part_id  Child Partition Root ID
                Unsigned 32-bit integer
ncp.nds_class_def_type  Class Definition Type
                String
ncp.nds_class_filter  Class Filter
                String
ncp.nds_classes  Classes
                Unsigned 32-bit integer
ncp.nds_comm_trans  Communications Transport
                Unsigned 32-bit integer
ncp.nds_compare_attributes  Compare Attributes?
                Boolean
ncp.nds_compare_results  Compare Results
                String
ncp.nds_crc      CRC
                Unsigned 32-bit integer
ncp.nds_crt_time  Agent Create Time
                Date/Time stamp
ncp.nds_delete_entry  Delete Entry?
                Boolean
ncp.nds_delim    Delimiter
                String
ncp.nds_depth    Distance object is from Root
                Unsigned 32-bit integer
ncp.nds_deref_base  Dereference Base Class
                String
```

```
ncp.nds_ds_time  DS Time
    Date/Time stamp
ncp.nds_eflags  Entry Flags
    Unsigned 32-bit integer
ncp.nds_eid  NDS EID
    Unsigned 32-bit integer
ncp.nds_entry_info  Entry Information
    Unsigned 32-bit integer
ncp.nds_entry_privilege_not_defined  Privilege Not Defined
    Boolean
ncp.nds_es  Input Entry Specifier
    Unsigned 32-bit integer
ncp.nds_es_rdn_count  RDN Count
    Unsigned 32-bit integer
ncp.nds_es_seconds  Seconds
    Date/Time stamp
ncp.nds_es_type  Entry Specifier Type
    String
ncp.nds_es_value  Entry Specifier Value
    Unsigned 32-bit integer
ncp.nds_event_num  Event Number
    Unsigned 16-bit integer
ncp.nds_file_handle  File Handle
    Unsigned 32-bit integer
ncp.nds_file_size  File Size
    Unsigned 32-bit integer
ncp.nds_flags  NDS Return Flags
    Unsigned 32-bit integer
ncp.nds_info_type  Info Type
    String
ncp.nds_inheritance_control  Inheritance?
    Boolean
ncp.nds_iteration  Iteration Handle
    Unsigned 32-bit integer
ncp.nds_iterator  Iterator
    Unsigned 32-bit integer
ncp.nds_keep  Delete Original RDN
    Boolean
ncp.nds_letter_ver  Letter Version
    Unsigned 32-bit integer
ncp.nds_lic_flags  License Flags
    Unsigned 32-bit integer
ncp.nds_local_partition  Local Partition ID
    Unsigned 32-bit integer
```

```
ncp.nds_lower Lower Limit Value
  Unsigned 32-bit integer
ncp.nds_master_part_id Master Partition Root ID
  Unsigned 32-bit integer
ncp.nds_name Name
  String
ncp.nds_name_filter Name Filter
  String
ncp.nds_name_type Name Type
  String
ncp.nds_nested_out_es Nested Output Entry Specifier Type
  Unsigned 32-bit integer
ncp.nds_new_part_id New Partition Root ID
  Unsigned 32-bit integer
ncp.nds_new_rdn New Relative Distinguished Name
  String
ncp.nds_nflags Flags
  Unsigned 32-bit integer
ncp.nds_num_objects Number of Objects to Search
  Unsigned 32-bit integer
ncp.nds_number_of_changes Number of Attribute Changes
  Unsigned 32-bit integer
ncp.nds_oid Object ID
  Byte array
ncp.nds_os_majver OS Major Version
  Unsigned 32-bit integer
ncp.nds_os_minver OS Minor Version
  Unsigned 32-bit integer
ncp.nds_out_delimiter Output Delimiter
  String
ncp.nds_out_es Output Entry Specifier
  Unsigned 32-bit integer
ncp.nds_out_es_type Output Entry Specifier Type
  Unsigned 32-bit integer
ncp.nds_parent Parent ID
  Unsigned 32-bit integer
ncp.nds_parent_dn Parent Distinguished Name
  String
ncp.nds_partition_busy Partition Busy
  Boolean
ncp.nds_partition_root_id Partition Root ID
  Unsigned 32-bit integer
ncp.nds_ping_version Ping Version
  Unsigned 32-bit integer
```

```
ncp.nds_privilege_not_defined  Privilege Not defined
    Boolean
ncp.nds_privileges  Privileges
    Unsigned 32-bit integer
ncp.nds_prot_bit1  Not Defined
    Boolean
ncp.nds_prot_bit10  Not Defined
    Boolean
ncp.nds_prot_bit11  Not Defined
    Boolean
ncp.nds_prot_bit12  Not Defined
    Boolean
ncp.nds_prot_bit13  Not Defined
    Boolean
ncp.nds_prot_bit14  Not Defined
    Boolean
ncp.nds_prot_bit15  Include CRC in NDS Header
    Boolean
ncp.nds_prot_bit16  Client is a Server
    Boolean
ncp.nds_prot_bit2  Not Defined
    Boolean
ncp.nds_prot_bit3  Not Defined
    Boolean
ncp.nds_prot_bit4  Not Defined
    Boolean
ncp.nds_prot_bit5  Not Defined
    Boolean
ncp.nds_prot_bit6  Not Defined
    Boolean
ncp.nds_prot_bit7  Not Defined
    Boolean
ncp.nds_prot_bit8  Not Defined
    Boolean
ncp.nds_prot_bit9  Not Defined
    Boolean
ncp.nds_purge  Purge Time
    Date/Time stamp
ncp.nds_rdn  RDN
    String
ncp.nds_read_attribute  Read Attribute?
    Boolean
ncp.nds_referrals  Referrals
    Unsigned 32-bit integer
```

```
ncp.nds_relative_dn  Relative Distinguished Name
  String
ncp.nds_rename_entry  Rename Entry?
  Boolean
ncp.nds_replica_num  Replica Number
  Unsigned 16-bit integer
ncp.nds_replicas  Replicas
  Unsigned 32-bit integer
ncp.nds_reply_buf  NDS Reply Buffer Size
  Unsigned 32-bit integer
ncp.nds_req_flags  Request Flags
  Unsigned 32-bit integer
ncp.nds_request_flags  NDS Request Flags
  Unsigned 16-bit integer
ncp.nds_request_flags_alias_ref  Alias Referral
  Boolean
ncp.nds_request_flags_dn_ref  Down Referral
  Boolean
ncp.nds_request_flags_local_entry  Local Entry
  Boolean
ncp.nds_request_flags_no_such_entry  No Such Entry
  Boolean
ncp.nds_request_flags_output  Output Fields
  Boolean
ncp.nds_request_flags_reply_data_size  Reply Data Size
  Boolean
ncp.nds_request_flags_req_cnt  Request Count
  Boolean
ncp.nds_request_flags_req_data_size  Request Data Size
  Boolean
ncp.nds_request_flags_trans_ref  Transport Referral
  Boolean
ncp.nds_request_flags_trans_ref2  Transport Referral
  Boolean
ncp.nds_request_flags_type_ref  Type Referral
  Boolean
ncp.nds_request_flags_up_ref  Up Referral
  Boolean
ncp.nds_result_flags  Result Flags
  Unsigned 32-bit integer
ncp.nds_return_all_classes  All Classes
  String
  Return all Classes?
ncp.nds_rev_count  Revision Count
  Unsigned 32-bit integer
```

```
ncp.nds_rflags Request Flags
    Unsigned 16-bit integer
ncp.nds_root_dn Root Distinguished Name
    String
ncp.nds_root_name Root Most Object Name
    String
ncp.nds_scope Scope
    Unsigned 32-bit integer
ncp.nds_search_scope Search Scope
    String
ncp.nds_status NDS Status
    Unsigned 32-bit integer
ncp.nds_stream_flags Streams Flags
    Unsigned 32-bit integer
ncp.nds_stream_name Stream Name
    String
ncp.nds_super Super Class
    String
ncp.nds_supervisor Supervisor?
    Boolean
ncp.nds_supervisor_entry Supervisor?
    Boolean
ncp.nds_svr_dist_name Server Distiguished Name
    String
ncp.nds_svr_time Server Time
    Date/Time stamp
ncp.nds_syntax Attribute Syntax
    String
ncp.nds_tags Tags
    String
ncp.nds_target_dn Target Server Name
    String
ncp.nds_time_delay Time Delay
    Unsigned 32-bit integer
ncp.nds_time_filter Time Filter
    Unsigned 32-bit integer
ncp.nds_tree_name Tree Name
    String
ncp.nds_tree_trans Tree Walker Transport
    Unsigned 32-bit integer
ncp.nds_trustee_dn Trustee Distinguished Name
    String
ncp.nds_upper Upper Limit Value
    Unsigned 32-bit integer
```



```
ncp.nds_ver    NDS Version
               Unsigned 32-bit integer
ncp.nds_verb2b_flags  Flags
               Unsigned 32-bit integer
ncp.nds_version  NDS Version
               Unsigned 32-bit integer
ncp.nds_vflags  Value Flags
               Unsigned 32-bit integer
ncp.nds_vlength  Value Length
               Unsigned 32-bit integer
ncp.nds_write_add_delete_attribute  Write, Add, Delete Attribute?
               Boolean
ncp.ndscreatetime  NDS Creation Time
               Date/Time stamp
ncp.ndsdepth  Distance from Root
               Unsigned 32-bit integer
ncp.ndsflag  Flags
               Unsigned 32-bit integer
ncp.ndsflags  Flags
               Unsigned 32-bit integer
ncp.ndsfrag  NDS Fragment Handle
               Unsigned 32-bit integer
ncp.ndsfragsize  NDS Fragment Size
               Unsigned 32-bit integer
ncp.ndsitems  Number of Items
               Unsigned 32-bit integer
ncp.ndsiterobj  Iterator Object
               Unsigned 32-bit integer
ncp.ndsiterverb  NDS Iteration Verb
               Unsigned 32-bit integer
ncp.ndsmessagesize  Message Size
               Unsigned 32-bit integer
ncp.ndsnet  Network
               IPX network or server name
ncp.ndsnode  Node
               6-byte Hardware (MAC) Address
ncp.ndsport  Port
               Unsigned 16-bit integer
ncp.ndsreplyerror  NDS Error
               Unsigned 32-bit integer
ncp.ndsrev  NDS Revision
               Unsigned 32-bit integer
ncp.ndssocket  Socket
               Unsigned 16-bit integer
```

```
ncp.ndstunemark  Tune Mark
  Unsigned 16-bit integer
ncp.ndsverb      NDS Verb
  Unsigned 8-bit integer
ncp.net_id_number Net ID Number
  Unsigned 32-bit integer
ncp.net_status   Network Status
  Unsigned 16-bit integer
ncp.netbios_broadcast_was_propogated  NetBIOS Broadcast Was Propogated
  Unsigned 32-bit integer
ncp.netbios_progated  NetBIOS Propagated Count
  Unsigned 32-bit integer
ncp.netware_access_handle  NetWare Access Handle
  Byte array
ncp.network_address  Network Address
  Unsigned 32-bit integer
ncp.network_node_address  Network Node Address
  Byte array
ncp.network_number  Network Number
  Unsigned 32-bit integer
ncp.network_socket  Network Socket
  Unsigned 16-bit integer
ncp.new_access_rights_create  Create
  Boolean
ncp.new_access_rights_delete  Delete
  Boolean
ncp.new_access_rights_mask  New Access Rights
  Unsigned 16-bit integer
ncp.new_access_rights_modify  Modify
  Boolean
ncp.new_access_rights_open  Open
  Boolean
ncp.new_access_rights_parental  Parental
  Boolean
ncp.new_access_rights_read  Read
  Boolean
ncp.new_access_rights_search  Search
  Boolean
ncp.new_access_rights_supervisor  Supervisor
  Boolean
ncp.new_access_rights_write  Write
  Boolean
ncp.new_directory_id  New Directory ID
  Unsigned 32-bit integer
```

```
ncp.new_ea_handle  New EA Handle
  Unsigned 32-bit integer
ncp.new_file_name  New File Name
  String
ncp.new_file_name_len  New File Name
  String
ncp.new_file_size  New File Size
  Unsigned 32-bit integer
ncp.new_object_name  New Object Name
  String
ncp.new_password  New Password
  String
ncp.new_path  New Path
  String
ncp.new_position  New Position
  Unsigned 8-bit integer
ncp.next_cnt_block  Next Count Block
  Unsigned 32-bit integer
ncp.next_huge_state_info  Next Huge State Info
  Byte array
ncp.next_limb_scan_num  Next Limb Scan Number
  Unsigned 32-bit integer
ncp.next_object_id  Next Object ID
  Unsigned 32-bit integer
ncp.next_record  Next Record
  Unsigned 32-bit integer
ncp.next_request_record  Next Request Record
  Unsigned 16-bit integer
ncp.next_search_index  Next Search Index
  Unsigned 16-bit integer
ncp.next_search_number  Next Search Number
  Unsigned 16-bit integer
ncp.next_starting_number  Next Starting Number
  Unsigned 32-bit integer
ncp.next_trustee_entry  Next Trustee Entry
  Unsigned 32-bit integer
ncp.next_volume_number  Next Volume Number
  Unsigned 32-bit integer
ncp.nlm_count  NLM Count
  Unsigned 32-bit integer
ncp.nlm_flags  Flags
  Unsigned 8-bit integer
ncp.nlm_flags_multiple  Can Load Multiple Times
  Boolean
```

```
ncp.nlm_flags_pseudo  PseudoPreemption
  Boolean
ncp.nlm_flags_reentrant  ReEntrant
  Boolean
ncp.nlm_flags_synchronize  Synchronize Start
  Boolean
ncp.nlm_load_options  NLM Load Options
  Unsigned 32-bit integer
ncp.nlm_name_stringz  NLM Name
  String
ncp.nlm_number  NLM Number
  Unsigned 32-bit integer
ncp.nlm_numbers  NLM Numbers
  Unsigned 32-bit integer
ncp.nlm_start_num  NLM Start Number
  Unsigned 32-bit integer
ncp.nlm_type  NLM Type
  Unsigned 8-bit integer
ncp.nlm_in_list  NLM's in List
  Unsigned 32-bit integer
ncp.no_avail_conns  No Available Connections Count
  Unsigned 32-bit integer
ncp.no_ecb_available_count  No ECB Available Count
  Unsigned 32-bit integer
ncp.no_mem_for_station  No Memory For Station Control Count
  Unsigned 32-bit integer
ncp.no_more_mem_avail  No More Memory Available Count
  Unsigned 32-bit integer
ncp.no_receive_buff  No Receive Buffers
  Unsigned 16-bit integer
ncp.no_space_for_service  No Space For Service
  Unsigned 16-bit integer
ncp.node  Node
  Byte array
ncp.node_flags  Node Flags
  Unsigned 32-bit integer
ncp.non_ded_flag  Non Dedicated Flag
  Boolean
ncp.non_freeable_avail_sub_alloc_sectors  Non Freeable Available Sub Alloc Sectors
  Unsigned 32-bit integer
ncp.non_freeable_limbo_sectors  Non Freeable Limbo Sectors
  Unsigned 32-bit integer
ncp.not_my_network  Not My Network
  Unsigned 16-bit integer
```

```
ncp.not_supported_mask  Bit Counter Supported
                        Boolean

ncp.not_usable_sub_alloc_sectors  Not Usable Sub Alloc Sectors
                        Unsigned 32-bit integer

ncp.not_yet_purgeable_blocks  Not Yet Purgeable Blocks
                        Unsigned 32-bit integer

ncp.ns_info_mask  Names Space Info Mask
                  Unsigned 16-bit integer

ncp.ns_info_mask_acc_date  Access Date
                           Boolean

ncp.ns_info_mask_adata  Archive Date
                         Boolean

ncp.ns_info_mask_aid  Archiver ID
                      Boolean

ncp.ns_info_mask_atime  Archive Time
                        Boolean

ncp.ns_info_mask_cdate  Creation Date
                         Boolean

ncp.ns_info_mask_ctime  Creation Time
                         Boolean

ncp.ns_info_mask_fatt  File Attributes
                       Boolean

ncp.ns_info_mask_max_acc_mask  Inheritance
                                Boolean

ncp.ns_info_mask_max_space  Maximum Space
                              Boolean

ncp.ns_info_mask_modify  Modify Name
                          Boolean

ncp.ns_info_mask_owner  Owner ID
                         Boolean

ncp.ns_info_mask_udelete  Update Date
                           Boolean

ncp.ns_info_mask_uid  Update ID
                       Boolean

ncp.ns_info_mask_utime  Update Time
                         Boolean

ncp.ns_specific_info  Name Space Specific Info
                      String

ncp.num_bytes  Number of Bytes
               Unsigned 16-bit integer

ncp.num_dir_cache_buff  Number Of Directory Cache Buffers
                        Unsigned 32-bit integer

ncp.num_of_active_tasks  Number of Active Tasks
                          Unsigned 8-bit integer
```

ncp.num\_of\_allocs Number of Allocations  
Unsigned 32-bit integer

ncp.num\_of\_cache\_check\_no\_wait Number Of Cache Check No Wait  
Unsigned 32-bit integer

ncp.num\_of\_cache\_checks Number Of Cache Checks  
Unsigned 32-bit integer

ncp.num\_of\_cache\_dirty\_checks Number Of Cache Dirty Checks  
Unsigned 32-bit integer

ncp.num\_of\_cache\_hits Number Of Cache Hits  
Unsigned 32-bit integer

ncp.num\_of\_cache\_hits\_no\_wait Number Of Cache Hits No Wait  
Unsigned 32-bit integer

ncp.num\_of\_cc\_in\_pkt Number of Custom Counters in Packet  
Unsigned 32-bit integer

ncp.num\_of\_checks Number of Checks  
Unsigned 32-bit integer

ncp.num\_of\_dir\_cache\_buff Number Of Directory Cache Buffers  
Unsigned 32-bit integer

ncp.num\_of\_dirty\_cache\_checks Number Of Dirty Cache Checks  
Unsigned 32-bit integer

ncp.num\_of\_entries Number of Entries  
Unsigned 32-bit integer

ncp.num\_of\_files\_migrated Number Of Files Migrated  
Unsigned 32-bit integer

ncp.num\_of\_garb\_coll Number of Garbage Collections  
Unsigned 32-bit integer

ncp.num\_of\_ncp\_reqs Number of NCP Requests since Server was brought up  
Unsigned 32-bit integer

ncp.num\_of\_ref\_publics Number of Referenced Public Symbols  
Unsigned 32-bit integer

ncp.num\_of\_segments Number of Segments  
Unsigned 32-bit integer

ncp.number\_of\_cpus Number of CPU's  
Unsigned 32-bit integer

ncp.number\_of\_data\_streams Number of Data Streams  
Unsigned 16-bit integer

ncp.number\_of\_data\_streams\_long Number of Data Streams  
Unsigned 32-bit integer

ncp.number\_of\_dynamic\_memory\_areas Number Of Dynamic Memory Areas  
Unsigned 16-bit integer

ncp.number\_of\_entries Number of Entries  
Unsigned 8-bit integer

ncp.number\_of\_locks Number of Locks  
Unsigned 8-bit integer

ncp.number\_of\_minutes\_to\_delay Number of Minutes to Delay  
Unsigned 32-bit integer

ncp.number\_of\_ncp\_extensions Number Of NCP Extensions  
Unsigned 32-bit integer

ncp.number\_of\_ns\_loaded Number Of Name Spaces Loaded  
Unsigned 16-bit integer

ncp.number\_of\_protocols Number of Protocols  
Unsigned 8-bit integer

ncp.number\_of\_records Number of Records  
Unsigned 16-bit integer

ncp.number\_of\_semaphores Number Of Semaphores  
Unsigned 16-bit integer

ncp.number\_of\_service\_processes Number Of Service Processes  
Unsigned 8-bit integer

ncp.number\_of\_set\_categories Number Of Set Categories  
Unsigned 32-bit integer

ncp.number\_of\_sms Number Of Storage Medias  
Unsigned 32-bit integer

ncp.number\_of\_stations Number of Stations  
Unsigned 8-bit integer

ncp.nxt\_search\_num Next Search Number  
Unsigned 32-bit integer

ncp.o\_c\_ret\_flags Open Create Return Flags  
Unsigned 8-bit integer

ncp.object\_count Object Count  
Unsigned 32-bit integer

ncp.object\_flags Object Flags  
Unsigned 8-bit integer

ncp.object\_has\_properites Object Has Properties  
Unsigned 8-bit integer

ncp.object\_id Object ID  
Unsigned 32-bit integer

ncp.object\_id\_count Object ID Count  
Unsigned 16-bit integer

ncp.object\_info\_rtn\_count Object Information Count  
Unsigned 32-bit integer

ncp.object\_name Object Name  
String

ncp.object\_name\_len Object Name  
String

ncp.object\_name\_stringz Object Name  
String

ncp.object\_number Object Number  
Unsigned 32-bit integer

```
ncp.object_security  Object Security
    Unsigned 8-bit integer
ncp.object_type      Object Type
    Unsigned 16-bit integer
ncp.old_file_name    Old File Name
    Byte array
ncp.old_file_size    Old File Size
    Unsigned 32-bit integer
ncp.oldest_deleted_file_age_in_ticks  Oldest Deleted File Age in Ticks
    Unsigned 32-bit integer
ncp.open_count       Open Count
    Unsigned 16-bit integer
ncp.open_create_action  Open Create Action
    Unsigned 8-bit integer
ncp.open_create_action_compressed  Compressed
    Boolean
ncp.open_create_action_created  Created
    Boolean
ncp.open_create_action_opened  Opened
    Boolean
ncp.open_create_action_read_only  Read Only
    Boolean
ncp.open_create_action_replaced  Replaced
    Boolean
ncp.open_create_mode  Open Create Mode
    Unsigned 8-bit integer
ncp.open_create_mode_64bit  Open 64-bit Access
    Boolean
ncp.open_create_mode_create  Create new file or subdirectory (file or subdirecto
    Boolean
ncp.open_create_mode_open  Open existing file (file must exist)
    Boolean
ncp.open_create_mode_oplock  Open Callback (Op-Lock)
    Boolean
ncp.open_create_mode_replace  Replace existing file
    Boolean
ncp.open_create_mode_ro  Open with Read Only Access
    Boolean
ncp.open_for_read_count  Open For Read Count
    Unsigned 16-bit integer
ncp.open_for_write_count  Open For Write Count
    Unsigned 16-bit integer
ncp.open_rights  Open Rights
    Unsigned 8-bit integer
```



```
ncp.open_rights_compat  Compatibility
                          Boolean
ncp.open_rights_deny_read  Deny Read
                          Boolean
ncp.open_rights_deny_write  Deny Write
                          Boolean
ncp.open_rights_read_only  Read Only
                          Boolean
ncp.open_rights_write_only  Write Only
                          Boolean
ncp.open_rights_write_thru  File Write Through
                          Boolean
ncp.oplock_handle  File Handle
                  Unsigned 16-bit integer
ncp.option_number  Option Number
                  Unsigned 8-bit integer
ncp.orig_num_cache_buff  Original Number Of Cache Buffers
                  Unsigned 32-bit integer
ncp.original_size  Original Size
                  Unsigned 32-bit integer
ncp.os_language_id  OS Language ID
                  Unsigned 8-bit integer
ncp.os_major_version  OS Major Version
                  Unsigned 8-bit integer
ncp.os_minor_version  OS Minor Version
                  Unsigned 8-bit integer
ncp.os_revision  OS Revision
                  Unsigned 32-bit integer
ncp.other_file_fork_fat  Other File Fork FAT Entry
                  Unsigned 32-bit integer
ncp.other_file_fork_size  Other File Fork Size
                  Unsigned 32-bit integer
ncp.outgoing_packet_discarded_no_turbo_buffer  Outgoing Packet Discarded No Turbo
                  Unsigned 16-bit integer
ncp.outstanding_compression_ios  Outstanding Compression IOs
                  Unsigned 32-bit integer
ncp.outstanding_ios  Outstanding IOs
                  Unsigned 32-bit integer
ncp.pltype  NDS Parameter Type
          Unsigned 8-bit integer
ncp.packet_rs_too_small_count  Receive Packet Too Small Count
                  Unsigned 32-bit integer
ncp.packet_rx_misc_error_count  Receive Packet Misc Error Count
                  Unsigned 32-bit integer
```

ncp.packet\_rx\_overflow\_count Receive Packet Overflow Count  
Unsigned 32-bit integer

ncp.packet\_rx\_too\_big\_count Receive Packet Too Big Count  
Unsigned 32-bit integer

ncp.packet\_seqno Packet Sequence Number  
Unsigned 32-bit integer  
Sequence number of this packet in a burst

ncp.packet\_tx\_misc\_error\_count Transmit Packet Misc Error Count  
Unsigned 32-bit integer

ncp.packet\_tx\_too\_big\_count Transmit Packet Too Big Count  
Unsigned 32-bit integer

ncp.packet\_tx\_too\_small\_count Transmit Packet Too Small Count  
Unsigned 32-bit integer

ncp.packets\_discarded\_by\_hop\_count Packets Discarded By Hop Count  
Unsigned 16-bit integer

ncp.packets\_discarded\_unknown\_net Packets Discarded Unknown Net  
Unsigned 16-bit integer

ncp.packets\_from\_invalid\_connection Packets From Invalid Connection  
Unsigned 16-bit integer

ncp.packets\_received\_during\_processing Packets Received During Processing  
Unsigned 16-bit integer

ncp.packets\_with\_bad\_request\_type Packets With Bad Request Type  
Unsigned 16-bit integer

ncp.packets\_with\_bad\_sequence\_number Packets With Bad Sequence Number  
Unsigned 16-bit integer

ncp.page\_table\_owner\_flag Page Table Owner  
Unsigned 32-bit integer

ncp.parent\_base\_id Parent Base ID  
Unsigned 32-bit integer

ncp.parent\_directory\_base Parent Directory Base  
Unsigned 32-bit integer

ncp.parent\_dos\_directory\_base Parent DOS Directory Base  
Unsigned 32-bit integer

ncp.parent\_id Parent ID  
Unsigned 32-bit integer

ncp.parent\_object\_number Parent Object Number  
Unsigned 32-bit integer

ncp.password Password  
String

ncp.path Path  
String

ncp.path16 Path  
String

ncp.path\_and\_name Path and Name  
String

```
ncp.path_base      Path Base
                   Unsigned 8-bit integer
ncp.path_component_count  Path Component Count
                   Unsigned 16-bit integer
ncp.path_component_size  Path Component Size
                   Unsigned 16-bit integer
ncp.path_cookie_flags  Path Cookie Flags
                   Unsigned 16-bit integer
ncp.path_count     Path Count
                   Unsigned 8-bit integer
ncp.pending_io_commands  Pending IO Commands
                   Unsigned 16-bit integer
ncp.percent_of_vol_used_by_dirs  Percent Of Volume Used By Directories
                   Unsigned 32-bit integer
ncp.physical_disk_channel  Physical Disk Channel
                   Unsigned 8-bit integer
ncp.physical_disk_number  Physical Disk Number
                   Unsigned 8-bit integer
ncp.physical_drive_count  Physical Drive Count
                   Unsigned 8-bit integer
ncp.physical_drive_type  Physical Drive Type
                   Unsigned 8-bit integer
ncp.physical_lock_threshold  Physical Lock Threshold
                   Unsigned 8-bit integer
ncp.physical_read_errors  Physical Read Errors
                   Unsigned 16-bit integer
ncp.physical_read_requests  Physical Read Requests
                   Unsigned 32-bit integer
ncp.physical_write_errors  Physical Write Errors
                   Unsigned 16-bit integer
ncp.physical_write_requests  Physical Write Requests
                   Unsigned 32-bit integer
ncp.ping_version   NDS Version
                   Unsigned 16-bit integer
ncp.poll_abort_conn  Poller Aborted The Connection Count
                   Unsigned 32-bit integer
ncp.poll_rem_old_out_of_order  Poller Removed Old Out Of Order Count
                   Unsigned 32-bit integer
ncp.pool_name      Pool Name
                   String
ncp.positive_acknowledges_sent  Positive Acknowledges Sent
                   Unsigned 16-bit integer
ncp.post_poned_events  Postponed Events
                   Unsigned 32-bit integer
```

```
ncp.pre_compressed_sectors  Precompressed Sectors
    Unsigned 32-bit integer
ncp.previous_control_packet  Previous Control Packet Count
    Unsigned 32-bit integer
ncp.previous_record  Previous Record
    Unsigned 32-bit integer
ncp.primary_entry  Primary Entry
    Unsigned 32-bit integer
ncp.print_flags  Print Flags
    Unsigned 8-bit integer
ncp.print_flags_banner  Print Banner Page
    Boolean
ncp.print_flags_cr  Create
    Boolean
ncp.print_flags_del_spool  Delete Spool File after Printing
    Boolean
ncp.print_flags_exp_tabs  Expand Tabs in the File
    Boolean
ncp.print_flags_ff  Suppress Form Feeds
    Boolean
ncp.print_server_version  Print Server Version
    Unsigned 8-bit integer
ncp.print_to_file_flag  Print to File Flag
    Boolean
ncp.printer_halted  Printer Halted
    Unsigned 8-bit integer
ncp.printer_offline  Printer Off-Line
    Unsigned 8-bit integer
ncp.priority  Priority
    Unsigned 32-bit integer
ncp.privileges  Login Privileges
    Unsigned 32-bit integer
ncp.pro_dos_info  Pro DOS Info
    Byte array
ncp.processor_type  Processor Type
    Unsigned 8-bit integer
ncp.product_major_version  Product Major Version
    Unsigned 16-bit integer
ncp.product_minor_version  Product Minor Version
    Unsigned 16-bit integer
ncp.product_revision_version  Product Revision Version
    Unsigned 8-bit integer
ncp.projected_comp_size  Projected Compression Size
    Unsigned 32-bit integer
```

```
ncp.property_data    Property Data
    Byte array
ncp.property_has_more_segments  Property Has More Segments
    Unsigned 8-bit integer
ncp.property_name    Property Name
    String
ncp.property_name_16  Property Name
    String
ncp.property_segment  Property Segment
    Unsigned 8-bit integer
ncp.property_type    Property Type
    Unsigned 8-bit integer
ncp.property_value    Property Value
    String
ncp.proposed_max_size  Proposed Max Size
    Unsigned 16-bit integer
ncp.protocol_board_num  Protocol Board Number
    Unsigned 32-bit integer
ncp.protocol_flags    Protocol Flags
    Unsigned 32-bit integer
ncp.protocol_id      Protocol ID
    Byte array
ncp.protocol_name    Protocol Name
    String
ncp.protocol_number  Protocol Number
    Unsigned 16-bit integer
ncp.purge_c_code    Purge Completion Code
    Unsigned 32-bit integer
ncp.purge_count    Purge Count
    Unsigned 32-bit integer
ncp.purge_flags    Purge Flags
    Unsigned 16-bit integer
ncp.purge_list    Purge List
    Unsigned 32-bit integer
ncp.purgeable_blocks  Purgeable Blocks
    Unsigned 32-bit integer
ncp.qms_version    QMS Version
    Unsigned 8-bit integer
ncp.queue_id      Queue ID
    Unsigned 32-bit integer
ncp.queue_name    Queue Name
    String
ncp.queue_start_position  Queue Start Position
    Unsigned 32-bit integer
```

```
ncp.queue_status  Queue Status
    Unsigned 8-bit integer
ncp.queue_status_new_jobs  Operator does not want to add jobs to the queue
    Boolean
ncp.queue_status_pserver  Operator does not want additional servers attaching
    Boolean
ncp.queue_status_svc_jobs  Operator does not want servers to service jobs
    Boolean
ncp.queue_type  Queue Type
    Unsigned 16-bit integer
ncp.r_tag_num  Resource Tag Number
    Unsigned 32-bit integer
ncp.re_mirror_current_offset  ReMirror Current Offset
    Unsigned 32-bit integer
ncp.re_mirror_drive_number  ReMirror Drive Number
    Unsigned 8-bit integer
ncp.read_beyond_write  Read Beyond Write
    Unsigned 16-bit integer
ncp.read_exist_blk  Read Existing Block Count
    Unsigned 32-bit integer
ncp.read_exist_part_read  Read Existing Partial Read Count
    Unsigned 32-bit integer
ncp.read_exist_read_err  Read Existing Read Error Count
    Unsigned 32-bit integer
ncp.read_exist_write_wait  Read Existing Write Wait Count
    Unsigned 32-bit integer
ncp.realloc_slot  Re-Allocate Slot Count
    Unsigned 32-bit integer
ncp.realloc_slot_came_too_soon  Re-Allocate Slot Came Too Soon Count
    Unsigned 32-bit integer
ncp.rec_lock_count  Record Lock Count
    Unsigned 16-bit integer
ncp.record_end  Record End
    Unsigned 32-bit integer
ncp.record_in_use  Record in Use
    Unsigned 16-bit integer
ncp.record_start  Record Start
    Unsigned 32-bit integer
ncp.redirected_printer  Redirected Printer
    Unsigned 8-bit integer
ncp.reexecute_request  Re-Execute Request Count
    Unsigned 32-bit integer
ncp.ref_addcount  Address Count
    Unsigned 32-bit integer
```

```
ncp.ref_rec Referral Record
  Unsigned 32-bit integer
ncp.reference_count Reference Count
  Unsigned 32-bit integer
ncp.relationships_count Relations Count
  Unsigned 16-bit integer
ncp.rem_cache_node Remove Cache Node Count
  Unsigned 32-bit integer
ncp.rem_cache_node_from_avail Remove Cache Node From Avail Count
  Unsigned 32-bit integer
ncp.remote_max_packet_size Remote Max Packet Size
  Unsigned 32-bit integer
ncp.remote_target_id Remote Target ID
  Unsigned 32-bit integer
ncp.removable_flag Removable Flag
  Unsigned 16-bit integer
ncp.remove_open_rights Remove Open Rights
  Unsigned 8-bit integer
ncp.remove_open_rights_comp Compatibility
  Boolean
ncp.remove_open_rights_dr Deny Read
  Boolean
ncp.remove_open_rights_dw Deny Write
  Boolean
ncp.remove_open_rights_ro Read Only
  Boolean
ncp.remove_open_rights_wo Write Only
  Boolean
ncp.remove_open_rights_write_thru Write Through
  Boolean
ncp.rename_flag Rename Flag
  Unsigned 8-bit integer
ncp.rename_flag_comp Compatability allows files that are marked read only to be
  Boolean
ncp.rename_flag_no Name Only renames only the specified name space entry name
  Boolean
ncp.rename_flag_ren Rename to Myself allows file to be renamed to it's original
  Boolean
ncp.replies_cancelled Replies Cancelled
  Unsigned 16-bit integer
ncp.reply_canceled Reply Canceled Count
  Unsigned 32-bit integer
ncp.reply_queue_job_numbers Reply Queue Job Numbers
  Unsigned 32-bit integer
```

```
ncp.req_frame_num  Response to Request in Frame Number
  Frame number
ncp.request_bit_map  Request Bit Map
  Unsigned 16-bit integer
ncp.request_bit_map_ratt  Return Attributes
  Boolean
ncp.request_bit_map_ret_acc_date  Access Date
  Boolean
ncp.request_bit_map_ret_acc_priv  Access Privileges
  Boolean
ncp.request_bit_map_ret_afp_ent  AFP Entry ID
  Boolean
ncp.request_bit_map_ret_afp_parent  AFP Parent Entry ID
  Boolean
ncp.request_bit_map_ret_bak_date  Backup Date&Time
  Boolean
ncp.request_bit_map_ret_cr_date  Creation Date
  Boolean
ncp.request_bit_map_ret_data_fork  Data Fork Length
  Boolean
ncp.request_bit_map_ret_finder  Finder Info
  Boolean
ncp.request_bit_map_ret_long_nm  Long Name
  Boolean
ncp.request_bit_map_ret_mod_date  Modify Date&Time
  Boolean
ncp.request_bit_map_ret_num_off  Number of Offspring
  Boolean
ncp.request_bit_map_ret_owner  Owner ID
  Boolean
ncp.request_bit_map_ret_res_fork  Resource Fork Length
  Boolean
ncp.request_bit_map_ret_short  Short Name
  Boolean
ncp.request_code  Request Code
  Unsigned 8-bit integer
ncp.requests_reprocessed  Requests Reprocessed
  Unsigned 16-bit integer
ncp.reserved  Reserved
  Unsigned 8-bit integer
ncp.reserved10  Reserved
  Byte array
ncp.reserved12  Reserved
  Byte array
```



```
ncp.reserved120  Reserved
                 Byte array
ncp.reserved16   Reserved
                 Byte array
ncp.reserved2    Reserved
                 Byte array
ncp.reserved20   Reserved
                 Byte array
ncp.reserved28   Reserved
                 Byte array
ncp.reserved3    Reserved
                 Byte array
ncp.reserved36   Reserved
                 Byte array
ncp.reserved4    Reserved
                 Byte array
ncp.reserved44   Reserved
                 Byte array
ncp.reserved48   Reserved
                 Byte array
ncp.reserved5    Reserved
                 Byte array
ncp.reserved50   Reserved
                 Byte array
ncp.reserved56   Reserved
                 Byte array
ncp.reserved6    Reserved
                 Byte array
ncp.reserved64   Reserved
                 Byte array
ncp.reserved8    Reserved
                 Byte array
ncp.reserved_or_directory_number  Reserved or Directory Number (see EAFlags)
                                   Unsigned 32-bit integer
ncp.resource_count  Resource Count
                   Unsigned 32-bit integer
ncp.resource_fork_len  Resource Fork Len
                       Unsigned 32-bit integer
ncp.resource_fork_size  Resource Fork Size
                        Unsigned 32-bit integer
ncp.resource_name  Resource Name
                  String
ncp.resource_sig  Resource Signature
                 String
```

```
ncp.restore_time  Restore Time
    Unsigned 32-bit integer
ncp.restriction  Disk Space Restriction
    Unsigned 32-bit integer
ncp.restrictions_enforced  Disk Restrictions Enforce Flag
    Unsigned 8-bit integer
ncp.ret_info_mask  Return Information
    Unsigned 16-bit integer
ncp.ret_info_mask_actual  Return Actual Information
    Boolean
ncp.ret_info_mask_alloc  Return Allocation Space Information
    Boolean
ncp.ret_info_mask_arch  Return Archive Information
    Boolean
ncp.ret_info_mask_attr  Return Attribute Information
    Boolean
ncp.ret_info_mask_create  Return Creation Information
    Boolean
ncp.ret_info_mask_dir  Return Directory Information
    Boolean
ncp.ret_info_mask_eattr  Return Extended Attributes Information
    Boolean
ncp.ret_info_mask_fname  Return File Name Information
    Boolean
ncp.ret_info_mask_id  Return ID Information
    Boolean
ncp.ret_info_mask_logical  Return Logical Information
    Boolean
ncp.ret_info_mask_mod  Return Modify Information
    Boolean
ncp.ret_info_mask_ns  Return Name Space Information
    Boolean
ncp.ret_info_mask_ns_attr  Return Name Space Attributes Information
    Boolean
ncp.ret_info_mask_rights  Return Rights Information
    Boolean
ncp.ret_info_mask_size  Return Size Information
    Boolean
ncp.ret_info_mask_tspace  Return Total Space Information
    Boolean
ncp.retry_tx_count  Transmit Retry Count
    Unsigned 32-bit integer
ncp.return_info_count  Return Information Count
    Unsigned 32-bit integer
```

```
ncp.returned_list_count  Returned List Count
    Unsigned 32-bit integer
ncp.rev_query_flag      Revoke Rights Query Flag
    Unsigned 8-bit integer
ncp.revent              Event
    Unsigned 16-bit integer
ncp.revision            Revision
    Unsigned 32-bit integer
ncp.rights_grant_mask   Grant Rights
    Unsigned 8-bit integer
ncp.rights_grant_mask_create  Create
    Boolean
ncp.rights_grant_mask_del   Delete
    Boolean
ncp.rights_grant_mask_mod   Modify
    Boolean
ncp.rights_grant_mask_open  Open
    Boolean
ncp.rights_grant_mask_parent  Parental
    Boolean
ncp.rights_grant_mask_read  Read
    Boolean
ncp.rights_grant_mask_search  Search
    Boolean
ncp.rights_grant_mask_write  Write
    Boolean
ncp.rights_revoke_mask   Revoke Rights
    Unsigned 8-bit integer
ncp.rights_revoke_mask_create  Create
    Boolean
ncp.rights_revoke_mask_del   Delete
    Boolean
ncp.rights_revoke_mask_mod   Modify
    Boolean
ncp.rights_revoke_mask_open  Open
    Boolean
ncp.rights_revoke_mask_parent  Parental
    Boolean
ncp.rights_revoke_mask_read  Read
    Boolean
ncp.rights_revoke_mask_search  Search
    Boolean
ncp.rights_revoke_mask_write  Write
    Boolean
```

```
ncp.rip_socket_num  RIP Socket Number
    Unsigned 16-bit integer
ncp.rnum  Replica Number
    Unsigned 16-bit integer
ncp.route_hops  Hop Count
    Unsigned 16-bit integer
ncp.route_time  Route Time
    Unsigned 16-bit integer
ncp.router_dn_flag  Router Down Flag
    Boolean
ncp.rpc_c_code  RPC Completion Code
    Unsigned 16-bit integer
ncp.rpy_nearest_srv_flag  Reply to Nearest Server Flag
    Boolean
ncp.rstate  Replica State
    String
ncp.rtype  Replica Type
    String
ncp.rx_buffer_size  Receive Buffer Size
    Unsigned 32-bit integer
ncp.rx_buffers  Receive Buffers
    Unsigned 32-bit integer
ncp.rx_buffers_75  Receive Buffers Warning Level
    Unsigned 32-bit integer
ncp.rx_buffers_checked_out  Receive Buffers Checked Out Count
    Unsigned 32-bit integer
ncp.s_day  Day
    Unsigned 8-bit integer
ncp.s_day_of_week  Day of Week
    Unsigned 8-bit integer
ncp.s_hour  Hour
    Unsigned 8-bit integer
ncp.s_m_info  Storage Media Information
    Unsigned 8-bit integer
ncp.s_minute  Minutes
    Unsigned 8-bit integer
ncp.s_module_name  Storage Module Name
    String
ncp.s_month  Month
    Unsigned 8-bit integer
ncp.s_offset_64bit  64bit Starting Offset
    Byte array
ncp.s_second  Seconds
    Unsigned 8-bit integer
```

```
ncp.salvageable_file_entry_number  Salvageable File Entry Number
    Unsigned 32-bit integer
ncp.sap_socket_number  SAP Socket Number
    Unsigned 16-bit integer
ncp.sattr  Search Attributes
    Unsigned 8-bit integer
ncp.sattr_archive  Archive
    Boolean
ncp.sattr_execute_confirm  Execute Confirm
    Boolean
ncp.sattr_exonly  Execute-Only Files Allowed
    Boolean
ncp.sattr_hid  Hidden Files Allowed
    Boolean
ncp.sattr_ronly  Read-Only Files Allowed
    Boolean
ncp.sattr_shareable  Shareable
    Boolean
ncp.sattr_sub  Subdirectories Only
    Boolean
ncp.sattr_sys  System Files Allowed
    Boolean
ncp.saved_an_out_of_order_packet  Saved An Out Of Order Packet Count
    Unsigned 32-bit integer
ncp.scan_entire_folder  Wild Search
    Boolean
ncp.scan_files_only  Scan Files Only
    Boolean
ncp.scan_folders_only  Scan Folders Only
    Boolean
ncp.scan_items  Number of Items returned from Scan
    Unsigned 32-bit integer
ncp.search_att_archive  Archive
    Boolean
ncp.search_att_execute_confirm  Execute Confirm
    Boolean
ncp.search_att_execute_only  Execute-Only
    Boolean
ncp.search_att_hidden  Hidden Files Allowed
    Boolean
ncp.search_att_low  Search Attributes
    Unsigned 16-bit integer
ncp.search_att_read_only  Read-Only
    Boolean
```

```
ncp.search_att_shareable  Shareable
    Boolean
ncp.search_att_sub        Subdirectories Only
    Boolean
ncp.search_att_system     System
    Boolean
ncp.search_attr_all_files All Files and Directories
    Boolean
ncp.search_bit_map        Search Bit Map
    Unsigned 8-bit integer
ncp.search_bit_map_files  Files
    Boolean
ncp.search_bit_map_hidden Hidden
    Boolean
ncp.search_bit_map_sub    Subdirectory
    Boolean
ncp.search_bit_map_sys    System
    Boolean
ncp.search_conn_number    Search Connection Number
    Unsigned 32-bit integer
ncp.search_instance       Search Instance
    Unsigned 32-bit integer
ncp.search_number         Search Number
    Unsigned 32-bit integer
ncp.search_pattern        Search Pattern
    String
ncp.search_pattern_16     Search Pattern
    String
ncp.search_sequence_word  Search Sequence
    Unsigned 16-bit integer
ncp.sec_rel_to_y2k        Seconds Relative to the Year 2000
    Unsigned 32-bit integer
ncp.sector_size           Sector Size
    Unsigned 32-bit integer
ncp.sectors_per_block     Sectors Per Block
    Unsigned 8-bit integer
ncp.sectors_per_cluster   Sectors Per Cluster
    Unsigned 16-bit integer
ncp.sectors_per_cluster_long Sectors Per Cluster
    Unsigned 32-bit integer
ncp.sectors_per_track     Sectors Per Track
    Unsigned 8-bit integer
ncp.security_equiv_list   Security Equivalent List
    String
```

```
ncp.security_flag Security Flag
    Unsigned 8-bit integer
ncp.security_restriction_version Security Restriction Version
    Unsigned 8-bit integer
ncp.semaphore_handle Semaphore Handle
    Unsigned 32-bit integer
ncp.semaphore_name Semaphore Name
    String
ncp.semaphore_open_count Semaphore Open Count
    Unsigned 8-bit integer
ncp.semaphore_share_count Semaphore Share Count
    Unsigned 8-bit integer
ncp.semaphore_time_out Semaphore Time Out
    Unsigned 16-bit integer
ncp.semaphore_value Semaphore Value
    Unsigned 16-bit integer
ncp.send_hold_off_message Send Hold Off Message Count
    Unsigned 32-bit integer
ncp.send_status Send Status
    Unsigned 8-bit integer
ncp.sent_a_dup_reply Sent A Duplicate Reply Count
    Unsigned 32-bit integer
ncp.sent_pos_ack Sent Positive Acknowledge Count
    Unsigned 32-bit integer
ncp.seq Sequence Number
    Unsigned 8-bit integer
ncp.sequence_byte Sequence
    Unsigned 8-bit integer
ncp.sequence_number Sequence Number
    Unsigned 32-bit integer
ncp.server_address Server Address
    Byte array
ncp.server_app_num Server App Number
    Unsigned 16-bit integer
ncp.server_id_number Server ID
    Unsigned 32-bit integer
ncp.server_info_flags Server Information Flags
    Unsigned 16-bit integer
ncp.server_list_flags Server List Flags
    Unsigned 32-bit integer
ncp.server_name Server Name
    String
ncp.server_name_len Server Name
    String
```

```
ncp.server_name_stringz  Server Name
    String
ncp.server_network_address  Server Network Address
    Byte array
ncp.server_node  Server Node
    Byte array
ncp.server_serial_number  Server Serial Number
    Unsigned 32-bit integer
ncp.server_station  Server Station
    Unsigned 8-bit integer
ncp.server_station_list  Server Station List
    Unsigned 8-bit integer
ncp.server_station_long  Server Station
    Unsigned 32-bit integer
ncp.server_status_record  Server Status Record
    String
ncp.server_task_number  Server Task Number
    Unsigned 8-bit integer
ncp.server_task_number_long  Server Task Number
    Unsigned 32-bit integer
ncp.server_type  Server Type
    Unsigned 16-bit integer
ncp.server_utilization  Server Utilization
    Unsigned 32-bit integer
ncp.server_utilization_percentage  Server Utilization Percentage
    Unsigned 8-bit integer
ncp.set_cmd_category  Set Command Category
    Unsigned 8-bit integer
ncp.set_cmd_flags  Set Command Flags
    Unsigned 8-bit integer
ncp.set_cmd_name  Set Command Name
    String
ncp.set_cmd_type  Set Command Type
    Unsigned 8-bit integer
ncp.set_cmd_value_num  Set Command Value
    Unsigned 32-bit integer
ncp.set_mask  Set Mask
    Unsigned 32-bit integer
ncp.set_parm_name  Set Parameter Name
    String
ncp.sft_error_table  SFT Error Table
    Byte array
ncp.sft_support_level  SFT Support Level
    Unsigned 8-bit integer
```



```
ncp.shareable_lock_count  Shareable Lock Count
    Unsigned 16-bit integer
ncp.shared_memory_addresses  Shared Memory Addresses
    Byte array
ncp.short_name  Short Name
    String
ncp.short_stack_name  Short Stack Name
    String
ncp.shouldnt_be_ack_here  Shouldn't Be ACKing Here Count
    Unsigned 32-bit integer
ncp.sibling_count  Sibling Count
    Unsigned 32-bit integer
ncp.signature  Signature
    Boolean
ncp.slot  Slot
    Unsigned 8-bit integer
ncp.sm_info_size  Storage Module Information Size
    Unsigned 32-bit integer
ncp.smids  Storage Media ID's
    Unsigned 32-bit integer
ncp.software_description  Software Description
    String
ncp.software_driver_type  Software Driver Type
    Unsigned 8-bit integer
ncp.software_major_version_number  Software Major Version Number
    Unsigned 8-bit integer
ncp.software_minor_version_number  Software Minor Version Number
    Unsigned 8-bit integer
ncp.someone_else_did_it_0  Someone Else Did It Count 0
    Unsigned 32-bit integer
ncp.someone_else_did_it_1  Someone Else Did It Count 1
    Unsigned 32-bit integer
ncp.someone_else_did_it_2  Someone Else Did It Count 2
    Unsigned 32-bit integer
ncp.someone_else_using_this_file  Someone Else Using This File Count
    Unsigned 32-bit integer
ncp.source_component_count  Source Path Component Count
    Unsigned 8-bit integer
ncp.source_dir_handle  Source Directory Handle
    Unsigned 8-bit integer
ncp.source_originate_time  Source Originate Time
    Byte array
ncp.source_path  Source Path
    String
```

```
ncp.source_return_time  Source Return Time
    Byte array
ncp.space_migrated      Space Migrated
    Unsigned 32-bit integer
ncp.space_restriction_node_count  Space Restriction Node Count
    Unsigned 32-bit integer
ncp.space_used          Space Used
    Unsigned 32-bit integer
ncp.spx_abort_conn     SPX Aborted Connection
    Unsigned 16-bit integer
ncp.spx_bad_in_pkt     SPX Bad In Packet Count
    Unsigned 16-bit integer
ncp.spx_bad_listen     SPX Bad Listen Count
    Unsigned 16-bit integer
ncp.spx_bad_send       SPX Bad Send Count
    Unsigned 16-bit integer
ncp.spx_est_conn_fail  SPX Establish Connection Fail
    Unsigned 16-bit integer
ncp.spx_est_conn_req   SPX Establish Connection Requests
    Unsigned 16-bit integer
ncp.spx_incoming_pkt   SPX Incoming Packet Count
    Unsigned 32-bit integer
ncp.spx_listen_con_fail  SPX Listen Connect Fail
    Unsigned 16-bit integer
ncp.spx_listen_con_req  SPX Listen Connect Request
    Unsigned 16-bit integer
ncp.spx_listen_pkt     SPX Listen Packet Count
    Unsigned 32-bit integer
ncp.spx_max_conn       SPX Max Connections Count
    Unsigned 16-bit integer
ncp.spx_max_used_conn  SPX Max Used Connections
    Unsigned 16-bit integer
ncp.spx_no_ses_listen  SPX No Session Listen ECB Count
    Unsigned 16-bit integer
ncp.spx_send           SPX Send Count
    Unsigned 32-bit integer
ncp.spx_send_fail      SPX Send Fail Count
    Unsigned 16-bit integer
ncp.spx_supp_pkt       SPX Suppressed Packet Count
    Unsigned 16-bit integer
ncp.spx_watch_dog      SPX Watch Dog Destination Session Count
    Unsigned 16-bit integer
ncp.spx_window_choke   SPX Window Choke Count
    Unsigned 32-bit integer
```

```
ncp.src_connection  Source Connection ID
    Unsigned 32-bit integer
    The workstation's connection identification number

ncp.src_name_space  Source Name Space
    Unsigned 8-bit integer

ncp.srvr_param_boolean  Set Parameter Value
    Boolean

ncp.srvr_param_string  Set Parameter Value
    String

ncp.stack_count  Stack Count
    Unsigned 32-bit integer

ncp.stack_full_name_str  Stack Full Name
    String

ncp.stack_major_vn  Stack Major Version Number
    Unsigned 8-bit integer

ncp.stack_minor_vn  Stack Minor Version Number
    Unsigned 8-bit integer

ncp.stack_number  Stack Number
    Unsigned 32-bit integer

ncp.stack_short_name  Stack Short Name
    String

ncp.start_conn_num  Starting Connection Number
    Unsigned 32-bit integer

ncp.start_number  Start Number
    Unsigned 32-bit integer

ncp.start_number_flag  Start Number Flag
    Unsigned 16-bit integer

ncp.start_search_number  Start Search Number
    Unsigned 16-bit integer

ncp.start_station_error  Start Station Error Count
    Unsigned 32-bit integer

ncp.start_volume_number  Starting Volume Number
    Unsigned 32-bit integer

ncp.starting_block  Starting Block
    Unsigned 16-bit integer

ncp.starting_number  Starting Number
    Unsigned 32-bit integer

ncp.stat_major_version  Statistics Table Major Version
    Unsigned 8-bit integer

ncp.stat_minor_version  Statistics Table Minor Version
    Unsigned 8-bit integer

ncp.stat_table_major_version  Statistics Table Major Version
    Unsigned 8-bit integer

ncp.stat_table_minor_version  Statistics Table Minor Version
    Unsigned 8-bit integer
```

```
ncp.station_list  Station List
  Unsigned 32-bit integer
ncp.station_number  Station Number
  Byte array
ncp.status  Status
  Unsigned 16-bit integer
ncp.status_flag_bits  Status Flag
  Unsigned 32-bit integer
ncp.status_flag_bits_64bit  64Bit File Offsets
  Boolean
ncp.status_flag_bits_audit  Audit
  Boolean
ncp.status_flag_bits_comp  Compression
  Boolean
ncp.status_flag_bits_im_purge  Immediate Purge
  Boolean
ncp.status_flag_bits_migrate  Migration
  Boolean
ncp.status_flag_bits_nss  NSS Volume
  Boolean
ncp.status_flag_bits_ro  Read Only
  Boolean
ncp.status_flag_bits_suballoc  Sub Allocation
  Boolean
ncp.status_flag_bits_utf8  UTF8 NCP Strings
  Boolean
ncp.still_doing_the_last_req  Still Doing The Last Request Count
  Unsigned 32-bit integer
ncp.still_transmitting  Still Transmitting Count
  Unsigned 32-bit integer
ncp.stream_type  Stream Type
  Unsigned 8-bit integer
  Type of burst
ncp.sub_alloc_clusters  Sub Alloc Clusters
  Unsigned 32-bit integer
ncp.sub_alloc_freeable_clusters  Sub Alloc Freeable Clusters
  Unsigned 32-bit integer
ncp.sub_count  Subordinate Count
  Unsigned 32-bit integer
ncp.sub_directory  Subdirectory
  Unsigned 32-bit integer
ncp.subfunc  SubFunction
  Unsigned 8-bit integer
ncp.suggested_file_size  Suggested File Size
  Unsigned 32-bit integer
```

```
ncp.support_module_id  Support Module ID
    Unsigned 32-bit integer
ncp.synch_name  Synch Name
    String
ncp.system_flags  System Flags
    Unsigned 8-bit integer
ncp.system_flags.abt  ABT
    Boolean
    Is this an abort request?
ncp.system_flags.bsy  BSY
    Boolean
    Is the server busy?
ncp.system_flags.eob  EOB
    Boolean
    Is this the last packet of the burst?
ncp.system_flags.lst  LST
    Boolean
    Return Fragment List?
ncp.system_flags.sys  SYS
    Boolean
    Is this a system packet?
ncp.system_interval_marker  System Interval Marker
    Unsigned 32-bit integer
ncp.tab_size  Tab Size
    Unsigned 8-bit integer
ncp.target_client_list  Target Client List
    Unsigned 8-bit integer
ncp.target_connection_number  Target Connection Number
    Unsigned 16-bit integer
ncp.target_dir_handle  Target Directory Handle
    Unsigned 8-bit integer
ncp.target_entry_id  Target Entry ID
    Unsigned 32-bit integer
ncp.target_execution_time  Target Execution Time
    Byte array
ncp.target_file_handle  Target File Handle
    Byte array
ncp.target_file_offset  Target File Offset
    Unsigned 32-bit integer
ncp.target_message  Message
    String
ncp.target_ptr  Target Printer
    Unsigned 8-bit integer
ncp.target_receive_time  Target Receive Time
    Byte array
```

```
ncp.target_server_id_number  Target Server ID Number
    Unsigned 32-bit integer
ncp.target_transmit_time     Target Transmit Time
    Byte array
ncp.task                     Task Number
    Unsigned 8-bit integer
ncp.task_num_byte           Task Number
    Unsigned 8-bit integer
ncp.task_number_word        Task Number
    Unsigned 16-bit integer
ncp.task_state              Task State
    Unsigned 8-bit integer
ncp.tcpref                  Address Referral
    IPv4 address
ncp.text_job_description     Text Job Description
    String
ncp.thrashing_count         Thrashing Count
    Unsigned 16-bit integer
ncp.time                    Time from Request
    Time duration
    Time between request and response in seconds
ncp.time_to_net             Time To Net
    Unsigned 16-bit integer
ncp.timeout_limit           Timeout Limit
    Unsigned 16-bit integer
ncp.timesync_status_active  Time Synchronization is Active
    Boolean
ncp.timesync_status_ext_sync External Clock Status
    Boolean
ncp.timesync_status_external External Time Synchronization Active
    Boolean
ncp.timesync_status_flags   Timesync Status
    Unsigned 32-bit integer
ncp.timesync_status_net_sync Time is Synchronized to the Network
    Boolean
ncp.timesync_status_server_type Time Server Type
    Unsigned 32-bit integer
ncp.timesync_status_sync    Time is Synchronized
    Boolean
ncp.too_many_ack_frag       Too Many ACK Fragments Count
    Unsigned 32-bit integer
ncp.too_many_hops           Too Many Hops
    Unsigned 16-bit integer
ncp.total_blks_to_dcompress Total Blocks To Decompress
    Unsigned 32-bit integer
```

ncp.total\_blocks Total Blocks  
Unsigned 32-bit integer

ncp.total\_cache\_writes Total Cache Writes  
Unsigned 32-bit integer

ncp.total\_changed\_fats Total Changed FAT Entries  
Unsigned 32-bit integer

ncp.total\_cnt\_blocks Total Count Blocks  
Unsigned 32-bit integer

ncp.total\_common\_cnts Total Common Counts  
Unsigned 32-bit integer

ncp.total\_dir\_entries Total Directory Entries  
Unsigned 32-bit integer

ncp.total\_directory\_slots Total Directory Slots  
Unsigned 16-bit integer

ncp.total\_extended\_directory\_extants Total Extended Directory Extants  
Unsigned 32-bit integer

ncp.total\_file\_service\_packets Total File Service Packets  
Unsigned 32-bit integer

ncp.total\_files\_opened Total Files Opened  
Unsigned 32-bit integer

ncp.total\_lfs\_counters Total LFS Counters  
Unsigned 32-bit integer

ncp.total\_offspring Total Offspring  
Unsigned 16-bit integer

ncp.total\_other\_packets Total Other Packets  
Unsigned 32-bit integer

ncp.total\_queue\_jobs Total Queue Jobs  
Unsigned 32-bit integer

ncp.total\_read\_requests Total Read Requests  
Unsigned 32-bit integer

ncp.total\_request Total Requests  
Unsigned 32-bit integer

ncp.total\_request\_packets Total Request Packets  
Unsigned 32-bit integer

ncp.total\_routed\_packets Total Routed Packets  
Unsigned 32-bit integer

ncp.total\_rx\_packet\_count Total Receive Packet Count  
Unsigned 32-bit integer

ncp.total\_rx\_packets Total Receive Packets  
Unsigned 32-bit integer

ncp.total\_rx\_pkts Total Receive Packets  
Unsigned 32-bit integer

ncp.total\_server\_memory Total Server Memory  
Unsigned 16-bit integer

ncp.total\_trans\_backed\_out Total Transactions Backed Out  
Unsigned 32-bit integer

ncp.total\_trans\_performed Total Transactions Performed  
Unsigned 32-bit integer

ncp.total\_tx\_packet\_count Total Transmit Packet Count  
Unsigned 32-bit integer

ncp.total\_tx\_packets Total Transmit Packets  
Unsigned 32-bit integer

ncp.total\_tx\_pkts Total Transmit Packets  
Unsigned 32-bit integer

ncp.total\_unfilled\_backout\_requests Total Unfilled Backout Requests  
Unsigned 16-bit integer

ncp.total\_volume\_clusters Total Volume Clusters  
Unsigned 16-bit integer

ncp.total\_write\_requests Total Write Requests  
Unsigned 32-bit integer

ncp.total\_write\_trans\_performed Total Write Transactions Performed  
Unsigned 32-bit integer

ncp.track\_on\_flag Track On Flag  
Boolean

ncp.transaction\_disk\_space Transaction Disk Space  
Unsigned 16-bit integer

ncp.transaction\_fat\_allocations Transaction FAT Allocations  
Unsigned 32-bit integer

ncp.transaction\_file\_size\_changes Transaction File Size Changes  
Unsigned 32-bit integer

ncp.transaction\_files\_truncated Transaction Files Truncated  
Unsigned 32-bit integer

ncp.transaction\_number Transaction Number  
Unsigned 32-bit integer

ncp.transaction\_tracking\_enabled Transaction Tracking Enabled  
Unsigned 8-bit integer

ncp.transaction\_tracking\_supported Transaction Tracking Supported  
Unsigned 8-bit integer

ncp.transaction\_volume\_number Transaction Volume Number  
Unsigned 16-bit integer

ncp.transport\_addr Transport Address

ncp.transport\_type Communications Type  
Unsigned 8-bit integer

ncp.trustee\_acc\_mask Trustee Access Mask  
Unsigned 8-bit integer

ncp.trustee\_id\_set Trustee ID  
Unsigned 32-bit integer

ncp.trustee\_list\_node\_count Trustee List Node Count  
Unsigned 32-bit integer



```
ncp.trustee_rights_create  Create
    Boolean
ncp.trustee_rights_del    Delete
    Boolean
ncp.trustee_rights_low   Trustee Rights
    Unsigned 16-bit integer
ncp.trustee_rights_modify  Modify
    Boolean
ncp.trustee_rights_open  Open
    Boolean
ncp.trustee_rights_parent  Parental
    Boolean
ncp.trustee_rights_read  Read
    Boolean
ncp.trustee_rights_search  Search
    Boolean
ncp.trustee_rights_super  Supervisor
    Boolean
ncp.trustee_rights_write  Write
    Boolean
ncp.trustee_set_number  Trustee Set Number
    Unsigned 8-bit integer
ncp.try_to_write_too_much  Trying To Write Too Much Count
    Unsigned 32-bit integer
ncp.ttl_comp_blks      Total Compression Blocks
    Unsigned 32-bit integer
ncp.ttl_ds_disk_space_alloc  Total Streams Space Allocated
    Unsigned 32-bit integer
ncp.ttl_eas           Total EA's
    Unsigned 32-bit integer
ncp.ttl_eas_data_size  Total EA's Data Size
    Unsigned 32-bit integer
ncp.ttl_eas_key_size   Total EA's Key Size
    Unsigned 32-bit integer
ncp.ttl_inter_blks    Total Intermediate Blocks
    Unsigned 32-bit integer
ncp.ttl_migrated_size  Total Migrated Size
    Unsigned 32-bit integer
ncp.ttl_num_of_r_tags  Total Number of Resource Tags
    Unsigned 32-bit integer
ncp.ttl_num_of_set_cmds  Total Number of Set Commands
    Unsigned 32-bit integer
ncp.ttl_pkts_routed   Total Packets Routed
    Unsigned 32-bit integer
```

```
ncp.ttl_pkts_srvcd  Total Packets Serviced
    Unsigned 32-bit integer
ncp.ttl_values_length  Total Values Length
    Unsigned 32-bit integer
ncp.ttl_write_data_size  Total Write Data Size
    Unsigned 32-bit integer
ncp.tts_flag  Transaction Tracking Flag
    Unsigned 16-bit integer
ncp.tts_level  TTS Level
    Unsigned 8-bit integer
ncp.turbo_fat_build_failed  Turbo FAT Build Failed Count
    Unsigned 32-bit integer
ncp.turbo_used_for_file_service  Turbo Used For File Service
    Unsigned 16-bit integer
ncp.type  Type
    Unsigned 16-bit integer
    NCP message type
ncp.udpref  Address Referral
    IPv4 address
ncp.uint32value  NDS Value
    Unsigned 32-bit integer
ncp.un_claimed_packets  Unclaimed Packets
    Unsigned 32-bit integer
ncp.un_compressable_data_streams_count  Uncompressable Data Streams Count
    Unsigned 32-bit integer
ncp.un_used  Unused
    Unsigned 8-bit integer
ncp.un_used_directory_entries  Unused Directory Entries
    Unsigned 32-bit integer
ncp.un_used_extended_directory_extants  Unused Extended Directory Extants
    Unsigned 32-bit integer
ncp.unclaimed_packets  Unclaimed Packets
    Unsigned 32-bit integer
ncp.undefined_28  Undefined
    Byte array
ncp.undefined_8  Undefined
    Byte array
ncp.unique_id  Unique ID
    Unsigned 8-bit integer
ncp.unknown_network  Unknown Network
    Unsigned 16-bit integer
ncp.unused_disk_blocks  Unused Disk Blocks
    Unsigned 32-bit integer
ncp.update_date  Update Date
    Unsigned 16-bit integer
```

```
ncp.update_id  Update ID
                Unsigned 32-bit integer
ncp.update_time  Update Time
                Unsigned 16-bit integer
ncp.used_blocks  Used Blocks
                Unsigned 32-bit integer
ncp.used_space  Used Space
                Unsigned 32-bit integer
ncp.user_id  User ID
                Unsigned 32-bit integer
ncp.user_info_audit_conn  Audit Connection Recorded
                Boolean
ncp.user_info_audited  Audited
                Boolean
ncp.user_info_being_abort  Being Aborted
                Boolean
ncp.user_info_bindery  Bindery Connection
                Boolean
ncp.user_info_dsaudit_conn  DS Audit Connection Recorded
                Boolean
ncp.user_info_held_req  Held Requests
                Unsigned 32-bit integer
ncp.user_info_int_login  Internal Login
                Boolean
ncp.user_info_logged_in  Logged In
                Boolean
ncp.user_info_logout  Logout in Progress
                Boolean
ncp.user_info_mac_station  MAC Station
                Boolean
ncp.user_info_need_sec  Needs Security Change
                Boolean
ncp.user_info_temp_authen  Temporary Authenticated
                Boolean
ncp.user_info_ttl_bytes_rd  Total Bytes Read
                Byte array
ncp.user_info_ttl_bytes_wrt  Total Bytes Written
                Byte array
ncp.user_info_use_count  Use Count
                Unsigned 16-bit integer
ncp.user_login_allowed  Login Status
                Unsigned 8-bit integer
ncp.user_name  User Name
                String
```

```
ncp.user_name_16  User Name
String

ncp.uts_time_in_seconds  UTC Time in Seconds
Unsigned 32-bit integer

ncp.valid_bfrs_reused  Valid Buffers Reused
Unsigned 32-bit integer

ncp.value_available  Value Available
Unsigned 8-bit integer

ncp.value_bytes  Bytes
Byte array

ncp.value_string  Value
String

ncp.vap_version  VAP Version
Unsigned 8-bit integer

ncp.variable_bit_mask  Variable Bit Mask
Unsigned 32-bit integer

ncp.variable_bits_defined  Variable Bits Defined
Unsigned 16-bit integer

ncp.vconsole_rev  Console Revision
Unsigned 8-bit integer

ncp.vconsole_ver  Console Version
Unsigned 8-bit integer

ncp.verb  Verb
Unsigned 32-bit integer

ncp.verb_data  Verb Data
Unsigned 8-bit integer

ncp.version  Version
Unsigned 32-bit integer

ncp.version_num_long  Version
Unsigned 32-bit integer

ncp.vert_location  Vertical Location
Unsigned 16-bit integer

ncp.virtual_console_version  Virtual Console Version
Unsigned 8-bit integer

ncp.vol_cap_archive  NetWare Archive bit Supported
Boolean

ncp.vol_cap_cluster  Volume is a Cluster Resource
Boolean

ncp.vol_cap_comp  NetWare Compression Supported
Boolean

ncp.vol_cap_dfs  DFS is Active on Volume
Boolean

ncp.vol_cap_dir_quota  NetWare Directory Quotas Supported
Boolean
```

```
ncp.vol_cap_ea    OS2 style EA's Supported
  Boolean

ncp.vol_cap_file_attr  Full NetWare file Attributes Supported
  Boolean

ncp.vol_cap_nss    Volume is Mounted by NSS
  Boolean

ncp.vol_cap_nss_admin  Volume is the NSS Admin Volume
  Boolean

ncp.vol_cap_sal_purge  NetWare Salvage and Purge Operations Supported
  Boolean

ncp.vol_cap_user_space  NetWare User Space Restrictions Supported
  Boolean

ncp.vol_info_reply_len  Volume Information Reply Length
  Unsigned 16-bit integer

ncp.vol_name_stringz  Volume Name
  String

ncp.volume_active_count  Volume Active Count
  Unsigned 32-bit integer

ncp.volume_cached_flag  Volume Cached Flag
  Unsigned 8-bit integer

ncp.volume_capabilities  Volume Capabilities
  Unsigned 32-bit integer

ncp.volume_guid  Volume GUID
  String

ncp.volume_hashed_flag  Volume Hashed Flag
  Unsigned 8-bit integer

ncp.volume_id  Volume ID
  Unsigned 32-bit integer

ncp.volume_last_modified_date  Volume Last Modified Date
  Unsigned 16-bit integer

ncp.volume_last_modified_time  Volume Last Modified Time
  Unsigned 16-bit integer

ncp.volume_mnt_point  Volume Mount Point
  String

ncp.volume_mounted_flag  Volume Mounted Flag
  Unsigned 8-bit integer

ncp.volume_name  Volume Name
  String

ncp.volume_name_len  Volume Name
  String

ncp.volume_number  Volume Number
  Unsigned 8-bit integer

ncp.volume_number_long  Volume Number
  Unsigned 32-bit integer
```

```
ncp.volume_reference_count  Volume Reference Count
    Unsigned 32-bit integer
ncp.volume_removable_flag  Volume Removable Flag
    Unsigned 8-bit integer
ncp.volume_request_flags  Volume Request Flags
    Unsigned 16-bit integer
ncp.volume_segment_dev_num  Volume Segment Device Number
    Unsigned 32-bit integer
ncp.volume_segment_offset  Volume Segment Offset
    Unsigned 32-bit integer
ncp.volume_segment_size  Volume Segment Size
    Unsigned 32-bit integer
ncp.volume_size_in_clusters  Volume Size in Clusters
    Unsigned 32-bit integer
ncp.volume_type  Volume Type
    Unsigned 16-bit integer
ncp.volume_use_count  Volume Use Count
    Unsigned 32-bit integer
ncp.volumes_supported_max  Volumes Supported Max
    Unsigned 16-bit integer
ncp.wait_node  Wait Node Count
    Unsigned 32-bit integer
ncp.wait_node_alloc_fail  Wait Node Alloc Failure Count
    Unsigned 32-bit integer
ncp.wait_on_sema  Wait On Semaphore Count
    Unsigned 32-bit integer
ncp.wait_till_dirty_blcks_dec  Wait Till Dirty Blocks Decrease Count
    Unsigned 32-bit integer
ncp.wait_time  Wait Time
    Unsigned 32-bit integer
ncp.wasted_server_memory  Wasted Server Memory
    Unsigned 16-bit integer
ncp.write_curr_trans  Write Currently Transmitting Count
    Unsigned 32-bit integer
ncp.write_didnt_need_but_req_ack  Write Didn't Need But Requested ACK Count
    Unsigned 32-bit integer
ncp.write_didnt_need_this_frag  Write Didn't Need This Fragment Count
    Unsigned 32-bit integer
ncp.write_dup_req  Write Duplicate Request Count
    Unsigned 32-bit integer
ncp.write_err  Write Error Count
    Unsigned 32-bit integer
ncp.write_got_an_ack0  Write Got An ACK Count 0
    Unsigned 32-bit integer
```

```
ncp.write_got_an_ack1 Write Got An ACK Count 1
    Unsigned 32-bit integer
ncp.write_held_off Write Held Off Count
    Unsigned 32-bit integer
ncp.write_held_off_with_dup Write Held Off With Duplicate Request
    Unsigned 32-bit integer
ncp.write_incon_packet_len Write Inconsistent Packet Lengths Count
    Unsigned 32-bit integer
ncp.write_out_of_mem_for_ctl_nodes Write Out Of Memory For Control Nodes Count
    Unsigned 32-bit integer
ncp.write_timeout Write Time Out Count
    Unsigned 32-bit integer
ncp.write_too_many_buf_check Write Too Many Buffers Checked Out Count
    Unsigned 32-bit integer
ncp.write_trash_dup_req Write Trashed Duplicate Request Count
    Unsigned 32-bit integer
ncp.write_trash_packet Write Trashed Packet Count
    Unsigned 32-bit integer
ncp.wrt_blk_cnt Write Block Count
    Unsigned 32-bit integer
ncp.wrt_entire_blk Write Entire Block Count
    Unsigned 32-bit integer
ncp.year Year
    Unsigned 8-bit integer
ncp.zero_ack_frag Zero ACK Fragment Count
    Unsigned 32-bit integer
nds.fragment NDS Fragment
    Frame number
    NDPS Fragment
nds.fragments NDS Fragments
    No value
    NDPS Fragments
nds.segment.error Desegmentation error
    Frame number
    Desegmentation error due to illegal segments
nds.segment.multipletails Multiple tail segments found
    Boolean
    Several tails were found when desegmenting the packet
nds.segment.overlap Segment overlap
    Boolean
    Segment overlaps with other segments
nds.segment.overlap.conflict Conflicting data in segment overlap
    Boolean
    Overlapping segments contained conflicting data
```

nds.segment.toolongsegment Segment too long  
Boolean  
Segment contained data past end of packet

### NetWare Link Services Protocol (nlsp)

nlsp.header\_length PDU Header Length  
Unsigned 8-bit integer

nlsp.hello.circuit\_type Circuit Type  
Unsigned 8-bit integer

nlsp.hello.holding\_timer Holding Timer  
Unsigned 8-bit integer

nlsp.hello.multicast Multicast Routing  
Boolean  
If set, this router supports multicast routing

nlsp.hello.priority Priority  
Unsigned 8-bit integer

nlsp.hello.state State  
Unsigned 8-bit integer

nlsp.irpd NetWare Link Services Protocol Discriminator  
Unsigned 8-bit integer

nlsp.lsp.attached\_flag Attached Flag  
Unsigned 8-bit integer

nlsp.lsp.checksum Checksum  
Unsigned 16-bit integer

nlsp.lsp.lspdbol LSP Database Overloaded  
Boolean

nlsp.lsp.partition\_repair Partition Repair  
Boolean  
If set, this router supports the optional Partition Repair function

nlsp.lsp.router\_type Router Type  
Unsigned 8-bit integer

nlsp.major\_version Major Version  
Unsigned 8-bit integer

nlsp.minor\_version Minor Version  
Unsigned 8-bit integer

nlsp.nr Multi-homed Non-routing Server  
Boolean

nlsp.packet\_length Packet Length  
Unsigned 16-bit integer

nlsp.sequence\_number Sequence Number  
Unsigned 32-bit integer

nlsp.type Packet Type  
Unsigned 8-bit integer



**NetWare Serialization Protocol (nw\_serial)****Network Block Device (nbd)**

nbd.data Data  
Byte array

nbd.error Error  
Unsigned 32-bit integer

nbd.from From  
Unsigned 64-bit integer

nbd.handle Handle  
Unsigned 64-bit integer

nbd.len Length  
Unsigned 32-bit integer

nbd.magic Magic  
Unsigned 32-bit integer

nbd.response\_in Response In  
Frame number  
The response to this NBD request is in this frame

nbd.response\_to Request In  
Frame number  
This is a response to the NBD request in this frame

nbd.time Time  
Time duration  
The time between the Call and the Reply

nbd.type Type  
Unsigned 32-bit integer

**Network Data Management Protocol (ndmp)**

ndmp.addr.ip IP Address  
IPv4 address  
IP Address

ndmp.addr.ipc IPC  
Byte array  
IPC identifier

ndmp.addr.loop\_id Loop ID  
Unsigned 32-bit integer  
FCAL Loop ID

ndmp.addr.tcp\_port TCP Port  
Unsigned 32-bit integer  
TCP Port

ndmp.addr\_type Addr Type  
Unsigned 32-bit integer  
Address Type

ndmp.addr\_types Addr Types  
No value  
List Of Address Types

```
ndmp.auth.challenge Challenge
    Byte array
    Authentication Challenge

ndmp.auth.digest Digest
    Byte array
    Authentication Digest

ndmp.auth.id ID
    String
    ID of client authenticating

ndmp.auth.password Password
    String
    Password of client authenticating

ndmp.auth.types Auth types
    No value
    Auth types

ndmp.auth_type Auth Type
    Unsigned 32-bit integer
    Authentication Type

ndmp.bu.destination_dir Destination Dir
    String
    Destination directory to restore backup to

ndmp.bu.new_name New Name
    String
    New Name

ndmp.bu.operation Operation
    Unsigned 32-bit integer
    BU Operation

ndmp.bu.original_path Original Path
    String
    Original path where backup was created

ndmp.bu.other_name Other Name
    String
    Other Name

ndmp.bu.state.invalid_ebr EstimatedBytesLeft valid
    Boolean
    Whether EstimatedBytesLeft is valid or not

ndmp.bu.state.invalid_etr EstimatedTimeLeft valid
    Boolean
    Whether EstimatedTimeLeft is valid or not

ndmp.butype.attr.backup_direct Backup direct
    Boolean
    backup_direct

ndmp.butype.attr.backup_file_history Backup file history
    Boolean
    backup_file_history

ndmp.butype.attr.backup_filelist Backup file list
    Boolean
    backup_filelist
```

```
ndmp.butype.attr.backup_incremental  Backup incremental
  Boolean
  backup_incremental
ndmp.butype.attr.backup_utf8  Backup UTF8
  Boolean
  backup_utf8
ndmp.butype.attr.recover_direct  Recover direct
  Boolean
  recover_direct
ndmp.butype.attr.recover_filelist  Recover file list
  Boolean
  recover_filelist
ndmp.butype.attr.recover_incremental  Recover incremental
  Boolean
  recover_incremental
ndmp.butype.attr.recover_utf8  Recover UTF8
  Boolean
  recover_utf8
ndmp.butype.default_env  Default Env
  No value
  Default Env's for this Butype Info
ndmp.butype.env.name  Name
  String
  Name for this env-variable
ndmp.butype.env.value  Value
  String
  Value for this env-variable
ndmp.butype.info  Butype Info
  No value
  Butype Info
ndmp.butype.name  Butype Name
  String
  Name of Butype
ndmp.bytes_left_to_read  Bytes left to read
  Signed 64-bit integer
  Number of bytes left to be read from the device
ndmp.connected  Connected
  Unsigned 32-bit integer
  Status of connection
ndmp.connected.reason  Reason
  String
  Textual description of the connection status
ndmp.count  Count
  Unsigned 32-bit integer
  Number of bytes/objects/operations
ndmp.data  Data
  Byte array
  Data written/read
```

```
ndmp.data.bytes_processed  Bytes Processed
    Unsigned 64-bit integer
    Number of bytes processed

ndmp.data.est_bytes_remain  Est Bytes Remain
    Unsigned 64-bit integer
    Estimated number of bytes remaining

ndmp.data.est_time_remain  Est Time Remain
    Time duration
    Estimated time remaining

ndmp.data.halted  Halted Reason
    Unsigned 32-bit integer
    Data halted reason

ndmp.data.state  State
    Unsigned 32-bit integer
    Data state

ndmp.data.written  Data Written
    Unsigned 64-bit integer
    Number of data bytes written

ndmp.dirs  Dirs
    No value
    List of directories

ndmp.error  Error
    Unsigned 32-bit integer
    Error code for this NDMP PDU

ndmp.execute_cdb.cdb_len  CDB length
    Unsigned 32-bit integer
    Length of CDB

ndmp.execute_cdb.datain  Data in
    Byte array
    Data transferred from the SCSI device

ndmp.execute_cdb.datain_len  Data in length
    Unsigned 32-bit integer
    Expected length of data bytes to read

ndmp.execute_cdb.dataout  Data out
    Byte array
    Data to be transferred to the SCSI device

ndmp.execute_cdb.dataout_len  Data out length
    Unsigned 32-bit integer
    Number of bytes transferred to the device

ndmp.execute_cdb.flags.data_in  DATA_IN
    Boolean
    DATA_IN

ndmp.execute_cdb.flags.data_out  DATA_OUT
    Boolean
    DATA_OUT

ndmp.execute_cdb.sns_len  Sense data length
    Unsigned 32-bit integer
    Length of sense data
```

```
ndmp.execute_cdb.status  Status
    Unsigned 8-bit integer
    SCSI status

ndmp.execute_cdb.timeout Timeout
    Unsigned 32-bit integer
    Reselect timeout, in milliseconds

ndmp.file File
    String
    Name of File

ndmp.file.atime atime
    Date/Time stamp
    Timestamp for atime for this file

ndmp.file.ctime ctime
    Date/Time stamp
    Timestamp for ctime for this file

ndmp.file.fattr Fattr
    Unsigned 32-bit integer
    Mode for UNIX, fattr for NT

ndmp.file.fh_info FH Info
    Unsigned 64-bit integer
    FH Info used for direct access

ndmp.file.fs_type File FS Type
    Unsigned 32-bit integer
    Type of file permissions (UNIX or NT)

ndmp.file.group Group
    Unsigned 32-bit integer
    GID for UNIX, NA for NT

ndmp.file.invalid_atime Invalid atime
    Boolean
    invalid_atime

ndmp.file.invalid_ctime Invalid ctime
    Boolean
    invalid_ctime

ndmp.file.invalid_group Invalid group
    Boolean
    invalid_group

ndmp.file.links Links
    Unsigned 32-bit integer
    Number of links to this file

ndmp.file.mtime mtime
    Date/Time stamp
    Timestamp for mtime for this file

ndmp.file.names File Names
    No value
    List of file names

ndmp.file.node Node
    Unsigned 64-bit integer
    Node used for direct access
```

```
ndmp.file.owner  Owner
  Unsigned 32-bit integer
  UID for UNIX, owner for NT

ndmp.file.parent  Parent
  Unsigned 64-bit integer
  Parent node(directory) for this node

ndmp.file.size  Size
  Unsigned 64-bit integer
  File Size

ndmp.file.stats  File Stats
  No value
  List of file stats

ndmp.file.type  File Type
  Unsigned 32-bit integer
  Type of file

ndmp.files  Files
  No value
  List of files

ndmp.fraglen  Fragment Length
  Unsigned 32-bit integer
  Fragment Length

ndmp.fs.avail_size  Avail Size
  Unsigned 64-bit integer
  Total available size on FS

ndmp.fs.env  Env variables
  No value
  Environment variables for FS

ndmp.fs.env.name  Name
  String
  Name for this env-variable

ndmp.fs.env.value  Value
  String
  Value for this env-variable

ndmp.fs.info  FS Info
  No value
  FS Info

ndmp.fs.invalid.avail_size  Available size invalid
  Boolean
  If available size is invalid

ndmp.fs.invalid.total_inodes  Total number of inodes invalid
  Boolean
  If total number of inodes is invalid

ndmp.fs.invalid.total_size  Total size invalid
  Boolean
  If total size is invalid

ndmp.fs.invalid.used_inodes  Used number of inodes is invalid
  Boolean
  If used number of inodes is invalid
```

```
ndmp.fs.invalid.used_size  Used size invalid
    Boolean
    If used size is invalid

ndmp.fs.logical_device    Logical Device
    String
    Name of logical device

ndmp.fs.physical_device   Physical Device
    String
    Name of physical device

ndmp.fs.status            Status
    String
    Status for this FS

ndmp.fs.total_inodes      Total Inodes
    Unsigned 64-bit integer
    Total number of inodes on FS

ndmp.fs.total_size        Total Size
    Unsigned 64-bit integer
    Total size of FS

ndmp.fs.type              Type
    String
    Type of FS

ndmp.fs.used_inodes       Used Inodes
    Unsigned 64-bit integer
    Number of used inodes on FS

ndmp.fs.used_size         Used Size
    Unsigned 64-bit integer
    Total used size of FS

ndmp.halt                 Halt
    Unsigned 32-bit integer
    Reason why it halted

ndmp.halt.reason          Reason
    String
    Textual reason for why it halted

ndmp.header               NDMP Header
    No value
    NDMP Header

ndmp.hostid               HostID
    String
    HostID

ndmp.hostname             Hostname
    String
    Hostname

ndmp.lastfrag             Last Fragment
    Boolean
    Last Fragment

ndmp.log.message          Message
    String
    Log entry
```

```
ndmp.log.message.id  Message ID
    Unsigned 32-bit integer
    ID of this log entry

ndmp.log.type        Type
    Unsigned 32-bit integer
    Type of log entry

ndmp.mover.mode      Mode
    Unsigned 32-bit integer
    Mover Mode

ndmp.mover.pause     Pause
    Unsigned 32-bit integer
    Reason why the mover paused

ndmp.mover.state     State
    Unsigned 32-bit integer
    State of the selected mover

ndmp.msg             Message
    Unsigned 32-bit integer
    Type of NDMP PDU

ndmp.msg_type        Type
    Unsigned 32-bit integer
    Is this a Request or Response?

ndmp.nlist           Nlist
    No value
    List of names

ndmp.nodes           Nodes
    No value
    List of nodes

ndmp.os.type         OS Type
    String
    OS Type

ndmp.os.version      OS Version
    String
    OS Version

ndmp.record.num      Record Num
    Unsigned 32-bit integer
    Number of records

ndmp.record.size     Record Size
    Unsigned 32-bit integer
    Record size in bytes

ndmp.reply_sequence  Reply Sequence
    Unsigned 32-bit integer
    Reply Sequence number for NDMP PDU

ndmp.request_frame   Request In
    Frame number
    The request to this NDMP command is in this frame

ndmp.resid_count     Resid Count
    Unsigned 32-bit integer
    Number of remaining bytes/objects/operations
```



```
ndmp.response_frame  Response In
    Frame number
    The response to this NDMP command is in this frame

ndmp.scsi.controller  Controller
    Unsigned 32-bit integer
    Target Controller

ndmp.scsi.device      Device
    String
    Name of SCSI Device

ndmp.scsi.id          ID
    Unsigned 32-bit integer
    Target ID

ndmp.scsi.info        SCSI Info
    No value
    SCSI Info

ndmp.scsi.lun         LUN
    Unsigned 32-bit integer
    Target LUN

ndmp.scsi.model       Model
    String
    Model of the SCSI device

ndmp.seek.position    Seek Position
    Unsigned 64-bit integer
    Current seek position on device

ndmp.sequence         Sequence
    Unsigned 32-bit integer
    Sequence number for NDMP PDU

ndmp.server.product   Product
    String
    Name of product

ndmp.server.revision  Revision
    String
    Revision of this product

ndmp.server.vendor    Vendor
    String
    Name of vendor

ndmp.tape.attr.rewind Device supports rewind
    Boolean
    If this device supports rewind

ndmp.tape.attr.unload Device supports unload
    Boolean
    If this device supports unload

ndmp.tape.cap.name    Name
    String
    Name for this env-variable

ndmp.tape.cap.value   Value
    String
    Value for this env-variable
```

```
ndmp.tape.capability  Tape Capabilities
    No value
    Tape Capabilities
ndmp.tape.dev_cap    Device Capability
    No value
    Tape Device Capability
ndmp.tape.device    Device
    String
    Name of TAPE Device
ndmp.tape.flags.error  Error
    Boolean
    error
ndmp.tape.flags.no_rewind  No rewind
    Boolean
    no_rewind
ndmp.tape.flags.unload  Unload
    Boolean
    unload
ndmp.tape.flags.write_protect  Write protect
    Boolean
    write_protect
ndmp.tape.info    Tape Info
    No value
    Tape Info
ndmp.tape.invalid.block_no  Block no
    Boolean
    block_no
ndmp.tape.invalid.block_size  Block size
    Boolean
    block_size
ndmp.tape.invalid.file_num  Invalid file num
    Boolean
    invalid_file_num
ndmp.tape.invalid.partition  Invalid partition
    Boolean
    partition
ndmp.tape.invalid.soft_errors  Soft errors
    Boolean
    soft_errors
ndmp.tape.invalid.space_remain  Space remain
    Boolean
    space_remain
ndmp.tape.invalid.total_space  Total space
    Boolean
    total_space
ndmp.tape.model    Model
    String
    Model of the TAPE drive
```

```
ndmp.tape.mtio.op      Operation
    Unsigned 32-bit integer
    MTIO Operation

ndmp.tape.open_mode   Mode
    Unsigned 32-bit integer
    Mode to open tape in

ndmp.tape.status.block_no  block_no
    Unsigned 32-bit integer
    block_no

ndmp.tape.status.block_size  block_size
    Unsigned 32-bit integer
    block_size

ndmp.tape.status.file_num  file_num
    Unsigned 32-bit integer
    file_num

ndmp.tape.status.partition  partition
    Unsigned 32-bit integer
    partition

ndmp.tape.status.soft_errors  soft_errors
    Unsigned 32-bit integer
    soft_errors

ndmp.tape.status.space_remain  space_remain
    Unsigned 64-bit integer
    space_remain

ndmp.tape.status.total_space  total_space
    Unsigned 64-bit integer
    total_space

ndmp.tcp.default_env  Default Env
    No value
    Default Env's for this Butype Info

ndmp.tcp.env.name  Name
    String
    Name for this env-variable

ndmp.tcp.env.value  Value
    String
    Value for this env-variable

ndmp.tcp.port_list  TCP Ports
    No value
    List of TCP ports

ndmp.time  Time from request
    Time duration
    Time since the request packet

ndmp.timestamp  Time
    Date/Time stamp
    Timestamp for this NDMP PDU

ndmp.version  Version
    Unsigned 32-bit integer
    Version of NDMP protocol
```

```
ndmp.window.length  Window Length
                    Unsigned 64-bit integer
                    Size of window in bytes

ndmp.window.offset  Window Offset
                    Unsigned 64-bit integer
                    Offset to window in bytes
```

**Network File System (nfs)**

```
nfs.ace ace
      String
      Access Control Entry

nfs.aceflag4 aceflag
      Unsigned 32-bit integer

nfs.acemask4 acemask
      Unsigned 32-bit integer

nfs.acetype4 acetype
      Unsigned 32-bit integer

nfs.acl ACL
      No value
      Access Control List

nfs.atime atime
      Date/Time stamp
      Access Time

nfs.atime.nsec nano seconds
      Unsigned 32-bit integer
      Access Time, Nano-seconds

nfs.atime.sec seconds
      Unsigned 32-bit integer
      Access Time, Seconds

nfs.atime.usec micro seconds
      Unsigned 32-bit integer
      Access Time, Micro-seconds

nfs.attr mand_attr
      Unsigned 32-bit integer
      Mandatory Attribute

nfs.bytes_per_block bytes_per_block
      Unsigned 32-bit integer

nfs.cachethis4 Cache this?
      Boolean

nfs.call.operation Opcode
      Unsigned 32-bit integer

nfs.callback.ident callback_ident
      Unsigned 32-bit integer
      Callback Identifier

nfs.cb_location cb_location
      Unsigned 32-bit integer
```

```
nfs.cb_program    cb_program
                  Unsigned 32-bit integer
nfs.cbrenforce4   binding enforce?
                  Boolean
nfs.change_info.atomic Atomic
                  Boolean
nfs.changeid4     changeid
                  Unsigned 64-bit integer
nfs.changeid4.after changeid (after)
                  Unsigned 64-bit integer
nfs.changeid4.before changeid (before)
                  Unsigned 64-bit integer
nfs.clientid      clientid
                  Unsigned 64-bit integer
                  Client ID
nfs.cookie3       cookie
                  Unsigned 64-bit integer
nfs.cookie4       cookie
                  Unsigned 64-bit integer
nfs.cookieverf4   cookieverf
                  Unsigned 64-bit integer
nfs.count3        count
                  Unsigned 32-bit integer
nfs.count3_dircount dircount
                  Unsigned 32-bit integer
nfs.count3_maxcount maxcount
                  Unsigned 32-bit integer
nfs.count4        count
                  Unsigned 32-bit integer
nfs.create_session_flags CREATE_SESSION flags
                  Unsigned 32-bit integer
nfs.createmode    Create Mode
                  Unsigned 32-bit integer
nfs.ctime         ctime
                  Date/Time stamp
                  Creation Time
nfs.ctime.nsec    nano seconds
                  Unsigned 32-bit integer
                  Creation Time, Nano-seconds
nfs.ctime.sec     seconds
                  Unsigned 32-bit integer
                  Creation Time, Seconds
nfs.ctime.usec    micro seconds
                  Unsigned 32-bit integer
                  Creation Time, Micro-seconds
```

```
nfs.data Data
  Byte array
nfs.delegate_type delegate_type
  Unsigned 32-bit integer
nfs.devaddr device addr
  Byte array
nfs.deviceid device ID
  Unsigned 32-bit integer
nfs.deviceidx device index
  Unsigned 32-bit integer
nfs.devicenum4 num devices
  Unsigned 32-bit integer
nfs.dircount dircount
  Unsigned 32-bit integer
nfs.dirlist4.eof eof
  Boolean
nfs.dtime time delta
  Time duration
  Time Delta
nfs.dtime.nsec nano seconds
  Unsigned 32-bit integer
  Time Delta, Nano-seconds
nfs.dtime.sec seconds
  Unsigned 32-bit integer
  Time Delta, Seconds
nfs.eof eof
  Unsigned 32-bit integer
nfs.exch_id_flags EXCHANGE_ID flags
  Unsigned 32-bit integer
nfs.exchange_id.state_protect State Protect
  Unsigned 32-bit integer
  State Protect How
nfs.fattr.blocks blocks
  Unsigned 32-bit integer
nfs.fattr.blocksize blocksize
  Unsigned 32-bit integer
nfs.fattr.fileid fileid
  Unsigned 32-bit integer
nfs.fattr.fsid fsid
  Unsigned 32-bit integer
nfs.fattr.gid gid
  Unsigned 32-bit integer
nfs.fattr.nlink nlink
  Unsigned 32-bit integer
nfs.fattr.rdev rdev
  Unsigned 32-bit integer
```

```
nfs.fattr.size  size
    Unsigned 32-bit integer
nfs.fattr.type  type
    Unsigned 32-bit integer
nfs.fattr.uid   uid
    Unsigned 32-bit integer
nfs.fattr3.fileid  fileid
    Unsigned 64-bit integer
nfs.fattr3.fsid   fsid
    Unsigned 64-bit integer
nfs.fattr3.gid   gid
    Unsigned 32-bit integer
nfs.fattr3.nlink  nlink
    Unsigned 32-bit integer
nfs.fattr3.rdev   rdev
    Unsigned 32-bit integer
nfs.fattr3.size   size
    Unsigned 64-bit integer
nfs.fattr3.type   Type
    Unsigned 32-bit integer
nfs.fattr3.uid   uid
    Unsigned 32-bit integer
nfs.fattr3.used   used
    Unsigned 64-bit integer
nfs.fattr4.aclsupport  aclsupport
    Unsigned 32-bit integer
nfs.fattr4.attr_vals  attr_vals
    Byte array
nfs.fattr4.fileid  fileid
    Unsigned 64-bit integer
nfs.fattr4.files_avail  files_avail
    Unsigned 64-bit integer
nfs.fattr4.files_free  files_free
    Unsigned 64-bit integer
nfs.fattr4.files_total  files_total
    Unsigned 64-bit integer
nfs.fattr4.fs_location  fs_location4
    String
nfs.fattr4.lease_time  lease_time
    Unsigned 32-bit integer
nfs.fattr4.maxfilesize  maxfilesize
    Unsigned 64-bit integer
nfs.fattr4.maxlink  maxlink
    Unsigned 32-bit integer
```

```
nfs.fattr4.maxname  maxname
    Unsigned 32-bit integer
nfs.fattr4.maxread  maxread
    Unsigned 64-bit integer
nfs.fattr4.maxwrite  maxwrite
    Unsigned 64-bit integer
nfs.fattr4.mounted_on_fileid  fileid
    Unsigned 64-bit integer
nfs.fattr4.numlinks  numlinks
    Unsigned 32-bit integer
nfs.fattr4.quota_hard  quota_hard
    Unsigned 64-bit integer
nfs.fattr4.quota_soft  quota_soft
    Unsigned 64-bit integer
nfs.fattr4.quota_used  quota_used
    Unsigned 64-bit integer
nfs.fattr4.size  size
    Unsigned 64-bit integer
nfs.fattr4.space_avail  space_avail
    Unsigned 64-bit integer
nfs.fattr4.space_free  space_free
    Unsigned 64-bit integer
nfs.fattr4.space_total  space_total
    Unsigned 64-bit integer
nfs.fattr4.space_used  space_used
    Unsigned 64-bit integer
nfs.fattr4_archive  fattr4_archive
    Boolean
nfs.fattr4_cansetime  fattr4_cansetime
    Boolean
nfs.fattr4_case_insensitive  fattr4_case_insensitive
    Boolean
nfs.fattr4_case_preserving  fattr4_case_preserving
    Boolean
nfs.fattr4_chown_restricted  fattr4_chown_restricted
    Boolean
nfs.fattr4_hidden  fattr4_hidden
    Boolean
nfs.fattr4_homogeneous  fattr4_homogeneous
    Boolean
nfs.fattr4_link_support  fattr4_link_support
    Boolean
nfs.fattr4_mimetype  fattr4_mimetype
    String
```



```
nfs.fattr4_named_attr  fattr4_named_attr
    Boolean

nfs.fattr4_no_trunc    fattr4_no_trunc
    Boolean

nfs.fattr4_owner      fattr4_owner
    String

nfs.fattr4_owner_group  fattr4_owner_group
    String

nfs.fattr4_symlink_support  fattr4_symlink_support
    Boolean

nfs.fattr4_system      fattr4_system
    Boolean

nfs.fattr4_unique_handles  fattr4_unique_handles
    Boolean

nfs.fh.auth_type      auth_type
    Unsigned 8-bit integer
    authentication type

nfs.fh.dentry         dentry
    Unsigned 32-bit integer
    dentry (cookie)

nfs.fh.dev            device
    Unsigned 32-bit integer

nfs.fh.dirinode       directory inode
    Unsigned 32-bit integer

nfs.fh.export.fileid  fileid
    Unsigned 32-bit integer
    export point fileid

nfs.fh.export.generation  generation
    Unsigned 32-bit integer
    export point generation

nfs.fh.export.snapid  snapid
    Unsigned 8-bit integer
    export point snapid

nfs.fh.file.flag.aggr  aggr
    Unsigned 16-bit integer
    file flag: aggr

nfs.fh.file.flag.empty  empty
    Unsigned 16-bit integer
    file flag: empty

nfs.fh.file.flag.exp_snapdir  exp_snapdir
    Unsigned 16-bit integer
    file flag: exp_snapdir

nfs.fh.file.flag.foster  foster
    Unsigned 16-bit integer
    file flag: foster
```

```
nfs.fh.file.flag.metadata  metadata
    Unsigned 16-bit integer
    file flag: metadata

nfs.fh.file.flag.mntpoint  mount point
    Unsigned 16-bit integer
    file flag: mountpoint

nfs.fh.file.flag.multivolume  multivolume
    Unsigned 16-bit integer
    file flag: multivolume

nfs.fh.file.flag.named_attr  named_attr
    Unsigned 16-bit integer
    file flag: named_attr

nfs.fh.file.flag.next_gen  next_gen
    Unsigned 16-bit integer
    file flag: next_gen

nfs.fh.file.flag.orphan  orphan
    Unsigned 16-bit integer
    file flag: orphan

nfs.fh.file.flag.private  private
    Unsigned 16-bit integer
    file flag: private

nfs.fh.file.flag.snapdir_ent  snapdir_ent
    Unsigned 16-bit integer
    file flag: snapdir_ent

nfs.fh.file.flag.snapdir  snapdir
    Unsigned 16-bit integer
    file flag: snapdir

nfs.fh.file.flag.striped  striped
    Unsigned 16-bit integer
    file flag: striped

nfs.fh.file.flag.vbn_access  vbn_access
    Unsigned 16-bit integer
    file flag: vbn_access

nfs.fh.file.flag.vfiler  vfiler
    Unsigned 16-bit integer
    file flag: vfiler

nfs.fh.fileid  fileid
    Unsigned 32-bit integer
    file ID

nfs.fh.fileid_type  fileid_type
    Unsigned 8-bit integer
    file ID type

nfs.fh.flags  flags
    Unsigned 16-bit integer
    file handle flags

nfs.fh.fn  file number
    Unsigned 32-bit integer
```

```
nfs.fh.fn.generation  generation
    Unsigned 32-bit integer
    file number generation

nfs.fh.fn.inode  inode
    Unsigned 32-bit integer
    file number inode

nfs.fh.fn.len  length
    Unsigned 32-bit integer
    file number length

nfs.fh.fsid  fsid
    Unsigned 32-bit integer
    file system ID

nfs.fh.fsid.inode  inode
    Unsigned 32-bit integer
    file system inode

nfs.fh.fsid.major  major
    Unsigned 32-bit integer
    major file system ID

nfs.fh.fsid.minor  minor
    Unsigned 32-bit integer
    minor file system ID

nfs.fh.fsid_type  fsid_type
    Unsigned 8-bit integer
    file system ID type

nfs.fh.fstype  file system type
    Unsigned 32-bit integer

nfs.fh.generation  generation
    Unsigned 32-bit integer
    inode generation

nfs.fh.handletype  handletype
    Unsigned 32-bit integer
    v4 handle type

nfs.fh.hash  hash
    Unsigned 32-bit integer
    file handle hash

nfs.fh.hp.len  length
    Unsigned 32-bit integer
    hash path length

nfs.fh.length  length
    Unsigned 32-bit integer
    file handle length

nfs.fh.mount.fileid  fileid
    Unsigned 32-bit integer
    mount point fileid

nfs.fh.mount.generation  generation
    Unsigned 32-bit integer
    mount point generation
```

```
nfs.fh.pinode  pseudo inode
                Unsigned 32-bit integer
nfs.fh.snapid  snapid
                Unsigned 8-bit integer
                snapshot ID
nfs.fh.unused  unused
                Unsigned 8-bit integer
nfs.fh.version version
                Unsigned 8-bit integer
                file handle layout version
nfs.fh.xdev    exported device
                Unsigned 32-bit integer
nfs.fh.xfn     exported file number
                Unsigned 32-bit integer
nfs.fh.xfn.generation  generation
                Unsigned 32-bit integer
                exported file number generation
nfs.fh.xfn.inode  exported inode
                Unsigned 32-bit integer
                exported file number inode
nfs.fh.xfn.len   length
                Unsigned 32-bit integer
                exported file number length
nfs.fh.xfsid.major  exported major
                Unsigned 32-bit integer
                exported major file system ID
nfs.fh.xfsid.minor  exported minor
                Unsigned 32-bit integer
                exported minor file system ID
nfs.fhandle     filehandle
                Byte array
                Opaque nfs filehandle
nfs.filesize    filesize
                Unsigned 64-bit integer
nfs.flavor4     flavor
                Unsigned 32-bit integer
nfs.flavors.info  Flavors Info
                No value
nfs.fsid4.major  fsid4.major
                Unsigned 64-bit integer
nfs.fsid4.minor  fsid4.minor
                Unsigned 64-bit integer
nfs.fsinfo.dtpref .dtpref
                Unsigned 32-bit integer
                Preferred READDIR request
```

```
nfs.fsinfo.maxfilesize  maxfilesize
    Unsigned 64-bit integer
    Maximum file size

nfs.fsinfo.properties  Properties
    Unsigned 32-bit integer
    File System Properties

nfs.fsinfo.rtmax  rtmax
    Unsigned 32-bit integer
    maximum READ request

nfs.fsinfo.rtmult  rtmult
    Unsigned 32-bit integer
    Suggested READ multiple

nfs.fsinfo.rtpref  rtpref
    Unsigned 32-bit integer
    Preferred READ request size

nfs.fsinfo.wtmax  wtmax
    Unsigned 32-bit integer
    Maximum WRITE request size

nfs.fsinfo.wtmult  wtmult
    Unsigned 32-bit integer
    Suggested WRITE multiple

nfs.fsinfo.wtpref  wtpref
    Unsigned 32-bit integer
    Preferred WRITE request size

nfs.fsstat.invarsec  invarsec
    Unsigned 32-bit integer
    probable number of seconds of file system invariance

nfs.fsstat3_resok.abytes  Available free bytes
    Unsigned 64-bit integer

nfs.fsstat3_resok.abytes  Available free file slots
    Unsigned 64-bit integer

nfs.fsstat3_resok.fbytes  Free bytes
    Unsigned 64-bit integer

nfs.fsstat3_resok.ffiles  Free file slots
    Unsigned 64-bit integer

nfs.fsstat3_resok.tbytes  Total bytes
    Unsigned 64-bit integer

nfs.fsstat3_resok.tfiles  Total file slots
    Unsigned 64-bit integer

nfs.full_name  Full Name
    String

nfs.gid3  gid
    Unsigned 32-bit integer

nfs.gid4  gid
    Unsigned 32-bit integer
```

```
nfs.gsshandle4  gsshandle4
    Byte array
nfs.gxfh3.cid    cluster id
    Unsigned 16-bit integer
nfs.gxfh3.epoch  epoch
    Unsigned 16-bit integer
nfs.gxfh3.exportptid  export point id
    Unsigned 32-bit integer
nfs.gxfh3.exportptuid  export point unique id
    Unsigned 32-bit integer
nfs.gxfh3.ldsidsid  local dsid
    Unsigned 32-bit integer
nfs.gxfh3.reserved  reserved
    Unsigned 16-bit integer
nfs.gxfh3.sfhflags  flags
    Unsigned 8-bit integer
nfs.gxfh3.sfhflags.empty  empty
    Boolean
nfs.gxfh3.sfhflags.ontap7g  ontap-7g
    Unsigned 8-bit integer
nfs.gxfh3.sfhflags.ontapgx  ontap-gx
    Unsigned 8-bit integer
nfs.gxfh3.sfhflags.reserv2  reserved
    Unsigned 8-bit integer
nfs.gxfh3.sfhflags.reserve1  reserved
    Unsigned 8-bit integer
nfs.gxfh3.sfhflags.snapdir  snap dir
    Boolean
nfs.gxfh3.sfhflags.snapdirent  snap dir ent
    Boolean
nfs.gxfh3.sfhflags.streamdir  stream dir
    Boolean
nfs.gxfh3.sfhflags.striped  striped
    Boolean
nfs.gxfh3.spinfileid  spin file id
    Unsigned 32-bit integer
nfs.gxfh3.spinfileuid  spin file unique id
    Unsigned 32-bit integer
nfs.gxfh3.utility  utility
    Unsigned 8-bit integer
nfs.gxfh3.utlfield.junction  broken junction
    Unsigned 8-bit integer
nfs.gxfh3.utlfield.notjunction  not broken junction
    Unsigned 8-bit integer
```

```
nfs.gxfh3.utlfield.treeR  tree R
    Unsigned 8-bit integer
nfs.gxfh3.utlfield.treeW  tree W
    Unsigned 8-bit integer
nfs.gxfh3.utlfield.version  file handle version
    Unsigned 8-bit integer
nfs.gxfh3.volcnt  volume count
    Unsigned 8-bit integer
nfs.hashalg4  hash alg
    Unsigned 32-bit integer
nfs.impl_id4.length  Implemetation ID length
    Unsigned 32-bit integer
nfs.iomode  IO mode
    Unsigned 32-bit integer
nfs.layout  layout
    Byte array
nfs.layoutavail  layout available?
    Boolean
nfs.layouttype  layout type
    Unsigned 32-bit integer
nfs.layoutupdate  layout update
    Byte array
nfs.length4  length
    Unsigned 64-bit integer
nfs.lock.locker.new_lock_owner  new lock owner?
    Boolean
nfs.lock.reclaim  reclaim?
    Boolean
nfs.lock_owner4  owner
    Byte array
nfs.lock_seqid  lock_seqid
    Unsigned 32-bit integer
    Lock Sequence ID
nfs.locktype4  locktype
    Unsigned 32-bit integer
nfs.machinename4  machine name
    String
nfs.majorid4  major ID
    Byte array
nfs.maxcount  maxcount
    Unsigned 32-bit integer
nfs.maxops4  max ops
    Unsigned 32-bit integer
nfs.maxreqs4  max reqs
    Unsigned 32-bit integer
```

```
nfs.maxreqsize4  max req size
    Unsigned 32-bit integer
nfs.maxrespsize4  max resp size
    Unsigned 32-bit integer
nfs.maxrespsizecached4  max resp size cached
    Unsigned 32-bit integer
nfs.mdscommit  MDS commit?
    Boolean
nfs.minlength4  min length
    Unsigned 64-bit integer
nfs.minorid4  minor ID
    Unsigned 64-bit integer
nfs.minorversion  minorversion
    Unsigned 32-bit integer
nfs.mtime  mtime
    Date/Time stamp
    Modify Time
nfs.mtime.nsec  nano seconds
    Unsigned 32-bit integer
    Modify Time, Nano-seconds
nfs.mtime.sec  seconds
    Unsigned 32-bit integer
    Modify Seconds
nfs.mtime.usec  micro seconds
    Unsigned 32-bit integer
    Modify Time, Micro-seconds
nfs.name  Name
    String
nfs.newoffset  new offset?
    Boolean
nfs.newsize  new size?
    Boolean
nfs.newtime  new time?
    Boolean
nfs.nfs_client_id4.id  id
    Byte array
nfs.nfs_ftype4  nfs_ftype4
    Unsigned 32-bit integer
nfs.nfsstat3  Status
    Unsigned 32-bit integer
    Reply status
nfs.nfsstat4  Status
    Unsigned 32-bit integer
    Reply status
nfs.nfstime4.nseconds  nseconds
    Unsigned 32-bit integer
```



```
nfs.nfstime4.seconds  seconds
    Unsigned 64-bit integer
nfs.nii_domain4  Implementer Domain name
    String
nfs.nii_name4  Implementation name
    String
nfs.notifydsop  NotifyDS op
    Unsigned 32-bit integer
nfs.num_blocks  num_blocks
    Unsigned 32-bit integer
nfs.offset3  offset
    Unsigned 64-bit integer
nfs.offset4  offset
    Unsigned 64-bit integer
nfs.open.claim_type  Claim Type
    Unsigned 32-bit integer
nfs.open.delegation_type  Delegation Type
    Unsigned 32-bit integer
nfs.open.limit_by  Space Limit
    Unsigned 32-bit integer
    Limit By
nfs.open.opentype  Open Type
    Unsigned 32-bit integer
nfs.open4.share_access  share_access
    Unsigned 32-bit integer
nfs.open4.share_deny  share_deny
    Unsigned 32-bit integer
nfs.open_owner4  owner
    Byte array
nfs.openattr4.createdir  attribute dir create
    Boolean
nfs.padsizesize4  hdr pad size
    Unsigned 32-bit integer
nfs.pathconf.case_insensitive  case_insensitive
    Boolean
    file names are treated case insensitive
nfs.pathconf.case_preserving  case_preserving
    Boolean
    file name cases are preserved
nfs.pathconf.chown_restricted  chown_restricted
    Boolean
    chown is restricted to root
nfs.pathconf.linkmax  linkmax
    Unsigned 32-bit integer
    Maximum number of hard links
```

```
nfs.pathconf.name_max  name_max
    Unsigned 32-bit integer
    Maximum file name length

nfs.pathconf.no_trunc  no_trunc
    Boolean
    No long file name truncation

nfs.pathname.component  Filename
    String
    Pathname component

nfs.procedure_v2  V2 Procedure
    Unsigned 32-bit integer

nfs.procedure_v3  V3 Procedure
    Unsigned 32-bit integer

nfs.procedure_v4  V4 Procedure
    Unsigned 32-bit integer

nfs.prot_info4_encr_alg  Prot Info encryption algorithm
    Unsigned 32-bit integer

nfs.prot_info4_hash_alg  Prot Info hash algorithm
    Unsigned 32-bit integer

nfs.prot_info4_spi_window  Prot Info spi window
    Unsigned 32-bit integer

nfs.prot_info4_svv_length  Prot Info svv_length
    Unsigned 32-bit integer

nfs.r_addr  r_addr
    Byte array

nfs.r_netid  r_netid
    Byte array

nfs.rdmachanattrs4  RDMA chan attrs
    Unsigned 32-bit integer

nfs.read.count  Count
    Unsigned 32-bit integer
    Read Count

nfs.read.eof  EOF
    Boolean

nfs.read.offset  Offset
    Unsigned 32-bit integer
    Read Offset

nfs.read.totalcount  Total Count
    Unsigned 32-bit integer
    Total Count (obsolete)

nfs.readdir.cookie  Cookie
    Unsigned 32-bit integer
    Directory Cookie

nfs.readdir.count  Count
    Unsigned 32-bit integer
    Directory Count
```

```
nfs.readdir.entry  Entry
    No value
    Directory Entry
nfs.readdir.entry.cookie  Cookie
    Unsigned 32-bit integer
    Directory Cookie
nfs.readdir.entry.fileid  File ID
    Unsigned 32-bit integer
nfs.readdir.entry.name  Name
    String
nfs.readdir.entry3.cookie  Cookie
    Unsigned 64-bit integer
    Directory Cookie
nfs.readdir.entry3.fileid  File ID
    Unsigned 64-bit integer
nfs.readdir.entry3.name  Name
    String
nfs.readdir.eof  EOF
    Unsigned 32-bit integer
nfs.readdirplus.entry.cookie  Cookie
    Unsigned 64-bit integer
    Directory Cookie
nfs.readdirplus.entry.fileid  File ID
    Unsigned 64-bit integer
nfs.readdirplus.entry.name  Name
    String
nfs.readlink.data  Data
    String
    Symbolic Link Data
nfs.recall  Recall
    Boolean
nfs.recall4  recall
    Boolean
nfs.reclaim4  reclaim
    Boolean
nfs.reply.operation  Opcode
    Unsigned 32-bit integer
nfs.retclose4  return on close?
    Boolean
nfs.returntype  return type
    Unsigned 32-bit integer
nfs.scope  server scope
    Byte array
nfs.secinfo.flavor  flavor
    Unsigned 32-bit integer
```

```
nfs.secinfo.flavor_info.rpcsec_gss_info.oid  oid
    Byte array
nfs.secinfo.flavor_info.rpcsec_gss_info.qop  qop
    Unsigned 32-bit integer
nfs.secinfo.rpcsec_gss_info.service  service
    Unsigned 32-bit integer
nfs.seqid  seqid
    Unsigned 32-bit integer
    Sequence ID
nfs.server  server
    String
nfs.service4  gid
    Unsigned 32-bit integer
nfs.session_id4  sessionid
    Byte array
nfs.set_it  set_it
    Unsigned 32-bit integer
    How To Set Time
nfs.set_size3.size  size
    Unsigned 64-bit integer
nfs.slotid4  slot ID
    Unsigned 32-bit integer
nfs.specdata1  specdata1
    Unsigned 32-bit integer
nfs.specdata2  specdata2
    Unsigned 32-bit integer
nfs.ssvlen4  ssv len
    Unsigned 32-bit integer
nfs.stable_how4  stable_how4
    Unsigned 32-bit integer
nfs.stamp4  stamp
    Unsigned 32-bit integer
nfs.stat  Status
    Unsigned 32-bit integer
    Reply status
nfs.state_protect_num_gss_handles  State Protect num gss handles
    Unsigned 32-bit integer
nfs.state_protect_window  State Protect window
    Unsigned 32-bit integer
nfs.stateid4  stateid
    Unsigned 64-bit integer
nfs.stateid4.other  Data
    Byte array
nfs.statfs.bavail  Available Blocks
    Unsigned 32-bit integer
```

```
nfs.statfs.bfree  Free Blocks
    Unsigned 32-bit integer
nfs.statfs.blocks  Total Blocks
    Unsigned 32-bit integer
nfs.statfs.bsize  Block Size
    Unsigned 32-bit integer
nfs.statfs.tsize  Transfer Size
    Unsigned 32-bit integer
nfs.status  status
    Unsigned 32-bit integer
nfs.stripe devs  stripe devs
    Unsigned 32-bit integer
nfs.stripeindex  first stripe index
    Unsigned 32-bit integer
nfs.stripe type  stripe type
    Unsigned 32-bit integer
nfs.stripe unit  stripe unit
    Unsigned 64-bit integer
nfs.symlink.linktext  Name
    String
    Symbolic link contents
nfs.symlink.to  To
    String
    Symbolic link destination name
nfs.tag  Tag
    String
nfs.type  Type
    Unsigned 32-bit integer
    File Type
nfs.uid3  uid
    Unsigned 32-bit integer
nfs.uid4  uid
    Unsigned 32-bit integer
nfs.util  util
    Unsigned 32-bit integer
nfs.verifier4  verifier
    Unsigned 64-bit integer
nfs.wcc_attr.size  size
    Unsigned 64-bit integer
nfs.who  who
    String
nfs.write.beginoffset  Begin Offset
    Unsigned 32-bit integer
    Begin offset (obsolete)
nfs.write.committed  Committed
    Unsigned 32-bit integer
```

```
nfs.write.offset  Offset
    Unsigned 32-bit integer
nfs.write.stable  Stable
    Unsigned 32-bit integer
nfs.write.totalcount  Total Count
    Unsigned 32-bit integer
    Total Count (obsolete)
```

### **Network Lock Manager Protocol (nlm)**

```
nlm.block  block
    Boolean
    block
nlm.cookie  cookie
    Byte array
    cookie
nlm.exclusive  exclusive
    Boolean
    exclusive
nlm.holder  holder
    No value
    holder
nlm.lock  lock
    No value
    lock
nlm.lock.caller_name  caller_name
    String
    caller_name
nlm.lock.l_len  l_len
    Unsigned 64-bit integer
    l_len
nlm.lock.l_offset  l_offset
    Unsigned 64-bit integer
    l_offset
nlm.lock.owner  owner
    Byte array
    owner
nlm.lock.svid  svid
    Unsigned 32-bit integer
    svid
nlm.msg_in  Request MSG in
    Unsigned 32-bit integer
    The RES packet is a response to the MSG in this packet
nlm.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure
nlm.procedure_v2  V2 Procedure
    Unsigned 32-bit integer
    V2 Procedure
```

```
nlm.procedure_v3  V3 Procedure
  Unsigned 32-bit integer
  V3 Procedure

nlm.procedure_v4  V4 Procedure
  Unsigned 32-bit integer
  V4 Procedure

nlm.reclaim  reclaim
  Boolean
  reclaim

nlm.res_in  Reply RES in
  Unsigned 32-bit integer
  The response to this MSG packet is in this packet

nlm.sequence  sequence
  Signed 32-bit integer
  sequence

nlm.share  share
  No value
  share

nlm.share.access  access
  Unsigned 32-bit integer
  access

nlm.share.mode  mode
  Unsigned 32-bit integer
  mode

nlm.share.name  name
  String
  name

nlm.stat  stat
  Unsigned 32-bit integer
  stat

nlm.state  state
  Unsigned 32-bit integer
  STATD state

nlm.test_stat  test_stat
  No value
  test_stat

nlm.test_stat.stat  stat
  Unsigned 32-bit integer
  stat

nlm.time  Time from request
  Time duration
  Time between Request and Reply for async NLM calls
```

#### **Network News Transfer Protocol (nntp)**

```
nntp.request  Request
  Boolean
  TRUE if NNTP request
```

nntp.response Response  
Boolean  
TRUE if NNTP response

### Network Service Over IP (nsip)

nsip.bvci BVCi  
Unsigned 16-bit integer  
BSSGP Virtual Connection Identifier

nsip.cause Cause  
Unsigned 8-bit integer

nsip.control\_bits.c Confirm change flow  
Boolean

nsip.control\_bits.r Request change flow  
Boolean

nsip.end\_flag End flag  
Boolean

nsip.ip4\_elements IP4 elements  
No value  
List of IP4 elements

nsip.ip6\_elements IP6 elements  
No value  
List of IP6 elements

nsip.ip\_address IP Address  
IPv4 address

nsip.ip\_element.data\_weight Data Weight  
Unsigned 8-bit integer

nsip.ip\_element.ip\_address IP Address  
IPv4 address

nsip.ip\_element.signalling\_weight Signalling Weight  
Unsigned 8-bit integer

nsip.ip\_element.udp\_port UDP Port  
Unsigned 16-bit integer

nsip.max\_num\_ns\_vc Maximum number of NS-VCs  
Unsigned 16-bit integer

nsip.ns\_vci NS-VCI  
Unsigned 16-bit integer  
Network Service Virtual Link Identifier

nsip.nsei NSEI  
Unsigned 16-bit integer  
Network Service Entity Identifier

nsip.num\_ip4\_endpoints Number of IP4 endpoints  
Unsigned 16-bit integer

nsip.num\_ip6\_endpoints Number of IP6 endpoints  
Unsigned 16-bit integer



```
nsip.pdu_type  PDU type
                Unsigned 8-bit integer
                PDU type information element
nsip.reset_flag  Reset flag
                Boolean
nsip.transaction_id  Transaction ID
                Unsigned 8-bit integer
```

#### **Network Status Monitor Callback Protocol (statnotify)**

```
statnotify.name  Name
                String
                Name of client that changed
statnotify.priv  Priv
                Byte array
                Client supplied opaque data
statnotify.procedure_v1  V1 Procedure
                Unsigned 32-bit integer
                V1 Procedure
statnotify.state  State
                Unsigned 32-bit integer
                New state of client that changed
```

#### **Network Status Monitor Protocol (stat)**

```
stat.mon  Monitor
          No value
          Monitor Host
stat.mon_id.name  Monitor ID Name
                String
                Monitor ID Name
stat.my_id  My ID
          No value
          My_ID structure
stat.my_id.hostname  Hostname
                String
                My_ID Host to callback
stat.my_id.proc  Procedure
                Unsigned 32-bit integer
                My_ID Procedure to callback
stat.my_id.prog  Program
                Unsigned 32-bit integer
                My_ID Program to callback
stat.my_id.vers  Version
                Unsigned 32-bit integer
                My_ID Version of callback
stat.name  Name
          String
          Name
```

```
stat.priv Priv
  Byte array
  Private client supplied opaque data

stat.procedure_v1 V1 Procedure
  Unsigned 32-bit integer
  V1 Procedure

stat.stat_chge Status Change
  No value
  Status Change structure

stat.stat_res Status Result
  No value
  Status Result

stat.stat_res.res Result
  Unsigned 32-bit integer
  Result

stat.stat_res.state State
  Unsigned 32-bit integer
  State

stat.state State
  Unsigned 32-bit integer
  State of local NSM
```

### **Network Time Protocol (ntp)**

```
ntp.ext Extension
  No value
  Extension

ntp.ext.associd Association ID
  Unsigned 32-bit integer
  Association ID

ntp.ext.flags Flags
  Unsigned 8-bit integer
  Flags (Response/Error/Version)

ntp.ext.flags.error Error bit
  Unsigned 8-bit integer
  Error bit

ntp.ext.flags.r Response bit
  Unsigned 8-bit integer
  Response bit

ntp.ext.flags.vn Version
  Unsigned 8-bit integer
  Version

ntp.ext.fstamp File Timestamp
  Unsigned 32-bit integer
  File Timestamp

ntp.ext.len Extension length
  Unsigned 16-bit integer
  Extension length
```

```
ntp.ext.op  Opcode
  Unsigned 8-bit integer
  Opcode

ntp.ext.sig  Signature
  Byte array
  Signature

ntp.ext.siglen  Signature length
  Unsigned 32-bit integer
  Signature length

ntp.ext.tstamp  Timestamp
  Unsigned 32-bit integer
  Timestamp

ntp.ext.val  Value
  Byte array
  Value

ntp.ext.vallen  Value length
  Unsigned 32-bit integer
  Value length

ntp.flags  Flags
  Unsigned 8-bit integer
  Flags (Leap/Version/Mode)

ntp.flags.li  Leap Indicator
  Unsigned 8-bit integer
  Leap Indicator

ntp.flags.mode  Mode
  Unsigned 8-bit integer
  Mode

ntp.flags.vn  Version number
  Unsigned 8-bit integer
  Version number

ntp.keyid  Key ID
  Byte array
  Key ID

ntp.mac  Message Authentication Code
  Byte array
  Message Authentication Code

ntp.org  Originate Time Stamp
  Byte array
  Originate Time Stamp

ntp.ppoll  Peer Polling Interval
  Unsigned 8-bit integer
  Peer Polling Interval

ntp.precision  Peer Clock Precision
  Signed 8-bit integer
  Peer Clock Precision

ntp.rec  Receive Time Stamp
  Byte array
  Receive Time Stamp
```

```
ntp.refid Reference Clock ID
  Byte array
  Reference Clock ID

ntp.reftime Reference Clock Update Time
  Byte array
  Reference Clock Update Time

ntp.rootdelay Root Delay
  Double-precision floating point
  Root Delay

ntp.rootdispersion Root Dispersion
  Double-precision floating point
  Root Dispersion

ntp.stratum Peer Clock Stratum
  Unsigned 8-bit integer
  Peer Clock Stratum

ntp.xmt Transmit Time Stamp
  Byte array
  Transmit Time Stamp

ntpctrl.flags2 Flags 2
  Unsigned 8-bit integer
  Flags (Response/Error/More/Opcode)

ntpctrl.flags2.error Error bit
  Unsigned 8-bit integer
  Error bit

ntpctrl.flags2.more More bit
  Unsigned 8-bit integer
  More bit

ntpctrl.flags2.opcode Opcode
  Unsigned 8-bit integer
  Opcode

ntpctrl.flags2.r Response bit
  Unsigned 8-bit integer
  Response bit

ntppriv.auth Auth bit
  Unsigned 8-bit integer
  Auth bit

ntppriv.auth_seq Auth, sequence
  Unsigned 8-bit integer
  Auth bit, sequence number

ntppriv.flags.more More bit
  Unsigned 8-bit integer
  More bit

ntppriv.flags.r Response bit
  Unsigned 8-bit integer
  Response bit

ntppriv.impl Implementation
  Unsigned 8-bit integer
  Implementation
```

ntppriv.reqcode Request code  
Unsigned 8-bit integer  
Request code

ntppriv.seq Sequence number  
Unsigned 8-bit integer  
Sequence number

### **Nortel SONMP (sonmp)**

sonmp.backplane Backplane type  
Unsigned 8-bit integer  
Backplane type of the agent sending the topology message

sonmp.chassis Chassis type  
Unsigned 8-bit integer  
Chassis type of the agent sending the topology message

sonmp.ipaddress NMM IP address  
IPv4 address  
IP address of the agent (NMM)

sonmp.nmmstate NMM state  
Unsigned 8-bit integer  
Current state of this agent

sonmp.numberoflinks Number of links  
Unsigned 8-bit integer  
Number of interconnect ports

sonmp.segmentident Segment Identifier  
Unsigned 24-bit integer  
Segment id of the segment from which the agent is sending the topology message

### **Novell Cluster Services (ncs)**

ncs.incarnation Incarnation  
Unsigned 32-bit integer

ncs.pan\_id Panning ID  
Unsigned 32-bit integer

### **Novell Distributed Print System (ndps)**

ndps.add\_bytes Address Bytes  
Byte array  
Address Bytes

ndps.addr\_len Address Length  
Unsigned 32-bit integer  
Address Length

ndps.admin\_submit\_flag Admin Submit Flag?  
Boolean  
Admin Submit Flag?

ndps.answer\_time Answer Time  
Unsigned 32-bit integer  
Answer Time

```
ndps.archive_size  Archive File Size
    Unsigned 32-bit integer
    Archive File Size

ndps.archive_type  Archive Type
    Unsigned 32-bit integer
    Archive Type

ndps.asn1_type     ASN.1 Type
    Unsigned 16-bit integer
    ASN.1 Type

ndps.attribue_value Value
    Unsigned 32-bit integer
    Value

ndps.attribute_set Attribute Set
    Byte array
    Attribute Set

ndps.attribute_time Time
    Date/Time stamp
    Time

ndps.auth_null    Auth Null
    Byte array
    Auth Null

ndps.banner_count Number of Banners
    Unsigned 32-bit integer
    Number of Banners

ndps.banner_name  Banner Name
    String
    Banner Name

ndps.banner_type  Banner Type
    Unsigned 32-bit integer
    Banner Type

ndps.broker_name  Broker Name
    String
    Broker Name

ndps.certified    Certified
    Byte array
    Certified

ndps.connection   Connection
    Unsigned 16-bit integer
    Connection

ndps.context      Context
    Byte array
    Context

ndps.context_len  Context Length
    Unsigned 32-bit integer
    Context Length

ndps.cred_type    Credential Type
    Unsigned 32-bit integer
    Credential Type
```

```
ndps.data [Data]
  No value
  [Data]

ndps.delivery_add_count Number of Delivery Addresses
  Unsigned 32-bit integer
  Number of Delivery Addresses

ndps.delivery_flag Delivery Address Data?
  Boolean
  Delivery Address Data?

ndps.delivery_method_count Number of Delivery Methods
  Unsigned 32-bit integer
  Number of Delivery Methods

ndps.delivery_method_type Delivery Method Type
  Unsigned 32-bit integer
  Delivery Method Type

ndps.doc_content Document Content
  Unsigned 32-bit integer
  Document Content

ndps.doc_name Document Name
  String
  Document Name

ndps.error_val Return Status
  Unsigned 32-bit integer
  Return Status

ndps.ext_err_string Extended Error String
  String
  Extended Error String

ndps.ext_error Extended Error Code
  Unsigned 32-bit integer
  Extended Error Code

ndps.file_name File Name
  String
  File Name

ndps.file_time_stamp File Time Stamp
  Unsigned 32-bit integer
  File Time Stamp

ndps.font_file_count Number of Font Files
  Unsigned 32-bit integer
  Number of Font Files

ndps.font_file_name Font File Name
  String
  Font File Name

ndps.font_name Font Name
  String
  Font Name

ndps.font_type Font Type
  Unsigned 32-bit integer
  Font Type
```

ndps.font\_type\_count Number of Font Types  
Unsigned 32-bit integer  
Number of Font Types

ndps.font\_type\_name Font Type Name  
String  
Font Type Name

ndps.fragment NDPS Fragment  
Frame number  
NDPS Fragment

ndps.fragments NDPS Fragments  
No value  
NDPS Fragments

ndps.get\_status\_flags Get Status Flag  
Unsigned 32-bit integer  
Get Status Flag

ndps.guid GUID  
Byte array  
GUID

ndps.inc\_across\_feed Increment Across Feed  
Byte array  
Increment Across Feed

ndps.included\_doc Included Document  
Byte array  
Included Document

ndps.included\_doc\_len Included Document Length  
Unsigned 32-bit integer  
Included Document Length

ndps.inf\_file\_name INF File Name  
String  
INF File Name

ndps.info\_boolean Boolean Value  
Boolean  
Boolean Value

ndps.info\_bytes Byte Value  
Byte array  
Byte Value

ndps.info\_int Integer Value  
Unsigned 8-bit integer  
Integer Value

ndps.info\_int16 16 Bit Integer Value  
Unsigned 16-bit integer  
16 Bit Integer Value

ndps.info\_int32 32 Bit Integer Value  
Unsigned 32-bit integer  
32 Bit Integer Value

ndps.info\_string String Value  
String  
String Value



```
ndps.interrupt_job_type  Interrupt Job Identifier
    Unsigned 32-bit integer
    Interrupt Job Identifier

ndps.interval  Interval
    Unsigned 32-bit integer
    Interval

ndps.ip  IP Address
    IPv4 address
    IP Address

ndps.item_bytes  Item Ptr
    Byte array
    Item Ptr

ndps.item_ptr  Item Pointer
    Byte array
    Item Pointer

ndps.language_flag  Language Data?
    Boolean
    Language Data?

ndps.last_packet_flag  Last Packet Flag
    Unsigned 32-bit integer
    Last Packet Flag

ndps.level  Level
    Unsigned 32-bit integer
    Level

ndps.local_id  Local ID
    Unsigned 32-bit integer
    Local ID

ndps.lower_range  Lower Range
    Unsigned 32-bit integer
    Lower Range

ndps.lower_range_n64  Lower Range
    Byte array
    Lower Range

ndps.message  Message
    String
    Message

ndps.method_flag  Method Data?
    Boolean
    Method Data?

ndps.method_name  Method Name
    String
    Method Name

ndps.method_ver  Method Version
    String
    Method Version

ndps.n64  Value
    Byte array
    Value
```

```
ndps.ndps_abort Abort?
  Boolean
  Abort?

ndps.ndps_address Address
  Unsigned 32-bit integer
  Address

ndps.ndps_address_type Address Type
  Unsigned 32-bit integer
  Address Type

ndps.ndps_attr_boolean Value?
  Boolean
  Value?

ndps.ndps_attr_type Value Syntax
  Unsigned 32-bit integer
  Value Syntax

ndps.ndps_attr_arg List Attribute Operation
  Unsigned 32-bit integer
  List Attribute Operation

ndps.ndps_bind_security Bind Security Options
  Unsigned 32-bit integer
  Bind Security Options

ndps.ndps_bind_security_count Number of Bind Security Options
  Unsigned 32-bit integer
  Number of Bind Security Options

ndps.ndps_car_name_or_oid Cardinal Name or OID
  Unsigned 32-bit integer
  Cardinal Name or OID

ndps.ndps_car_or_oid Cardinal or OID
  Unsigned 32-bit integer
  Cardinal or OID

ndps.ndps_card_enum_time Cardinal, Enum, or Time
  Unsigned 32-bit integer
  Cardinal, Enum, or Time

ndps.ndps_client_server_type Client/Server Type
  Unsigned 32-bit integer
  Client/Server Type

ndps.ndps_colorant_set Colorant Set
  Unsigned 32-bit integer
  Colorant Set

ndps.ndps_continuation_option Continuation Option
  Byte array
  Continuation Option

ndps.ndps_count_limit Count Limit
  Unsigned 32-bit integer
  Count Limit

ndps.ndps_criterion_type Criterion Type
  Unsigned 32-bit integer
  Criterion Type
```

```
ndps.ndps_data_item_type  Item Type
    Unsigned 32-bit integer
    Item Type

ndps.ndps_delivery_add_type  Delivery Address Type
    Unsigned 32-bit integer
    Delivery Address Type

ndps.ndps_dim_falg  Dimension Flag
    Unsigned 32-bit integer
    Dimension Flag

ndps.ndps_dim_value  Dimension Value Type
    Unsigned 32-bit integer
    Dimension Value Type

ndps.ndps_direction  Direction
    Unsigned 32-bit integer
    Direction

ndps.ndps_doc_content  Document Content
    Unsigned 32-bit integer
    Document Content

ndps.ndps_doc_num  Document Number
    Unsigned 32-bit integer
    Document Number

ndps.ndps_ds_info_type  DS Info Type
    Unsigned 32-bit integer
    DS Info Type

ndps.ndps_edge_value  Edge Value
    Unsigned 32-bit integer
    Edge Value

ndps.ndps_event_object_identifier  Event Object Type
    Unsigned 32-bit integer
    Event Object Type

ndps.ndps_event_type  Event Type
    Unsigned 32-bit integer
    Event Type

ndps.ndps_filter  Filter Type
    Unsigned 32-bit integer
    Filter Type

ndps.ndps_filter_item  Filter Item Operation
    Unsigned 32-bit integer
    Filter Item Operation

ndps.ndps_force  Force?
    Boolean
    Force?

ndps.ndps_get_resman_session_type  Session Type
    Unsigned 32-bit integer
    Session Type

ndps.ndps_get_session_type  Session Type
    Unsigned 32-bit integer
    Session Type
```

```
ndps.ndps_identifier_type  Identifier Type
    Unsigned 32-bit integer
    Identifier Type

ndps.ndps_ignored_type    Ignored Type
    Unsigned 32-bit integer
    Ignored Type

ndps.ndps_integer_or_oid  Integer or OID
    Unsigned 32-bit integer
    Integer or OID

ndps.ndps_integer_type_flag  Integer Type Flag
    Unsigned 32-bit integer
    Integer Type Flag

ndps.ndps_integer_type_value  Integer Type Value
    Unsigned 32-bit integer
    Integer Type Value

ndps.ndps_item_count      Number of Items
    Unsigned 32-bit integer
    Number of Items

ndps.ndps_lang_id        Language ID
    Unsigned 32-bit integer
    Language ID

ndps.ndps_language_count  Number of Languages
    Unsigned 32-bit integer
    Number of Languages

ndps.ndps_len            Length
    Unsigned 16-bit integer
    Length

ndps.ndps_lib_error      Library Error
    Unsigned 32-bit integer
    Library Error

ndps.ndps_limit_enc      Limit Encountered
    Unsigned 32-bit integer
    Limit Encountered

ndps.ndps_list_local_server_type  Server Type
    Unsigned 32-bit integer
    Server Type

ndps.ndps_list_profiles_choice_type  List Profiles Choice Type
    Unsigned 32-bit integer
    List Profiles Choice Type

ndps.ndps_list_profiles_result_type  List Profiles Result Type
    Unsigned 32-bit integer
    List Profiles Result Type

ndps.ndps_list_profiles_type  List Profiles Type
    Unsigned 32-bit integer
    List Profiles Type

ndps.ndps_list_services_type  Services Type
    Unsigned 32-bit integer
    Services Type
```

```
ndps.ndps_loc_object_name  Local Object Name
    String
    Local Object Name
ndps.ndps_location_value  Location Value Type
    Unsigned 32-bit integer
    Location Value Type
ndps.ndps_long_edge_feeds  Long Edge Feeds?
    Boolean
    Long Edge Feeds?
ndps.ndps_max_items  Maximum Items in List
    Unsigned 32-bit integer
    Maximum Items in List
ndps.ndps_media_type  Media Type
    Unsigned 32-bit integer
    Media Type
ndps.ndps_medium_size  Medium Size
    Unsigned 32-bit integer
    Medium Size
ndps.ndps_nameorid  Name or ID Type
    Unsigned 32-bit integer
    Name or ID Type
ndps.ndps_num_resources  Number of Resources
    Unsigned 32-bit integer
    Number of Resources
ndps.ndps_num_services  Number of Services
    Unsigned 32-bit integer
    Number of Services
ndps.ndps_numbers_up  Numbers Up
    Unsigned 32-bit integer
    Numbers Up
ndps.ndps_object_name  Object Name
    String
    Object Name
ndps.ndps_object_op  Operation
    Unsigned 32-bit integer
    Operation
ndps.ndps_operator  Operator Type
    Unsigned 32-bit integer
    Operator Type
ndps.ndps_other_error  Other Error
    Unsigned 32-bit integer
    Other Error
ndps.ndps_other_error_2  Other Error 2
    Unsigned 32-bit integer
    Other Error 2
ndps.ndps_page_flag  Page Flag
    Unsigned 32-bit integer
    Page Flag
```

```
ndps.ndps_page_order  Page Order
    Unsigned 32-bit integer
    Page Order

ndps.ndps_page_orientation  Page Orientation
    Unsigned 32-bit integer
    Page Orientation

ndps.ndps_page_size  Page Size
    Unsigned 32-bit integer
    Page Size

ndps.ndps_persistence  Persistence
    Unsigned 32-bit integer
    Persistence

ndps.ndps_printer_name  Printer Name
    String
    Printer Name

ndps.ndps_profile_id  Profile ID
    Unsigned 32-bit integer
    Profile ID

ndps.ndps_qual  Qualifier
    Unsigned 32-bit integer
    Qualifier

ndps.ndps_qual_name_type  Qualified Name Type
    Unsigned 32-bit integer
    Qualified Name Type

ndps.ndps_qual_name_type2  Qualified Name Type
    Unsigned 32-bit integer
    Qualified Name Type

ndps.ndps_realization  Realization Type
    Unsigned 32-bit integer
    Realization Type

ndps.ndps_resource_type  Resource Type
    Unsigned 32-bit integer
    Resource Type

ndps.ndps_ret_restrict  Retrieve Restrictions
    Unsigned 32-bit integer
    Retrieve Restrictions

ndps.ndps_server_type  NDPS Server Type
    Unsigned 32-bit integer
    NDPS Server Type

ndps.ndps_service_enabled  Service Enabled?
    Boolean
    Service Enabled?

ndps.ndps_service_type  NDPS Service Type
    Unsigned 32-bit integer
    NDPS Service Type

ndps.ndps_session  Session Handle
    Unsigned 32-bit integer
    Session Handle
```

```
ndps.ndps_session_type  Session Type
    Unsigned 32-bit integer
    Session Type

ndps.ndps_state_severity  State Severity
    Unsigned 32-bit integer
    State Severity

ndps.ndps_status_flags  Status Flag
    Unsigned 32-bit integer
    Status Flag

ndps.ndps_substring_match  Substring Match
    Unsigned 32-bit integer
    Substring Match

ndps.ndps_time_limit  Time Limit
    Unsigned 32-bit integer
    Time Limit

ndps.ndps_training  Training
    Unsigned 32-bit integer
    Training

ndps.ndps_xdimension  X Dimension
    Unsigned 32-bit integer
    X Dimension

ndps.ndps_xydim_value  XY Dimension Value Type
    Unsigned 32-bit integer
    XY Dimension Value Type

ndps.ndps_ydimension  Y Dimension
    Unsigned 32-bit integer
    Y Dimension

ndps.net  IPX Network
    IPX network or server name
    Scope

ndps.node  Node
    6-byte Hardware (MAC) Address
    Node

ndps.notify_lease_exp_time  Notify Lease Expiration Time
    Unsigned 32-bit integer
    Notify Lease Expiration Time

ndps.notify_printer_uri  Notify Printer URI
    String
    Notify Printer URI

ndps.notify_seq_number  Notify Sequence Number
    Unsigned 32-bit integer
    Notify Sequence Number

ndps.notify_time_interval  Notify Time Interval
    Unsigned 32-bit integer
    Notify Time Interval

ndps.num_address_items  Number of Address Items
    Unsigned 32-bit integer
    Number of Address Items
```

ndps.num\_areas Number of Areas  
Unsigned 32-bit integer  
Number of Areas

ndps.num\_argss Number of Arguments  
Unsigned 32-bit integer  
Number of Arguments

ndps.num\_attributes Number of Attributes  
Unsigned 32-bit integer  
Number of Attributes

ndps.num\_categories Number of Categories  
Unsigned 32-bit integer  
Number of Categories

ndps.num\_colorants Number of Colorants  
Unsigned 32-bit integer  
Number of Colorants

ndps.num\_destinations Number of Destinations  
Unsigned 32-bit integer  
Number of Destinations

ndps.num\_doc\_types Number of Document Types  
Unsigned 32-bit integer  
Number of Document Types

ndps.num\_events Number of Events  
Unsigned 32-bit integer  
Number of Events

ndps.num\_ignored\_attributes Number of Ignored Attributes  
Unsigned 32-bit integer  
Number of Ignored Attributes

ndps.num\_job\_categories Number of Job Categories  
Unsigned 32-bit integer  
Number of Job Categories

ndps.num\_jobs Number of Jobs  
Unsigned 32-bit integer  
Number of Jobs

ndps.num\_locations Number of Locations  
Unsigned 32-bit integer  
Number of Locations

ndps.num\_names Number of Names  
Unsigned 32-bit integer  
Number of Names

ndps.num\_objects Number of Objects  
Unsigned 32-bit integer  
Number of Objects

ndps.num\_options Number of Options  
Unsigned 32-bit integer  
Number of Options

ndps.num\_page\_informations Number of Page Information Items  
Unsigned 32-bit integer  
Number of Page Information Items



```
ndps.num_page_selects  Number of Page Select Items
    Unsigned 32-bit integer
    Number of Page Select Items

ndps.num_passwords    Number of Passwords
    Unsigned 32-bit integer
    Number of Passwords

ndps.num_results      Number of Results
    Unsigned 32-bit integer
    Number of Results

ndps.num_servers      Number of Servers
    Unsigned 32-bit integer
    Number of Servers

ndps.num_transfer_methods  Number of Transfer Methods
    Unsigned 32-bit integer
    Number of Transfer Methods

ndps.num_values       Number of Values
    Unsigned 32-bit integer
    Number of Values

ndps.num_win31_keys   Number of Windows 3.1 Keys
    Unsigned 32-bit integer
    Number of Windows 3.1 Keys

ndps.num_win95_keys   Number of Windows 95 Keys
    Unsigned 32-bit integer
    Number of Windows 95 Keys

ndps.num_windows_keys  Number of Windows Keys
    Unsigned 32-bit integer
    Number of Windows Keys

ndps.object           Object ID
    Unsigned 32-bit integer
    Object ID

ndps.objectid_def10   Object ID Definition
    No value
    Object ID Definition

ndps.objectid_def11   Object ID Definition
    No value
    Object ID Definition

ndps.objectid_def12   Object ID Definition
    No value
    Object ID Definition

ndps.objectid_def13   Object ID Definition
    No value
    Object ID Definition

ndps.objectid_def14   Object ID Definition
    No value
    Object ID Definition

ndps.objectid_def15   Object ID Definition
    No value
    Object ID Definition
```

```
ndps.objectid_def16  Object ID Definition
    No value
    Object ID Definition
ndps.objectid_def7   Object ID Definition
    No value
    Object ID Definition
ndps.objectid_def8   Object ID Definition
    No value
    Object ID Definition
ndps.objectid_def9   Object ID Definition
    No value
    Object ID Definition
ndps.octet_string    Octet String
    Byte array
    Octet String
ndps.oid              Object ID
    Byte array
    Object ID
ndps.os_count         Number of OSes
    Unsigned 32-bit integer
    Number of OSes
ndps.os_type          OS Type
    Unsigned 32-bit integer
    OS Type
ndps.pa_name          Printer Name
    String
    Printer Name
ndps.packet_count     Packet Count
    Unsigned 32-bit integer
    Packet Count
ndps.packet_type      Packet Type
    Unsigned 32-bit integer
    Packet Type
ndps.password         Password
    Byte array
    Password
ndps.pause_job_type   Pause Job Identifier
    Unsigned 32-bit integer
    Pause Job Identifier
ndps.port             IP Port
    Unsigned 16-bit integer
    IP Port
ndps.print_arg        Print Type
    Unsigned 32-bit integer
    Print Type
ndps.print_def_name   Printer Definition Name
    String
    Printer Definition Name
```

```
ndps.print_dir_name  Printer Directory Name
    String
    Printer Directory Name
ndps.print_file_name  Printer File Name
    String
    Printer File Name
ndps.print_security  Printer Security
    Unsigned 32-bit integer
    Printer Security
ndps.printer_def_count  Number of Printer Definitions
    Unsigned 32-bit integer
    Number of Printer Definitions
ndps.printer_id  Printer ID
    Byte array
    Printer ID
ndps.printer_type_count  Number of Printer Types
    Unsigned 32-bit integer
    Number of Printer Types
ndps.prn_manuf  Printer Manufacturer
    String
    Printer Manufacturer
ndps.prn_type  Printer Type
    String
    Printer Type
ndps.rbuffer  Connection
    Unsigned 32-bit integer
    Connection
ndps.record_length  Record Length
    Unsigned 16-bit integer
    Record Length
ndps.record_mark  Record Mark
    Unsigned 16-bit integer
    Record Mark
ndps.ref_doc_name  Referenced Document Name
    String
    Referenced Document Name
ndps.registry_name  Registry Name
    String
    Registry Name
ndps.reqframe  Request Frame
    Frame number
    Request Frame
ndps.res_type  Resource Type
    Unsigned 32-bit integer
    Resource Type
ndps.resubmit_op_type  Resubmit Operation Type
    Unsigned 32-bit integer
    Resubmit Operation Type
```

```
ndps.ret_code   Return Code
                Unsigned 32-bit integer
                Return Code

ndps.rpc_acc    RPC Accept or Deny
                Unsigned 32-bit integer
                RPC Accept or Deny

ndps.rpc_acc_prob  Access Problem
                Unsigned 32-bit integer
                Access Problem

ndps.rpc_acc_res  RPC Accept Results
                Unsigned 32-bit integer
                RPC Accept Results

ndps.rpc_acc_stat  RPC Accept Status
                Unsigned 32-bit integer
                RPC Accept Status

ndps.rpc_attr_prob  Attribute Problem
                Unsigned 32-bit integer
                Attribute Problem

ndps.rpc_doc_acc_prob  Document Access Problem
                Unsigned 32-bit integer
                Document Access Problem

ndps.rpc_obj_id_type  Object ID Type
                Unsigned 32-bit integer
                Object ID Type

ndps.rpc_oid_struct_size  OID Struct Size
                Unsigned 16-bit integer
                OID Struct Size

ndps.rpc_print_prob  Printer Problem
                Unsigned 32-bit integer
                Printer Problem

ndps.rpc_prob_type  Problem Type
                Unsigned 32-bit integer
                Problem Type

ndps.rpc_rej_stat  RPC Reject Status
                Unsigned 32-bit integer
                RPC Reject Status

ndps.rpc_sec_prob  Security Problem
                Unsigned 32-bit integer
                Security Problem

ndps.rpc_sel_prob  Selection Problem
                Unsigned 32-bit integer
                Selection Problem

ndps.rpc_serv_prob  Service Problem
                Unsigned 32-bit integer
                Service Problem

ndps.rpc_update_prob  Update Problem
                Unsigned 32-bit integer
                Update Problem
```

```
ndps.rpc_version  RPC Version
  Unsigned 32-bit integer
  RPC Version

ndps.sbuffer  Server
  Unsigned 32-bit integer
  Server

ndps.scope  Scope
  Unsigned 32-bit integer
  Scope

ndps.segment.error  Desegmentation error
  Frame number
  Desegmentation error due to illegal segments

ndps.segment.multipletails  Multiple tail segments found
  Boolean
  Several tails were found when desegmenting the packet

ndps.segment.overlap  Segment overlap
  Boolean
  Segment overlaps with other segments

ndps.segment.overlap.conflict  Conflicting data in segment overlap
  Boolean
  Overlapping segments contained conflicting data

ndps.segment.toolongsegment  Segment too long
  Boolean
  Segment contained data past end of packet

ndps.server_name  Server Name
  String
  Server Name

ndps.shutdown_type  Shutdown Type
  Unsigned 32-bit integer
  Shutdown Type

ndps.size_inc_in_feed  Size Increment in Feed
  Byte array
  Size Increment in Feed

ndps.socket  IPX Socket
  Unsigned 16-bit integer
  IPX Socket

ndps.sub_complete  Submission Complete?
  Boolean
  Submission Complete?

ndps.supplier_flag  Supplier Data?
  Boolean
  Supplier Data?

ndps.supplier_name  Supplier Name
  String
  Supplier Name

ndps.time  Time
  Unsigned 32-bit integer
  Time
```

```
ndps.tree      Tree
  String
  Tree

ndps.upper_range  Upper Range
  Unsigned 32-bit integer
  Upper Range

ndps.upper_range_n64  Upper Range
  Byte array
  Upper Range

ndps.user_name  Trustee Name
  String
  Trustee Name

ndps.vendor_dir  Vendor Directory
  String
  Vendor Directory

ndps.windows_key  Windows Key
  String
  Windows Key

ndps.xdimension_n64  X Dimension
  Byte array
  X Dimension

ndps.xid  Exchange ID
  Unsigned 32-bit integer
  Exchange ID

ndps.xmax_n64  Maximum X Dimension
  Byte array
  Maximum X Dimension

ndps.xmin_n64  Minimum X Dimension
  Byte array
  Minimum X Dimension

ndps.ymax_n64  Maximum Y Dimension
  Byte array
  Maximum Y Dimension

ndps.ymin_n64  Minimum Y Dimension
  Byte array
  Minimum Y Dimension

spx.ndps_error  NDPS Error
  Unsigned 32-bit integer
  NDPS Error

spx.ndps_func_broker  Broker Program
  Unsigned 32-bit integer
  Broker Program

spx.ndps_func_delivery  Delivery Program
  Unsigned 32-bit integer
  Delivery Program

spx.ndps_func_notify  Notify Program
  Unsigned 32-bit integer
  Notify Program
```

```
spx.ndps_func_print  Print Program
    Unsigned 32-bit integer
    Print Program

spx.ndps_func_registry  Registry Program
    Unsigned 32-bit integer
    Registry Program

spx.ndps_func_resman  ResMan Program
    Unsigned 32-bit integer
    ResMan Program

spx.ndps_program  NDPS Program Number
    Unsigned 32-bit integer
    NDPS Program Number

spx.ndps_version  Program Version
    Unsigned 32-bit integer
    Program Version
```

### **Novell Modular Authentication Service (nmas)**

```
nmas.attribute  Attribute Type
    Unsigned 32-bit integer
    Attribute Type

nmas.buf_size  Reply Buffer Size
    Unsigned 32-bit integer
    Reply Buffer Size

nmas.clearence  Requested Clearence
    String
    Requested Clearence

nmas.cqueue_bytes  Client Queue Number of Bytes
    Unsigned 32-bit integer
    Client Queue Number of Bytes

nmas.cred_type  Credential Type
    Unsigned 32-bit integer
    Credential Type

nmas.data  Data
    Byte array
    Data

nmas.enc_cred  Encrypted Credential
    Byte array
    Encrypted Credential

nmas.enc_data  Encrypted Data
    Byte array
    Encrypted Data

nmas.encrypt_error  Payload Error
    Unsigned 32-bit integer
    Payload/Encryption Return Code

nmas.frag_handle  Fragment Handle
    Unsigned 32-bit integer
    Fragment Handle
```

```
nmas.func    Function
             Unsigned 8-bit integer
             Function

nmas.length  Length
             Unsigned 32-bit integer
             Length

nmas.login_seq  Requested Login Sequence
              String
              Requested Login Sequence

nmas.login_state  Login State
                 Unsigned 32-bit integer
                 Login State

nmas.lsm_verb  Login Store Message Verb
              Unsigned 8-bit integer
              Login Store Message Verb

nmas.msg_verb  Message Verb
              Unsigned 8-bit integer
              Message Verb

nmas.msg_version  Message Version
                 Unsigned 32-bit integer
                 Message Version

nmas.num_creds  Number of Credentials
               Unsigned 32-bit integer
               Number of Credentials

nmas.opaque  Opaque Data
            Byte array
            Opaque Data

nmas.ping_flags  Flags
                Unsigned 32-bit integer
                Flags

nmas.ping_version  Ping Version
                  Unsigned 32-bit integer
                  Ping Version

nmas.return_code  Return Code
                 Unsigned 32-bit integer
                 Return Code

nmas.session_ident  Session Identifier
                   Unsigned 32-bit integer
                   Session Identifier

nmas.squeue_bytes  Server Queue Number of Bytes
                  Unsigned 32-bit integer
                  Server Queue Number of Bytes

nmas.subfunc  Subfunction
             Unsigned 8-bit integer
             Subfunction

nmas.subverb  Sub Verb
             Unsigned 32-bit integer
             Sub Verb
```



```
nmas.tree    Tree
             String
             Tree

nmas.user    User
             String
             User

nmas.version  NMAP Protocol Version
             Unsigned 32-bit integer
             NMAP Protocol Version
```

**Novell SecretStore Services (sss)**

```
ncp.sss_bit1  Enhanced Protection
             Boolean

ncp.sss_bit10 Destroy Context
             Boolean

ncp.sss_bit11 Not Defined
             Boolean

ncp.sss_bit12 Not Defined
             Boolean

ncp.sss_bit13 Not Defined
             Boolean

ncp.sss_bit14 Not Defined
             Boolean

ncp.sss_bit15 Not Defined
             Boolean

ncp.sss_bit16 Not Defined
             Boolean

ncp.sss_bit17 EP Lock
             Boolean

ncp.sss_bit18 Not Initialized
             Boolean

ncp.sss_bit19 Enhanced Protection
             Boolean

ncp.sss_bit2  Create ID
             Boolean

ncp.sss_bit20 Store Not Synced
             Boolean

ncp.sss_bit21 Admin Last Modified
             Boolean

ncp.sss_bit22 EP Password Present
             Boolean

ncp.sss_bit23 EP Master Password Present
             Boolean

ncp.sss_bit24 MP Disabled
             Boolean
```

```
ncp.sss_bit25  Not Defined
               Boolean
ncp.sss_bit26  Not Defined
               Boolean
ncp.sss_bit27  Not Defined
               Boolean
ncp.sss_bit28  Not Defined
               Boolean
ncp.sss_bit29  Not Defined
               Boolean
ncp.sss_bit3   Remove Lock
               Boolean
ncp.sss_bit30  Not Defined
               Boolean
ncp.sss_bit31  Not Defined
               Boolean
ncp.sss_bit32  Not Defined
               Boolean
ncp.sss_bit4   Repair
               Boolean
ncp.sss_bit5   Unicode
               Boolean
ncp.sss_bit6   EP Master Password Used
               Boolean
ncp.sss_bit7   EP Password Used
               Boolean
ncp.sss_bit8   Set Tree Name
               Boolean
ncp.sss_bit9   Get Context
               Boolean
sss.buffer     Buffer Size
               Unsigned 32-bit integer
               Buffer Size
sss.context    Context
               Unsigned 32-bit integer
               Context
sss.enc_cred   Encrypted Credential
               Byte array
               Encrypted Credential
sss.enc_data   Encrypted Data
               Byte array
               Encrypted Data
sss.flags     Flags
               Unsigned 32-bit integer
               Flags
```

```
sss.frag_handle  Fragment Handle
                 Unsigned 32-bit integer
                 Fragment Handle

sss.length      Length
                 Unsigned 32-bit integer
                 Length

sss.ping_version Ping Version
                 Unsigned 32-bit integer
                 Ping Version

sss.return_code Return Code
                 Unsigned 32-bit integer
                 Return Code

sss.secret      Secret ID
                 String
                 Secret ID

sss.user        User
                 String
                 User

sss.verb        Verb
                 Unsigned 32-bit integer
                 Verb

sss.version     SecretStore Protocol Version
                 Unsigned 32-bit integer
                 SecretStore Protocol Version
```

**Null/Loopback (null)**

```
null.family     Family
                 Unsigned 32-bit integer

null.type       Type
                 Unsigned 16-bit integer
```

**OICQ – IM software, popular in China (oicq)**

```
oicq.command    Command
                 Unsigned 16-bit integer
                 Command

oicq.data       Data
                 String
                 Data

oicq.flag       Flag
                 Unsigned 8-bit integer
                 Protocol Flag

oicq.qqid       Data(OICQ Number,if sender is client)
                 Unsigned 32-bit integer

oicq.seq        Sequence
                 Unsigned 16-bit integer
                 Sequence
```

```
oicq.version  Version
              Unsigned 16-bit integer
              Version-zz
```

#### **OMA UserPlane Location Protocol (ulp)**

```
ulp.CellMeasuredResultsList_item  Item
                                   No value
                                   ulp.CellMeasuredResults

ulp.MeasuredResultsList_item      Item
                                   No value
                                   ulp.MeasuredResults

ulp.NMR_item                       Item
                                   No value
                                   ulp.NMRelement

ulp.SatelliteInfo_item            Item
                                   No value
                                   ulp.SatelliteInfoElement

ulp.TimeslotISCP_List_item        Item
                                   Unsigned 32-bit integer
                                   ulp.TimeslotISCP

ulp.ULP_PDU                        ULP-PDU
                                   No value
                                   ulp.ULP_PDU

ulp.aFLT                           aFLT
                                   Boolean
                                   ulp.BOOLEAN

ulp.aRFCN                          aRFCN
                                   Unsigned 32-bit integer
                                   ulp.INTEGER_0_1023

ulp.acquisitionAssistanceRequested acquisitionAssistanceRequested
                                   Boolean
                                   ulp.BOOLEAN

ulp.agpsSETBased                   agpsSETBased
                                   Boolean
                                   ulp.BOOLEAN

ulp.agpsSETassisted                agpsSETassisted
                                   Boolean
                                   ulp.BOOLEAN

ulp.almanacRequested               almanacRequested
                                   Boolean
                                   ulp.BOOLEAN

ulp.altUncertainty                 altUncertainty
                                   Unsigned 32-bit integer
                                   ulp.INTEGER_0_127

ulp.altitude                       altitude
                                   Unsigned 32-bit integer
                                   ulp.INTEGER_0_32767
```

```
ulp.altitudeDirection  altitudeDirection
    Unsigned 32-bit integer
    ulp.T_altitudeDirection

ulp.altitudeInfo  altitudeInfo
    No value
    ulp.AltitudeInfo

ulp.autonomousGPS  autonomousGPS
    Boolean
    ulp.BOOLEAN

ulp.bSIC  bSIC
    Unsigned 32-bit integer
    ulp.INTEGER_0_63

ulp.bearing  bearing
    Byte array
    ulp.BIT_STRING_SIZE_9

ulp.cdmaCell  cdmaCell
    No value
    ulp.CdmaCellInformation

ulp.cellIdentity  cellIdentity
    Unsigned 32-bit integer
    ulp.INTEGER_0_268435455

ulp.cellInfo  cellInfo
    Unsigned 32-bit integer
    ulp.CellInfo

ulp.cellMeasuredResultsList  cellMeasuredResultsList
    Unsigned 32-bit integer
    ulp.CellMeasuredResultsList

ulp.cellParametersID  cellParametersID
    Unsigned 32-bit integer
    ulp.CellParametersID

ulp.clientName  clientName
    Byte array
    ulp.OCTET_STRING_SIZE_1_maxClientLength

ulp.clientNameType  clientNameType
    Unsigned 32-bit integer
    ulp.FormatIndicator

ulp.confidence  confidence
    Unsigned 32-bit integer
    ulp.INTEGER_0_100

ulp.cpich_Ec_N0  cpich-Ec-N0
    Unsigned 32-bit integer
    ulp.CPICH_Ec_N0

ulp.cpich_RSCP  cpich-RSCP
    Unsigned 32-bit integer
    ulp.CPICH_RSCP

ulp.delay  delay
    Unsigned 32-bit integer
    ulp.INTEGER_0_7
```

```
ulp.dgpsCorrectionsRequested  dgpsCorrectionsRequested
    Boolean
    ulp.BOOLEAN
ulp.eCID  eCID
    Boolean
    ulp.BOOLEAN
ulp.eOTD  eOTD
    Boolean
    ulp.BOOLEAN
ulp.encodingType  encodingType
    Unsigned 32-bit integer
    ulp.EncodingType
ulp.fQDN  fQDN
    String
    ulp.FQDN
ulp.fdd  fdd
    No value
    ulp.FrequencyInfoFDD
ulp.frequencyInfo  frequencyInfo
    No value
    ulp.FrequencyInfo
ulp.gpsToe  gpsToe
    Unsigned 32-bit integer
    ulp.INTEGER_0_167
ulp.gpsWeek  gpsWeek
    Unsigned 32-bit integer
    ulp.INTEGER_0_1023
ulp.gsmCell  gsmCell
    No value
    ulp.GsmCellInformation
ulp.horacc  horacc
    Unsigned 32-bit integer
    ulp.INTEGER_0_127
ulp.horandveruncert  horandveruncert
    No value
    ulp.Horandveruncert
ulp.horandvervel  horandvervel
    No value
    ulp.Horandvervel
ulp.horspeed  horspeed
    Byte array
    ulp.BIT_STRING_SIZE_16
ulp.horuncertspeed  horuncertspeed
    Byte array
    ulp.BIT_STRING_SIZE_8
ulp.horvel  horvel
    No value
    ulp.Horvel
```

```
ulp.horveluncert horveluncert
  No value
  ulp.Horveluncert
ulp.iODE iODE
  Unsigned 32-bit integer
  ulp.INTEGER_0_255
ulp.iPAddress iPAddress
  Unsigned 32-bit integer
  ulp.IPAddress
ulp.imsi imsi
  Byte array
  ulp.T_imsi
ulp.ionosphericModelRequested ionosphericModelRequested
  Boolean
  ulp.BOOLEAN
ulp.ipv4Address ipv4Address
  IPv4 address
  ulp.OCTET_STRING_SIZE_4
ulp.ipv6Address ipv6Address
  IPv6 address
  ulp.OCTET_STRING_SIZE_16
ulp.keyIdentity keyIdentity
  Byte array
  ulp.KeyIdentity
ulp.keyIdentity2 keyIdentity2
  Byte array
  ulp.KeyIdentity2
ulp.keyIdentity3 keyIdentity3
  Byte array
  ulp.KeyIdentity3
ulp.keyIdentity4 keyIdentity4
  Byte array
  ulp.KeyIdentity4
ulp.latitude latitude
  Unsigned 32-bit integer
  ulp.INTEGER_0_8388607
ulp.latitudeSign latitudeSign
  Unsigned 32-bit integer
  ulp.T_latitudeSign
ulp.length length
  Unsigned 32-bit integer
  ulp.INTEGER_0_65535
ulp.locationId locationId
  No value
  ulp.LocationId
ulp.longKey longKey
  Byte array
  ulp.BIT_STRING_SIZE_256
```

```
ulp.longitude longitude
Signed 32-bit integer
ulp.INTEGER_M8388608_8388607

ulp.mAC mAC
Byte array
ulp.MAC

ulp.maj maj
Unsigned 32-bit integer
ulp.INTEGER_0_255

ulp.maxLocAge maxLocAge
Unsigned 32-bit integer
ulp.INTEGER_0_65535

ulp.mdn mdn
Byte array
ulp.OCTET_STRING_SIZE_8

ulp.measuredResultsList measuredResultsList
Unsigned 32-bit integer
ulp.MeasuredResultsList

ulp.message message
Unsigned 32-bit integer
ulp.UlpMessage

ulp.min min
Unsigned 32-bit integer
ulp.INTEGER_0_255

ulp.modeSpecificInfo modeSpecificInfo
Unsigned 32-bit integer
ulp.FrequencySpecificInfo

ulp.msSUPLAUTHREQ msSUPLAUTHREQ
No value
ulp.SUPLAUTHREQ

ulp.msSUPLAUTHRESP msSUPLAUTHRESP
No value
ulp.SUPLAUTHRESP

ulp.msSUPLEND msSUPLEND
No value
ulp.SUPLEND

ulp.msSUPLINIT msSUPLINIT
No value
ulp.SUPLINIT

ulp.msSUPLPOS msSUPLPOS
No value
ulp.SUPLPOS

ulp.msSUPLPOSINIT msSUPLPOSINIT
No value
ulp.SUPLPOSINIT

ulp.msSUPLRESPONSE msSUPLRESPONSE
No value
ulp.SUPLRESPONSE
```



```
ulp.msSUPLSTART  msSUPLSTART
    No value
    ulp.SUPLSTART
ulp.msisdn  msisdn
    Byte array
    ulp.T_msisdn
ulp.nMR  nMR
    Unsigned 32-bit integer
    ulp.NMR
ulp.nSAT  nSAT
    Unsigned 32-bit integer
    ulp.INTEGER_0_31
ulp.nai  nai
    String
    ulp.IA5String_SIZE_1_1000
ulp.navigationModelData  navigationModelData
    No value
    ulp.NavigationModel
ulp.navigationModelRequested  navigationModelRequested
    Boolean
    ulp.BOOLEAN
ulp.notification  notification
    No value
    ulp.Notification
ulp.notificationType  notificationType
    Unsigned 32-bit integer
    ulp.NotificationType
ulp.oTDOA  oTDOA
    Boolean
    ulp.BOOLEAN
ulp.orientationMajorAxis  orientationMajorAxis
    Unsigned 32-bit integer
    ulp.INTEGER_0_180
ulp.pathloss  pathloss
    Unsigned 32-bit integer
    ulp.Pathloss
ulp.posMethod  posMethod
    Unsigned 32-bit integer
    ulp.PosMethod
ulp.posPayLoad  posPayLoad
    Unsigned 32-bit integer
    ulp.PosPayLoad
ulp.posProtocol  posProtocol
    No value
    ulp.PosProtocol
ulp.posTechnology  posTechnology
    No value
    ulp.PosTechnology
```

```
ulp.position position
    No value
    ulp.Position

ulp.positionEstimate positionEstimate
    No value
    ulp.PositionEstimate

ulp.prefMethod prefMethod
    Unsigned 32-bit integer
    ulp.PrefMethod

ulp.primaryCCPCH_RSCP primaryCCPCH-RSCP
    Unsigned 32-bit integer
    ulp.PrimaryCCPCH_RSCP

ulp.primaryCPICH_Info primaryCPICH-Info
    No value
    ulp.PrimaryCPICH_Info

ulp.primaryScramblingCode primaryScramblingCode
    Unsigned 32-bit integer
    ulp.INTEGER_0_511

ulp.proposedTGSN proposedTGSN
    Unsigned 32-bit integer
    ulp.TGSN

ulp.qoP qoP
    No value
    ulp.QoP

ulp.reBASELONG reBASELONG
    Unsigned 32-bit integer
    ulp.INTEGER_0_8388607

ulp.realTimeIntegrityRequested realTimeIntegrityRequested
    Boolean
    ulp.BOOLEAN

ulp.refBASEID refBASEID
    Unsigned 32-bit integer
    ulp.INTEGER_0_65535

ulp.refBASELAT refBASELAT
    Unsigned 32-bit integer
    ulp.INTEGER_0_4194303

ulp.refCI refCI
    Unsigned 32-bit integer
    ulp.INTEGER_0_65535

ulp.refLAC refLAC
    Unsigned 32-bit integer
    ulp.INTEGER_0_65535

ulp.refMCC refMCC
    Unsigned 32-bit integer
    ulp.INTEGER_0_999

ulp.refMNC refMNC
    Unsigned 32-bit integer
    ulp.INTEGER_0_999
```

```
ulp.refNID refNID
  Unsigned 32-bit integer
  ulp.INTEGER_0_65535

ulp.refREFPN refREFPN
  Unsigned 32-bit integer
  ulp.INTEGER_0_511

ulp.refSID refSID
  Unsigned 32-bit integer
  ulp.INTEGER_0_32767

ulp.refSeconds refSeconds
  Unsigned 32-bit integer
  ulp.INTEGER_0_4194303

ulp.refUC refUC
  Unsigned 32-bit integer
  ulp.INTEGER_0_268435455

ulp.refWeekNumber refWeekNumber
  Unsigned 32-bit integer
  ulp.INTEGER_0_65535

ulp.referenceLocationRequested referenceLocationRequested
  Boolean
  ulp.BOOLEAN

ulp.referenceTimeRequested referenceTimeRequested
  Boolean
  ulp.BOOLEAN

ulp.requestedAssistData requestedAssistData
  No value
  ulp.RequestedAssistData

ulp.requestorId requestorId
  Byte array
  ulp.OCTET_STRING_SIZE_1_maxReqLength

ulp.requestorIdType requestorIdType
  Unsigned 32-bit integer
  ulp.FormatIndicator

ulp.rrc rrc
  Boolean
  ulp.BOOLEAN

ulp.rrcPayload rrcPayload
  Byte array
  ulp.OCTET_STRING_SIZE_1_8192

ulp.rrlp rrlp
  Boolean
  ulp.BOOLEAN

ulp.rrlpPayload rrlpPayload
  Byte array
  ulp.T_rrlpPayload

ulp.rxLev rxLev
  Unsigned 32-bit integer
  ulp.INTEGER_0_63
```

```
ulp.sETAAuthKey  sETAAuthKey
    Unsigned 32-bit integer
    ulp.sETAAuthKey

ulp.sETCapabilities  sETCapabilities
    No value
    ulp.sETCapabilities

ulp.sETNonce  sETNonce
    Byte array
    ulp.sETNonce

ulp.sLPAddress  sLPAddress
    Unsigned 32-bit integer
    ulp.sLPAddress

ulp.sLPMode  sLPMode
    Unsigned 32-bit integer
    ulp.sLPMode

ulp.sPCAuthKey  sPCAuthKey
    Unsigned 32-bit integer
    ulp.sPCAuthKey

ulp.sUPLPOS  sUPLPOS
    No value
    ulp.sUPLPOS

ulp.satId  satId
    Unsigned 32-bit integer
    ulp.INTEGER_0_63

ulp.satInfo  satInfo
    Unsigned 32-bit integer
    ulp.SatelliteInfo

ulp.servind  servind
    Unsigned 32-bit integer
    ulp.INTEGER_0_255

ulp.sessionID  sessionID
    No value
    ulp.SessionID

ulp.sessionId  sessionId
    Unsigned 32-bit integer
    ulp.INTEGER_0_65535

ulp.setId  setId
    Unsigned 32-bit integer
    ulp.SETID

ulp.setSessionID  setSessionID
    No value
    ulp.SetSessionID

ulp.shortKey  shortKey
    Byte array
    ulp.BIT_STRING_SIZE_128

ulp.slpId  slpId
    Unsigned 32-bit integer
    ulp.sLPAddress
```

```
ulp.slpSessionID  slpSessionID
    No value
    ulp.SlpSessionID

ulp.status  status
    Unsigned 32-bit integer
    ulp.Status

ulp.statusCode  statusCode
    Unsigned 32-bit integer
    ulp.StatusCode

ulp.tA  tA
    Unsigned 32-bit integer
    ulp.INTEGER_0_255

ulp.tdd  tdd
    No value
    ulp.FrequencyInfoTDD

ulp.tia801  tia801
    Boolean
    ulp.BOOLEAN

ulp.tia801payload  tia801payload
    Byte array
    ulp.OCTET_STRING_SIZE_1_8192

ulp.timeslotISCP_List  timeslotISCP-List
    Unsigned 32-bit integer
    ulp.TimeslotISCP_List

ulp.timestamp  timestamp
    String
    ulp.UTCTime

ulp.toeLimit  toeLimit
    Unsigned 32-bit integer
    ulp.INTEGER_0_10

ulp.uarfcn_DL  uarfcn-DL
    Unsigned 32-bit integer
    ulp.UARFCN

ulp.uarfcn_Nt  uarfcn-Nt
    Unsigned 32-bit integer
    ulp.UARFCN

ulp.uarfcn_UL  uarfcn-UL
    Unsigned 32-bit integer
    ulp.UARFCN

ulp.uncertainty  uncertainty
    No value
    ulp.T_uncertainty

ulp.uncertaintySemiMajor  uncertaintySemiMajor
    Unsigned 32-bit integer
    ulp.INTEGER_0_127

ulp.uncertaintySemiMinor  uncertaintySemiMinor
    Unsigned 32-bit integer
    ulp.INTEGER_0_127
```

```
ulp.uncertspeed  uncertspeed
  Byte array
  ulp.BIT_STRING_SIZE_8

ulp.utcModelRequested  utcModelRequested
  Boolean
  ulp.BOOLEAN

ulp.utra_CarrierRSSI  utra-CarrierRSSI
  Unsigned 32-bit integer
  ulp.UTRA_CarrierRSSI

ulp.velocity  velocity
  Unsigned 32-bit integer
  ulp.Velocity

ulp.ver  ver
  Byte array
  ulp.Ver

ulp.veracc  veracc
  Unsigned 32-bit integer
  ulp.INTEGER_0_127

ulp.verdirect  verdirect
  Byte array
  ulp.BIT_STRING_SIZE_1

ulp.version  version
  No value
  ulp.Version

ulp.verspeed  verspeed
  Byte array
  ulp.BIT_STRING_SIZE_8

ulp.veruncertspeed  veruncertspeed
  Byte array
  ulp.BIT_STRING_SIZE_8

ulp.wcdmaCell  wcdmaCell
  No value
  ulp.WcdmaCellInformation
```

**OSI (osi)****Online Certificate Status Protocol (ocsp)**

```
ocsp.AcceptableResponses  AcceptableResponses
  Unsigned 32-bit integer
  ocsp.AcceptableResponses

ocsp.AcceptableResponses_item  Item
  ocsp.OBJECT_IDENTIFIER

ocsp.ArchiveCutoff  ArchiveCutoff
  String
  ocsp.ArchiveCutoff
```

```
ocsp.BasicOCSPResponse  BasicOCSPResponse
    No value
    ocsp.BasicOCSPResponse

ocsp.CrlID  CrlID
    No value
    ocsp.CrlID

ocsp.ServiceLocator  ServiceLocator
    No value
    ocsp.ServiceLocator

ocsp.byKey  byKey
    Byte array
    ocsp.KeyHash

ocsp.byName  byName
    Unsigned 32-bit integer
    pkixexplicit.Name

ocsp.certID  certID
    No value
    ocsp.CertID

ocsp.certStatus  certStatus
    Unsigned 32-bit integer
    ocsp.CertStatus

ocsp.certs  certs
    Unsigned 32-bit integer
    ocsp.SEQUENCE_OF_Certificate

ocsp.certs_item  Item
    No value
    x509af.Certificate

ocsp.crlNum  crlNum
    Signed 32-bit integer
    ocsp.INTEGER

ocsp.crlTime  crlTime
    String
    ocsp.GeneralizedTime

ocsp.crlUrl  crlUrl
    String
    ocsp.IA5String

ocsp.good  good
    No value
    ocsp.NULL

ocsp.hashAlgorithm  hashAlgorithm
    No value
    x509af.AlgorithmIdentifier

ocsp.issuer  issuer
    Unsigned 32-bit integer
    pkixexplicit.Name

ocsp.issuerKeyHash  issuerKeyHash
    Byte array
    ocsp.OCTET_STRING
```

```
ocsp.issuerNameHash issuerNameHash
    Byte array
    ocsp.OCTET_STRING

ocsp.locator locator
    Unsigned 32-bit integer
    pkiximplicit.AuthorityInfoAccessSyntax

ocsp.nextUpdate nextUpdate
    String
    ocsp.GeneralizedTime

ocsp.optionalSignature optionalSignature
    No value
    ocsp.Signature

ocsp.producedAt producedAt
    String
    ocsp.GeneralizedTime

ocsp.reqCert reqCert
    No value
    ocsp.CertID

ocsp.requestExtensions requestExtensions
    Unsigned 32-bit integer
    pkixexplicit.Extensions

ocsp.requestList requestList
    Unsigned 32-bit integer
    ocsp.SEQUENCE_OF_Request

ocsp.requestList_item Item
    No value
    ocsp.Request

ocsp.requestorName requestorName
    Unsigned 32-bit integer
    pkixexplicit.GeneralName

ocsp.responderID responderID
    Unsigned 32-bit integer
    ocsp.ResponderID

ocsp.response response
    Byte array
    ocsp.T_response

ocsp.responseBytes responseBytes
    No value
    ocsp.ResponseBytes

ocsp.responseExtensions responseExtensions
    Unsigned 32-bit integer
    pkixexplicit.Extensions

ocsp.responseStatus responseStatus
    Unsigned 32-bit integer
    ocsp.OCSPPResponseStatus

ocsp.responseType responseType
    ocsp.T_responseType
```



```
ocsp.responses responses
    Unsigned 32-bit integer
    ocsp.SEQUENCE_OF_SingleResponse
ocsp.responses_item Item
    No value
    ocsp.SingleResponse
ocsp.revocationReason revocationReason
    Unsigned 32-bit integer
    x509ce.CRLReason
ocsp.revocationTime revocationTime
    String
    ocsp.GeneralizedTime
ocsp.revoked revoked
    No value
    ocsp.RevokedInfo
ocsp.serialNumber serialNumber
    Signed 32-bit integer
    pkixexplicit.CertificateSerialNumber
ocsp.signature signature
    Byte array
    ocsp.BIT_STRING
ocsp.signatureAlgorithm signatureAlgorithm
    No value
    x509af.AlgorithmIdentifier
ocsp.singleExtensions singleExtensions
    Unsigned 32-bit integer
    pkixexplicit.Extensions
ocsp.singleRequestExtensions singleRequestExtensions
    Unsigned 32-bit integer
    pkixexplicit.Extensions
ocsp.tbsRequest tbsRequest
    No value
    ocsp.TBSRequest
ocsp.tbsResponseData tbsResponseData
    No value
    ocsp.ResponseData
ocsp.thisUpdate thisUpdate
    String
    ocsp.GeneralizedTime
ocsp.unknown unknown
    No value
    ocsp.UnknownInfo
ocsp.version version
    Signed 32-bit integer
    ocsp.Version
x509af.responseType.id ResponseType Id
    String
    ResponseType Id
```

**OpcUa Binary Protocol (opcua)**

```
application.nodeid.encodingmask  NodeId EncodingMask
    Unsigned 8-bit integer
application.nodeid.nsid  NodeId EncodingMask
    Unsigned 8-bit integer
application.nodeid.numeric  NodeId Identifier Numeric
    Unsigned 32-bit integer
security.channel  Secure Channel Id
security.policy  Security Policy
    String
security.sig  Security Signature
    Unsigned 16-bit integer
security.token  Security Token Id
    String
transport.altendpoint  Alternate EndPoint
    String
transport.cid  ConnectionId
transport.endpoint  EndPoint
    String
transport.len  Message Length
    Unsigned 32-bit integer
transport.lifetime  Lifetime
    Unsigned 32-bit integer
transport.rbl  ReceiveBufferLength
    Unsigned 32-bit integer
transport.rlifetime  Revised Lifetime
    Unsigned 32-bit integer
transport.rqid  RequestId
    Unsigned 32-bit integer
transport.rrbl  Revised ReceiveBufferLength
    Unsigned 32-bit integer
transport.rsbl  Revised SendBufferLength
    Unsigned 32-bit integer
transport.sbl  SendBufferLength
    Unsigned 32-bit integer
transport.sig  Signature
    String
transport.status  StatusCode
    Unsigned 32-bit integer
transport.ver  Version
    Unsigned 32-bit integer
```

**Open Policy Service Interface (opsi)**

```
opsi.attr.accounting Accounting
    String
opsi.attr.acct.session_id Accounting session ID
    String
opsi.attr.application_name OPSI application name
    String
opsi.attr.called_station_id Called station ID
    String
opsi.attr.calling_station_id Calling station ID
    String
opsi.attr.chap_challenge CHAP challenge
    String
opsi.attr.chap_password CHAP password attribute
    String
opsi.attr.designation_number Designation number
    String
opsi.attr.flags OPSI flags
    Unsigned 32-bit integer
opsi.attr.framed_address Framed address
    IPv4 address
opsi.attr.framed_compression Framed compression
    Unsigned 32-bit integer
opsi.attr.framed_filter Framed filter
    String
opsi.attr.framed_mtu Framed MTU
    Unsigned 32-bit integer
opsi.attr.framed_netmask Framed netmask
    IPv4 address
opsi.attr.framed_protocol Framed protocol
    Unsigned 32-bit integer
opsi.attr.framed_routing Framed routing
    Unsigned 32-bit integer
opsi.attr.nas_id NAS ID
    String
opsi.attr.nas_ip_addr NAS IP address
    IPv4 address
opsi.attr.nas_port NAS port
    Unsigned 32-bit integer
opsi.attr.nas_port_id NAS port ID
    String
opsi.attr.nas_port_type NAS port type
    Unsigned 32-bit integer
opsi.attr.password User password
    String
```

```
opsi.attr.service_type  Service type
                        Unsigned 32-bit integer
opsi.attr.smc_aaa_id    SMC AAA ID
                        Unsigned 32-bit integer
opsi.attr.smc_id        SMC ID
                        Unsigned 32-bit integer
opsi.attr.smc_pop_id    SMC POP id
                        Unsigned 32-bit integer
opsi.attr.smc_pop_name  SMC POP name
                        String
opsi.attr.smc_ran_id    SMC RAN ID
                        Unsigned 32-bit integer
opsi.attr.smc_ran_ip    SMC RAN IP address
                        IPv4 address
opsi.attr.smc_ran_name  SMC RAN name
                        String
opsi.attr.smc_receive_time  SMC receive time
                        Date/Time stamp
opsi.attr.smc_stat_time  SMC stat time
                        Unsigned 32-bit integer
opsi.attr.smc_vpn_id    SMC VPN ID
                        Unsigned 32-bit integer
opsi.attr.smc_vpn_name  SMC VPN name
                        String
opsi.attr.user_name     User name
                        String
opsi.hook               Hook ID
                        Unsigned 8-bit integer
opsi.length             Message length
                        Unsigned 16-bit integer
opsi.major              Major version
                        Unsigned 8-bit integer
opsi.minor              Minor version
                        Unsigned 8-bit integer
opsi.opcode             Operation code
                        Unsigned 8-bit integer
opsi.session_id         Session ID
                        Unsigned 16-bit integer
```

**Open Shortest Path First (ospf)**

```
ospf.advrouter          Advertising Router
                        IPv4 address
ospf.dbd                DB Description
                        Unsigned 8-bit integer
```

```
ospf.dbd.i I
  Boolean
ospf.dbd.m M
  Boolean
ospf.dbd.ms MS
  Boolean
ospf.dbd.r R
  Boolean
ospf.lls.ext.options Options
  Unsigned 32-bit integer
ospf.lls.ext.options.lr LR
  Boolean
ospf.lls.ext.options.rs RS
  Boolean
ospf.lsa Link-State Advertisement Type
  Unsigned 8-bit integer
ospf.lsa.asbr Summary LSA (ASBR)
  Boolean
ospf.lsa.asext AS-External LSA (ASBR)
  Boolean
ospf.lsa.attr External Attributes LSA
  Boolean
ospf.lsa.member Group Membership LSA
  Boolean
ospf.lsa.mpls MPLS Traffic Engineering LSA
  Boolean
ospf.lsa.network Network LSA
  Boolean
ospf.lsa.nssa NSSA AS-External LSA
  Boolean
ospf.lsa.opaque Opaque LSA
  Boolean
ospf.lsa.router Router LSA
  Boolean
ospf.lsa.summary Summary LSA (IP Network)
  Boolean
ospf.lsid_opaque_type Link State ID Opaque Type
  Unsigned 8-bit integer
ospf.lsid_te_lsa.instance Link State ID TE-LSA Instance
  Unsigned 16-bit integer
ospf.mpls.bc MPLS/DSTE Bandwidth Constraints Model Id
  Unsigned 8-bit integer
  MPLS/DSTE Bandwidth Constraints Model Id
```

```
ospf.mpls.linkcolor  MPLS/TE Link Resource Class/Color
    Unsigned 32-bit integer
    MPLS/TE Link Resource Class/Color
ospf.mpls.linkid     MPLS/TE Link ID
    IPv4 address
ospf.mpls.linktype   MPLS/TE Link Type
    Unsigned 8-bit integer
    MPLS/TE Link Type
ospf.mpls.local_addr MPLS/TE Local Interface Address
    IPv4 address
ospf.mpls.local_id   MPLS/TE Local Interface Index
    Unsigned 32-bit integer
ospf.mpls.remote_addr MPLS/TE Remote Interface Address
    IPv4 address
ospf.mpls.remote_id  MPLS/TE Remote Interface Index
    Unsigned 32-bit integer
ospf.mpls.routerid   MPLS/TE Router ID
    IPv4 address
ospf.msg             Message Type
    Unsigned 8-bit integer
ospf.msg.dbdesc      Database Description
    Boolean
ospf.msg.hello        Hello
    Boolean
ospf.msg.lsack        Link State Adv Acknowledgement
    Boolean
ospf.msg.lsreq        Link State Adv Request
    Boolean
ospf.msg.lsupdate    Link State Adv Update
    Boolean
ospf.srcrouter        Source OSPF Router
    IPv4 address
ospf.v2.grace         Grace TLV
    No value
ospf.v2.grace.ip      Restart IP
    IPv4 address
    The IP address of the interface originating this LSA
ospf.v2.grace.period  Grace Period
    Unsigned 32-bit integer
    The number of seconds neighbors should advertise the router as fully adjacent
ospf.v2.grace.reason  Restart Reason
    Unsigned 8-bit integer
    The reason the router is restarting
ospf.v2.options       Options
    Unsigned 8-bit integer
```

```
ospf.v2.options.dc  DC
  Boolean
ospf.v2.options.dn  DN
  Boolean
ospf.v2.options.e   E
  Boolean
ospf.v2.options.l   L
  Boolean
ospf.v2.options.mc  MC
  Boolean
ospf.v2.options.np  NP
  Boolean
ospf.v2.options.o   O
  Boolean
ospf.v2.router.lsa.flags  Flags
  Unsigned 8-bit integer
ospf.v2.router.lsa.flags.b  B
  Boolean
ospf.v2.router.lsa.flags.e  E
  Boolean
ospf.v2.router.lsa.flags.v  V
  Boolean
ospf.v3.as.external.flags  Flags
  Unsigned 8-bit integer
ospf.v3.as.external.flags.e  E
  Boolean
ospf.v3.as.external.flags.f  F
  Boolean
ospf.v3.as.external.flags.t  T
  Boolean
ospf.v3.options  Options
  Unsigned 24-bit integer
ospf.v3.options.dc  DC
  Boolean
ospf.v3.options.e   E
  Boolean
ospf.v3.options.mc  MC
  Boolean
ospf.v3.options.n   N
  Boolean
ospf.v3.options.r   R
  Boolean
ospf.v3.options.v6  V6
  Boolean
```

```

ospf.v3.prefix.options  PrefixOptions
    Unsigned 8-bit integer
ospf.v3.prefix.options.la  LA
    Boolean
ospf.v3.prefix.options.mc  MC
    Boolean
ospf.v3.prefix.options.nu  NU
    Boolean
ospf.v3.prefix.options.p  P
    Boolean
ospf.v3.router.lsa.flags  Flags
    Unsigned 8-bit integer
ospf.v3.router.lsa.flags.b  B
    Boolean
ospf.v3.router.lsa.flags.e  E
    Boolean
ospf.v3.router.lsa.flags.v  V
    Boolean
ospf.v3.router.lsa.flags.w  W
    Boolean

```

**OpenBSD Encapsulating device (enc)**

```

enc.af  Address Family
    Unsigned 32-bit integer
    Protocol (IPv4 vs IPv6)
enc.flags  Flags
    Unsigned 32-bit integer
    ENC flags
enc.spi  SPI
    Unsigned 32-bit integer
    Security Parameter Index

```

**OpenBSD Packet Filter log file (pflog)**

```

pflog.length  Header Length
    Unsigned 8-bit integer
    Length of Header
pflog.rulenr  Rule Number
    Signed 32-bit integer
    Last matched firewall main ruleset rule number
pflog.ruleset  Ruleset
    String
    Ruleset name in anchor
pflog.subrulenr  Sub Rule Number
    Signed 32-bit integer
    Last matched firewall anchored ruleset rule number

```



**OpenBSD Packet Filter log file, pre 3.4 (pflog-old)**

```
pflog.action  Action
              Unsigned 16-bit integer
              Action taken by PF on the packet

pflog.af     Address Family
              Unsigned 32-bit integer
              Protocol (IPv4 vs IPv6)

pflog.dir    Direction
              Unsigned 16-bit integer
              Direction of packet in stack (inbound versus outbound)

pflog.ifname Interface
              String
              Interface

pflog.reason Reason
              Unsigned 16-bit integer
              Reason for logging the packet

pflog.rnr    Rule Number
              Signed 16-bit integer
              Last matched firewall rule number
```

**Optimized Link State Routing Protocol (olsr)**

```
olsr.ansn    Advertised Neighbor Sequence Number (ANSN)
              Unsigned 16-bit integer
              Advertised Neighbor Sequence Number (ANSN)

olsr.data    Data
              Byte array
              Data

olsr.hop_count Hop Count
              Unsigned 8-bit integer
              Hop Count

olsr.htime   Hello emission interval
              Double-precision floating point
              Hello emission interval

olsr.interface6_addr Interface Address
              IPv6 address
              Interface Address

olsr.interface_addr Interface Address
              IPv4 address
              Interface Address

olsr.link_message_size Link Message Size
              Unsigned 16-bit integer
              Link Message Size

olsr.link_type Link Type
              Unsigned 8-bit integer
              Link Type

olsr.message_seq_num Message Sequence Number
              Unsigned 16-bit integer
              Message Sequence Number
```

```
olsr.message_size  Message
    Unsigned 16-bit integer
    Message Size in Bytes

olsr.message_type  Message Type
    Unsigned 8-bit integer
    Message Type

olsr.neighbor6_addr Neighbor Address
    IPv6 address
    Neighbor Address

olsr.neighbor_addr Neighbor Address
    IPv4 address
    Neighbor Address

olsr.netmask       Netmask
    IPv4 address
    Netmask

olsr.netmask6     Netmask
    IPv6 address
    Netmask

olsr.network6_addr Network Address
    IPv6 address
    Network Address

olsr.network_addr Network Address
    IPv4 address
    Network Address

olsr.origin6_addr Originator Address
    IPv6 address
    Originator Address

olsr.origin_addr  Originator Address
    IPv4 address
    Originator Address

olsr.packet_len   Packet Length
    Unsigned 16-bit integer
    Packet Length in Bytes

olsr.packet_seq_num Packet Sequence Number
    Unsigned 16-bit integer
    Packet Sequence Number

olsr.ttl          Time to Live
    Unsigned 8-bit integer
    Time to Live

olsr.vtime        Validity Time
    Double-precision floating point
    Validity Time

olsr.willingness  Willingness to Carry and Forward
    Unsigned 8-bit integer
    Willingness to Carry and Forward
```

**PC NFS (pcnfsd)**

```
pcnfsd.auth.client  Authentication Client
String
Authentication Client

pcnfsd.auth.ident.clear  Clear Ident
String
Authentication Clear Ident

pcnfsd.auth.ident.obscure  Obscure Ident
String
Authentication Obscure Ident

pcnfsd.auth.password.clear  Clear Password
String
Authentication Clear Password

pcnfsd.auth.password.obscure  Obscure Password
String
Authentication Obscure Password

pcnfsd.comment  Comment
String
Comment

pcnfsd.def_umask  def_umask
Unsigned 32-bit integer
def_umask

pcnfsd.gid  Group ID
Unsigned 32-bit integer
Group ID

pcnfsd.gids.count  Group ID Count
Unsigned 32-bit integer
Group ID Count

pcnfsd.homedir  Home Directory
String
Home Directory

pcnfsd.procedure_v1  V1 Procedure
Unsigned 32-bit integer
V1 Procedure

pcnfsd.procedure_v2  V2 Procedure
Unsigned 32-bit integer
V2 Procedure

pcnfsd.status  Reply Status
Unsigned 32-bit integer
Status

pcnfsd.uid  User ID
Unsigned 32-bit integer
User ID

pcnfsd.username  User name
String
pcnfsd.username
```

**PKCS#1 (pkcs-1)**

```
pkcs1.coefficient coefficient
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.digest digest
Byte array
pkcs1.Digest

pkcs1.digestAlgorithm digestAlgorithm
No value
pkcs1.DigestAlgorithmIdentifier

pkcs1.exponent1 exponent1
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.exponent2 exponent2
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.modulus modulus
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.prime1 prime1
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.prime2 prime2
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.privateExponent privateExponent
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.publicExponent publicExponent
Signed 32-bit integer
pkcs1.INTEGER

pkcs1.version version
Signed 32-bit integer
pkcs1.Version
```

**PKCS#12: Personal Information Exchange (pkcs12)**

```
pkcs12.Attributes_item Item
No value
x509if.Attribute

pkcs12.AuthenticatedSafe AuthenticatedSafe
Unsigned 32-bit integer
pkcs12.AuthenticatedSafe

pkcs12.AuthenticatedSafe_item Item
No value
cms.ContentInfo

pkcs12.CRLBag CRLBag
No value
pkcs12.CRLBag
```

```
pkcs12.CertBag CertBag
    No value
    pkcs12.CertBag
pkcs12.EncryptedPrivateKeyInfo EncryptedPrivateKeyInfo
    No value
    pkcs12.EncryptedPrivateKeyInfo
pkcs12.KeyBag KeyBag
    No value
    pkcs12.KeyBag
pkcs12.PBEParameter PBEParameter
    No value
    pkcs12.PBEParameter
pkcs12.PBES2Params PBES2Params
    No value
    pkcs12.PBES2Params
pkcs12.PBKDF2Params PBKDF2Params
    No value
    pkcs12.PBKDF2Params
pkcs12.PBMAC1Params PBMAC1Params
    No value
    pkcs12.PBMAC1Params
pkcs12.PFX PFX
    No value
    pkcs12.PFX
pkcs12.PKCS8ShroudedKeyBag PKCS8ShroudedKeyBag
    No value
    pkcs12.PKCS8ShroudedKeyBag
pkcs12.PrivateKeyInfo PrivateKeyInfo
    No value
    pkcs12.PrivateKeyInfo
pkcs12.SafeContents SafeContents
    Unsigned 32-bit integer
    pkcs12.SafeContents
pkcs12.SafeContents_item Item
    No value
    pkcs12.SafeBag
pkcs12.SecretBag SecretBag
    No value
    pkcs12.SecretBag
pkcs12.X509Certificate X509Certificate
    No value
    pkcs12.X509Certificate
pkcs12.attrId attrId
    pkcs12.T_attrId
pkcs12.attrValues attrValues
    Unsigned 32-bit integer
    pkcs12.T_attrValues
```

```
pkcs12.attrValues_item  Item
    No value
    pkcs12.T_attrValues_item
pkcs12.attributes  attributes
    Unsigned 32-bit integer
    pkcs12.Attributes
pkcs12.authSafe  authSafe
    No value
    cms.ContentInfo
pkcs12.bagAttributes  bagAttributes
    Unsigned 32-bit integer
    pkcs12.SET_OF_PKCS12Attribute
pkcs12.bagAttributes_item  Item
    No value
    pkcs12.PKCS12Attribute
pkcs12.bagId  bagId
    pkcs12.T_bagId
pkcs12.bagValue  bagValue
    No value
    pkcs12.T_bagValue
pkcs12.certId  certId
    pkcs12.T_certId
pkcs12.certValue  certValue
    No value
    pkcs12.T_certValue
pkcs12.crlId  crlId
    pkcs12.T_crlId
pkcs12.crlValue  crlValue
    No value
    pkcs12.T_crlValue
pkcs12.digest  digest
    Byte array
    cms.Digest
pkcs12.digestAlgorithm  digestAlgorithm
    No value
    cms.DigestAlgorithmIdentifier
pkcs12.encryptedData  encryptedData
    Byte array
    pkcs12.EncryptedData
pkcs12.encryptionAlgorithm  encryptionAlgorithm
    No value
    x509af.AlgorithmIdentifier
pkcs12.encryptionScheme  encryptionScheme
    No value
    x509af.AlgorithmIdentifier
```

```
pkcs12.iterationCount iterationCount
    Signed 32-bit integer
    pkcs12.INTEGER

pkcs12.iterations iterations
    Signed 32-bit integer
    pkcs12.INTEGER

pkcs12.keyDerivationFunc keyDerivationFunc
    No value
    x509af.AlgorithmIdentifier

pkcs12.keyLength keyLength
    Unsigned 32-bit integer
    pkcs12.INTEGER_1_MAX

pkcs12.mac mac
    No value
    pkcs12.DigestInfo

pkcs12.macData macData
    No value
    pkcs12.MacData

pkcs12.macSalt macSalt
    Byte array
    pkcs12.OCTET_STRING

pkcs12.messageAuthScheme messageAuthScheme
    No value
    x509af.AlgorithmIdentifier

pkcs12.otherSource otherSource
    No value
    x509af.AlgorithmIdentifier

pkcs12.prf prf
    No value
    x509af.AlgorithmIdentifier

pkcs12.privateKey privateKey
    Byte array
    pkcs12.PrivateKey

pkcs12.privateKeyAlgorithm privateKeyAlgorithm
    No value
    x509af.AlgorithmIdentifier

pkcs12.salt salt
    Byte array
    pkcs12.OCTET_STRING

pkcs12.secretTypeId secretTypeId
    pkcs12.T_secretTypeId

pkcs12.secretValue secretValue
    No value
    pkcs12.T_secretValue

pkcs12.specified specified
    Byte array
    pkcs12.OCTET_STRING
```

```
pkcs12.version  version
                Unsigned 32-bit integer
                pkcs12.T_version
```

**PKINIT (pkinit)**

```
pkinit.AuthPack  AuthPack
                No value
                pkinit.AuthPack

pkinit.KDCDHKeyInfo  KDCDHKeyInfo
                No value
                pkinit.KDCDHKeyInfo

pkinit.caName  caName
                Unsigned 32-bit integer
                pkixexplicit.Name

pkinit.clientPublicValue  clientPublicValue
                No value
                pkixexplicit.SubjectPublicKeyInfo

pkinit.ctime  ctime
                No value
                KerberosV5Spec2.KerberosTime

pkinit.cusec  cusec
                Signed 32-bit integer
                pkinit.INTEGER

pkinit.dhKeyExpiration  dhKeyExpiration
                No value
                KerberosV5Spec2.KerberosTime

pkinit.dhSignedData  dhSignedData
                No value
                cms.ContentInfo

pkinit.encKeyPack  encKeyPack
                No value
                cms.ContentInfo

pkinit.issuerAndSerial  issuerAndSerial
                No value
                cms.IssuerAndSerialNumber

pkinit.kdcCert  kdcCert
                No value
                cms.IssuerAndSerialNumber

pkinit.nonce  nonce
                Unsigned 32-bit integer
                pkinit.INTEGER_0_4294967295

pkinit.paChecksum  paChecksum
                No value
                KerberosV5Spec2.Checksum

pkinit.pkAuthenticator  pkAuthenticator
                No value
                pkinit.PKAuthenticator
```



```

pkinit.signedAuthPack  signedAuthPack
    No value
    cms.ContentInfo

pkinit.subjectPublicKey  subjectPublicKey
    Byte array
    pkinit.BIT_STRING

pkinit.supportedCMSTypes  supportedCMSTypes
    Unsigned 32-bit integer
    pkinit.SEQUENCE_OF_AlgorithmIdentifier

pkinit.supportedCMSTypes_item  Item
    No value
    pkixexplicit.AlgorithmIdentifier

pkinit.trustedCertifiers  trustedCertifiers
    Unsigned 32-bit integer
    pkinit.SEQUENCE_OF_TrustedCA

pkinit.trustedCertifiers_item  Item
    Unsigned 32-bit integer
    pkinit.TrustedCA

```

**PKIX CERT File Format (pkix-cert)**

```

cert  Certificate
    No value
    Certificate

```

**PKIX Qualified (pkixqualified)**

```

pkixqualified.BiometricSyntax  BiometricSyntax
    Unsigned 32-bit integer
    pkixqualified.BiometricSyntax

pkixqualified.BiometricSyntax_item  Item
    No value
    pkixqualified.BiometricData

pkixqualified.Directorystring  Directorystring
    Unsigned 32-bit integer
    pkixqualified.Directorystring

pkixqualified.Generalizedtime  Generalizedtime
    String
    pkixqualified.Generalizedtime

pkixqualified.NameRegistrationAuthorities_item  Item
    Unsigned 32-bit integer
    x509ce.GeneralName

pkixqualified.Printablestring  Printablestring
    String
    pkixqualified.Printablestring

pkixqualified.QCStatements  QCStatements
    Unsigned 32-bit integer
    pkixqualified.QCStatements

```

```

pkixqualified.QCStatements_item  Item
    No value
    pkixqualified.QCStatement
pkixqualified.SemanticsInformation  SemanticsInformation
    No value
    pkixqualified.SemanticsInformation
pkixqualified.biometricDataHash  biometricDataHash
    Byte array
    pkixqualified.OCTET_STRING
pkixqualified.biometricDataOid  biometricDataOid
    pkixqualified.OBJECT_IDENTIFIER
pkixqualified.hashAlgorithm  hashAlgorithm
    No value
    x509af.AlgorithmIdentifier
pkixqualified.nameRegistrationAuthorities  nameRegistrationAuthorities
    Unsigned 32-bit integer
    pkixqualified.NameRegistrationAuthorities
pkixqualified.predefinedBiometricType  predefinedBiometricType
    Signed 32-bit integer
    pkixqualified.PredefinedBiometricType
pkixqualified.semanticsIdentifier  semanticsIdentifier
    pkixqualified.OBJECT_IDENTIFIER
pkixqualified.sourceDataUri  sourceDataUri
    String
    pkixqualified.IA5String
pkixqualified.statementId  statementId
    pkixqualified.T_statementId
pkixqualified.statementInfo  statementInfo
    No value
    pkixqualified.T_statementInfo
pkixqualified.typeOfBiometricData  typeOfBiometricData
    Unsigned 32-bit integer
    pkixqualified.TypeOfBiometricData

```

**PKIX Time Stamp Protocol (pkixtsp)**

```

pkixtsp.accuracy  accuracy
    No value
    pkixtsp.Accuracy
pkixtsp.addInfoNotAvailable  addInfoNotAvailable
    Boolean
pkixtsp.badAlg  badAlg
    Boolean
pkixtsp.badDataFormat  badDataFormat
    Boolean
pkixtsp.badRequest  badRequest
    Boolean

```

```
pkixtsp.certReq  certReq
  Boolean
  pkixtsp.BOOLEAN

pkixtsp.extensions  extensions
  Unsigned 32-bit integer
  pkixlexplicit.Extensions

pkixtsp.failInfo  failInfo
  Byte array
  pkixtsp.PKIFailureInfo

pkixtsp.genTime  genTime
  String
  pkixtsp.GeneralizedTime

pkixtsp.hashAlgorithm  hashAlgorithm
  No value
  pkixlexplicit.AlgorithmIdentifier

pkixtsp.hashedException  hashedMessage
  Byte array
  pkixtsp.OCTET_STRING

pkixtsp.messageImprint  messageImprint
  No value
  pkixtsp.MessageImprint

pkixtsp.micros  micros
  Unsigned 32-bit integer
  pkixtsp.INTEGER_1_999

pkixtsp.millis  millis
  Unsigned 32-bit integer
  pkixtsp.INTEGER_1_999

pkixtsp.nonce  nonce
  Signed 32-bit integer
  pkixtsp.INTEGER

pkixtsp.ordering  ordering
  Boolean
  pkixtsp.BOOLEAN

pkixtsp.policy  policy
  pkixtsp.TSAPolicyId

pkixtsp.reqPolicy  reqPolicy
  pkixtsp.TSAPolicyId

pkixtsp.seconds  seconds
  Signed 32-bit integer
  pkixtsp.INTEGER

pkixtsp.serialNumber  serialNumber
  Signed 32-bit integer
  pkixtsp.INTEGER

pkixtsp.status  status
  No value
  pkixtsp.PKIStatusInfo
```

```

pkixtsp.systemFailure  systemFailure
    Boolean

pkixtsp.timeNotAvailable  timeNotAvailable
    Boolean

pkixtsp.timeStampToken  timeStampToken
    No value
    pkixtsp.TimeStampToken

pkixtsp.tsa  tsa
    Unsigned 32-bit integer
    pkiximplicit.GeneralName

pkixtsp.unacceptedExtension  unacceptedExtension
    Boolean

pkixtsp.unacceptedPolicy  unacceptedPolicy
    Boolean

pkixtsp.version  version
    Signed 32-bit integer
    pkixtsp.T_version

```

**PKIX1Explicit (pkix1explicit)**

```

pkixlexplicit.ASIdentifiers  ASIdentifiers
    No value
    pkixlexplicit.ASIdentifiers

pkixlexplicit.DirectoryString  DirectoryString
    String
    pkixlexplicit.DirectoryString

pkixlexplicit.DomainParameters  DomainParameters
    No value
    pkixlexplicit.DomainParameters

pkixlexplicit.Extensions_item  Item
    No value
    pkixlexplicit.Extension

pkixlexplicit.IPAddrBlocks  IPAddrBlocks
    Unsigned 32-bit integer
    pkixlexplicit.IPAddrBlocks

pkixlexplicit.IPAddrBlocks_item  Item
    No value
    pkixlexplicit.IPAddressFamily

pkixlexplicit.RDNSequence_item  Item
    Unsigned 32-bit integer
    pkixlexplicit.RelativeDistinguishedName

pkixlexplicit.RelativeDistinguishedName_item  Item
    No value
    pkixlexplicit.AttributeTypeAndValue

pkixlexplicit.addressFamily  addressFamily
    Byte array
    pkixlexplicit.T_addressFamily

```

```

pkixlexplicit.addressPrefix  addressPrefix
    Byte array
    pkixlexplicit.IPAddress
pkixlexplicit.addressRange  addressRange
    No value
    pkixlexplicit.IPAddressRange
pkixlexplicit.addressesOrRanges  addressesOrRanges
    Unsigned 32-bit integer
    pkixlexplicit.SEQUENCE_OF_IPAddressOrRange
pkixlexplicit.addressesOrRanges_item  Item
    Unsigned 32-bit integer
    pkixlexplicit.IPAddressOrRange
pkixlexplicit.addressfamily  Address family (AFN)
    Unsigned 16-bit integer
    Address family (AFN)
pkixlexplicit.addressfamily.safi  Subsequent Address Family Identifiers (SAFI)
    Unsigned 16-bit integer
    Subsequent Address Family Identifiers (SAFI) RFC4760
pkixlexplicit.asIdsOrRanges  asIdsOrRanges
    Unsigned 32-bit integer
    pkixlexplicit.SEQUENCE_OF_ASIdOrRange
pkixlexplicit.asIdsOrRanges_item  Item
    Unsigned 32-bit integer
    pkixlexplicit.ASIdOrRange
pkixlexplicit.asnum  asnum
    Unsigned 32-bit integer
    pkixlexplicit.ASIdentifierChoice
pkixlexplicit.critical  critical
    Boolean
    pkixlexplicit.BOOLEAN
pkixlexplicit.extnId  extnId
    pkixlexplicit.T_extnId
pkixlexplicit.extnValue  extnValue
    Byte array
    pkixlexplicit.T_extnValue
pkixlexplicit.g  g
    Signed 32-bit integer
    pkixlexplicit.INTEGER
pkixlexplicit.generalTime  generalTime
    String
    pkixlexplicit.GeneralizedTime
pkixlexplicit.id  Id
    String
    Object identifier Id
pkixlexplicit.inherit  inherit
    No value
    pkixlexplicit.NULL

```

```
pkixlexplicit.ipAddressChoice  ipAddressChoice
    Unsigned 32-bit integer
    pkixlexplicit.IPAddressChoice
pkixlexplicit.j  j
    Signed 32-bit integer
    pkixlexplicit.INTEGER
pkixlexplicit.max  max
    Byte array
    pkixlexplicit.IPAddress
pkixlexplicit.min  min
    Byte array
    pkixlexplicit.IPAddress
pkixlexplicit.p  p
    Signed 32-bit integer
    pkixlexplicit.INTEGER
pkixlexplicit.pgenCounter  pgenCounter
    Signed 32-bit integer
    pkixlexplicit.INTEGER
pkixlexplicit.q  q
    Signed 32-bit integer
    pkixlexplicit.INTEGER
pkixlexplicit.range  range
    No value
    pkixlexplicit.ASRange
pkixlexplicit.rdi  rdi
    Unsigned 32-bit integer
    pkixlexplicit.ASIdentifierChoice
pkixlexplicit.seed  seed
    Byte array
    pkixlexplicit.BIT_STRING
pkixlexplicit.type  type
    pkixlexplicit.OBJECT_IDENTIFIER
pkixlexplicit.utcTime  utcTime
    String
    pkixlexplicit.UTCTime
pkixlexplicit.validationParms  validationParms
    No value
    pkixlexplicit.ValidationParms
pkixlexplicit.value  value
    No value
    pkixlexplicit.T_value
pkixlexplicit.values  values
    Unsigned 32-bit integer
    pkixlexplicit.T_values
pkixlexplicit.values_item  Item
    No value
    pkixlexplicit.T_values_item
```

**PKIX1Implicit (pkix1implicit)**

```

pkix1implicit.AuthorityInfoAccessSyntax  AuthorityInfoAccessSyntax
    Unsigned 32-bit integer
    pkix1implicit.AuthorityInfoAccessSyntax
pkix1implicit.AuthorityInfoAccessSyntax_item  Item
    No value
    pkix1implicit.AccessDescription
pkix1implicit.Dummy  Dummy
    No value
    pkix1implicit.Dummy
pkix1implicit.accessLocation  accessLocation
    Unsigned 32-bit integer
    x509ce.GeneralName
pkix1implicit.accessMethod  accessMethod
    pkix1implicit.OBJECT_IDENTIFIER
pkix1implicit.bmpString  bmpString
    String
    pkix1implicit.BMPString
pkix1implicit.explicitText  explicitText
    Unsigned 32-bit integer
    pkix1implicit.DisplayText
pkix1implicit.nameAssigner  nameAssigner
    String
    pkix1explicit.DirectoryString
pkix1implicit.noticeNumbers  noticeNumbers
    Unsigned 32-bit integer
    pkix1implicit.T_noticeNumbers
pkix1implicit.noticeNumbers_item  Item
    Signed 32-bit integer
    pkix1implicit.INTEGER
pkix1implicit.noticeRef  noticeRef
    No value
    pkix1implicit.NoticeReference
pkix1implicit.organization  organization
    Unsigned 32-bit integer
    pkix1implicit.DisplayText
pkix1implicit.partyName  partyName
    String
    pkix1explicit.DirectoryString
pkix1implicit.utf8String  utf8String
    String
    pkix1implicit.UTF8String
pkix1implicit.visibleString  visibleString
    String
    pkix1implicit.VisibleString

```

**PKIXProxy (RFC3820) (pkixproxy)**

```

pkixproxy.ProxyCertInfoExtension ProxyCertInfoExtension
  No value
  pkixproxy.ProxyCertInfoExtension

pkixproxy.pCPathLenConstraint pCPathLenConstraint
  Signed 32-bit integer
  pkixproxy.ProxyCertPathLengthConstraint

pkixproxy.policy policy
  Byte array
  pkixproxy.OCTET_STRING

pkixproxy.policyLanguage policyLanguage
  pkixproxy.OBJECT_IDENTIFIER

pkixproxy.proxyPolicy proxyPolicy
  No value
  pkixproxy.ProxyPolicy

```

**PPI Packet Header (ppi)**

```

ppi.80211-common.chan.freq Channel frequency
  Unsigned 16-bit integer
  PPI 802.11-Common Channel Frequency

ppi.80211-common.chan.type Channel type
  Unsigned 16-bit integer
  PPI 802.11-Common Channel Type

ppi.80211-common.chan.type.2ghz 2 GHz spectrum
  Boolean
  PPI 802.11-Common Channel Type 2 GHz spectrum

ppi.80211-common.chan.type.5ghz 5 GHz spectrum
  Boolean
  PPI 802.11-Common Channel Type 5 GHz spectrum

ppi.80211-common.chan.type.cck Complementary Code Keying (CCK)
  Boolean
  PPI 802.11-Common Channel Type Complementary Code Keying (CCK) Modulation

ppi.80211-common.chan.type.dynamic Dynamic CCK-OFDM
  Boolean
  PPI 802.11-Common Channel Type Dynamic CCK-OFDM Channel

ppi.80211-common.chan.type.gfsk Gaussian Frequency Shift Keying (GFSK)
  Boolean
  PPI 802.11-Common Channel Type Gaussian Frequency Shift Keying (GFSK) Modula

ppi.80211-common.chan.type.ofdm Orthogonal Frequency-Division Multiplexing (OFDM)
  Boolean
  PPI 802.11-Common Channel Type Orthogonal Frequency-Division Multiplexing (O

ppi.80211-common.chan.type.passive Passive
  Boolean
  PPI 802.11-Common Channel Type Passive

ppi.80211-common.chan.type.turbo Turbo
  Boolean
  PPI 802.11-Common Channel Type Turbo

```



```
ppi.80211-common.dbm.antnoise  dBm antenna noise
Signed 8-bit integer
PPI 802.11-Common dBm Antenna Noise

ppi.80211-common.dbm.antsignal  dBm antenna signal
Signed 8-bit integer
PPI 802.11-Common dBm Antenna Signal

ppi.80211-common.fhss.hopset  FHSS hopset
Unsigned 8-bit integer
PPI 802.11-Common Frequency-Hopping Spread Spectrum (FHSS) Hopset

ppi.80211-common.fhss.pattern  FHSS pattern
Unsigned 8-bit integer
PPI 802.11-Common Frequency-Hopping Spread Spectrum (FHSS) Pattern

ppi.80211-common.flags  Flags
Unsigned 16-bit integer
PPI 802.11-Common Flags

ppi.80211-common.flags.fcs  FCS present flag
Boolean
PPI 802.11-Common Frame Check Sequence (FCS) Present Flag

ppi.80211-common.flags.fcs-invalid  FCS validity
Boolean
PPI 802.11-Common Frame Check Sequence (FCS) Validity flag

ppi.80211-common.flags.phy-err  PHY error flag
Boolean
PPI 802.11-Common Physical level (PHY) Error

ppi.80211-common.flags.tsft  TSFT flag
Boolean
PPI 802.11-Common Timing Synchronization Function Timer (TSFT) msec/usec fla

ppi.80211-common.rate  Data rate
Unsigned 16-bit integer
PPI 802.11-Common Data Rate (x 500 Kbps)

ppi.80211-common.tsft  TSFT
Unsigned 64-bit integer
PPI 802.11-Common Timing Synchronization Function Timer (TSFT)

ppi.80211-mac-phy.ext-chan.freq  Extended channel frequency
Unsigned 16-bit integer
PPI 802.11n MAC+PHY Extended Channel Frequency

ppi.80211-mac-phy.ext-chan.type  Channel type
Unsigned 16-bit integer
PPI 802.11n MAC+PHY Channel Type

ppi.80211-mac-phy.ext-chan.type.2ghz  2 GHz spectrum
Boolean
PPI 802.11n MAC+PHY Channel Type 2 GHz spectrum

ppi.80211-mac-phy.ext-chan.type.5ghz  5 GHz spectrum
Boolean
PPI 802.11n MAC+PHY Channel Type 5 GHz spectrum

ppi.80211-mac-phy.ext-chan.type.cck  Complementary Code Keying (CCK)
Boolean
PPI 802.11n MAC+PHY Channel Type Complementary Code Keying (CCK) Modulation
```

```
ppi.80211-mac-phy.ext-chan.type.dynamic  Dynamic CCK-OFDM
Boolean
PPI 802.11n MAC+PHY Channel Type Dynamic CCK-OFDM Channel

ppi.80211-mac-phy.ext-chan.type.gfsk  Gaussian Frequency Shift Keying (GFSK)
Boolean
PPI 802.11n MAC+PHY Channel Type Gaussian Frequency Shift Keying (GFSK) Modu

ppi.80211-mac-phy.ext-chan.type.ofdm  Orthogonal Frequency-Division Multiplexing
Boolean
PPI 802.11n MAC+PHY Channel Type Orthogonal Frequency-Division Multiplexing

ppi.80211-mac-phy.ext-chan.type.passive  Passive
Boolean
PPI 802.11n MAC+PHY Channel Type Passive

ppi.80211-mac-phy.ext-chan.type.turbo  Turbo
Boolean
PPI 802.11n MAC+PHY Channel Type Turbo

ppi.80211n-mac-phy.dbmant0.noise  dBm antenna 0 noise
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 0 Noise

ppi.80211n-mac-phy.dbmant0.signal  dBm antenna 0 signal
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 0 Signal

ppi.80211n-mac-phy.dbmant1.noise  dBm antenna 1 noise
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 1 Noise

ppi.80211n-mac-phy.dbmant1.signal  dBm antenna 1 signal
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 1 Signal

ppi.80211n-mac-phy.dbmant2.noise  dBm antenna 2 noise
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 2 Noise

ppi.80211n-mac-phy.dbmant2.signal  dBm antenna 2 signal
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 2 Signal

ppi.80211n-mac-phy.dbmant3.noise  dBm antenna 3 noise
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 3 Noise

ppi.80211n-mac-phy.dbmant3.signal  dBm antenna 3 signal
Signed 8-bit integer
PPI 802.11n MAC+PHY dBm Antenna 3 Signal

ppi.80211n-mac-phy.emv0  EVM-0
Unsigned 32-bit integer
PPI 802.11n MAC+PHY Error Vector Magnitude (EVM) for chain 0

ppi.80211n-mac-phy.emv1  EVM-1
Unsigned 32-bit integer
PPI 802.11n MAC+PHY Error Vector Magnitude (EVM) for chain 1

ppi.80211n-mac-phy.emv2  EVM-2
Unsigned 32-bit integer
PPI 802.11n MAC+PHY Error Vector Magnitude (EVM) for chain 2
```

```

ppi.80211n-mac-phy.emv3  EVM-3
    Unsigned 32-bit integer
    PPI 802.11n MAC+PHY Error Vector Magnitude (EVM) for chain 3

ppi.80211n-mac-phy.mcs  MCS
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Modulation Coding Scheme (MCS)

ppi.80211n-mac-phy.num_streams  Number of spatial streams
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY number of spatial streams

ppi.80211n-mac-phy.rssi.ant0ctl  Antenna 0 control RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 0 Control Channel Received Signal Strength Indic

ppi.80211n-mac-phy.rssi.ant0ext  Antenna 0 extension RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 0 Extension Channel Received Signal Strength Ind

ppi.80211n-mac-phy.rssi.ant1ctl  Antenna 1 control RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 1 Control Channel Received Signal Strength Indic

ppi.80211n-mac-phy.rssi.ant1ext  Antenna 1 extension RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 1 Extension Channel Received Signal Strength Ind

ppi.80211n-mac-phy.rssi.ant2ctl  Antenna 2 control RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 2 Control Channel Received Signal Strength Indic

ppi.80211n-mac-phy.rssi.ant2ext  Antenna 2 extension RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 2 Extension Channel Received Signal Strength Ind

ppi.80211n-mac-phy.rssi.ant3ctl  Antenna 3 control RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 3 Control Channel Received Signal Strength Indic

ppi.80211n-mac-phy.rssi.ant3ext  Antenna 3 extension RSSI
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Antenna 3 Extension Channel Received Signal Strength Ind

ppi.80211n-mac-phy.rssi.combined  RSSI combined
    Unsigned 8-bit integer
    PPI 802.11n MAC+PHY Received Signal Strength Indication (RSSI) Combined

ppi.80211n-mac.ampdu  A-MPDU
    Frame number
    802.11n Aggregated MAC Protocol Data Unit (A-MPDU)

ppi.80211n-mac.ampdu.count  MPDU count
    Unsigned 16-bit integer
    The number of aggregated MAC Protocol Data Units (MPDUs)

ppi.80211n-mac.ampdu.reassembled  Reassembled A-MPDU
    No value
    Reassembled Aggregated MAC Protocol Data Unit (A-MPDU)

ppi.80211n-mac.ampdu.reassembled_in  Reassembled A-MPDU in frame
    Frame number
    The A-MPDU that doesn't end in this segment is reassembled in this frame

```

```
ppi.80211n-mac.ampdu_id  AMPDU-ID
    Unsigned 32-bit integer
    PPI 802.11n MAC AMPDU-ID

ppi.80211n-mac.flags  MAC flags
    Unsigned 32-bit integer
    PPI 802.11n MAC flags

ppi.80211n-mac.flags.agg  Aggregate flag
    Boolean
    PPI 802.11 MAC Aggregate Flag

ppi.80211n-mac.flags.delim_crc_error_after  A-MPDU Delimiter CRC error after thi
    Boolean
    PPI 802.11n MAC A-MPDU Delimiter CRC Error After This Frame Flag

ppi.80211n-mac.flags.greenfield  Greenfield flag
    Boolean
    PPI 802.11n MAC Greenfield Flag

ppi.80211n-mac.flags.ht20_40  HT20/HT40 flag
    Boolean
    PPI 802.11n MAC HT20/HT40 Flag

ppi.80211n-mac.flags.more_agg  More aggregates flag
    Boolean
    PPI 802.11n MAC More Aggregates Flag

ppi.80211n-mac.flags.rx.duplicate  Duplicate RX flag
    Boolean
    PPI 802.11n MAC Duplicate RX Flag

ppi.80211n-mac.flags.rx.short_guard_interval  RX Short Guard Interval (SGI) flag
    Boolean
    PPI 802.11n MAC RX Short Guard Interval (SGI) Flag

ppi.80211n-mac.num_delimiters  Num-Delimiters
    Unsigned 8-bit integer
    PPI 802.11n MAC number of zero-length pad delimiters

ppi.80211n-mac.reserved  Reserved
    Unsigned 24-bit integer
    PPI 802.11n MAC Reserved

ppi.8023_extension.errors  Errors
    Unsigned 32-bit integer
    PPI 802.3 Extension Errors

ppi.8023_extension.errors.error1  Error 1
    Boolean
    Debug Error 1

ppi.8023_extension.errors.error2  Error 2
    Boolean
    Debug Error 2

ppi.8023_extension.errors.error3  Error 3
    Boolean
    Debug Error 3

ppi.8023_extension.flags  Flags
    Unsigned 32-bit integer
    PPI 802.3 Extension Flags
```

```
ppi.8023_extension.flags.fcs_present  FCS Present Flag
    Boolean
    FCS (4 bytes) is present at the end of the packet
ppi.8023_extension.flags.flag2  Flag 2
    Boolean
    Debug Flag 2
ppi.8023_extension.flags.flag3  Flag 3
    Boolean
    Debug Flag 3
ppi.aggregation_extension.interface_id  Interface ID
    Unsigned 32-bit integer
    Zero-based index of the physical interface the packet was captured from
ppi.cap-info  Capture information
    Byte array
    PPI Capture information
ppi.dlt  DLT
    Unsigned 32-bit integer
    libpcap Data Link Type (DLT) of the payload
ppi.field_len  Field length
    Unsigned 16-bit integer
    PPI data field length
ppi.field_type  Field type
    Unsigned 16-bit integer
    PPI data field type
ppi.flags  Flags
    Unsigned 8-bit integer
    PPI header flags
ppi.flags.alignment  Alignment
    Boolean
    PPI header flags - 32bit Alignment
ppi.flags.reserved  Reserved
    Unsigned 8-bit integer
    PPI header flags - Reserved Flags
ppi.length  Header length
    Unsigned 16-bit integer
    Length of header including payload
ppi.proc-info  Process information
    Byte array
    PPI Process information
ppi.spectrum-map  Radio spectrum map
    Byte array
    PPI Radio spectrum map
ppi.version  Version
    Unsigned 8-bit integer
    PPI header format version
```

**PPP Bandwidth Allocation Control Protocol (bap)****PPP Bandwidth Allocation Protocol (bap)****PPP Bridging Control Protocol (bcp)**

```
bcp.flags  Flags
           Unsigned 8-bit integer

bcp.flags.bcontrol  Bridge control
                   Boolean

bcp.flags.fcs_present  LAN FCS present
                       Boolean

bcp.flags.zeropad  802.3 pad zero-filled
                   Boolean

bcp.mac_type  MAC Type
              Unsigned 8-bit integer

bcp.pads  Pads
          Unsigned 8-bit integer
```

**PPP CDP Control Protocol (cdpcp)****PPP Callback Control Protocol (cbcp)****PPP Challenge Handshake Authentication Protocol (chap)**

```
chap.code  Code
           Unsigned 8-bit integer
           CHAP code

chap.identifier  Identifier
                Unsigned 8-bit integer
                CHAP identifier

chap.length  Length
             Unsigned 16-bit integer
             CHAP length

chap.message  Message
             String
             CHAP message

chap.name  Name
           String
           CHAP name

chap.value  Value
           Byte array
           CHAP value data

chap.value_size  Value Size
                Unsigned 8-bit integer
                CHAP value size
```

**PPP Compressed Datagram (comp\_data)****PPP Compression Control Protocol (ccp)****PPP IP Control Protocol (ipcp)****PPP IPv6 Control Protocol (ipv6cp)****PPP In HDLC-Like Framing (ppp\_hdlc)****PPP Link Control Protocol (lcp)****PPP MPLS Control Protocol (mplscp)****PPP Multilink Protocol (mp)**

```
mp.first  First fragment
          Boolean
mp.last   Last fragment
          Boolean
mp.seq    Sequence number
          Unsigned 24-bit integer
```

**PPP Multiplexing (pppmux)****PPP OSI Control Protocol (osicp)****PPP Password Authentication Protocol (pap)****PPP VJ Compression (vj)**

```
vj.ack_delta  Ack delta
              Unsigned 16-bit integer
              Delta for acknowledgment sequence number
vj.change_mask  Change mask
              Unsigned 8-bit integer
vj.change_mask_a  Ack number changed
                Boolean
                Acknowledgement sequence number changed
vj.change_mask_c  Connection changed
                Boolean
                Connection number changed
vj.change_mask_i  IP ID change != 1
                Boolean
                IP ID changed by a value other than 1
vj.change_mask_p  Push bit set
                Boolean
                TCP PSH flag set
```

```
vj.change_mask_s  Sequence number changed
                  Boolean
                  Sequence number changed
vj.change_mask_u  Urgent pointer set
                  Boolean
                  Urgent pointer set
vj.change_mask_w  Window changed
                  Boolean
                  TCP window changed
vj.connection_number  Connection number
                    Unsigned 8-bit integer
                    Connection number
vj.ip_id_delta  IP ID delta
               Unsigned 16-bit integer
               Delta for IP ID
vj.seq_delta  Sequence delta
             Unsigned 16-bit integer
             Delta for sequence number
vj.tcp_cksum  TCP checksum
            Unsigned 16-bit integer
            TCP checksum
vj.urgp  Urgent pointer
        Unsigned 16-bit integer
        Urgent pointer
vj.win_delta  Window delta
            Signed 16-bit integer
            Delta for window
```

#### **PPP-over-Ethernet Discovery (pppoed)**

```
pppoe.code  Code
           Unsigned 8-bit integer
pppoe.payload_length  Payload Length
                   Unsigned 16-bit integer
pppoe.session_id  Session ID
                 Unsigned 16-bit integer
pppoe.type  Type
          Unsigned 8-bit integer
pppoe.version  Version
             Unsigned 8-bit integer
pppoed.tag  Tag
          Unsigned 16-bit integer
pppoed.tag.unknown_data  Unknown Data
                       Byte array
pppoed.tag_length  Tag Length
                 Unsigned 16-bit integer
pppoed.tags  PPPoE Tags
            No value
```



```
pppoed.tags.ac_cookie  AC-Cookie
    Byte array
pppoed.tags.ac_name    AC-Name
    String
pppoed.tags.ac_system_error  AC-System-Error
    String
pppoed.tags.credits    Credits
    Byte array
pppoed.tags.credits.bcn  BCN
    Unsigned 16-bit integer
pppoed.tags.credits.fcn  FCN
    Unsigned 16-bit integer
pppoed.tags.generic_error  Generic-Error
    String
pppoed.tags.host_uniq    Host-Uniq
    Byte array
pppoed.tags.hurl        HURL
    Byte array
pppoed.tags.ip_route_add  IP Route Add
    Byte array
pppoed.tags.max_payload  PPP Max Palyload
    Byte array
pppoed.tags.metrics      Metrics
    Byte array
pppoed.tags.metrics.curr_drate  Curr. datarate
    Unsigned 16-bit integer
pppoed.tags.metrics.latency  Latency
    Unsigned 16-bit integer
pppoed.tags.metrics.max_drate  Max. datarate
    Unsigned 16-bit integer
pppoed.tags.metrics.r      Receive Only
    Boolean
pppoed.tags.metrics.resource  Resource
    Unsigned 8-bit integer
pppoed.tags.metrics.rlq    Relative Link Quality
    Unsigned 8-bit integer
pppoed.tags.motm          MOTM
    Byte array
pppoed.tags.relay_session_id  Relay-Session-Id
    Byte array
pppoed.tags.seq_num      Sequence Number
    Unsigned 16-bit integer
pppoed.tags.service_name  Service-Name
    String
```

```
pppoed.tags.service_name_error  Service-Name-Error
    String
pppoed.tags.vendor_id  Vendor id
    Unsigned 32-bit integer
pppoed.tags.vendor_unspecified  Vendor unspecified
    Byte array
```

**PPP-over-Ethernet Session (pppoe)****PPPMux Control Protocol (pppmuxcp)****PROFINET DCP (pn\_dcp)**

```
pn_dcp.block  Block
    No value
pn_dcp.block_error  BlockError
    Unsigned 8-bit integer
pn_dcp.block_info  BlockInfo
    Unsigned 16-bit integer
pn_dcp.block_length  DCPBlockLength
    Unsigned 16-bit integer
pn_dcp.block_qualifier  BlockQualifier
    Unsigned 16-bit integer
pn_dcp.data_length  DCPDataLength
    Unsigned 16-bit integer
pn_dcp.deviceinitiative_value  DeviceInitiativeValue
    Unsigned 16-bit integer
pn_dcp.option  Option
    Unsigned 8-bit integer
pn_dcp.reserved16  Reserved
    Unsigned 16-bit integer
pn_dcp.reserved8  Reserved
    Unsigned 8-bit integer
pn_dcp.response_delay  ResponseDelay
    Unsigned 16-bit integer
pn_dcp.service_id  ServiceID
    Unsigned 8-bit integer
pn_dcp.service_type  ServiceType
    Unsigned 8-bit integer
pn_dcp.subobtion_ip_ip  IPaddress
    IPv4 address
pn_dcp.subobtion_ip_subnetmask  Subnetmask
    IPv4 address
pn_dcp.suboption  Suboption
    Unsigned 8-bit integer
```

```
pn_dcp.suboption_all      Suboption
    Unsigned 8-bit integer
pn_dcp.suboption_control  Suboption
    Unsigned 8-bit integer
pn_dcp.suboption_control_response  Response
    Unsigned 8-bit integer
pn_dcp.suboption_device  Suboption
    Unsigned 8-bit integer
pn_dcp.suboption_device_aliasname  AliasName
    String
pn_dcp.suboption_device_id  DeviceID
    Unsigned 16-bit integer
pn_dcp.suboption_device_nameofstation  NameOfStation
    String
pn_dcp.suboption_device_role  DeviceRoleDetails
    Unsigned 8-bit integer
pn_dcp.suboption_device_typeofstation  TypeOfStation
    String
pn_dcp.suboption_deviceinitiative  Suboption
    Unsigned 8-bit integer
pn_dcp.suboption_dhcp  Suboption
    Unsigned 8-bit integer
pn_dcp.suboption_dhcp_device_id  Device ID
    Byte array
pn_dcp.suboption_ip  Suboption
    Unsigned 8-bit integer
pn_dcp.suboption_ip_block_info  BlockInfo
    Unsigned 16-bit integer
pn_dcp.suboption_ip_standard_gateway  StandardGateway
    IPv4 address
pn_dcp.suboption_manuf  Suboption
    Unsigned 8-bit integer
pn_dcp.suboption_vendor_id  VendorID
    Unsigned 16-bit integer
pn_dcp.xid  Xid
    Unsigned 32-bit integer
```

**PROFINET IO (pn\_io)**

```
pn_io.ack_seq_num  AckSeqNum
    Unsigned 16-bit integer
pn_io.actual_local_time_stamp  ActualLocalTimeStamp
    Unsigned 64-bit integer
pn_io.add_flags  AddFlags
    No value
```

```
pn_io.add_val1  AdditionalValue1
                Unsigned 16-bit integer
pn_io.add_val2  AdditionalValue2
                Unsigned 16-bit integer
pn_io.address_resolution_properties  AddressResolutionProperties
                Unsigned 32-bit integer
pn_io.adjust_properties  AdjustProperties
                Unsigned 16-bit integer
pn_io.alarm_dst_endpoint  AlarmDstEndpoint
                Unsigned 16-bit integer
pn_io.alarm_specifier  AlarmSpecifier
                No value
pn_io.alarm_specifier.ardiagnosis  ARDiagnosisState
                Unsigned 16-bit integer
pn_io.alarm_specifier.channel  ChannelDiagnosis
                Unsigned 16-bit integer
pn_io.alarm_specifier.manufacturer  ManufacturerSpecificDiagnosis
                Unsigned 16-bit integer
pn_io.alarm_specifier.sequence  SequenceNumber
                Unsigned 16-bit integer
pn_io.alarm_specifier.submodule  SubmoduleDiagnosisState
                Unsigned 16-bit integer
pn_io.alarm_src_endpoint  AlarmSrcEndpoint
                Unsigned 16-bit integer
pn_io.alarm_type  AlarmType
                Unsigned 16-bit integer
pn_io.alarmcr_properties  AlarmCRProperties
                Unsigned 32-bit integer
pn_io.alarmcr_properties.priority  priority
                Unsigned 32-bit integer
pn_io.alarmcr_properties.reserved  Reserved
                Unsigned 32-bit integer
pn_io.alarmcr_properties.transport  Transport
                Unsigned 32-bit integer
pn_io.alarmcr_tagheaderhigh  AlarmCRTagHeaderHigh
                Unsigned 16-bit integer
pn_io.alarmcr_tagheaderlow  AlarmCRTagHeaderLow
                Unsigned 16-bit integer
pn_io.alarmcr_type  AlarmCRType
                Unsigned 16-bit integer
pn_io.api  API
                No value
pn_io.ar_properties  ARProperties
                Unsigned 32-bit integer
```

```
pn_io.ar_properties.acknowledge_companion_ar  AcknowledgeCompanionAR
    Unsigned 32-bit integer
pn_io.ar_properties.companion_ar  CompanionAR
    Unsigned 32-bit integer
pn_io.ar_properties.data_rate  DataRate
    Unsigned 32-bit integer
pn_io.ar_properties.device_access  DeviceAccess
    Unsigned 32-bit integer
pn_io.ar_properties.parametrization_server  ParametrizationServer
    Unsigned 32-bit integer
pn_io.ar_properties.pull_module_alarm_allowed  PullModuleAlarmAllowed
    Unsigned 32-bit integer
pn_io.ar_properties.reserved  Reserved
    Unsigned 32-bit integer
pn_io.ar_properties.reserved_1  Reserved_1
    Unsigned 32-bit integer
pn_io.ar_properties.state  State
    Unsigned 32-bit integer
pn_io.ar_properties.supervisor_takeover_allowed  SupervisorTakeoverAllowed
    Unsigned 32-bit integer
pn_io.ar_type  ARType
    Unsigned 16-bit integer
pn_io.ar_uuid  ARUUID
pn_io.args_len  ArgsLength
    Unsigned 32-bit integer
pn_io.args_max  ArgsMaximum
    Unsigned 32-bit integer
pn_io.array  Array
    No value
pn_io.array_act_count  ActualCount
    Unsigned 32-bit integer
pn_io.array_max_count  MaximumCount
    Unsigned 32-bit integer
pn_io.array_offset  Offset
    Unsigned 32-bit integer
pn_io.block  Block
    No value
pn_io.block_header  BlockHeader
    No value
pn_io.block_length  BlockLength
    Unsigned 16-bit integer
pn_io.block_type  BlockType
    Unsigned 16-bit integer
pn_io.block_version_high  BlockVersionHigh
    Unsigned 8-bit integer
```

```
pn_io.block_version_low  BlockVersionLow
    Unsigned 8-bit integer
pn_io.channel_error_type  ChannelErrorType
    Unsigned 16-bit integer
pn_io.channel_number     ChannelNumber
    Unsigned 16-bit integer
pn_io.channel_properties  ChannelProperties
    Unsigned 16-bit integer
pn_io.channel_properties.accumulative  Accumulative
    Unsigned 16-bit integer
pn_io.channel_properties.direction  Direction
    Unsigned 16-bit integer
pn_io.channel_properties.maintenance_demanded  MaintenanceDemanded
    Unsigned 16-bit integer
pn_io.channel_properties.maintenance_required  MaintenanceRequired
    Unsigned 16-bit integer
pn_io.channel_properties.specifier  Specifier
    Unsigned 16-bit integer
pn_io.channel_properties.type  Type
    Unsigned 16-bit integer
pn_io.check_sync_mode  CheckSyncMode
    Unsigned 16-bit integer
pn_io.check_sync_mode.cable_delay  CableDelay
    Unsigned 16-bit integer
pn_io.check_sync_mode.reserved  Reserved
    Unsigned 16-bit integer
pn_io.check_sync_mode.sync_master  SyncMaster
    Unsigned 16-bit integer
pn_io.cminitiator_activitytimeoutfactor  CMInitiatorActivityTimeoutFactor
    Unsigned 16-bit integer
pn_io.cminitiator_mac_add  CMInitiatorMacAdd
    6-byte Hardware (MAC) Address
pn_io.cminitiator_station_name  CMInitiatorStationName
    String
pn_io.cminitiator_udprtport  CMInitiatorUDPRTPort
    Unsigned 16-bit integer
pn_io.cminitiator_uuid  CMInitiatorObjectUUID
pn_io.cmresponder_macadd  CMResponderMacAdd
    6-byte Hardware (MAC) Address
pn_io.cmresponder_udprtport  CMResponderUDPRTPort
    Unsigned 16-bit integer
pn_io.control_block_properties  ControlBlockProperties
    Unsigned 16-bit integer
pn_io.control_block_properties.appl_ready  ControlBlockProperties
    Unsigned 16-bit integer
```

```
pn_io.control_block_properties.appl_ready0  ApplicationReady
    Unsigned 16-bit integer
pn_io.control_command  ControlCommand
    No value
pn_io.control_command.applready  ApplicationReady
    Unsigned 16-bit integer
pn_io.control_command.done  Done
    Unsigned 16-bit integer
pn_io.control_command.prmend  PrmEnd
    Unsigned 16-bit integer
pn_io.control_command.ready_for_companion  ReadyForCompanion
    Unsigned 16-bit integer
pn_io.control_command.ready_for_rt_class3  ReadyForRT Class 3
    Unsigned 16-bit integer
pn_io.control_command.release  Release
    Unsigned 16-bit integer
pn_io.controller_appl_cycle_factor  ControllerApplicationCycleFactor
    Unsigned 16-bit integer
pn_io.cycle_counter  CycleCounter
    Unsigned 16-bit integer
pn_io.data_description  DataDescription
    No value
pn_io.data_hold_factor  DataHoldFactor
    Unsigned 16-bit integer
pn_io.data_length  DataLength
    Unsigned 16-bit integer
pn_io.domain_boundary  DomainBoundary
    Unsigned 32-bit integer
pn_io.domain_boundary.egress  DomainBoundaryEgress
    Unsigned 32-bit integer
pn_io.domain_boundary.ingress  DomainBoundaryIngress
    Unsigned 32-bit integer
pn_io.ds  DataStatus
    Unsigned 8-bit integer
pn_io.ds_ok  StationProblemIndicator (1:Ok/0:Problem)
    Unsigned 8-bit integer
pn_io.ds_operate  ProviderState (1:Run/0:Stop)
    Unsigned 8-bit integer
pn_io.ds_primary  State (1:Primary/0:Backup)
    Unsigned 8-bit integer
pn_io.ds_res1  Reserved (should be zero)
    Unsigned 8-bit integer
pn_io.ds_res3  Reserved (should be zero)
    Unsigned 8-bit integer
```

```
pn_io.ds_res67    Reserved (should be zero)
                 Unsigned 8-bit integer
pn_io.ds_valid    DataValid (1:Valid/0:Invalid)
                 Unsigned 8-bit integer
pn_io.entry_detail EntryDetail
                 Unsigned 32-bit integer
pn_io.error_code  ErrorCode
                 Unsigned 8-bit integer
pn_io.error_code1 ErrorCode1
                 Unsigned 8-bit integer
pn_io.error_code2 ErrorCode2
                 Unsigned 8-bit integer
pn_io.error_decode ErrorDecode
                 Unsigned 8-bit integer
pn_io.error_drop_budget ErrorDropBudget
                 Unsigned 32-bit integer
pn_io.error_power_budget ErrorPowerBudget
                 Unsigned 32-bit integer
pn_io.ethertype  Ethertype
                 Unsigned 16-bit integer
pn_io.ext_channel_add_value ExtChannelAddValue
                 Unsigned 32-bit integer
pn_io.ext_channel_error_type ExtChannelErrorType
                 Unsigned 16-bit integer
pn_io.fiber_optic_cable_type FiberOpticCableType
                 Unsigned 32-bit integer
pn_io.fiber_optic_type FiberOpticType
                 Unsigned 32-bit integer
pn_io.frame_details FrameDetails
                 Unsigned 8-bit integer
pn_io.frame_id    FrameID
                 Unsigned 16-bit integer
pn_io.frame_send_offset FrameSendOffset
                 Unsigned 32-bit integer
pn_io.fs_hello_delay FSHelloDelay
                 Unsigned 32-bit integer
pn_io.fs_hello_interval FSHelloInterval
                 Unsigned 32-bit integer
                 ms before conveying a second DCP_Hello.req
pn_io.fs_hello_mode FSHelloMode
                 Unsigned 32-bit integer
pn_io.fs_hello_retry FSHelloRetry
                 Unsigned 32-bit integer
pn_io.fs_parameter_mode FSPParameterMode
                 Unsigned 32-bit integer
```



```
pn_io.fs_parameter_uuid  FSParameterUUID
pn_io.im_date            IM_Date
                        String
pn_io.im_descriptor     IM_Descriptor
                        String
pn_io.im_hardware_revision  IMHardwareRevision
                        Unsigned 16-bit integer
pn_io.im_profile_id     IMProfileID
                        Unsigned 16-bit integer
pn_io.im_profile_specific_type  IMProfileSpecificType
                        Unsigned 16-bit integer
pn_io.im_revision_bugfix  IM_SWRevisionBugFix
                        Unsigned 8-bit integer
pn_io.im_revision_counter  IMRevisionCounter
                        Unsigned 16-bit integer
pn_io.im_revision_prefix  IMRevisionPrefix
                        Unsigned 8-bit integer
pn_io.im_serial_number  IMSerialNumber
                        String
pn_io.im_supported      IM_Supported
                        Unsigned 16-bit integer
pn_io.im_sw_revision_functional_enhancement  IMSWRevisionFunctionalEnhancement
                        Unsigned 8-bit integer
pn_io.im_sw_revision_internal_change  IMSWRevisionInternalChange
                        Unsigned 8-bit integer
pn_io.im_tag_function   IM_Tag_Function
                        String
pn_io.im_tag_location   IM_Tag_Location
                        String
pn_io.im_version_major  IMVersionMajor
                        Unsigned 8-bit integer
pn_io.im_version_minor  IMVersionMinor
                        Unsigned 8-bit integer
pn_io.index             Index
                        Unsigned 16-bit integer
pn_io.io_cs             IOCS
                        No value
pn_io.io_data_object    IODataObject
                        No value
pn_io.io_data_object_frame_offset  IODataObjectFrameOffset
                        Unsigned 16-bit integer
pn_io.iocr_multicast_mac_add  IOCRMulticastMACAdd
                        6-byte Hardware (MAC) Address
pn_io.iocr_properties   IOCRProperties
                        Unsigned 32-bit integer
```

```
pn_io.iocr_properties.media_redundancy  MediaRedundancy
    Unsigned 32-bit integer
pn_io.iocr_properties.reserved1  Reserved1
    Unsigned 32-bit integer
pn_io.iocr_properties.reserved2  Reserved2
    Unsigned 32-bit integer
pn_io.iocr_properties.rtclass  RTClass
    Unsigned 32-bit integer
pn_io.iocr_reference  IOCRReference
    Unsigned 16-bit integer
pn_io.iocr_tag_header  IOCRTagHeader
    Unsigned 16-bit integer
pn_io.iocr_tree  IOCR
    No value
pn_io.iocr_type  IOCRType
    Unsigned 16-bit integer
pn_io.iocs_frame_offset  IOCSFrameOffset
    Unsigned 16-bit integer
pn_io.ioxs  IOCS
    Unsigned 8-bit integer
pn_io.ioxs.datastate  DataState (1:good/0:bad)
    Unsigned 8-bit integer
pn_io.ioxs.extension  Extension (1:another IOxS follows/0:no IOxS follows)
    Unsigned 8-bit integer
pn_io.ioxs.instance  Instance (only valid, if DataState is bad)
    Unsigned 8-bit integer
pn_io.ioxs.res14  Reserved (should be zero)
    Unsigned 8-bit integer
pn_io.ip_address  IPAddress
    IPv4 address
pn_io.ir_data_id  IRDataID
pn_io.ir_frame_data  Frame data
    No value
pn_io.length_data  LengthData
    Unsigned 16-bit integer
pn_io.length_iocs  LengthIOCS
    Unsigned 16-bit integer
pn_io.length_iops  LengthIOPS
    Unsigned 16-bit integer
pn_io.length_own_chassis_id  LengthOwnChassisID
    Unsigned 8-bit integer
pn_io.length_own_port_id  LengthOwnPortID
    Unsigned 8-bit integer
pn_io.length_peer_chassis_id  LengthPeerChassisID
    Unsigned 8-bit integer
```

```
pn_io.length_peer_port_id LengthPeerPortID
    Unsigned 8-bit integer
pn_io.line_delay LineDelay
    Unsigned 32-bit integer
    LineDelay in nanoseconds
pn_io.local_time_stamp LocalTimeStamp
    Unsigned 64-bit integer
pn_io.localalarmref LocalAlarmReference
    Unsigned 16-bit integer
pn_io.lt LT
    Unsigned 16-bit integer
pn_io.macadd MACAddress
    6-byte Hardware (MAC) Address
pn_io.maintenance_demanded_drop_budget MaintenanceDemandedDropBudget
    Unsigned 32-bit integer
pn_io.maintenance_demanded_power_budget MaintenanceDemandedPowerBudget
    Unsigned 32-bit integer
pn_io.maintenance_required_drop_budget MaintenanceRequiredDropBudget
    Unsigned 32-bit integer
pn_io.maintenance_required_power_budget MaintenanceRequiredPowerBudget
    Unsigned 32-bit integer
pn_io.maintenance_status MaintenanceStatus
    Unsigned 32-bit integer
pn_io.maintenance_status_demanded Demanded
    Unsigned 32-bit integer
pn_io.maintenance_status_required Required
    Unsigned 32-bit integer
pn_io.mau_type MAUType
    Unsigned 16-bit integer
pn_io.mau_type_mode MAUTypeMode
    Unsigned 16-bit integer
pn_io.max_bridge_delay MaxBridgeDelay
    Unsigned 32-bit integer
pn_io.max_port_rx_delay MaxPortRxDelay
    Unsigned 32-bit integer
pn_io.max_port_tx_delay MaxPortTxDelay
    Unsigned 32-bit integer
pn_io.maxalarmdatalength MaxAlarmDataLength
    Unsigned 16-bit integer
pn_io.mci_timeout_factor MCITimeoutFactor
    Unsigned 16-bit integer
pn_io.media_type MediaType
    Unsigned 32-bit integer
pn_io.module Module
    No value
```

```
pn_io.module_ident_number  ModuleIdentNumber
    Unsigned 32-bit integer
pn_io.module_properties    ModuleProperties
    Unsigned 16-bit integer
pn_io.module_state        ModuleState
    Unsigned 16-bit integer
pn_io.mrp_check           MRP_Check
    Unsigned 16-bit integer
pn_io.mrp_domain_name     MRP_DomainName
    String
pn_io.mrp_domain_uuid     MRP_DomainUUID
pn_io.mrp_length_domain_name MRP_LengthDomainName
    Unsigned 16-bit integer
pn_io.mrp_lnkdownT       MRP_LNKdownT
    Unsigned 16-bit integer
    Link down Interval in ms
pn_io.mrp_lnknrmax       MRP_LNKNRmax
    Unsigned 16-bit integer
pn_io.mrp_lnkupt         MRP_LNKupT
    Unsigned 16-bit integer
    Link up Interval in ms
pn_io.mrp_prio           MRP_Prio
    Unsigned 16-bit integer
pn_io.mrp_ring_state     MRP_RingState
    Unsigned 16-bit integer
pn_io.mrp_role           MRP_Role
    Unsigned 16-bit integer
pn_io.mrp_rt_state       MRP_RTState
    Unsigned 16-bit integer
pn_io.mrp_rtmode         MRP_RTMode
    Unsigned 32-bit integer
pn_io.mrp_rtmode.class1_2 RTClass1_2
    Unsigned 32-bit integer
pn_io.mrp_rtmode.class3  RTClass1_3
    Unsigned 32-bit integer
pn_io.mrp_rtmode.reserved_1 Reserved_1
    Unsigned 32-bit integer
pn_io.mrp_rtmode.reserved_2 Reserved_2
    Unsigned 32-bit integer
pn_io.mrp_topchgt       MRP_TOPchgT
    Unsigned 16-bit integer
    time base 10ms
pn_io.mrp_topnrmax       MRP_TOPNRmax
    Unsigned 16-bit integer
    number of iterations
```

```
pn_io.mrp_tstdefaultt  MRP_TSTdefaultT
    Unsigned 16-bit integer
    time base 1ms

pn_io.mrp_tstnrmax  MRP_TSTNRmax
    Unsigned 16-bit integer
    number of outstanding test indications causes ring failure

pn_io.mrp_tstshortt  MRP_TSTshortT
    Unsigned 16-bit integer
    time base 1 ms

pn_io.mrp_version  MRP_Version
    Unsigned 16-bit integer

pn_io.multicast_boundary  MulticastBoundary
    Unsigned 32-bit integer

pn_io.nr_of_tx_port_groups  NumberOfTxPortGroups
    Unsigned 8-bit integer

pn_io.number_of_apis  NumberOfAPIs
    Unsigned 16-bit integer

pn_io.number_of_ars  NumberOfARs
    Unsigned 16-bit integer

pn_io.number_of_io_data_objects  NumberOfIODataObjects
    Unsigned 16-bit integer

pn_io.number_of_iocrs  NumberOfIOCRs
    Unsigned 16-bit integer

pn_io.number_of_iocs  NumberOfIOCS
    Unsigned 16-bit integer

pn_io.number_of_log_entries  NumberOfLogEntries
    Unsigned 16-bit integer

pn_io.number_of_modules  NumberOfModules
    Unsigned 16-bit integer

pn_io.number_of_peers  NumberOfPeers
    Unsigned 8-bit integer

pn_io.number_of_ports  hf_pn_io_number_of_ports
    Unsigned 32-bit integer

pn_io.number_of_slots  NumberOfSlots
    Unsigned 16-bit integer

pn_io.number_of_submodules  NumberOfSubmodules
    Unsigned 16-bit integer

pn_io.number_of_subslots  NumberOfSubslots
    Unsigned 16-bit integer

pn_io.opnum  Operation
    Unsigned 16-bit integer

pn_io.order_id  OrderID
    String

pn_io.own_chassis_id  OwnChassisID
    String
```

```
pn_io.own_port_id  OwnPortID
    String
pn_io.parameter_server_objectuuid  ParameterServerObjectUUID
pn_io.parameter_server_station_name  ParameterServerStationName
    String
pn_io.pdu_type  PDUType
    No value
pn_io.pdu_type.type  Type
    Unsigned 8-bit integer
pn_io.pdu_type.version  Version
    Unsigned 8-bit integer
pn_io.peer_chassis_id  PeerChassisID
    String
pn_io.peer_macadd  PeerMACAddress
    6-byte Hardware (MAC) Address
pn_io.peer_port_id  PeerPortID
    String
pn_io.phase  Phase
    Unsigned 16-bit integer
pn_io.pllwindow  PLLWindow
    Unsigned 32-bit integer
pn_io.port_state  PortState
    Unsigned 16-bit integer
pn_io.provider_station_name  ProviderStationName
    String
pn_io.ptcp_length_subdomain_name  PTCPLengthSubdomainName
    Unsigned 8-bit integer
pn_io.ptcp_master_priority_1  PTCP_MasterPriority1
    Unsigned 8-bit integer
pn_io.ptcp_master_priority_2  PTCP_MasterPriority2
    Unsigned 8-bit integer
pn_io.ptcp_master_startup_time  PTCPMasterStartupTime
    Unsigned 16-bit integer
pn_io.ptcp_subdomain_id  PTCPSubdomainID
pn_io.ptcp_subdomain_name  PTCPSubdomainName
    String
pn_io.ptcp_takeover_timeout_factor  PTCPTakeoverTimeoutFactor
    Unsigned 16-bit integer
pn_io.ptcp_timeout_factor  PTCPTimeoutFactor
    Unsigned 16-bit integer
pn_io.record_data_length  RecordDataLength
    Unsigned 32-bit integer
pn_io.reduction_ratio  ReductionRatio
    Unsigned 16-bit integer
```

```
pn_io.remotealarmref RemoteAlarmReference
    Unsigned 16-bit integer
pn_io.reserved16 Reserved
    Unsigned 16-bit integer
pn_io.reserved_interval_begin ReservedIntervalBegin
    Unsigned 32-bit integer
pn_io.reserved_interval_end ReservedIntervalEnd
    Unsigned 32-bit integer
pn_io.rta_retries RTARetries
    Unsigned 16-bit integer
pn_io.rta_timeoutfactor RTATimeoutFactor
    Unsigned 16-bit integer
pn_io.rx_port RXPort
    Unsigned 8-bit integer
pn_io.send_clock_factor SendClockFactor
    Unsigned 16-bit integer
pn_io.send_seq_num SendSeqNum
    Unsigned 16-bit integer
pn_io.seq_number SeqNumber
    Unsigned 16-bit integer
pn_io.sequence Sequence
    Unsigned 16-bit integer
pn_io.session_key SessionKey
    Unsigned 16-bit integer
pn_io.slot Slot
    No value
pn_io.slot_nr SlotNumber
    Unsigned 16-bit integer
pn_io.standard_gateway StandardGateway
    IPv4 address
pn_io.station_name_length StationNameLength
    Unsigned 16-bit integer
pn_io.status Status
    No value
pn_io.submodule Submodule
    No value
pn_io.submodule_data_length SubmoduleDataLength
    Unsigned 16-bit integer
pn_io.submodule_ident_number SubmoduleIdentNumber
    Unsigned 32-bit integer
pn_io.submodule_properties SubmoduleProperties
    Unsigned 16-bit integer
pn_io.submodule_properties.discard_ioxs DiscardIOXS
    Unsigned 16-bit integer
```

```
pn_io.submodule_properties.reduce_input_submodule_data_length  ReduceInputSubmod
    Unsigned 16-bit integer
pn_io.submodule_properties.reduce_output_submodule_data_length  ReduceOutputSubm
    Unsigned 16-bit integer
pn_io.submodule_properties.reserved  Reserved
    Unsigned 16-bit integer
pn_io.submodule_properties.shared_input  SharedInput
    Unsigned 16-bit integer
pn_io.submodule_properties.type  Type
    Unsigned 16-bit integer
pn_io.submodule_state  SubmoduleState
    Unsigned 16-bit integer
pn_io.submodule_state.add_info  AddInfo
    Unsigned 16-bit integer
pn_io.submodule_state.ar_info  ARInfo
    Unsigned 16-bit integer
pn_io.submodule_state.detail  Detail
    Unsigned 16-bit integer
pn_io.submodule_state.diag_info  DiagInfo
    Unsigned 16-bit integer
pn_io.submodule_state.format_indicator  FormatIndicator
    Unsigned 16-bit integer
pn_io.submodule_state.ident_info  IdentInfo
    Unsigned 16-bit integer
pn_io.submodule_state.maintenance_demanded  MaintenanceDemanded
    Unsigned 16-bit integer
pn_io.submodule_state.maintenance_required  MaintenanceRequired
    Unsigned 16-bit integer
pn_io.submodule_state.qualified_info  QualifiedInfo
    Unsigned 16-bit integer
pn_io.subnetmask  Subnetmask
    IPv4 address
pn_io.subslot  Subslot
    No value
pn_io.subslot_nr  SubslotNumber
    Unsigned 16-bit integer
pn_io.substitute_active_flag  SubstituteActiveFlag
    Unsigned 16-bit integer
pn_io.sync_frame_address  SyncFrameAddress
    Unsigned 16-bit integer
pn_io.sync_properties  SyncProperties
    Unsigned 16-bit integer
pn_io.sync_send_factor  SyncSendFactor
    Unsigned 32-bit integer
```



```
pn_io.tack TACK
    Unsigned 8-bit integer
pn_io.target_ar_uuid TargetARUUID
pn_io.time_data_cycle TimeDataCycle
    Unsigned 16-bit integer
pn_io.time_io_input TimeIOInput
    Unsigned 32-bit integer
pn_io.time_io_input_valid TimeIOInput
    Unsigned 32-bit integer
pn_io.time_io_output TimeIOOutput
    Unsigned 32-bit integer
pn_io.time_io_output_valid TimeIOOutputValid
    Unsigned 32-bit integer
pn_io.transfer_status TransferStatus
    Unsigned 8-bit integer
pn_io.user_structure_identifier UserStructureIdentifier
    Unsigned 16-bit integer
pn_io.var_part_len VarPartLen
    Unsigned 16-bit integer
pn_io.vendor_block_type VendorBlockType
    Unsigned 16-bit integer
pn_io.vendor_id_high VendorIDHigh
    Unsigned 8-bit integer
pn_io.vendor_id_low VendorIDLow
    Unsigned 8-bit integer
pn_io.watchdog_factor WatchdogFactor
    Unsigned 16-bit integer
pn_io.window_size WindowSize
    Unsigned 8-bit integer
```

**PROFINET MRP (pn\_mrp)**

```
pn_mrp.blocked Blocked
    Unsigned 16-bit integer
pn_mrp.domain_uuid DomainUUID
pn_mrp.interval Interval
    Unsigned 16-bit integer
    Interval for next topologie change event (in ms)
pn_mrp.length Length
    Unsigned 8-bit integer
pn_mrp.manufacturer_oui ManufacturerOUI
    Unsigned 24-bit integer
pn_mrp.oui Organizationally Unique Identifier
    Unsigned 24-bit integer
pn_mrp.port_role PortRole
    Unsigned 16-bit integer
```

```
pn_mrp.prio Prio
    Unsigned 16-bit integer
pn_mrp.ring_state RingState
    Unsigned 16-bit integer
pn_mrp.sa SA
    6-byte Hardware (MAC) Address
pn_mrp.sequence_id SequenceID
    Unsigned 16-bit integer
    Unique sequence number to each outstanding service request
pn_mrp.time_stamp TimeStamp
    Unsigned 16-bit integer
    Actual counter value of lms counter
pn_mrp.transition Transition
    Unsigned 16-bit integer
    Number of transitions between media redundancy lost and ok states
pn_mrp.type Type
    Unsigned 8-bit integer
pn_mrp.version Version
    Unsigned 16-bit integer
```

**PROFINET MRRT (pn\_mrirt)**

```
pn_mrirt.domain_uuid DomainUUID
pn_mrirt.length Length
    Unsigned 8-bit integer
pn_mrirt.sa SA
    6-byte Hardware (MAC) Address
pn_mrirt.sequence_id SequenceID
    Unsigned 16-bit integer
    Unique sequence number to each outstanding service request
pn_mrirt.type Type
    Unsigned 8-bit integer
pn_mrirt.version Version
    Unsigned 16-bit integer
```

**PROFINET PTCP (pn\_ptcp)**

```
pn_ptcp.block Block
    No value
pn_ptcp.clock_accuracy ClockAccuracy
    Unsigned 8-bit integer
pn_ptcp.clock_class ClockClass
    Unsigned 8-bit integer
pn_ptcp.clockvariance ClockVariance
    Signed 16-bit integer
pn_ptcp.currentutcoffset CurrentUTCOffset
    Unsigned 16-bit integer
```

```
pn_ptcp.delay10ns  Delay10ns
    Unsigned 32-bit integer
pn_ptcp.delay1ns   Delay1ns
    Unsigned 32-bit integer
pn_ptcp.delay1ns_byte  Delay1ns_Byte
    Unsigned 8-bit integer
pn_ptcp.delay1ns_fup  Delay1ns_FUP
    Signed 32-bit integer
pn_ptcp.epoch_number  EpochNumber
    Unsigned 16-bit integer
pn_ptcp.flags  Flags
    Unsigned 16-bit integer
pn_ptcp.header  Header
    No value
pn_ptcp.irdata_uuid  IRDataUUID
pn_ptcp.master_priority1  MasterPriority1
    Unsigned 8-bit integer
pn_ptcp.master_priority2  MasterPriority2
    Unsigned 8-bit integer
pn_ptcp.master_source_address  MasterSourceAddress
    6-byte Hardware (MAC) Address
pn_ptcp.nanoseconds  NanoSeconds
    Unsigned 32-bit integer
pn_ptcp.oui  Organizationally Unique Identifier
    Unsigned 24-bit integer
pn_ptcp.port_mac_address  PortMACAddress
    6-byte Hardware (MAC) Address
pn_ptcp.res1  Reserved 1
    Unsigned 32-bit integer
pn_ptcp.res2  Reserved 2
    Unsigned 32-bit integer
pn_ptcp.seconds  Seconds
    Unsigned 32-bit integer
pn_ptcp.sequence_id  SequenceID
    Unsigned 16-bit integer
pn_ptcp.subdomain_uuid  SubdomainUUID
pn_ptcp.subtype  Subtype
    Unsigned 8-bit integer
    PROFINET Subtype
pn_ptcp.t2portrxdelay  T2PortRxDelay (ns)
    Unsigned 32-bit integer
pn_ptcp.t2timestamp  T2TimeStamp (ns)
    Unsigned 32-bit integer
pn_ptcp.t3porttxdelay  T3PortTxDelay (ns)
    Unsigned 32-bit integer
```

```

pn_ptcp.tl_length  TypeLength.Length
    Unsigned 16-bit integer
pn_ptcp.tl_type    TypeLength.Type
    Unsigned 16-bit integer
pn_ptcp.tlvheader  TLVHeader
    No value

```

**PROFINET Real-Time Protocol (pn\_rt)**

```

pn.padding  Padding
    String
pn.undecoded  Undecoded Data
    String
pn.user_data  User Data
    String
pn_rt.cycle_counter  CycleCounter
    Unsigned 16-bit integer
pn_rt.ds  DataStatus
    Unsigned 8-bit integer
pn_rt.ds_ok  StationProblemIndicator (1:Ok/0:Problem)
    Unsigned 8-bit integer
pn_rt.ds_operate  ProviderState (1:Run/0:Stop)
    Unsigned 8-bit integer
pn_rt.ds_primary  State (1:Primary/0:Backup)
    Unsigned 8-bit integer
pn_rt.ds_res1  Reserved (should be zero)
    Unsigned 8-bit integer
pn_rt.ds_res3  Reserved (should be zero)
    Unsigned 8-bit integer
pn_rt.ds_res67  Reserved (should be zero)
    Unsigned 8-bit integer
pn_rt.ds_valid  DataValid (1:Valid/0:Invalid)
    Unsigned 8-bit integer
pn_rt.frame_id  FrameID
    Unsigned 16-bit integer
pn_rt.malformed  Malformed
    Byte array
pn_rt.transfer_status  TransferStatus
    Unsigned 8-bit integer

```

**P\_Mul (ACPI42) (p\_mul)**

```

p_mul.ack_count  Count of Ack Info Entries
    Unsigned 16-bit integer
    Count of Ack Info Entries
p_mul.ack_info_entry  Ack Info Entry
    No value
    Ack Info Entry

```

`p_mul.ack_length` Length of Ack Info Entry  
Unsigned 16-bit integer  
Length of Ack Info Entry

`p_mul.analysis.ack_first_in` Retransmission of Ack in  
Frame number  
This Ack was first sent in this frame

`p_mul.analysis.ack_in` Ack PDU in  
Frame number  
This packet has an Ack in this frame

`p_mul.analysis.ack_missing` Ack PDU missing  
No value  
The acknowledgement for this packet is missing

`p_mul.analysis.ack_time` Ack Time  
Time duration  
The time between the Last PDU and the Ack

`p_mul.analysis.addr_pdu_in` Address PDU in  
Frame number  
The Address PDU is found in this frame

`p_mul.analysis.addr_pdu_missing` Address PDU missing  
No value  
The Address PDU for this packet is missing

`p_mul.analysis.dup_ack_no` Duplicate ACK #  
Unsigned 32-bit integer  
Duplicate Ack count

`p_mul.analysis.elapsed_time` Time since Address PDU  
Time duration  
The time between the Address PDU and this PDU

`p_mul.analysis.last_pdu_in` Last Data PDU in  
Frame number  
The last Data PDU found in this frame

`p_mul.analysis.msg_first_in` Retransmission of Message in  
Frame number  
This Message was first sent in this frame

`p_mul.analysis.pdu_delay` PDU Delay  
Time duration  
The time between the last PDU and this PDU

`p_mul.analysis.prev_pdu_in` Previous PDU in  
Frame number  
The previous PDU is found in this frame

`p_mul.analysis.prev_pdu_missing` Previous PDU missing  
No value  
The previous PDU for this packet is missing

`p_mul.analysis.retrans_no` Retransmission #  
Unsigned 32-bit integer  
Retransmission count

`p_mul.analysis.retrans_time` Retransmission Time  
Time duration  
The time between the last PDU and this PDU

```

p_mul.analysis.total_retrans_time  Total Retransmission Time
    Time duration
    The time between the first PDU and this PDU
p_mul.analysis.total_time  Total Time
    Time duration
    The time between the first Address PDU and the Ack
p_mul.ann_mc_group  Announced Multicast Group
    Unsigned 32-bit integer
    Announced Multicast Group
p_mul.checksum  Checksum
    Unsigned 16-bit integer
    Checksum
p_mul.checksum_bad  Bad
    Boolean
    True: checksum doesn't match packet content; False: matches content or not c
p_mul.checksum_good  Good
    Boolean
    True: checksum matches packet content; False: doesn't match content or not c
p_mul.data_fragment  Fragment of Data
    No value
    Fragment of Data
p_mul.dest_count  Count of Destination Entries
    Unsigned 16-bit integer
    Count of Destination Entries
p_mul.dest_entry  Destination Entry
    No value
    Destination Entry
p_mul.dest_id  Destination ID
    IPv4 address
    Destination ID
p_mul.expiry_time  Expiry Time
    Date/Time stamp
    Expiry Time
p_mul.fec.id  FEC ID
    Unsigned 8-bit integer
    Forward Error Correction ID
p_mul.fec.length  FEC Parameter Length
    Unsigned 8-bit integer
    Forward Error Correction Parameter Length
p_mul.fec.parameters  FEC Parameters
    No value
    Forward Error Correction Parameters
p_mul.first  First
    Boolean
    First
p_mul.fragment  Message fragment
    Frame number
    Message fragment

```

```
p_mul.fragment.error    Message defragmentation error
    Frame number
    Message defragmentation error
p_mul.fragment.multiple_tails  Message has multiple tail fragments
    Boolean
    Message has multiple tail fragments
p_mul.fragment.overlap  Message fragment overlap
    Boolean
    Message fragment overlap
p_mul.fragment.overlap.conflicts  Message fragment overlapping with conflicting
    Boolean
    Message fragment overlapping with conflicting data
p_mul.fragment.too_long_fragment  Message fragment too long
    Boolean
    Message fragment too long
p_mul.fragments  Message fragments
    No value
    Message fragments
p_mul.last  Last
    Boolean
    Last
p_mul.length  Length of PDU
    Unsigned 16-bit integer
    Length of PDU
p_mul.mc_group  Multicast Group
    Unsigned 32-bit integer
    Multicast Group
p_mul.message_id  Message ID (MSID)
    Unsigned 32-bit integer
    Message ID
p_mul.missing_seq_no  Missing Data PDU Seq Number
    Unsigned 16-bit integer
    Missing Data PDU Seq Number
p_mul.msg_seq_no  Message Sequence Number
    Unsigned 16-bit integer
    Message Sequence Number
p_mul.no_missing_seq_no  Total Number of Missing Data PDU Sequence Numbers
    Unsigned 16-bit integer
    Total Number of Missing Data PDU Sequence Numbers
p_mul.no_pdus  Total Number of PDUs
    Unsigned 16-bit integer
    Total Number of PDUs
p_mul.pdu_type  PDU Type
    Unsigned 8-bit integer
    PDU Type
p_mul.priority  Priority
    Unsigned 8-bit integer
    Priority
```

```

p_mul.reassembled.in  Reassembled in
    Frame number
    Reassembled in

p_mul.reserved_length  Length of Reserved Field
    Unsigned 16-bit integer
    Length of Reserved Field

p_mul.seq_no  Sequence Number of PDUs
    Unsigned 16-bit integer
    Sequence Number of PDUs

p_mul.source_id  Source ID
    IPv4 address
    Source ID

p_mul.source_id_ack  Source ID of Ack Sender
    IPv4 address
    Source ID of Ack Sender

p_mul.sym_key  Symmetric Key
    No value
    Symmetric Key

p_mul.timestamp  Timestamp Option
    Unsigned 64-bit integer
    Timestamp Option (in units of 100ms)

p_mul.unused  MAP unused
    Unsigned 8-bit integer
    MAP unused

```

#### **Packed Encoding Rules (ASN.1 X.691) (per)**

```

per._const_int_len  Constrained Integer Length
    Unsigned 32-bit integer
    Number of bytes in the Constrained Integer

per.arbitrary  arbitrary
    Byte array
    per.T_arbitrary

per.bit_string_length  Bit String Length
    Unsigned 32-bit integer
    Number of bits in the Bit String

per.choice_extension_index  Choice Extension Index
    Unsigned 32-bit integer
    Which index of the Choice within extension addition is encoded

per.choice_index  Choice Index
    Unsigned 32-bit integer
    Which index of the Choice within extension root is encoded

per.data_value_descriptor  data-value-descriptor
    String
    per.T_data_value_descriptor

per.direct_reference  direct-reference
    per.T_direct_reference

```



per.encoding encoding  
Unsigned 32-bit integer  
per.External\_encoding

per.enum\_extension\_index Enumerated Extension Index  
Unsigned 32-bit integer  
Which index of the Enumerated within extension addition is encoded

per.enum\_index Enumerated Index  
Unsigned 32-bit integer  
Which index of the Enumerated within extension root is encoded

per.extension\_bit Extension Bit  
Boolean  
The extension bit of an aggregate

per.extension\_present\_bit Extension Present Bit  
Boolean  
Whether this optional extension is present or not

per.generalstring\_length GeneralString Length  
Unsigned 32-bit integer  
Length of the GeneralString

per.indirect\_reference indirect-reference  
Signed 32-bit integer  
per.T\_indirect\_reference

per.num\_sequence\_extensions Number of Sequence Extensions  
Unsigned 32-bit integer  
Number of extensions encoded in this sequence

per.object\_length Object Identifier Length  
Unsigned 32-bit integer  
Length of the object identifier

per.octet\_aligned octet-aligned  
Byte array  
per.T\_octet\_aligned

per.octet\_string\_length Octet String Length  
Unsigned 32-bit integer  
Number of bytes in the Octet String

per.open\_type\_length Open Type Length  
Unsigned 32-bit integer  
Length of an open type encoding

per.optional\_field\_bit Optional Field Bit  
Boolean  
This bit specifies the presence/absence of an optional field

per.real\_length Raal Length  
Unsigned 32-bit integer  
Length of an real encoding

per.sequence\_of\_length Sequence-Of Length  
Unsigned 32-bit integer  
Number of items in the Sequence Of

per.single\_ASN1\_type single-ASN1-type  
No value  
per.T\_single\_ASN1\_type

per.small\_number\_bit Small Number Bit  
Boolean  
The small number bit for a section 10.6 integer

#### **Packet Cable Lawful Intercept (pcli)**

pcli.cccid CCCID  
Unsigned 32-bit integer  
Call Content Connection Identifier

#### **PacketCable (pktc)**

pktc.ack\_required ACK Required Flag  
Boolean  
ACK Required Flag

pktc.asd Application Specific Data  
No value  
KMMID/DOI application specific data

pktc.asd.ipsec\_auth\_alg IPsec Authentication Algorithm  
Unsigned 8-bit integer  
IPsec Authentication Algorithm

pktc.asd.ipsec\_enc\_alg IPsec Encryption Transform ID  
Unsigned 8-bit integer  
IPsec Encryption Transform ID

pktc.asd.ipsec\_spi IPsec Security Parameter Index  
Unsigned 32-bit integer  
Security Parameter Index for inbound Security Association (IPsec)

pktc.asd.snmp\_auth\_alg SNMPv3 Authentication Algorithm  
Unsigned 8-bit integer  
SNMPv3 Authentication Algorithm

pktc.asd.snmp\_enc\_alg SNMPv3 Encryption Transform ID  
Unsigned 8-bit integer  
SNMPv3 Encryption Transform ID

pktc.asd.snmp\_engine\_boots SNMPv3 Engine Boots  
Unsigned 32-bit integer  
SNMPv3 Engine Boots

pktc.asd.snmp\_engine\_id SNMPv3 Engine ID  
Byte array  
SNMPv3 Engine ID

pktc.asd.snmp\_engine\_id.len SNMPv3 Engine ID Length  
Unsigned 8-bit integer  
Length of SNMPv3 Engine ID

pktc.asd.snmp\_engine\_time SNMPv3 Engine Time  
Unsigned 32-bit integer  
SNMPv3 Engine ID Time

pktc.asd.snmp\_usm\_username SNMPv3 USM User Name  
String  
SNMPv3 USM User Name

```
pktc.asd.snmp_usm_username.len  SNMPv3 USM User Name Length
    Unsigned 8-bit integer
    Length of SNMPv3 USM User Name
pktc.ciphers  List of Ciphersuites
    No value
    List of Ciphersuites
pktc.ciphers.len  Number of Ciphersuites
    Unsigned 8-bit integer
    Number of Ciphersuites
pktc.doi  Domain of Interpretation
    Unsigned 8-bit integer
    Domain of Interpretation
pktc.grace_period  Grace Period
    Unsigned 32-bit integer
    Grace Period in seconds
pktc.kmmid  Key Management Message ID
    Unsigned 8-bit integer
    Key Management Message ID
pktc.mtafqdn.enterprise  Enterprise Number
    Unsigned 32-bit integer
    Enterprise Number
pktc.mtafqdn.fqdn  MTA FQDN
    String
    MTA FQDN
pktc.mtafqdn.ip  MTA IP Address
    IPv4 address
    MTA IP Address (all zeros if not supplied)
pktc.mtafqdn.mac  MTA MAC address
    6-byte Hardware (MAC) Address
    MTA MAC address
pktc.mtafqdn.manu_cert_revoked  Manufacturer Cert Revocation Time
    Date/Time stamp
    Manufacturer Cert Revocation Time (UTC) or 0 if not revoked
pktc.mtafqdn.msgtype  Message Type
    Unsigned 8-bit integer
    MTA FQDN Message Type
pktc.mtafqdn.pub_key_hash  MTA Public Key Hash
    Byte array
    MTA Public Key Hash (SHA-1)
pktc.mtafqdn.version  Protocol Version
    Unsigned 8-bit integer
    MTA FQDN Protocol Version
pktc.reestablish  Re-establish Flag
    Boolean
    Re-establish Flag
pktc.server_nonce  Server Nonce
    Unsigned 32-bit integer
    Server Nonce random number
```

```
pktc.server_principal  Server Kerberos Principal Identifier
    String
    Server Kerberos Principal Identifier
pktc.shal_hmac  SHA-1 HMAC
    Byte array
    SHA-1 HMAC
pktc.spl  Security Parameter Lifetime
    Unsigned 32-bit integer
    Lifetime in seconds of security parameter
pktc.timestamp  Timestamp
    String
    Timestamp (UTC)
pktc.version.major  Major version
    Unsigned 8-bit integer
    Major version of PKTC
pktc.version.minor  Minor version
    Unsigned 8-bit integer
    Minor version of PKTC
```

**PacketCable AVPs (paketcable\_avps)**

```
radius.vendor.pkt.bcid.ec  Event Counter
    Unsigned 32-bit integer
    PacketCable Event Message BCID Event Counter
radius.vendor.pkt.bcid.ts  Timestamp
    Unsigned 32-bit integer
    PacketCable Event Message BCID Timestamp
radius.vendor.pkt.ctc.cc  Event Object
    Unsigned 32-bit integer
    PacketCable Call Termination Cause Code
radius.vendor.pkt.ctc.sd  Source Document
    Unsigned 16-bit integer
    PacketCable Call Termination Cause Source Document
radius.vendor.pkt.emh.ac  Attribute Count
    Unsigned 16-bit integer
    PacketCable Event Message Attribute Count
radius.vendor.pkt.emh.emt  Event Message Type
    Unsigned 16-bit integer
    PacketCable Event Message Type
radius.vendor.pkt.emh.eo  Event Object
    Unsigned 8-bit integer
    PacketCable Event Message Event Object
radius.vendor.pkt.emh.et  Element Type
    Unsigned 16-bit integer
    PacketCable Event Message Element Type
radius.vendor.pkt.emh.priority  Priority
    Unsigned 8-bit integer
    PacketCable Event Message Priority
```

```
radius.vendor.pkt.emh.sn  Sequence Number
    Unsigned 32-bit integer
    PacketCable Event Message Sequence Number

radius.vendor.pkt.emh.st  Status
    Unsigned 32-bit integer
    PacketCable Event Message Status

radius.vendor.pkt.emh.st.ei  Status
    Unsigned 32-bit integer
    PacketCable Event Message Status Error Indicator

radius.vendor.pkt.emh.st.emp  Event Message Proxied
    Unsigned 32-bit integer
    PacketCable Event Message Status Event Message Proxied

radius.vendor.pkt.emh.st.eo  Event Origin
    Unsigned 32-bit integer
    PacketCable Event Message Status Event Origin

radius.vendor.pkt.emh.vid  Event Message Version ID
    Unsigned 16-bit integer
    PacketCable Event Message header version ID

radius.vendor.pkt.esi.cccp  CCC-Port
    Unsigned 16-bit integer
    PacketCable Electronic-Surveillance-Indication CCC-Port

radius.vendor.pkt.esi.cdcp  CDC-Port
    Unsigned 16-bit integer
    PacketCable Electronic-Surveillance-Indication CDC-Port

radius.vendor.pkt.esi.dfccca  DF_CDC_Address
    IPv4 address
    PacketCable Electronic-Surveillance-Indication DF_CCC_Address

radius.vendor.pkt.esi.dfcdca  DF_CDC_Address
    IPv4 address
    PacketCable Electronic-Surveillance-Indication DF_CDC_Address

radius.vendor.pkt.qs  QoS Status
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute QoS Status

radius.vendor.pkt.qs.flags.gi  Grant Interval
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Bitmask: Grant Interval

radius.vendor.pkt.qs.flags.gpi  Grants Per Interval
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Bitmask: Grants Per Interval

radius.vendor.pkt.qs.flags.mcb  Maximum Concatenated Burst
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Bitmask: Maximum Concatenated Burst

radius.vendor.pkt.qs.flags.mdl  Maximum Downstream Latency
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Bitmask: Maximum Downstream Latency

radius.vendor.pkt.qs.flags.mps  Minium Packet Size
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Bitmask: Minimum Packet Size
```

radius.vendor.pkt.qs.flags.mrtr Minimum Reserved Traffic Rate  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Minimum Reserved Traffic Rate

radius.vendor.pkt.qs.flags.msr Maximum Sustained Rate  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Maximum Sustained Rate

radius.vendor.pkt.qs.flags.mtb Maximum Traffic Burst  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Maximum Traffic Burst

radius.vendor.pkt.qs.flags.npi Nominal Polling Interval  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Nominal Polling Interval

radius.vendor.pkt.qs.flags.sfst Service Flow Scheduling Type  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Service Flow Scheduling Type

radius.vendor.pkt.qs.flags.srtp Status Request/Transmission Policy  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Status Request/Transmission Policy

radius.vendor.pkt.qs.flags.tgj Tolerated Grant Jitter  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Tolerated Grant Jitter

radius.vendor.pkt.qs.flags.toso Type of Service Override  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Type of Service Override

radius.vendor.pkt.qs.flags.tp Traffic Priority  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Traffic Priority

radius.vendor.pkt.qs.flags.tpj Tolerated Poll Jitter  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Tolerated Poll Jitter

radius.vendor.pkt.qs.flags.ugs Unsolicited Grant Size  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Bitmask: Unsolicited Grant Size

radius.vendor.pkt.qs.gi Grant Interval  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Grant Interval

radius.vendor.pkt.qs.gpi Grants Per Interval  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Grants Per Interval

radius.vendor.pkt.qs.mcb Maximum Concatenated Burst  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Maximum Concatenated Burst

radius.vendor.pkt.qs.mdl Maximum Downstream Latency  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Maximum Downstream Latency

radius.vendor.pkt.qs.mps Minimum Packet Size  
Unsigned 32-bit integer  
PacketCable QoS Descriptor Attribute Minimum Packet Size

```
radius.vendor.pkt.qs.mrtr  Minimum Reserved Traffic Rate
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Minimum Reserved Traffic Rate
radius.vendor.pkt.qs.msr  Maximum Sustained Rate
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Maximum Sustained Rate
radius.vendor.pkt.qs.mtb  Maximum Traffic Burst
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Maximum Traffic Burst
radius.vendor.pkt.qs.npi  Nominal Polling Interval
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Nominal Polling Interval
radius.vendor.pkt.qs.sfst  Service Flow Scheduling Type
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Service Flow Scheduling Type
radius.vendor.pkt.qs.si   Status Indication
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute QoS State Indication
radius.vendor.pkt.qs.srtp  Status Request/Transmission Policy
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Status Request/Transmission Policy
radius.vendor.pkt.qs.tgj  Tolerated Grant Jitter
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Tolerated Grant Jitter
radius.vendor.pkt.qs.toso  Type of Service Override
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Type of Service Override
radius.vendor.pkt.qs.tp   Traffic Priority
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Traffic Priority
radius.vendor.pkt.qs.tpj  Tolerated Poll Jitter
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Tolerated Poll Jitter
radius.vendor.pkt.qs.ugs  Unsolicited Grant Size
    Unsigned 32-bit integer
    PacketCable QoS Descriptor Attribute Unsolicited Grant Size
radius.vendor.pkt.rfi.nr  Number-of-Redirections
    Unsigned 16-bit integer
    PacketCable Redirected-From-Info Number-of-Redirections
radius.vendor.pkt.tdi.cname  Calling_Name
    String
    PacketCable Terminal_Display_Info Calling_Name
radius.vendor.pkt.tdi.cnum  Calling_Number
    String
    PacketCable Terminal_Display_Info Calling_Number
radius.vendor.pkt.tdi.gd   General_Display
    String
    PacketCable Terminal_Display_Info General_Display
```

```

radius.vendor.pkt.tdi.mw  Message_Waiting
    String
    PacketCable Terminal_Display_Info Message_Waiting
radius.vendor.pkt.tdi.sbm  Terminal_Display_Status_Bitmask
    Unsigned 8-bit integer
    PacketCable Terminal_Display_Info Terminal_Display_Status_Bitmask
radius.vendor.pkt.tdi.sbm.cname  Calling_Name
    Boolean
    PacketCable Terminal_Display_Info Terminal_Display_Status_Bitmask Calling_Na
radius.vendor.pkt.tdi.sbm.cnum  Calling_Number
    Boolean
    PacketCable Terminal_Display_Info Terminal_Display_Status_Bitmask Calling_Nu
radius.vendor.pkt.tdi.sbm.gd  General_Display
    Boolean
    PacketCable Terminal_Display_Info Terminal_Display_Status_Bitmask General_Di
radius.vendor.pkt.tdi.sbm.mw  Message_Waiting
    Boolean
    PacketCable Terminal_Display_Info Terminal_Display_Status_Bitmask Message_Wa
radius.vendor.pkt.tgid.tn  Event Object
    Unsigned 32-bit integer
    PacketCable Trunk Group ID Trunk Number
radius.vendor.pkt.tgid.tt  Trunk Type
    Unsigned 16-bit integer
    PacketCable Trunk Group ID Trunk Type
radius.vendor.pkt.ti  Time Adjustment
    Unsigned 64-bit integer
    PacketCable Time Adjustment

```

#### **PacketCable Call Content Connection (pkt\_ccc)**

```

pkt_ccc.ccc_id  PacketCable CCC Identifier
    Unsigned 32-bit integer
    CCC_ID
pkt_ccc.ts  PacketCable CCC Timestamp
    Byte array
    Timestamp

```

#### **Packetized Elementary Stream (mpeg\_pes)**

```

mpeg_pes.additional_copy_info_flag  additional-copy-info-flag
    Boolean
    mpeg_pes.BOOLEAN
mpeg_pes.aspect_ratio  aspect-ratio
    Unsigned 32-bit integer
    mpeg_pes.T_aspect_ratio
mpeg_pes.bit_rate  bit-rate
    Byte array
    mpeg_pes.BIT_STRING_SIZE_18

```



```
mpeg-pes.bit_rate_extension  bit-rate-extension
    Byte array
    mpeg_pes.BIT_STRING_SIZE_12
mpeg-pes.broken_gop  broken-gop
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.chroma_format  chroma-format
    Unsigned 32-bit integer
    mpeg_pes.INTEGER_0_3
mpeg-pes.closed_gop  closed-gop
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.constrained_parameters_flag  constrained-parameters-flag
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.copy-info  copy info
    Unsigned 8-bit integer
mpeg-pes.copyright  copyright
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.crc  CRC
    Unsigned 16-bit integer
mpeg-pes.crc_flag  crc-flag
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.data  PES data
    Byte array
mpeg-pes.data_alignment  data-alignment
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.drop_frame_flag  drop-frame-flag
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.dsm_trick_mode_flag  dsm-trick-mode-flag
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.dts  decode time stamp (DTS)
    Time duration
mpeg-pes.dts_flag  dts-flag
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.es_rate  elementary stream rate
    Unsigned 24-bit integer
mpeg-pes.es_rate_flag  es-rate-flag
    Boolean
    mpeg_pes.BOOLEAN
```

```
mpeg-pes.escr    elementary stream clock reference (ESCR)
                Time duration
mpeg-pes.escr_flag  escr-flag
                Boolean
                mpeg_pes.BOOLEAN
mpeg-pes.extension  PES extension
                No value
mpeg-pes.extension-flags  extension flags
                Unsigned 8-bit integer
mpeg-pes.extension2  extension2
                Unsigned 16-bit integer
mpeg-pes.extension_flag  extension-flag
                Boolean
                mpeg_pes.BOOLEAN
mpeg-pes.frame    frame
                Unsigned 32-bit integer
                mpeg_pes.INTEGER_0_64
mpeg-pes.frame_rate  frame-rate
                Unsigned 32-bit integer
                mpeg_pes.T_frame_rate
mpeg-pes.frame_rate_extension_d  frame-rate-extension-d
                Unsigned 32-bit integer
                mpeg_pes.INTEGER_0_3
mpeg-pes.frame_rate_extension_n  frame-rate-extension-n
                Unsigned 32-bit integer
                mpeg_pes.INTEGER_0_3
mpeg-pes.frame_type  frame-type
                Unsigned 32-bit integer
                mpeg_pes.T_frame_type
mpeg-pes.header-data  PES header data
                Byte array
mpeg-pes.header_data_length  header-data-length
                Unsigned 32-bit integer
                mpeg_pes.INTEGER_0_255
mpeg-pes.horizontal_size  horizontal-size
                Byte array
                mpeg_pes.BIT_STRING_SIZE_12
mpeg-pes.horizontal_size_extension  horizontal-size-extension
                Unsigned 32-bit integer
                mpeg_pes.INTEGER_0_3
mpeg-pes.hour    hour
                Unsigned 32-bit integer
                mpeg_pes.INTEGER_0_32
mpeg-pes.length  length
                Unsigned 16-bit integer
                mpeg_pes.INTEGER_0_65535
```

```
mpeg-pes.load_intra_quantiser_matrix  load-intra-quantiser-matrix
  Boolean
  mpeg_pes.BOOLEAN
mpeg-pes.load_non_intra_quantiser_matrix  load-non-intra-quantiser-matrix
  Boolean
  mpeg_pes.BOOLEAN
mpeg-pes.low_delay  low-delay
  Boolean
  mpeg_pes.BOOLEAN
mpeg-pes.minute  minute
  Unsigned 32-bit integer
  mpeg_pes.INTEGER_0_64
mpeg-pes.must_be_0001  must-be-0001
  Byte array
  mpeg_pes.BIT_STRING_SIZE_4
mpeg-pes.must_be_one  must-be-one
  Boolean
  mpeg_pes.BOOLEAN
mpeg-pes.must_be_zero  must-be-zero
  Boolean
  mpeg_pes.BOOLEAN
mpeg-pes.original  original
  Boolean
  mpeg_pes.BOOLEAN
mpeg-pes.pack  Pack header
  No value
mpeg-pes.pack-length  pack length
  Unsigned 8-bit integer
mpeg-pes.padding  PES padding
  Byte array
mpeg-pes.prefix  prefix
  Byte array
  mpeg_pes.OCTET_STRING_SIZE_3
mpeg-pes.priority  priority
  Boolean
  mpeg_pes.BOOLEAN
mpeg-pes.private-data  private data
  Unsigned 16-bit integer
mpeg-pes.profile_and_level  profile-and-level
  Unsigned 32-bit integer
  mpeg_pes.INTEGER_0_255
mpeg-pes.program-mux-rate  PES program mux rate
  Unsigned 24-bit integer
mpeg-pes.progressive_sequence  progressive-sequence
  Boolean
  mpeg_pes.BOOLEAN
```

```
mpeg-pes.pstd-buffer  P-STD buffer size
    Unsigned 16-bit integer
mpeg-pes.pts  presentation time stamp (PTS)
    Time duration
mpeg-pes.pts_flag  pts-flag
    Boolean
    mpeg_pes.BOOLEAN
mpeg-pes.scr  system clock reference (SCR)
    Time duration
mpeg-pes.scrambling_control  scrambling-control
    Unsigned 32-bit integer
    mpeg_pes.T_scrambling_control
mpeg-pes.second  second
    Unsigned 32-bit integer
    mpeg_pes.INTEGER_0_64
mpeg-pes.sequence  sequence
    Unsigned 16-bit integer
mpeg-pes.stream  stream
    Unsigned 8-bit integer
    mpeg_pes.T_stream
mpeg-pes.stuffing  PES stuffing bytes
    Byte array
mpeg-pes.stuffing-length  PES stuffing length
    Unsigned 8-bit integer
mpeg-pes.temporal_sequence_number  temporal-sequence-number
    Byte array
    mpeg_pes.BIT_STRING_SIZE_10
mpeg-pes.vbv_buffer_size  vbv-buffer-size
    Byte array
    mpeg_pes.BIT_STRING_SIZE_10
mpeg-pes.vbv_buffer_size_extension  vbv-buffer-size-extension
    Unsigned 32-bit integer
    mpeg_pes.INTEGER_0_255
mpeg-pes.vbv_delay  vbv-delay
    Byte array
    mpeg_pes.BIT_STRING_SIZE_16
mpeg-pes.vertical_size  vertical-size
    Byte array
    mpeg_pes.BIT_STRING_SIZE_12
mpeg-pes.vertical_size_extension  vertical-size-extension
    Unsigned 32-bit integer
    mpeg_pes.INTEGER_0_3
mpeg-video.data  MPEG picture data
    Byte array
mpeg-video.gop  MPEG group of pictures
    No value
```

```

mpeg-video.picture  MPEG picture
    No value
mpeg-video.quant  MPEG quantization matrix
    Byte array
mpeg-video.sequence  MPEG sequence header
    No value
mpeg-video.sequence-ext  MPEG sequence extension
    No value

```

### Parallel Redundancy Protocol (IEC62439 Chapter 6) (prp)

```

prp.supervision_frame.length  length
    Unsigned 8-bit integer
prp.supervision_frame.length2  length2
    Unsigned 8-bit integer
prp.supervision_frame.prp_red_box_mac_address  redBoxMacAddress
    6-byte Hardware (MAC) Address
prp.supervision_frame.prp_source_mac_address_A  sourceMacAddressA
    6-byte Hardware (MAC) Address
prp.supervision_frame.prp_source_mac_address_B  sourceMacAddressB
    6-byte Hardware (MAC) Address
prp.supervision_frame.prp_vdan_mac_address  vdanMacAddress
    6-byte Hardware (MAC) Address
prp.supervision_frame.type  type
    Unsigned 8-bit integer
prp.supervision_frame.type2  type2
    Unsigned 8-bit integer
prp.supervision_frame.version  version
    Unsigned 16-bit integer
prp.trailer.prp_lan  lan
    Unsigned 16-bit integer
prp.trailer.prp_sequence_nr  sequenceNr
    Unsigned 16-bit integer
prp.trailer.prp_size  size
    Unsigned 16-bit integer

```

### Parallel Virtual File System (pvfs)

```

pvfs.aggregate_size  Aggregate Size
    Unsigned 64-bit integer
    Aggregate Size
pvfs.atime  atime
    Date/Time stamp
    Access Time
pvfs.atime.sec  seconds
    Unsigned 32-bit integer
    Access Time (seconds)

```

```
pvfs.atime.usec  microseconds
                Unsigned 32-bit integer
                Access Time (microseconds)

pvfs.attribute  attr
                Unsigned 32-bit integer
                Attribute

pvfs.attribute.key  Attribute key
                   String
                   Attribute key

pvfs.attribute.value  Attribute value
                     String
                     Attribute value

pvfs.attrmask  attrmask
              Unsigned 32-bit integer
              Attribute Mask

pvfs.b_size  Size of bstream (if applicable)
            Unsigned 64-bit integer
            Size of bstream

pvfs.bytes_available  Bytes Available
                    Unsigned 64-bit integer
                    Bytes Available

pvfs.bytes_completed  Bytes Completed
                     Unsigned 64-bit integer
                     Bytes Completed

pvfs.bytes_read  bytes_read
                Unsigned 64-bit integer
                bytes_read

pvfs.bytes_total  Bytes Total
                 Unsigned 64-bit integer
                 Bytes Total

pvfs.bytes_written  bytes_written
                   Unsigned 64-bit integer
                   bytes_written

pvfs.context_id  Context ID
                Unsigned 32-bit integer
                Context ID

pvfs.ctime  ctime
           Date/Time stamp
           Creation Time

pvfs.ctime.sec  seconds
               Unsigned 32-bit integer
               Creation Time (seconds)

pvfs.ctime.usec  microseconds
                Unsigned 32-bit integer
                Creation Time (microseconds)

pvfs.cur_time_ms  cur_time_ms
                Unsigned 64-bit integer
                cur_time_ms
```

```
pvfs.directory_version  Directory Version
    Unsigned 64-bit integer
    Directory Version

pvfs.dirent_count  Dir Entry Count
    Unsigned 64-bit integer
    Directory Entry Count

pvfs.distribution.name  Name
    String
    Distribution Name

pvfs.ds_type  ds_type
    Unsigned 32-bit integer
    Type

pvfs.encoding  Encoding
    Unsigned 32-bit integer
    Encoding

pvfs.end_time_ms  end_time_ms
    Unsigned 64-bit integer
    end_time_ms

pvfs.ereg  ereg
    Signed 32-bit integer
    ereg

pvfs.error  Result
    Unsigned 32-bit integer
    Result

pvfs.fh.hash  hash
    Unsigned 32-bit integer
    file handle hash

pvfs.fh.length  length
    Unsigned 32-bit integer
    file handle length

pvfs.flowproto_type  Flow Protocol Type
    Unsigned 32-bit integer
    Flow Protocol Type

pvfs.fs_id  fs_id
    Unsigned 32-bit integer
    File System ID

pvfs.handle  Handle
    Byte array
    Handle

pvfs.handles_available  Handles Available
    Unsigned 64-bit integer
    Handles Available

pvfs.id_gen_t  id_gen_t
    Unsigned 64-bit integer
    id_gen_t

pvfs.io_type  I/O Type
    Unsigned 32-bit integer
    I/O Type
```

```
pvfs.k_size  Number of keyvals (if applicable)
             Unsigned 64-bit integer
             Number of keyvals

pvfs.lb      lb
             Unsigned 64-bit integer
             lb

pvfs.load_average.15s  Load Average (15s)
                      Unsigned 64-bit integer
                      Load Average (15s)

pvfs.load_average.1s   Load Average (1s)
                      Unsigned 64-bit integer
                      Load Average (1s)

pvfs.load_average.5s   Load Average (5s)
                      Unsigned 64-bit integer
                      Load Average (5s)

pvfs.magic_nr  Magic Number
              Unsigned 32-bit integer
              Magic Number

pvfs.metadata_read  metadata_read
                  Unsigned 64-bit integer
                  metadata_read

pvfs.metadata_write metadata_write
                  Unsigned 64-bit integer
                  metadata_write

pvfs.mode  Mode
          Unsigned 32-bit integer
          Mode

pvfs.mtime  mtime
          Date/Time stamp
          Modify Time

pvfs.mtime.sec  seconds
              Unsigned 32-bit integer
              Modify Time (seconds)

pvfs.mtime.usec  microseconds
              Unsigned 32-bit integer
              Modify Time (microseconds)

pvfs.num_blocks  Number of blocks
                Unsigned 32-bit integer
                Number of blocks

pvfs.num_contig_chunks  Number of contig_chunks
                      Unsigned 32-bit integer
                      Number of contig_chunks

pvfs.num_eregs  Number of eregs
              Unsigned 32-bit integer
              Number of eregs

pvfs.offset  Offset
            Unsigned 64-bit integer
            Offset
```



```
pvfs.parent_atime  Parent atime
    Date/Time stamp
    Access Time

pvfs.parent_atime.sec  seconds
    Unsigned 32-bit integer
    Access Time (seconds)

pvfs.parent_atime.usec  microseconds
    Unsigned 32-bit integer
    Access Time (microseconds)

pvfs.parent_ctime  Parent ctime
    Date/Time stamp
    Creation Time

pvfs.parent_ctime.sec  seconds
    Unsigned 32-bit integer
    Creation Time (seconds)

pvfs.parent_ctime.usec  microseconds
    Unsigned 32-bit integer
    Creation Time (microseconds)

pvfs.parent_mtime  Parent mtime
    Date/Time stamp
    Modify Time

pvfs.parent_mtime.sec  seconds
    Unsigned 32-bit integer
    Modify Time (seconds)

pvfs.parent_mtime.usec  microseconds
    Unsigned 32-bit integer
    Modify Time (microseconds)

pvfs.path  Path
    String
    Path

pvfs.prev_value  Previous Value
    Unsigned 64-bit integer
    Previous Value

pvfs.ram.free_bytes  RAM Free Bytes
    Unsigned 64-bit integer
    RAM Free Bytes

pvfs.ram_bytes_free  RAM Bytes Free
    Unsigned 64-bit integer
    RAM Bytes Free

pvfs.ram_bytes_total  RAM Bytes Total
    Unsigned 64-bit integer
    RAM Bytes Total

pvfs.release_number  Release Number
    Unsigned 32-bit integer
    Release Number

pvfs.server_count  Number of servers
    Unsigned 32-bit integer
    Number of servers
```

```
pvfs.server_nr  Server #
                Unsigned 32-bit integer
                Server #

pvfs.server_op  Server Operation
                Unsigned 32-bit integer
                Server Operation

pvfs.server_param  Server Parameter
                  Unsigned 32-bit integer
                  Server Parameter

pvfs.size  Size
           Unsigned 64-bit integer
           Size

pvfs.sreg  sreg
          Signed 32-bit integer
          sreg

pvfs.start_time_ms  start_time_ms
                   Unsigned 64-bit integer
                   start_time_ms

pvfs.stride  Stride
            Unsigned 64-bit integer
            Stride

pvfs.strip_size  Strip size
                Unsigned 64-bit integer
                Strip size (bytes)

pvfs.tag  Tag
         Unsigned 64-bit integer
         Tag

pvfs.total_handles  Total Handles
                   Unsigned 64-bit integer
                   Total Handles

pvfs.ub  ub
        Unsigned 64-bit integer
        ub

pvfs.uptime  Uptime (seconds)
            Unsigned 64-bit integer
            Uptime (seconds)
```

#### **Parlay Dissector Using GIOP API (giop-parlay)**

#### **Path Computation Element communication Protocol (pcep)**

```
pcep.error.type  Error-Type
                 Unsigned 8-bit integer

pcep.hdr.msg.flags.reserved  Reserved Flags
                             Boolean

pcep.hdr.obj.flags.i  Ignore (I)
                     Boolean
```

```
pcep.hdr.obj.flags.p Processing-Rule (P)
  Boolean
pcep.hdr.obj.flags.reserved Reserved Flags
  Boolean
pcep.lspa.flags.l Local Protection Desired (L)
  Boolean
pcep.metric.flags.b Bound (B)
  Boolean
pcep.metric.flags.c Cost (C)
  Boolean
pcep.msg Message Type
  Unsigned 8-bit integer
pcep.msg.close Close Message
  Boolean
pcep.msg.error Error Message
  Boolean
pcep.msg.keepalive Keepalive Message
  Boolean
pcep.msg.notification Notification Message
  Boolean
pcep.msg.open Open Message
  Boolean
pcep.msg.path.computation.reply Path Computation Reply Mesagge
  Boolean
pcep.msg.path.computation.request Path Computation Request Message
  Boolean
pcep.no.path.flags.c C
  Boolean
pcep.notification.type Notification Type
  Unsigned 32-bit integer
pcep.notification.type2 Notification Type
  Unsigned 32-bit integer
pcep.notification.value1 Notification Value
  Unsigned 32-bit integer
pcep.obj.bandwidth BANDWIDTH object
  No value
pcep.obj.close CLOSE object
  No value
pcep.obj.endpoint END-POINT object
  No value
pcep.obj.ero EXPLICIT ROUTE object (ERO)
  No value
pcep.obj.error ERROR object
  No value
```

```
pcep.obj.iro IRO object
    No value
pcep.obj.loadbalancing LOAD BALANCING object
    No value
pcep.obj.lspa LSPA object
    No value
pcep.obj.metric METRIC object
    No value
pcep.obj.nopath NO-PATH object
    No value
pcep.obj.notification NOTIFICATION object
    No value
pcep.obj.open OPEN object
    No value
pcep.obj.rp RP object
    No value
pcep.obj.rro RECORD ROUTE object (RRO)
    No value
pcep.obj.svec SVEC object
    No value
pcep.obj.xro EXCLUDE ROUTE object (XRO)
    No value
pcep.object Object Class
    Unsigned 32-bit integer
pcep.open.flags.res Reserved Flags
    Boolean
pcep.rp.flags.b Bi-directional (L)
    Boolean
pcep.rp.flags.o Strict/Loose (L)
    Boolean
pcep.rp.flags.pri Priority (PRI)
    Boolean
pcep.rp.flags.r Reoptimization (R)
    Boolean
pcep.rp.flags.reserved Reserved Flags
    Boolean
pcep.subobj Type
    Unsigned 8-bit integer
pcep.subobj.auntonomus.sys.num SUBOBJECT: Autonomous System Number
    No value
pcep.subobj.exrs SUBOBJECT: EXRS
    No value
pcep.subobj.flags.lpa Local Protection Available
    Boolean
```

```

pcep.subobj.flags.lpu  Local protection in Use
    Boolean
pcep.subobj.ipv4  SUBOBJECT: IPv4 Prefix
    No value
pcep.subobj.ipv6  SUBOBJECT: IPv6 Prefix
    No value
pcep.subobj.label  Type
    Unsigned 32-bit integer
pcep.subobj.label.control  SUBOBJECT: Label Control
    No value
pcep.subobj.label.flags.gl  Global Label
    Boolean
pcep.subobj.srlg  SUBOBJECT: SRLG
    No value
pcep.subobj.unnum.interfaceid  SUBOBJECT: Unnumbered Interface ID
    No value
pcep.svec.flags.l  Link diverse (L)
    Boolean
pcep.svec.flags.n  Node diverse (N)
    Boolean
pcep.svec.flags.s  SRLG diverse (S)
    Boolean
pcep.xro.flags.f  Fail (F)
    Boolean
pcep.xro.sub.attribute  Attribute
    Unsigned 32-bit integer

```

#### **Pegasus Lightweight Stream Control (lsc)**

```

lsc.current_npt  Current NPT
    Signed 32-bit integer
    Current Time (milliseconds)
lsc.mode  Server Mode
    Unsigned 8-bit integer
    Current Server Mode
lsc.op_code  Op Code
    Unsigned 8-bit integer
    Operation Code
lsc.scale_denum  Scale Denominator
    Unsigned 16-bit integer
    Scale Denominator
lsc.scale_num  Scale Numerator
    Signed 16-bit integer
    Scale Numerator
lsc.start_npt  Start NPT
    Signed 32-bit integer
    Start Time (milliseconds)

```

```
lsc.status_code  Status Code
                 Unsigned 8-bit integer
                 Status Code

lsc.stop_npt     Stop NPT
                 Signed 32-bit integer
                 Stop Time (milliseconds)

lsc.stream_handle Stream Handle
                 Unsigned 32-bit integer
                 Stream identification handle

lsc.trans_id     Transaction ID
                 Unsigned 8-bit integer
                 Transaction ID

lsc.version      Version
                 Unsigned 8-bit integer
                 Version of the Pegasus LSC protocol
```

### **Ping Pong Protocol (pingpongprotocol)**

```
pingpongprotocol.message_flags  Flags
                                 Unsigned 8-bit integer

pingpongprotocol.message_length Length
                                 Unsigned 16-bit integer

pingpongprotocol.message_type   Type
                                 Unsigned 8-bit integer

pingpongprotocol.ping_data      Ping_Data
                                 Byte array

pingpongprotocol.ping_messageno  MessageNo
                                 Unsigned 64-bit integer

pingpongprotocol.pong_data       Pong_Data
                                 Byte array

pingpongprotocol.pong_messageno  MessageNo
                                 Unsigned 64-bit integer

pingpongprotocol.pong_replyno    ReplyNo
                                 Unsigned 64-bit integer
```

### **Plan 9 9P (9p)**

```
9p.aname  Aname
           String
           Access Name

9p.atime  Atime
           Date/Time stamp
           Access Time

9p.count  Count
           Unsigned 32-bit integer
           Count

9p.dev    Dev
           Unsigned 32-bit integer
```

```
9p.ename  Ename
          String
          Error

9p.fid    Fid
          Unsigned 32-bit integer
          File ID

9p.filename  File name
            String
            File name

9p.gid     Gid
          String
          Group id

9p.iounit  I/O Unit
          Unsigned 32-bit integer
          I/O Unit

9p.length  Length
          Unsigned 64-bit integer
          File Length

9p.maxsize  Max msg size
          Unsigned 32-bit integer
          Max message size

9p.mode     Mode
          Unsigned 8-bit integer
          Mode

9p.mode.orclose  Remove on close
          Boolean

9p.mode.rwx  Open/Create Mode
          Unsigned 8-bit integer
          Open/Create Mode

9p.mode.trunc  Trunc
          Boolean
          Truncate

9p.msglen   Msg length
          Unsigned 32-bit integer
          9P Message Length

9p.msgtype  Msg Type
          Unsigned 8-bit integer
          Message Type

9p.mtime    Mtime
          Date/Time stamp
          Modified Time

9p.muid     Muid
          String
          Last modifiers uid

9p.name     Name
          String
          Name of file
```

9p.newfid New fid  
Unsigned 32-bit integer  
New file ID

9p.nqid Nr Qids  
Unsigned 16-bit integer  
Number of Qid results

9p.nwalk Nr Walks  
Unsigned 32-bit integer  
Nr of walk items

9p.offset Offset  
Unsigned 64-bit integer  
Offset

9p.oldtag Old tag  
Unsigned 16-bit integer  
Old tag

9p.paramsz Param length  
Unsigned 16-bit integer  
Parameter length

9p.perm Permissions  
Unsigned 32-bit integer  
Permission bits

9p.qidpath Qid path  
Unsigned 64-bit integer  
Qid path

9p.qidtype Qid type  
Unsigned 8-bit integer  
Qid type

9p.qidvers Qid version  
Unsigned 32-bit integer  
Qid version

9p.sdlen Stat data length  
Unsigned 16-bit integer  
Stat data length

9p.statmode Mode  
Unsigned 32-bit integer  
File mode flags

9p.statttype Type  
Unsigned 16-bit integer  
Type

9p.tag Tag  
Unsigned 16-bit integer  
9P Tag

9p.uid Uid  
String  
User id

9p.uname Uname  
String  
User Name



9p.version Version  
String  
Version

9p.wname Wname  
String  
Path Name Element

### **Point-to-Point Protocol (ppp)**

ppp.address Address  
Unsigned 8-bit integer

ppp.control Control  
Unsigned 8-bit integer

ppp.direction Direction  
Unsigned 8-bit integer  
PPP direction

ppp.protocol Protocol  
Unsigned 16-bit integer

### **Point-to-Point Tunnelling Protocol (pptp)**

pptp.type Message type  
Unsigned 16-bit integer  
PPTP message type

### **Port Aggregation Protocol (pagp)**

pagp.flags Flags  
Unsigned 8-bit integer  
Information flags

pagp.flags.automode Auto Mode  
Boolean  
1 = Auto Mode enabled, 0 = Desirable Mode

pagp.flags.slowhello Slow Hello  
Boolean  
1 = using Slow Hello, 0 = Slow Hello disabled

pagp.flags.state Consistent State  
Boolean  
1 = Consistent State, 0 = Not Ready

pagp.flushlocaldevId Flush Local Device ID  
6-byte Hardware (MAC) Address  
Flush local device ID

pagp.flushpartnerdevId Flush Partner Device ID  
6-byte Hardware (MAC) Address  
Flush remote device ID

pagp.localdevId Local Device ID  
6-byte Hardware (MAC) Address  
Local device ID

pagp.locallearnCap Local Learn Capability  
Unsigned 8-bit integer  
Local learn capability

pagp.localgroupcap Local Group Capability  
Unsigned 32-bit integer  
The local group capability

pagp.localgroupifindex Local Group ifindex  
Unsigned 32-bit integer  
The local group interface index

pagp.localportpri Local Port Hot Standby Priority  
Unsigned 8-bit integer  
The local hot standby priority assigned to this port

pagp.localsentportifindex Local Sent Port ifindex  
Unsigned 32-bit integer  
The interface index of the local port used to send PDU

pagp.numtlvs Number of TLVs  
Unsigned 16-bit integer  
Number of TLVs following

pagp.partnercount Partner Count  
Unsigned 16-bit integer  
Partner count

pagp.partnerdevvid Partner Device ID  
6-byte Hardware (MAC) Address  
Remote Device ID (MAC)

pagp.partnergroupcap Partner Group Capability  
Unsigned 32-bit integer  
Remote group capability

pagp.partnergroupifindex Partner Group ifindex  
Unsigned 32-bit integer  
Remote group interface index

pagp.partnerlearncap Partner Learn Capability  
Unsigned 8-bit integer  
Remote learn capability

pagp.partnerportpri Partner Port Hot Standby Priority  
Unsigned 8-bit integer  
Remote port priority

pagp.partnersentportifindex Partner Sent Port ifindex  
Unsigned 32-bit integer  
Remote port interface index sent

pagp.tlv Entry  
Unsigned 16-bit integer  
Type/Length/Value

pagp.tlvagportmac Agport MAC Address  
6-byte Hardware (MAC) Address  
Source MAC on frames for this aggregate

pagp.tlvdevname Device Name  
String  
sysName of device

pagp.tlvportname Physical Port Name  
String  
Name of port used to send PDU

```
pagp.transid  Transaction ID
               Unsigned 32-bit integer
               Flush transaction ID

pagp.version  Version
               Unsigned 8-bit integer
               Identifies the PAgP PDU version: 1 = Info, 2 = Flush
```

**Portable Network Graphics (png)**

```
png.bkgd.blue  Blue
               Unsigned 16-bit integer

png.bkgd.green  Green
               Unsigned 16-bit integer

png.bkgd.greyscale  Greyscale
               Unsigned 16-bit integer

png.bkgd.palette_index  Palette Index
               Unsigned 8-bit integer

png.bkgd.red  Red
               Unsigned 16-bit integer

png.chunk.crc  CRC
               Unsigned 32-bit integer

png.chunk.data  Data
               No value

png.chunk.flag.ancillary  Ancillary
               Boolean

png.chunk.flag.private  Private
               Boolean

png.chunk.flag.stc  Safe To Copy
               Boolean

png.chunk.len  Len
               Unsigned 32-bit integer

png.chunk.type  Chunk
               String

png.ihdr.bitdepth  Bit Depth
               Unsigned 8-bit integer

png.ihdr.colour_type  Colour Type
               Unsigned 8-bit integer

png.ihdr.compression_method  Compression Method
               Unsigned 8-bit integer

png.ihdr.filter_method  Filter Method
               Unsigned 8-bit integer

png.ihdr.height  Height
               Unsigned 32-bit integer

png.ihdr.interlace_method  Interlace Method
               Unsigned 8-bit integer

png.ihdr.width  Width
               Unsigned 32-bit integer
```

```
png.phys.horiz  Horizontal pixels per unit
                Unsigned 32-bit integer

png.phys.unit   Unit
                Unsigned 8-bit integer

png.phys.vert   Vertical pixels per unit
                Unsigned 32-bit integer

png.signature   PNG Signature
                Byte array

png.text.keyword Keyword
                String

png.text.string String
                String

png.time.day    Day
                Unsigned 8-bit integer

png.time.hour   Hour
                Unsigned 8-bit integer

png.time.minute Minute
                Unsigned 8-bit integer

png.time.month  Month
                Unsigned 8-bit integer

png.time.second Second
                Unsigned 8-bit integer

png.time.year   Year
                Unsigned 16-bit integer
```

**Portmap (portmap)**

```
portmap.answer  Answer
                Boolean
                Answer

portmap.args    Arguments
                Byte array
                Arguments

portmap.port    Port
                Unsigned 32-bit integer
                Port

portmap.proc    Procedure
                Unsigned 32-bit integer
                Procedure

portmap.procedure_v1 V1 Procedure
                Unsigned 32-bit integer
                V1 Procedure

portmap.procedure_v2 V2 Procedure
                Unsigned 32-bit integer
                V2 Procedure
```

```
portmap.procedure_v3  V3 Procedure
    Unsigned 32-bit integer
    V3 Procedure

portmap.procedure_v4  V4 Procedure
    Unsigned 32-bit integer
    V4 Procedure

portmap.prog  Program
    Unsigned 32-bit integer
    Program

portmap.proto  Protocol
    Unsigned 32-bit integer
    Protocol

portmap.result  Result
    Byte array
    Result

portmap.rpcb  RPCB
    No value
    RPCB

portmap.rpcb.addr  Universal Address
    String
    Universal Address

portmap.rpcb.netid  Network Id
    String
    Network Id

portmap.rpcb.owner  Owner of this Service
    String
    Owner of this Service

portmap.rpcb.prog  Program
    Unsigned 32-bit integer
    Program

portmap.rpcb.version  Version
    Unsigned 32-bit integer
    Version

portmap.uaddr  Universal Address
    String
    Universal Address

portmap.version  Version
    Unsigned 32-bit integer
    Version
```

**Post Office Protocol (pop)**

```
pop.request  Request
    String
    Request

pop.request.command  Request command
    String
    Request command
```

```
pop.request.data  Data
  String
  Request data

pop.request.parameter  Request parameter
  String
  Request parameter

pop.response  Response
  String
  Response

pop.response.data  Data
  String
  Response Data

pop.response.description  Response description
  String
  Response description

pop.response.indicator  Response indicator
  String
  Response indicator
```

**PostgreSQL (pgsql)**

```
pgsql.authtype  Authentication type
  Signed 32-bit integer
  The type of authentication requested by the backend.

pgsql.code  Code
  String
  SQLState code.

pgsql.col.index  Column index
  Unsigned 32-bit integer
  The position of a column within a row.

pgsql.col.name  Column name
  String
  The name of a column.

pgsql.col.typemod  Type modifier
  Signed 32-bit integer
  The type modifier for a column.

pgsql.condition  Condition
  String
  The name of a NOTIFY condition.

pgsql.copydata  Copy data
  Byte array
  Data sent following a Copy-in or Copy-out response.

pgsql.detail  Detail
  String
  Detailed error message.

pgsql.error  Error
  String
  An error message.
```

pgsql.file File  
String  
The source-code file where an error was reported.

pgsql.format Format  
Unsigned 16-bit integer  
A format specifier.

pgsql.frontend Frontend  
Boolean  
True for messages from the frontend, false otherwise.

pgsql.hint Hint  
String  
A suggestion to resolve an error.

pgsql.key Key  
Unsigned 32-bit integer  
The secret key used by a particular backend.

pgsql.length Length  
Unsigned 32-bit integer  
The length of the message (not including the type).

pgsql.line Line  
String  
The line number on which an error was reported.

pgsql.message Message  
String  
Error message.

pgsql.oid OID  
Unsigned 32-bit integer  
An object identifier.

pgsql.oid.table Table OID  
Unsigned 32-bit integer  
The object identifier of a table.

pgsql.oid.type Type OID  
Unsigned 32-bit integer  
The object identifier of a type.

pgsql.parameter\_name Parameter name  
String  
The name of a database parameter.

pgsql.parameter\_value Parameter value  
String  
The value of a database parameter.

pgsql.password Password  
String  
A password.

pgsql.pid PID  
Unsigned 32-bit integer  
The process ID of a backend.

pgsql.portal Portal  
String  
The name of a portal.

pgsql.position Position  
String  
The index of the error within the query string.

pgsql.query Query  
String  
A query string.

pgsql.routine Routine  
String  
The routine that reported an error.

pgsql.salt Salt value  
Byte array  
The salt to use while encrypting a password.

pgsql.severity Severity  
String  
Message severity.

pgsql.statement Statement  
String  
The name of a prepared statement.

pgsql.status Status  
Unsigned 8-bit integer  
The transaction status of the backend.

pgsql.tag Tag  
String  
A completion tag.

pgsql.text Text  
String  
Text from the backend.

pgsql.type Type  
String  
A one-byte message type identifier.

pgsql.val.data Data  
Byte array  
Parameter data.

pgsql.val.length Column length  
Signed 32-bit integer  
The length of a parameter value, in bytes. -1 means NULL.

pgsql.where Context  
String  
The context in which an error occurred.

#### **Pragmatic General Multicast (pgm)**

pgm.ack.bitmap Packet Bitmap  
Unsigned 32-bit integer

pgm.ack.maxsqn Maximum Received Sequence Number  
Unsigned 32-bit integer

pgm.data.sqn Data Packet Sequence Number  
Unsigned 32-bit integer



```
pgm.data.trail  Trailing Edge Sequence Number
                Unsigned 32-bit integer

pgm.genopts.len  Length
                Unsigned 8-bit integer

pgm.genopts.opx  Option Extensibility Bits
                Unsigned 8-bit integer

pgm.genopts.type  Type
                Unsigned 8-bit integer

pgm.hdr.cksum  Checksum
                Unsigned 16-bit integer

pgm.hdr.cksum_bad  Bad Checksum
                Boolean

pgm.hdr.dport  Destination Port
                Unsigned 16-bit integer

pgm.hdr.gsi  Global Source Identifier
                Byte array

pgm.hdr.opts  Options
                Unsigned 8-bit integer

pgm.hdr.opts.netsig  Network Significant Options
                Boolean

pgm.hdr.opts.opt  Options
                Boolean

pgm.hdr.opts.parity  Parity
                Boolean

pgm.hdr.opts.varlen  Variable length Parity Packet Option
                Boolean

pgm.hdr.sport  Source Port
                Unsigned 16-bit integer

pgm.hdr.tsduhlen  Transport Service Data Unit Length
                Unsigned 16-bit integer

pgm.hdr.type  Type
                Unsigned 8-bit integer

pgm.nak.grp  Multicast Group NLA
                IPv4 address

pgm.nak.grpafi  Multicast Group AFI
                Unsigned 16-bit integer

pgm.nak.grpres  Reserved
                Unsigned 16-bit integer

pgm.nak.sqn  Requested Sequence Number
                Unsigned 32-bit integer

pgm.nak.src  Source NLA
                IPv4 address

pgm.nak.srcafi  Source NLA AFI
                Unsigned 16-bit integer
```

```
pgm.nak.srcres  Reserved
    Unsigned 16-bit integer
pgm.opts.ccddata.acker  Acker
    IPv4 address
pgm.opts.ccddata.afi  Acker AFI
    Unsigned 16-bit integer
pgm.opts.ccddata.lossrate  Loss Rate
    Unsigned 16-bit integer
pgm.opts.ccddata.res  Reserved
    Unsigned 8-bit integer
pgm.opts.ccddata.res2  Reserved
    Unsigned 16-bit integer
pgm.opts.ccddata.tstamp  Time Stamp
    Unsigned 16-bit integer
pgm.opts.fragment.first_sqn  First Sequence Number
    Unsigned 32-bit integer
pgm.opts.fragment.fragment_offset  Fragment Offset
    Unsigned 32-bit integer
pgm.opts.fragment.res  Reserved
    Unsigned 8-bit integer
pgm.opts.fragment.total_length  Total Length
    Unsigned 32-bit integer
pgm.opts.join.min_join  Minimum Sequence Number
    Unsigned 32-bit integer
pgm.opts.join.res  Reserved
    Unsigned 8-bit integer
pgm.opts.len  Length
    Unsigned 8-bit integer
pgm.opts.nak.list  List
    Byte array
pgm.opts.nak.op  Reserved
    Unsigned 8-bit integer
pgm.opts.nak_bo_ivl.bo_ivl  Back-off Interval
    Unsigned 32-bit integer
pgm.opts.nak_bo_ivl.bo_ivl_sqn  Back-off Interval Sequence Number
    Unsigned 32-bit integer
pgm.opts.nak_bo_ivl.res  Reserved
    Unsigned 8-bit integer
pgm.opts.nak_bo_rng.max_bo_ivl  Max Back-off Interval
    Unsigned 32-bit integer
pgm.opts.nak_bo_rng.min_bo_ivl  Min Back-off Interval
    Unsigned 32-bit integer
pgm.opts.nak_bo_rng.res  Reserved
    Unsigned 8-bit integer
```

```
pgm.opts.parity_prm.op  Parity Parameters
    Unsigned 8-bit integer
pgm.opts.parity_prm.prm_grp  Transmission Group Size
    Unsigned 32-bit integer
pgm.opts.redirect.afi  DLR AFI
    Unsigned 16-bit integer
pgm.opts.redirect.dlr  DLR
    IPv4 address
pgm.opts.redirect.res  Reserved
    Unsigned 8-bit integer
pgm.opts.redirect.res2  Reserved
    Unsigned 16-bit integer
pgm.opts.tlen  Total Length
    Unsigned 16-bit integer
pgm.opts.type  Type
    Unsigned 8-bit integer
pgm.poll.backoff_ivl  Back-off Interval
    Unsigned 32-bit integer
pgm.poll.matching_bmask  Matching Bitmask
    Unsigned 32-bit integer
pgm.poll.path  Path NLA
    IPv4 address
pgm.poll.pathafi  Path NLA AFI
    Unsigned 16-bit integer
pgm.poll.rand_str  Random String
    Unsigned 32-bit integer
pgm.poll.res  Reserved
    Unsigned 16-bit integer
pgm.poll.round  Round
    Unsigned 16-bit integer
pgm.poll.sqn  Sequence Number
    Unsigned 32-bit integer
pgm.poll.subtype  Subtype
    Unsigned 16-bit integer
pgm.polr.res  Reserved
    Unsigned 16-bit integer
pgm.polr.round  Round
    Unsigned 16-bit integer
pgm.polr.sqn  Sequence Number
    Unsigned 32-bit integer
pgm.port  Port
    Unsigned 16-bit integer
pgm.spm.lead  Leading Edge Sequence Number
    Unsigned 32-bit integer
```

```
pgm.spm.path Path NLA
    IPv4 address
pgm.spm.pathafi Path NLA AFI
    Unsigned 16-bit integer
pgm.spm.res Reserved
    Unsigned 16-bit integer
pgm.spm.sqn Sequence number
    Unsigned 32-bit integer
pgm.spm.trail Trailing Edge Sequence Number
    Unsigned 32-bit integer
```

### **Precision Time Protocol (IEEE1588) (ptp)**

```
ptp.control control
    Unsigned 8-bit integer
ptp.dr.delayreceipttimestamp delayReceiptTimestamp
    Time duration
ptp.dr.delayreceipttimestamp_nanoseconds delayReceiptTimestamp (nanoseconds)
    Signed 32-bit integer
ptp.dr.delayreceipttimestamp_seconds delayReceiptTimestamp (Seconds)
    Unsigned 32-bit integer
ptp.dr.requestingsourcecommunicationtechnology requestingSourceCommunicationTec
    Unsigned 8-bit integer
ptp.dr.requestingsourceportid requestingSourcePortId
    Unsigned 16-bit integer
ptp.dr.requestingsourcesequenceid requestingSourceSequenceId
    Unsigned 16-bit integer
ptp.dr.requestingsourceuuid requestingSourceUuid
    6-byte Hardware (MAC) Address
ptp.flags flags
    Unsigned 16-bit integer
ptp.flags.assist PTP_ASSIST
    Unsigned 16-bit integer
ptp.flags.boundary_clock PTP_BOUNDARY_CLOCK
    Unsigned 16-bit integer
ptp.flags.ext_sync PTP_EXT_SYNC
    Unsigned 16-bit integer
ptp.flags.li59 PTP_LI59
    Unsigned 16-bit integer
ptp.flags.li61 PTP_LI61
    Unsigned 16-bit integer
ptp.flags.parent_stats PTP_PARENT_STATS
    Unsigned 16-bit integer
ptp.flags.sync_burst PTP_SYNC_BURST
    Unsigned 16-bit integer
```

```
ptp.fu.associatedsequenceid  associatedSequenceId
    Unsigned 16-bit integer
ptp.fu.hf_ptp_fu_preciseorigintimestamp  preciseOriginTimestamp
    Time duration
ptp.fu.hf_ptp_fu_preciseorigintimestamp_seconds  preciseOriginTimestamp (seconds)
    Unsigned 32-bit integer
ptp.fu.preciseorigintimestamp_nanoseconds  preciseOriginTimestamp (nanoseconds)
    Signed 32-bit integer
ptp.messagestype  messageType
    Unsigned 8-bit integer
ptp.mm.boundaryhops  boundaryHops
    Signed 16-bit integer
ptp.mm.clock.identity.clockcommunicationtechnology  clockCommunicationTechnology
    Unsigned 8-bit integer
ptp.mm.clock.identity.clockportfield  clockPortField
    Unsigned 16-bit integer
ptp.mm.clock.identity.clockuuidfield  clockUuidField
    6-byte Hardware (MAC) Address
ptp.mm.clock.identity.manufactureridentity  manufacturerIdentity
    Byte array
ptp.mm.current.data.set.offsetfrommaster  offsetFromMaster
    Time duration
ptp.mm.current.data.set.offsetfrommasternanoseconds  offsetFromMasterNanoseconds
    Signed 32-bit integer
ptp.mm.current.data.set.offsetfrommasterseconds  offsetFromMasterSeconds
    Unsigned 32-bit integer
ptp.mm.current.data.set.onewaydelay  oneWayDelay
    Time duration
ptp.mm.current.data.set.onewaydelaynanoseconds  oneWayDelayNanoseconds
    Signed 32-bit integer
ptp.mm.current.data.set.onewaydelayseconds  oneWayDelaySeconds
    Unsigned 32-bit integer
ptp.mm.current.data.set.stepsremoved  stepsRemoved
    Unsigned 16-bit integer
ptp.mm.default.data.set.clockcommunicationtechnology  clockCommunicationTechnology
    Unsigned 8-bit integer
ptp.mm.default.data.set.clockfollowupcapable  clockFollowupCapable
    Boolean
ptp.mm.default.data.set.clockidentifier  clockIdentifier
    Byte array
ptp.mm.default.data.set.clockportfield  clockPortField
    Unsigned 16-bit integer
ptp.mm.default.data.set.clockstratum  clockStratum
    Unsigned 8-bit integer
```

```
ptp.mm.default.data.set.clockuuidfield  clockUuidField
    6-byte Hardware (MAC) Address
ptp.mm.default.data.set.clockvariance  clockVariance
    Unsigned 16-bit integer
ptp.mm.default.data.set.externaltiming  externalTiming
    Boolean
ptp.mm.default.data.set.initializable  initializable
    Boolean
ptp.mm.default.data.set.isboundaryclock  isBoundaryClock
    Boolean
ptp.mm.default.data.set.numberforeignrecords  numberForeignRecords
    Unsigned 16-bit integer
ptp.mm.default.data.set.numberports  numberPorts
    Unsigned 16-bit integer
ptp.mm.default.data.set.preferred  preferred
    Boolean
ptp.mm.default.data.set.subdomainname  subDomainName
    String
ptp.mm.default.data.set.syncinterval  syncInterval
    Signed 8-bit integer
ptp.mm.foreign.data.set.foreignmastercommunicationstechnology  foreignMasterCommu
    Unsigned 8-bit integer
ptp.mm.foreign.data.set.foreignmasterportidfield  foreignMasterPortIdField
    Unsigned 16-bit integer
ptp.mm.foreign.data.set.foreignmastersyncs  foreignMasterSyncs
    Unsigned 16-bit integer
ptp.mm.foreign.data.set.foreignmasteruuidfield  foreignMasterUuidField
    6-byte Hardware (MAC) Address
ptp.mm.foreign.data.set.returnedportnumber  returnedPortNumber
    Unsigned 16-bit integer
ptp.mm.foreign.data.set.returnedrecordnumber  returnedRecordNumber
    Unsigned 16-bit integer
ptp.mm.get.foreign.data.set.recordkey  recordKey
    Unsigned 16-bit integer
ptp.mm.global.time.data.set.currentutcoffset  currentUtcOffset
    Signed 16-bit integer
ptp.mm.global.time.data.set.epochnumber  epochNumber
    Unsigned 16-bit integer
ptp.mm.global.time.data.set.leap59  leap59
    Boolean
ptp.mm.global.time.data.set.leap61  leap61
    Boolean
ptp.mm.global.time.data.set.localtime  localTime
    Time duration
```

```
ptp.mm.global.time.data.set.localtimenoseconds  localTimeNanoseconds
Signed 32-bit integer
ptp.mm.global.time.data.set.localtimeseconds  localTimeSeconds
Unsigned 32-bit integer
ptp.mm.initialize.clock.initialisationkey  initialisationKey
Unsigned 16-bit integer
ptp.mm.managementmessagekey  managementMessageKey
Unsigned 8-bit integer
ptp.mm.messageparameters  messageParameters
Byte array
ptp.mm.parameterlength  parameterLength
Unsigned 16-bit integer
ptp.mm.parent.data.set.grandmastercommunicationstechnology  grandmasterCommunicationTechnology
Unsigned 8-bit integer
ptp.mm.parent.data.set.grandmasteridentifier  grandmasterIdentifier
Byte array
ptp.mm.parent.data.set.grandmasterisboundaryclock  grandmasterIsBoundaryClock
Boolean
ptp.mm.parent.data.set.grandmasterportidfield  grandmasterPortIdField
Unsigned 16-bit integer
ptp.mm.parent.data.set.grandmasterpreferred  grandmasterPreferred
Boolean
ptp.mm.parent.data.set.grandmastersequencenumber  grandmasterSequenceNumber
Unsigned 16-bit integer
ptp.mm.parent.data.set.grandmasterstratum  grandmasterStratum
Unsigned 8-bit integer
ptp.mm.parent.data.set.grandmasteruuidfield  grandmasterUuidField
6-byte Hardware (MAC) Address
ptp.mm.parent.data.set.grandmastervariance  grandmasterVariance
Signed 16-bit integer
ptp.mm.parent.data.set.observeddrift  observedDrift
Signed 32-bit integer
ptp.mm.parent.data.set.observedvariance  observedVariance
Signed 16-bit integer
ptp.mm.parent.data.set.parentcommunicationstechnology  parentCommunicationTechnology
Unsigned 8-bit integer
ptp.mm.parent.data.set.parentexternaltiming  parentExternalTiming
Boolean
ptp.mm.parent.data.set.parentfollowupcapable  parentFollowupCapable
Boolean
ptp.mm.parent.data.set.parentlastsyncsequencenumber  parentLastSyncSequenceNumber
Unsigned 16-bit integer
ptp.mm.parent.data.set.parentportid  parentPortId
Unsigned 16-bit integer
```

```
ptp.mm.parent.data.set.parentstats  parentStats
    Boolean
ptp.mm.parent.data.set.parentuuid  parentUuid
    6-byte Hardware (MAC) Address
ptp.mm.parent.data.set.parentvariance  parentVariance
    Unsigned 16-bit integer
ptp.mm.parent.data.set.utcreasonable  utcReasonable
    Boolean
ptp.mm.port.data.set.burstenabled  burstEnabled
    Boolean
ptp.mm.port.data.set.eventportaddress  eventPortAddress
    Byte array
ptp.mm.port.data.set.eventportaddressoctets  eventPortAddressOctets
    Unsigned 8-bit integer
ptp.mm.port.data.set.generalportaddress  generalPortAddress
    Byte array
ptp.mm.port.data.set.generalportaddressoctets  generalPortAddressOctets
    Unsigned 8-bit integer
ptp.mm.port.data.set.lastgeneraleventsequencenumber  lastGeneralEventSequenceNumber
    Unsigned 16-bit integer
ptp.mm.port.data.set.lastsynceventsequencenumber  lastSyncEventSequenceNumber
    Unsigned 16-bit integer
ptp.mm.port.data.set.portcommunicationtechnology  portCommunicationTechnology
    Unsigned 8-bit integer
ptp.mm.port.data.set.portidfield  portIdField
    Unsigned 16-bit integer
ptp.mm.port.data.set.portstate  portState
    Unsigned 8-bit integer
ptp.mm.port.data.set.portuuidfield  portUuidField
    6-byte Hardware (MAC) Address
ptp.mm.port.data.set.returnedportnumber  returnedPortNumber
    Unsigned 16-bit integer
ptp.mm.port.data.set.subdomainaddress  subdomainAddress
    Byte array
ptp.mm.port.data.set.subdomainaddressoctets  subdomainAddressOctets
    Unsigned 8-bit integer
ptp.mm.set.subdomain.subdomainname  subdomainName
    String
ptp.mm.set.sync.interval.syncinterval  syncInterval
    Unsigned 16-bit integer
ptp.mm.set.time.localtime  localtime
    Time duration
ptp.mm.set.time.localtimenoseconds  localTimeNanoseconds
    Signed 32-bit integer
```



```
ptp.mm.set.time.localtimeseconds  localtimeSeconds
    Unsigned 32-bit integer
ptp.mm.startingboundaryhops  startingBoundaryHops
    Signed 16-bit integer
ptp.mm.targetcommunicationtechnology  targetCommunicationTechnology
    Unsigned 8-bit integer
ptp.mm.targetportid  targetPortId
    Unsigned 16-bit integer
ptp.mm.targetuuid  targetUuid
    6-byte Hardware (MAC) Address
ptp.mm.update.default.data.set.clockidentifier  clockIdentifier
    Byte array
ptp.mm.update.default.data.set.clockstratum  clockStratum
    Unsigned 8-bit integer
ptp.mm.update.default.data.set.clockvariance  clockVariance
    Unsigned 16-bit integer
ptp.mm.update.default.data.set.preferred  preferred
    Boolean
ptp.mm.update.default.data.set.subdomainname  subdomainName
    String
ptp.mm.update.default.data.set.syncinterval  syncInterval
    Signed 8-bit integer
ptp.mm.update.global.time.properties.currentutcoffset  currentUtcOffset
    Unsigned 16-bit integer
ptp.mm.update.global.time.properties.epochnumber  epochNumber
    Unsigned 16-bit integer
ptp.mm.update.global.time.properties.leap59  leap59
    Boolean
ptp.mm.update.global.time.properties.leap61  leap61
    Boolean
ptp.sdr.currentutcoffset  currentUTCOffset
    Signed 16-bit integer
ptp.sdr.epochnumber  epochNumber
    Unsigned 16-bit integer
ptp.sdr.estimatedmasterdrift  estimatedMasterDrift
    Signed 32-bit integer
ptp.sdr.estimatedmastervariance  estimatedMasterVariance
    Signed 16-bit integer
ptp.sdr.grandmasterclockidentifier  grandmasterClockIdentifier
    String
ptp.sdr.grandmasterclockstratum  grandmasterClockStratum
    Unsigned 8-bit integer
ptp.sdr.grandmasterclockuuid  grandMasterClockUuid
    6-byte Hardware (MAC) Address
```

```
ptp.sdr.grandmasterclockvariance  grandmasterClockVariance
    Signed 16-bit integer
ptp.sdr.grandmastercommunicationtechnology  grandmasterCommunicationTechnology
    Unsigned 8-bit integer
ptp.sdr.grandmasterisboundaryclock  grandmasterIsBoundaryClock
    Unsigned 8-bit integer
ptp.sdr.grandmasterportid  grandmasterPortId
    Unsigned 16-bit integer
ptp.sdr.grandmasterpreferred  grandmasterPreferred
    Unsigned 8-bit integer
ptp.sdr.grandmastersequenceid  grandmasterSequenceId
    Unsigned 16-bit integer
ptp.sdr.localclockidentifier  localClockIdentifier
    String
ptp.sdr.localclockstratum  localClockStratum
    Unsigned 8-bit integer
ptp.sdr.localclockvariance  localClockVariance
    Signed 16-bit integer
ptp.sdr.localstepsremoved  localStepsRemoved
    Unsigned 16-bit integer
ptp.sdr.origintimestamp  originTimestamp
    Time duration
ptp.sdr.origintimestamp_nanoseconds  originTimestamp (nanoseconds)
    Signed 32-bit integer
ptp.sdr.origintimestamp_seconds  originTimestamp (seconds)
    Unsigned 32-bit integer
ptp.sdr.parentcommunicationtechnology  parentCommunicationTechnology
    Unsigned 8-bit integer
ptp.sdr.parentportfield  parentPortField
    Unsigned 16-bit integer
ptp.sdr.parentuuid  parentUuid
    6-byte Hardware (MAC) Address
ptp.sdr.syncinterval  syncInterval
    Signed 8-bit integer
ptp.sdr.utcreasonable  utcReasonable
    Boolean
ptp.sequenceid  sequenceId
    Unsigned 16-bit integer
ptp.sourcecommunicationtechnology  sourceCommunicationTechnology
    Unsigned 8-bit integer
ptp.sourceportid  sourcePortId
    Unsigned 16-bit integer
ptp.sourceuuid  sourceUuid
    6-byte Hardware (MAC) Address
```

```
ptp.subdomain    subdomain
                  String

ptp.v2.an.grandmasterclockaccuracy  grandmasterClockAccuracy
                                     Unsigned 8-bit integer

ptp.v2.an.grandmasterclockclass    grandmasterClockClass
                                     Unsigned 8-bit integer

ptp.v2.an.grandmasterclockidentity  grandmasterClockIdentity
                                     Unsigned 64-bit integer

ptp.v2.an.grandmasterclockvariance  grandmasterClockVariance
                                     Signed 16-bit integer

ptp.v2.an.localstepsremoved        localStepsRemoved
                                     Unsigned 16-bit integer

ptp.v2.an.origincurrentutcoffset    originCurrentUTCOffset
                                     Signed 16-bit integer

ptp.v2.an.origintimestamp           originTimestamp
                                     Time duration

ptp.v2.an.origintimestamp.nanoseconds  originTimestamp (nanoseconds)
                                     Signed 32-bit integer

ptp.v2.an.origintimestamp.seconds    originTimestamp (seconds)
                                     Unsigned 64-bit integer

ptp.v2.an.priority1                priority1
                                     Unsigned 8-bit integer

ptp.v2.an.priority2                priority2
                                     Unsigned 8-bit integer

ptp.v2.clockidentity                ClockIdentity
                                     Unsigned 64-bit integer

ptp.v2.control                      control
                                     Unsigned 8-bit integer

ptp.v2.correction.ns                correction
                                     Unsigned 64-bit integer

ptp.v2.correction.subns             correctionSubNs
                                     Double-precision floating point

ptp.v2.dr.receivetimestamp           receiveTimestamp
                                     Time duration

ptp.v2.dr.receivetimestamp.nanoseconds  receiveTimestamp (nanoseconds)
                                     Signed 32-bit integer

ptp.v2.dr.receivetimestamp.seconds    receiveTimestamp (seconds)
                                     Unsigned 64-bit integer

ptp.v2.dr.requestingsourceportid    requestingSourcePortId
                                     Unsigned 16-bit integer

ptp.v2.dr.requestingsourceportidentity  requestingSourcePortIdentity
                                     Unsigned 64-bit integer

ptp.v2.flags                        flags
                                     Unsigned 16-bit integer
```

```
ptp.v2.flags.alternatemaster  PTP_ALTERNATE_MASTER
    Boolean
ptp.v2.flags.frequencytraceable  FREQUENCY_TRACEABLE
    Boolean
ptp.v2.flags.li59  PTP_LI_59
    Boolean
ptp.v2.flags.li61  PTP_LI_61
    Boolean
ptp.v2.flags.security  PTP_SECURITY
    Boolean
ptp.v2.flags.specific1  PTP profile Specific 1
    Boolean
ptp.v2.flags.specific2  PTP profile Specific 2
    Boolean
ptp.v2.flags.timescale  PTP_TIMESCALE
    Boolean
ptp.v2.flags.timetraceable  TIME_TRACEABLE
    Boolean
ptp.v2.flags.twostep  PTP_TWO_STEP
    Boolean
ptp.v2.flags.unicast  PTP_UNICAST
    Boolean
ptp.v2.flags.utcreasonable  PTP_UTC_REASONABLE
    Boolean
ptp.v2.fu.preciseorigintimestamp  preciseOriginTimestamp
    Time duration
ptp.v2.fu.preciseorigintimestamp.nanoseconds  preciseOriginTimestamp (nanosecond)
    Signed 32-bit integer
ptp.v2.fu.preciseorigintimestamp.seconds  preciseOriginTimestamp (seconds)
    Unsigned 64-bit integer
ptp.v2.logmessageperiod  logMessagePeriod
    Signed 8-bit integer
ptp.v2.messageid  messageId
    Unsigned 8-bit integer
ptp.v2.messagelength  messageLength
    Unsigned 16-bit integer
ptp.v2.mm.AlternateMulticastSyncInterval  Alternate multicast sync interval
    Signed 8-bit integer
ptp.v2.mm.CurrentUTCOffsetValid  CurrentUTCOffset valid
    Boolean
ptp.v2.mm.PortNumber  PortNumber
    Unsigned 16-bit integer
ptp.v2.mm.SlavOnly  Slave only
    Boolean
```

```
ptp.v2.mm.action      action
    Unsigned 8-bit integer

ptp.v2.mm.announceReceiptTimeout  announceReceiptTimeout
    Unsigned 8-bit integer

ptp.v2.mm.boundaryhops  boundaryHops
    Unsigned 8-bit integer

ptp.v2.mm.clockType    clockType
    Unsigned 16-bit integer

ptp.v2.mm.clockType.BC  The node implements a boundary clock
    Boolean

ptp.v2.mm.clockType.MM  The node implements a management node
    Boolean

ptp.v2.mm.clockType.OC  The node implements an ordinary clock
    Boolean

ptp.v2.mm.clockType.e2e_TC  The node implements an end-to-end transparent clock
    Boolean

ptp.v2.mm.clockType.p2p_TC  The node implements a peer-to-peer transparent clock
    Boolean

ptp.v2.mm.clockType.reserved  Reserved
    Boolean

ptp.v2.mm.clockaccuracy  Clock accuracy
    Unsigned 8-bit integer

ptp.v2.mm.clockclass    Clock class
    Unsigned 8-bit integer

ptp.v2.mm.clockidentity  Clock identity
    Unsigned 64-bit integer

ptp.v2.mm.clockvariance  Clock variance
    Signed 16-bit integer

ptp.v2.mm.currentOffset  Current offset
    Signed 32-bit integer

ptp.v2.mm.currentutcoffset  CurrentUTCOffset
    Signed 16-bit integer

ptp.v2.mm.data          data
    Byte array

ptp.v2.mm.delayMechanism  Delay mechanism
    Unsigned 8-bit integer

ptp.v2.mm.displayData   Display data
    String

ptp.v2.mm.displayName   Display name
    String

ptp.v2.mm.domainNumber  domain number
    Unsigned 8-bit integer

ptp.v2.mm.faultRecordLength  fault record length
    Unsigned 16-bit integer
```

```
ptp.v2.mm.faultyFlag    Faulty flag
                        Boolean

ptp.v2.mm.frequencyTraceable  Frequency traceable
                        Boolean

ptp.v2.mm.grandmasterPriority1  Grandmaster priority1
                        Unsigned 8-bit integer

ptp.v2.mm.grandmasterPriority2  Grandmaster priority2
                        Unsigned 8-bit integer

ptp.v2.mm.grandmasterclockaccuracy  Grandmaster clock accuracy
                        Unsigned 8-bit integer

ptp.v2.mm.grandmasterclockclass  Grandmaster clock class
                        Unsigned 8-bit integer

ptp.v2.mm.grandmasterclockidentity  Grandmaster clock identity
                        Unsigned 64-bit integer

ptp.v2.mm.grandmasterclockvariance  Grandmaster clock variance
                        Signed 16-bit integer

ptp.v2.mm.initializationKey  initialization key
                        Unsigned 16-bit integer

ptp.v2.mm.jumpSeconds  Jump seconds
                        Signed 32-bit integer

ptp.v2.mm.keyField  Key field
                        Unsigned 8-bit integer

ptp.v2.mm.lengthField  lengthField
                        Unsigned 16-bit integer

ptp.v2.mm.li59  leap 59
                        Boolean

ptp.v2.mm.li61  leap 61
                        Boolean

ptp.v2.mm.logAnnounceInterval  logAnnounceInterval
                        Signed 8-bit integer

ptp.v2.mm.logMinDelayReqInterval  logMinDelayReqInterval
                        Signed 8-bit integer

ptp.v2.mm.logMinPdelayReqInterval  logMinPdelayReqInterval
                        Signed 8-bit integer

ptp.v2.mm.logSyncInterval  logSyncInterval
                        Signed 8-bit integer

ptp.v2.mm.managementErrorId  managementErrorId
                        Unsigned 16-bit integer

ptp.v2.mm.managementId  managementId
                        Unsigned 16-bit integer

ptp.v2.mm.maxKey  Max key
                        Unsigned 8-bit integer

ptp.v2.mm.networkProtocol  network protocol
                        Unsigned 16-bit integer
```

```
ptp.v2.mm.numberofAlternateMasters  Number of alternate masters
    Unsigned 8-bit integer
ptp.v2.mm.observedParentClockPhaseChangeRate  observedParentClockPhaseChangeRate
    Signed 32-bit integer
ptp.v2.mm.observedParentOffsetScaledLogVariance  observedParentOffsetScaledLogVariance
    Unsigned 16-bit integer
ptp.v2.mm.offset.ns  correction
    Unsigned 64-bit integer
ptp.v2.mm.offset.subns  SubNs
    Double-precision floating point
ptp.v2.mm.parentclockidentity  parent ClockIdentity
    Unsigned 64-bit integer
ptp.v2.mm.parentsourceportid  parent SourcePortID
    Unsigned 16-bit integer
ptp.v2.mm.parentstats  parent stats
    Boolean
ptp.v2.mm.pathDelay.ns  ns
    Unsigned 64-bit integer
ptp.v2.mm.pathDelay.subns  SubNs
    Double-precision floating point
ptp.v2.mm.pathTraceEnable  Path trace unicast
    Boolean
ptp.v2.mm.peerMeanPathDelay.ns  ns
    Unsigned 64-bit integer
ptp.v2.mm.peerMeanPathDelay.subns  SubNs
    Double-precision floating point
ptp.v2.mm.physicalLayerProtocol  physicalLayerProtocol
    String
ptp.v2.mm.portState  Port state
    Unsigned 8-bit integer
ptp.v2.mm.primaryDomain  Primary domain number
    Unsigned 8-bit integer
ptp.v2.mm.priority1  priority1
    Unsigned 8-bit integer
ptp.v2.mm.priority2  priority2
    Unsigned 8-bit integer
ptp.v2.mm.ptp.v2.mm.currentTime  current time
    Time duration
ptp.v2.mm.ptp.v2.mm.currentTime.nanoseconds  current time (nanoseconds)
    Signed 32-bit integer
ptp.v2.mm.ptp.v2.mm.displayData.length  length
    Unsigned 8-bit integer
ptp.v2.mm.ptp.v2.mm.displayName.length  length
    Unsigned 8-bit integer
```

```
ptp.v2.mm.ptp.v2.mm.faultDescription  faultDescription
String

ptp.v2.mm.ptp.v2.mm.faultDescription.length  length
Unsigned 8-bit integer

ptp.v2.mm.ptp.v2.mm.faultName  faultName
String

ptp.v2.mm.ptp.v2.mm.faultName.length  length
Unsigned 8-bit integer

ptp.v2.mm.ptp.v2.mm.faultRecord  fault record
Byte array

ptp.v2.mm.ptp.v2.mm.faultTime  Fault time
Time duration

ptp.v2.mm.ptp.v2.mm.faultTime.nanoseconds  Fault time (nanoseconds)
Signed 32-bit integer

ptp.v2.mm.ptp.v2.mm.faultTime.seconds  Fault time (seconds)
Unsigned 64-bit integer

ptp.v2.mm.ptp.v2.mm.faultValue  faultValue
String

ptp.v2.mm.ptp.v2.mm.faultValue.length  length
Unsigned 8-bit integer

ptp.v2.mm.ptp.v2.mm.manufacturerIdentity  manufacturer identity
Byte array

ptp.v2.mm.ptp.v2.mm.numberOfFaultRecords  number of fault records
Unsigned 16-bit integer

ptp.v2.mm.ptp.v2.mm.numberPorts  number of ports
Unsigned 16-bit integer

ptp.v2.mm.ptp.v2.mm.pad  Pad
Byte array

ptp.v2.mm.ptp.v2.mm.physicalAddress  physical address
Byte array

ptp.v2.mm.ptp.v2.mm.physicalAddressLength  physical address length
Unsigned 16-bit integer

ptp.v2.mm.ptp.v2.mm.physicalLayerProtocol.length  length
Unsigned 8-bit integer

ptp.v2.mm.ptp.v2.mm.productDescription  product description
String

ptp.v2.mm.ptp.v2.mm.productDescription.length  length
Unsigned 8-bit integer

ptp.v2.mm.ptp.v2.mm.profileIdentity  profileIdentity
Byte array

ptp.v2.mm.ptp.v2.mm.protocolAddress  protocol address
Byte array

ptp.v2.mm.ptp.v2.mm.protocolAddress.length  length
Unsigned 16-bit integer
```



```
ptp.v2.mm.ptp.v2.mm.reserved reserved
    Byte array
ptp.v2.mm.ptp.v2.mm.revisionData revision data
    String
ptp.v2.mm.ptp.v2.mm.revisionData.length length
    Unsigned 8-bit integer
ptp.v2.mm.ptp.v2.mm.userDescription user description
    String
ptp.v2.mm.ptp.v2.mm.userDescription.length length
    Unsigned 8-bit integer
ptp.v2.mm.ptptimescale PTP timescale
    Boolean
ptp.v2.mm.severityCode severity code
    Unsigned 8-bit integer
ptp.v2.mm.startingboundaryhops startingBoundaryHops
    Unsigned 8-bit integer
ptp.v2.mm.stepsRemoved steps removed
    Signed 16-bit integer
ptp.v2.mm.targetportid targetPortId
    Unsigned 16-bit integer
ptp.v2.mm.targetportidentity targetPortIdentity
    Unsigned 64-bit integer
ptp.v2.mm.timeTraceable Time traceable
    Boolean
ptp.v2.mm.timesource TimeSource
    Unsigned 8-bit integer
ptp.v2.mm.tlvType tlvType
    Unsigned 16-bit integer
ptp.v2.mm.transmitAlternateMulticastSync Transmit alternate multicast sync
    Boolean
ptp.v2.mm.twoStep Two step
    Boolean
ptp.v2.mm.unicastEnable Enable unicast
    Boolean
ptp.v2.mm.versionNumber versionNumber
    Unsigned 8-bit integer
ptp.v2.pdfu.requestingportidentity requestingSourcePortIdentity
    Unsigned 64-bit integer
ptp.v2.pdfu.requestingsourceportid requestingSourcePortId
    Unsigned 16-bit integer
ptp.v2.pdfu.responseorigintimestamp responseOriginTimestamp
    Time duration
ptp.v2.pdfu.responseorigintimestamp.nanoseconds responseOriginTimestamp (nanosec
    Signed 32-bit integer
```

```
ptp.v2.pdfu.responseorigintimestamp.seconds  responseOriginTimestamp (seconds)
    Unsigned 64-bit integer
ptp.v2.pdrq.origintimestamp  originTimestamp
    Time duration
ptp.v2.pdrq.origintimestamp.nanoseconds  originTimestamp (nanoseconds)
    Signed 32-bit integer
ptp.v2.pdrq.origintimestamp.seconds  originTimestamp (seconds)
    Unsigned 64-bit integer
ptp.v2.pdrs.requestingportidentity  requestingSourcePortIdentity
    Unsigned 64-bit integer
ptp.v2.pdrs.requestingsourceportid  requestingSourcePortId
    Unsigned 16-bit integer
ptp.v2.pdrs.requestreceipttimestamp  requestreceiptTimestamp
    Time duration
ptp.v2.pdrs.requestreceipttimestamp.nanoseconds  requestreceiptTimestamp (nanose
    Signed 32-bit integer
ptp.v2.pdrs.requestreceipttimestamp.seconds  requestreceiptTimestamp (seconds)
    Unsigned 64-bit integer
ptp.v2.sdr.origintimestamp  originTimestamp
    Time duration
ptp.v2.sdr.origintimestamp.nanoseconds  originTimestamp (nanoseconds)
    Signed 32-bit integer
ptp.v2.sdr.origintimestamp.seconds  originTimestamp (seconds)
    Unsigned 64-bit integer
ptp.v2.sequenceid  sequenceId
    Unsigned 16-bit integer
ptp.v2.sig.targetportid  targetPortId
    Unsigned 16-bit integer
ptp.v2.sig.targetportidentity  targetPortIdentity
    Unsigned 64-bit integer
ptp.v2.sourceportid  SourcePortID
    Unsigned 16-bit integer
ptp.v2.subdomainnumber  subdomainNumber
    Unsigned 8-bit integer
ptp.v2.timesource  TimeSource
    Unsigned 8-bit integer
ptp.v2.transportspecific  transportSpecific
    Unsigned 8-bit integer
ptp.v2.transportspecific.802.1asconform  802.1as conform
    Boolean
ptp.v2.transportspecific.v1compatibility  V1 Compatibility
    Boolean
ptp.v2.versionptp  versionPTP
    Unsigned 8-bit integer
```

```
ptp.versionnetwork  versionNetwork
    Unsigned 16-bit integer
ptp.versionptp      versionPTP
    Unsigned 16-bit integer
```

**Printer Access Protocol (apap)**

```
pad.pad  Pad
    No value
    Pad Byte

pap.connid  ConnID
    Unsigned 8-bit integer
    PAP connection ID

pap.eof  EOF
    Boolean
    EOF

pap.function  Function
    Unsigned 8-bit integer
    PAP function

pap.quantum  Quantum
    Unsigned 8-bit integer
    Flow quantum

pap.seq  Sequence
    Unsigned 16-bit integer
    Sequence number

pap.socket  Socket
    Unsigned 8-bit integer
    ATP responding socket number

pap.status  Status
    String
    Printer status
```

**Prism capture header (prism)**

```
prism.frmlen.data  Frame Length Field
    Unsigned 32-bit integer

prism.istx.data  IstX Field
    Unsigned 32-bit integer

prism.msgcode  Message Code
    Unsigned 32-bit integer

prism.msglen  Message Length
    Unsigned 32-bit integer

prism.noise.data  Noise Field
    Unsigned 32-bit integer

prism.rate.data  Rate Field
    Unsigned 32-bit integer

prism.rssi.data  RSSI Field
    Unsigned 32-bit integer
```

prism.signal.data Signal Field  
Unsigned 32-bit integer

prism.sq.data SQ Field  
Unsigned 32-bit integer

#### **Privilege Server operations (rpriv)**

rpriv.get\_eptgt\_rqst\_authn\_svc Authn\_Svc  
Unsigned 32-bit integer

rpriv.get\_eptgt\_rqst\_authz\_svc Authz\_Svc  
Unsigned 32-bit integer

rpriv.get\_eptgt\_rqst\_key\_size Key\_Size  
Unsigned 32-bit integer

rpriv.get\_eptgt\_rqst\_key\_size2 Key\_Size  
Unsigned 32-bit integer

rpriv.get\_eptgt\_rqst\_key\_t Key\_t  
String

rpriv.get\_eptgt\_rqst\_key\_t2 Key\_t2  
String

rpriv.get\_eptgt\_rqst\_var1 Var1  
Unsigned 32-bit integer

rpriv.opnum Operation  
Unsigned 16-bit integer  
Operation

#### **Pro-MPEG Code of Practice #3 release 2 FEC Protocol (2dparityfec)**

2dparityfec.d Row FEC (D)  
Boolean

2dparityfec.e RFC2733 Extension (E)  
Boolean

2dparityfec.index Index  
Unsigned 8-bit integer

2dparityfec.lr Length recovery  
Unsigned 16-bit integer

2dparityfec.mask Mask  
Unsigned 24-bit integer

2dparityfec.na NA  
Unsigned 8-bit integer

2dparityfec.offset Offset  
Unsigned 8-bit integer

2dparityfec.payload FEC Payload  
Byte array

2dparityfec.ptr Payload Type recovery  
Unsigned 8-bit integer

2dparityfec.snbase\_ext SNBase ext  
Unsigned 8-bit integer

2dparityfec.snbase\_low SNBase low  
Unsigned 16-bit integer

2dparityfec.tsr Timestamp recovery  
Unsigned 32-bit integer

2dparityfec.type Type  
Unsigned 8-bit integer

2dparityfec.x Pro-MPEG Extension (X)  
Boolean

**Protocol Independent Multicast (pim)**

pim.cksum Checksum  
Unsigned 16-bit integer

pim.code Code  
Unsigned 8-bit integer

pim.type Type  
Unsigned 8-bit integer

pim.version Version  
Unsigned 8-bit integer

**Protocol for carrying Authentication for Network Access (pana)**

pana.avp.code AVP Code  
Unsigned 16-bit integer

pana.avp.data.bytes Value  
Byte array

pana.avp.data.enum Value  
Signed 32-bit integer

pana.avp.data.int32 Value  
Signed 32-bit integer

pana.avp.data.int64 Value  
Signed 64-bit integer

pana.avp.data.string Value  
String

pana.avp.data.uint32 Value  
Unsigned 32-bit integer

pana.avp.data.uint64 Value  
Unsigned 64-bit integer

pana.avp.flags AVP Flags  
Unsigned 16-bit integer

pana.avp.flags.v Vendor  
Boolean

pana.avp.length AVP Length  
Unsigned 16-bit integer

pana.avp.reserved AVP Reserved  
Unsigned 16-bit integer

pana.avp.vendorid AVP Vendor ID  
Unsigned 32-bit integer

```
pana.flags  Flags
            Unsigned 8-bit integer
pana.flags.a  Auth
            Boolean
pana.flags.c  Complete
            Boolean
pana.flags.i  IP Reconfig
            Boolean
pana.flags.p  Ping
            Boolean
pana.flags.r  Request
            Boolean
pana.flags.s  Start
            Boolean
pana.length  PANA Message Length
            Unsigned 16-bit integer
pana.reserved  PANA Reserved
            Unsigned 16-bit integer
pana.response_in  Response In
            Frame number
            The response to this PANA request is in this frame
pana.response_to  Request In
            Frame number
            This is a response to the PANA request in this frame
pana.seq  PANA Sequence Number
            Unsigned 32-bit integer
pana.sid  PANA Session ID
            Unsigned 32-bit integer
pana.time  Time
            Time duration
            The time between the Call and the Reply
pana.type  PANA Message Type
            Unsigned 16-bit integer
```

**Q.2931 (q2931)**

```
q2931.call_ref  Call reference value
            Byte array
q2931.call_ref_flag  Call reference flag
            Boolean
q2931.call_ref_len  Call reference value length
            Unsigned 8-bit integer
q2931.disc  Protocol discriminator
            Unsigned 8-bit integer
q2931.message_action_indicator  Action indicator
            Unsigned 8-bit integer
```

q2931.message\_flag Flag  
Boolean

q2931.message\_len Message length  
Unsigned 16-bit integer

q2931.message\_type Message type  
Unsigned 8-bit integer

q2931.message\_type\_ext Message type extension  
Unsigned 8-bit integer

**Q.931 (q931)**

q931.call\_ref Call reference value  
Byte array

q931.call\_ref\_flag Call reference flag  
Boolean

q931.call\_ref\_len Call reference value length  
Unsigned 8-bit integer

q931.called\_party\_number.digits Called party number digits  
String

q931.calling\_party\_number.digits Calling party number digits  
String

q931.cause\_location Cause location  
Unsigned 8-bit integer

q931.cause\_value Cause value  
Unsigned 8-bit integer

q931.channel.dchan D-channel indicator  
Boolean  
True if the identified channel is the D-Channel

q931.channel.element\_type Element type  
Unsigned 8-bit integer  
Type of element in the channel number/slot map octets

q931.channel.exclusive Indicated channel is exclusive  
Boolean  
True if only the indicated channel is acceptable

q931.channel.interface\_id\_present Interface identifier present  
Boolean  
True if the interface identifier is explicit in the following octets

q931.channel.interface\_type Interface type  
Boolean  
Identifies the ISDN interface type

q931.channel.map Number/map  
Boolean  
True if channel is indicates by channel map rather than number

q931.channel.number Channel number  
Unsigned 8-bit integer  
Channel number

q931.channel.selection Information channel selection  
Unsigned 8-bit integer  
Identifies the information channel to be used

q931.coding\_standard Coding standard  
Unsigned 8-bit integer

q931.connected\_number.digits Connected party number digits  
String

q931.disc Protocol discriminator  
Unsigned 8-bit integer

q931.extension\_ind Extension indicator  
Boolean

q931.information\_transfer\_capability Information transfer capability  
Unsigned 8-bit integer

q931.information\_transfer\_rate Information transfer rate  
Unsigned 8-bit integer

q931.message\_type Message type  
Unsigned 8-bit integer

q931.number\_type Number type  
Unsigned 8-bit integer

q931.numbering\_plan Numbering plan  
Unsigned 8-bit integer

q931.presentation\_ind Presentation indicator  
Unsigned 8-bit integer

q931.reassembled\_in Reassembled Q.931 in frame  
Frame number  
This Q.931 message is reassembled in this frame

q931.redirecting\_number.digits Redirecting party number digits  
String

q931.screening\_ind Screening indicator  
Unsigned 8-bit integer

q931.segment Q.931 Segment  
Frame number  
Q.931 Segment

q931.segment.error Defragmentation error  
Frame number  
Defragmentation error due to illegal fragments

q931.segment.multipletails Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

q931.segment.overlap Segment overlap  
Boolean  
Fragment overlaps with other fragments

q931.segment.overlap.conflict Conflicting data in fragment overlap  
Boolean  
Overlapping fragments contained conflicting data



q931.segment.toolongfragment Segment too long  
Boolean  
Segment contained data past end of packet

q931.segment\_type Segmented message type  
Unsigned 8-bit integer

q931.segments Q.931 Segments  
No value  
Q.931 Segments

q931.transfer\_mode Transfer mode  
Unsigned 8-bit integer

q931.uill User information layer 1 protocol  
Unsigned 8-bit integer

### Q.932 (q932)

q932.InterpretationComponent InterpretationComponent  
Unsigned 32-bit integer  
q932.InterpretationComponent

q932.NetworkFacilityExtension NetworkFacilityExtension  
No value  
q932.NetworkFacilityExtension

q932.NetworkProtocolProfile NetworkProtocolProfile  
Unsigned 32-bit integer  
q932.NetworkProtocolProfile

q932.dataPartyNumber dataPartyNumber  
String  
q932.NumberDigits

q932.destinationEntity destinationEntity  
Unsigned 32-bit integer  
q932.EntityType

q932.destinationEntityAddress destinationEntityAddress  
Unsigned 32-bit integer  
q932.AddressInformation

q932.ie.data Data  
Byte array  
Data

q932.ie.len Length  
Unsigned 8-bit integer  
Information Element Length

q932.ie.type Type  
Unsigned 8-bit integer  
Information Element Type

q932.nSAPSubaddress nSAPSubaddress  
Byte array  
q932.NSAPSubaddress

q932.nationalStandardPartyNumber nationalStandardPartyNumber  
String  
q932.NumberDigits

```
q932.nd Notification description
    Unsigned 8-bit integer
    Notification description

q932.nsapEncodedNumber nsapEncodedNumber
    Byte array
    q932.NsapEncodedNumber

q932.numberNotAvailableDueToInterworking numberNotAvailableDueToInterworking
    No value
    q932.NULL

q932.numberNotAvailableDueToInterworking numberNotAvailableDueToInterworking
    No value
    q932.NULL

q932.oddCountIndicator oddCountIndicator
    Boolean
    q932.BOOLEAN

q932.partyNumber partyNumber
    Unsigned 32-bit integer
    q932.PartyNumber

q932.partySubaddress partySubaddress
    Unsigned 32-bit integer
    q932.PartySubaddress

q932.pp Protocol profile
    Unsigned 8-bit integer
    Protocol profile

q932.presentationAllowedAddress presentationAllowedAddress
    No value
    q932.AddressScreened

q932.presentationAllowedAddress presentationAllowedAddress
    No value
    q932.Address

q932.presentationAllowedNumber presentationAllowedNumber
    No value
    q932.NumberScreened

q932.presentationRestricted presentationRestricted
    No value
    q932.NULL

q932.presentationRestrictedAddress presentationRestrictedAddress
    No value
    q932.AddressScreened

q932.presentationRestrictedNumber presentationRestrictedNumber
    No value
    q932.NumberScreened

q932.privateNumberDigits privateNumberDigits
    String
    q932.NumberDigits

q932.privatePartyNumber privatePartyNumber
    No value
    q932.PrivatePartyNumber
```

```

q932.privateTypeOfNumber privateTypeOfNumber
    Unsigned 32-bit integer
    q932.PrivateTypeOfNumber

q932.publicNumberDigits publicNumberDigits
    String
    q932.NumberDigits

q932.publicPartyNumber publicPartyNumber
    No value
    q932.PublicPartyNumber

q932.publicTypeOfNumber publicTypeOfNumber
    Unsigned 32-bit integer
    q932.PublicTypeOfNumber

q932.screeningIndicator screeningIndicator
    Unsigned 32-bit integer
    q932.ScreeningIndicator

q932.screeningIndicator screeningIndicator
    Unsigned 32-bit integer
    q932.ScreeningIndicator

q932.sourceEntity sourceEntity
    Unsigned 32-bit integer
    q932.EntityType

q932.sourceEntityAddress sourceEntityAddress
    Unsigned 32-bit integer
    q932.AddressInformation

q932.subaddressInformation subaddressInformation
    Byte array
    q932.SubaddressInformation

q932.telexPartyNumber telexPartyNumber
    String
    q932.NumberDigits

q932.unknownPartyNumber unknownPartyNumber
    String
    q932.NumberDigits

q932.userSpecifiedSubaddress userSpecifiedSubaddress
    No value
    q932.UserSpecifiedSubaddress

```

#### **Q.932 Operations Service Element (q932.ros)**

```

q932.ros.InvokeId_present InvokeId.present
    Signed 32-bit integer
    q932_ros.InvokeId_present

q932.ros.ROS ROS
    Unsigned 32-bit integer
    q932_ros.ROS

q932.ros.absent absent
    No value
    q932_ros.NULL

```

```
q932.ros.argument  argument
    Byte array
    q932_ros.InvokeArgument
q932.ros.errcode  errcode
    Unsigned 32-bit integer
    q932_ros.Code
q932.ros.general  general
    Signed 32-bit integer
    q932_ros.GeneralProblem
q932.ros.global  global
    q932_ros.T_global
q932.ros.invoke  invoke
    No value
    q932_ros.Invoke
q932.ros.invokeId  invokeId
    Unsigned 32-bit integer
    q932_ros.InvokeId
q932.ros.linkedId  linkedId
    Unsigned 32-bit integer
    q932_ros.T_linkedId
q932.ros.local  local
    Signed 32-bit integer
    q932_ros.T_local
q932.ros.opcode  opcode
    Unsigned 32-bit integer
    q932_ros.Code
q932.ros.parameter  parameter
    Byte array
    q932_ros.T_parameter
q932.ros.present  present
    Signed 32-bit integer
    q932_ros.T_linkedIdPresent
q932.ros.problem  problem
    Unsigned 32-bit integer
    q932_ros.T_problem
q932.ros.reject  reject
    No value
    q932_ros.Reject
q932.ros.result  result
    No value
    q932_ros.T_result
q932.ros.returnValue  returnValue
    No value
    q932_ros.ReturnError
q932.ros.returnValue  returnValue
    No value
    q932_ros.ReturnResult
```

**Q.933 (q933)**

q933.call\_ref Call reference value  
Byte array

q933.call\_ref\_flag Call reference flag  
Boolean

q933.call\_ref\_len Call reference value length  
Unsigned 8-bit integer

q933.called\_party\_number.digits Called party number digits  
String

q933.calling\_party\_number.digits Calling party number digits  
String

q933.cause\_location Cause location  
Unsigned 8-bit integer

q933.cause\_value Cause value  
Unsigned 8-bit integer

q933.coding\_standard Coding standard  
Unsigned 8-bit integer

q933.connected\_number.digits Connected party number digits  
String

q933.disc Protocol discriminator  
Unsigned 8-bit integer

q933.extension\_ind Extension indicator  
Boolean

q933.information\_transfer\_capability Information transfer capability  
Unsigned 8-bit integer

q933.link\_verification.rxseq RX Sequence  
Unsigned 8-bit integer

q933.link\_verification.txseq TX Sequence  
Unsigned 8-bit integer

q933.message\_type Message type  
Unsigned 8-bit integer

q933.number\_type Number type  
Unsigned 8-bit integer

q933.numbering\_plan numbering plan  
Unsigned 8-bit integer

q933.presentation\_ind Presentation indicator  
Unsigned 8-bit integer

q933.redirecting\_number.digits Redirecting party number digits  
String

q933.report\_type Report type  
Unsigned 8-bit integer

q933.screening\_ind Screening indicator  
Unsigned 8-bit integer

q933.transfer\_mode Transfer mode  
Unsigned 8-bit integer

q933.uill1 User information layer 1 protocol  
Unsigned 8-bit integer

**QSIG (qsig)**

qsig.aoc.AOCSCurrencyInfoList\_item Item  
No value  
qsig\_aoc.AOCSCurrencyInfo

qsig.aoc.AocCompleteArg AocCompleteArg  
No value  
qsig\_aoc.AocCompleteArg

qsig.aoc.AocCompleteRes AocCompleteRes  
No value  
qsig\_aoc.AocCompleteRes

qsig.aoc.AocDivChargeReqArg AocDivChargeReqArg  
No value  
qsig\_aoc.AocDivChargeReqArg

qsig.aoc.AocFinalArg AocFinalArg  
No value  
qsig\_aoc.AocFinalArg

qsig.aoc.AocInterimArg AocInterimArg  
No value  
qsig\_aoc.AocInterimArg

qsig.aoc.AocRateArg AocRateArg  
No value  
qsig\_aoc.AocRateArg

qsig.aoc.ChargeRequestArg ChargeRequestArg  
No value  
qsig\_aoc.ChargeRequestArg

qsig.aoc.ChargeRequestRes ChargeRequestRes  
No value  
qsig\_aoc.ChargeRequestRes

qsig.aoc.DummyArg DummyArg  
Unsigned 32-bit integer  
qsig\_aoc.DummyArg

qsig.aoc.Extension Extension  
No value  
qsig.Extension

qsig.aoc.adviceModeCombination adviceModeCombination  
Unsigned 32-bit integer  
qsig\_aoc.AdviceModeCombination

qsig.aoc.adviceModeCombinations adviceModeCombinations  
Unsigned 32-bit integer  
qsig\_aoc.SEQUENCE\_SIZE\_0\_7\_OF\_AdviceModeCombination

qsig.aoc.adviceModeCombinations\_item Item  
Unsigned 32-bit integer  
qsig\_aoc.AdviceModeCombination

```
qsig.aoc.aocDivChargeReqArgExt  aocDivChargeReqArgExt
    Unsigned 32-bit integer
    qsig_aoc.T_aocDivChargeReqArgExt

qsig.aoc.aocRate  aocRate
    Unsigned 32-bit integer
    qsig_aoc.T_aocRate

qsig.aoc.aocSCurrencyInfoList  aocSCurrencyInfoList
    Unsigned 32-bit integer
    qsig_aoc.AOCSCurrencyInfoList

qsig.aoc.chargeIdentifier  chargeIdentifier
    Signed 32-bit integer
    qsig_aoc.ChargeIdentifier

qsig.aoc.chargeNotAvailable  chargeNotAvailable
    No value
    qsig_aoc.NULL

qsig.aoc.chargeNumber  chargeNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.aoc.chargeReqArgExtension  chargeReqArgExtension
    Unsigned 32-bit integer
    qsig_aoc.T_chargeReqArgExtension

qsig.aoc.chargeReqResExtension  chargeReqResExtension
    Unsigned 32-bit integer
    qsig_aoc.T_chargeReqResExtension

qsig.aoc.chargedItem  chargedItem
    Unsigned 32-bit integer
    qsig_aoc.ChargedItem

qsig.aoc.chargedUser  chargedUser
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.aoc.chargingAssociation  chargingAssociation
    Unsigned 32-bit integer
    qsig_aoc.ChargingAssociation

qsig.aoc.chargingOption  chargingOption
    Unsigned 32-bit integer
    qsig_aoc.ChargingOption

qsig.aoc.completeArgExtension  completeArgExtension
    Unsigned 32-bit integer
    qsig_aoc.T_completeArgExtension

qsig.aoc.completeResExtension  completeResExtension
    Unsigned 32-bit integer
    qsig_aoc.T_completeResExtension

qsig.aoc.currencyAmount  currencyAmount
    Unsigned 32-bit integer
    qsig_aoc.CurrencyAmount

qsig.aoc.currencyInfoNotAvailable  currencyInfoNotAvailable
    No value
    qsig_aoc.NULL
```

```
qsig.aoc.dAmount    dAmount
    No value
    qsig_aoc.Amount

qsig.aoc.dChargingType dChargingType
    Unsigned 32-bit integer
    qsig_aoc.ChargingType

qsig.aoc.dCurrency  dCurrency
    String
    qsig_aoc.Currency

qsig.aoc.dGranularity dGranularity
    No value
    qsig_aoc.Time

qsig.aoc.dTime      dTime
    No value
    qsig_aoc.Time

qsig.aoc.diversionType diversionType
    Unsigned 32-bit integer
    qsig_aoc.DiversionType

qsig.aoc.divertingUser divertingUser
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.aoc.durationCurrency durationCurrency
    No value
    qsig_aoc.DurationCurrency

qsig.aoc.extension  extension
    No value
    qsig.Extension

qsig.aoc.fRAmount    fRAmount
    No value
    qsig_aoc.Amount

qsig.aoc.fRCurrency fRCurrency
    String
    qsig_aoc.Currency

qsig.aoc.finalArgExtension finalArgExtension
    Unsigned 32-bit integer
    qsig_aoc.T_finalArgExtension

qsig.aoc.finalBillingId finalBillingId
    Unsigned 32-bit integer
    qsig_aoc.FinalBillingId

qsig.aoc.finalCharge finalCharge
    Unsigned 32-bit integer
    qsig_aoc.T_finalCharge

qsig.aoc.flatRateCurrency flatRateCurrency
    No value
    qsig_aoc.FlatRateCurrency

qsig.aoc.freeOfCharge freeOfCharge
    No value
    qsig_aoc.NULL
```



```
qsig.aoc.freeOfChargefromBeginning  freeOfChargefromBeginning
    No value
    qsig_aoc.NULL

qsig.aoc.interimArgExtension  interimArgExtension
    Unsigned 32-bit integer
    qsig_aoc.T_interimArgExtension

qsig.aoc.interimBillingId  interimBillingId
    Unsigned 32-bit integer
    qsig_aoc.InterimBillingId

qsig.aoc.interimCharge  interimCharge
    Unsigned 32-bit integer
    qsig_aoc.T_interimCharge

qsig.aoc.lengthOfTimeUnit  lengthOfTimeUnit
    Unsigned 32-bit integer
    qsig_aoc.LengthOfTimeUnit

qsig.aoc.multipleExtension  multipleExtension
    Unsigned 32-bit integer
    qsig_aoc.SEQUENCE_OF_Extension

qsig.aoc.multipleExtension_item  Item
    No value
    qsig.Extension

qsig.aoc.multiplier  multiplier
    Unsigned 32-bit integer
    qsig_aoc.Multiplier

qsig.aoc.none  none
    No value
    qsig_aoc.NULL

qsig.aoc.rAmount  rAmount
    No value
    qsig_aoc.Amount

qsig.aoc.rCurrency  rCurrency
    String
    qsig_aoc.Currency

qsig.aoc.rateArgExtension  rateArgExtension
    Unsigned 32-bit integer
    qsig_aoc.T_rateArgExtension

qsig.aoc.rateType  rateType
    Unsigned 32-bit integer
    qsig_aoc.T_rateType

qsig.aoc.recordedCurrency  recordedCurrency
    No value
    qsig_aoc.RecordedCurrency

qsig.aoc.scale  scale
    Unsigned 32-bit integer
    qsig_aoc.Scale

qsig.aoc.specialChargingCode  specialChargingCode
    Unsigned 32-bit integer
    qsig_aoc.SpecialChargingCode
```

```
qsig.aoc.specificCurrency  specificCurrency
    No value
    qsig_aoc.T_specificCurrency
qsig.aoc.vRAmount  vRAmount
    No value
    qsig_aoc.Amount
qsig.aoc.vRCurrency  vRCurrency
    String
    qsig_aoc.Currency
qsig.aoc.vRVolumeUnit  vRVolumeUnit
    Unsigned 32-bit integer
    qsig_aoc.VolumeUnit
qsig.aoc.volumeRateCurrency  volumeRateCurrency
    No value
    qsig_aoc.VolumeRateCurrency
qsig.cc.CcExtension  CcExtension
    Unsigned 32-bit integer
    qsig_cc.CcExtension
qsig.cc.CcOptionalArg  CcOptionalArg
    Unsigned 32-bit integer
    qsig_cc.CcOptionalArg
qsig.cc.CcRequestArg  CcRequestArg
    No value
    qsig_cc.CcRequestArg
qsig.cc.CcRequestRes  CcRequestRes
    No value
    qsig_cc.CcRequestRes
qsig.cc.Extension  Extension
    No value
    qsig.Extension
qsig.cc.can_retain_service  can-retain-service
    Boolean
    qsig_cc.BOOLEAN
qsig.cc.extArg  extArg
    Unsigned 32-bit integer
    qsig_cc.CcExtension
qsig.cc.extension  extension
    Unsigned 32-bit integer
    qsig_cc.CcExtension
qsig.cc.fullArg  fullArg
    No value
    qsig_cc.T_fullArg
qsig.cc.multiple  multiple
    Unsigned 32-bit integer
    qsig_cc.SEQUENCE_OF_Extension
qsig.cc.multiple_item  Item
    No value
    qsig.Extension
```

```
qsig.cc.no_path_reservation  no-path-reservation
    Boolean
    qsig_cc.BOOLEAN

qsig.cc.none  none
    No value
    qsig_cc.NULL

qsig.cc.numberA  numberA
    Unsigned 32-bit integer
    qsig.PresentedNumberUnscreened

qsig.cc.numberB  numberB
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.cc.retain_service  retain-service
    Boolean
    qsig_cc.BOOLEAN

qsig.cc.retain_sig_connection  retain-sig-connection
    Boolean
    qsig_cc.BOOLEAN

qsig.cc.service  service
    Byte array
    qsig.PSS1InformationElement

qsig.cc.single  single
    No value
    qsig.Extension

qsig.cc.subaddrA  subaddrA
    Unsigned 32-bit integer
    qsig.PartySubaddress

qsig.cc.subaddrB  subaddrB
    Unsigned 32-bit integer
    qsig.PartySubaddress

qsig.cf.ARG_activatediversionQ  ARG-activatediversionQ
    No value
    qsig_cf.ARG_activatediversionQ

qsig.cf.ARG_callrerouteing  ARG-callrerouteing
    No value
    qsig_cf.ARG_callrerouteing

qsig.cf.ARG_cfnrDivertedLegFailed  ARG-cfnrDivertedLegFailed
    Unsigned 32-bit integer
    qsig_cf.ARG_cfnrDivertedLegFailed

qsig.cf.ARG_checkRestriction  ARG-checkRestriction
    No value
    qsig_cf.ARG_checkRestriction

qsig.cf.ARG_deactivatediversionQ  ARG-deactivatediversionQ
    No value
    qsig_cf.ARG_deactivatediversionQ

qsig.cf.ARG_divertingLegInformation1  ARG-divertingLegInformation1
    No value
    qsig_cf.ARG_divertingLegInformation1
```

```
qsig.cf.ARG_divertingLegInformation2  ARG-divertingLegInformation2
    No value
    qsig.cf.ARG_divertingLegInformation2
qsig.cf.ARG_divertingLegInformation3  ARG-divertingLegInformation3
    No value
    qsig.cf.ARG_divertingLegInformation3
qsig.cf.ARG_interrogatedDiversionQ  ARG-interrogatedDiversionQ
    No value
    qsig.cf.ARG_interrogatedDiversionQ
qsig.cf.Extension  Extension
    No value
    qsig.Extension
qsig.cf.IntResultList  IntResultList
    Unsigned 32-bit integer
    qsig.cf.IntResultList
qsig.cf.IntResultList_item  Item
    No value
    qsig.cf.IntResult
qsig.cf.RES_activateDiversionQ  RES-activateDiversionQ
    Unsigned 32-bit integer
    qsig.cf.RES_activateDiversionQ
qsig.cf.RES_callRerouteing  RES-callRerouteing
    Unsigned 32-bit integer
    qsig.cf.RES_callRerouteing
qsig.cf.RES_checkRestriction  RES-checkRestriction
    Unsigned 32-bit integer
    qsig.cf.RES_checkRestriction
qsig.cf.RES_deactivateDiversionQ  RES-deactivateDiversionQ
    Unsigned 32-bit integer
    qsig.cf.RES_deactivateDiversionQ
qsig.cf.activatingUserNr  activatingUserNr
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.cf.basicService  basicService
    Unsigned 32-bit integer
    qsig.cf.BasicService
qsig.cf.calledAddress  calledAddress
    No value
    qsig.Address
qsig.cf.callingName  callingName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.cf.callingNumber  callingNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberScreened
qsig.cf.callingPartySubaddress  callingPartySubaddress
    Unsigned 32-bit integer
    qsig.PartySubaddress
```

```
qsig.cf.deactivatingUserNr  deactivatingUserNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.cf.diversionCounter  diversionCounter
    Unsigned 32-bit integer
    qsig_cf.INTEGER_1_15

qsig.cf.diversionReason  diversionReason
    Unsigned 32-bit integer
    qsig_cf.DiversionReason

qsig.cf.divertedToAddress  divertedToAddress
    No value
    qsig.Address

qsig.cf.divertedToNr  divertedToNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.cf.divertingNr  divertingNr
    Unsigned 32-bit integer
    qsig.PresentedNumberUnscreened

qsig.cf.extension  extension
    Unsigned 32-bit integer
    qsig_cf.ADExtension

qsig.cf.interrogatingUserNr  interrogatingUserNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.cf.lastRerouteingNr  lastRerouteingNr
    Unsigned 32-bit integer
    qsig.PresentedNumberUnscreened

qsig.cf.multiple  multiple
    Unsigned 32-bit integer
    qsig_cf.SEQUENCE_OF_Extension

qsig.cf.multiple_item  Item
    No value
    qsig.Extension

qsig.cf.nominatedNr  nominatedNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.cf.null  null
    No value
    qsig_cf.NULL

qsig.cf.originalCalledName  originalCalledName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.cf.originalCalledNr  originalCalledNr
    Unsigned 32-bit integer
    qsig.PresentedNumberUnscreened

qsig.cf.originalDiversionReason  originalDiversionReason
    Unsigned 32-bit integer
    qsig_cf.DiversionReason
```

```
qsig.cf.originalRerouteingReason  originalRerouteingReason
    Unsigned 32-bit integer
    qsig_cf.DiversionReason

qsig.cf.pSS1InfoElement  pSS1InfoElement
    Byte array
    qsig.PSS1InformationElement

qsig.cf.presentationAllowedIndicator  presentationAllowedIndicator
    Boolean
    qsig.PresentationAllowedIndicator

qsig.cf.procedure  procedure
    Unsigned 32-bit integer
    qsig_cf.Procedure

qsig.cf.redirectingName  redirectingName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.cf.redirectionName  redirectionName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.cf.remoteEnabled  remoteEnabled
    Boolean
    qsig_cf.BOOLEAN

qsig.cf.rerouteingReason  rerouteingReason
    Unsigned 32-bit integer
    qsig_cf.DiversionReason

qsig.cf.servedUserNr  servedUserNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.cf.single  single
    No value
    qsig.Extension

qsig.cf.subscriptionOption  subscriptionOption
    Unsigned 32-bit integer
    qsig_cf.SubscriptionOption

qsig.ci.CIGetCIPLRes  CIGetCIPLRes
    No value
    qsig_ci.CIGetCIPLRes

qsig.ci.CIRequestArg  CIRequestArg
    No value
    qsig_ci.CIRequestArg

qsig.ci.CIRequestRes  CIRequestRes
    No value
    qsig_ci.CIRequestRes

qsig.ci.DummyArg  DummyArg
    Unsigned 32-bit integer
    qsig_ci.DummyArg

qsig.ci.DummyRes  DummyRes
    Unsigned 32-bit integer
    qsig_ci.DummyRes
```

```
qsig.ci.Extension Extension
    No value
    qsig.Extension

qsig.ci.PathRetainArg PathRetainArg
    Unsigned 32-bit integer
    qsig_ci.PathRetainArg

qsig.ci.ServiceAvailableArg ServiceAvailableArg
    Unsigned 32-bit integer
    qsig_ci.ServiceAvailableArg

qsig.ci.argumentExtension argumentExtension
    Unsigned 32-bit integer
    qsig_ci.T_argumentExtension

qsig.ci.ci-high ci-high
    Boolean

qsig.ci.ci-low ci-low
    Boolean

qsig.ci.ci-medium ci-medium
    Boolean

qsig.ci.ciCapabilityLevel ciCapabilityLevel
    Unsigned 32-bit integer
    qsig_ci.CICapabilityLevel

qsig.ci.ciProtectionLevel ciProtectionLevel
    Unsigned 32-bit integer
    qsig_ci.CIProtectionLevel

qsig.ci.ciUnwantedUserStatus ciUnwantedUserStatus
    Unsigned 32-bit integer
    qsig_ci.CIUnwantedUserStatus

qsig.ci.extendedServiceList extendedServiceList
    No value
    qsig_ci.T_extendedServiceList

qsig.ci.extension extension
    No value
    qsig.Extension

qsig.ci.null null
    No value
    qsig_ci.NULL

qsig.ci.resultExtension resultExtension
    Unsigned 32-bit integer
    qsig_ci.T_resultExtension

qsig.ci.sequenceOfExtn sequenceOfExtn
    Unsigned 32-bit integer
    qsig_ci.SEQUENCE_OF_Extension

qsig.ci.sequenceOfExtn_item Item
    No value
    qsig.Extension
```

```
qsig.ci.serviceList  serviceList
    Byte array
    qsig_ci.ServiceList

qsig.cidl.CallIdentificationAssignArg  CallIdentificationAssignArg
    No value
    qsig_cidl.CallIdentificationAssignArg

qsig.cidl.CallIdentificationUpdateArg  CallIdentificationUpdateArg
    No value
    qsig_cidl.CallIdentificationUpdateArg

qsig.cidl.extension  extension
    Unsigned 32-bit integer
    qsig_cidl.ExtensionType

qsig.cidl.globalCallID  globalCallID
    No value
    qsig_cidl.CallIdentificationData

qsig.cidl.globallyUniqueID  globallyUniqueID
    Byte array
    qsig_cidl.GloballyUniqueID

qsig.cidl.legID  legID
    No value
    qsig_cidl.CallIdentificationData

qsig.cidl.linkageID  linkageID
    Unsigned 32-bit integer
    qsig_cidl.T_linkageID

qsig.cidl.sequenceOfExt  sequenceOfExt
    Unsigned 32-bit integer
    qsig_cidl.SEQUENCE_OF_Extension

qsig.cidl.sequenceOfExt_item  Item
    No value
    qsig.Extension

qsig.cidl.subDomainID  subDomainID
    Byte array
    qsig_cidl.SubDomainID

qsig.cidl.switchingSubDomainName  switchingSubDomainName
    String
    qsig_cidl.SwitchingSubDomainName

qsig.cidl.threadID  threadID
    No value
    qsig_cidl.CallIdentificationData

qsig.cidl.timeStamp  timeStamp
    String
    qsig_cidl.TimeStamp

qsig.cint.CintCondArg  CintCondArg
    No value
    qsig_cint.CintCondArg

qsig.cint.CintExtension  CintExtension
    Unsigned 32-bit integer
    qsig_cint.CintExtension
```



```
qsig.cint.CintInformation1Arg  CintInformation1Arg
    No value
    qsig_cint.CintInformation1Arg
qsig.cint.CintInformation2Arg  CintInformation2Arg
    No value
    qsig_cint.CintInformation2Arg
qsig.cint.calledName  calledName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.cint.calledNumber  calledNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberUnscreened
qsig.cint.extension  extension
    Unsigned 32-bit integer
    qsig_cint.CintExtension
qsig.cint.interceptedToNumber  interceptedToNumber
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.cint.interceptionCause  interceptionCause
    Unsigned 32-bit integer
    qsig_cint.CintCause
qsig.cint.multiple  multiple
    Unsigned 32-bit integer
    qsig_cint.SEQUENCE_OF_Extension
qsig.cint.multiple_item  Item
    No value
    qsig.Extension
qsig.cint.none  none
    No value
    qsig_cint.NULL
qsig.cint.originalCalledName  originalCalledName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.cint.originalCalledNumber  originalCalledNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberUnscreened
qsig.cint.single  single
    No value
    qsig.Extension
qsig.cmn.CmnArg  CmnArg
    No value
    qsig_cmn.CmnArg
qsig.cmn.DummyArg  DummyArg
    Unsigned 32-bit integer
    qsig_cmn.DummyArg
qsig.cmn.anfCINTcanInterceptDelayed  anfCINTcanInterceptDelayed
    Boolean
```

```

qsig.cmn.anfCINTcanInterceptImmediate  anfCINTcanInterceptImmediate
    Boolean

qsig.cmn.anfPRsupportedAtCooperatingPinx  anfPRsupportedAtCooperatingPinx
    Boolean

qsig.cmn.anfPUMIreRoutingSupported  anfPUMIreRoutingSupported
    Boolean

qsig.cmn.anfWTMIreRoutingSupported  anfWTMIreRoutingSupported
    Boolean

qsig.cmn.equipmentIdentity  equipmentIdentity
    No value
    qsig_cmn.EquipmentId

qsig.cmn.extension  extension
    Unsigned 32-bit integer
    qsig_cmn.T_extension

qsig.cmn.featureIdentifier  featureIdentifier
    Byte array
    qsig_cmn.FeatureIdList

qsig.cmn.groupId  groupId
    String
    qsig_cmn.IA5String_SIZE_1_10

qsig.cmn.multiple  multiple
    Unsigned 32-bit integer
    qsig_cmn.SEQUENCE_OF_Extension

qsig.cmn.multiple_item  Item
    No value
    qsig.Extension

qsig.cmn.nodeId  nodeId
    String
    qsig_cmn.IA5String_SIZE_1_10

qsig.cmn.null  null
    No value
    qsig_cmn.NULL

qsig.cmn.partyCategory  partyCategory
    Unsigned 32-bit integer
    qsig_cmn.PartyCategory

qsig.cmn.reserved  reserved
    Boolean

qsig.cmn.single  single
    No value
    qsig.Extension

qsig.cmn.ssAOCsupportChargeRateProvAtGatewPinx  ssAOCsupportChargeRateProvAtGate
    Boolean

qsig.cmn.ssAOCsupportFinalChargeProvAtGatewPinx  ssAOCsupportFinalChargeProvAtGa
    Boolean

qsig.cmn.ssAOCsupportInterimChargeProvAtGatewPinx  ssAOCsupportInterimChargeProv
    Boolean

```

```
qsig.cmn.ssCCBSpssible  ssCCBSpssible
  Boolean

qsig.cmn.ssCCNRpossible  ssCCNRpossible
  Boolean

qsig.cmn.ssCFreRoutingSupported  ssCFreRoutingSupported
  Boolean

qsig.cmn.ssCIforcedRelease  ssCIforcedRelease
  Boolean

qsig.cmn.ssCIisolation  ssCIisolation
  Boolean

qsig.cmn.ssCIprotectionLevel  ssCIprotectionLevel
  Unsigned 32-bit integer
  qsig_cmn.INTEGER_0_3

qsig.cmn.ssCIwaitOnBusy  ssCIwaitOnBusy
  Boolean

qsig.cmn.ssCOsupported  ssCOsupported
  Boolean

qsig.cmn.ssCTreRoutingSupported  ssCTreRoutingSupported
  Boolean

qsig.cmn.ssDNDOProtectionLevel  ssDNDOProtectionLevel
  Unsigned 32-bit integer
  qsig_cmn.INTEGER_0_3

qsig.cmn.ssSSCTreRoutingSupported  ssSSCTreRoutingSupported
  Boolean

qsig.cmn.unitId  unitId
  String
  qsig_cmn.IA5String_SIZE_1_10

qsig.co.DummyArg  DummyArg
  Unsigned 32-bit integer
  qsig_co.DummyArg

qsig.co.DummyRes  DummyRes
  Unsigned 32-bit integer
  qsig_co.DummyRes

qsig.co.Extension  Extension
  No value
  qsig.Extension

qsig.co.PathRetainArg  PathRetainArg
  Unsigned 32-bit integer
  qsig_co.PathRetainArg

qsig.co.ServiceAvailableArg  ServiceAvailableArg
  Unsigned 32-bit integer
  qsig_co.ServiceAvailableArg

qsig.co.callOffer  callOffer
  Boolean
```

```
qsig.co.extendedServiceList  extendedServiceList
    No value
    qsig_co.T_extendedServiceList
qsig.co.extension  extension
    No value
    qsig.Extension
qsig.co.null  null
    No value
    qsig_co.NULL
qsig.co.sequenceOfExtn  sequenceOfExtn
    Unsigned 32-bit integer
    qsig_co.SEQUENCE_OF_Extension
qsig.co.sequenceOfExtn_item  Item
    No value
    qsig.Extension
qsig.co.serviceList  serviceList
    Byte array
    qsig_co.ServiceList
qsig.cpi.CPIPRequestArg  CPIPRequestArg
    No value
    qsig_cpi.CPIPRequestArg
qsig.cpi.CPIRequestArg  CPIRequestArg
    No value
    qsig_cpi.CPIRequestArg
qsig.cpi.argumentExtension  argumentExtension
    Unsigned 32-bit integer
    qsig_cpi.T_argumentExtension
qsig.cpi.cpiCapabilityLevel  cpiCapabilityLevel
    Unsigned 32-bit integer
    qsig_cpi.CPICapabilityLevel
qsig.cpi.cpiProtectionLevel  cpiProtectionLevel
    Unsigned 32-bit integer
    qsig_cpi.CPIProtectionLevel
qsig.cpi.extension  extension
    No value
    qsig.Extension
qsig.cpi.sequenceOfExtn  sequenceOfExtn
    Unsigned 32-bit integer
    qsig_cpi.SEQUENCE_OF_Extension
qsig.cpi.sequenceOfExtn_item  Item
    No value
    qsig.Extension
qsig.ct.CTActiveArg  CTActiveArg
    No value
    qsig_ct.CTActiveArg
qsig.ct.CTCompleteArg  CTCompleteArg
    No value
    qsig_ct.CTCompleteArg
```

```
qsig.ct.CTIdentifyRes  CTIdentifyRes
    No value
    qsig_ct.CTIdentifyRes
qsig.ct.CTInitiateArg  CTInitiateArg
    No value
    qsig_ct.CTInitiateArg
qsig.ct.CTSetupArg    CTSetupArg
    No value
    qsig_ct.CTSetupArg
qsig.ct.CTUpdateArg   CTUpdateArg
    No value
    qsig_ct.CTUpdateArg
qsig.ct.DummyArg      DummyArg
    Unsigned 32-bit integer
    qsig_ct.DummyArg
qsig.ct.DummyRes      DummyRes
    Unsigned 32-bit integer
    qsig_ct.DummyRes
qsig.ct.Extension     Extension
    No value
    qsig.Extension
qsig.ct.SubaddressTransferArg  SubaddressTransferArg
    No value
    qsig_ct.SubaddressTransferArg
qsig.ct.argumentExtension  argumentExtension
    Unsigned 32-bit integer
    qsig_ct.CTIargumentExtension
qsig.ct.basicCallInfoElements  basicCallInfoElements
    Byte array
    qsig.PSS1InformationElement
qsig.ct.callIdentity   callIdentity
    String
    qsig_ct.CallIdentity
qsig.ct.callStatus     callStatus
    Unsigned 32-bit integer
    qsig_ct.CallStatus
qsig.ct.connectedAddress  connectedAddress
    Unsigned 32-bit integer
    qsig.PresentedAddressScreened
qsig.ct.connectedName    connectedName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.ct.endDesignation   endDesignation
    Unsigned 32-bit integer
    qsig_ct.EndDesignation
qsig.ct.multiple         multiple
    Unsigned 32-bit integer
    qsig_ct.SEQUENCE_OF_Extension
```

```
qsig.ct.multiple_item  Item
    No value
    qsig.Extension
qsig.ct.null  null
    No value
    qsig_ct.NULL
qsig.ct.redirectionName  redirectionName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.ct.redirectionNumber  redirectionNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberScreened
qsig.ct.redirectionSubaddress  redirectionSubaddress
    Unsigned 32-bit integer
    qsig.PartySubaddress
qsig.ct.rerouteingNumber  rerouteingNumber
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.ct.resultExtension  resultExtension
    Unsigned 32-bit integer
    qsig_ct.T_resultExtension
qsig.ct.single  single
    No value
    qsig.Extension
qsig.dataPartyNumber  dataPartyNumber
    String
    qsig.NumberDigits
qsig.dnd.DNDActivateArg  DNDActivateArg
    No value
    qsig_dnd.DNDActivateArg
qsig.dnd.DNDActivateRes  DNDActivateRes
    No value
    qsig_dnd.DNDActivateRes
qsig.dnd.DNDDeactivateArg  DNDDeactivateArg
    No value
    qsig_dnd.DNDDeactivateArg
qsig.dnd.DNDInterrogateArg  DNDInterrogateArg
    No value
    qsig_dnd.DNDInterrogateArg
qsig.dnd.DNDInterrogateRes  DNDInterrogateRes
    No value
    qsig_dnd.DNDInterrogateRes
qsig.dnd.DNDOverrideArg  DNDOverrideArg
    No value
    qsig_dnd.DNDOverrideArg
qsig.dnd.DummyArg  DummyArg
    Unsigned 32-bit integer
    qsig_dnd.DummyArg
```

```
qsig.dnd.DummyRes  DummyRes
    Unsigned 32-bit integer
    qsig_dnd.DummyRes

qsig.dnd.Extension  Extension
    No value
    qsig.Extension

qsig.dnd.PathRetainArg  PathRetainArg
    Unsigned 32-bit integer
    qsig_dnd.PathRetainArg

qsig.dnd.ServiceAvailableArg  ServiceAvailableArg
    Unsigned 32-bit integer
    qsig_dnd.ServiceAvailableArg

qsig.dnd.argumentExtension  argumentExtension
    Unsigned 32-bit integer
    qsig_dnd.DNDAargumentExtension

qsig.dnd.basicService  basicService
    Unsigned 32-bit integer
    qsig_cf.BasicService

qsig.dnd.dndProtectionLevel  dndProtectionLevel
    Unsigned 32-bit integer
    qsig_dnd.DNDProtectionLevel

qsig.dnd.dndo-high  dndo-high
    Boolean

qsig.dnd.dndo-low  dndo-low
    Boolean

qsig.dnd.dndo-medium  dndo-medium
    Boolean

qsig.dnd.dndoCapabilityLevel  dndoCapabilityLevel
    Unsigned 32-bit integer
    qsig_dnd.DNDOCapabilityLevel

qsig.dnd.extendedServiceList  extendedServiceList
    No value
    qsig_dnd.T_extendedServiceList

qsig.dnd.extension  extension
    No value
    qsig.Extension

qsig.dnd.null  null
    No value
    qsig_dnd.NULL

qsig.dnd.resultExtension  resultExtension
    Unsigned 32-bit integer
    qsig_dnd.T_resultExtension

qsig.dnd.sequenceOfExtn  sequenceOfExtn
    Unsigned 32-bit integer
    qsig_dnd.SEQUENCE_OF_Extension
```

```
qsig.dnd.sequenceOfExtn_item  Item
    No value
    qsig.Extension

qsig.dnd.servedUserNr  servedUserNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.dnd.serviceList  serviceList
    Byte array
    qsig_dnd.ServiceList

qsig.dnd.status  status
    Unsigned 32-bit integer
    qsig_dnd.T_status

qsig.dnd.status_item  Item
    No value
    qsig_dnd.T_status_item

qsig.error  Error
    Unsigned 8-bit integer
    Error

qsig.extensionArgument  extensionArgument
    No value
    qsig.T_extensionArgument

qsig.extensionId  extensionId
    qsig.T_extensionId

qsig.ie.data  Data
    Byte array
    Data

qsig.ie.len  Length
    Unsigned 8-bit integer
    Information Element Length

qsig.ie.type  Type
    Unsigned 8-bit integer
    Information Element Type

qsig.ie.type.cs4  Type
    Unsigned 8-bit integer
    Information Element Type (Codeset 4)

qsig.ie.type.cs5  Type
    Unsigned 8-bit integer
    Information Element Type (Codeset 5)

qsig.mcm.CompleteInfo_item  Item
    No value
    qsig_mcm.AddressHeader

qsig.mcm.Extension  Extension
    No value
    qsig.Extension

qsig.mcm.MCMDummyRes  MCMDummyRes
    Unsigned 32-bit integer
    qsig_mcm.MCMDummyRes
```



```
qsig.mcm.MCMInterrogateArg  MCMInterrogateArg
    No value
    qsig_mcm.MCMInterrogateArg
qsig.mcm.MCMInterrogateRes  MCMInterrogateRes
    No value
    qsig_mcm.MCMInterrogateRes
qsig.mcm.MCMNewMsgArg  MCMNewMsgArg
    No value
    qsig_mcm.MCMNewMsgArg
qsig.mcm.MCMNoNewMsgArg  MCMNoNewMsgArg
    No value
    qsig_mcm.MCMNoNewMsgArg
qsig.mcm.MCMServiceArg  MCMServiceArg
    No value
    qsig_mcm.MCMServiceArg
qsig.mcm.MCMUpdateArg  MCMUpdateArg
    No value
    qsig_mcm.MCMUpdateArg
qsig.mcm.MCMUpdateReqArg  MCMUpdateReqArg
    No value
    qsig_mcm.MCMUpdateReqArg
qsig.mcm.MCMUpdateReqRes  MCMUpdateReqRes
    Unsigned 32-bit integer
    qsig_mcm.MCMUpdateReqRes
qsig.mcm.MCMUpdateReqRes_item  Item
    No value
    qsig_mcm.MCMUpdateReqResElt
qsig.mcm.MCMailboxFullArg  MCMailboxFullArg
    No value
    qsig_mcm.MCMailboxFullArg
qsig.mcm.MailboxFullFor_item  Item
    No value
    qsig_mcm.MailboxFullPar
qsig.mcm.activateMCM  activateMCM
    Unsigned 32-bit integer
    qsig_mcm.SEQUENCE_OF_MCMSERVICEINFO
qsig.mcm.activateMCM_item  Item
    No value
    qsig_mcm.MCMSERVICEINFO
qsig.mcm.allMsgInfo  allMsgInfo
    No value
    qsig_mcm.AllMsgInfo
qsig.mcm.argumentExt  argumentExt
    Unsigned 32-bit integer
    qsig_mcm.MCMNewArgumentExt
qsig.mcm.capacityReached  capacityReached
    Unsigned 32-bit integer
    qsig_mcm.INTEGER_0_100
```

```
qsig.mcm.completeInfo  completeInfo
    Unsigned 32-bit integer
    qsig_mcm.CompleteInfo

qsig.mcm.compressedInfo  compressedInfo
    No value
    qsig_mcm.CompressedInfo

qsig.mcm.deactivateMCM  deactivateMCM
    Unsigned 32-bit integer
    qsig_mcm.SEQUENCE_OF_MessageType

qsig.mcm.deactivateMCM_item  Item
    Unsigned 32-bit integer
    qsig_mcm.MessageType

qsig.mcm.extension  extension
    No value
    qsig.Extension

qsig.mcm.extensions  extensions
    Unsigned 32-bit integer
    qsig_mcm.MCMExtensions

qsig.mcm.highestPriority  highestPriority
    Unsigned 32-bit integer
    qsig_mcm.Priority

qsig.mcm.integer  integer
    Unsigned 32-bit integer
    qsig_mcm.INTEGER_0_65535

qsig.mcm.interrogateInfo  interrogateInfo
    Unsigned 32-bit integer
    qsig_mcm.SEQUENCE_OF_MessageType

qsig.mcm.interrogateInfo_item  Item
    Unsigned 32-bit integer
    qsig_mcm.MessageType

qsig.mcm.interrogateResult  interrogateResult
    Unsigned 32-bit integer
    qsig_mcm.SEQUENCE_OF_MCMSERVICEINFO

qsig.mcm.interrogateResult_item  Item
    No value
    qsig_mcm.MCMSERVICEINFO

qsig.mcm.lastTimeStamp  lastTimeStamp
    String
    qsig_mcm.TimeStamp

qsig.mcm.mCMChange  mCMChange
    Unsigned 32-bit integer
    qsig_mcm.MCMChange

qsig.mcm.mCMModeNew  mCMModeNew
    Signed 32-bit integer
    qsig_mcm.MCMMode

qsig.mcm.mCMModeRetrieved  mCMModeRetrieved
    Signed 32-bit integer
    qsig_mcm.MCMMode
```

```
qsig.mcm.mailboxFullFor mailboxFullFor
    Unsigned 32-bit integer
    qsig_mcm.MailboxFullFor

qsig.mcm.messageCentreID messageCentreID
    Unsigned 32-bit integer
    qsig_mcm.MsgCentreId

qsig.mcm.messageType messageType
    Unsigned 32-bit integer
    qsig_mcm.MessageType

qsig.mcm.moreInfoFollows moreInfoFollows
    Boolean
    qsig_mcm.BOOLEAN

qsig.mcm.msgCentreId msgCentreId
    Unsigned 32-bit integer
    qsig_mcm.MsgCentreId

qsig.mcm.multipleExtension multipleExtension
    Unsigned 32-bit integer
    qsig_mcm.SEQUENCE_OF_Extension

qsig.mcm.multipleExtension_item Item
    No value
    qsig.Extension

qsig.mcm.newMsgInfo newMsgInfo
    Unsigned 32-bit integer
    qsig_mcm.MessageInfo

qsig.mcm.newMsgInfoOnly newMsgInfoOnly
    Unsigned 32-bit integer
    qsig_mcm.MessageInfo

qsig.mcm.noMsgsOfMsgType noMsgsOfMsgType
    No value
    qsig_mcm.NULL

qsig.mcm.none none
    No value
    qsig_mcm.NULL

qsig.mcm.nrofMessages nrofMessages
    Unsigned 32-bit integer
    qsig_mcm.NrofMessages

qsig.mcm.numericString numericString
    String
    qsig_mcm.NumericString_SIZE_1_10

qsig.mcm.originatingNr originatingNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.mcm.originatorNr originatorNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.mcm.partyInfo partyInfo
    No value
    qsig_mcm.PartyInfo
```

```
qsig.mcm.partyNumber partyNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.mcm.priority priority
    Unsigned 32-bit integer
    qsig_mcm.INTEGER_0_9

qsig.mcm.retrievedMsgInfo retrievedMsgInfo
    Unsigned 32-bit integer
    qsig_mcm.MessageInfo

qsig.mcm.retrievedMsgInfoOnly retrievedMsgInfoOnly
    Unsigned 32-bit integer
    qsig_mcm.MessageInfo

qsig.mcm.servedUserNr servedUserNr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.mcm.setToDefaultValues setToDefaultValues
    No value
    qsig_mcm.NULL

qsig.mcm.specificMessageType specificMessageType
    Unsigned 32-bit integer
    qsig_mcm.MessageType

qsig.mcm.timeStamp timeStamp
    String
    qsig_mcm.TimeStamp

qsig.mcm.timestamp timestamp
    String
    qsig_mcm.TimeStamp

qsig.mcm.updateInfo updateInfo
    Unsigned 32-bit integer
    qsig_mcm.UpdateInfo

qsig.mcr.Extension Extension
    No value
    qsig.Extension

qsig.mcr.MCAalertingArg MCAalertingArg
    No value
    qsig_mcr.MCAalertingArg

qsig.mcr.MCInformArg MCInformArg
    No value
    qsig_mcr.MCInformArg

qsig.mcr.MCRequestArg MCRequestArg
    No value
    qsig_mcr.MCRequestArg

qsig.mcr.MCRequestResult MCRequestResult
    No value
    qsig_mcr.MCRequestResult

qsig.mcr.basicService basicService
    Unsigned 32-bit integer
    qsig_cf.BasicService
```

```
qsig.mcr.callType    callType
    Unsigned 32-bit integer
    qsig_mcr.CallType

qsig.mcr.cisc        cisc
    No value
    qsig_mcr.NULL

qsig.mcr.cooperatingAddress  cooperatingAddress
    Unsigned 32-bit integer
    qsig.PresentedAddressUnscreened

qsig.mcr.correlation  correlation
    No value
    qsig_mcr.Correlation

qsig.mcr.correlationData  correlationData
    String
    qsig_pr.CallIdentity

qsig.mcr.correlationReason  correlationReason
    Unsigned 32-bit integer
    qsig_mcr.CorrelationReason

qsig.mcr.destinationAddress  destinationAddress
    Unsigned 32-bit integer
    qsig.PresentedAddressUnscreened

qsig.mcr.extensions  extensions
    Unsigned 32-bit integer
    qsig_mcr.MCRExtensions

qsig.mcr.multiple  multiple
    Unsigned 32-bit integer
    qsig_mcr.SEQUENCE_OF_Extension

qsig.mcr.multiple_item  Item
    No value
    qsig.Extension

qsig.mcr.none  none
    No value
    qsig_mcr.NULL

qsig.mcr.requestingAddress  requestingAddress
    Unsigned 32-bit integer
    qsig.PresentedAddressUnscreened

qsig.mcr.retainOrigCall  retainOrigCall
    Boolean
    qsig_mcr.BOOLEAN

qsig.mcr.single  single
    No value
    qsig.Extension

qsig.mid.Extension  Extension
    No value
    qsig.Extension

qsig.mid.MIDDummyRes  MIDDummyRes
    Unsigned 32-bit integer
    qsig_mid.MIDDummyRes
```

```
qsig.mid.MIDMailboxAuthArg  MIDMailboxAuthArg
    No value
    qsig_mid.MIDMailboxAuthArg
qsig.mid.MIDMailboxIDArg  MIDMailboxIDArg
    No value
    qsig_mid.MIDMailboxIDArg
qsig.mid.extension  extension
    No value
    qsig.Extension
qsig.mid.extensions  extensions
    Unsigned 32-bit integer
    qsig_mid.MIDExtensions
qsig.mid.mailBox  mailBox
    Unsigned 32-bit integer
    qsig_mid.String
qsig.mid.messageCentreID  messageCentreID
    Unsigned 32-bit integer
    qsig_mcm.MsgCentreId
qsig.mid.messageType  messageType
    Unsigned 32-bit integer
    qsig_mcm.MessageType
qsig.mid.multipleExtension  multipleExtension
    Unsigned 32-bit integer
    qsig_mid.SEQUENCE_OF_Extension
qsig.mid.multipleExtension_item  Item
    No value
    qsig.Extension
qsig.mid.none  none
    No value
    qsig_mid.NULL
qsig.mid.partyInfo  partyInfo
    No value
    qsig_mid.PartyInfo
qsig.mid.password  password
    Unsigned 32-bit integer
    qsig_mid.String
qsig.mid.servedUserName  servedUserName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.mid.servedUserNr  servedUserNr
    Unsigned 32-bit integer
    qsig.PresentedAddressUnscreened
qsig.mid.stringBmp  stringBmp
    String
    qsig_mid.BMPString
qsig.mid.stringUtf8  stringUtf8
    String
    qsig_mid.UTF8String
```

```

qsig.nSAPSubaddress  nSAPSubaddress
    Byte array
    qsig.NSAPSubaddress

qsig.na.NameArg  NameArg
    Unsigned 32-bit integer
    qsig_na.NameArg

qsig.na.characterSet  characterSet
    Unsigned 32-bit integer
    qsig_na.CharacterSet

qsig.na.extension  extension
    Unsigned 32-bit integer
    qsig_na.NameExtension

qsig.na.multiple  multiple
    Unsigned 32-bit integer
    qsig_na.SEQUENCE_OF_Extension

qsig.na.multiple_item  Item
    No value
    qsig.Extension

qsig.na.name  name
    Unsigned 32-bit integer
    qsig_na.Name

qsig.na.nameData  nameData
    String
    qsig_na.NameData

qsig.na.nameNotAvailable  nameNotAvailable
    No value
    qsig_na.NameNotAvailable

qsig.na.namePresentationAllowed  namePresentationAllowed
    Unsigned 32-bit integer
    qsig_na.NamePresentationAllowed

qsig.na.namePresentationAllowedExtended  namePresentationAllowedExtended
    No value
    qsig_na.NameSet

qsig.na.namePresentationAllowedSimple  namePresentationAllowedSimple
    String
    qsig_na.NameData

qsig.na.namePresentationRestricted  namePresentationRestricted
    Unsigned 32-bit integer
    qsig_na.NamePresentationRestricted

qsig.na.namePresentationRestrictedExtended  namePresentationRestrictedExtended
    No value
    qsig_na.NameSet

qsig.na.namePresentationRestrictedNull  namePresentationRestrictedNull
    No value
    qsig_na.NULL

qsig.na.namePresentationRestrictedSimple  namePresentationRestrictedSimple
    String
    qsig_na.NameData

```

```
qsig.na.nameSequence  nameSequence
    No value
    qsig_na.T_nameSequence
qsig.na.single  single
    No value
    qsig.Extension
qsig.nationalStandardPartyNumber  nationalStandardPartyNumber
    String
    qsig.NumberDigits
qsig.numberNotAvailableDueToInterworking  numberNotAvailableDueToInterworking
    No value
    qsig.NULL
qsig.oddCountIndicator  oddCountIndicator
    Boolean
    qsig.BOOLEAN
qsig.operation  Operation
    Unsigned 8-bit integer
    Operation
qsig.partyNumber  partyNumber
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.partySubaddress  partySubaddress
    Unsigned 32-bit integer
    qsig.PartySubaddress
qsig.pc  Party category
    Unsigned 8-bit integer
    Party category
qsig.pr.DummyArg  DummyArg
    Unsigned 32-bit integer
    qsig_pr.DummyArg
qsig.pr.DummyResult  DummyResult
    Unsigned 32-bit integer
    qsig_pr.DummyResult
qsig.pr.Extension  Extension
    No value
    qsig.Extension
qsig.pr.PRProposeArg  PRProposeArg
    No value
    qsig_pr.PRProposeArg
qsig.pr.PRRetainArg  PRRetainArg
    No value
    qsig_pr.PRRetainArg
qsig.pr.PRSetupArg  PRSetupArg
    No value
    qsig_pr.PRSetupArg
qsig.pr.callIdentity  callIdentity
    String
    qsig_pr.CallIdentity
```



```
qsig.pr.extension extension
    Unsigned 32-bit integer
    qsig_pr.PRPExtension

qsig.pr.multiple multiple
    Unsigned 32-bit integer
    qsig_pr.SEQUENCE_OF_Extension

qsig.pr.multiple_item Item
    No value
    qsig.Extension

qsig.pr.null null
    No value
    qsig_pr.NULL

qsig.pr.rerouteingNumber rerouteingNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.pr.single single
    No value
    qsig.Extension

qsig.presentationAllowedAddressNS presentationAllowedAddressNS
    No value
    qsig.NumberScreened

qsig.presentationAllowedAddressNU presentationAllowedAddressNU
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.presentationAllowedAddressS presentationAllowedAddressS
    No value
    qsig.AddressScreened

qsig.presentationAllowedAddressU presentationAllowedAddressU
    No value
    qsig.Address

qsig.presentationRestricted presentationRestricted
    No value
    qsig.NULL

qsig.presentationRestrictedAddressNS presentationRestrictedAddressNS
    No value
    qsig.NumberScreened

qsig.presentationRestrictedAddressNU presentationRestrictedAddressNU
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.presentationRestrictedAddressS presentationRestrictedAddressS
    No value
    qsig.AddressScreened

qsig.presentationRestrictedAddressU presentationRestrictedAddressU
    No value
    qsig.Address

qsig.privateNumberDigits privateNumberDigits
    String
    qsig.NumberDigits
```

```
qsig.privatePartyNumber privatePartyNumber
    No value
    qsig.PrivatePartyNumber
qsig.privateTypeOfNumber privateTypeOfNumber
    Unsigned 32-bit integer
    qsig.PrivateTypeOfNumber
qsig.publicNumberDigits publicNumberDigits
    String
    qsig.NumberDigits
qsig.publicPartyNumber publicPartyNumber
    No value
    qsig.PublicPartyNumber
qsig.publicTypeOfNumber publicTypeOfNumber
    Unsigned 32-bit integer
    qsig.PublicTypeOfNumber
qsig.pumch.DivertArg DivertArg
    No value
    qsig_pumch.DivertArg
qsig.pumch.DummyRes DummyRes
    Unsigned 32-bit integer
    qsig_pumch.DummyRes
qsig.pumch.EnquiryArg EnquiryArg
    No value
    qsig_pumch.EnquiryArg
qsig.pumch.EnquiryRes EnquiryRes
    Unsigned 32-bit integer
    qsig_pumch.EnquiryRes
qsig.pumch.Extension Extension
    No value
    qsig.Extension
qsig.pumch.InformArg InformArg
    No value
    qsig_pumch.InformArg
qsig.pumch.PumoArg PumoArg
    No value
    qsig_pumch.PumoArg
qsig.pumch.alternativeId alternativeId
    Byte array
    qsig_pumch.AlternativeId
qsig.pumch.argExtension argExtension
    Unsigned 32-bit integer
    qsig_pumch.PumiExtension
qsig.pumch.both both
    No value
    qsig_pumch.T_both
qsig.pumch.callingNumber callingNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberScreened
```

```
qsig.pumch.callingUserName  callingUserName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.pumch.callingUserSub  callingUserSub
    Unsigned 32-bit integer
    qsig.PartySubaddress

qsig.pumch.cfuActivated  cfuActivated
    No value
    qsig_pumch.CfuActivated

qsig.pumch.currLocation  currLocation
    No value
    qsig_pumch.CurrLocation

qsig.pumch.destinationNumber  destinationNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.pumch.divOptions  divOptions
    Unsigned 32-bit integer
    qsig_pumch.SubscriptionOption

qsig.pumch.divToAddress  divToAddress
    No value
    qsig.Address

qsig.pumch.extension  extension
    No value
    qsig.Extension

qsig.pumch.hostingAddr  hostingAddr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.pumch.multiple  multiple
    Unsigned 32-bit integer
    qsig_pumch.SEQUENCE_OF_Extension

qsig.pumch.multiple_item  Item
    No value
    qsig.Extension

qsig.pumch.null  null
    No value
    qsig_pumch.NULL

qsig.pumch.pisnNumber  pisnNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.pumch.pumIdentity  pumIdentity
    Unsigned 32-bit integer
    qsig_pumch.PumIdentity

qsig.pumch.pumName  pumName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.pumch.pumUserSub  pumUserSub
    Unsigned 32-bit integer
    qsig.PartySubaddress
```

```
qsig.pumch.qSIGInfoElement  qSIGInfoElement
    Byte array
    qsig.PSS1InformationElement
qsig.pumch.sendingComplete  sendingComplete
    No value
    qsig_pumch.NULL
qsig.pumch.sequOfExtn  sequOfExtn
    Unsigned 32-bit integer
    qsig_pumch.SEQUENCE_OF_Extension
qsig.pumch.sequOfExtn_item  Item
    No value
    qsig.Extension
qsig.pumch.single  single
    No value
    qsig.Extension
qsig.pumr.DummyRes  DummyRes
    Unsigned 32-bit integer
    qsig_pumr.DummyRes
qsig.pumr.Extension  Extension
    No value
    qsig.Extension
qsig.pumr.PumDe_regArg  PumDe-regArg
    No value
    qsig_pumr.PumDe_regArg
qsig.pumr.PumDelRegArg  PumDelRegArg
    No value
    qsig_pumr.PumDelRegArg
qsig.pumr.PumInterrogArg  PumInterrogArg
    No value
    qsig_pumr.PumInterrogArg
qsig.pumr.PumInterrogRes  PumInterrogRes
    Unsigned 32-bit integer
    qsig_pumr.PumInterrogRes
qsig.pumr.PumInterrogRes_item  Item
    No value
    qsig_pumr.PumInterrogRes_item
qsig.pumr.PumRegistrArg  PumRegistrArg
    No value
    qsig_pumr.PumRegistrArg
qsig.pumr.PumRegistrRes  PumRegistrRes
    No value
    qsig_pumr.PumRegistrRes
qsig.pumr.activatingUserAddr  activatingUserAddr
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.pumr.activatingUserPin  activatingUserPin
    Byte array
    qsig_pumr.UserPin
```

```
qsig.pumr.alternativeId  alternativeId
    Byte array
    qsig_pumr.AlternativeId

qsig.pumr.argExtension  argExtension
    Unsigned 32-bit integer
    qsig_pumr.PumrExtension

qsig.pumr.basicService  basicService
    Unsigned 32-bit integer
    qsig_cf.BasicService

qsig.pumr.durationOfSession  durationOfSession
    Signed 32-bit integer
    qsig_pumr.INTEGER

qsig.pumr.extension  extension
    No value
    qsig.Extension

qsig.pumr.homeInfoOnly  homeInfoOnly
    Boolean
    qsig_pumr.BOOLEAN

qsig.pumr.hostingAddr  hostingAddr
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.pumr.interrogParams  interrogParams
    No value
    qsig_pumr.SessionParams

qsig.pumr.null  null
    No value
    qsig_pumr.NULL

qsig.pumr.numberOfOutgCalls  numberOfOutgCalls
    Signed 32-bit integer
    qsig_pumr.INTEGER

qsig.pumr.pumNumber  pumNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.pumr.pumUserId  pumUserId
    Unsigned 32-bit integer
    qsig_pumr.RpumUserId

qsig.pumr.pumUserPin  pumUserPin
    Byte array
    qsig_pumr.UserPin

qsig.pumr.sequOfExtn  sequOfExtn
    Unsigned 32-bit integer
    qsig_pumr.SEQUENCE_OF_Extension

qsig.pumr.sequOfExtn_item  Item
    No value
    qsig.Extension

qsig.pumr.serviceOption  serviceOption
    Unsigned 32-bit integer
    qsig_pumr.ServiceOption
```

```
qsig.pumr.sessionParams  sessionParams
    No value
    qsig_pumr.SessionParams
qsig.pumr.userPin  userPin
    Unsigned 32-bit integer
    qsig_pumr.T_userPin
qsig.re.ReAlertingArg  ReAlertingArg
    No value
    qsig_re.ReAlertingArg
qsig.re.ReAnswerArg  ReAnswerArg
    No value
    qsig_re.ReAnswerArg
qsig.re.alertedName  alertedName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.re.alertedNumber  alertedNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberScreened
qsig.re.argumentExtension  argumentExtension
    Unsigned 32-bit integer
    qsig_re.T_argumentExtension
qsig.re.connectedName  connectedName
    Unsigned 32-bit integer
    qsig_na.Name
qsig.re.connectedNumber  connectedNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberScreened
qsig.re.connectedSubaddress  connectedSubaddress
    Unsigned 32-bit integer
    qsig.PartySubaddress
qsig.re.extension  extension
    No value
    qsig.Extension
qsig.re.multipleExtension  multipleExtension
    Unsigned 32-bit integer
    qsig_re.SEQUENCE_OF_Extension
qsig.re.multipleExtension_item  Item
    No value
    qsig.Extension
qsig.screeningIndicator  screeningIndicator
    Unsigned 32-bit integer
    qsig.ScreeningIndicator
qsig.sd.DisplayArg  DisplayArg
    No value
    qsig_sd.DisplayArg
qsig.sd.Extension  Extension
    No value
    qsig.Extension
```

```
qsig.sd.KeypadArg KeypadArg
    No value
    qsig_sd.KeypadArg
qsig.sd.displayString displayString
    Unsigned 32-bit integer
    qsig_sd.DisplayString
qsig.sd.displayStringExtended displayStringExtended
    Byte array
    qsig_sd.BMPStringExtended
qsig.sd.displayStringNormal displayStringNormal
    Byte array
    qsig_sd.BMPStringNormal
qsig.sd.extension extension
    Unsigned 32-bit integer
    qsig_sd.SDExtension
qsig.sd.keypadString keypadString
    Byte array
    qsig_sd.BMPStringNormal
qsig.sd.multipleExtension multipleExtension
    Unsigned 32-bit integer
    qsig_sd.SEQUENCE_OF_Extension
qsig.sd.multipleExtension_item Item
    No value
    qsig.Extension
qsig.service Service
    Unsigned 8-bit integer
    Supplementary Service
qsig.sms.DummyRes DummyRes
    Unsigned 32-bit integer
    qsig_sms.DummyRes
qsig.sms.PAR_smsCommandError PAR-smsCommandError
    No value
    qsig_sms.PAR_smsCommandError
qsig.sms.PAR_smsDeliverError PAR-smsDeliverError
    No value
    qsig_sms.PAR_smsDeliverError
qsig.sms.PAR_smsStatusReportError PAR-smsStatusReportError
    No value
    qsig_sms.PAR_smsStatusReportError
qsig.sms.PAR_smsSubmitError PAR-smsSubmitError
    No value
    qsig_sms.PAR_smsSubmitError
qsig.sms.SAlertArg SAlertArg
    No value
    qsig_sms.SAlertArg
qsig.sms.SmsCommandArg SmsCommandArg
    No value
    qsig_sms.SmsCommandArg
```

```
qsig.sms.SmsCommandRes  SmsCommandRes
    No value
    qsig_sms.SmsCommandRes

qsig.sms.SmsDeliverArg  SmsDeliverArg
    No value
    qsig_sms.SmsDeliverArg

qsig.sms.SmsDeliverRes  SmsDeliverRes
    No value
    qsig_sms.SmsDeliverRes

qsig.sms.SmsExtension  SmsExtension
    Unsigned 32-bit integer
    qsig_sms.SmsExtension

qsig.sms.SmsStatusReportArg  SmsStatusReportArg
    No value
    qsig_sms.SmsStatusReportArg

qsig.sms.SmsStatusReportRes  SmsStatusReportRes
    No value
    qsig_sms.SmsStatusReportRes

qsig.sms.SmsSubmitArg  SmsSubmitArg
    No value
    qsig_sms.SmsSubmitArg

qsig.sms.SmsSubmitRes  SmsSubmitRes
    No value
    qsig_sms.SmsSubmitRes

qsig.sms.UserDataHeader_item  Item
    Unsigned 32-bit integer
    qsig_sms.UserDataHeaderChoice

qsig.sms.applicationPort16BitHeader  applicationPort16BitHeader
    No value
    qsig_sms.ApplicationPort16BitHeader

qsig.sms.applicationPort8BitHeader  applicationPort8BitHeader
    No value
    qsig_sms.ApplicationPort8BitHeader

qsig.sms.cancelSRRforConcatenatedSM  cancelSRRforConcatenatedSM
    Boolean

qsig.sms.class  class
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_3

qsig.sms.commandData  commandData
    Byte array
    qsig_sms.CommandData

qsig.sms.commandType  commandType
    Unsigned 32-bit integer
    qsig_sms.CommandType

qsig.sms.compressed  compressed
    Boolean
    qsig_sms.BOOLEAN
```



```

qsig.sms.concatenated16BitSMHeader concatenated16BitSMHeader
    No value
    qsig_sms.Concatenated16BitSMHeader
qsig.sms.concatenated16BitSMReferenceNumber concatenated16BitSMReferenceNumber
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_65536
qsig.sms.concatenated8BitSMHeader concatenated8BitSMHeader
    No value
    qsig_sms.Concatenated8BitSMHeader
qsig.sms.concatenated8BitSMReferenceNumber concatenated8BitSMReferenceNumber
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255
qsig.sms.dataHeaderSourceIndicator dataHeaderSourceIndicator
    Unsigned 32-bit integer
    qsig_sms.DataHeaderSourceIndicator
qsig.sms.destination16BitPort destination16BitPort
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_65536
qsig.sms.destination8BitPort destination8BitPort
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255
qsig.sms.destinationAddress destinationAddress
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.sms.dischargeTime dischargeTime
    String
    qsig_sms.DischargeTime
qsig.sms.enhancedVP enhancedVP
    Unsigned 32-bit integer
    qsig_sms.EnhancedVP
qsig.sms.failureCause failureCause
    Unsigned 32-bit integer
    qsig_sms.FailureCause
qsig.sms.genericUserData genericUserData
    Byte array
    qsig_sms.OCTET_STRING
qsig.sms.genericUserValue genericUserValue
    No value
    qsig_sms.GenericUserValue
qsig.sms.includeOrigUDHintoSR includeOrigUDHintoSR
    Boolean
qsig.sms.maximumNumberOf16BitSMInConcatenatedSM maximumNumberOf16BitSMInConcatenatedSM
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255
qsig.sms.maximumNumberOf8BitSMInConcatenatedSM maximumNumberOf8BitSMInConcatenatedSM
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255

```

```
qsig.sms.messageNumber  messageNumber
    Unsigned 32-bit integer
    qsig_sms.MessageReference

qsig.sms.messageReference  messageReference
    Unsigned 32-bit integer
    qsig_sms.MessageReference

qsig.sms.moreMessagesToSend  moreMessagesToSend
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.multiple  multiple
    Unsigned 32-bit integer
    qsig_sms.SEQUENCE_OF_Extension

qsig.sms.multiple_item  Item
    No value
    qsig.Extension

qsig.sms.null  null
    No value
    qsig_sms.NULL

qsig.sms.originatingAddress  originatingAddress
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.sms.originatingName  originatingName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.sms.originator16BitPort  originator16BitPort
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_65536

qsig.sms.originator8BitPort  originator8BitPort
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255

qsig.sms.parameterValue  parameterValue
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255

qsig.sms.priority  priority
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.protocolIdentifier  protocolIdentifier
    Unsigned 32-bit integer
    qsig_sms.ProtocolIdentifier

qsig.sms.recipientAddress  recipientAddress
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.sms.recipientName  recipientName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.sms.rejectDuplicates  rejectDuplicates
    Boolean
    qsig_sms.BOOLEAN
```

```
qsig.sms.replyPath replyPath
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.resChoiceSeq resChoiceSeq
    No value
    qsig_sms.ResChoiceSeq

qsig.sms.sRforPermanentError sRforPermanentError
    Boolean

qsig.sms.sRforTempErrorSCnotTrying sRforTempErrorSCnotTrying
    Boolean

qsig.sms.sRforTempErrorSCstillTrying sRforTempErrorSCstillTrying
    Boolean

qsig.sms.sRforTransactionCompleted sRforTransactionCompleted
    Boolean

qsig.sms.scAddressSaved scAddressSaved
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.sequenceNumberOf16BitSM sequenceNumberOf16BitSM
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255

qsig.sms.sequenceNumberOf8BitSM sequenceNumberOf8BitSM
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255

qsig.sms.serviceCentreTimeStamp serviceCentreTimeStamp
    String
    qsig_sms.ServiceCentreTimeStamp

qsig.sms.shortMessageText shortMessageText
    No value
    qsig_sms.ShortMessageText

qsig.sms.shortMessageTextData shortMessageTextData
    Byte array
    qsig_sms.ShortMessageTextData

qsig.sms.shortMessageTextType shortMessageTextType
    Unsigned 32-bit integer
    qsig_sms.ShortMessageTextType

qsig.sms.single single
    No value
    qsig.Extension

qsig.sms.singleShotSM singleShotSM
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.smDeliverParameter smDeliverParameter
    No value
    qsig_sms.SmDeliverParameter

qsig.sms.smSubmitParameter smSubmitParameter
    No value
    qsig_sms.SmSubmitParameter
```

```
qsig.sms.smsDeliverResponseChoice  smsDeliverResponseChoice
    Unsigned 32-bit integer
    qsig_sms.SmsDeliverResChoice

qsig.sms.smsExtension  smsExtension
    Unsigned 32-bit integer
    qsig_sms.SmsExtension

qsig.sms.smsStatusReportResponseChoice  smsStatusReportResponseChoice
    Unsigned 32-bit integer
    qsig_sms.SmsStatusReportResponseChoice

qsig.sms.smscControlParameterHeader  smscControlParameterHeader
    Byte array
    qsig_sms.SmscControlParameterHeader

qsig.sms.status  status
    Unsigned 32-bit integer
    qsig_sms.Status

qsig.sms.statusReportIndication  statusReportIndication
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.statusReportQualifier  statusReportQualifier
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.statusReportRequest  statusReportRequest
    Boolean
    qsig_sms.BOOLEAN

qsig.sms.userData  userData
    No value
    qsig_sms.UserData

qsig.sms.userDataHeader  userDataHeader
    Unsigned 32-bit integer
    qsig_sms.UserDataHeader

qsig.sms.validityPeriod  validityPeriod
    Unsigned 32-bit integer
    qsig_sms.ValidityPeriod

qsig.sms.validityPeriodAbs  validityPeriodAbs
    String
    qsig_sms.ValidityPeriodAbs

qsig.sms.validityPeriodEnh  validityPeriodEnh
    No value
    qsig_sms.ValidityPeriodEnh

qsig.sms.validityPeriodRel  validityPeriodRel
    Unsigned 32-bit integer
    qsig_sms.ValidityPeriodRel

qsig.sms.validityPeriodSec  validityPeriodSec
    Unsigned 32-bit integer
    qsig_sms.INTEGER_0_255

qsig.sms.validityPeriodSemi  validityPeriodSemi
    Byte array
    qsig_sms.ValidityPeriodSemi
```

```

qsig.sms.wirelessControlHeader  wirelessControlHeader
    Byte array
    qsig_sms.WirelessControlHeader

qsig.ssct.DummyArg  DummyArg
    Unsigned 32-bit integer
    qsig_ssct.DummyArg

qsig.ssct.DummyRes  DummyRes
    Unsigned 32-bit integer
    qsig_ssct.DummyRes

qsig.ssct.Extension  Extension
    No value
    qsig.Extension

qsig.ssct.SSCTDigitInfoArg  SSCTDigitInfoArg
    No value
    qsig_ssct.SSCTDigitInfoArg

qsig.ssct.SSCTInitiateArg  SSCTInitiateArg
    No value
    qsig_ssct.SSCTInitiateArg

qsig.ssct.SSCTSetupArg  SSCTSetupArg
    No value
    qsig_ssct.SSCTSetupArg

qsig.ssct.argumentExtension  argumentExtension
    Unsigned 32-bit integer
    qsig_ssct.SSCTIargumentExtension

qsig.ssct.awaitConnect  awaitConnect
    Boolean
    qsig_ssct.AwaitConnect

qsig.ssct.multiple  multiple
    Unsigned 32-bit integer
    qsig_ssct.SEQUENCE_OF_Extension

qsig.ssct.multiple_item  Item
    No value
    qsig.Extension

qsig.ssct.null  null
    No value
    qsig_ssct.NULL

qsig.ssct.rerouteingNumber  rerouteingNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.ssct.reroutingNumber  reroutingNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.ssct.sendingComplete  sendingComplete
    No value
    qsig_ssct.NULL

qsig.ssct.single  single
    No value
    qsig.Extension

```

```
qsig.ssct.transferredAddress  transferredAddress
    Unsigned 32-bit integer
    qsig.PresentedAddressScreened

qsig.ssct.transferredName  transferredName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.ssct.transferringAddress  transferringAddress
    Unsigned 32-bit integer
    qsig.PresentedAddressScreened

qsig.ssct.transferringName  transferringName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.subaddressInformation  subaddressInformation
    Byte array
    qsig.SubaddressInformation

qsig.sync.Extension  Extension
    No value
    qsig.Extension

qsig.sync.SynchronizationInfoArg  SynchronizationInfoArg
    No value
    qsig_sync.SynchronizationInfoArg

qsig.sync.SynchronizationReqArg  SynchronizationReqArg
    No value
    qsig_sync.SynchronizationReqArg

qsig.sync.SynchronizationReqRes  SynchronizationReqRes
    No value
    qsig_sync.SynchronizationReqRes

qsig.sync.action  action
    Signed 32-bit integer
    qsig_sync.Action

qsig.sync.argExtension  argExtension
    Unsigned 32-bit integer
    qsig_sync.ArgExtension

qsig.sync.extension  extension
    No value
    qsig.Extension

qsig.sync.response  response
    Boolean
    qsig_sync.BOOLEAN

qsig.sync.sequOfExtn  sequOfExtn
    Unsigned 32-bit integer
    qsig_sync.SEQUENCE_OF_Extension

qsig.sync.sequOfExtn_item  Item
    No value
    qsig.Extension

qsig.sync.stateinfo  stateinfo
    Signed 32-bit integer
    qsig_sync.T_stateinfo
```

```
qsig.tc Transit count
    Unsigned 8-bit integer
    Transit count

qsig.telexPartyNumber telexPartyNumber
    String
    qsig.NumberDigits

qsig.unknownPartyNumber unknownPartyNumber
    String
    qsig.NumberDigits

qsig.userSpecifiedSubaddress userSpecifiedSubaddress
    No value
    qsig.UserSpecifiedSubaddress

qsig.wtmau.ARG_transferAuthParam ARG-transferAuthParam
    No value
    qsig_wtmau.ARG_transferAuthParam

qsig.wtmau.AuthWtmArg AuthWtmArg
    No value
    qsig_wtmau.AuthWtmArg

qsig.wtmau.AuthWtmRes AuthWtmRes
    No value
    qsig_wtmau.AuthWtmRes

qsig.wtmau.CalcWtatInfo_item Item
    No value
    qsig_wtmau.CalcWtatInfoUnit

qsig.wtmau.Extension Extension
    No value
    qsig.Extension

qsig.wtmau.WtanParamArg WtanParamArg
    No value
    qsig_wtmau.WtanParamArg

qsig.wtmau.WtanParamRes WtanParamRes
    No value
    qsig_wtmau.WtanParamRes

qsig.wtmau.WtatParamArg WtatParamArg
    No value
    qsig_wtmau.WtatParamArg

qsig.wtmau.WtatParamRes WtatParamRes
    No value
    qsig_wtmau.WtatParamRes

qsig.wtmau.alternativeId alternativeId
    Byte array
    qsig_wtmau.AlternativeId

qsig.wtmau.autWtmResValue autWtmResValue
    Unsigned 32-bit integer
    qsig_wtmau.T_autWtmResValue

qsig.wtmau.authAlg authAlg
    Unsigned 32-bit integer
    qsig_wtmau.DefinedIDs
```

```
qsig.wtmau.authAlgorithm  authAlgorithm
    No value
    qsig_wtmau.AuthAlgorithm
qsig.wtmau.authChallenge  authChallenge
    Byte array
    qsig_wtmau.AuthChallenge
qsig.wtmau.authKey  authKey
    Byte array
    qsig_wtmau.AuthKey
qsig.wtmau.authResponse  authResponse
    Byte array
    qsig_wtmau.AuthResponse
qsig.wtmau.authSessionKey  authSessionKey
    Byte array
    qsig_wtmau.AuthSessionKey
qsig.wtmau.authSessionKeyInfo  authSessionKeyInfo
    No value
    qsig_wtmau.AuthSessionKeyInfo
qsig.wtmau.calcWtanInfo  calcWtanInfo
    No value
    qsig_wtmau.CalcWtanInfo
qsig.wtmau.calcWtatInfo  calcWtatInfo
    Unsigned 32-bit integer
    qsig_wtmau.CalcWtatInfo
qsig.wtmau.calculationParam  calculationParam
    Byte array
    qsig_wtmau.CalculationParam
qsig.wtmau.canCompute  canCompute
    No value
    qsig_wtmau.CanCompute
qsig.wtmau.challLen  challLen
    Unsigned 32-bit integer
    qsig_wtmau.INTEGER_1_8
qsig.wtmau.derivedCipherKey  derivedCipherKey
    Byte array
    qsig_wtmau.DerivedCipherKey
qsig.wtmau.dummyExtension  dummyExtension
    Unsigned 32-bit integer
    qsig_wtmau.DummyExtension
qsig.wtmau.extension  extension
    No value
    qsig.Extension
qsig.wtmau.param  param
    No value
    qsig_wtmau.T_param
qsig.wtmau.pisnNumber  pisnNumber
    Unsigned 32-bit integer
    qsig.PartyNumber
```



```
qsig.wtmau.sequOfExtn sequOfExtn
    Unsigned 32-bit integer
    qsig_wtmau.SEQUENCE_OF_Extension
qsig.wtmau.sequOfExtn_item Item
    No value
    qsig.Extension
qsig.wtmau.wtanParamInfo wtanParamInfo
    Unsigned 32-bit integer
    qsig_wtmau.WtanParamInfo
qsig.wtmau.wtatParamInfo wtatParamInfo
    No value
    qsig_wtmau.WtatParamInfo
qsig.wtmau.wtatParamInfoChoice wtatParamInfoChoice
    Unsigned 32-bit integer
    qsig_wtmau.T_wtatParamInfoChoice
qsig.wtmau.wtmUserId wtmUserId
    Unsigned 32-bit integer
    qsig_wtmau.WtmUserId
qsig.wtmch.DivertArg DivertArg
    No value
    qsig_wtmch.DivertArg
qsig.wtmch.DummyRes DummyRes
    Unsigned 32-bit integer
    qsig_wtmch.DummyRes
qsig.wtmch.EnquiryArg EnquiryArg
    No value
    qsig_wtmch.EnquiryArg
qsig.wtmch.EnquiryRes EnquiryRes
    Unsigned 32-bit integer
    qsig_wtmch.EnquiryRes
qsig.wtmch.Extension Extension
    No value
    qsig.Extension
qsig.wtmch.InformArg InformArg
    No value
    qsig_wtmch.InformArg
qsig.wtmch.WtmoArg WtmoArg
    No value
    qsig_wtmch.WtmoArg
qsig.wtmch.alternativeId alternativeId
    Byte array
    qsig_wtmch.AlternativeId
qsig.wtmch.argExtension argExtension
    Unsigned 32-bit integer
    qsig_wtmch.WtmiExtension
qsig.wtmch.both both
    No value
    qsig_wtmch.T_both
```

```
qsig.wtmch.callingName  callingName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.wtmch.callingNumber  callingNumber
    Unsigned 32-bit integer
    qsig.PresentedNumberScreened

qsig.wtmch.callingUserSub  callingUserSub
    Unsigned 32-bit integer
    qsig.PartySubaddress

qsig.wtmch.cfuActivated  cfuActivated
    No value
    qsig_wtmch.CfuActivated

qsig.wtmch.currLocation  currLocation
    No value
    qsig_wtmch.CurrLocation

qsig.wtmch.destinationNumber  destinationNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.wtmch.divOptions  divOptions
    Unsigned 32-bit integer
    qsig_wtmch.SubscriptionOption

qsig.wtmch.divToAddress  divToAddress
    No value
    qsig.Address

qsig.wtmch.extension  extension
    No value
    qsig.Extension

qsig.wtmch.multiple  multiple
    Unsigned 32-bit integer
    qsig_wtmch.SEQUENCE_OF_Extension

qsig.wtmch.multiple_item  Item
    No value
    qsig.Extension

qsig.wtmch.null  null
    No value
    qsig_wtmch.NULL

qsig.wtmch.pisnNumber  pisnNumber
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.wtmch.qSIGInfoElement  qSIGInfoElement
    Byte array
    qsig.PSS1InformationElement

qsig.wtmch.sendingComplete  sendingComplete
    No value
    qsig_wtmch.NULL

qsig.wtmch.sequOfExtn  sequOfExtn
    Unsigned 32-bit integer
    qsig_wtmch.SEQUENCE_OF_Extension
```

```
qsig.wtmch.sequOfExtn_item  Item
    No value
    qsig.Extension

qsig.wtmch.single  single
    No value
    qsig.Extension

qsig.wtmch.visitPINX  visitPINX
    Unsigned 32-bit integer
    qsig.PartyNumber

qsig.wtmch.wtmIdentity  wtmIdentity
    Unsigned 32-bit integer
    qsig_wtmch.WtmIdentity

qsig.wtmch.wtmName  wtmName
    Unsigned 32-bit integer
    qsig_na.Name

qsig.wtmch.wtmUserSub  wtmUserSub
    Unsigned 32-bit integer
    qsig.PartySubaddress

qsig.wtmlr.DummyRes  DummyRes
    Unsigned 32-bit integer
    qsig_wtmlr.DummyRes

qsig.wtmlr.Extension  Extension
    No value
    qsig.Extension

qsig.wtmlr.GetRRCInfArg  GetRRCInfArg
    No value
    qsig_wtmlr.GetRRCInfArg

qsig.wtmlr.GetRRCInfRes  GetRRCInfRes
    No value
    qsig_wtmlr.GetRRCInfRes

qsig.wtmlr.LocDeRegArg  LocDeRegArg
    No value
    qsig_wtmlr.LocDeRegArg

qsig.wtmlr.LocDelArg  LocDelArg
    No value
    qsig_wtmlr.LocDelArg

qsig.wtmlr.LocInfoCheckArg  LocInfoCheckArg
    No value
    qsig_wtmlr.LocInfoCheckArg

qsig.wtmlr.LocInfoCheckRes  LocInfoCheckRes
    No value
    qsig_wtmlr.LocInfoCheckRes

qsig.wtmlr.LocUpdArg  LocUpdArg
    No value
    qsig_wtmlr.LocUpdArg

qsig.wtmlr.PisnEnqArg  PisnEnqArg
    No value
    qsig_wtmlr.PisnEnqArg
```

```

qsig.wtmlr.PisnEnqRes  PisnEnqRes
    No value
    qsig_wtmlr.PisnEnqRes
qsig.wtmlr.alternativeId  alternativeId
    Byte array
    qsig_wtmlr.AlternativeId
qsig.wtmlr.argExtension  argExtension
    Unsigned 32-bit integer
    qsig_wtmlr.LrExtension
qsig.wtmlr.basicService  basicService
    Unsigned 32-bit integer
    qsig_cf.BasicService
qsig.wtmlr.checkResult  checkResult
    Unsigned 32-bit integer
    qsig_wtmlr.CheckResult
qsig.wtmlr.extension  extension
    No value
    qsig.Extension
qsig.wtmlr.null  null
    No value
    qsig_wtmlr.NULL
qsig.wtmlr.pisnNumber  pisnNumber
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.wtmlr.resExtension  resExtension
    Unsigned 32-bit integer
    qsig_wtmlr.LrExtension
qsig.wtmlr.rrClass  rrClass
    Unsigned 32-bit integer
    qsig_wtmlr.RRClass
qsig.wtmlr.sequOfExtn  sequOfExtn
    Unsigned 32-bit integer
    qsig_wtmlr.SEQUENCE_OF_Extension
qsig.wtmlr.sequOfExtn_item  Item
    No value
    qsig.Extension
qsig.wtmlr.visitPINX  visitPINX
    Unsigned 32-bit integer
    qsig.PartyNumber
qsig.wtmlr.wtmUserId  wtmUserId
    Unsigned 32-bit integer
    qsig_wtmlr.WtmUserId

```

### Quake II Network Protocol (quake2)

```

quake2.c2s  Client to Server
    Unsigned 32-bit integer
    Client to Server

```

```
quake2.connectionless  Connectionless
    Unsigned 32-bit integer
    Connectionless

quake2.connectionless.marker  Marker
    Unsigned 32-bit integer
    Marker

quake2.connectionless.text  Text
    String
    Text

quake2.game  Game
    Unsigned 32-bit integer
    Game

quake2.game.client.command  Client Command Type
    Unsigned 8-bit integer
    Quake II Client Command

quake2.game.client.command.move  Bitfield
    Unsigned 8-bit integer
    Quake II Client Command Move

quake2.game.client.command.move.angles  Angles (pitch)
    Unsigned 8-bit integer

quake2.game.client.command.move.buttons  Buttons
    Unsigned 8-bit integer

quake2.game.client.command.move.chksum  Checksum
    Unsigned 8-bit integer
    Quake II Client Command Move

quake2.game.client.command.move.impulse  Impulse
    Unsigned 8-bit integer

quake2.game.client.command.move.lframe  Last Frame
    Unsigned 32-bit integer
    Quake II Client Command Move

quake2.game.client.command.move.lightlevel  Lightlevel
    Unsigned 8-bit integer
    Quake II Client Command Move

quake2.game.client.command.move.movement  Movement (fwd)
    Unsigned 8-bit integer

quake2.game.client.command.move.msec  Msec
    Unsigned 8-bit integer
    Quake II Client Command Move

quake2.game.qport  QPort
    Unsigned 32-bit integer
    Quake II Client Port

quake2.game.rel1  Reliable
    Boolean
    Packet is reliable and may be retransmitted

quake2.game.rel2  Reliable
    Boolean
    Packet was reliable and may be retransmitted
```

quake2.game.seq1 Sequence Number  
Unsigned 32-bit integer  
Sequence number of the current packet

quake2.game.seq2 Sequence Number  
Unsigned 32-bit integer  
Sequence number of the last received packet

quake2.game.server.command Server Command  
Unsigned 8-bit integer  
Quake II Server Command

quake2.s2c Server to Client  
Unsigned 32-bit integer  
Server to Client

### Quake III Arena Network Protocol (quake3)

quake3.connectionless Connectionless  
Unsigned 32-bit integer  
Connectionless

quake3.connectionless.command Command  
String  
Command

quake3.connectionless.marker Marker  
Unsigned 32-bit integer  
Marker

quake3.connectionless.text Text  
String  
Text

quake3.direction Direction  
No value  
Packet Direction

quake3.game Game  
Unsigned 32-bit integer  
Game

quake3.game.qport QPort  
Unsigned 32-bit integer  
Quake III Arena Client Port

quake3.game.rel1 Reliable  
Boolean  
Packet is reliable and may be retransmitted

quake3.game.rel2 Reliable  
Boolean  
Packet was reliable and may be retransmitted

quake3.game.seq1 Sequence Number  
Unsigned 32-bit integer  
Sequence number of the current packet

quake3.game.seq2 Sequence Number  
Unsigned 32-bit integer  
Sequence number of the last received packet

```
quake3.server.addr  Server Address
    IPv4 address
    Server IP Address

quake3.server.port  Server Port
    Unsigned 16-bit integer
    Server UDP Port
```

**Quake Network Protocol (quake)**

```
quake.control.accept.port  Port
    Unsigned 32-bit integer
    Game Data Port

quake.control.command  Command
    Unsigned 8-bit integer
    Control Command

quake.control.connect.game  Game
    String
    Game Name

quake.control.connect.version  Version
    Unsigned 8-bit integer
    Game Protocol Version Number

quake.control.player_info.address  Address
    String
    Player Address

quake.control.player_info.colors  Colors
    Unsigned 32-bit integer
    Player Colors

quake.control.player_info.colors.pants  Pants
    Unsigned 8-bit integer
    Pants Color

quake.control.player_info.colors.shirt  Shirt
    Unsigned 8-bit integer
    Shirt Color

quake.control.player_info.connect_time  Connect Time
    Unsigned 32-bit integer
    Player Connect Time

quake.control.player_info.frag  Frags
    Unsigned 32-bit integer
    Player Frags

quake.control.player_info.name  Name
    String
    Player Name

quake.control.player_info.player  Player
    Unsigned 8-bit integer
    Player

quake.control.reject.reason  Reason
    String
    Reject Reason
```

```
quake.control.rule_info.lastrule  Last Rule
    String
    Last Rule Name
quake.control.rule_info.rule      Rule
    String
    Rule Name
quake.control.rule_info.value     Value
    String
    Rule Value
quake.control.server_info.address  Address
    String
    Server Address
quake.control.server_info.game     Game
    String
    Game Name
quake.control.server_info.map      Map
    String
    Map Name
quake.control.server_info.max_player  Maximal Number of Players
    Unsigned 8-bit integer
    Maximal Number of Players
quake.control.server_info.num_player  Number of Players
    Unsigned 8-bit integer
    Current Number of Players
quake.control.server_info.server    Server
    String
    Server Name
quake.control.server_info.version    Version
    Unsigned 8-bit integer
    Game Protocol Version Number
quake.header.flags                 Flags
    Unsigned 16-bit integer
    Flags
quake.header.length                 Length
    Unsigned 16-bit integer
    full data length
quake.header.sequence               Sequence
    Unsigned 32-bit integer
    Sequence Number
```

#### **QuakeWorld Network Protocol (quakeworld)**

```
quakeworld.c2s                     Client to Server
    Unsigned 32-bit integer
    Client to Server
quakeworld.connectionless           Connectionless
    Unsigned 32-bit integer
    Connectionless
```



```
quakeworld.connectionless.arguments Arguments
    String
    Arguments

quakeworld.connectionless.command Command
    String
    Command

quakeworld.connectionless.connect.challenge Challenge
    Signed 32-bit integer
    Challenge from the server

quakeworld.connectionless.connect.infostring Infostring
    String
    Infostring with additional variables

quakeworld.connectionless.connect.infostring.key Key
    String
    Infostring Key

quakeworld.connectionless.connect.infostring.key_value Key/Value
    String
    Key and Value

quakeworld.connectionless.connect.infostring.value Value
    String
    Infostring Value

quakeworld.connectionless.connect.qport QPort
    Unsigned 32-bit integer
    QPort of the client

quakeworld.connectionless.connect.version Version
    Unsigned 32-bit integer
    Protocol Version

quakeworld.connectionless.marker Marker
    Unsigned 32-bit integer
    Marker

quakeworld.connectionless.rcon.command Command
    String
    Command

quakeworld.connectionless.rcon.password Password
    String
    Rcon Password

quakeworld.connectionless.text Text
    String
    Text

quakeworld.game Game
    Unsigned 32-bit integer
    Game

quakeworld.game.qport QPort
    Unsigned 32-bit integer
    QuakeWorld Client Port

quakeworld.game.rell Reliable
    Boolean
    Packet is reliable and may be retransmitted
```

quakeworld.game.rel2 Reliable  
Boolean  
Packet was reliable and may be retransmitted

quakeworld.game.seq1 Sequence Number  
Unsigned 32-bit integer  
Sequence number of the current packet

quakeworld.game.seq2 Sequence Number  
Unsigned 32-bit integer  
Sequence number of the last received packet

quakeworld.s2c Server to Client  
Unsigned 32-bit integer  
Server to Client

#### **Qualified Logical Link Control (qllc)**

qllc.address Address Field  
Unsigned 8-bit integer

qllc.control Control Field  
Unsigned 8-bit integer

#### **RFC 2250 MPEG1 (mpeg1)**

mpeg1.stream MPEG-1 stream  
Byte array

rtp.payload\_mpeg\_T T  
Unsigned 16-bit integer

rtp.payload\_mpeg\_an AN  
Unsigned 16-bit integer

rtp.payload\_mpeg\_b Beginning-of-slice  
Boolean

rtp.payload\_mpeg\_bfc BFC  
Unsigned 16-bit integer

rtp.payload\_mpeg\_fbv FBV  
Unsigned 16-bit integer

rtp.payload\_mpeg\_ffc FFC  
Unsigned 16-bit integer

rtp.payload\_mpeg\_ffv FFV  
Unsigned 16-bit integer

rtp.payload\_mpeg\_mbz MBZ  
Unsigned 16-bit integer

rtp.payload\_mpeg\_n New Picture Header  
Unsigned 16-bit integer

rtp.payload\_mpeg\_p Picture type  
Unsigned 16-bit integer

rtp.payload\_mpeg\_s Sequence Header  
Boolean

rtp.payload\_mpeg\_tr Temporal Reference  
Unsigned 16-bit integer

**RFC 2435 JPEG (jpeg)**

jpeg.main\_hdr Main Header  
No value

jpeg.main\_hdr.height Height  
Unsigned 8-bit integer

jpeg.main\_hdr.offset Fragment Offset  
Unsigned 24-bit integer

jpeg.main\_hdr.q Q  
Unsigned 8-bit integer

jpeg.main\_hdr.ts Type Specific  
Unsigned 8-bit integer

jpeg.main\_hdr.type Type  
Unsigned 8-bit integer

jpeg.main\_hdr.width Width  
Unsigned 8-bit integer

jpeg.payload Payload  
Byte array

jpeg.qtable\_hdr Quantization Table Header  
No value

jpeg.qtable\_hdr.data Quantization Table Data  
Byte array

jpeg.qtable\_hdr.length Length  
Unsigned 16-bit integer

jpeg.qtable\_hdr.mbz MBZ  
Unsigned 8-bit integer

jpeg.qtable\_hdr.precision Precision  
Unsigned 8-bit integer

jpeg.restart\_hdr Restart Marker Header  
No value

jpeg.restart\_hdr.count Restart Count  
Unsigned 16-bit integer

jpeg.restart\_hdr.f F  
Unsigned 16-bit integer

jpeg.restart\_hdr.interval Restart Interval  
Unsigned 16-bit integer

jpeg.restart\_hdr.l L  
Unsigned 16-bit integer

**RFC 2833 RTP Event (rtpevent)**

rtpevent.duration Event Duration  
Unsigned 16-bit integer

rtpevent.end\_of\_event End of Event  
Boolean

rtpevent.event\_id Event ID  
Unsigned 8-bit integer

rtpevent.reserved Reserved  
Boolean

rtpevent.volume Volume  
Unsigned 8-bit integer

### **RIPng (ripng)**

ripng.cmd Command  
Unsigned 8-bit integer

ripng.version Version  
Unsigned 8-bit integer

### **RMCP Security-extensions Protocol (rsp)**

rsp.sequence Sequence  
Unsigned 32-bit integer  
RSP sequence

rsp.session\_id Session ID  
Unsigned 32-bit integer  
RSP session ID

### **RPC Browser (rpc\_browser)**

rpc\_browser.opnum Operation  
Unsigned 16-bit integer  
Operation

rpc\_browser.rc Return code  
Unsigned 32-bit integer  
Browser return code

rpc\_browser.unknown.bytes Unknown bytes  
Byte array  
Unknown bytes. If you know what this is, contact wireshark developers.

rpc\_browser.unknown.hyper Unknown hyper  
Unsigned 64-bit integer  
Unknown hyper. If you know what this is, contact wireshark developers.

rpc\_browser.unknown.long Unknown long  
Unsigned 32-bit integer  
Unknown long. If you know what this is, contact wireshark developers.

rpc\_browser.unknown.string Unknown string  
String  
Unknown string. If you know what this is, contact wireshark developers.

### **RS Interface properties (rs\_plcy)**

rs\_plcy.opnum Operation  
Unsigned 16-bit integer  
Operation

### **RSTAT (rstat)**

rstat.procedure\_v1 V1 Procedure  
Unsigned 32-bit integer  
V1 Procedure

```
rstat.procedure_v2  V2 Procedure
  Unsigned 32-bit integer
  V2 Procedure
rstat.procedure_v3  V3 Procedure
  Unsigned 32-bit integer
  V3 Procedure
rstat.procedure_v4  V4 Procedure
  Unsigned 32-bit integer
  V4 Procedure
```

**RSYNC File Synchroniser (rsync)**

```
rsync.command  Command String
  String
rsync.data  rsync data
  Byte array
rsync.hdr_magic  Magic Header
  String
rsync.hdr_version  Header Version
  String
rsync.motd  Server MOTD String
  String
rsync.query  Client Query String
  String
rsync.response  Server Response String
  String
```

**RTcfg (rtcfg)**

```
rtcfg.ack_length  Ack Length
  Unsigned 32-bit integer
  RTcfg Ack Length
rtcfg.active_stations  Active Stations
  Unsigned 32-bit integer
  RTcfg Active Stations
rtcfg.address_type  Address Type
  Unsigned 8-bit integer
  RTcfg Address Type
rtcfg.burst_rate  Stage 2 Burst Rate
  Unsigned 8-bit integer
  RTcfg Stage 2 Burst Rate
rtcfg.client_flags  Flags
  Unsigned 8-bit integer
  RTcfg Client Flags
rtcfg.client_flags.available  Req. Available
  Unsigned 8-bit integer
  Request Available
```

```
rtcfg.client_flags.ready  Client Ready
    Unsigned 8-bit integer
    Client Ready

rtcfg.client_flags.res    Reserved
    Unsigned 8-bit integer
    Reserved

rtcfg.client_ip_address  Client IP Address
    IPv4 address
    RTcfg Client IP Address

rtcfg.config_data        Config Data
    Byte array
    RTcfg Config Data

rtcfg.config_offset      Config Offset
    Unsigned 32-bit integer
    RTcfg Config Offset

rtcfg.heartbeat_period   Heartbeat Period
    Unsigned 16-bit integer
    RTcfg Heartbeat Period

rtcfg.id                 ID
    Unsigned 8-bit integer
    RTcfg ID

rtcfg.padding            Padding
    Unsigned 8-bit integer
    RTcfg Padding

rtcfg.s1_config_length   Stage 1 Config Length
    Unsigned 16-bit integer
    RTcfg Stage 1 Config Length

rtcfg.s2_config_length   Stage 2 Config Length
    Unsigned 32-bit integer
    RTcfg Stage 2 Config Length

rtcfg.server_flags       Flags
    Unsigned 8-bit integer
    RTcfg Server Flags

rtcfg.server_flags.ready  Server Ready
    Unsigned 8-bit integer
    Server Ready

rtcfg.server_flags.res0   Reserved
    Unsigned 8-bit integer
    Reserved

rtcfg.server_flags.res2   Reserved
    Unsigned 8-bit integer
    Reserved

rtcfg.server_ip_address  Server IP Address
    IPv4 address
    RTcfg Server IP Address

rtcfg.vers               Version
    Unsigned 8-bit integer
    RTcfg Version
```

rtcfg.vers\_id Version and ID  
Unsigned 8-bit integer  
RTcfg Version and ID

**RX Protocol (rx)**

rx.abort ABORT Packet  
No value  
ABORT Packet

rx.abort\_code Abort Code  
Unsigned 32-bit integer  
Abort Code

rx.ack ACK Packet  
No value  
ACK Packet

rx.ack\_type ACK Type  
Unsigned 8-bit integer  
Type Of ACKs

rx.bufferespace Bufferspace  
Unsigned 16-bit integer  
Number Of Packets Available

rx.callnumber Call Number  
Unsigned 32-bit integer  
Call Number

rx.challenge CHALLENGE Packet  
No value  
CHALLENGE Packet

rx.cid CID  
Unsigned 32-bit integer  
CID

rx.encrypted Encrypted  
No value  
Encrypted part of response packet

rx.epoch Epoch  
Date/Time stamp  
Epoch

rx.first First Packet  
Unsigned 32-bit integer  
First Packet

rx.flags Flags  
Unsigned 8-bit integer  
Flags

rx.flags.client\_init Client Initiated  
Boolean  
Client Initiated

rx.flags.free\_packet Free Packet  
Boolean  
Free Packet

```
rx.flags.last_packet  Last Packet
    Boolean
    Last Packet
rx.flags.more_packets  More Packets
    Boolean
    More Packets
rx.flags.request_ack  Request Ack
    Boolean
    Request Ack
rx.if_mtu  Interface MTU
    Unsigned 32-bit integer
    Interface MTU
rx.inc_nonce  Inc Nonce
    Unsigned 32-bit integer
    Incremented Nonce
rx.kvno  kvno
    Unsigned 32-bit integer
    kvno
rx.level  Level
    Unsigned 32-bit integer
    Level
rx.max_mtu  Max MTU
    Unsigned 32-bit integer
    Max MTU
rx.max_packets  Max Packets
    Unsigned 32-bit integer
    Max Packets
rx.maxskew  Max Skew
    Unsigned 16-bit integer
    Max Skew
rx.min_level  Min Level
    Unsigned 32-bit integer
    Min Level
rx.nonce  Nonce
    Unsigned 32-bit integer
    Nonce
rx.num_acks  Num ACKs
    Unsigned 8-bit integer
    Number Of ACKs
rx.prev  Prev Packet
    Unsigned 32-bit integer
    Previous Packet
rx.reason  Reason
    Unsigned 8-bit integer
    Reason For This ACK
rx.response  RESPONSE Packet
    No value
    RESPONSE Packet
```



```
rx.rwind  rwind
          Unsigned 32-bit integer
          rwind

rx.securityindex  Security Index
          Unsigned 32-bit integer
          Security Index

rx.seq  Sequence Number
       Unsigned 32-bit integer
       Sequence Number

rx.serial  Serial
          Unsigned 32-bit integer
          Serial

rx.serviceid  Service ID
             Unsigned 16-bit integer
             Service ID

rx.spare  Spare/Checksum
         Unsigned 16-bit integer
         Spare/Checksum

rx.ticket  ticket
          Byte array
          Ticket

rx.ticket_len  Ticket len
              Unsigned 32-bit integer
              Ticket Length

rx.type  Type
        Unsigned 8-bit integer
        Type

rx.userstatus  User Status
              Unsigned 32-bit integer
              User Status

rx.version  Version
           Unsigned 32-bit integer
           Version Of Challenge/Response
```

#### **Radio Access Network Application Part (ranap)**

```
ranap.APN  APN
          Byte array
          ranap.APN

ranap.AccuracyFulfilmentIndicator  AccuracyFulfilmentIndicator
                                   Unsigned 32-bit integer
                                   ranap.AccuracyFulfilmentIndicator

ranap.Alt_RAB_Parameter_ExtendedGuaranteedBitrateInf  Alt-RAB-Parameter-Extended
                                                       No value
                                                       ranap.Alt_RAB_Parameter_ExtendedGuaranteedBitrateInf

ranap.Alt_RAB_Parameter_ExtendedGuaranteedBitrateList_item  Item
                                                             Unsigned 32-bit integer
                                                             ranap.ExtendedGuaranteedBitrate
```

```

ranap.Alt_RAB_Parameter_ExtendedGuaranteedBitrates_item  Item
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_ExtendedGuaranteedBitrateList
ranap.Alt_RAB_Parameter_ExtendedMaxBitrateInf  Alt-RAB-Parameter-ExtendedMaxBitr
    No value
    ranap.Alt_RAB_Parameter_ExtendedMaxBitrateInf
ranap.Alt_RAB_Parameter_ExtendedMaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.ExtendedMaxBitrate
ranap.Alt_RAB_Parameter_ExtendedMaxBitrates_item  Item
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_ExtendedMaxBitrateList
ranap.Alt_RAB_Parameter_GuaranteedBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.GuaranteedBitrate
ranap.Alt_RAB_Parameter_GuaranteedBitrates_item  Item
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_GuaranteedBitrateList
ranap.Alt_RAB_Parameter_MaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.MaxBitrate
ranap.Alt_RAB_Parameter_MaxBitrates_item  Item
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_MaxBitrateList
ranap.Alt_RAB_Parameters  Alt-RAB-Parameters
    No value
    ranap.Alt_RAB_Parameters
ranap.AlternativeRABConfigurationRequest  AlternativeRABConfigurationRequest
    Unsigned 32-bit integer
    ranap.AlternativeRABConfigurationRequest
ranap.AreaIdentity  AreaIdentity
    Unsigned 32-bit integer
    ranap.AreaIdentity
ranap.Ass_RAB_Parameter_ExtendedGuaranteedBitrateList  Ass-RAB-Parameter-Extende
    Unsigned 32-bit integer
    ranap.Ass_RAB_Parameter_ExtendedGuaranteedBitrateList
ranap.Ass_RAB_Parameter_ExtendedGuaranteedBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.ExtendedGuaranteedBitrate
ranap.Ass_RAB_Parameter_ExtendedMaxBitrateList  Ass-RAB-Parameter-ExtendedMaxBit
    Unsigned 32-bit integer
    ranap.Ass_RAB_Parameter_ExtendedMaxBitrateList
ranap.Ass_RAB_Parameter_ExtendedMaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.ExtendedMaxBitrate
ranap.Ass_RAB_Parameter_GuaranteedBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.GuaranteedBitrate

```

```
ranap.Ass_RAB_Parameter_MaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.MaxBitrate

ranap.Ass_RAB_Parameters  Ass-RAB-Parameters
    No value
    ranap.Ass_RAB_Parameters

ranap.AuthorisedPLMNs_item  Item
    No value
    ranap.AuthorisedPLMNs_item

ranap.AuthorisedSNAs_item  Item
    Unsigned 32-bit integer
    ranap.SNAC

ranap.BroadcastAssistanceDataDecipheringKeys  BroadcastAssistanceDataDeciphering
    No value
    ranap.BroadcastAssistanceDataDecipheringKeys

ranap.CNMBMSLinkingInformation  CNMBMSLinkingInformation
    No value
    ranap.CNMBMSLinkingInformation

ranap.CN_DeactivateTrace  CN-DeactivateTrace
    No value
    ranap.CN_DeactivateTrace

ranap.CN_DomainIndicator  CN-DomainIndicator
    Unsigned 32-bit integer
    ranap.CN_DomainIndicator

ranap.CN_InvokeTrace  CN-InvokeTrace
    No value
    ranap.CN_InvokeTrace

ranap.Cause  Cause
    Unsigned 32-bit integer
    ranap.Cause

ranap.CellLoadInformationGroup  CellLoadInformationGroup
    No value
    ranap.CellLoadInformationGroup

ranap.ChosenEncryptionAlgorithm  ChosenEncryptionAlgorithm
    Unsigned 32-bit integer
    ranap.ChosenEncryptionAlgorithm

ranap.ChosenIntegrityProtectionAlgorithm  ChosenIntegrityProtectionAlgorithm
    Unsigned 32-bit integer
    ranap.ChosenIntegrityProtectionAlgorithm

ranap.ClassmarkInformation2  ClassmarkInformation2
    Byte array
    ranap.ClassmarkInformation2

ranap.ClassmarkInformation3  ClassmarkInformation3
    Byte array
    ranap.ClassmarkInformation3

ranap.ClientType  ClientType
    Unsigned 32-bit integer
    ranap.ClientType
```

```
ranap.CommonID CommonID
  No value
  ranap.CommonID

ranap.CriticalityDiagnostics CriticalityDiagnostics
  No value
  ranap.CriticalityDiagnostics

ranap.CriticalityDiagnostics_IE_List_item Item
  No value
  ranap.CriticalityDiagnostics_IE_List_item

ranap.DRX_CycleLengthCoefficient DRX-CycleLengthCoefficient
  Unsigned 32-bit integer
  ranap.DRX_CycleLengthCoefficient

ranap.DataVolumeList_item Item
  No value
  ranap.DataVolumeList_item

ranap.DataVolumeReport DataVolumeReport
  No value
  ranap.DataVolumeReport

ranap.DataVolumeReportRequest DataVolumeReportRequest
  No value
  ranap.DataVolumeReportRequest

ranap.DeltaRAListofIdleModeUEs DeltaRAListofIdleModeUEs
  No value
  ranap.DeltaRAListofIdleModeUEs

ranap.DirectInformationTransfer DirectInformationTransfer
  No value
  ranap.DirectInformationTransfer

ranap.DirectTransfer DirectTransfer
  No value
  ranap.DirectTransfer

ranap.E_DCH_MAC_d_Flow_ID E-DCH-MAC-d-Flow-ID
  Unsigned 32-bit integer
  ranap.E_DCH_MAC_d_Flow_ID

ranap.EncryptionInformation EncryptionInformation
  No value
  ranap.EncryptionInformation

ranap.ErrorIndication ErrorIndication
  No value
  ranap.ErrorIndication

ranap.ExtendedRNC_ID ExtendedRNC-ID
  Unsigned 32-bit integer
  ranap.ExtendedRNC_ID

ranap.ForwardSRNS_Context ForwardSRNS-Context
  No value
  ranap.ForwardSRNS_Context

ranap.FrequenceLayerConvergenceFlag FrequenceLayerConvergenceFlag
  Unsigned 32-bit integer
  ranap.FrequenceLayerConvergenceFlag
```

```
ranap.GANSS_PositioningDataSet  GANSS-PositioningDataSet
    Unsigned 32-bit integer
    ranap.GANSS_PositioningDataSet

ranap.GANSS_PositioningDataSet_item  Item
    Byte array
    ranap.GANSS_PositioningMethodAndUsage

ranap.GA_Polygon_item  Item
    No value
    ranap.GA_Polygon_item

ranap.GERAN_BSC_Container  GERAN-BSC-Container
    Byte array
    ranap.GERAN_BSC_Container

ranap.GERAN_Classmark  GERAN-Classmark
    Byte array
    ranap.GERAN_Classmark

ranap.GERAN_Iumode_RAB_FailedList_RABAssgntResponse  GERAN-Iumode-RAB-FailedList
    Unsigned 32-bit integer
    ranap.GERAN_Iumode_RAB_FailedList_RABAssgntResponse

ranap.GERAN_Iumode_RAB_Failed_RABAssgntResponse_Item  GERAN-Iumode-RAB-Failed-RA
    No value
    ranap.GERAN_Iumode_RAB_Failed_RABAssgntResponse_Item

ranap.GlobalCN_ID  GlobalCN-ID
    No value
    ranap.GlobalCN_ID

ranap.GlobalRNC_ID  GlobalRNC-ID
    No value
    ranap.GlobalRNC_ID

ranap.HS_DSCH_MAC_d_Flow_ID  HS-DSCH-MAC-d-Flow-ID
    Unsigned 32-bit integer
    ranap.HS_DSCH_MAC_d_Flow_ID

ranap.IMEIList_item  Item
    Byte array
    ranap.IMEI

ranap.IMEISVList_item  Item
    Byte array
    ranap.IMEISV

ranap.IPMulticastAddress  IPMulticastAddress
    Byte array
    ranap.IPMulticastAddress

ranap.IncludeVelocity  IncludeVelocity
    Unsigned 32-bit integer
    ranap.IncludeVelocity

ranap.InformationExchangeID  InformationExchangeID
    Unsigned 32-bit integer
    ranap.InformationExchangeID

ranap.InformationExchangeType  InformationExchangeType
    Unsigned 32-bit integer
    ranap.InformationExchangeType
```

```
ranap.InformationRequestType InformationRequestType
    Unsigned 32-bit integer
    ranap.InformationRequestType
ranap.InformationRequested InformationRequested
    Unsigned 32-bit integer
    ranap.InformationRequested
ranap.InformationTransferConfirmation InformationTransferConfirmation
    No value
    ranap.InformationTransferConfirmation
ranap.InformationTransferFailure InformationTransferFailure
    No value
    ranap.InformationTransferFailure
ranap.InformationTransferID InformationTransferID
    Unsigned 32-bit integer
    ranap.InformationTransferID
ranap.InformationTransferIndication InformationTransferIndication
    No value
    ranap.InformationTransferIndication
ranap.InformationTransferType InformationTransferType
    Unsigned 32-bit integer
    ranap.InformationTransferType
ranap.InitialUE_Message InitialUE-Message
    No value
    ranap.InitialUE_Message
ranap.IntegrityProtectionInformation IntegrityProtectionInformation
    No value
    ranap.IntegrityProtectionInformation
ranap.InterSystemInformationTransferType InterSystemInformationTransferType
    Unsigned 32-bit integer
    ranap.InterSystemInformationTransferType
ranap.InterSystemInformation_TransparentContainer InterSystemInformation-Transp
    No value
    ranap.InterSystemInformation_TransparentContainer
ranap.IuSignallingConnectionIdentifier IuSignallingConnectionIdentifier
    Byte array
    ranap.IuSignallingConnectionIdentifier
ranap.IuTransportAssociation IuTransportAssociation
    Unsigned 32-bit integer
    ranap.IuTransportAssociation
ranap.Iu_ReleaseCommand Iu-ReleaseCommand
    No value
    ranap.Iu_ReleaseCommand
ranap.Iu_ReleaseComplete Iu-ReleaseComplete
    No value
    ranap.Iu_ReleaseComplete
ranap.Iu_ReleaseRequest Iu-ReleaseRequest
    No value
    ranap.Iu_ReleaseRequest
```

```
ranap.JoinedMBMSBearerService_IEs  JoinedMBMSBearerService-IEs
    Unsigned 32-bit integer
    ranap.JoinedMBMSBearerService_IEs
ranap.JoinedMBMSBearerService_IEs_item  Item
    No value
    ranap.JoinedMBMSBearerService_IEs_item
ranap.KeyStatus  KeyStatus
    Unsigned 32-bit integer
    ranap.KeyStatus
ranap.L3_Information  L3-Information
    Byte array
    ranap.L3_Information
ranap.LAI  LAI
    No value
    ranap.LAI
ranap.LAListOfIdleModeUEs  LAListOfIdleModeUEs
    Unsigned 32-bit integer
    ranap.LAListOfIdleModeUEs
ranap.LAListOfIdleModeUEs_item  Item
    No value
    ranap.LAI
ranap.LA_LIST_item  Item
    No value
    ranap.LA_LIST_item
ranap.LastKnownServiceArea  LastKnownServiceArea
    No value
    ranap.LastKnownServiceArea
ranap.LeftMBMSBearerService_IEs  LeftMBMSBearerService-IEs
    Unsigned 32-bit integer
    ranap.LeftMBMSBearerService_IEs
ranap.LeftMBMSBearerService_IEs_item  Item
    No value
    ranap.LeftMBMSBearerService_IEs_item
ranap.ListOF_SNAs_item  Item
    Unsigned 32-bit integer
    ranap.SNAC
ranap.ListOfInterfacesToTrace_item  Item
    No value
    ranap.InterfacesToTraceItem
ranap.LocationRelatedDataFailure  LocationRelatedDataFailure
    No value
    ranap.LocationRelatedDataFailure
ranap.LocationRelatedDataRequest  LocationRelatedDataRequest
    No value
    ranap.LocationRelatedDataRequest
ranap.LocationRelatedDataRequestType  LocationRelatedDataRequestType
    No value
    ranap.LocationRelatedDataRequestType
```

```
ranap.LocationRelatedDataRequestTypeSpecificToGERANIuMode  LocationRelatedDataRe
  Unsigned 32-bit integer
  ranap.LocationRelatedDataRequestTypeSpecificToGERANIuMode
ranap.LocationRelatedDataResponse  LocationRelatedDataResponse
  No value
  ranap.LocationRelatedDataResponse
ranap.LocationReport  LocationReport
  No value
  ranap.LocationReport
ranap.LocationReportingControl  LocationReportingControl
  No value
  ranap.LocationReportingControl
ranap.MBMSBearerServiceType  MBMSBearerServiceType
  Unsigned 32-bit integer
  ranap.MBMSBearerServiceType
ranap.MBMSCNDe_Registration  MBMSCNDe-Registration
  Unsigned 32-bit integer
  ranap.MBMSCNDe_Registration
ranap.MBMSCNDe_RegistrationRequest  MBMSCNDe-RegistrationRequest
  No value
  ranap.MBMSCNDe_RegistrationRequest
ranap.MBMSCNDe_RegistrationResponse  MBMSCNDe-RegistrationResponse
  No value
  ranap.MBMSCNDe_RegistrationResponse
ranap.MBMSCountingInformation  MBMSCountingInformation
  Unsigned 32-bit integer
  ranap.MBMSCountingInformation
ranap.MBMSIPMulticastAddressandAPNRequest_item  Item
  No value
  ranap.TMGI
ranap.MBMSLinkingInformation  MBMSLinkingInformation
  Unsigned 32-bit integer
  ranap.MBMSLinkingInformation
ranap.MBMSRABEstablishmentIndication  MBMSRABEstablishmentIndication
  No value
  ranap.MBMSRABEstablishmentIndication
ranap.MBMSRABRelease  MBMSRABRelease
  No value
  ranap.MBMSRABRelease
ranap.MBMSRABReleaseFailure  MBMSRABReleaseFailure
  No value
  ranap.MBMSRABReleaseFailure
ranap.MBMSRABReleaseRequest  MBMSRABReleaseRequest
  No value
  ranap.MBMSRABReleaseRequest
ranap.MBMSRegistrationFailure  MBMSRegistrationFailure
  No value
  ranap.MBMSRegistrationFailure
```



```
ranap.MBMSRegistrationRequest  MBMSRegistrationRequest
    No value
    ranap.MBMSRegistrationRequest
ranap.MBMSRegistrationRequestType  MBMSRegistrationRequestType
    Unsigned 32-bit integer
    ranap.MBMSRegistrationRequestType
ranap.MBMSRegistrationResponse  MBMSRegistrationResponse
    No value
    ranap.MBMSRegistrationResponse
ranap.MBMSServiceArea  MBMSServiceArea
    Byte array
    ranap.MBMSServiceArea
ranap.MBMSSessionDuration  MBMSSessionDuration
    Byte array
    ranap.MBMSSessionDuration
ranap.MBMSSessionIdentity  MBMSSessionIdentity
    Byte array
    ranap.MBMSSessionIdentity
ranap.MBMSSessionRepetitionNumber  MBMSSessionRepetitionNumber
    Byte array
    ranap.MBMSSessionRepetitionNumber
ranap.MBMSSessionStart  MBMSSessionStart
    No value
    ranap.MBMSSessionStart
ranap.MBMSSessionStartFailure  MBMSSessionStartFailure
    No value
    ranap.MBMSSessionStartFailure
ranap.MBMSSessionStartResponse  MBMSSessionStartResponse
    No value
    ranap.MBMSSessionStartResponse
ranap.MBMSSessionStop  MBMSSessionStop
    No value
    ranap.MBMSSessionStop
ranap.MBMSSessionStopResponse  MBMSSessionStopResponse
    No value
    ranap.MBMSSessionStopResponse
ranap.MBMSSessionUpdate  MBMSSessionUpdate
    No value
    ranap.MBMSSessionUpdate
ranap.MBMSSessionUpdateFailure  MBMSSessionUpdateFailure
    No value
    ranap.MBMSSessionUpdateFailure
ranap.MBMSSessionUpdateResponse  MBMSSessionUpdateResponse
    No value
    ranap.MBMSSessionUpdateResponse
ranap.MBMSUELinkingRequest  MBMSUELinkingRequest
    No value
    ranap.MBMSUELinkingRequest
```

```
ranap.MBMSUELinkingResponse  MBMSUELinkingResponse
    No value
    ranap.MBMSUELinkingResponse
ranap.MessageStructure  MessageStructure
    Unsigned 32-bit integer
    ranap.MessageStructure
ranap.MessageStructure_item  Item
    No value
    ranap.MessageStructure_item
ranap.NAS_PDU  NAS-PDU
    Byte array
    ranap.NAS_PDU
ranap.NAS_SequenceNumber  NAS-SequenceNumber
    Byte array
    ranap.NAS_SequenceNumber
ranap.NewBSS_To_OldBSS_Information  NewBSS-To-OldBSS-Information
    Byte array
    ranap.NewBSS_To_OldBSS_Information
ranap.NewRAListofIdleModeUEs_item  Item
    Byte array
    ranap.RAC
ranap.NonSearchingIndication  NonSearchingIndication
    Unsigned 32-bit integer
    ranap.NonSearchingIndication
ranap.NumberOfSteps  NumberOfSteps
    Unsigned 32-bit integer
    ranap.NumberOfSteps
ranap.OMC_ID  OMC-ID
    Byte array
    ranap.OMC_ID
ranap.OldBSS_ToNewBSS_Information  OldBSS-ToNewBSS-Information
    Byte array
    ranap.OldBSS_ToNewBSS_Information
ranap.Overload  Overload
    No value
    ranap.Overload
ranap.PDP_TypeInformation  PDP-TypeInformation
    Unsigned 32-bit integer
    ranap.PDP_TypeInformation
ranap.PDP_TypeInformation_item  Item
    Unsigned 32-bit integer
    ranap.PDP_Type
ranap.PLMNidentity  PLMNidentity
    Byte array
    ranap.PLMNidentity
ranap.PLMNs_in_shared_network_item  Item
    No value
    ranap.PLMNs_in_shared_network_item
```

```
ranap.Paging Paging
  No value
  ranap.Paging

ranap.PagingAreaID PagingAreaID
  Unsigned 32-bit integer
  ranap.PagingAreaID

ranap.PagingCause PagingCause
  Unsigned 32-bit integer
  ranap.PagingCause

ranap.PeriodicLocationInfo PeriodicLocationInfo
  No value
  ranap.PeriodicLocationInfo

ranap.PermanentNAS_UE_ID PermanentNAS-UE-ID
  Unsigned 32-bit integer
  ranap.PermanentNAS_UE_ID

ranap.PermittedEncryptionAlgorithms_item Item
  Unsigned 32-bit integer
  ranap.EncryptionAlgorithm

ranap.PermittedIntegrityProtectionAlgorithms_item Item
  Unsigned 32-bit integer
  ranap.IntegrityProtectionAlgorithm

ranap.PositionData PositionData
  No value
  ranap.PositionData

ranap.PositionDataSpecificToGERANIuMode PositionDataSpecificToGERANIuMode
  Byte array
  ranap.PositionDataSpecificToGERANIuMode

ranap.PositioningDataSet_item Item
  Byte array
  ranap.PositioningMethodAndUsage

ranap.PositioningPriority PositioningPriority
  Unsigned 32-bit integer
  ranap.PositioningPriority

ranap.PrivateIE_Container_item Item
  No value
  ranap.PrivateIE_Field

ranap.PrivateMessage PrivateMessage
  No value
  ranap.PrivateMessage

ranap.ProtocolExtensionContainer_item Item
  No value
  ranap.ProtocolExtensionField

ranap.ProtocolIE_ContainerList_item Item
  Unsigned 32-bit integer
  ranap.ProtocolIE_Container

ranap.ProtocolIE_ContainerPairList_item Item
  Unsigned 32-bit integer
  ranap.ProtocolIE_ContainerPair
```

```
ranap.ProtocolIE_ContainerPair_item  Item
    No value
    ranap.ProtocolIE_FieldPair
ranap.ProtocolIE_Container_item  Item
    No value
    ranap.ProtocolIE_Field
ranap.ProvidedData  ProvidedData
    Unsigned 32-bit integer
    ranap.ProvidedData
ranap.RAB_AssignmentRequest  RAB-AssignmentRequest
    No value
    ranap.RAB_AssignmentRequest
ranap.RAB_AssignmentResponse  RAB-AssignmentResponse
    No value
    ranap.RAB_AssignmentResponse
ranap.RAB_ContextFailedtoTransferList  RAB-ContextFailedtoTransferList
    Unsigned 32-bit integer
    ranap.RAB_ContextFailedtoTransferList
ranap.RAB_ContextItem  RAB-ContextItem
    No value
    ranap.RAB_ContextItem
ranap.RAB_ContextItem_RANAP_RelocInf  RAB-ContextItem-RANAP-RelocInf
    No value
    ranap.RAB_ContextItem_RANAP_RelocInf
ranap.RAB_ContextList  RAB-ContextList
    Unsigned 32-bit integer
    ranap.RAB_ContextList
ranap.RAB_ContextList_RANAP_RelocInf  RAB-ContextList-RANAP-RelocInf
    Unsigned 32-bit integer
    ranap.RAB_ContextList_RANAP_RelocInf
ranap.RAB_DataForwardingItem  RAB-DataForwardingItem
    No value
    ranap.RAB_DataForwardingItem
ranap.RAB_DataForwardingItem_SRNS_CtxReq  RAB-DataForwardingItem-SRNS-CtxReq
    No value
    ranap.RAB_DataForwardingItem_SRNS_CtxReq
ranap.RAB_DataForwardingList  RAB-DataForwardingList
    Unsigned 32-bit integer
    ranap.RAB_DataForwardingList
ranap.RAB_DataForwardingList_SRNS_CtxReq  RAB-DataForwardingList-SRNS-CtxReq
    Unsigned 32-bit integer
    ranap.RAB_DataForwardingList_SRNS_CtxReq
ranap.RAB_DataVolumeReportItem  RAB-DataVolumeReportItem
    No value
    ranap.RAB_DataVolumeReportItem
ranap.RAB_DataVolumeReportList  RAB-DataVolumeReportList
    Unsigned 32-bit integer
    ranap.RAB_DataVolumeReportList
```

```
ranap.RAB_DataVolumeReportRequestItem  RAB-DataVolumeReportRequestItem
    No value
    ranap.RAB_DataVolumeReportRequestItem
ranap.RAB_DataVolumeReportRequestList  RAB-DataVolumeReportRequestList
    Unsigned 32-bit integer
    ranap.RAB_DataVolumeReportRequestList
ranap.RAB_FailedItem  RAB-FailedItem
    No value
    ranap.RAB_FailedItem
ranap.RAB_FailedList  RAB-FailedList
    Unsigned 32-bit integer
    ranap.RAB_FailedList
ranap.RAB_FailedtoReportList  RAB-FailedtoReportList
    Unsigned 32-bit integer
    ranap.RAB_FailedtoReportList
ranap.RAB_ModifyItem  RAB-ModifyItem
    No value
    ranap.RAB_ModifyItem
ranap.RAB_ModifyList  RAB-ModifyList
    Unsigned 32-bit integer
    ranap.RAB_ModifyList
ranap.RAB_ModifyRequest  RAB-ModifyRequest
    No value
    ranap.RAB_ModifyRequest
ranap.RAB_Parameter_ExtendedGuaranteedBitrateList  RAB-Parameter-ExtendedGuarant
    Unsigned 32-bit integer
    ranap.RAB_Parameter_ExtendedGuaranteedBitrateList
ranap.RAB_Parameter_ExtendedGuaranteedBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.ExtendedGuaranteedBitrate
ranap.RAB_Parameter_ExtendedMaxBitrateList  RAB-Parameter-ExtendedMaxBitrateList
    Unsigned 32-bit integer
    ranap.RAB_Parameter_ExtendedMaxBitrateList
ranap.RAB_Parameter_ExtendedMaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.ExtendedMaxBitrate
ranap.RAB_Parameter_GuaranteedBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.GuaranteedBitrate
ranap.RAB_Parameter_MaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.MaxBitrate
ranap.RAB_Parameters  RAB-Parameters
    No value
    ranap.RAB_Parameters
ranap.RAB_QueuedItem  RAB-QueuedItem
    No value
    ranap.RAB_QueuedItem
```

```
ranap.RAB_QueuedList  RAB-QueuedList
    Unsigned 32-bit integer
    ranap.RAB_QueuedList

ranap.RAB_ReleaseFailedList  RAB-ReleaseFailedList
    Unsigned 32-bit integer
    ranap.RAB_ReleaseFailedList

ranap.RAB_ReleaseItem  RAB-ReleaseItem
    No value
    ranap.RAB_ReleaseItem

ranap.RAB_ReleaseList  RAB-ReleaseList
    Unsigned 32-bit integer
    ranap.RAB_ReleaseList

ranap.RAB_ReleaseRequest  RAB-ReleaseRequest
    No value
    ranap.RAB_ReleaseRequest

ranap.RAB_ReleasedItem  RAB-ReleasedItem
    No value
    ranap.RAB_ReleasedItem

ranap.RAB_ReleasedItem_IuRelComp  RAB-ReleasedItem-IuRelComp
    No value
    ranap.RAB_ReleasedItem_IuRelComp

ranap.RAB_ReleasedList  RAB-ReleasedList
    Unsigned 32-bit integer
    ranap.RAB_ReleasedList

ranap.RAB_ReleasedList_IuRelComp  RAB-ReleasedList-IuRelComp
    Unsigned 32-bit integer
    ranap.RAB_ReleasedList_IuRelComp

ranap.RAB_RelocationReleaseItem  RAB-RelocationReleaseItem
    No value
    ranap.RAB_RelocationReleaseItem

ranap.RAB_RelocationReleaseList  RAB-RelocationReleaseList
    Unsigned 32-bit integer
    ranap.RAB_RelocationReleaseList

ranap.RAB_SetupItem_RelocReq  RAB-SetupItem-RelocReq
    No value
    ranap.RAB_SetupItem_RelocReq

ranap.RAB_SetupItem_RelocReqAck  RAB-SetupItem-RelocReqAck
    No value
    ranap.RAB_SetupItem_RelocReqAck

ranap.RAB_SetupList_RelocReq  RAB-SetupList-RelocReq
    Unsigned 32-bit integer
    ranap.RAB_SetupList_RelocReq

ranap.RAB_SetupList_RelocReqAck  RAB-SetupList-RelocReqAck
    Unsigned 32-bit integer
    ranap.RAB_SetupList_RelocReqAck

ranap.RAB_SetupOrModifiedItem  RAB-SetupOrModifiedItem
    No value
    ranap.RAB_SetupOrModifiedItem
```

```
ranap.RAB_SetupOrModifiedList  RAB-SetupOrModifiedList
    Unsigned 32-bit integer
    ranap.RAB_SetupOrModifiedList
ranap.RAB_SetupOrModifyItemFirst  RAB-SetupOrModifyItemFirst
    No value
    ranap.RAB_SetupOrModifyItemFirst
ranap.RAB_SetupOrModifyItemSecond  RAB-SetupOrModifyItemSecond
    No value
    ranap.RAB_SetupOrModifyItemSecond
ranap.RAB_SetupOrModifyList  RAB-SetupOrModifyList
    Unsigned 32-bit integer
    ranap.RAB_SetupOrModifyList
ranap.RAB_TrCH_Mapping_item  Item
    No value
    ranap.RAB_TrCH_MappingItem
ranap.RABs_ContextFailedtoTransferItem  RABs-ContextFailedtoTransferItem
    No value
    ranap.RABs_ContextFailedtoTransferItem
ranap.RABs_failed_to_reportItem  RABs-failed-to-reportItem
    No value
    ranap.RABs_failed_to_reportItem
ranap.RAC  RAC
    Byte array
    ranap.RAC
ranap.RAListofIdleModeUEs  RAListofIdleModeUEs
    Unsigned 32-bit integer
    ranap.RAListofIdleModeUEs
ranap.RAListwithNoIdleModeUEsAnyMore_item  Item
    Byte array
    ranap.RAC
ranap.RANAP_PDU  RANAP-PDU
    Unsigned 32-bit integer
    ranap.RANAP_PDU
ranap.RANAP_RelocationInformation  RANAP-RelocationInformation
    No value
    ranap.RANAP_RelocationInformation
ranap.RAT_Type  RAT-Type
    Unsigned 32-bit integer
    ranap.RAT_Type
ranap.RAofIdleModeUEs_item  Item
    Byte array
    ranap.RAC
ranap.RRC_Container  RRC-Container
    Byte array
    ranap.RRC_Container
ranap.RedirectAttemptFlag  RedirectAttemptFlag
    No value
    ranap.RedirectAttemptFlag
```

```
ranap.RedirectionCompleted  RedirectionCompleted
    Unsigned 32-bit integer
    ranap.RedirectionCompleted

ranap.RedirectionIndication  RedirectionIndication
    Unsigned 32-bit integer
    ranap.RedirectionIndication

ranap.RejectCauseValue  RejectCauseValue
    Unsigned 32-bit integer
    ranap.RejectCauseValue

ranap.RelocationCancel  RelocationCancel
    No value
    ranap.RelocationCancel

ranap.RelocationCancelAcknowledge  RelocationCancelAcknowledge
    No value
    ranap.RelocationCancelAcknowledge

ranap.RelocationCommand  RelocationCommand
    No value
    ranap.RelocationCommand

ranap.RelocationComplete  RelocationComplete
    No value
    ranap.RelocationComplete

ranap.RelocationDetect  RelocationDetect
    No value
    ranap.RelocationDetect

ranap.RelocationFailure  RelocationFailure
    No value
    ranap.RelocationFailure

ranap.RelocationPreparationFailure  RelocationPreparationFailure
    No value
    ranap.RelocationPreparationFailure

ranap.RelocationRequest  RelocationRequest
    No value
    ranap.RelocationRequest

ranap.RelocationRequestAcknowledge  RelocationRequestAcknowledge
    No value
    ranap.RelocationRequestAcknowledge

ranap.RelocationRequired  RelocationRequired
    No value
    ranap.RelocationRequired

ranap.RelocationType  RelocationType
    Unsigned 32-bit integer
    ranap.RelocationType

ranap.RequestType  RequestType
    No value
    ranap.RequestType

ranap.RequestedGANSSAssistanceData  RequestedGANSSAssistanceData
    Byte array
    ranap.RequestedGANSSAssistanceData
```



```

ranap.RequestedMBMSIPMulticastAddressandAPNRequest_item  Item
    No value
    ranap.MBMSIPMulticastAddressandAPNlist
ranap.RequestedMulticastServiceList_item  Item
    No value
    ranap.TMGI
ranap.Requested_RAB_Parameter_ExtendedGuaranteedBitrateList  Requested-RAB-Param
    Unsigned 32-bit integer
    ranap.Requested_RAB_Parameter_ExtendedGuaranteedBitrateList
ranap.Requested_RAB_Parameter_ExtendedGuaranteedBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.ExtendedGuaranteedBitrate
ranap.Requested_RAB_Parameter_ExtendedMaxBitrateList  Requested-RAB-Parameter-Ex
    Unsigned 32-bit integer
    ranap.Requested_RAB_Parameter_ExtendedMaxBitrateList
ranap.Requested_RAB_Parameter_ExtendedMaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.ExtendedMaxBitrate
ranap.Requested_RAB_Parameter_GuaranteedBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.GuaranteedBitrate
ranap.Requested_RAB_Parameter_MaxBitrateList_item  Item
    Unsigned 32-bit integer
    ranap.MaxBitrate
ranap.Reset  Reset
    No value
    ranap.Reset
ranap.ResetAcknowledge  ResetAcknowledge
    No value
    ranap.ResetAcknowledge
ranap.ResetResource  ResetResource
    No value
    ranap.ResetResource
ranap.ResetResourceAcknowledge  ResetResourceAcknowledge
    No value
    ranap.ResetResourceAcknowledge
ranap.ResetResourceItem  ResetResourceItem
    No value
    ranap.ResetResourceItem
ranap.ResetResourceList  ResetResourceList
    Unsigned 32-bit integer
    ranap.ResetResourceList
ranap.ResponseTime  ResponseTime
    Unsigned 32-bit integer
    ranap.ResponseTime
ranap.SAI  SAI
    No value
    ranap.SAI

```

```
ranap.SAPI SAPI
  Unsigned 32-bit integer
  ranap.SAPI

ranap.SDU_FormatInformationParameters_item Item
  No value
  ranap.SDU_FormatInformationParameters_item

ranap.SDU_Parameters_item Item
  No value
  ranap.SDU_Parameters_item

ranap.SNA_Access_Information SNA-Access-Information
  No value
  ranap.SNA_Access_Information

ranap.SRB_TrCH_Mapping SRB-TrCH-Mapping
  Unsigned 32-bit integer
  ranap.SRB_TrCH_Mapping

ranap.SRB_TrCH_Mapping_item Item
  No value
  ranap.SRB_TrCH_MappingItem

ranap.SRNS_ContextRequest SRNS-ContextRequest
  No value
  ranap.SRNS_ContextRequest

ranap.SRNS_ContextResponse SRNS-ContextResponse
  No value
  ranap.SRNS_ContextResponse

ranap.SRNS_DataForwardCommand SRNS-DataForwardCommand
  No value
  ranap.SRNS_DataForwardCommand

ranap.SecurityModeCommand SecurityModeCommand
  No value
  ranap.SecurityModeCommand

ranap.SecurityModeComplete SecurityModeComplete
  No value
  ranap.SecurityModeComplete

ranap.SecurityModeReject SecurityModeReject
  No value
  ranap.SecurityModeReject

ranap.SessionUpdateID SessionUpdateID
  Unsigned 32-bit integer
  ranap.SessionUpdateID

ranap.SignallingIndication SignallingIndication
  Unsigned 32-bit integer
  ranap.SignallingIndication

ranap.SourceBSS_ToTargetBSS_TransparentContainer SourceBSS-ToTargetBSS-Transpar
  Byte array
  ranap.SourceBSS_ToTargetBSS_TransparentContainer

ranap.SourceID SourceID
  Unsigned 32-bit integer
  ranap.SourceID
```

```
ranap.TMGI    TMGI
  No value
  ranap.TMGI

ranap.TargetBSS_ToSourceBSS_TransparentContainer  TargetBSS-ToSourceBSS-Transpar
  Byte array
  ranap.TargetBSS_ToSourceBSS_TransparentContainer

ranap.TargetID  TargetID
  Unsigned 32-bit integer
  ranap.TargetID

ranap.TemporaryUE_ID  TemporaryUE-ID
  Unsigned 32-bit integer
  ranap.TemporaryUE_ID

ranap.TimeToMBMSDataTransfer  TimeToMBMSDataTransfer
  Byte array
  ranap.TimeToMBMSDataTransfer

ranap.TrCH_ID_List_item  Item
  No value
  ranap.TrCH_ID

ranap.TracePropagationParameters  TracePropagationParameters
  No value
  ranap.TracePropagationParameters

ranap.TraceRecordingSessionInformation  TraceRecordingSessionInformation
  No value
  ranap.TraceRecordingSessionInformation

ranap.TraceReference  TraceReference
  Byte array
  ranap.TraceReference

ranap.TraceType  TraceType
  Byte array
  ranap.TraceType

ranap.TransportLayerAddress  TransportLayerAddress
  Byte array
  ranap.TransportLayerAddress

ranap.TransportLayerInformation  TransportLayerInformation
  No value
  ranap.TransportLayerInformation

ranap.TriggerID  TriggerID
  Byte array
  ranap.TriggerID

ranap.TypeOfError  TypeOfError
  Unsigned 32-bit integer
  ranap.TypeOfError

ranap.UESBI_Iu  UESBI-Iu
  No value
  ranap.UESBI_Iu

ranap.UESpecificInformationIndication  UESpecificInformationIndication
  No value
  ranap.UESpecificInformationIndication
```

```
ranap.UE_ID UE-ID
  Unsigned 32-bit integer
  ranap.UE_ID

ranap.UnsuccessfulLinking_IEs UnsuccessfulLinking-IEs
  Unsigned 32-bit integer
  ranap.UnsuccessfulLinking_IEs

ranap.UnsuccessfulLinking_IEs_item Item
  No value
  ranap.UnsuccessfulLinking_IEs_item

ranap.UplinkInformationExchangeFailure UplinkInformationExchangeFailure
  No value
  ranap.UplinkInformationExchangeFailure

ranap.UplinkInformationExchangeRequest UplinkInformationExchangeRequest
  No value
  ranap.UplinkInformationExchangeRequest

ranap.UplinkInformationExchangeResponse UplinkInformationExchangeResponse
  No value
  ranap.UplinkInformationExchangeResponse

ranap.VelocityEstimate VelocityEstimate
  Unsigned 32-bit integer
  ranap.VelocityEstimate

ranap.VerticalAccuracyCode VerticalAccuracyCode
  Unsigned 32-bit integer
  ranap.VerticalAccuracyCode

ranap.aPN aPN
  Byte array
  ranap.APN

ranap.accuracyCode accuracyCode
  Unsigned 32-bit integer
  ranap.INTEGER_0_127

ranap.ageOfSAI ageOfSAI
  Unsigned 32-bit integer
  ranap.INTEGER_0_32767

ranap.allocationOrRetentionPriority allocationOrRetentionPriority
  No value
  ranap.AllocationOrRetentionPriority

ranap.altExtendedGuaranteedBitrateType altExtendedGuaranteedBitrateType
  Unsigned 32-bit integer
  ranap.Alt_RAB_Parameter_GuaranteedBitrateType

ranap.altExtendedGuaranteedBitrates altExtendedGuaranteedBitrates
  Unsigned 32-bit integer
  ranap.Alt_RAB_Parameter_ExtendedGuaranteedBitrates

ranap.altExtendedMaxBitrateType altExtendedMaxBitrateType
  Unsigned 32-bit integer
  ranap.Alt_RAB_Parameter_MaxBitrateType

ranap.altExtendedMaxBitrates altExtendedMaxBitrates
  Unsigned 32-bit integer
  ranap.Alt_RAB_Parameter_ExtendedMaxBitrates
```

```
ranap.altGuaranteedBitRateInf  altGuaranteedBitRateInf
    No value
    ranap.Alt_RAB_Parameter_GuaranteedBitrateInf
ranap.altGuaranteedBitrateType  altGuaranteedBitrateType
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_GuaranteedBitrateType
ranap.altGuaranteedBitrates  altGuaranteedBitrates
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_GuaranteedBitrates
ranap.altMaxBitrateInf  altMaxBitrateInf
    No value
    ranap.Alt_RAB_Parameter_MaxBitrateInf
ranap.altMaxBitrateType  altMaxBitrateType
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_MaxBitrateType
ranap.altMaxBitrates  altMaxBitrates
    Unsigned 32-bit integer
    ranap.Alt_RAB_Parameter_MaxBitrates
ranap.altitude  altitude
    Unsigned 32-bit integer
    ranap.INTEGER_0_32767
ranap.altitudeAndDirection  altitudeAndDirection
    No value
    ranap.GA_AltitudeAndDirection
ranap.assGuaranteedBitRateInf  assGuaranteedBitRateInf
    Unsigned 32-bit integer
    ranap.Ass_RAB_Parameter_GuaranteedBitrateList
ranap.assMaxBitrateInf  assMaxBitrateInf
    Unsigned 32-bit integer
    ranap.Ass_RAB_Parameter_MaxBitrateList
ranap.authorisedPLMNs  authorisedPLMNs
    Unsigned 32-bit integer
    ranap.AuthorisedPLMNs
ranap.authorisedSNAsList  authorisedSNAsList
    Unsigned 32-bit integer
    ranap.AuthorisedSNAs
ranap.bearing  bearing
    Unsigned 32-bit integer
    ranap.INTEGER_0_359
ranap.bindingID  bindingID
    Byte array
    ranap.BindingID
ranap.cGI  cGI
    No value
    ranap.CGI
ranap.cI  cI
    Byte array
    ranap.CI
```

```
ranap.cN_DomainIndicator  cN-DomainIndicator
    Unsigned 32-bit integer
    ranap.CN_DomainIndicator

ranap.cN_ID  cN-ID
    Unsigned 32-bit integer
    ranap.CN_ID

ranap.cause  cause
    Unsigned 32-bit integer
    ranap.Cause

ranap.cell_Capacity_Class_Value  cell-Capacity-Class-Value
    Unsigned 32-bit integer
    ranap.Cell_Capacity_Class_Value

ranap.chosenEncryptionAlgorithmForCS  chosenEncryptionAlgorithmForCS
    Unsigned 32-bit integer
    ranap.ChosenEncryptionAlgorithm

ranap.chosenEncryptionAlgorithmForPS  chosenEncryptionAlgorithmForPS
    Unsigned 32-bit integer
    ranap.ChosenEncryptionAlgorithm

ranap.chosenEncryptionAlgorithmForSignalling  chosenEncryptionAlgorithmForSignalling
    Unsigned 32-bit integer
    ranap.ChosenEncryptionAlgorithm

ranap.chosenIntegrityProtectionAlgorithm  chosenIntegrityProtectionAlgorithm
    Unsigned 32-bit integer
    ranap.ChosenIntegrityProtectionAlgorithm

ranap.cipheringKey  cipheringKey
    Byte array
    ranap.EncryptionKey

ranap.cipheringKeyFlag  cipheringKeyFlag
    Byte array
    ranap.BIT_STRING_SIZE_1

ranap.confidence  confidence
    Unsigned 32-bit integer
    ranap.INTEGER_0_127

ranap.criticality  criticality
    Unsigned 32-bit integer
    ranap.Criticality

ranap.currentDecipheringKey  currentDecipheringKey
    Byte array
    ranap.BIT_STRING_SIZE_56

ranap.dCH_ID  dCH-ID
    Unsigned 32-bit integer
    ranap.DCH_ID

ranap.dL_GTP_PDU_SequenceNumber  dL-GTP-PDU-SequenceNumber
    Unsigned 32-bit integer
    ranap.DL_GTP_PDU_SequenceNumber

ranap.dSCH_ID  dSCH-ID
    Unsigned 32-bit integer
    ranap.DSCH_ID
```

```
ranap.d_RNTI    d-RNTI
               Unsigned 32-bit integer
               ranap.D_RNTI

ranap.dataVolumeReference  dataVolumeReference
               Unsigned 32-bit integer
               ranap.DataVolumeReference

ranap.dataVolumeReportingIndication  dataVolumeReportingIndication
               Unsigned 32-bit integer
               ranap.DataVolumeReportingIndication

ranap.deliveryOfErroneousSDU  deliveryOfErroneousSDU
               Unsigned 32-bit integer
               ranap.DeliveryOfErroneousSDU

ranap.deliveryOrder  deliveryOrder
               Unsigned 32-bit integer
               ranap.DeliveryOrder

ranap.directionOfAltitude  directionOfAltitude
               Unsigned 32-bit integer
               ranap.T_directionOfAltitude

ranap.dl_GTP_PDU_SequenceNumber  dl-GTP-PDU-SequenceNumber
               Unsigned 32-bit integer
               ranap.DL_GTP_PDU_SequenceNumber

ranap.dl_N_PDU_SequenceNumber  dl-N-PDU-SequenceNumber
               Unsigned 32-bit integer
               ranap.DL_N_PDU_SequenceNumber

ranap.dl_UnsuccessfullyTransmittedDataVolume  dl-UnsuccessfullyTransmittedDataVo
               Unsigned 32-bit integer
               ranap.DataVolumeList

ranap.dl_dataVolumes  dl-dataVolumes
               Unsigned 32-bit integer
               ranap.DataVolumeList

ranap.downlinkCellLoadInformation  downlinkCellLoadInformation
               No value
               ranap.CellLoadInformation

ranap.ellipsoidArc  ellipsoidArc
               No value
               ranap.GA_EllipsoidArc

ranap.emptyFullRListofIdleModeUEs  emptyFullRListofIdleModeUEs
               Unsigned 32-bit integer
               ranap.T_emptyFullRListofIdleModeUEs

ranap.equipmentsToBeTraced  equipmentsToBeTraced
               Unsigned 32-bit integer
               ranap.EquipmentsToBeTraced

ranap.event  event
               Unsigned 32-bit integer
               ranap.Event

ranap.exponent  exponent
               Unsigned 32-bit integer
               ranap.INTEGER_1_8
```

```
ranap.extensionValue extensionValue
    No value
    ranap.T_extensionValue
ranap.firstCriticality firstCriticality
    Unsigned 32-bit integer
    ranap.Criticality
ranap.firstValue firstValue
    No value
    ranap.T_firstValue
ranap.gERAN_Cell_ID gERAN-Cell-ID
    No value
    ranap.GERAN_Cell_ID
ranap.gERAN_Classmark gERAN-Classmark
    Byte array
    ranap.GERAN_Classmark
ranap.gTP_TEI gTP-TEI
    Byte array
    ranap.GTP_TEI
ranap.geographicalArea geographicalArea
    Unsigned 32-bit integer
    ranap.GeographicalArea
ranap.geographicalCoordinates geographicalCoordinates
    No value
    ranap.GeographicalCoordinates
ranap.global global
    ranap.OBJECT_IDENTIFIER
ranap.guaranteedBitRate guaranteedBitRate
    Unsigned 32-bit integer
    ranap.RAB_Parameter_GuaranteedBitrateList
ranap.horizontalSpeed horizontalSpeed
    Unsigned 32-bit integer
    ranap.INTEGER_0_2047
ranap.horizontalSpeedAndBearing horizontalSpeedAndBearing
    No value
    ranap.HorizontalSpeedAndBearing
ranap.horizontalUncertaintySpeed horizontalUncertaintySpeed
    Unsigned 32-bit integer
    ranap.INTEGER_0_255
ranap.horizontalVelocity horizontalVelocity
    No value
    ranap.HorizontalVelocity
ranap.horizontalVelocityWithUncertainty horizontalVelocityWithUncertainty
    No value
    ranap.HorizontalVelocityWithUncertainty
ranap.horizontalWithVeritcalVelocityAndUncertainty horizontalWithVeritcalVeloci
    No value
    ranap.HorizontalWithVerticalVelocityAndUncertainty
```



```
ranap.horizontalWithVerticalVelocity horizontalWithVerticalVelocity
    No value
    ranap.HorizontalWithVerticalVelocity
ranap.iECriticality iECriticality
    Unsigned 32-bit integer
    ranap.Criticality
ranap.iE_Extensions iE-Extensions
    Unsigned 32-bit integer
    ranap.ProtocolExtensionContainer
ranap.iE_ID iE-ID
    Unsigned 32-bit integer
    ranap.ProtocolIE_ID
ranap.iEsCriticalityDiagnostics iEsCriticalityDiagnostics
    Unsigned 32-bit integer
    ranap.CriticalityDiagnostics_IE_List
ranap.iMEI iMEI
    Byte array
    ranap.IMEI
ranap.iMEIMask iMEIMask
    Byte array
    ranap.BIT_STRING_SIZE_7
ranap.iMEISV iMEISV
    Byte array
    ranap.IMEISV
ranap.iMEISVMask iMEISVMask
    Byte array
    ranap.BIT_STRING_SIZE_7
ranap.iMEISVgroup iMEISVgroup
    No value
    ranap.IMEISVGroup
ranap.iMEISVlist iMEISVlist
    Unsigned 32-bit integer
    ranap.IMEISVList
ranap.iMEIgroup iMEIgroup
    No value
    ranap.IMEIGroup
ranap.iMEIlist iMEIlist
    Unsigned 32-bit integer
    ranap.IMEIList
ranap.iMSI iMSI
    Byte array
    ranap.IMSI
ranap.iPMulticastAddress iPMulticastAddress
    Byte array
    ranap.IPMulticastAddress
ranap.id id
    Unsigned 32-bit integer
    ranap.ProtocolIE_ID
```

```
ranap.imei imei
    Byte array
    ranap.IMEI

ranap.imeisv imeisv
    Byte array
    ranap.IMEISV

ranap.imsi imsi
    Byte array
    ranap.IMSI

ranap.imsi_digits IMSI digits
    String
    IMSI digits

ranap.includedAngle includedAngle
    Unsigned 32-bit integer
    ranap.INTEGER_0_179

ranap.initiatingMessage initiatingMessage
    No value
    ranap.InitiatingMessage

ranap.innerRadius innerRadius
    Unsigned 32-bit integer
    ranap.INTEGER_0_65535

ranap.integrityProtectionKey integrityProtectionKey
    Byte array
    ranap.IntegrityProtectionKey

ranap.interface interface
    Unsigned 32-bit integer
    ranap.T_interface

ranap.iuSigConId iuSigConId
    Byte array
    ranap.IuSignallingConnectionIdentifier

ranap.iuTransportAssociation iuTransportAssociation
    Unsigned 32-bit integer
    ranap.IuTransportAssociation

ranap.joinedMBMSBearerService_IEs joinedMBMSBearerService-IEs
    Unsigned 32-bit integer
    ranap.JoinedMBMSBearerService_IEs

ranap.key key
    Byte array
    ranap.EncryptionKey

ranap.lAC lAC
    Byte array
    ranap.LAC

ranap.lAI lAI
    No value
    ranap.LAI

ranap.lA_LIST lA-LIST
    Unsigned 32-bit integer
    ranap.LA_LIST
```

```
ranap.latitude latitude
    Unsigned 32-bit integer
    ranap.INTEGER_0_8388607

ranap.latitudeSign latitudeSign
    Unsigned 32-bit integer
    ranap.T_latitudeSign

ranap.listOF_SNAs listOF-SNAs
    Unsigned 32-bit integer
    ranap.ListOF_SNAs

ranap.listOfInterfacesToTrace listOfInterfacesToTrace
    Unsigned 32-bit integer
    ranap.ListOfInterfacesToTrace

ranap.loadValue loadValue
    Unsigned 32-bit integer
    ranap.LoadValue

ranap.local local
    Unsigned 32-bit integer
    ranap.INTEGER_0_65535

ranap.longitude longitude
    Signed 32-bit integer
    ranap.INTEGER_M8388608_8388607

ranap.mBMSIPMulticastAddressandAPNRequest mBMSIPMulticastAddressandAPNRequest
    Unsigned 32-bit integer
    ranap.MBMSIPMulticastAddressandAPNRequest

ranap.mBMS_PTP_RAB_ID mBMS-PTP-RAB-ID
    Byte array
    ranap.MBMS_PTP_RAB_ID

ranap.mantissa mantissa
    Unsigned 32-bit integer
    ranap.INTEGER_1_9

ranap.maxBitrate maxBitrate
    Unsigned 32-bit integer
    ranap.RAB_Parameter_MaxBitrateList

ranap.maxSDU_Size maxSDU-Size
    Unsigned 32-bit integer
    ranap.MaxSDU_Size

ranap.misc misc
    Unsigned 32-bit integer
    ranap.CauseMisc

ranap.nAS nAS
    Unsigned 32-bit integer
    ranap.CauseNAS

ranap.nAS_PDU nAS-PDU
    Byte array
    ranap.NAS_PDU

ranap.nAS_SynchronisationIndicator nAS-SynchronisationIndicator
    Byte array
    ranap.NAS_SynchronisationIndicator
```

```
ranap.nRTLoadInformationValue  nRTLoadInformationValue
    Unsigned 32-bit integer
    ranap.NRTLoadInformationValue

ranap.newRAListofIdleModeUEs  newRAListofIdleModeUEs
    Unsigned 32-bit integer
    ranap.NewRAListofIdleModeUEs

ranap.nextDecipheringKey  nextDecipheringKey
    Byte array
    ranap.BIT_STRING_SIZE_56

ranap.non_Standard  non-Standard
    Unsigned 32-bit integer
    ranap.CauseNon_Standard

ranap.notEmptyRAListofIdleModeUEs  notEmptyRAListofIdleModeUEs
    No value
    ranap.NotEmptyRAListofIdleModeUEs

ranap.numberOfIuInstances  numberOfIuInstances
    Unsigned 32-bit integer
    ranap.NumberOfIuInstances

ranap.offsetAngle  offsetAngle
    Unsigned 32-bit integer
    ranap.INTEGER_0_179

ranap.orientationOfMajorAxis  orientationOfMajorAxis
    Unsigned 32-bit integer
    ranap.INTEGER_0_179

ranap.outcome  outcome
    No value
    ranap.Outcome

ranap.pDP_TypeInformation  pDP-TypeInformation
    Unsigned 32-bit integer
    ranap.PDP_TypeInformation

ranap.pLMNidentity  pLMNidentity
    Byte array
    ranap.PLMNidentity

ranap.pLMNs_in_shared_network  pLMNs-in-shared-network
    Unsigned 32-bit integer
    ranap.PLMNs_in_shared_network

ranap.p_TMSI  p-TMSI
    Byte array
    ranap.P_TMSI

ranap.permanentNAS_UE_ID  permanentNAS-UE-ID
    Unsigned 32-bit integer
    ranap.PermanentNAS_UE_ID

ranap.permittedAlgorithms  permittedAlgorithms
    Unsigned 32-bit integer
    ranap.PermittedEncryptionAlgorithms

ranap.point  point
    No value
    ranap.GA_Point
```

```
ranap.pointWithAltitude pointWithAltitude
    No value
    ranap.GA_PointWithAltitude
ranap.pointWithAltitudeAndUncertaintyEllipsoid pointWithAltitudeAndUncertaintyE
    No value
    ranap.GA_PointWithAltitudeAndUncertaintyEllipsoid
ranap.pointWithUnCertainty pointWithUnCertainty
    No value
    ranap.GA_PointWithUnCertainty
ranap.pointWithUncertaintyEllipse pointWithUncertaintyEllipse
    No value
    ranap.GA_PointWithUnCertaintyEllipse
ranap.polygon polygon
    Unsigned 32-bit integer
    ranap.GA_Polygon
ranap.positioningDataDiscriminator positioningDataDiscriminator
    Byte array
    ranap.PositioningDataDiscriminator
ranap.positioningDataSet positioningDataSet
    Unsigned 32-bit integer
    ranap.PositioningDataSet
ranap.pre_emptionCapability pre-emptionCapability
    Unsigned 32-bit integer
    ranap.Pre_emptionCapability
ranap.pre_emptionVulnerability pre-emptionVulnerability
    Unsigned 32-bit integer
    ranap.Pre_emptionVulnerability
ranap.priorityLevel priorityLevel
    Unsigned 32-bit integer
    ranap.PriorityLevel
ranap.privateIEs privateIEs
    Unsigned 32-bit integer
    ranap.PrivateIE_Container
ranap.procedureCode procedureCode
    Unsigned 32-bit integer
    ranap.ProcedureCode
ranap.procedureCriticality procedureCriticality
    Unsigned 32-bit integer
    ranap.Criticality
ranap.protocol protocol
    Unsigned 32-bit integer
    ranap.CauseProtocol
ranap.protocolExtensions protocolExtensions
    Unsigned 32-bit integer
    ranap.ProtocolExtensionContainer
ranap.protocolIEs protocolIEs
    Unsigned 32-bit integer
    ranap.ProtocolIE_Container
```

```
ranap.queuingAllowed  queuingAllowed
    Unsigned 32-bit integer
    ranap.QueuingAllowed

ranap.rAB_AsymmetryIndicator  rAB-AsymmetryIndicator
    Unsigned 32-bit integer
    ranap.RAB_AsymmetryIndicator

ranap.rAB_ID  rAB-ID
    Byte array
    ranap.RAB_ID

ranap.rAB_Parameters  rAB-Parameters
    No value
    ranap.RAB_Parameters

ranap.rAB_SubflowCombinationBitRate  rAB-SubflowCombinationBitRate
    Unsigned 32-bit integer
    ranap.RAB_SubflowCombinationBitRate

ranap.rAB_TrCH_Mapping  rAB-TrCH-Mapping
    Unsigned 32-bit integer
    ranap.RAB_TrCH_Mapping

ranap.rAC  rAC
    Byte array
    ranap.RAC

ranap.rAI  rAI
    No value
    ranap.RAI

ranap.rAListwithNoIdleModeUEsAnyMore  rAListwithNoIdleModeUEsAnyMore
    Unsigned 32-bit integer
    ranap.RAListwithNoIdleModeUEsAnyMore

ranap.rAofIdleModeUEs  rAofIdleModeUEs
    Unsigned 32-bit integer
    ranap.RAofIdleModeUEs

ranap.rIMInformation  rIMInformation
    Byte array
    ranap.RIMInformation

ranap.rIMRoutingAddress  rIMRoutingAddress
    Unsigned 32-bit integer
    ranap.RIMRoutingAddress

ranap.rIM_Transfer  rIM-Transfer
    No value
    ranap.RIM_Transfer

ranap.rNCTraceInformation  rNCTraceInformation
    No value
    ranap.RNCTraceInformation

ranap.rNC_ID  rNC-ID
    Unsigned 32-bit integer
    ranap.RNC_ID

ranap.rRC_Container  rRC-Container
    Byte array
    ranap.RRC_Container
```

```
ranap.rTLoadValue  rTLoadValue
    Unsigned 32-bit integer
    ranap.RTLoadValue

ranap.radioNetwork  radioNetwork
    Unsigned 32-bit integer
    ranap.CauseRadioNetwork

ranap.radioNetworkExtension  radioNetworkExtension
    Unsigned 32-bit integer
    ranap.CauseRadioNetworkExtension

ranap.relocationRequirement  relocationRequirement
    Unsigned 32-bit integer
    ranap.RelocationRequirement

ranap.relocationType  relocationType
    Unsigned 32-bit integer
    ranap.RelocationType

ranap.repetitionNumber  repetitionNumber
    Unsigned 32-bit integer
    ranap.RepetitionNumber0

ranap.reportArea  reportArea
    Unsigned 32-bit integer
    ranap.ReportArea

ranap.reportingAmount  reportingAmount
    Unsigned 32-bit integer
    ranap.INTEGER_1_8639999_

ranap.reportingInterval  reportingInterval
    Unsigned 32-bit integer
    ranap.INTEGER_1_8639999_

ranap.requestedGPSAssistanceData  requestedGPSAssistanceData
    Byte array
    ranap.RequestedGPSAssistanceData

ranap.requestedGuaranteedBitrates  requestedGuaranteedBitrates
    Unsigned 32-bit integer
    ranap.Requested_RAB_Parameter_GuaranteedBitrateList

ranap.requestedLocationRelatedDataType  requestedLocationRelatedDataType
    Unsigned 32-bit integer
    ranap.RequestedLocationRelatedDataType

ranap.requestedMBMSIPMulticastAddressandAPNRequest  requestedMBMSIPMulticastAddr
    Unsigned 32-bit integer
    ranap.RequestedMBMSIPMulticastAddressandAPNRequest

ranap.requestedMaxBitrates  requestedMaxBitrates
    Unsigned 32-bit integer
    ranap.Requested_RAB_Parameter_MaxBitrateList

ranap.requestedMulticastServiceList  requestedMulticastServiceList
    Unsigned 32-bit integer
    ranap.RequestedMulticastServiceList

ranap.requested_RAB_Parameter_Values  requested-RAB-Parameter-Values
    No value
    ranap.Requested_RAB_Parameter_Values
```

```
ranap.residualBitErrorRatio  residualBitErrorRatio
    No value
    ranap.ResidualBitErrorRatio
ranap.sAC  sAC
    Byte array
    ranap.sAC
ranap.sAI  sAI
    No value
    ranap.sAI
ranap.sAPI  sAPI
    Unsigned 32-bit integer
    ranap.sAPI
ranap.sDU_ErrorRatio  sDU-ErrorRatio
    No value
    ranap.sDU_ErrorRatio
ranap.sDU_FormatInformationParameters  sDU-FormatInformationParameters
    Unsigned 32-bit integer
    ranap.sDU_FormatInformationParameters
ranap.sDU_Parameters  sDU-Parameters
    Unsigned 32-bit integer
    ranap.sDU_Parameters
ranap.sRB_ID  sRB-ID
    Unsigned 32-bit integer
    ranap.sRB_ID
ranap.secondCriticality  secondCriticality
    Unsigned 32-bit integer
    ranap.Criticality
ranap.secondValue  secondValue
    No value
    ranap.T_secondValue
ranap.serviceID  serviceID
    Byte array
    ranap.OCTET_STRING_SIZE_3
ranap.service_Handover  service-Handover
    Unsigned 32-bit integer
    ranap.Service_Handover
ranap.shared_network_information  shared-network-information
    No value
    ranap.Shared_Network_Information
ranap.sourceCellID  sourceCellID
    Unsigned 32-bit integer
    ranap.SourceCellID
ranap.sourceGERANCellID  sourceGERANCellID
    No value
    ranap.CGI
ranap.sourceRNC_ID  sourceRNC-ID
    No value
    ranap.SourceRNC_ID
```



```
ranap.sourceStatisticsDescriptor  sourceStatisticsDescriptor
    Unsigned 32-bit integer
    ranap.SourceStatisticsDescriptor
ranap.sourceUTRANCellID  sourceUTRANCellID
    No value
    ranap.SourceUTRANCellID
ranap.subflowSDU_Size  subflowSDU-Size
    Unsigned 32-bit integer
    ranap.SubflowSDU_Size
ranap.successfulOutcome  successfulOutcome
    No value
    ranap.SuccessfulOutcome
ranap.tMGI  tMGI
    No value
    ranap.TMGI
ranap.tMSI  tMSI
    Byte array
    ranap.TMSI
ranap.targetCellId  targetCellId
    Unsigned 32-bit integer
    ranap.TargetCellId
ranap.targetRNC_ID  targetRNC-ID
    No value
    ranap.TargetRNC_ID
ranap.trCH_ID  trCH-ID
    No value
    ranap.TrCH_ID
ranap.trCH_ID_List  trCH-ID-List
    Unsigned 32-bit integer
    ranap.TrCH_ID_List
ranap.traceActivationIndicator  traceActivationIndicator
    Unsigned 32-bit integer
    ranap.T_traceActivationIndicator
ranap.traceDepth  traceDepth
    Unsigned 32-bit integer
    ranap.TraceDepth
ranap.traceRecordingSessionReference  traceRecordingSessionReference
    Unsigned 32-bit integer
    ranap.TraceRecordingSessionReference
ranap.traceReference  traceReference
    Byte array
    ranap.TraceReference
ranap.trafficClass  trafficClass
    Unsigned 32-bit integer
    ranap.TrafficClass
ranap.trafficHandlingPriority  trafficHandlingPriority
    Unsigned 32-bit integer
    ranap.TrafficHandlingPriority
```

```
ranap.transferDelay transferDelay
    Unsigned 32-bit integer
    ranap.TransferDelay

ranap.transmissionNetwork transmissionNetwork
    Unsigned 32-bit integer
    ranap.CauseTransmissionNetwork

ranap.transportLayerAddress transportLayerAddress
    Byte array
    ranap.TransportLayerAddress

ranap.transportLayerInformation transportLayerInformation
    No value
    ranap.TransportLayerInformation

ranap.triggeringMessage triggeringMessage
    Unsigned 32-bit integer
    ranap.TriggeringMessage

ranap.uESBI_IuA uESBI-IuA
    Byte array
    ranap.UESBI_IuA

ranap.uESBI_IuB uESBI-IuB
    Byte array
    ranap.UESBI_IuB

ranap.uL_GTP_PDU_SequenceNumber uL-GTP-PDU-SequenceNumber
    Unsigned 32-bit integer
    ranap.UL_GTP_PDU_SequenceNumber

ranap.uP_ModeVersions uP-ModeVersions
    Byte array
    ranap.UP_ModeVersions

ranap.uSCH_ID uSCH-ID
    Unsigned 32-bit integer
    ranap.USCH_ID

ranap.uTRANcellID uTRANcellID
    Unsigned 32-bit integer
    ranap.TargetCellId

ranap.ul_GTP_PDU_SequenceNumber ul-GTP-PDU-SequenceNumber
    Unsigned 32-bit integer
    ranap.UL_GTP_PDU_SequenceNumber

ranap.ul_N_PDU_SequenceNumber ul-N-PDU-SequenceNumber
    Unsigned 32-bit integer
    ranap.UL_N_PDU_SequenceNumber

ranap.uncertaintyAltitude uncertaintyAltitude
    Unsigned 32-bit integer
    ranap.INTEGER_0_127

ranap.uncertaintyCode uncertaintyCode
    Unsigned 32-bit integer
    ranap.INTEGER_0_127

ranap.uncertaintyEllipse uncertaintyEllipse
    No value
    ranap.GA_UncertaintyEllipse
```

```

ranap.uncertaintyRadius  uncertaintyRadius
    Unsigned 32-bit integer
    ranap.INTEGER_0_127

ranap.uncertaintySemi_major  uncertaintySemi-major
    Unsigned 32-bit integer
    ranap.INTEGER_0_127

ranap.uncertaintySemi_minor  uncertaintySemi-minor
    Unsigned 32-bit integer
    ranap.INTEGER_0_127

ranap.uncertaintySpeed  uncertaintySpeed
    Unsigned 32-bit integer
    ranap.INTEGER_0_255

ranap.unsuccessfulOutcome  unsuccessfulOutcome
    No value
    ranap.UnsuccessfulOutcome

ranap.uplinkCellLoadInformation  uplinkCellLoadInformation
    No value
    ranap.CellLoadInformation

ranap.userPlaneInformation  userPlaneInformation
    No value
    ranap.UserPlaneInformation

ranap.userPlaneMode  userPlaneMode
    Unsigned 32-bit integer
    ranap.UserPlaneMode

ranap.value  value
    No value
    ranap.T_ie_field_value

ranap.veritcalSpeed  veritcalSpeed
    Unsigned 32-bit integer
    ranap.INTEGER_0_255

ranap.veritcalSpeedDirection  veritcalSpeedDirection
    Unsigned 32-bit integer
    ranap.VerticalSpeedDirection

ranap.veritcalVelocity  veritcalVelocity
    No value
    ranap.VerticalVelocity

ranap.verticalUncertaintySpeed  verticalUncertaintySpeed
    Unsigned 32-bit integer
    ranap.INTEGER_0_255

```

#### **Radio Resource Control (RRC) protocol (rrc)**

```

rrc.AC_To_ASC_MappingTable_item  Item
    Unsigned 32-bit integer
    rrc.AC_To_ASC_Mapping

rrc.AccessClassBarredList_item  Item
    Unsigned 32-bit integer
    rrc.AccessClassBarred

```

```
rrc.AcquisitionSatInfoList_item  Item
    No value
    rrc.AcquisitionSatInfo

rrc.AdditionalMeasurementID_List_item  Item
    Unsigned 32-bit integer
    rrc.MeasurementIdentity

rrc.AdditionalPRACH_TF_and_TFCS_CCCH_List_item  Item
    No value
    rrc.AdditionalPRACH_TF_and_TFCS_CCCH

rrc.AllowedTFC_List_item  Item
    Unsigned 32-bit integer
    rrc.TFC_Value

rrc.AllowedTFI_List_item  Item
    Unsigned 32-bit integer
    rrc.INTEGER_0_31

rrc.AlmanacSatInfoList_item  Item
    No value
    rrc.AlmanacSatInfo

rrc.AvailableAP_SignatureList_item  Item
    Unsigned 32-bit integer
    rrc.AP_Signature

rrc.AvailableAP_Signature_VCAMList_item  Item
    No value
    rrc.AP_Signature_VCAM

rrc.AvailableAP_SubchannelList_item  Item
    Unsigned 32-bit integer
    rrc.AP_Subchannel

rrc.AvailableMinimumSF_ListVCAM_item  Item
    No value
    rrc.AvailableMinimumSF_VCAM

rrc.BCCH_BCH_Message  BCCH-BCH-Message
    No value
    rrc.BCCH_BCH_Message

rrc.BCCH_FACH_Message  BCCH-FACH-Message
    No value
    rrc.BCCH_FACH_Message

rrc.BLER_MeasurementResultsList_item  Item
    No value
    rrc.BLER_MeasurementResults

rrc.BLER_TransChIdList_item  Item
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.BadSatList_item  Item
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.CDMA2000_MessageList_item  Item
    No value
    rrc.CDMA2000_Message
```

```
rrc.CDMA2000_UMTS_Frequency_List_item  Item
    No value
    rrc.FrequencyInfoCDMA2000
rrc.CD_AccessSlotSubchannelList_item  Item
    Unsigned 32-bit integer
    rrc.CD_AccessSlotSubchannel
rrc.CD_SignatureCodeList_item  Item
    Unsigned 32-bit integer
    rrc.CD_SignatureCode
rrc.CN_DomainInformationListFull_item  Item
    No value
    rrc.CN_DomainInformationFull
rrc.CN_DomainInformationList_item  Item
    No value
    rrc.CN_DomainInformation
rrc.CN_DomainInformationList_v390ext_item  Item
    No value
    rrc.CN_DomainInformation_v390ext
rrc.CN_DomainSysInfoList_item  Item
    No value
    rrc.CN_DomainSysInfo
rrc.COUNT_C_List_item  Item
    No value
    rrc.COUNT_CSingle
rrc.CPCH_PersistenceLevelsList_item  Item
    No value
    rrc.CPCH_PersistenceLevels
rrc.CPCH_SetInfoList_item  Item
    No value
    rrc.CPCH_SetInfo
rrc.CellIdentity_PerRL_List_item  Item
    Byte array
    rrc.CellIdentity
rrc.CellMeasurementEventResults_LCR_r4_item  Item
    No value
    rrc.PrimaryCCPCH_Info_LCR_r4
rrc.CellToReportList_item  Item
    No value
    rrc.CellToReport
rrc.CellsForInterFreqMeasList_item  Item
    Unsigned 32-bit integer
    rrc.InterFreqCellID
rrc.CellsForInterRATMeasList_item  Item
    Unsigned 32-bit integer
    rrc.InterRATCellID
rrc.CellsForIntraFreqMeasList_item  Item
    Unsigned 32-bit integer
    rrc.IntraFreqCellID
```

```
rrc.CipheringInfoPerRB_List_item  Item
    No value
    rrc.CipheringInfoPerRB
rrc.CipheringInfoPerRB_List_r4_item  Item
    No value
    rrc.CipheringInfoPerRB_r4
rrc.CipheringStatusList_item  Item
    No value
    rrc.CipheringStatusCNdomain
rrc.CipheringStatusList_r4_item  Item
    No value
    rrc.CipheringStatusCNdomain_r4
rrc.CodeChangeStatusList_item  Item
    No value
    rrc.CodeChangeStatus
rrc.CommonDynamicTF_InfoList_DynamicTTI_item  Item
    No value
    rrc.CommonDynamicTF_Info_DynamicTTI
rrc.CommonDynamicTF_InfoList_item  Item
    No value
    rrc.CommonDynamicTF_Info
rrc.CompleteSIB_List_item  Item
    No value
    rrc.CompleteSIBshort
rrc.CompressedModeMeasCapabFDDList2_item  Item
    No value
    rrc.CompressedModeMeasCapabFDD2
rrc.CompressedModeMeasCapabFDDList_ext_item  Item
    No value
    rrc.CompressedModeMeasCapabFDD_ext
rrc.CompressedModeMeasCapabFDDList_item  Item
    No value
    rrc.CompressedModeMeasCapabFDD
rrc.CompressedModeMeasCapabGSMList_item  Item
    No value
    rrc.CompressedModeMeasCapabGSM
rrc.CompressedModeMeasCapabTDDList_item  Item
    No value
    rrc.CompressedModeMeasCapabTDD
rrc.DGPS_CorrectionSatInfoList_item  Item
    No value
    rrc.DGPS_CorrectionSatInfo
rrc.DL_AddReconfTransChInfo2List_item  Item
    No value
    rrc.DL_AddReconfTransChInformation2
rrc.DL_AddReconfTransChInfoList_item  Item
    No value
    rrc.DL_AddReconfTransChInformation
```

```
rrc.DL_AddReconfTransChInfoList_r4_item  Item
No value
rrc.DL_AddReconfTransChInformation_r4
rrc.DL_AddReconfTransChInfoList_r5_item  Item
No value
rrc.DL_AddReconfTransChInformation_r5
rrc.DL_CCCH_Message  DL-CCCH-Message
No value
rrc.DL_CCCH_Message
rrc.DL_CCTrChListToRemove_item  Item
Unsigned 32-bit integer
rrc.TFCS_IdentityPlain
rrc.DL_CCTrChList_item  Item
No value
rrc.DL_CCTrCh
rrc.DL_CCTrChList_r4_item  Item
No value
rrc.DL_CCTrCh_r4
rrc.DL_CCTrChList_r7_item  Item
No value
rrc.DL_CCTrCh_r7
rrc.DL_ChannelisationCodeList_item  Item
No value
rrc.DL_ChannelisationCode
rrc.DL_DCCH_Message  DL-DCCH-Message
No value
rrc.DL_DCCH_Message
rrc.DL_DeletedTransChInfoList_item  Item
No value
rrc.DL_TransportChannelIdentity
rrc.DL_DeletedTransChInfoList_r5_item  Item
No value
rrc.DL_TransportChannelIdentity_r5
rrc.DL_HSPDSCH_TS_Configuration_VHCR_item  Item
No value
rrc.DL_HSPDSCH_TS_Configuration_VHCR_item
rrc.DL_HSPDSCH_TS_Configuration_item  Item
No value
rrc.DL_HSPDSCH_TS_Configuration_item
rrc.DL_InformationPerRL_ListPostFDD_item  Item
No value
rrc.DL_InformationPerRL_PostFDD
rrc.DL_InformationPerRL_List_item  Item
No value
rrc.DL_InformationPerRL
rrc.DL_InformationPerRL_List_r4_item  Item
No value
rrc.DL_InformationPerRL_r4
```

```
rrc.DL_InformationPerRL_List_r5_item  Item
    No value
    rrc.DL_InformationPerRL_r5
rrc.DL_InformationPerRL_List_r5bis_item  Item
    No value
    rrc.DL_InformationPerRL_r5bis
rrc.DL_InformationPerRL_List_r6_item  Item
    No value
    rrc.DL_InformationPerRL_r6
rrc.DL_InformationPerRL_List_r7_item  Item
    No value
    rrc.DL_InformationPerRL_r7
rrc.DL_InformationPerRL_List_v6b0ext_item  Item
    No value
    rrc.DL_InformationPerRL_v6b0ext
rrc.DL_LogicalChannelMappingList_item  Item
    No value
    rrc.DL_LogicalChannelMapping
rrc.DL_LogicalChannelMappingList_r5_item  Item
    No value
    rrc.DL_LogicalChannelMapping_r5
rrc.DL_SHCCH_Message  DL-SHCCH-Message
    No value
    rrc.DL_SHCCH_Message
rrc.DL_TPC_PowerOffsetPerRL_List_item  Item
    No value
    rrc.DL_TPC_PowerOffsetPerRL
rrc.DRAC_StaticInformationList_item  Item
    No value
    rrc.DRAC_StaticInformation
rrc.DRAC_SysInfoList_item  Item
    No value
    rrc.DRAC_SysInfo
rrc.DSCH_MappingList_item  Item
    No value
    rrc.DSCH_Mapping
rrc.DSCH_TransportChannelsInfo_item  Item
    No value
    rrc.DSCH_TransportChannelsInfo_item
rrc.DedicatedDynamicTF_InfoList_DynamicTTI_item  Item
    No value
    rrc.DedicatedDynamicTF_Info_DynamicTTI
rrc.DedicatedDynamicTF_InfoList_item  Item
    No value
    rrc.DedicatedDynamicTF_Info
rrc.DynamicPersistenceLevelList_item  Item
    Unsigned 32-bit integer
    rrc.DynamicPersistenceLevel
```



```
rrc.DynamicPersistenceLevelTF_List_item  Item
    Unsigned 32-bit integer
    rrc.DynamicPersistenceLevel
rrc.E_AGCH_Set_Config_LCR_item  Item
    No value
    rrc.E_AGCH_Individual_LCR
rrc.E_AGCH_Set_Config_item  Item
    No value
    rrc.E_AGCH_Individual
rrc.E_DCH_AddReconf_MAC_d_FlowList_item  Item
    No value
    rrc.E_DCH_AddReconf_MAC_d_Flow
rrc.E_DCH_AddReconf_MAC_d_FlowList_r7_item  Item
    No value
    rrc.E_DCH_AddReconf_MAC_d_Flow_r7
rrc.E_DPDCH_Reference_E_TFCIList_item  Item
    No value
    rrc.E_DPDCH_Reference_E_TFCI
rrc.E_HICH_Information_LCR_List_item  Item
    No value
    rrc.E_HICH_Information_LCR
rrc.ExtSIBTypeInfooSchedulingInfo_List_item  Item
    No value
    rrc.ExtSIBTypeInfooSchedulingInfo
rrc.FACH_PCH_InformationList_item  Item
    No value
    rrc.FACH_PCH_Information
rrc.FDD_UMTS_Frequency_List_item  Item
    No value
    rrc.FrequencyInfoFDD
rrc.ForbiddenAffectCellList_LCR_r4_item  Item
    No value
    rrc.ForbiddenAffectCell_LCR_r4
rrc.ForbiddenAffectCellList_item  Item
    Unsigned 32-bit integer
    rrc.ForbiddenAffectCell
rrc.ForbiddenAffectCellList_r4_item  Item
    Unsigned 32-bit integer
    rrc.ForbiddenAffectCell_r4
rrc.GERANIu_MessageList_item  Item
    Byte array
    rrc.BIT_STRING_SIZE_1_32768
rrc.GERAN_SystemInformation_item  Item
    Byte array
    rrc.GERAN_SystemInfoBlock
rrc.GPS_MeasurementParamList_item  Item
    No value
    rrc.GPS_MeasurementParam
```

```
rrc.GPS_TOW_AssistList_item  Item
    No value
    rrc.GPS_TOW_Assist

rrc.GSM_BA_Range_List_item  Item
    No value
    rrc.GSM_BA_Range

rrc.GSM_MeasuredResultsList_item  Item
    No value
    rrc.GSM_MeasuredResults

rrc.GSM_MessageList_item  Item
    Byte array
    rrc.BIT_STRING_SIZE_1_512

rrc.GSM_TargetCellInfoList_item  Item
    No value
    rrc.GSM_TargetCellInfo

rrc.HS_SCCH_LessTFS_item  Item
    No value
    rrc.HS_SCCH_LessTFS_item

rrc.HeaderCompressionInfoList_item  Item
    No value
    rrc.HeaderCompressionInfo

rrc.HeaderCompressionInfoList_r4_item  Item
    No value
    rrc.HeaderCompressionInfo_r4

rrc.IMEI_item  Item
    Unsigned 32-bit integer
    rrc.IMEI_Digit

rrc.IMSI_GSM_MAP_item  Item
    Unsigned 32-bit integer
    rrc.Digit

rrc.IndividualDL_CCTrCH_InfoList_item  Item
    No value
    rrc.IndividualDL_CCTrCH_Info

rrc.IndividualTS_InterferenceList_item  Item
    No value
    rrc.IndividualTS_Interference

rrc.IndividualUL_CCTrCH_InfoList_item  Item
    No value
    rrc.IndividualUL_CCTrCH_Info

rrc.InitialPriorityDelayList_item  Item
    Unsigned 32-bit integer
    rrc.NS_IP

rrc.InterFreqCellList_LCR_r4_ext_item  Item
    No value
    rrc.InterFreqCell_LCR_r4

rrc.InterFreqCellList_item  Item
    No value
    rrc.InterFreqCell
```

```
rrc.InterFreqCellMeasuredResultsList_item  Item
    No value
    rrc.CellMeasuredResults
rrc.InterFreqEventList_item  Item
    Unsigned 32-bit integer
    rrc.InterFreqEvent
rrc.InterFreqEventList_r6_item  Item
    Unsigned 32-bit integer
    rrc.InterFreqEvent_r6
rrc.InterFreqMeasuredResultsList_item  Item
    No value
    rrc.InterFreqMeasuredResults
rrc.InterFreqRACHRepCellsList_item  Item
    Unsigned 32-bit integer
    rrc.InterFreqCellID
rrc.InterFreqRepQuantityRACH_TDDList_item  Item
    Unsigned 32-bit integer
    rrc.InterFreqRepQuantityRACH_TDD
rrc.InterFrequencyMeasuredResultsList_v590ext_item  Item
    No value
    rrc.DeltaRSCPPerCell
rrc.InterRATEventList_item  Item
    Unsigned 32-bit integer
    rrc.InterRATEvent
rrc.InterRATHandoverInfo_r3_add_ext_IEs  InterRATHandoverInfo-r3-add-ext-IEs
    No value
    rrc.InterRATHandoverInfo_r3_add_ext_IEs
rrc.InterRATMeasuredResultsList_item  Item
    Unsigned 32-bit integer
    rrc.InterRATMeasuredResults
rrc.InterRAT_UE_RadioAccessCapabilityList_item  Item
    Unsigned 32-bit integer
    rrc.InterRAT_UE_RadioAccessCapability
rrc.InterRAT_UE_SecurityCapList_item  Item
    Unsigned 32-bit integer
    rrc.InterRAT_UE_SecurityCapability
rrc.Inter_FreqEventCriteriaList_v590ext_item  Item
    No value
    rrc.Inter_FreqEventCriteria_v590ext
rrc.IntraFreqEventCriteriaList_LCR_r4_item  Item
    No value
    rrc.IntraFreqEventCriteria_LCR_r4
rrc.IntraFreqEventCriteriaList_item  Item
    No value
    rrc.IntraFreqEventCriteria
rrc.IntraFreqEventCriteriaList_r4_item  Item
    No value
    rrc.IntraFreqEventCriteria_r4
```

```
rrc.IntraFreqEventCriteriaList_r6_item  Item
    No value
    rrc.IntraFreqEventCriteria_r6
rrc.IntraFreqMeasQuantity_TDDList_item  Item
    Unsigned 32-bit integer
    rrc.IntraFreqMeasQuantity_TDD
rrc.IntraFreqMeasuredResultsList_item  Item
    No value
    rrc.CellMeasuredResults
rrc.IntraFreqRepQuantityRACH_TDDList_item  Item
    Unsigned 32-bit integer
    rrc.IntraFreqRepQuantityRACH_TDD
rrc.IntraFrequencyMeasuredResultsList_v590ext_item  Item
    No value
    rrc.DeltaRSCPPerCell
rrc.Intra_FreqEventCriteriaList_v590ext_item  Item
    Signed 32-bit integer
    rrc.DeltaRSCP
rrc.MAC_d_PDU_SizeInfo_List_item  Item
    No value
    rrc.MAC_d_PDUsizesInfo
rrc.MAC_hs_AddReconfQueue_List_item  Item
    No value
    rrc.MAC_hs_AddReconfQueue
rrc.MAC_hs_DelQueue_List_item  Item
    No value
    rrc.MAC_hs_DelQueue
rrc.MBMS_CommonRBInformationList_r6_item  Item
    No value
    rrc.MBMS_CommonRBInformation_r6
rrc.MBMS_CurrentCell_SCCPCHList_r6_item  Item
    No value
    rrc.MBMS_CurrentCell_SCCPCH_r6
rrc.MBMS_FACHCarryingMTCH_List_item  Item
    Unsigned 32-bit integer
    rrc.TransportFormatSet
rrc.MBMS_ModifiedServiceList_r6_item  Item
    No value
    rrc.MBMS_ModifiedService_r6
rrc.MBMS_NeighbouringCellSCCPCHList_r6_item  Item
    No value
    rrc.MBMS_NeighbouringCellSCCPCH_r6
rrc.MBMS_PTM_RBInformation_CList_item  Item
    No value
    rrc.MBMS_PTM_RBInformation_C
rrc.MBMS_PTM_RBInformation_NList_item  Item
    No value
    rrc.MBMS_PTM_RBInformation_N
```

```
rrc.MBMS_PhyChInformationList_r6_item  Item
    No value
    rrc.MBMS_PhyChInformation_r6
rrc.MBMS_PREFERREDFrequencyList_r6_item  Item
    No value
    rrc.MBMS_PREFERREDFrequencyInfo_r6
rrc.MBMS_SIBType5_SCCPCHList_r6_item  Item
    No value
    rrc.MBMS_SIBType5_SCCPCH_r6
rrc.MBMS_SelectedServicesListFull_item  Item
    No value
    rrc.MBMS_ServiceIdentity_r6
rrc.MBMS_SelectedServicesListShort_item  Item
    Unsigned 32-bit integer
    rrc.MBMS_ShortTransmissionID
rrc.MBMS_ServiceAccessInfoList_r6_item  Item
    No value
    rrc.MBMS_ServiceAccessInfo_r6
rrc.MBMS_ServiceSchedulingInfoList_r6_item  Item
    No value
    rrc.MBMS_ServiceSchedulingInfo_r6
rrc.MBMS_ServiceTransmInfoList_item  Item
    No value
    rrc.MBMS_ServiceTransmInfo
rrc.MBMS_TrCHInformation_CurrList_item  Item
    No value
    rrc.MBMS_TrCHInformation_Curr
rrc.MBMS_TrCHInformation_NeighbList_item  Item
    No value
    rrc.MBMS_TrCHInformation_Neighb
rrc.MBMS_TrCHInformation_SIB5List_item  Item
    No value
    rrc.MBMS_TrCHInformation_SIB5
rrc.MBMS_TranspChInfoForEachCCTrCh_r6_item  Item
    No value
    rrc.MBMS_TranspChInfoForCCTrCh_r6
rrc.MBMS_TranspChInfoForEachTrCh_r6_item  Item
    No value
    rrc.MBMS_TranspChInfoForTrCh_r6
rrc.MBMS_UnmodifiedServiceList_r6_item  Item
    No value
    rrc.MBMS_UnmodifiedService_r6
rrc.MCCH_Message  MCCH-Message
    No value
    rrc.MCCH_Message
rrc.MCC_item  Item
    Unsigned 32-bit integer
    rrc.Digit
```

```
rrc.MNC_item Item
  Unsigned 32-bit integer
  rrc.Digit

rrc.MSCH_Message MSCH-Message
  No value
  rrc.MSCH_Message

rrc.MappingFunctionParameterList_item Item
  No value
  rrc.MappingFunctionParameter

rrc.MappingInfo_item Item
  No value
  rrc.Mapping

rrc.MeasuredResultsList_LCR_r4_ext_item Item
  Unsigned 32-bit integer
  rrc.MeasuredResults_LCR_r4

rrc.MeasuredResultsList_item Item
  Unsigned 32-bit integer
  rrc.MeasuredResults

rrc.MeasurementReport MeasurementReport
  No value
  rrc.MeasurementReport

rrc.MonitoredCellRACH_List_item Item
  No value
  rrc.MonitoredCellRACH_Result

rrc.NavigationModelSatInfoList_item Item
  No value
  rrc.NavigationModelSatInfo

rrc.NeighbourList_item Item
  No value
  rrc.Neighbour

rrc.NeighbourList_v390ext_item Item
  No value
  rrc.Neighbour_v390ext

rrc.NewInterFreqCellList_item Item
  No value
  rrc.NewInterFreqCell

rrc.NewInterFreqCellList_r4_item Item
  No value
  rrc.NewInterFreqCell_r4

rrc.NewInterFreqCellSI_List_ECN0_LCR_r4_item Item
  No value
  rrc.NewInterFreqCellSI_ECN0_LCR_r4

rrc.NewInterFreqCellSI_List_ECN0_item Item
  No value
  rrc.NewInterFreqCellSI_ECN0

rrc.NewInterFreqCellSI_List_HCS_ECN0_LCR_r4_item Item
  No value
  rrc.NewInterFreqCellSI_HCS_ECN0_LCR_r4
```

```
rrc.NewInterFreqCellSI_List_HCS_ECN0_item  Item
    No value
    rrc.NewInterFreqCellSI_HCS_ECN0
rrc.NewInterFreqCellSI_List_HCS_RSCP_LCR_r4_item  Item
    No value
    rrc.NewInterFreqCellSI_HCS_RSCP_LCR_r4
rrc.NewInterFreqCellSI_List_HCS_RSCP_item  Item
    No value
    rrc.NewInterFreqCellSI_HCS_RSCP
rrc.NewInterFreqCellSI_List_RSCP_LCR_r4_item  Item
    No value
    rrc.NewInterFreqCellSI_RSCP_LCR_r4
rrc.NewInterFreqCellSI_List_RSCP_item  Item
    No value
    rrc.NewInterFreqCellSI_RSCP
rrc.NewInterRATCellList_B_item  Item
    No value
    rrc.NewInterRATCell_B
rrc.NewInterRATCellList_item  Item
    No value
    rrc.NewInterRATCell
rrc.NewIntraFreqCellList_item  Item
    No value
    rrc.NewIntraFreqCell
rrc.NewIntraFreqCellList_r4_item  Item
    No value
    rrc.NewIntraFreqCell_r4
rrc.NewIntraFreqCellSI_List_ECN0_LCR_r4_item  Item
    No value
    rrc.NewIntraFreqCellSI_ECN0_LCR_r4
rrc.NewIntraFreqCellSI_List_ECN0_item  Item
    No value
    rrc.NewIntraFreqCellSI_ECN0
rrc.NewIntraFreqCellSI_List_HCS_ECN0_LCR_r4_item  Item
    No value
    rrc.NewIntraFreqCellSI_HCS_ECN0_LCR_r4
rrc.NewIntraFreqCellSI_List_HCS_ECN0_item  Item
    No value
    rrc.NewIntraFreqCellSI_HCS_ECN0
rrc.NewIntraFreqCellSI_List_HCS_RSCP_LCR_r4_item  Item
    No value
    rrc.NewIntraFreqCellSI_HCS_RSCP_LCR_r4
rrc.NewIntraFreqCellSI_List_HCS_RSCP_item  Item
    No value
    rrc.NewIntraFreqCellSI_HCS_RSCP
rrc.NewIntraFreqCellSI_List_RSCP_LCR_r4_item  Item
    No value
    rrc.NewIntraFreqCellSI_RSCP_LCR_r4
```

```
rrc.NewIntraFreqCellSI_List_RSCP_item  Item
    No value
    rrc.NewIntraFreqCellSI_RSCP
rrc.NonUsedFreqParameterList_item  Item
    No value
    rrc.NonUsedFreqParameter
rrc.NonUsedFreqParameterList_r6_item  Item
    No value
    rrc.NonUsedFreqParameter_r6
rrc.NonUsedFreqWList_r6_item  Item
    Unsigned 32-bit integer
    rrc.W
rrc.Non_allowedTFC_List_item  Item
    Unsigned 32-bit integer
    rrc.TFC_Value
rrc.NumberOfTbSizeAndTTIList_item  Item
    No value
    rrc.NumberOfTbSizeAndTTIList_item
rrc.OngoingMeasRepList_item  Item
    No value
    rrc.OngoingMeasRep
rrc.OngoingMeasRepList_r4_item  Item
    No value
    rrc.OngoingMeasRep_r4
rrc.OngoingMeasRepList_r5_item  Item
    No value
    rrc.OngoingMeasRep_r5
rrc.OngoingMeasRepList_r6_item  Item
    No value
    rrc.OngoingMeasRep_r6
rrc.OngoingMeasRepList_r7_item  Item
    No value
    rrc.OngoingMeasRep_r7
rrc.PCCH_Message  PCCH-Message
    No value
    rrc.PCCH_Message
rrc.PCPCH_ChannelInfoList_item  Item
    No value
    rrc.PCPCH_ChannelInfo
rrc.PDSCH_CodeInfoList_item  Item
    No value
    rrc.PDSCH_CodeInfo
rrc.PDSCH_CodeMapList_item  Item
    No value
    rrc.PDSCH_CodeMap
rrc.PDSCH_SysInfoList_HCR_r5_item  Item
    No value
    rrc.PDSCH_SysInfo_HCR_r5
```



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rrc.PDSCH_SysInfoList_LCR_r4_item  Item
    No value
    rrc.PDSCH_SysInfo_LCR_r4
rrc.PDSCH_SysInfoList_SFN_HCR_r5_item  Item
    No value
    rrc.PDSCH_SysInfoList_SFN_HCR_r5_item
rrc.PDSCH_SysInfoList_SFN_LCR_r4_item  Item
    No value
    rrc.PDSCH_SysInfoList_SFN_LCR_r4_item
rrc.PDSCH_SysInfoList_SFN_item  Item
    No value
    rrc.PDSCH_SysInfoList_SFN_item
rrc.PDSCH_SysInfoList_item  Item
    No value
    rrc.PDSCH_SysInfo
rrc.PDSCH_SysInfoList_r7_item  Item
    No value
    rrc.PDSCH_SysInfo_r7
rrc.PLMNsOfInterFreqCellsList_item  Item
    No value
    rrc.PLMNsOfInterFreqCellsList_item
rrc.PLMNsOfInterRATCellsList_item  Item
    No value
    rrc.PLMNsOfInterRATCellsList_item
rrc.PLMNsOfIntraFreqCellsList_item  Item
    No value
    rrc.PLMNsOfIntraFreqCellsList_item
rrc.PRACH_ChanCodes_LCR_r4_item  Item
    Unsigned 32-bit integer
    rrc.TDD_PRACH_CCode_LCR_r4
rrc.PRACH_Partitioning_LCR_r4_item  Item
    No value
    rrc.ASCSetting_TDD_LCR_r4
rrc.PRACH_SystemInformationList_LCR_r4_item  Item
    No value
    rrc.PRACH_SystemInformation_LCR_r4
rrc.PRACH_SystemInformationList_item  Item
    No value
    rrc.PRACH_SystemInformation
rrc.PRACH_SystemInformationList_r7_item  Item
    No value
    rrc.PRACH_SystemInformation_r7
rrc.PUSCH_SysInfoList_HCR_r5_item  Item
    No value
    rrc.PUSCH_SysInfo_HCR_r5
rrc.PUSCH_SysInfoList_LCR_r4_item  Item
    No value
    rrc.PUSCH_SysInfo_LCR_r4
```

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rrc.PUSCH_SysInfoList_SFN_HCR_r5_item  Item
    No value
    rrc.PUSCH_SysInfoList_SFN_HCR_r5_item
rrc.PUSCH_SysInfoList_SFN_LCR_r4_item  Item
    No value
    rrc.PUSCH_SysInfoList_SFN_LCR_r4_item
rrc.PUSCH_SysInfoList_SFN_VHCR_item  Item
    No value
    rrc.PUSCH_SysInfoList_SFN_VHCR_item
rrc.PUSCH_SysInfoList_SFN_item  Item
    No value
    rrc.PUSCH_SysInfoList_SFN_item
rrc.PUSCH_SysInfoList_item  Item
    No value
    rrc.PUSCH_SysInfo
rrc.PagingRecord2List_r5_item  Item
    Unsigned 32-bit integer
    rrc.PagingRecord2_r5
rrc.PagingRecordList_item  Item
    Unsigned 32-bit integer
    rrc.PagingRecord
rrc.PersistenceScalingFactorList_item  Item
    Unsigned 32-bit integer
    rrc.PersistenceScalingFactor
rrc.PichChannelisationCodeList_LCR_r4_item  Item
    Unsigned 32-bit integer
    rrc.DL_TS_ChannelisationCode
rrc.PredefinedConfigSetsWithDifferentValueTag_item  Item
    No value
    rrc.PredefinedConfigSetWithDifferentValueTag
rrc.PredefinedConfigStatusListVarSz_item  Item
    Unsigned 32-bit integer
    rrc.PredefinedConfigStatusInfo
rrc.PredefinedConfigStatusList_item  Item
    Unsigned 32-bit integer
    rrc.PredefinedConfigStatusInfo
rrc.PredefinedConfigValueTagList_item  Item
    Unsigned 32-bit integer
    rrc.PredefinedConfigValueTag
rrc.QualityEventResults_item  Item
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity
rrc.QualityReportingCriteria_item  Item
    No value
    rrc.QualityReportingCriteriaSingle
rrc.RAB_InformationList_item  Item
    No value
    rrc.RAB_Info
```

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rrc.RAB_InformationList_r6_item  Item
    No value
    rrc.RAB_Info_r6
rrc.RAB_InformationReconfigList_item  Item
    No value
    rrc.RAB_InformationReconfig
rrc.RAB_InformationSetupList_item  Item
    No value
    rrc.RAB_InformationSetup
rrc.RAB_InformationSetupList_r4_item  Item
    No value
    rrc.RAB_InformationSetup_r4
rrc.RAB_InformationSetupList_r5_item  Item
    No value
    rrc.RAB_InformationSetup_r5
rrc.RAB_InformationSetupList_r6_ext_item  Item
    No value
    rrc.RAB_InformationSetup_r6_ext
rrc.RAB_InformationSetupList_r6_item  Item
    No value
    rrc.RAB_InformationSetup_r6
rrc.RAB_InformationSetupList_r7_item  Item
    No value
    rrc.RAB_InformationSetup_r7
rrc.RAB_InformationSetupList_v6b0ext_item  Item
    No value
    rrc.RAB_InformationSetup_v6b0ext
rrc.RAT_FDD_InfoList_item  Item
    No value
    rrc.RAT_FDD_Info
rrc.RAT_TDD_InfoList_item  Item
    No value
    rrc.RAT_TDD_Info
rrc.RB_ActivationTimeInfoList_item  Item
    No value
    rrc.RB_ActivationTimeInfo
rrc.RB_COUNT_C_InformationList_item  Item
    No value
    rrc.RB_COUNT_C_Information
rrc.RB_COUNT_C_MSB_InformationList_item  Item
    No value
    rrc.RB_COUNT_C_MSB_Information
rrc.RB_IdentityList_item  Item
    Unsigned 32-bit integer
    rrc.RB_Identity
rrc.RB_InformationAffectedList_item  Item
    No value
    rrc.RB_InformationAffected
```

```
rrc.RB_InformationAffectedList_r5_item  Item
    No value
    rrc.RB_InformationAffected_r5
rrc.RB_InformationAffectedList_r6_item  Item
    No value
    rrc.RB_InformationAffected_r6
rrc.RB_InformationChangedList_r6_item  Item
    No value
    rrc.RB_InformationChanged_r6
rrc.RB_InformationReconfigList_item  Item
    No value
    rrc.RB_InformationReconfig
rrc.RB_InformationReconfigList_r4_item  Item
    No value
    rrc.RB_InformationReconfig_r4
rrc.RB_InformationReconfigList_r5_item  Item
    No value
    rrc.RB_InformationReconfig_r5
rrc.RB_InformationReconfigList_r6_item  Item
    No value
    rrc.RB_InformationReconfig_r6
rrc.RB_InformationReleaseList_item  Item
    Unsigned 32-bit integer
    rrc.RB_Identity
rrc.RB_InformationSetupList_item  Item
    No value
    rrc.RB_InformationSetup
rrc.RB_InformationSetupList_r4_item  Item
    No value
    rrc.RB_InformationSetup_r4
rrc.RB_InformationSetupList_r5_item  Item
    No value
    rrc.RB_InformationSetup_r5
rrc.RB_InformationSetupList_r6_item  Item
    No value
    rrc.RB_InformationSetup_r6
rrc.RB_MappingInfo_item  Item
    No value
    rrc.RB_MappingOption
rrc.RB_MappingInfo_r5_item  Item
    No value
    rrc.RB_MappingOption_r5
rrc.RB_MappingInfo_r6_item  Item
    No value
    rrc.RB_MappingOption_r6
rrc.RB_PDCPContextRelocationList_item  Item
    No value
    rrc.RB_PDCPContextRelocation
```

```
rrc.RB_WithPDCP_InfoList_item  Item
    No value
    rrc.RB_WithPDCP_Info
rrc.RFC3095_ContextInfoList_r5_item  Item
    No value
    rrc.RFC3095_ContextInfo
rrc.RFC3095_Context_List_item  Item
    No value
    rrc.RFC3095_Context_List_item
rrc.RF_CapabBandListFDDComp_ext_item  Item
    Unsigned 32-bit integer
    rrc.RF_CapabBandFDDComp
rrc.RF_CapabBandListFDDComp_item  Item
    Unsigned 32-bit integer
    rrc.RF_CapabBandFDDComp
rrc.RLC_PDU_SizeList_item  Item
    Unsigned 32-bit integer
    rrc.RLC_PDU_Size
rrc.RLC_SizeExplicitList_item  Item
    No value
    rrc.RLC_SizeInfo
rrc.RL_AdditionInfoList_item  Item
    No value
    rrc.PrimaryCPICH_Info
rrc.RL_AdditionInformationList_item  Item
    No value
    rrc.RL_AdditionInformation
rrc.RL_AdditionInformationList_r6_item  Item
    No value
    rrc.RL_AdditionInformation_r6
rrc.RL_AdditionInformationList_r7_item  Item
    No value
    rrc.RL_AdditionInformation_r7
rrc.RL_AdditionInformation_list_v6b0ext_item  Item
    No value
    rrc.RL_AdditionInformation_v6b0ext
rrc.RL_IdentifierList_item  Item
    No value
    rrc.PrimaryCPICH_Info
rrc.RL_RemovalInformationList_item  Item
    No value
    rrc.PrimaryCPICH_Info
rrc.ROHC_PacketSizeList_r4_item  Item
    Unsigned 32-bit integer
    rrc.ROHC_PacketSize_r4
rrc.ROHC_ProfileList_r4_item  Item
    Unsigned 32-bit integer
    rrc.ROHC_Profile_r4
```

```
rrc.RRCConnectionSetupComplete_r3_add_ext_IEs  RRCConnectionSetupComplete-r3-add
  No value
  rrc.RRCConnectionSetupComplete_r3_add_ext_IEs
rrc.RRC_MessageSequenceNumberList_item  Item
  Unsigned 32-bit integer
  rrc.RRC_MessageSequenceNumber
rrc.ReplacedPDSCH_CodeInfoList_item  Item
  No value
  rrc.ReplacedPDSCH_CodeInfo
rrc.RestrictedTrCH_InfoList_item  Item
  No value
  rrc.RestrictedTrCH
rrc.RestrictedTrChInfoList_item  Item
  No value
  rrc.RestrictedTrChInfo
rrc.SCCPCH_ChannelisationCodeList_VHCR_item  Item
  Unsigned 32-bit integer
  rrc.SCCPCH_ChannelisationCode_VHCR
rrc.SCCPCH_ChannelisationCodeList_item  Item
  Unsigned 32-bit integer
  rrc.SCCPCH_ChannelisationCode
rrc.SCCPCH_SystemInformationList_LCR_r4_ext_item  Item
  No value
  rrc.SCCPCH_SystemInformation_LCR_r4_ext
rrc.SCCPCH_SystemInformationList_item  Item
  No value
  rrc.SCCPCH_SystemInformation
rrc.SCCPCH_SystemInformationList_r7_item  Item
  No value
  rrc.SCCPCH_SystemInformation_r7
rrc.SIBSb_ReferenceList_item  Item
  No value
  rrc.SchedulingInformationSIBSb
rrc.SIB_ReferenceListFACH_item  Item
  No value
  rrc.SchedulingInformationSIB
rrc.SIB_ReferenceList_item  Item
  No value
  rrc.SchedulingInformationSIB
rrc.SIR_MeasurementList_item  Item
  No value
  rrc.SIR_MeasurementResults
rrc.SIR_TFCS_List_item  Item
  Unsigned 32-bit integer
  rrc.SIR_TFCS
rrc.SIR_TimeslotList_item  Item
  Unsigned 32-bit integer
  rrc.SIR
```

```
rrc.SRB_InformationSetupList2_item  Item
    No value
    rrc.SRB_InformationSetup
rrc.SRB_InformationSetupList2_r6_item  Item
    No value
    rrc.SRB_InformationSetup_r6
rrc.SRB_InformationSetupList_item  Item
    No value
    rrc.SRB_InformationSetup
rrc.SRB_InformationSetupList_r5_item  Item
    No value
    rrc.SRB_InformationSetup_r5
rrc.SRB_InformationSetupList_r6_item  Item
    No value
    rrc.SRB_InformationSetup_r6
rrc.SRB_SpecificIntegrityProtInfoList_item  Item
    No value
    rrc.SRB_SpecificIntegrityProtInfo
rrc.SRNC_RelocationInfo_v3h0ext_IEs  SRNC-RelocationInfo-v3h0ext-IEs
    No value
    rrc.SRNC_RelocationInfo_v3h0ext_IEs
rrc.STARTList2_item  Item
    No value
    rrc.STARTSingle
rrc.STARTList_item  Item
    No value
    rrc.STARTSingle
rrc.SatDataList_item  Item
    No value
    rrc.SatData
rrc.SibOFF_List_item  Item
    Unsigned 32-bit integer
    rrc.SibOFF
rrc.StoredTGP_SequenceList_item  Item
    No value
    rrc.StoredTGP_Sequence
rrc.SystemSpecificCapUpdateReqList_item  Item
    Unsigned 32-bit integer
    rrc.SystemSpecificCapUpdateReq
rrc.SystemSpecificCapUpdateReqList_r5_item  Item
    Unsigned 32-bit integer
    rrc.SystemSpecificCapUpdateReq_r5
rrc.TDD_UMTS_Frequency_List_item  Item
    No value
    rrc.FrequencyInfoTDD
rrc.TFCI_RangeList_item  Item
    No value
    rrc.TFCI_Range
```

```
rrc.TFCS_RemovalList_item  Item
    No value
    rrc.TFCS_Removal
rrc.TFC_SubsetList_item  Item
    No value
    rrc.TFC_SubsetList_item
rrc.TGP_SequenceList_item  Item
    No value
    rrc.TGP_Sequence
rrc.TPC_CombinationInfoList_item  Item
    No value
    rrc.TPC_Combination_Info
rrc.ThresholdNonUsedFrequency_deltaList_item  Item
    No value
    rrc.DeltaRSCPPerCell
rrc.TimeslotISCP_List_item  Item
    Unsigned 32-bit integer
    rrc.TimeslotISCP
rrc.TimeslotInfoList_LCR_r4_item  Item
    No value
    rrc.TimeslotInfo_LCR_r4
rrc.TimeslotInfoList_item  Item
    No value
    rrc.TimeslotInfo
rrc.TimeslotListWithISCP_item  Item
    No value
    rrc.TimeslotWithISCP
rrc.TimeslotList_item  Item
    Unsigned 32-bit integer
    rrc.TimeslotNumber
rrc.TrafficVolumeMeasuredResultsList_item  Item
    No value
    rrc.TrafficVolumeMeasuredResults
rrc.TrafficVolumeMeasurementObjectList_item  Item
    Unsigned 32-bit integer
    rrc.UL_TrCH_Identity
rrc.TransChCriteriaList_item  Item
    No value
    rrc.TransChCriteria
rrc.UECapabilityInformation_r3_add_ext_IEs  UECapabilityInformation-r3-add-ext-IEs
    No value
    rrc.UECapabilityInformation_r3_add_ext_IEs
rrc.UE_CapabilityContainer_IEs  UE-CapabilityContainer-IEs
    No value
    rrc.UE_CapabilityContainer_IEs
rrc.UE_InternalEventParamList_item  Item
    Unsigned 32-bit integer
    rrc.UE_InternalEventParam
```



```
rrc.UE_Positioning_EventParamList_item  Item
    No value
    rrc.UE_Positioning_EventParam
rrc.UE_Positioning_IPDL_Parameters_TDDList_r4_ext_item  Item
    No value
    rrc.UE_Positioning_IPDL_Parameters_TDD_r4_ext
rrc.UE_Positioning_OTDOA_NeighbourCellList_UEB_ext_item  Item
    No value
    rrc.UE_Positioning_OTDOA_NeighbourCellInfo_UEB_ext
rrc.UE_Positioning_OTDOA_NeighbourCellList_UEB_item  Item
    No value
    rrc.UE_Positioning_OTDOA_NeighbourCellInfo_UEB
rrc.UE_Positioning_OTDOA_NeighbourCellList_item  Item
    No value
    rrc.UE_Positioning_OTDOA_NeighbourCellInfo
rrc.UE_Positioning_OTDOA_NeighbourCellList_r4_item  Item
    No value
    rrc.UE_Positioning_OTDOA_NeighbourCellInfo_r4
rrc.UE_RX_TX_ReportEntryList_item  Item
    No value
    rrc.UE_RX_TX_ReportEntry
rrc.UE_RadioAccessCapabBandFDDList2_item  Item
    No value
    rrc.UE_RadioAccessCapabBandFDD2
rrc.UE_RadioAccessCapabBandFDDList_ext_item  Item
    No value
    rrc.UE_RadioAccessCapabBandFDD_ext
rrc.UE_RadioAccessCapabBandFDDList_item  Item
    No value
    rrc.UE_RadioAccessCapabBandFDD
rrc.UE_TransmittedPowerTDD_List_item  Item
    Unsigned 32-bit integer
    rrc.UE_TransmittedPower
rrc.UL_AddReconfTransChInfoList_item  Item
    No value
    rrc.UL_AddReconfTransChInformation
rrc.UL_AddReconfTransChInfoList_r6_item  Item
    Unsigned 32-bit integer
    rrc.UL_AddReconfTransChInformation_r6
rrc.UL_AddReconfTransChInfoList_r7_item  Item
    Unsigned 32-bit integer
    rrc.UL_AddReconfTransChInformation_r7
rrc.UL_CCCH_Message  UL-CCCH-Message
    No value
    rrc.UL_CCCH_Message
rrc.UL_CCTrCHListToRemove_item  Item
    Unsigned 32-bit integer
    rrc.TFCS_IdentityPlain
```

```
rrc.UL_CCTrCHList_item  Item
    No value
    rrc.UL_CCTrCH

rrc.UL_CCTrCHList_r4_item  Item
    No value
    rrc.UL_CCTrCH_r4

rrc.UL_CCTrCHList_r7_item  Item
    No value
    rrc.UL_CCTrCH_r7

rrc.UL_CCTrChTPCList_item  Item
    No value
    rrc.TFCS_Identity

rrc.UL_ControlledTrChList_item  Item
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.UL_DCCH_Message  UL-DCCH-Message
    No value
    rrc.UL_DCCH_Message

rrc.UL_DeletedTransChInfoList_item  Item
    No value
    rrc.UL_TransportChannelIdentity

rrc.UL_DeletedTransChInfoList_r6_item  Item
    Unsigned 32-bit integer
    rrc.UL_TransportChannelIdentity_r6

rrc.UL_SHCCH_Message  UL-SHCCH-Message
    No value
    rrc.UL_SHCCH_Message

rrc.UL_TS_ChannelisationCodeList_VHCR_item  Item
    Unsigned 32-bit integer
    rrc.UL_TS_ChannelisationCode_VHCR

rrc.UL_TS_ChannelisationCodeList_item  Item
    Unsigned 32-bit integer
    rrc.UL_TS_ChannelisationCode

rrc.UL_TS_ChannelisationCodeList_r7_item  Item
    No value
    rrc.UL_TS_ChannelisationCodeList_r7_item

rrc.URA_IdentityList_item  Item
    Byte array
    rrc.URA_Identity

rrc.USCH_TransportChannelsInfo_item  Item
    No value
    rrc.USCH_TransportChannelsInfo_item

rrc.a0  a0
    Byte array
    rrc.BIT_STRING_SIZE_32

rrc.a1  a1
    Byte array
    rrc.BIT_STRING_SIZE_24
```

```
rrc.a5-1 a5-1
  Boolean
rrc.a5-2 a5-2
  Boolean
rrc.a5-3 a5-3
  Boolean
rrc.a5-4 a5-4
  Boolean
rrc.a5-5 a5-5
  Boolean
rrc.a5-6 a5-6
  Boolean
rrc.a5-7 a5-7
  Boolean
rrc.a_Sqrt a-Sqrt
  Byte array
  rrc.BIT_STRING_SIZE_24
rrc.absent absent
  No value
  rrc.NULL
rrc.ac_To_ASC_MappingTable ac-To-ASC-MappingTable
  Unsigned 32-bit integer
  rrc.AC_To_ASC_MappingTable
rrc.accessClassBarredList accessClassBarredList
  Unsigned 32-bit integer
  rrc.AccessClassBarredList
rrc.accessInfoPeriodCoefficient accessInfoPeriodCoefficient
  Unsigned 32-bit integer
  rrc.INTEGER_0_3
rrc.accessServiceClass_FDD accessServiceClass-FDD
  No value
  rrc.AccessServiceClass_FDD
rrc.accessServiceClass_TDD accessServiceClass-TDD
  No value
  rrc.AccessServiceClass_TDD
rrc.accessServiceClass_TDD_LCR accessServiceClass-TDD-LCR
  No value
  rrc.AccessServiceClass_TDD_LCR_r4
rrc.accessStratumReleaseIndicator accessStratumReleaseIndicator
  Unsigned 32-bit integer
  rrc.AccessStratumReleaseIndicator
rrc.accessprobabilityFactor_Connected accessprobabilityFactor-Connected
  Unsigned 32-bit integer
  rrc.MBMS_AccessProbabilityFactor
rrc.accessprobabilityFactor_Idle accessprobabilityFactor-Idle
  Unsigned 32-bit integer
  rrc.MBMS_AccessProbabilityFactor
```

```
rrc.accuracy256 accuracy256
  Unsigned 32-bit integer
  rrc.INTEGER_0_150

rrc.accuracy2560 accuracy2560
  Unsigned 32-bit integer
  rrc.INTEGER_0_15

rrc.accuracy40 accuracy40
  Unsigned 32-bit integer
  rrc.INTEGER_0_960

rrc.ack_NACK_repetition_factor ack-NACK-repetition-factor
  Unsigned 32-bit integer
  rrc.ACK_NACK_repetitionFactor

rrc.activate activate
  No value
  rrc.T_activate

rrc.activationTime activationTime
  Unsigned 32-bit integer
  rrc.ActivationTime

rrc.activationTimeForDPCH activationTimeForDPCH
  Unsigned 32-bit integer
  rrc.ActivationTime

rrc.activationTimeForTFCSubset activationTimeForTFCSubset
  Unsigned 32-bit integer
  rrc.ActivationTime

rrc.activationTimeSFN activationTimeSFN
  Unsigned 32-bit integer
  rrc.INTEGER_0_4095

rrc.active active
  No value
  rrc.T_active

rrc.activeSetReportingQuantities activeSetReportingQuantities
  No value
  rrc.CellReportingQuantities

rrc.activeSetUpdate activeSetUpdate
  Unsigned 32-bit integer
  rrc.ActiveSetUpdate

rrc.activeSetUpdateComplete activeSetUpdateComplete
  No value
  rrc.ActiveSetUpdateComplete

rrc.activeSetUpdateComplete_r3_add_ext activeSetUpdateComplete-r3-add-ext
  Byte array
  rrc.BIT_STRING

rrc.activeSetUpdateFailure activeSetUpdateFailure
  No value
  rrc.ActiveSetUpdateFailure

rrc.activeSetUpdateFailure_r3_add_ext activeSetUpdateFailure-r3-add-ext
  Byte array
  rrc.BIT_STRING
```

```
rrc.activeSetUpdate_r3  activeSetUpdate-r3
    No value
    rrc.ActiveSetUpdate_r3_IEs
rrc.activeSetUpdate_r3_add_ext  activeSetUpdate-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.activeSetUpdate_r6  activeSetUpdate-r6
    No value
    rrc.ActiveSetUpdate_r6_IEs
rrc.activeSetUpdate_r6_add_ext  activeSetUpdate-r6-add-ext
    Byte array
    rrc.BIT_STRING
rrc.activeSetUpdate_r7  activeSetUpdate-r7
    No value
    rrc.ActiveSetUpdate_r7_IEs
rrc.activeSetUpdate_r7_add_ext  activeSetUpdate-r7-add-ext
    Byte array
    rrc.BIT_STRING
rrc.activeSetUpdate_v4b0ext  activeSetUpdate-v4b0ext
    No value
    rrc.ActiveSetUpdate_v4b0ext_IEs
rrc.activeSetUpdate_v590ext  activeSetUpdate-v590ext
    No value
    rrc.ActiveSetUpdate_v590ext_IEs
rrc.activeSetUpdate_v690ext  activeSetUpdate-v690ext
    No value
    rrc.ActiveSetUpdate_v690ext_IEs
rrc.activeSetUpdate_v6b0ext  activeSetUpdate-v6b0ext
    No value
    rrc.ActiveSetUpdate_v6b0ext_IEs
rrc.activeSetUpdate_v7xyext  activeSetUpdate-v7xyext
    No value
    rrc.ActiveSetUpdate_v7xyext_IEs
rrc.addIntercept  addIntercept
    Unsigned 32-bit integer
    rrc.INTEGER_0_63
rrc.addOrReconfMAC_dFlow  addOrReconfMAC-dFlow
    No value
    rrc.AddOrReconfMAC_dFlow
rrc.addReconf_MAC_d_FlowList  addReconf-MAC-d-FlowList
    Unsigned 32-bit integer
    rrc.E_DCH_AddReconf_MAC_d_FlowList
rrc.addition  addition
    No value
    rrc.TFCS_ReconfAdd
rrc.additionalAssistanceDataReq  additionalAssistanceDataReq
    Boolean
    rrc.BOOLEAN
```

```
rrc.additionalAssistanceDataRequest  additionalAssistanceDataRequest
    Boolean
    rrc.BOOLEAN

rrc.additionalMeasuredResults  additionalMeasuredResults
    Unsigned 32-bit integer
    rrc.MeasuredResultsList

rrc.additionalMeasuredResults_LCR  additionalMeasuredResults-LCR
    Unsigned 32-bit integer
    rrc.MeasuredResultsList_LCR_r4_ext

rrc.additionalMeasurementID_List  additionalMeasurementID-List
    Unsigned 32-bit integer
    rrc.AdditionalMeasurementID_List

rrc.additionalMeasurementList  additionalMeasurementList
    Unsigned 32-bit integer
    rrc.AdditionalMeasurementID_List

rrc.additionalPRACH_TF_and_TFCS_CCCH_IEs  additionalPRACH-TF-and-TFCS-CCCH-IEs
    No value
    rrc.AdditionalPRACH_TF_and_TFCS_CCCH_IEs

rrc.additionalPRACH_TF_and_TFCS_CCCH_List  additionalPRACH-TF-and-TFCS-CCCH-List
    Unsigned 32-bit integer
    rrc.AdditionalPRACH_TF_and_TFCS_CCCH_List

rrc.additionalSS_TPC_Symbols  additionalSS-TPC-Symbols
    Unsigned 32-bit integer
    rrc.INTEGER_1_15

rrc.additionalTimeslots  additionalTimeslots
    Unsigned 32-bit integer
    rrc.T_additionalTimeslots

rrc.af0  af0
    Byte array
    rrc.BIT_STRING_SIZE_11

rrc.af1  af1
    Byte array
    rrc.BIT_STRING_SIZE_11

rrc.af2  af2
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.aich_Info  aich-Info
    No value
    rrc.AICH_Info

rrc.aich_PowerOffset  aich-PowerOffset
    Signed 32-bit integer
    rrc.AICH_PowerOffset

rrc.aich_TransmissionTiming  aich-TransmissionTiming
    Unsigned 32-bit integer
    rrc.AICH_TransmissionTiming

rrc.alert  alert
    Boolean
    rrc.BOOLEAN
```

```
rrc.alfa0   alfa0
            Byte array
            rrc.BIT_STRING_SIZE_8

rrc.alfa1   alfa1
            Byte array
            rrc.BIT_STRING_SIZE_8

rrc.alfa2   alfa2
            Byte array
            rrc.BIT_STRING_SIZE_8

rrc.alfa3   alfa3
            Byte array
            rrc.BIT_STRING_SIZE_8

rrc.algorithm1  algorithm1
            Unsigned 32-bit integer
            rrc.TPC_StepSizeFDD

rrc.algorithm2  algorithm2
            No value
            rrc.NULL

rrc.algorithmSpecificInfo  algorithmSpecificInfo
            Unsigned 32-bit integer
            rrc.AlgorithmSpecificInfo

rrc.all   all
            No value
            rrc.NULL

rrc.allActivePlusDetectedSet  allActivePlusDetectedSet
            Unsigned 32-bit integer
            rrc.MaxNumberOfReportingCellsType3

rrc.allActivePlusMonitoredAndOrDetectedSet  allActivePlusMonitoredAndOrDetectedSet
            Unsigned 32-bit integer
            rrc.MaxNumberOfReportingCellsType3

rrc.allActiveplusMonitoredSet  allActiveplusMonitoredSet
            Unsigned 32-bit integer
            rrc.MaxNumberOfReportingCellsType3

rrc.allSizes  allSizes
            No value
            rrc.NULL

rrc.allVirtualActSetplusMonitoredSetNonUsedFreq  allVirtualActSetplusMonitoredSet
            Unsigned 32-bit integer
            rrc.MaxNumberOfReportingCellsType3

rrc.allocationActivationTime  allocationActivationTime
            Unsigned 32-bit integer
            rrc.INTEGER_0_255

rrc.allocationConfirmation  allocationConfirmation
            Unsigned 32-bit integer
            rrc.T_allocationConfirmation

rrc.allocationDuration  allocationDuration
            Unsigned 32-bit integer
            rrc.INTEGER_1_256
```

```
rrc.allowedTFC_List    allowedTFC-List
    Unsigned 32-bit integer
    rrc.AllowedTFC_List

rrc.allowedTFIList    allowedTFIList
    Unsigned 32-bit integer
    rrc.AllowedTFI_List

rrc.allowedTFI_List    allowedTFI-List
    Unsigned 32-bit integer
    rrc.AllowedTFI_List

rrc.almanacRequest    almanacRequest
    Boolean
    rrc.BOOLEAN

rrc.almanacSatInfoList    almanacSatInfoList
    Unsigned 32-bit integer
    rrc.AlmanacSatInfoList

rrc.alpha    alpha
    Unsigned 32-bit integer
    rrc.Alpha

rrc.altE_bitInterpretation    altE-bitInterpretation
    Unsigned 32-bit integer
    rrc.T_altE_bitInterpretation

rrc.altitude    altitude
    Unsigned 32-bit integer
    rrc.INTEGER_0_32767

rrc.altitudeDirection    altitudeDirection
    Unsigned 32-bit integer
    rrc.T_altitudeDirection

rrc.am_RLC_ErrorIndicationRb2_3or4    am-RLC-ErrorIndicationRb2-3or4
    Boolean
    rrc.BOOLEAN

rrc.am_RLC_ErrorIndicationRb5orAbove    am-RLC-ErrorIndicationRb5orAbove
    Boolean
    rrc.BOOLEAN

rrc.ansi_41    ansi-41
    Byte array
    rrc.NAS_SystemInformationANSI_41

rrc.ansi_41_GlobalServiceRedirectInfo    ansi-41-GlobalServiceRedirectInfo
    Byte array
    rrc.ANSI_41_GlobalServiceRedirectInfo

rrc.ansi_41_IDNNS    ansi-41-IDNNS
    Byte array
    rrc.Ansi_41_IDNNS

rrc.ansi_41_PrivateNeighbourListInfo    ansi-41-PrivateNeighbourListInfo
    Byte array
    rrc.ANSI_41_PrivateNeighbourListInfo

rrc.ansi_41_RAB_Identity    ansi-41-RAB-Identity
    Byte array
    rrc.BIT_STRING_SIZE_8
```



```
rrc.ansi_41_RAND_Information  ansi-41-RAND-Information
    Byte array
    rrc.ANSI_41_RAND_Information
rrc.ansi_41_UserZoneID_Information  ansi-41-UserZoneID-Information
    Byte array
    rrc.ANSI_41_UserZoneID_Information
rrc.antiSpoof  antiSpoof
    Boolean
    rrc.BOOLEAN
rrc.aodo  aodo
    Byte array
    rrc.BIT_STRING_SIZE_5
rrc.ap_AICH_ChannelisationCode  ap-AICH-ChannelisationCode
    Unsigned 32-bit integer
    rrc.AP_AICH_ChannelisationCode
rrc.ap_PreambleScramblingCode  ap-PreambleScramblingCode
    Unsigned 32-bit integer
    rrc.AP_PreambleScramblingCode
rrc.ap_Signature  ap-Signature
    Unsigned 32-bit integer
    rrc.AP_Signature
rrc.appliedTA  appliedTA
    Unsigned 32-bit integer
    rrc.UL_TimingAdvance
rrc.aquisitionAssistanceRequest  aquisitionAssistanceRequest
    Boolean
    rrc.BOOLEAN
rrc.asn1_ViolationOrEncodingError  asn1-ViolationOrEncodingError
    No value
    rrc.NULL
rrc.assignedSubChannelNumber  assignedSubChannelNumber
    Byte array
    rrc.T_assignedSubChannelNumber
rrc.assistanceDataDelivery  assistanceDataDelivery
    Unsigned 32-bit integer
    rrc.AssistanceDataDelivery
rrc.assistanceDataDelivery_r3  assistanceDataDelivery-r3
    No value
    rrc.AssistanceDataDelivery_r3_IEs
rrc.assistanceDataDelivery_r3_add_ext  assistanceDataDelivery-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.assistanceDataDelivery_v3a0ext  assistanceDataDelivery-v3a0ext
    No value
    rrc.AssistanceDataDelivery_v3a0ext
rrc.assistanceDataDelivery_v4b0ext  assistanceDataDelivery-v4b0ext
    No value
    rrc.AssistanceDataDelivery_v4b0ext_IEs
```

```
rrc.assistanceDataDelivery_v7xyext  assistanceDataDelivery-v7xyext
    No value
    rrc.AssistanceDataDelivery_v7xyext_IEs
rrc.availableAP_SignatureList  availableAP-SignatureList
    Unsigned 32-bit integer
    rrc.AvailableAP_SignatureList
rrc.availableAP_Signature_VCAMLList  availableAP-Signature-VCAMLList
    Unsigned 32-bit integer
    rrc.AvailableAP_Signature_VCAMLList
rrc.availableAP_SubchannelList  availableAP-SubchannelList
    Unsigned 32-bit integer
    rrc.AvailableAP_SubchannelList
rrc.availableSF  availableSF
    Unsigned 32-bit integer
    rrc.SF_PRACH
rrc.availableSYNC_ULCodesIndics  availableSYNC-ULCodesIndics
    Byte array
    rrc.T_availableSYNC_ULCodesIndics
rrc.availableSignatureEndIndex  availableSignatureEndIndex
    Unsigned 32-bit integer
    rrc.INTEGER_0_15
rrc.availableSignatureStartIndex  availableSignatureStartIndex
    Unsigned 32-bit integer
    rrc.INTEGER_0_15
rrc.availableSignatures  availableSignatures
    Byte array
    rrc.AvailableSignatures
rrc.availableSubChannelNumbers  availableSubChannelNumbers
    Byte array
    rrc.AvailableSubChannelNumbers
rrc.averageRLC_BufferPayload  averageRLC-BufferPayload
    Unsigned 32-bit integer
    rrc.TimeInterval
rrc.azimuth  azimuth
    Unsigned 32-bit integer
    rrc.INTEGER_0_31
rrc.azimuthAndElevation  azimuthAndElevation
    No value
    rrc.AzimuthAndElevation
rrc.b0  b0
    Boolean
rrc.b1  b1
    Boolean
rrc.b2  b2
    Boolean
rrc.b3  b3
    Boolean
```

```
rrc.backoffControlParams  backoffControlParams
    No value
    rrc.BackoffControlParams
rrc.badCRC  badCRC
    Unsigned 32-bit integer
    rrc.INTEGER_1_512
rrc.band_Class  band-Class
    Byte array
    rrc.BIT_STRING_SIZE_5
rrc.barred  barred
    No value
    rrc.T_barred
rrc.bcc  bcc
    Unsigned 32-bit integer
    rrc.BCC
rrc.bcch_ARFCN  bcch-ARFCN
    Unsigned 32-bit integer
    rrc.BCCH_ARFCN
rrc.bcch_ModificationInfo  bcch-ModificationInfo
    No value
    rrc.BCCH_ModificationInfo
rrc.bcch_ModificationTime  bcch-ModificationTime
    Unsigned 32-bit integer
    rrc.BCCH_ModificationTime
rrc.beaconPLEst  beaconPLEst
    Unsigned 32-bit integer
    rrc.BEACON_PL_Est
rrc.bearing  bearing
    Unsigned 32-bit integer
    rrc.INTEGER_0_359
rrc.beta0  beta0
    Byte array
    rrc.BIT_STRING_SIZE_8
rrc.beta1  beta1
    Byte array
    rrc.BIT_STRING_SIZE_8
rrc.beta2  beta2
    Byte array
    rrc.BIT_STRING_SIZE_8
rrc.beta3  beta3
    Byte array
    rrc.BIT_STRING_SIZE_8
rrc.bitMode  bitMode
    Unsigned 32-bit integer
    rrc.BitModeRLC_SizeInfo
rrc.bitModeRLC_SizeInfo  bitModeRLC-SizeInfo
    Unsigned 32-bit integer
    rrc.BitModeRLC_SizeInfo
```

```
rrc.bitmap bitmap
    Byte array
    rrc.T_bitmap

rrc.blerMeasurementResultsList blerMeasurementResultsList
    Unsigned 32-bit integer
    rrc.BLER_MeasurementResultsList

rrc.bler_QualityValue bler-QualityValue
    Signed 32-bit integer
    rrc.BLER_QualityValue

rrc.bler_dl_TransChIdList bler-dl-TransChIdList
    Unsigned 32-bit integer
    rrc.BLER_TransChIdList

rrc.bler_target bler-target
    Signed 32-bit integer
    rrc.Bler_Target

rrc.broadcast_UL_OL_PC_info broadcast-UL-OL-PC-info
    No value
    rrc.NULL

rrc.bsic bsic
    No value
    rrc.BSIC

rrc.bsicReported bsicReported
    Unsigned 32-bit integer
    rrc.BSICReported

rrc.bsic_VerificationRequired bsic-VerificationRequired
    Unsigned 32-bit integer
    rrc.BSIC_VerificationRequired

rrc.burstFreq burstFreq
    Unsigned 32-bit integer
    rrc.INTEGER_1_16

rrc.burstLength burstLength
    Unsigned 32-bit integer
    rrc.INTEGER_10_25

rrc.burstModeParameters burstModeParameters
    No value
    rrc.BurstModeParameters

rrc.burstStart burstStart
    Unsigned 32-bit integer
    rrc.INTEGER_0_15

rrc.burstType burstType
    Unsigned 32-bit integer
    rrc.BurstType

rrc.burst_Type burst-Type
    Unsigned 32-bit integer
    rrc.T_burst_Type

rrc.cBS_DRX_Level1Information_extension CBS-DRX-Level1Information-extension
    Unsigned 32-bit integer
    rrc.CBS_DRX_Level1Information_extension_r6
```

```

rrc.cSDomainSpecificAccessRestriction  cSDomainSpecificAccessRestriction
    Unsigned 32-bit integer
    rrc.DomainSpecificAccessRestriction_v670ext

rrc.c_N0  c-N0
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.c_RNTI  c-RNTI
    Byte array
    rrc.C_RNTI

rrc.c_ic  c-ic
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.c_is  c-is
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.c_rc  c-rc
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.c_rs  c-rs
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.c_uc  c-uc
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.c_us  c-us
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.calculationTimeForCiphering  calculationTimeForCiphering
    No value
    rrc.CalculationTimeForCiphering

rrc.capabilityUpdateRequirement  capabilityUpdateRequirement
    No value
    rrc.CapabilityUpdateRequirement

rrc.capabilityUpdateRequirement_r4Ext  capabilityUpdateRequirement-r4Ext
    No value
    rrc.CapabilityUpdateRequirement_r4_ext

rrc.capabilityUpdateRequirement_r4_ext  capabilityUpdateRequirement-r4-ext
    No value
    rrc.CapabilityUpdateRequirement_r4_ext

rrc.capabilityUpdateRequirement_r7Ext  capabilityUpdateRequirement-r7Ext
    No value
    rrc.CapabilityUpdateRequirement_r7_ext

rrc.capabilityUpdateRequirement_r7_ext  capabilityUpdateRequirement-r7-ext
    No value
    rrc.CapabilityUpdateRequirement_r7_ext

rrc.cbs_DRX_Level1Information  cbs-DRX-Level1Information
    No value
    rrc.CBS_DRX_Level1Information

```

```
rrc.cbs_FrameOffset  cbs-FrameOffset
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.ccTrCH_PowerControlInfo  ccTrCH-PowerControlInfo
    No value
    rrc.CCTrCH_PowerControlInfo

rrc.cd_AccessSlotSubchannelList  cd-AccessSlotSubchannelList
    Unsigned 32-bit integer
    rrc.CD_AccessSlotSubchannelList

rrc.cd_CA_ICH_ChannelisationCode  cd-CA-ICH-ChannelisationCode
    Unsigned 32-bit integer
    rrc.CD_CA_ICH_ChannelisationCode

rrc.cd_PreambleScramblingCode  cd-PreambleScramblingCode
    Unsigned 32-bit integer
    rrc.CD_PreambleScramblingCode

rrc.cd_SignatureCodeList  cd-SignatureCodeList
    Unsigned 32-bit integer
    rrc.CD_SignatureCodeList

rrc.cdma2000  cdma2000
    No value
    rrc.T_cdma2000

rrc.cdma2000_MessageList  cdma2000-MessageList
    Unsigned 32-bit integer
    rrc.CDMA2000_MessageList

rrc.cdma2000_UMTS_Frequency_List  cdma2000-UMTS-Frequency-List
    Unsigned 32-bit integer
    rrc.CDMA2000_UMTS_Frequency_List

rrc.cdma_Freq  cdma-Freq
    Byte array
    rrc.BIT_STRING_SIZE_11

rrc.cellAccessRestriction  cellAccessRestriction
    No value
    rrc.CellAccessRestriction

rrc.cellAndChannelIdentity  cellAndChannelIdentity
    No value
    rrc.CellAndChannelIdentity

rrc.cellBarred  cellBarred
    Unsigned 32-bit integer
    rrc.CellBarred

rrc.cellChangeOrderFromUTRAN  cellChangeOrderFromUTRAN
    Unsigned 32-bit integer
    rrc.CellChangeOrderFromUTRAN

rrc.cellChangeOrderFromUTRANFailure  cellChangeOrderFromUTRANFailure
    Unsigned 32-bit integer
    rrc.CellChangeOrderFromUTRANFailure

rrc.cellChangeOrderFromUTRANFailure_r3  cellChangeOrderFromUTRANFailure-r3
    No value
    rrc.CellChangeOrderFromUTRANFailure_r3_IEs
```

```
rrc.cellChangeOrderFromUTRANFailure_r3_add_ext  cellChangeOrderFromUTRANFailure-  
    Byte array  
    rrc.BIT_STRING  
rrc.cellChangeOrderFromUTRAN_IEs  cellChangeOrderFromUTRAN-IEs  
    No value  
    rrc.CellChangeOrderFromUTRAN_r3_IEs  
rrc.cellChangeOrderFromUTRAN_r3_add_ext  cellChangeOrderFromUTRAN-r3-add-ext  
    Byte array  
    rrc.BIT_STRING  
rrc.cellChangeOrderFromUTRAN_v590ext  cellChangeOrderFromUTRAN-v590ext  
    No value  
    rrc.CellChangeOrderFromUTRAN_v590ext_IEs  
rrc.cellGroupIdentity  cellGroupIdentity  
    Byte array  
    rrc.MBMS_CellGroupIdentity_r6  
rrc.cellIdentity  cellIdentity  
    Byte array  
    rrc.CellIdentity  
rrc.cellIdentity_reportingIndicator  cellIdentity-reportingIndicator  
    Boolean  
    rrc.BOOLEAN  
rrc.cellIndividualOffset  cellIndividualOffset  
    Signed 32-bit integer  
    rrc.CellIndividualOffset  
rrc.cellInfo  cellInfo  
    No value  
    rrc.CellInfo  
rrc.cellMeasurementEventResults  cellMeasurementEventResults  
    Unsigned 32-bit integer  
    rrc.CellMeasurementEventResults  
rrc.cellParametersID  cellParametersID  
    Unsigned 32-bit integer  
    rrc.CellParametersID  
rrc.cellPosition  cellPosition  
    Unsigned 32-bit integer  
    rrc.ReferenceCellPosition  
rrc.cellReservationExtension  cellReservationExtension  
    Unsigned 32-bit integer  
    rrc.ReservedIndicator  
rrc.cellReservedForOperatorUse  cellReservedForOperatorUse  
    Unsigned 32-bit integer  
    rrc.ReservedIndicator  
rrc.cellSelectQualityMeasure  cellSelectQualityMeasure  
    Unsigned 32-bit integer  
    rrc.T_cellSelectQualityMeasure  
rrc.cellSelectReselectInfo  cellSelectReselectInfo  
    No value  
    rrc.CellSelectReselectInfoSIB_3_4
```

```

rrc.cellSelectReselectInfoPCHFACH_v5b0ext  cellSelectReselectInfoPCHFACH-v5b0ext
    No value
    rrc.CellSelectReselectInfoPCHFACH_v5b0ext
rrc.cellSelectReselectInfoTresselectionScaling_v5c0ext  cellSelectReselectInfoTre
    No value
    rrc.CellSelectReselectInfoTresselectionScaling_v5c0ext
rrc.cellSelectReselectInfo_v590ext  cellSelectReselectInfo-v590ext
    No value
    rrc.CellSelectReselectInfo_v590ext
rrc.cellSelectionReselectionInfo  cellSelectionReselectionInfo
    No value
    rrc.CellSelectReselectInfoSIB_11_12_RSCP
rrc.cellSynchronisationInfo  cellSynchronisationInfo
    No value
    rrc.CellSynchronisationInfo
rrc.cellSynchronisationInfoReportingIndicator  cellSynchronisationInfoReportingI
    Boolean
    rrc.BOOLEAN
rrc.cellToReportList  cellToReportList
    Unsigned 32-bit integer
    rrc.CellToReportList
rrc.cellUpdate  cellUpdate
    No value
    rrc.CellUpdate
rrc.cellUpdateCause  cellUpdateCause
    Unsigned 32-bit integer
    rrc.CellUpdateCause
rrc.cellUpdateCause_ext  cellUpdateCause-ext
    Unsigned 32-bit integer
    rrc.CellUpdateCause_ext
rrc.cellUpdateConfirm  cellUpdateConfirm
    Unsigned 32-bit integer
    rrc.CellUpdateConfirm
rrc.cellUpdateConfirm_CCCH_r3_add_ext  cellUpdateConfirm-CCCH-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.cellUpdateConfirm_CCCH_r4_add_ext  cellUpdateConfirm-CCCH-r4-add-ext
    Byte array
    rrc.BIT_STRING
rrc.cellUpdateConfirm_CCCH_r5_add_ext  cellUpdateConfirm-CCCH-r5-add-ext
    Byte array
    rrc.BIT_STRING
rrc.cellUpdateConfirm_r3  cellUpdateConfirm-r3
    No value
    rrc.CellUpdateConfirm_r3_IEs
rrc.cellUpdateConfirm_r3_add_ext  cellUpdateConfirm-r3-add-ext
    Byte array
    rrc.BIT_STRING

```



```
rrc.cellUpdateConfirm_r4  cellUpdateConfirm-r4
    No value
    rrc.CellUpdateConfirm_r4_IEs
rrc.cellUpdateConfirm_r4_add_ext  cellUpdateConfirm-r4-add-ext
    Byte array
    rrc.BIT_STRING
rrc.cellUpdateConfirm_r5  cellUpdateConfirm-r5
    No value
    rrc.CellUpdateConfirm_r5_IEs
rrc.cellUpdateConfirm_r5_add_ext  cellUpdateConfirm-r5-add-ext
    Byte array
    rrc.BIT_STRING
rrc.cellUpdateConfirm_r6  cellUpdateConfirm-r6
    No value
    rrc.CellUpdateConfirm_r6_IEs
rrc.cellUpdateConfirm_r6_add_ext  cellUpdateConfirm-r6-add-ext
    Byte array
    rrc.BIT_STRING
rrc.cellUpdateConfirm_r7  cellUpdateConfirm-r7
    No value
    rrc.CellUpdateConfirm_r7_IEs
rrc.cellUpdateConfirm_r7_add_ext  cellUpdateConfirm-r7-add-ext
    Byte array
    rrc.BIT_STRING
rrc.cellUpdateConfirm_v3a0ext  cellUpdateConfirm-v3a0ext
    No value
    rrc.CellUpdateConfirm_v3a0ext
rrc.cellUpdateConfirm_v4b0ext  cellUpdateConfirm-v4b0ext
    No value
    rrc.CellUpdateConfirm_v4b0ext_IEs
rrc.cellUpdateConfirm_v590ext  cellUpdateConfirm-v590ext
    No value
    rrc.CellUpdateConfirm_v590ext_IEs
rrc.cellUpdateConfirm_v5d0ext  cellUpdateConfirm-v5d0ext
    No value
    rrc.CellUpdateConfirm_v5d0ext_IEs
rrc.cellUpdateConfirm_v690ext  cellUpdateConfirm-v690ext
    No value
    rrc.CellUpdateConfirm_v690ext_IEs
rrc.cellUpdateConfirm_v6b0ext  cellUpdateConfirm-v6b0ext
    No value
    rrc.CellUpdateConfirm_v6b0ext_IEs
rrc.cellUpdateOccurred  cellUpdateOccurred
    No value
    rrc.NULL
rrc.cellUpdate_r3_add_ext  cellUpdate-r3-add-ext
    Byte array
    rrc.BIT_STRING
```

```
rrc.cellUpdate_v590ext  cellUpdate-v590ext
    No value
    rrc.CellUpdate_v590ext
rrc.cellUpdate_v690ext  cellUpdate-v690ext
    No value
    rrc.CellUpdate_v690ext_IEs
rrc.cellUpdate_v6b0ext  cellUpdate-v6b0ext
    No value
    rrc.CellUpdate_v6b0ext_IEs
rrc.cellUpdate_v7xyext  cellUpdate-v7xyext
    No value
    rrc.CellUpdate_v7xyext_IEs
rrc.cellValueTag  cellValueTag
    Unsigned 32-bit integer
    rrc.CellValueTag
rrc.cell_Id  cell-Id
    Byte array
    rrc.CellIdentity
rrc.cell_Timing  cell-Timing
    No value
    rrc.T_cell_Timing
rrc.cell_id  cell-id
    Byte array
    rrc.CellIdentity
rrc.cell_id_PerRL_List  cell-id-PerRL-List
    Unsigned 32-bit integer
    rrc.CellIdentity_PerRL_List
rrc.cellsForInterFreqMeasList  cellsForInterFreqMeasList
    Unsigned 32-bit integer
    rrc.CellsForInterFreqMeasList
rrc.cellsForInterRATMeasList  cellsForInterRATMeasList
    Unsigned 32-bit integer
    rrc.CellsForInterRATMeasList
rrc.cellsForIntraFreqMeasList  cellsForIntraFreqMeasList
    Unsigned 32-bit integer
    rrc.CellsForIntraFreqMeasList
rrc.cfnHandling  cfnHandling
    Unsigned 32-bit integer
    rrc.T_cfnHandling
rrc.chCode1-SF16  chCode1-SF16
    Boolean
rrc.chCode1-SF32  chCode1-SF32
    Boolean
rrc.chCode10-SF16  chCode10-SF16
    Boolean
rrc.chCode10-SF32  chCode10-SF32
    Boolean
```

rrc.chCode11-SF16 Boolean	chCode11-SF16
rrc.chCode11-SF32 Boolean	chCode11-SF32
rrc.chCode12-SF16 Boolean	chCode12-SF16
rrc.chCode12-SF32 Boolean	chCode12-SF32
rrc.chCode13-SF16 Boolean	chCode13-SF16
rrc.chCode13-SF32 Boolean	chCode13-SF32
rrc.chCode14-SF16 Boolean	chCode14-SF16
rrc.chCode14-SF32 Boolean	chCode14-SF32
rrc.chCode15-SF16 Boolean	chCode15-SF16
rrc.chCode15-SF32 Boolean	chCode15-SF32
rrc.chCode16-SF16 Boolean	chCode16-SF16
rrc.chCode16-SF32 Boolean	chCode16-SF32
rrc.chCode17-SF32 Boolean	chCode17-SF32
rrc.chCode18-SF32 Boolean	chCode18-SF32
rrc.chCode19-SF32 Boolean	chCode19-SF32
rrc.chCode2-SF16 Boolean	chCode2-SF16
rrc.chCode2-SF32 Boolean	chCode2-SF32
rrc.chCode20-SF32 Boolean	chCode20-SF32
rrc.chCode21-SF32 Boolean	chCode21-SF32
rrc.chCode22-SF32 Boolean	chCode22-SF32
rrc.chCode23-SF32 Boolean	chCode23-SF32
rrc.chCode24-SF32 Boolean	chCode24-SF32

```
rrc.chCode25-SF32  chCode25-SF32
  Boolean
rrc.chCode26-SF32  chCode26-SF32
  Boolean
rrc.chCode27-SF32  chCode27-SF32
  Boolean
rrc.chCode28-SF32  chCode28-SF32
  Boolean
rrc.chCode29-SF32  chCode29-SF32
  Boolean
rrc.chCode3-SF16   chCode3-SF16
  Boolean
rrc.chCode3-SF32   chCode3-SF32
  Boolean
rrc.chCode30-SF32  chCode30-SF32
  Boolean
rrc.chCode31-SF32  chCode31-SF32
  Boolean
rrc.chCode32-SF32  chCode32-SF32
  Boolean
rrc.chCode4-SF16   chCode4-SF16
  Boolean
rrc.chCode4-SF32   chCode4-SF32
  Boolean
rrc.chCode5-SF16   chCode5-SF16
  Boolean
rrc.chCode5-SF32   chCode5-SF32
  Boolean
rrc.chCode6-SF16   chCode6-SF16
  Boolean
rrc.chCode6-SF32   chCode6-SF32
  Boolean
rrc.chCode7-SF16   chCode7-SF16
  Boolean
rrc.chCode7-SF32   chCode7-SF32
  Boolean
rrc.chCode8-SF16   chCode8-SF16
  Boolean
rrc.chCode8-SF32   chCode8-SF32
  Boolean
rrc.chCode9-SF16   chCode9-SF16
  Boolean
rrc.chCode9-SF32   chCode9-SF32
  Boolean
```

```

rrc.chCodeIndex0  chCodeIndex0
  Boolean
rrc.chCodeIndex1  chCodeIndex1
  Boolean
rrc.chCodeIndex10 chCodeIndex10
  Boolean
rrc.chCodeIndex11 chCodeIndex11
  Boolean
rrc.chCodeIndex12 chCodeIndex12
  Boolean
rrc.chCodeIndex13 chCodeIndex13
  Boolean
rrc.chCodeIndex14 chCodeIndex14
  Boolean
rrc.chCodeIndex15 chCodeIndex15
  Boolean
rrc.chCodeIndex2  chCodeIndex2
  Boolean
rrc.chCodeIndex3  chCodeIndex3
  Boolean
rrc.chCodeIndex4  chCodeIndex4
  Boolean
rrc.chCodeIndex5  chCodeIndex5
  Boolean
rrc.chCodeIndex6  chCodeIndex6
  Boolean
rrc.chCodeIndex7  chCodeIndex7
  Boolean
rrc.chCodeIndex8  chCodeIndex8
  Boolean
rrc.chCodeIndex9  chCodeIndex9
  Boolean

rrc.channelAssignmentActive channelAssignmentActive
  Unsigned 32-bit integer
  rrc.ChannelAssignmentActive

rrc.channelCodingType channelCodingType
  Unsigned 32-bit integer
  rrc.ChannelCodingType

rrc.channelReqParamsForUCSM channelReqParamsForUCSM
  No value
  rrc.ChannelReqParamsForUCSM

rrc.channelisationCode channelisationCode
  Unsigned 32-bit integer
  rrc.E_HICH_ChannelisationCode

```

```
rrc.channelisationCode256 channelisationCode256
    Unsigned 32-bit integer
    rrc.ChannelisationCode256

rrc.channelisationCodeIndices channelisationCodeIndices
    Byte array
    rrc.T_channelisationCodeIndices

rrc.channelisationCodeList channelisationCodeList
    Unsigned 32-bit integer
    rrc.TDD_PRACH_CCodeList

rrc.channelisationCodeList_item Item
    Unsigned 32-bit integer
    rrc.DL_TS_ChannelisationCode

rrc.channelisation_Code channelisation-Code
    Unsigned 32-bit integer
    rrc.HS_ChannelisationCode_LCR

rrc.channelisation_code channelisation-code
    Unsigned 32-bit integer
    rrc.DL_TS_ChannelisationCode

rrc.chipRateCapability chipRateCapability
    Unsigned 32-bit integer
    rrc.ChipRateCapability

rrc.cipheringAlgorithm cipheringAlgorithm
    Unsigned 32-bit integer
    rrc.CipheringAlgorithm

rrc.cipheringAlgorithmCap cipheringAlgorithmCap
    Byte array
    rrc.T_cipheringAlgorithmCap

rrc.cipheringInfoForSRB1_v3a0ext cipheringInfoForSRB1-v3a0ext
    No value
    rrc.CipheringInfoPerRB_List_v3a0ext

rrc.cipheringInfoPerRB_List cipheringInfoPerRB-List
    Unsigned 32-bit integer
    rrc.CipheringInfoPerRB_List

rrc.cipheringKeyFlag cipheringKeyFlag
    Byte array
    rrc.BIT_STRING_SIZE_1

rrc.cipheringModeCommand cipheringModeCommand
    Unsigned 32-bit integer
    rrc.CipheringModeCommand

rrc.cipheringModeInfo cipheringModeInfo
    No value
    rrc.CipheringModeInfo

rrc.cipheringSerialNumber cipheringSerialNumber
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535

rrc.cipheringStatus cipheringStatus
    Unsigned 32-bit integer
    rrc.CipheringStatus
```

```
rrc.cipheringStatusList cipheringStatusList
    Unsigned 32-bit integer
    rrc.CipheringStatusList

rrc.closedLoopTimingAdjMode closedLoopTimingAdjMode
    Unsigned 32-bit integer
    rrc.ClosedLoopTimingAdjMode

rrc.cn_CommonGSM_MAP_NAS_SysInfo cn-CommonGSM-MAP-NAS-SysInfo
    Byte array
    rrc.NAS_SystemInformationGSM_MAP

rrc.cn_DRX_CycleLengthCoeff cn-DRX-CycleLengthCoeff
    Unsigned 32-bit integer
    rrc.CN_DRX_CycleLengthCoefficient

rrc.cn_DomainIdentity cn-DomainIdentity
    Unsigned 32-bit integer
    rrc.CN_DomainIdentity

rrc.cn_DomainInformationList cn-DomainInformationList
    Unsigned 32-bit integer
    rrc.CN_DomainInformationList

rrc.cn_DomainInformationListFull cn-DomainInformationListFull
    Unsigned 32-bit integer
    rrc.CN_DomainInformationListFull

rrc.cn_DomainInformationList_v390ext cn-DomainInformationList-v390ext
    Unsigned 32-bit integer
    rrc.CN_DomainInformationList_v390ext

rrc.cn_DomainSpecificNAS_Info cn-DomainSpecificNAS-Info
    Byte array
    rrc.NAS_SystemInformationGSM_MAP

rrc.cn_DomainSysInfoList cn-DomainSysInfoList
    Unsigned 32-bit integer
    rrc.CN_DomainSysInfoList

rrc.cn_Identity cn-Identity
    No value
    rrc.T_cn_Identity

rrc.cn_InformationInfo cn-InformationInfo
    No value
    rrc.CN_InformationInfo

rrc.cn_OriginatedPage_connectedMode_UE cn-OriginatedPage-connectedMode-UE
    No value
    rrc.T_cn_OriginatedPage_connectedMode_UE

rrc.cn_Type cn-Type
    Unsigned 32-bit integer
    rrc.T_cn_Type

rrc.cn_pagedUE_Identity cn-pagedUE-Identity
    Unsigned 32-bit integer
    rrc.CN_PagedUE_Identity

rrc.code0 code0
    Boolean
```

```
rrc.code1 code1
    Boolean

rrc.code2 code2
    Boolean

rrc.code3 code3
    Boolean

rrc.code4 code4
    Boolean

rrc.code5 code5
    Boolean

rrc.code6 code6
    Boolean

rrc.code7 code7
    Boolean

rrc.codeChangeStatusList codeChangeStatusList
    Unsigned 32-bit integer
    rrc.CodeChangeStatusList

rrc.codeNumber codeNumber
    Unsigned 32-bit integer
    rrc.CodeNumberDSCH

rrc.codeNumberStart codeNumberStart
    Unsigned 32-bit integer
    rrc.CodeNumberDSCH

rrc.codeNumberStop codeNumberStop
    Unsigned 32-bit integer
    rrc.CodeNumberDSCH

rrc.codeOnL2 codeOnL2
    Byte array
    rrc.BIT_STRING_SIZE_2

rrc.codePhase codePhase
    Unsigned 32-bit integer
    rrc.INTEGER_0_1022

rrc.codePhaseSearchWindow codePhaseSearchWindow
    Unsigned 32-bit integer
    rrc.CodePhaseSearchWindow

rrc.codeRange codeRange
    No value
    rrc.CodeRange

rrc.codeResourceInfo codeResourceInfo
    Unsigned 32-bit integer
    rrc.UL_TS_ChannelisationCode

rrc.codeWordSet codeWordSet
    Unsigned 32-bit integer
    rrc.CodeWordSet

rrc.codesRepresentation codesRepresentation
    Unsigned 32-bit integer
    rrc.T_codesRepresentation
```



```
rrc.commonCCTrChIdentity  commonCCTrChIdentity
    Unsigned 32-bit integer
    rrc.MBMS_CommonCCTrChIdentity
rrc.commonMidamble  commonMidamble
    No value
    rrc.NULL
rrc.commonRBIdentity  commonRBIdentity
    Unsigned 32-bit integer
    rrc.MBMS_CommonRBIdentity
rrc.commonTDD_Choice  commonTDD-Choice
    Unsigned 32-bit integer
    rrc.T_commonTDD_Choice
rrc.commonTimeslotInfo  commonTimeslotInfo
    No value
    rrc.CommonTimeslotInfo
rrc.commonTimeslotInfoMBMS  commonTimeslotInfoMBMS
    No value
    rrc.CommonTimeslotInfoMBMS
rrc.commonTrChIdentity  commonTrChIdentity
    Unsigned 32-bit integer
    rrc.MBMS_CommonTrChIdentity
rrc.commonTransChTFS  commonTransChTFS
    No value
    rrc.CommonTransChTFS
rrc.commonTransChTFS_LCR  commonTransChTFS-LCR
    No value
    rrc.CommonTransChTFS_LCR
rrc.complete  complete
    No value
    rrc.T_complete
rrc.completeAndFirst  completeAndFirst
    No value
    rrc.T_completeAndFirst
rrc.completeSIB  completeSIB
    No value
    rrc.CompleteSIB
rrc.completeSIB_List  completeSIB-List
    Unsigned 32-bit integer
    rrc.CompleteSIB_List
rrc.compressedModeMeasCapabFDDList  compressedModeMeasCapabFDDList
    Unsigned 32-bit integer
    rrc.CompressedModeMeasCapabFDDList
rrc.compressedModeMeasCapabFDDList_ext  compressedModeMeasCapabFDDList-ext
    Unsigned 32-bit integer
    rrc.CompressedModeMeasCapabFDDList_ext
rrc.compressedModeMeasCapabGSMList  compressedModeMeasCapabGSMList
    Unsigned 32-bit integer
    rrc.CompressedModeMeasCapabGSMList
```

```
rrc.compressedModeMeasCapabMC    compressedModeMeasCapabMC
    No value
    rrc.CompressedModeMeasCapabMC

rrc.compressedModeMeasCapabTDDList  compressedModeMeasCapabTDDList
    Unsigned 32-bit integer
    rrc.CompressedModeMeasCapabTDDList

rrc.compressedModeRuntimeError  compressedModeRuntimeError
    Unsigned 32-bit integer
    rrc.TGPSI

rrc.computedGainFactors    computedGainFactors
    Unsigned 32-bit integer
    rrc.ReferenceTFC_ID

rrc.conditionalInformationElementError  conditionalInformationElementError
    No value
    rrc.IdentificationOfReceivedMessage

rrc.confidence    confidence
    Unsigned 32-bit integer
    rrc.INTEGER_0_100

rrc.configuration    configuration
    Unsigned 32-bit integer
    rrc.T_configuration

rrc.configurationIncomplete    configurationIncomplete
    No value
    rrc.NULL

rrc.configurationUnacceptable    configurationUnacceptable
    No value
    rrc.NULL

rrc.configurationUnsupported    configurationUnsupported
    No value
    rrc.NULL

rrc.configured    configured
    No value
    rrc.NULL

rrc.confirmRequest    confirmRequest
    Unsigned 32-bit integer
    rrc.T_confirmRequest

rrc.connectedModePLMNIIdentities    connectedModePLMNIIdentities
    No value
    rrc.PLMNIIdentitiesOfNeighbourCells

rrc.connectedModePLMNIIdentitiesSIB11bis    connectedModePLMNIIdentitiesSIB11bis
    No value
    rrc.PLMNIIdentitiesOfNeighbourCells

rrc.consecutive    consecutive
    No value
    rrc.T_consecutive

rrc.constantValue    constantValue
    Signed 32-bit integer
    rrc.ConstantValue
```

```

rrc.continue continue
    No value
    rrc.NULL

rrc.continueMCCHReading continueMCCHReading
    Boolean
    rrc.BOOLEAN

rrc.convolutional convolutional
    Unsigned 32-bit integer
    rrc.CodingRate

rrc.countC_SFN_Frame_difference countC-SFN-Frame-difference
    No value
    rrc.CountC_SFN_Frame_difference

rrc.countC_SFN_High countC-SFN-High
    Unsigned 32-bit integer
    rrc.INTEGER_0_15

rrc.count_C count-C
    Byte array
    rrc.BIT_STRING_SIZE_32

rrc.count_C_ActivationTime count-C-ActivationTime
    Unsigned 32-bit integer
    rrc.ActivationTime

rrc.count_C_DL count-C-DL
    Unsigned 32-bit integer
    rrc.COUNT_C

rrc.count_C_List count-C-List
    Unsigned 32-bit integer
    rrc.COUNT_C_List

rrc.count_C_MSB_DL count-C-MSB-DL
    Unsigned 32-bit integer
    rrc.COUNT_C_MSB

rrc.count_C_MSB_UL count-C-MSB-UL
    Unsigned 32-bit integer
    rrc.COUNT_C_MSB

rrc.count_C_UL count-C-UL
    Unsigned 32-bit integer
    rrc.COUNT_C

rrc.counterCheck counterCheck
    Unsigned 32-bit integer
    rrc.CounterCheck

rrc.counterCheckResponse counterCheckResponse
    No value
    rrc.CounterCheckResponse

rrc.counterCheckResponse_r3_add_ext counterCheckResponse-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.counterCheck_r3 counterCheck-r3
    No value
    rrc.CounterCheck_r3_IEs

```

```
rrc.counterCheck_r3_add_ext  counterCheck-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.countingForCellFACH  countingForCellFACH
    Boolean
    rrc.BOOLEAN

rrc.countingForCellPCH  countingForCellPCH
    Boolean
    rrc.BOOLEAN

rrc.countingForUraPCH  countingForUraPCH
    Boolean
    rrc.BOOLEAN

rrc.cpch_SetID  cpch-SetID
    Unsigned 32-bit integer
    rrc.CPCH_SetID

rrc.cpch_StatusIndicationMode  cpch-StatusIndicationMode
    Unsigned 32-bit integer
    rrc.CPCH_StatusIndicationMode

rrc.cpich_Ec_N0  cpich-Ec-N0
    No value
    rrc.T_cpich_Ec_N0

rrc.cpich_Ec_N0_reportingIndicator  cpich-Ec-N0-reportingIndicator
    Boolean
    rrc.BOOLEAN

rrc.cpich_RSCP  cpich-RSCP
    No value
    rrc.NULL

rrc.cpich_RSCP_reportingIndicator  cpich-RSCP-reportingIndicator
    Boolean
    rrc.BOOLEAN

rrc.cqi_RepetitionFactor  cqi-RepetitionFactor
    Unsigned 32-bit integer
    rrc.CQI_RepetitionFactor

rrc.cqi_dtx_Timer  cqi-dtx-Timer
    Unsigned 32-bit integer
    rrc.CQI_DTX_Timer

rrc.crc_Size  crc-Size
    Unsigned 32-bit integer
    rrc.CRC_Size

rrc.criticalExtensions  criticalExtensions
    Unsigned 32-bit integer
    rrc.T_criticalExtensions

rrc.csCallType  csCallType
    Unsigned 32-bit integer
    rrc.T_csCallType

rrc.cs_domain  cs-domain
    No value
    rrc.T_cs_domain
```

```
rrc.ctch_AllocationPeriod  ctch-AllocationPeriod
    Unsigned 32-bit integer
    rrc.INTEGER_1_256

rrc.ctch_Indicator  ctch-Indicator
    Boolean
    rrc.BOOLEAN

rrc.ctfc12  ctfc12
    Unsigned 32-bit integer
    rrc.INTEGER_0_4095

rrc.ctfc12Bit  ctfc12Bit
    Unsigned 32-bit integer
    rrc.T_ctfc12Bit

rrc.ctfc12Bit_item  Item
    No value
    rrc.T_ctfc12Bit_item

rrc.ctfc12bit  ctfc12bit
    Unsigned 32-bit integer
    rrc.INTEGER_0_4095

rrc.ctfc16  ctfc16
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535

rrc.ctfc16Bit  ctfc16Bit
    Unsigned 32-bit integer
    rrc.T_ctfc16Bit

rrc.ctfc16Bit_item  Item
    No value
    rrc.T_ctfc16Bit_item

rrc.ctfc16bit  ctfc16bit
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535

rrc.ctfc2  ctfc2
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.ctfc24  ctfc24
    Unsigned 32-bit integer
    rrc.INTEGER_0_16777215

rrc.ctfc24Bit  ctfc24Bit
    Unsigned 32-bit integer
    rrc.T_ctfc24Bit

rrc.ctfc24Bit_item  Item
    No value
    rrc.T_ctfc24Bit_item

rrc.ctfc24bit  ctfc24bit
    Unsigned 32-bit integer
    rrc.INTEGER_0_16777215

rrc.ctfc2Bit  ctfc2Bit
    Unsigned 32-bit integer
    rrc.T_ctfc2Bit
```

```
rrc.ctfc2Bit_item  Item
    No value
    rrc.T_ctfc2Bit_item
rrc.ctfc2bit  ctfc2bit
    Unsigned 32-bit integer
    rrc.INTEGER_0_3
rrc.ctfc4  ctfc4
    Unsigned 32-bit integer
    rrc.INTEGER_0_15
rrc.ctfc4Bit  ctfc4Bit
    Unsigned 32-bit integer
    rrc.T_ctfc4Bit
rrc.ctfc4Bit_item  Item
    No value
    rrc.T_ctfc4Bit_item
rrc.ctfc4bit  ctfc4bit
    Unsigned 32-bit integer
    rrc.INTEGER_0_15
rrc.ctfc6  ctfc6
    Unsigned 32-bit integer
    rrc.INTEGER_0_63
rrc.ctfc6Bit  ctfc6Bit
    Unsigned 32-bit integer
    rrc.T_ctfc6Bit
rrc.ctfc6Bit_item  Item
    No value
    rrc.T_ctfc6Bit_item
rrc.ctfc6bit  ctfc6bit
    Unsigned 32-bit integer
    rrc.INTEGER_0_63
rrc.ctfc8  ctfc8
    Unsigned 32-bit integer
    rrc.INTEGER_0_255
rrc.ctfc8Bit  ctfc8Bit
    Unsigned 32-bit integer
    rrc.T_ctfc8Bit
rrc.ctfc8Bit_item  Item
    No value
    rrc.T_ctfc8Bit_item
rrc.ctfc8bit  ctfc8bit
    Unsigned 32-bit integer
    rrc.INTEGER_0_255
rrc.ctfcSize  ctfcSize
    Unsigned 32-bit integer
    rrc.T_ctfcSize
rrc.currentCell  currentCell
    No value
    rrc.T_currentCell
```

```
rrc.currentCell_SCCPCH  currentCell-SCCPCH
    Unsigned 32-bit integer
    rrc.MBMS_SCCPCHIdentity

rrc.current_tgps_Status  current-tgps-Status
    Unsigned 32-bit integer
    rrc.T_current_tgps_Status

rrc.cycleLength_1024  cycleLength-1024
    No value
    rrc.MBMS_L1CombiningSchedule_1024

rrc.cycleLength_128  cycleLength-128
    No value
    rrc.MBMS_L1CombiningSchedule_128

rrc.cycleLength_256  cycleLength-256
    No value
    rrc.MBMS_L1CombiningSchedule_256

rrc.cycleLength_32  cycleLength-32
    No value
    rrc.MBMS_L1CombiningSchedule_32

rrc.cycleLength_512  cycleLength-512
    No value
    rrc.MBMS_L1CombiningSchedule_512

rrc.cycleLength_64  cycleLength-64
    No value
    rrc.MBMS_L1CombiningSchedule_64

rrc.cycleOffset  cycleOffset
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.dL_DCCHmessage  dL-DCCHmessage
    Byte array
    rrc.OCTET_STRING

rrc.dataID  dataID
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.dcch  dcch
    No value
    rrc.MBMS_PFLInfo

rrc.dch  dch
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.dch_QualityTarget  dch-QualityTarget
    No value
    rrc.QualityTarget

rrc.dch_and_dsch  dch-and-dsch
    No value
    rrc.TransportChannelIdentityDCHandDSCH

rrc.dch_and_hsdSCH  dch-and-hsdSCH
    No value
    rrc.MAC_d_FlowIdentityDCHandHSDSCH
```

```
rrc.dch_rach_usch dch-rach-usch
    No value
    rrc.T_dch_rach_usch
rrc.dch_transport_ch_id dch-transport-ch-id
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity
rrc.dch_usch dch-usch
    No value
    rrc.T_dch_usch
rrc.dcs1800 dcs1800
    Boolean
    rrc.BOOLEAN
rrc.ddi ddi
    Unsigned 32-bit integer
    rrc.DDI
rrc.deactivate deactivate
    No value
    rrc.NULL
rrc.dedicatedTransChTFS dedicatedTransChTFS
    No value
    rrc.DedicatedTransChTFS
rrc.defaultConfig defaultConfig
    No value
    rrc.T_defaultConfig
rrc.defaultConfigIdentity defaultConfigIdentity
    Unsigned 32-bit integer
    rrc.DefaultConfigIdentity
rrc.defaultConfigMode defaultConfigMode
    Unsigned 32-bit integer
    rrc.DefaultConfigMode
rrc.defaultDPCH_OffsetValue defaultDPCH-OffsetValue
    Unsigned 32-bit integer
    rrc.DefaultDPCH_OffsetValueFDD
rrc.defaultMidamble defaultMidamble
    No value
    rrc.NULL
rrc.deferredMeasurementControlReading deferredMeasurementControlReading
    Unsigned 32-bit integer
    rrc.T_deferredMeasurementControlReading
rrc.deferredMeasurementControlReadingSupport deferredMeasurementControlReadingsSupport
    Unsigned 32-bit integer
    rrc.T_deferredMeasurementControlReadingSupport
rrc.delayRestrictionFlag delayRestrictionFlag
    Unsigned 32-bit integer
    rrc.DelayRestrictionFlag
rrc.deltaACK deltaACK
    Unsigned 32-bit integer
    rrc.DeltaACK
```



```
rrc.deltaCQI  deltaCQI
    Unsigned 32-bit integer
    rrc.DeltaCQI
rrc.deltaI  deltaI
    Byte array
    rrc.BIT_STRING_SIZE_16
rrc.deltaNACK  deltaNACK
    Unsigned 32-bit integer
    rrc.DeltaNACK
rrc.deltaPp_m  deltaPp-m
    Signed 32-bit integer
    rrc.DeltaPp_m
rrc.deltaQhcs  deltaQhcs
    Signed 32-bit integer
    rrc.DeltaRSCP
rrc.deltaQrxlevmin  deltaQrxlevmin
    Signed 32-bit integer
    rrc.DeltaQrxlevmin
rrc.deltaRSCP  deltaRSCP
    Signed 32-bit integer
    rrc.DeltaRSCP
rrc.deltaSIR1  deltaSIR1
    Unsigned 32-bit integer
    rrc.DeltaSIR
rrc.deltaSIR2  deltaSIR2
    Unsigned 32-bit integer
    rrc.DeltaSIR
rrc.deltaSIRAfter1  deltaSIRAfter1
    Unsigned 32-bit integer
    rrc.DeltaSIR
rrc.deltaSIRAfter2  deltaSIRAfter2
    Unsigned 32-bit integer
    rrc.DeltaSIR
rrc.delta_n  delta-n
    Byte array
    rrc.BIT_STRING_SIZE_16
rrc.delta_t_LS  delta-t-LS
    Byte array
    rrc.BIT_STRING_SIZE_8
rrc.delta_t_LSF  delta-t-LSF
    Byte array
    rrc.BIT_STRING_SIZE_8
rrc.desired_HS_SICH_PowerLevel  desired-HS-SICH-PowerLevel
    Signed 32-bit integer
    rrc.INTEGER_M120_M58
rrc.detectedSetReportingQuantities  detectedSetReportingQuantities
    No value
    rrc.CellReportingQuantities
```

```
rrc.deviceType deviceType
    Unsigned 32-bit integer
    rrc.T_deviceType

rrc.dgpsCorrectionsRequest dgpsCorrectionsRequest
    Boolean
    rrc.BOOLEAN

rrc.dgps_CorrectionSatInfoList dgps-CorrectionSatInfoList
    Unsigned 32-bit integer
    rrc.DGPS_CorrectionSatInfoList

rrc.dhs_sync dhs-sync
    Signed 32-bit integer
    rrc.DHS_Sync

rrc.diagnosticsType diagnosticsType
    Unsigned 32-bit integer
    rrc.T_diagnosticsType

rrc.different different
    No value
    rrc.T_different

rrc.disabled disabled
    No value
    rrc.NULL

rrc.diversityPattern diversityPattern
    No value
    rrc.T_diversityPattern

rrc.dl dl
    Unsigned 32-bit integer
    rrc.DL_CompressedModeMethod

rrc.dl_64QAM_Configured dl-64QAM-Configured
    Unsigned 32-bit integer
    rrc.T_dl_64QAM_Configured

rrc.dl_AM_RLC_Mode dl-AM-RLC-Mode
    No value
    rrc.DL_AM_RLC_Mode

rrc.dl_AddReconfTransChInfoList dl-AddReconfTransChInfoList
    Unsigned 32-bit integer
    rrc.DL_AddReconfTransChInfoList

rrc.dl_CCTrCH_TimeslotsCodes dl-CCTrCH-TimeslotsCodes
    No value
    rrc.DownlinkTimeslotsCodes

rrc.dl_CCTrChListToEstablish dl-CCTrChListToEstablish
    Unsigned 32-bit integer
    rrc.DL_CCTrChList

rrc.dl_CCTrChListToRemove dl-CCTrChListToRemove
    Unsigned 32-bit integer
    rrc.DL_CCTrChListToRemove

rrc.dl_CapabilityWithSimultaneousHS_DSCHConfig dl-CapabilityWithSimultaneousHS-
    Unsigned 32-bit integer
    rrc.DL_CapabilityWithSimultaneousHS_DSCHConfig
```

```
rrc.dl_ChannelisationCode dl-ChannelisationCode
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.dl_ChannelisationCodeList dl-ChannelisationCodeList
    Unsigned 32-bit integer
    rrc.DL_ChannelisationCodeList

rrc.dl_CommonInformation dl-CommonInformation
    No value
    rrc.DL_CommonInformation

rrc.dl_CommonInformationPost dl-CommonInformationPost
    No value
    rrc.DL_CommonInformationPost

rrc.dl_CommonInformationPredef dl-CommonInformationPredef
    No value
    rrc.DL_CommonInformationPredef

rrc.dl_CommonTransChInfo dl-CommonTransChInfo
    No value
    rrc.DL_CommonTransChInfo

rrc.dl_CounterSynchronisationInfo dl-CounterSynchronisationInfo
    No value
    rrc.DL_CounterSynchronisationInfo

rrc.dl_DCH_TFCS dl-DCH-TFCS
    Unsigned 32-bit integer
    rrc.TFCS

rrc.dl_DPCCH_BER dl-DPCCH-BER
    Unsigned 32-bit integer
    rrc.DL_DPCCH_BER

rrc.dl_DPCH_InfoCommon dl-DPCH-InfoCommon
    No value
    rrc.DL_DPCH_InfoCommon

rrc.dl_DPCH_InfoPerRL dl-DPCH-InfoPerRL
    Unsigned 32-bit integer
    rrc.DL_DPCH_InfoPerRL

rrc.dl_DPCH_PowerControlInfo dl-DPCH-PowerControlInfo
    No value
    rrc.DL_DPCH_PowerControlInfo

rrc.dl_DPCH_TimeslotsCodes dl-DPCH-TimeslotsCodes
    No value
    rrc.DownlinkTimeslotsCodes

rrc.dl_DeletedTransChInfoList dl-DeletedTransChInfoList
    Unsigned 32-bit integer
    rrc.DL_DeletedTransChInfoList

rrc.dl_FDPCH_InfoCommon dl-FDPCH-InfoCommon
    No value
    rrc.DL_FDPCH_InfoCommon_r6

rrc.dl_FDPCH_InfoPerRL dl-FDPCH-InfoPerRL
    No value
    rrc.DL_FDPCH_InfoPerRL_r6
```

```
rrc.dl_FDPCH_PowerControlInfo dl-FDPCH-PowerControlInfo
  No value
  rrc.DL_DPCH_PowerControlInfo
rrc.dl_FDPCH_TPCcommandErrorRate dl-FDPCH-TPCcommandErrorRate
  Unsigned 32-bit integer
  rrc.INTEGER_1_16
rrc.dl_FrameType dl-FrameType
  Unsigned 32-bit integer
  rrc.DL_FrameType
rrc.dl_HFN dl-HFN
  Byte array
  rrc.BIT_STRING_SIZE_20_25
rrc.dl_HSPDSCH_Information dl-HSPDSCH-Information
  No value
  rrc.DL_HSPDSCH_Information
rrc.dl_HSPDSCH_TS_Configuration dl-HSPDSCH-TS-Configuration
  Unsigned 32-bit integer
  rrc.DL_HSPDSCH_TS_Configuration
rrc.dl_InformationPerRL dl-InformationPerRL
  No value
  rrc.DL_InformationPerRL_PostTDD
rrc.dl_InformationPerRL_List dl-InformationPerRL-List
  Unsigned 32-bit integer
  rrc.DL_InformationPerRL_List
rrc.dl_InformationPerRL_List_v6b0ext dl-InformationPerRL-List-v6b0ext
  Unsigned 32-bit integer
  rrc.DL_InformationPerRL_List_v6b0ext
rrc.dl_IntegrityProtActivationInfo dl-IntegrityProtActivationInfo
  No value
  rrc.IntegrityProtActivationInfo
rrc.dl_LogicalChannelMappingList dl-LogicalChannelMappingList
  Unsigned 32-bit integer
  rrc.DL_LogicalChannelMappingList
rrc.dl_MeasurementsFDD dl-MeasurementsFDD
  Boolean
  rrc.BOOLEAN
rrc.dl_MeasurementsGSM dl-MeasurementsGSM
  Boolean
  rrc.BOOLEAN
rrc.dl_MeasurementsMC dl-MeasurementsMC
  Boolean
  rrc.BOOLEAN
rrc.dl_MeasurementsTDD dl-MeasurementsTDD
  Boolean
  rrc.BOOLEAN
rrc.dl_Parameters dl-Parameters
  Unsigned 32-bit integer
  rrc.T_dl_Parameters
```

```
rrc.dl_PhysChCapabilityFDD_v380ext dl-PhysChCapabilityFDD-v380ext
  No value
  rrc.DL_PhysChCapabilityFDD_v380ext
rrc.dl_RFC3095 dl-RFC3095
  No value
  rrc.DL_RFC3095_r4
rrc.dl_RFC3095_Context dl-RFC3095-Context
  No value
  rrc.DL_RFC3095_Context
rrc.dl_RFC3095_Context_Relocation dl-RFC3095-Context-Relocation
  Boolean
  rrc.BOOLEAN
rrc.dl_RLC_Mode dl-RLC-Mode
  Unsigned 32-bit integer
  rrc.DL_RLC_Mode
rrc.dl_RLC_PDU_size dl-RLC-PDU-size
  Unsigned 32-bit integer
  rrc.OctetModeRLC_SizeInfoType1
rrc.dl_RLC_StatusInfo dl-RLC-StatusInfo
  No value
  rrc.DL_RLC_StatusInfo
rrc.dl_RRC_HFN dl-RRC-HFN
  Byte array
  rrc.BIT_STRING_SIZE_28
rrc.dl_RRC_SequenceNumber dl-RRC-SequenceNumber
  Unsigned 32-bit integer
  rrc.RRC_MessageSequenceNumber
rrc.dl_Reception_Window_Size dl-Reception-Window-Size
  Unsigned 32-bit integer
  rrc.DL_Reception_Window_Size_r6
rrc.dl_ScramblingCode dl-ScramblingCode
  Unsigned 32-bit integer
  rrc.SecondaryScramblingCode
rrc.dl_TFCS_Identity dl-TFCS-Identity
  No value
  rrc.TFCS_Identity
rrc.dl_TM_RLC_Mode dl-TM-RLC-Mode
  No value
  rrc.DL_TM_RLC_Mode
rrc.dl_TPC_PowerOffsetPerRL_List dl-TPC-PowerOffsetPerRL-List
  Unsigned 32-bit integer
  rrc.DL_TPC_PowerOffsetPerRL_List
rrc.dl_TS_ChannelisationCodesShort dl-TS-ChannelisationCodesShort
  No value
  rrc.DL_TS_ChannelisationCodesShort
rrc.dl_TrChInfoList dl-TrChInfoList
  Unsigned 32-bit integer
  rrc.DL_AddReconfTransChInfoList
```

```
rrc.dl_TransChBLER dl-TransChBLER
  Boolean
  rrc.BOOLEAN

rrc.dl_TransChCapability dl-TransChCapability
  No value
  rrc.DL_TransChCapability

rrc.dl_TransChInfoList dl-TransChInfoList
  Unsigned 32-bit integer
  rrc.DL_AddReconfTransChInfoList

rrc.dl_TransportChannelBLER dl-TransportChannelBLER
  Unsigned 32-bit integer
  rrc.DL_TransportChannelBLER

rrc.dl_TransportChannelIdentity dl-TransportChannelIdentity
  Unsigned 32-bit integer
  rrc.TransportChannelIdentity

rrc.dl_TransportChannelType dl-TransportChannelType
  Unsigned 32-bit integer
  rrc.DL_TransportChannelType

rrc.dl_UM_RLC_DuplAvoid_Reord_Info dl-UM-RLC-DuplAvoid-Reord-Info
  No value
  rrc.UM_RLC_DuplAvoid_Reord_Info_r6

rrc.dl_UM_RLC_LI_size dl-UM-RLC-LI-size
  Unsigned 32-bit integer
  rrc.DL_UM_RLC_LI_size

rrc.dl_UM_RLC_Mode dl-UM-RLC-Mode
  No value
  rrc.NULL

rrc.dl_UM_RLC_OutOSeqDelivery_Info dl-UM-RLC-OutOSeqDelivery-Info
  No value
  rrc.UM_RLC_OutOSeqDelivery_Info_r6

rrc.dl_UM_SN dl-UM-SN
  Byte array
  rrc.BIT_STRING_SIZE_7

rrc.dl_curr_time dl-curr-time
  Unsigned 32-bit integer
  rrc.INTEGER_0_4294967295

rrc.dl_dpchInfo dl-dpchInfo
  Unsigned 32-bit integer
  rrc.T_dl_dpchInfo

rrc.dl_dpchInfoCommon dl-dpchInfoCommon
  Unsigned 32-bit integer
  rrc.T_dl_dpchInfoCommon

rrc.dl_dyn_changed dl-dyn-changed
  Boolean
  rrc.BOOLEAN

rrc.dl_hspdsch_Information dl-hspdsch-Information
  No value
  rrc.DL_HSPDSCH_Information
```

```

rrc.dl_mode dl-mode
    Unsigned 32-bit integer
    rrc.T_dl_mode

rrc.dl_rate_matching_restriction dl-rate-matching-restriction
    No value
    rrc.Dl_rate_matching_restriction

rrc.dl_ref_ir dl-ref-ir
    Byte array
    rrc.OCTET_STRING_SIZE_1_3000

rrc.dl_ref_time dl-ref-time
    Unsigned 32-bit integer
    rrc.INTEGER_0_4294967295

rrc.dl_restrictedTrCh_Type dl-restrictedTrCh-Type
    Unsigned 32-bit integer
    rrc.DL_TrCH_Type

rrc.dl_syn_offset_id dl-syn-offset-id
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535

rrc.dl_syn_slope_ts dl-syn-slope-ts
    Unsigned 32-bit integer
    rrc.INTEGER_0_4294967295

rrc.dl_transportChannelIdentity dl-transportChannelIdentity
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.dn dn
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.domainIndicator domainIndicator
    Unsigned 32-bit integer
    rrc.T_domainIndicator

rrc.domainSpecificAccessClassBarredList domainSpecificAccessClassBarredList
    Unsigned 32-bit integer
    rrc.AccessClassBarredList

rrc.domainSpecificAccessRestrictionForSharedNetwork domainSpecificAccessRestrictionForSharedNetwork
    Unsigned 32-bit integer
    rrc.DomainSpecificAccessRestrictionForSharedNetwork_v670ext

rrc.domainSpecificAccessRestrictionList domainSpecificAccessRestrictionList
    No value
    rrc.DomainSpecificAccessRestrictionList_v670ext

rrc.domainSpecificAccessRestrictionParametersForAll domainSpecificAccessRestrictionParametersForAll
    No value
    rrc.DomainSpecificAccessRestrictionParam_v670ext

rrc.domainSpecificAccessRestrictionParametersForOperator1 domainSpecificAccessRestrictionParametersForOperator1
    No value
    rrc.DomainSpecificAccessRestrictionParam_v670ext

rrc.domainSpecificAccessRestrictionParametersForOperator2 domainSpecificAccessRestrictionParametersForOperator2
    No value
    rrc.DomainSpecificAccessRestrictionParam_v670ext

```

```

rrc.domainSpecificAccessRestrictionParametersForOperator3  domainSpecificAccessR
    No value
    rrc.DomainSpecificAccessRestrictionParam_v670ext
rrc.domainSpecificAccessRestrictionParametersForOperator4  domainSpecificAccessR
    No value
    rrc.DomainSpecificAccessRestrictionParam_v670ext
rrc.domainSpecificAccessRestrictionParametersForOperator5  domainSpecificAccessR
    No value
    rrc.DomainSpecificAccessRestrictionParam_v670ext
rrc.domainSpecificAccessRestrictionParametersForPLMNofMIB  domainSpecificAccessR
    No value
    rrc.DomainSpecificAccessRestrictionParam_v670ext
rrc.doppler  doppler
    Signed 32-bit integer
    rrc.INTEGER_M32768_32768
rrc.doppler0thOrder  doppler0thOrder
    Signed 32-bit integer
    rrc.INTEGER_M2048_2047
rrc.doppler1stOrder  doppler1stOrder
    Signed 32-bit integer
    rrc.INTEGER_M42_21
rrc.dopplerUncertainty  dopplerUncertainty
    Unsigned 32-bit integer
    rrc.DopplerUncertainty
rrc.downlinkCompressedMode  downlinkCompressedMode
    No value
    rrc.CompressedModeMeasCapability
rrc.downlinkCompressedMode_LCR  downlinkCompressedMode-LCR
    No value
    rrc.CompressedModeMeasCapability_LCR_r4
rrc.downlinkDirectTransfer  downlinkDirectTransfer
    Unsigned 32-bit integer
    rrc.DownlinkDirectTransfer
rrc.downlinkDirectTransfer_r3  downlinkDirectTransfer-r3
    No value
    rrc.DownlinkDirectTransfer_r3_IEs
rrc.downlinkDirectTransfer_r3_add_ext  downlinkDirectTransfer-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.downlinkPhysChCapability  downlinkPhysChCapability
    No value
    rrc.DL_PhysChCapabilityFDD
rrc.downlinkTimeslotsCodes  downlinkTimeslotsCodes
    No value
    rrc.DownlinkTimeslotsCodes
rrc.dpc_Mode  dpc-Mode
    Unsigned 32-bit integer
    rrc.DPC_Mode

```



```
rrc.dpcch_PowerOffset dpcch-PowerOffset
Signed 32-bit integer
rrc.DPCCH_PowerOffset

rrc.dpch_CompressedModeInfo dpch-CompressedModeInfo
No value
rrc.DPCH_CompressedModeInfo

rrc.dpch_CompressedModeStatusInfo dpch-CompressedModeStatusInfo
No value
rrc.DPCH_CompressedModeStatusInfo

rrc.dpch_ConstantValue dpch-ConstantValue
Signed 32-bit integer
rrc.ConstantValueTdd

rrc.dpch_FrameOffset dpch-FrameOffset
Unsigned 32-bit integer
rrc.DPCH_FrameOffset

rrc.dpch_TFCS_InUplink dpch-TFCS-InUplink
Unsigned 32-bit integer
rrc.TFC_Subset

rrc.dpdchPresence dpdchPresence
Unsigned 32-bit integer
rrc.T_dpdchPresence

rrc.drac_ClassIdentity drac-ClassIdentity
Unsigned 32-bit integer
rrc.DRAC_ClassIdentity

rrc.drx_Info drx-Info
No value
rrc.DRX_Info

rrc.dsch dsch
Unsigned 32-bit integer
rrc.TransportChannelIdentity

rrc.dsch_RNTI dsch-RNTI
Byte array
rrc.DSCH_RNTI

rrc.dsch_RadioLinkIdentifier dsch-RadioLinkIdentifier
Unsigned 32-bit integer
rrc.DSCH_RadioLinkIdentifier

rrc.dsch_TFCS dsch-TFCS
Unsigned 32-bit integer
rrc.TFCS

rrc.dsch_TFS dsch-TFS
Unsigned 32-bit integer
rrc.TransportFormatSet

rrc.dsch_TransportChannelsInfo dsch-TransportChannelsInfo
Unsigned 32-bit integer
rrc.DSCH_TransportChannelsInfo

rrc.dsch_transport_ch_id dsch-transport-ch-id
Unsigned 32-bit integer
rrc.TransportChannelIdentity
```

```
rrc.dsch_transport_channel_identity dsch-transport-channel-identity
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.dtx_Info dtx-Info
    No value
    rrc.DTX_Info

rrc.dtx_drx_Info dtx-drx-Info
    No value
    rrc.DTX_DRX_Info_r7

rrc.dtx_e_dch_TTI_10ms dtx-e-dch-TTI-10ms
    No value
    rrc.DTX_E_DCH_TTI_10ms

rrc.dtx_e_dch_TTI_2ms dtx-e-dch-TTI-2ms
    No value
    rrc.DTX_E_DCH_TTI_2ms

rrc.dummy dummy
    No value
    rrc.IntegrityProtectionModeInfo

rrc.dummy1 dummy1
    Unsigned 32-bit integer
    rrc.CPCH_SetID

rrc.dummy2 dummy2
    No value
    rrc.CipheringModeInfo

rrc.dummy3 dummy3
    No value
    rrc.DL_CounterSynchronisationInfo

rrc.dummy4 dummy4
    No value
    rrc.SSDT_Information

rrc.duration duration
    Unsigned 32-bit integer
    rrc.INTEGER_1_256

rrc.durationTimeInfo durationTimeInfo
    Unsigned 32-bit integer
    rrc.DurationTimeInfo

rrc.dynamic dynamic
    Unsigned 32-bit integer
    rrc.CommonDynamicTF_InfoList_DynamicTTI

rrc.dynamicPersistenceLevelTF_List dynamicPersistenceLevelTF-List
    Unsigned 32-bit integer
    rrc.DynamicPersistenceLevelTF_List

rrc.dynamicSFusage dynamicSFusage
    Boolean
    rrc.BOOLEAN

rrc.dynamicTFInformationCCCH dynamicTFInformationCCCH
    No value
    rrc.DynamicTFInformationCCCH
```

```
rrc.e e
  Byte array
  rrc.BIT_STRING_SIZE_16

rrc.e1a e1a
  No value
  rrc.Event1a

rrc.e1b e1b
  No value
  rrc.Event1b

rrc.e1c e1c
  No value
  rrc.Event1c

rrc.e1d e1d
  No value
  rrc.NULL

rrc.e1e e1e
  No value
  rrc.Event1e

rrc.e1f e1f
  No value
  rrc.Event1f

rrc.e1g e1g
  No value
  rrc.NULL

rrc.e1h e1h
  Signed 32-bit integer
  rrc.ThresholdUsedFrequency

rrc.e1i e1i
  Signed 32-bit integer
  rrc.ThresholdUsedFrequency

rrc.e1j e1j
  No value
  rrc.Event1j_r6

rrc.e7a e7a
  Unsigned 32-bit integer
  rrc.ThresholdPositionChange

rrc.e7b e7b
  Unsigned 32-bit integer
  rrc.ThresholdSFN_SFN_Change

rrc.e7c e7c
  Unsigned 32-bit integer
  rrc.ThresholdSFN_GPS_TOW

rrc.e_AGCH_BLER_Target e-AGCH-BLER-Target
  Signed 32-bit integer
  rrc.Bler_Target

rrc.e_AGCH_ChannelisationCode e-AGCH-ChannelisationCode
  Unsigned 32-bit integer
  rrc.E_AGCH_ChannelisationCode
```

```
rrc.e_AGCH_Information e-AGCH-Information
  No value
  rrc.E_AGCH_Information
rrc.e_AGCH_Set_Config e-AGCH-Set-Config
  Unsigned 32-bit integer
  rrc.E_AGCH_Set_Config
rrc.e_DCH_MAC_d_FlowIdentity e-DCH-MAC-d-FlowIdentity
  Unsigned 32-bit integer
  rrc.E_DCH_MAC_d_FlowIdentity
rrc.e_DCH_MinimumSet_E_TFCI e-DCH-MinimumSet-E-TFCI
  Unsigned 32-bit integer
  rrc.E_DCH_MinimumSet_E_TFCI
rrc.e_DCH_RL_InfoNewServingCell e-DCH-RL-InfoNewServingCell
  No value
  rrc.E_DCH_RL_InfoNewServingCell
rrc.e_DCH_RL_InfoOtherCellList e-DCH-RL-InfoOtherCellList
  Unsigned 32-bit integer
  rrc.SEQUENCE_SIZE_1_maxEDCHRL_OF_E_DCH_RL_InfoOtherCell
rrc.e_DCH_RL_InfoOtherCellList_item Item
  No value
  rrc.E_DCH_RL_InfoOtherCell
rrc.e_DPCCH_DPCCH_PowerOffset e-DPCCH-DPCCH-PowerOffset
  Unsigned 32-bit integer
  rrc.E_DPCCH_DPCCH_PowerOffset
rrc.e_DPCCH_Info e-DPCCH-Info
  No value
  rrc.E_DPCCH_Info
rrc.e_DPDCH_Info e-DPDCH-Info
  No value
  rrc.E_DPDCH_Info
rrc.e_HICH_Info e-HICH-Info
  No value
  rrc.T_e_HICH_Info
rrc.e_HICH_InfoList e-HICH-InfoList
  Unsigned 32-bit integer
  rrc.E_HICH_Information_LCR_List
rrc.e_HICH_Information e-HICH-Information
  No value
  rrc.E_HICH_Information
rrc.e_PUCH_CodeHopping e-PUCH-CodeHopping
  Boolean
  rrc.BOOLEAN
rrc.e_PUCH_ContantValue e-PUCH-ContantValue
  Signed 32-bit integer
  rrc.INTEGER_M35_10
rrc.e_PUCH_Info e-PUCH-Info
  No value
  rrc.E_PUCH_Info
```

```
rrc.e_PUCH_TPC_Step_Size  e-PUCH-TPC-Step-Size
    Unsigned 32-bit integer
    rrc.INTEGER_1_3

rrc.e_PUCH_TS_ConfigurationList  e-PUCH-TS-ConfigurationList
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxTS_2_OF_E_PUCH_TS_Slots

rrc.e_PUCH_TS_ConfigurationList_item  Item
    No value
    rrc.E_PUCH_TS_Slots

rrc.e_RGCH_Info  e-RGCH-Info
    Unsigned 32-bit integer
    rrc.T_e_RGCH_Info

rrc.e_RGCH_Information  e-RGCH-Information
    No value
    rrc.E_RGCH_Information

rrc.e_RUCCH_ConstantValue  e-RUCCH-ConstantValue
    Signed 32-bit integer
    rrc.INTEGER_M35_10

rrc.e_RUCCH_Info  e-RUCCH-Info
    No value
    rrc.E_RUCCH_Info

rrc.e_RUCCH_Midamble  e-RUCCH-Midamble
    Unsigned 32-bit integer
    rrc.T_e_RUCCH_Midamble

rrc.e_RUCCH_PersistenceScalingFactor  e-RUCCH-PersistenceScalingFactor
    Unsigned 32-bit integer
    rrc.PersistenceScalingFactor

rrc.e_RUCCH_Sync_UL_Codes_Bitmap  e-RUCCH-Sync-UL-Codes-Bitmap
    Byte array
    rrc.T_e_RUCCH_Sync_UL_Codes_Bitmap

rrc.e_RUCCH_TS_Number  e-RUCCH-TS-Number
    Unsigned 32-bit integer
    rrc.INTEGER_0_14

rrc.e_TFCI_TableIndex  e-TFCI-TableIndex
    Unsigned 32-bit integer
    rrc.E_TFCI_TableIndex

rrc.e_TFCS_Info  e-TFCS-Info
    No value
    rrc.E_TFCS_Info

rrc.e_dch  e-dch
    No value
    rrc.T_e_dch

rrc.e_dch_ReconfigurationInfo  e-dch-ReconfigurationInfo
    No value
    rrc.E_DCH_ReconfigurationInfo

rrc.e_dch_TTI_Length  e-dch-TTI-Length
    Unsigned 32-bit integer
    rrc.T_e_dch_TTI_Length
```

```
rrc.edch_CellIndicator edch-CellIndicator
    Unsigned 32-bit integer
    rrc.T_edch_CellIndicator

rrc.edch_PhysicalLayerCategory edch-PhysicalLayerCategory
    Unsigned 32-bit integer
    rrc.INTEGER_1_16

rrc.ei ei
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.elevation elevation
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.ellipsoidPoint ellipsoidPoint
    No value
    rrc.EllipsoidPoint

rrc.ellipsoidPointAltitude ellipsoidPointAltitude
    No value
    rrc.EllipsoidPointAltitude

rrc.ellipsoidPointAltitudeEllipse ellipsoidPointAltitudeEllipse
    No value
    rrc.EllipsoidPointAltitudeEllipsoide

rrc.ellipsoidPointAltitudeEllipsoide ellipsoidPointAltitudeEllipsoide
    No value
    rrc.EllipsoidPointAltitudeEllipsoide

rrc.ellipsoidPointUncertCircle ellipsoidPointUncertCircle
    No value
    rrc.EllipsoidPointUncertCircle

rrc.ellipsoidPointUncertEllipse ellipsoidPointUncertEllipse
    No value
    rrc.EllipsoidPointUncertEllipse

rrc.ellipsoidPointWithAltitude ellipsoidPointWithAltitude
    No value
    rrc.EllipsoidPointAltitude

rrc.enabled enabled
    No value
    rrc.T_enabled

rrc.enablingDelay enablingDelay
    Unsigned 32-bit integer
    rrc.EnablingDelay

rrc.endOfModifiedMCCHInformation endOfModifiedMCCHInformation
    Unsigned 32-bit integer
    rrc.INTEGER_1_16

rrc.environmentCharacterisation environmentCharacterisation
    Unsigned 32-bit integer
    rrc.EnvironmentCharacterisation

rrc.ephemerisParameter ephemerisParameter
    No value
    rrc.EphemerisParameter
```

```
rrc.errorIndication  errorIndication
    Unsigned 32-bit integer
    rrc.FailureCauseWithProtErr

rrc.errorOccurred    errorOccurred
    No value
    rrc.T_errorOccurred

rrc.errorReason      errorReason
    Unsigned 32-bit integer
    rrc.UE_Positioning_ErrorCause

rrc.esn_DS_41        esn-DS-41
    Byte array
    rrc.ESN_DS_41

rrc.establishmentCause  establishmentCause
    Unsigned 32-bit integer
    rrc.EstablishmentCause

rrc.event            event
    Unsigned 32-bit integer
    rrc.IntraFreqEvent

rrc.event2a          event2a
    No value
    rrc.Event2a

rrc.event2b          event2b
    No value
    rrc.Event2b

rrc.event2c          event2c
    No value
    rrc.Event2c

rrc.event2d          event2d
    No value
    rrc.Event2d

rrc.event2e          event2e
    No value
    rrc.Event2e

rrc.event2f          event2f
    No value
    rrc.Event2f

rrc.event3a          event3a
    No value
    rrc.Event3a

rrc.event3b          event3b
    No value
    rrc.Event3b

rrc.event3c          event3c
    No value
    rrc.Event3c

rrc.event3d          event3d
    No value
    rrc.Event3d
```

```
rrc.event6a event6a
    No value
    rrc.UE_6AB_Event
rrc.event6b event6b
    No value
    rrc.UE_6AB_Event
rrc.event6c event6c
    Unsigned 32-bit integer
    rrc.TimeToTrigger
rrc.event6d event6d
    Unsigned 32-bit integer
    rrc.TimeToTrigger
rrc.event6e event6e
    Unsigned 32-bit integer
    rrc.TimeToTrigger
rrc.event6f event6f
    No value
    rrc.UE_6FG_Event
rrc.event6g event6g
    No value
    rrc.UE_6FG_Event
rrc.event7a event7a
    No value
    rrc.UE_Positioning_PositionEstimateInfo
rrc.event7b event7b
    No value
    rrc.UE_Positioning_OTDOA_Measurement
rrc.event7c event7c
    No value
    rrc.UE_Positioning_GPS_MeasurementResults
rrc.eventCriteriaList eventCriteriaList
    Unsigned 32-bit integer
    rrc.IntraFreqEventCriteriaList
rrc.eventID eventID
    Unsigned 32-bit integer
    rrc.EventIDInterFreq
rrc.eventResults eventResults
    Unsigned 32-bit integer
    rrc.EventResults
rrc.eventSpecificInfo eventSpecificInfo
    Unsigned 32-bit integer
    rrc.UE_Positioning_EventSpecificInfo
rrc.eventSpecificParameters eventSpecificParameters
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxMeasParEvent_OF_TrafficVolumeEventParam
rrc.eventSpecificParameters_item Item
    No value
    rrc.TrafficVolumeEventParam
```



```
rrc.ex_ul_TimingAdvance  ex-ul-TimingAdvance
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.expectReordering  expectReordering
    Unsigned 32-bit integer
    rrc.ExpectReordering

rrc.expirationTimeFactor  expirationTimeFactor
    Unsigned 32-bit integer
    rrc.ExpirationTimeFactor

rrc.explicit  explicit
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxHProcesses_OF_HARQMemorySize

rrc.explicitList  explicitList
    Unsigned 32-bit integer
    rrc.RLC_SizeExplicitList

rrc.explicitList_item  Item
    No value
    rrc.LogicalChannelByRB

rrc.explicitPLMN_Id  explicitPLMN-Id
    No value
    rrc.PLMN_Identity

rrc.explicit_config  explicit-config
    Unsigned 32-bit integer
    rrc.TransportFormatSet

rrc.explicit_item  Item
    Unsigned 32-bit integer
    rrc.HARQMemorySize

rrc.extSIBTypeInfooSchedulingInfo_List  extSIBTypeInfooSchedulingInfo-List
    Unsigned 32-bit integer
    rrc.ExtSIBTypeInfooSchedulingInfo_List

rrc.ext_ul_TimingAdvance  ext-ul-TimingAdvance
    No value
    rrc.EXT_UL_TimingAdvance

rrc.extension  extension
    No value
    rrc.NULL

rrc.extensionSIB_Type  extensionSIB-Type
    Unsigned 32-bit integer
    rrc.SIB_TypeExt

rrc.extraDopplerInfo  extraDopplerInfo
    No value
    rrc.ExtraDopplerInfo

rrc.fACH_meas_occasion_coeff  fACH-meas-occasion-coeff
    Unsigned 32-bit integer
    rrc.INTEGER_1_12

rrc.f_MAX_PERIOD  f-MAX-PERIOD
    Unsigned 32-bit integer
    rrc.INTEGER_1_65535
```

```
rrc.f_MAX_TIME f-MAX-TIME
    Unsigned 32-bit integer
    rrc.INTEGER_1_255

rrc.fach fach
    No value
    rrc.NULL

rrc.fachCarryingMCCH fachCarryingMCCH
    No value
    rrc.T_fachCarryingMCCH

rrc.fachCarryingMSCH fachCarryingMSCH
    No value
    rrc.T_fachCarryingMSCH

rrc.fachCarryingMTCH_List fachCarryingMTCH-List
    Unsigned 32-bit integer
    rrc.MBMS_FACHCarryingMTCH_List

rrc.fach_MeasurementOccasionInfo fach-MeasurementOccasionInfo
    No value
    rrc.FACH_MeasurementOccasionInfo

rrc.fach_MeasurementOccasionInfo_LCR_Ext fach-MeasurementOccasionInfo-LCR-Ext
    No value
    rrc.FACH_MeasurementOccasionInfo_LCR_r4_ext

rrc.fach_PCH_InformationList fach-PCH-InformationList
    Unsigned 32-bit integer
    rrc.FACH_PCH_InformationList

rrc.failureCause failureCause
    Unsigned 32-bit integer
    rrc.FailureCauseWithProtErr

rrc.failureCauseWithProtErr failureCauseWithProtErr
    Unsigned 32-bit integer
    rrc.FailureCauseWithProtErr

rrc.fdd fdd
    No value
    rrc.T_fdd

rrc.fddPhysChCapability fddPhysChCapability
    No value
    rrc.T_fddPhysChCapability

rrc.fddPhysicalChannelCapab_hspdsch_edch fddPhysicalChannelCapab-hspdsch-edch
    No value
    rrc.T_fddPhysicalChannelCapab_hspdsch_edch

rrc.fddRF_Capability fddRF-Capability
    No value
    rrc.T_fddRF_Capability

rrc.fdd_Measurements fdd-Measurements
    Boolean
    rrc.BOOLEAN

rrc.fdd_UMTS_Frequency_List fdd-UMTS-Frequency-List
    Unsigned 32-bit integer
    rrc.FDD_UMTS_Frequency_List
```

```
rrc.fdd_edch fdd-edch
  Unsigned 32-bit integer
  rrc.T_fdd_edch

rrc.fdd_hspdsch fdd-hspdsch
  Unsigned 32-bit integer
  rrc.T_fdd_hspdsch

rrc.fdd_item Item
  No value
  rrc.ASCSetting_FDD

rrc.fdpch_FrameOffset fdpch-FrameOffset
  Unsigned 32-bit integer
  rrc.DPCH_FrameOffset

rrc.feedback_cycle feedback-cycle
  Unsigned 32-bit integer
  rrc.Feedback_cycle

rrc.filterCoefficient filterCoefficient
  Unsigned 32-bit integer
  rrc.FilterCoefficient

rrc.fineSFN_SFN fineSFN-SFN
  Unsigned 32-bit integer
  rrc.FineSFN_SFN

rrc.firstChannelisationCode firstChannelisationCode
  Unsigned 32-bit integer
  rrc.DL_TS_ChannelisationCode

rrc.firstIndividualTimeslotInfo firstIndividualTimeslotInfo
  No value
  rrc.IndividualTimeslotInfo

rrc.firstSegment firstSegment
  No value
  rrc.FirstSegment

rrc.fitInterval fitInterval
  Byte array
  rrc.BIT_STRING_SIZE_1

rrc.forbiddenAffectCellList forbiddenAffectCellList
  Unsigned 32-bit integer
  rrc.ForbiddenAffectCellList

rrc.fpack_Info fpack-Info
  No value
  rrc.FPACH_Info_r4

rrc.fractionalGPS_Chips fractionalGPS-Chips
  Unsigned 32-bit integer
  rrc.INTEGER_0_1023

rrc.freqQualityEstimateQuantity_FDD freqQualityEstimateQuantity-FDD
  Unsigned 32-bit integer
  rrc.FreqQualityEstimateQuantity_FDD

rrc.freqQualityEstimateQuantity_TDD freqQualityEstimateQuantity-TDD
  Unsigned 32-bit integer
  rrc.FreqQualityEstimateQuantity_TDD
```

```
rrc.frequency frequency
  Unsigned 32-bit integer
  rrc.INTEGER_1_8

rrc.frequencyBandIndicator frequencyBandIndicator
  Unsigned 32-bit integer
  rrc.RadioFrequencyBandFDD

rrc.frequencyBandIndicator2 frequencyBandIndicator2
  Unsigned 32-bit integer
  rrc.RadioFrequencyBandFDD2

rrc.frequencyInfo frequencyInfo
  No value
  rrc.FrequencyInfo

rrc.frequencyQualityEstimate frequencyQualityEstimate
  Boolean
  rrc.BOOLEAN

rrc.frequency_Band frequency-Band
  Unsigned 32-bit integer
  rrc.Frequency_Band

rrc.frequency_band frequency-band
  Unsigned 32-bit integer
  rrc.Frequency_Band

rrc.fullTFCS fullTFCS
  No value
  rrc.NULL

rrc.functionType functionType
  Unsigned 32-bit integer
  rrc.MappingFunctionType

rrc.futurecoding futurecoding
  Byte array
  rrc.BIT_STRING_SIZE_15

rrc.gainFactorBetaC gainFactorBetaC
  Unsigned 32-bit integer
  rrc.GainFactor

rrc.gainFactorBetaD gainFactorBetaD
  Unsigned 32-bit integer
  rrc.GainFactor

rrc.gainFactorInformation gainFactorInformation
  Unsigned 32-bit integer
  rrc.GainFactorInformation

rrc.geranIu_Message geranIu-Message
  Unsigned 32-bit integer
  rrc.T_geranIu_Message

rrc.geranIu_MessageList geranIu-MessageList
  No value
  rrc.T_geranIu_MessageList

rrc.geranIu_Messages geranIu-Messages
  Unsigned 32-bit integer
  rrc.GERANIu_MessageList
```

```
rrc.geranIu_RadioAccessCapability  geranIu-RadioAccessCapability
    Byte array
    rrc.GERANIu_RadioAccessCapability

rrc.geran_SystemInfoType  geran-SystemInfoType
    Unsigned 32-bit integer
    rrc.T_geran_SystemInfoType

rrc.gps_BitNumber  gps-BitNumber
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.gps_MeasurementParamList  gps-MeasurementParamList
    Unsigned 32-bit integer
    rrc.GPS_MeasurementParamList

rrc.gps_ReferenceTime  gps-ReferenceTime
    Unsigned 32-bit integer
    rrc.INTEGER_0_604799999

rrc.gps_ReferenceTimeOnly  gps-ReferenceTimeOnly
    Unsigned 32-bit integer
    rrc.INTEGER_0_604799999

rrc.gps_TOW  gps-TOW
    Unsigned 32-bit integer
    rrc.INTEGER_0_604799

rrc.gps_TOW_AssistList  gps-TOW-AssistList
    Unsigned 32-bit integer
    rrc.GPS_TOW_AssistList

rrc.gps_TimingOfCellWanted  gps-TimingOfCellWanted
    Boolean
    rrc.BOOLEAN

rrc.gps_Toe  gps-Toe
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.gps_Week  gps-Week
    Unsigned 32-bit integer
    rrc.INTEGER_0_1023

rrc.gps_tow_lmsec  gps-tow-lmsec
    Unsigned 32-bit integer
    rrc.GPS_TOW_lmsec

rrc.groupIdentity  groupIdentity
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxURNTI_Group_OF_GroupReleaseInformation

rrc.groupIdentity_item  Item
    No value
    rrc.GroupReleaseInformation

rrc.groupReleaseInformation  groupReleaseInformation
    No value
    rrc.GroupReleaseInformation

rrc.gsm  gsm
    No value
    rrc.T_gsm
```

```
rrc.gsm1900    gsm1900
  Boolean
  rrc.BOOLEAN

rrc.gsm900    gsm900
  Boolean
  rrc.BOOLEAN

rrc.gsmLowRangeUARFCN  gsmLowRangeUARFCN
  Unsigned 32-bit integer
  rrc.UARFCN

rrc.gsmSecurityCapability  gsmSecurityCapability
  Byte array
  rrc.GsmSecurityCapability

rrc.gsmUpRangeUARFCN  gsmUpRangeUARFCN
  Unsigned 32-bit integer
  rrc.UARFCN

rrc.gsm_BA_Range_List  gsm-BA-Range-List
  Unsigned 32-bit integer
  rrc.GSM_BA_Range_List

rrc.gsm_CarrierRSSI  gsm-CarrierRSSI
  Byte array
  rrc.GSM_CarrierRSSI

rrc.gsm_Carrier_RSSI  gsm-Carrier-RSSI
  Boolean
  rrc.BOOLEAN

rrc.gsm_Classmark2  gsm-Classmark2
  Byte array
  rrc.GSM_Classmark2

rrc.gsm_Classmark3  gsm-Classmark3
  Byte array
  rrc.GSM_Classmark3

rrc.gsm_MAP  gsm-MAP
  Byte array
  rrc.NAS_SystemInformationGSM_MAP

rrc.gsm_MAP_RAB_Identity  gsm-MAP-RAB-Identity
  Byte array
  rrc.BIT_STRING_SIZE_8

rrc.gsm_MAP_and_ANSI_41  gsm-MAP-and-ANSI-41
  No value
  rrc.T_gsm_MAP_and_ANSI_41

rrc.gsm_MS_RadioAccessCapability  gsm-MS-RadioAccessCapability
  Byte array
  rrc.GSM_MS_RadioAccessCapability

rrc.gsm_Map_IDNNS  gsm-Map-IDNNS
  No value
  rrc.Gsm_map_IDNNS

rrc.gsm_Measurements  gsm-Measurements
  No value
  rrc.GSM_Measurements
```

```
rrc.gsm_MessageList    gsm-MessageList
    No value
    rrc.T_gsm_MessageList

rrc.gsm_Messages       gsm-Messages
    Unsigned 32-bit integer
    rrc.GSM_MessageList

rrc.gsm_TargetCellInfoList  gsm-TargetCellInfoList
    Unsigned 32-bit integer
    rrc.GSM_TargetCellInfoList

rrc.gsm_message        gsm-message
    Unsigned 32-bit integer
    rrc.T_gsm_message

rrc.hs_SCCHChannelisationCodeInfo  hs-SCCHChannelisationCodeInfo
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxHSSCCHs_OF_HS_SCCH_Codes

rrc.hs_SCCHChannelisationCodeInfo_item  Item
    Unsigned 32-bit integer
    rrc.HS_SCCH_Codes

rrc.hs_SCCH_SetConfiguration  hs-SCCH-SetConfiguration
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxHSSCCHs_OF_HS_SCCH_TDD384

rrc.hs_SCCH_SetConfiguration_item  Item
    No value
    rrc.HS_SCCH_TDD384

rrc.handoverFromUTRANCommand_CDMA2000  handoverFromUTRANCommand-CDMA2000
    Unsigned 32-bit integer
    rrc.HandoverFromUTRANCommand_CDMA2000

rrc.handoverFromUTRANCommand_CDMA2000_r3  handoverFromUTRANCommand-CDMA2000-r3
    No value
    rrc.HandoverFromUTRANCommand_CDMA2000_r3_IEs

rrc.handoverFromUTRANCommand_CDMA2000_r3_add_ext  handoverFromUTRANCommand-CDMA2000-r3-add_ext
    Byte array
    rrc.BIT_STRING

rrc.handoverFromUTRANCommand_GERANIu  handoverFromUTRANCommand-GERANIu
    No value
    rrc.HandoverFromUTRANCommand_GERANIu

rrc.handoverFromUTRANCommand_GERANIu_r5  handoverFromUTRANCommand-GERANIu-r5
    No value
    rrc.HandoverFromUTRANCommand_GERANIu_r5_IEs

rrc.handoverFromUTRANCommand_GSM  handoverFromUTRANCommand-GSM
    Unsigned 32-bit integer
    rrc.HandoverFromUTRANCommand_GSM

rrc.handoverFromUTRANCommand_GSM_r3  handoverFromUTRANCommand-GSM-r3
    No value
    rrc.HandoverFromUTRANCommand_GSM_r3_IEs

rrc.handoverFromUTRANCommand_GSM_r3_add_ext  handoverFromUTRANCommand-GSM-r3-add_ext
    Byte array
    rrc.BIT_STRING
```

```
rrc.handoverFromUTRANCommand_GSM_r6  handoverFromUTRANCommand-GSM-r6
    No value
    rrc.HandoverFromUTRANCommand_GSM_r6_IEs
rrc.handoverFromUTRANCommand_GSM_r6_add_ext  handoverFromUTRANCommand-GSM-r6-add
    Byte array
    rrc.BIT_STRING
rrc.handoverFromUTRANCommand_GSM_v690ext  handoverFromUTRANCommand-GSM-v690ext
    No value
    rrc.HandoverFromUTRANCommand_GSM_v690ext_IEs
rrc.handoverFromUTRANFailure  handoverFromUTRANFailure
    No value
    rrc.HandoverFromUTRANFailure
rrc.handoverFromUTRANFailure_r3_add_ext  handoverFromUTRANFailure-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.handoverFromUTRANFailure_v590ext  handoverFromUTRANFailure-v590ext
    No value
    rrc.HandoverFromUtranFailure_v590ext_IEs
rrc.handoverToUTRANCommand_r3  handoverToUTRANCommand-r3
    No value
    rrc.HandoverToUTRANCommand_r3_IEs
rrc.handoverToUTRANCommand_r4  handoverToUTRANCommand-r4
    No value
    rrc.HandoverToUTRANCommand_r4_IEs
rrc.handoverToUTRANCommand_r5  handoverToUTRANCommand-r5
    No value
    rrc.HandoverToUTRANCommand_r5_IEs
rrc.handoverToUTRANCommand_r6  handoverToUTRANCommand-r6
    No value
    rrc.HandoverToUTRANCommand_r6_IEs
rrc.handoverToUTRANCommand_v6b0ext  handoverToUTRANCommand-v6b0ext
    No value
    rrc.HandoverToUTRANCommand_v6b0ext_IEs
rrc.handoverToUTRANComplete  handoverToUTRANComplete
    No value
    rrc.HandoverToUTRANComplete
rrc.handoverToUTRANComplete_r3_add_ext  handoverToUTRANComplete-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.happyBit_DelayCondition  happyBit-DelayCondition
    Unsigned 32-bit integer
    rrc.HappyBit_DelayCondition
rrc.harqInfo  harqInfo
    No value
    rrc.HARQ_Info
rrc.harq_Info  harq-Info
    Unsigned 32-bit integer
    rrc.T_harq_Info
```



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rrc.harq_Preamble_Mode  harq-Preamble-Mode
    Unsigned 32-bit integer
    rrc.HARQ_Preamble_Mode

rrc.hcr_r5_SpecificInfo  hcr-r5-SpecificInfo
    No value
    rrc.T_hcr_r5_SpecificInfo

rrc.hcs_CellReselectInformation  hcs-CellReselectInformation
    No value
    rrc.HCS_CellReselectInformation_RSCP

rrc.hcs_NeighbouringCellInformation_ECNO  hcs-NeighbouringCellInformation-ECNO
    No value
    rrc.HCS_NeighbouringCellInformation_ECNO

rrc.hcs_NeighbouringCellInformation_RSCP  hcs-NeighbouringCellInformation-RSCP
    No value
    rrc.HCS_NeighbouringCellInformation_RSCP

rrc.hcs_PRIO  hcs-PRIO
    Unsigned 32-bit integer
    rrc.HCS_PRIO

rrc.hcs_ServingCellInformation  hcs-ServingCellInformation
    No value
    rrc.HCS_ServingCellInformation

rrc.hcs_not_used  hcs-not-used
    No value
    rrc.T_hcs_not_used

rrc.hcs_used  hcs-used
    No value
    rrc.T_hcs_used

rrc.headerCompressionInfoList  headerCompressionInfoList
    Unsigned 32-bit integer
    rrc.HeaderCompressionInfoList

rrc.horizontalAccuracy  horizontalAccuracy
    Byte array
    rrc.UE_Positioning_Accuracy

rrc.horizontalSpeed  horizontalSpeed
    Unsigned 32-bit integer
    rrc.INTEGER_0_2047

rrc.horizontalSpeedUncertainty  horizontalSpeedUncertainty
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.horizontalVelocity  horizontalVelocity
    No value
    rrc.HorizontalVelocity

rrc.horizontalVelocityWithUncertainty  horizontalVelocityWithUncertainty
    No value
    rrc.HorizontalVelocityWithUncertainty

rrc.horizontalWithVerticalVelocity  horizontalWithVerticalVelocity
    No value
    rrc.HorizontalWithVerticalVelocity
```

```

rrc.horizontalWithVerticalVelocityAndUncertainty horizontalWithVerticalVelocity
    No value
    rrc.HorizontalWithVerticalVelocityAndUncertainty
rrc.horizontal_Accuracy horizontal-Accuracy
    Byte array
    rrc.UE_Positioning_Accuracy
rrc.hs_DSCH_64QAM_Support hs-DSCH-64QAM-Support
    Boolean
    rrc.BOOLEAN
rrc.hs_PDSCH_Midamble_Configuration_tdd128 hs-PDSCH-Midamble-Configuration-tdd128
    No value
    rrc.HS_PDSCH_Midamble_Configuration_TDD128
rrc.hs_SICH_PowerControl hs-SICH-PowerControl
    No value
    rrc.HS_SICH_Power_Control_Info_TDD384
rrc.hs_SICH_PowerControl_Info hs-SICH-PowerControl-Info
    No value
    rrc.HS_SICH_Power_Control_Info_TDD384
rrc.hs_pdsch_CodeIndex hs-pdsch-CodeIndex
    Unsigned 32-bit integer
    rrc.INTEGER_1_15
rrc.hs_scchLessOperation hs-scchLessOperation
    Unsigned 32-bit integer
    rrc.T_hs_scchLessOperation
rrc.hs_scch_Info hs-scch-Info
    No value
    rrc.HS_SCCH_Info
rrc.hs_scch_LessInfo hs-scch-LessInfo
    No value
    rrc.HS_SCCH_LessInfo_r7
rrc.hs_scch_LessSecondCodeApplicability hs-scch-LessSecondCodeApplicability
    Boolean
    rrc.BOOLEAN
rrc.hs_scch_LessTFI hs-scch-LessTFI
    Unsigned 32-bit integer
    rrc.INTEGER_1_90
rrc.hs_scch_LessTFS hs-scch-LessTFS
    Unsigned 32-bit integer
    rrc.HS_SCCH_LessTFS
rrc.hs_sich_ConstantValue hs-sich-ConstantValue
    Signed 32-bit integer
    rrc.ConstantValue
rrc.hs_sich_configuration hs-sich-configuration
    No value
    rrc.HS_SICH_Configuration_TDD128
rrc.hsdpa_CellIndicator hsdpa-CellIndicator
    Unsigned 32-bit integer
    rrc.T_hsdpa_CellIndicator

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```
rrc.hsdSCH hsdSCH
    Unsigned 32-bit integer
    rrc.MAC_d_FlowIdentity

rrc.hsdSCH_mac_d_flow_id hsdSCH-mac-d-flow-id
    Unsigned 32-bit integer
    rrc.MAC_d_FlowIdentity

rrc.hsdSCH_physical_layer_category hsdSCH-physical-layer-category
    Unsigned 32-bit integer
    rrc.HSDSCH_physical_layer_category

rrc.hysteresis hysteresis
    Unsigned 32-bit integer
    rrc.HysteresisInterFreq

rrc.i0 i0
    Byte array
    rrc.BIT_STRING_SIZE_32

rrc.iDot iDot
    Byte array
    rrc.BIT_STRING_SIZE_14

rrc.iMEI iMEI
    No value
    rrc.T_iMEI

rrc.iMSIcauseUEinitiatedEvent iMSIcauseUEinitiatedEvent
    No value
    rrc.T_iMSIcauseUEinitiatedEvent

rrc.iMSIresponsetopaging iMSIresponsetopaging
    No value
    rrc.T_iMSIresponsetopaging

rrc.idleModePLMNIidentities idleModePLMNIidentities
    No value
    rrc.PLMNIidentitiesOfNeighbourCells

rrc.idleModePLMNIidentitiesSIB11bis idleModePLMNIidentitiesSIB11bis
    No value
    rrc.PLMNIidentitiesOfNeighbourCells

rrc.ie_ValueNotComprehended ie-ValueNotComprehended
    No value
    rrc.IdentificationOfReceivedMessage

rrc.imei imei
    Unsigned 32-bit integer
    rrc.IMEI

rrc.implementationSpecificParams implementationSpecificParams
    Byte array
    rrc.ImplementationSpecificParams

rrc.implicit implicit
    No value
    rrc.NULL

rrc.imsi imsi
    Unsigned 32-bit integer
    rrc.IMSI_GSM_MAP
```

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rrc.imsi_DS_41   imsi-DS-41
    Byte array
    rrc.IMSI_DS_41

rrc.imsi_GSM_MAP   imsi-GSM-MAP
    Unsigned 32-bit integer
    rrc.IMSI_GSM_MAP

rrc.imsi_and_ESN_DS_41   imsi-and-ESN-DS-41
    No value
    rrc.IMSI_and_ESN_DS_41

rrc.inSequenceDelivery   inSequenceDelivery
    Boolean
    rrc.BOOLEAN

rrc.inactive   inactive
    No value
    rrc.NULL

rrc.includeInSchedulingInfo   includeInSchedulingInfo
    Boolean
    rrc.BOOLEAN

rrc.incompatibleSimultaneousReconfiguration   incompatibleSimultaneousReconfiguration
    No value
    rrc.NULL

rrc.indicateChangeInSelectedServices   indicateChangeInSelectedServices
    Boolean
    rrc.BOOLEAN

rrc.individualDL_CCTrCH_InfoList   individualDL-CCTrCH-InfoList
    Unsigned 32-bit integer
    rrc.IndividualDL_CCTrCH_InfoList

rrc.individualTS_InterferenceList   individualTS-InterferenceList
    Unsigned 32-bit integer
    rrc.IndividualTS_InterferenceList

rrc.individualTimeslotInfo   individualTimeslotInfo
    No value
    rrc.IndividualTimeslotInfo

rrc.individualTimeslotLCR_Ext   individualTimeslotLCR-Ext
    No value
    rrc.IndividualTimeslotInfo_LCR_r4_ext

rrc.individualUL_CCTrCH_InfoList   individualUL-CCTrCH-InfoList
    Unsigned 32-bit integer
    rrc.IndividualUL_CCTrCH_InfoList

rrc.individuallySignalled   individuallySignalled
    No value
    rrc.T_individuallySignalled

rrc.initialDirectTransfer   initialDirectTransfer
    No value
    rrc.InitialDirectTransfer

rrc.initialDirectTransfer_r3_add_ext   initialDirectTransfer-r3-add-ext
    Byte array
    rrc.BIT_STRING

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```
rrc.initialDirectTransfer_v3a0ext  initialDirectTransfer-v3a0ext
    No value
    rrc.InitialDirectTransfer_v3a0ext
rrc.initialDirectTransfer_v590ext  initialDirectTransfer-v590ext
    No value
    rrc.InitialDirectTransfer_v590ext
rrc.initialDirectTransfer_v690ext  initialDirectTransfer-v690ext
    No value
    rrc.InitialDirectTransfer_v690ext_IEs
rrc.initialDirectTransfer_v7xyext  initialDirectTransfer-v7xyext
    No value
    rrc.InitialDirectTransfer_v7xyext_IEs
rrc.initialPriorityDelayList  initialPriorityDelayList
    Unsigned 32-bit integer
    rrc.InitialPriorityDelayList
rrc.initialUE_Identity  initialUE-Identity
    Unsigned 32-bit integer
    rrc.InitialUE_Identity
rrc.initialise  initialise
    No value
    rrc.T_initialise
rrc.integerCodePhase  integerCodePhase
    Unsigned 32-bit integer
    rrc.INTEGER_0_19
rrc.integrityCheckInfo  integrityCheckInfo
    No value
    rrc.IntegrityCheckInfo
rrc.integrityProtInitNumber  integrityProtInitNumber
    Byte array
    rrc.IntegrityProtInitNumber
rrc.integrityProtectionAlgorithm  integrityProtectionAlgorithm
    Unsigned 32-bit integer
    rrc.IntegrityProtectionAlgorithm
rrc.integrityProtectionAlgorithmCap  integrityProtectionAlgorithmCap
    Byte array
    rrc.T_integrityProtectionAlgorithmCap
rrc.integrityProtectionModeCommand  integrityProtectionModeCommand
    Unsigned 32-bit integer
    rrc.IntegrityProtectionModeCommand
rrc.integrityProtectionModeInfo  integrityProtectionModeInfo
    No value
    rrc.IntegrityProtectionModeInfo
rrc.integrityProtectionStatus  integrityProtectionStatus
    Unsigned 32-bit integer
    rrc.IntegrityProtectionStatus
rrc.interFreqCellID  interFreqCellID
    Unsigned 32-bit integer
    rrc.InterFreqCellID
```

```
rrc.interFreqCellIndication_SIB11  interFreqCellIndication-SIB11
    Unsigned 32-bit integer
    rrc.INTEGER_0_1

rrc.interFreqCellIndication_SIB12  interFreqCellIndication-SIB12
    Unsigned 32-bit integer
    rrc.INTEGER_0_1

rrc.interFreqCellInfoList  interFreqCellInfoList
    No value
    rrc.InterFreqCellInfoList

rrc.interFreqCellInfoSI_List  interFreqCellInfoSI-List
    No value
    rrc.InterFreqCellInfoSI_List_RSCP

rrc.interFreqCellList  interFreqCellList
    Unsigned 32-bit integer
    rrc.InterFreqCellList

rrc.interFreqCellMeasuredResultsList  interFreqCellMeasuredResultsList
    Unsigned 32-bit integer
    rrc.InterFreqCellMeasuredResultsList

rrc.interFreqEventList  interFreqEventList
    Unsigned 32-bit integer
    rrc.InterFreqEventList

rrc.interFreqEventResults  interFreqEventResults
    No value
    rrc.InterFreqEventResults

rrc.interFreqEventResults_LCR  interFreqEventResults-LCR
    No value
    rrc.InterFreqEventResults_LCR_r4_ext

rrc.interFreqMeasQuantity  interFreqMeasQuantity
    No value
    rrc.InterFreqMeasQuantity

rrc.interFreqMeasuredResultsList  interFreqMeasuredResultsList
    Unsigned 32-bit integer
    rrc.InterFreqMeasuredResultsList

rrc.interFreqMeasurementSysInfo  interFreqMeasurementSysInfo
    No value
    rrc.InterFreqMeasurementSysInfo_RSCP

rrc.interFreqRACHRepCellsList  interFreqRACHRepCellsList
    Unsigned 32-bit integer
    rrc.InterFreqRACHRepCellsList

rrc.interFreqRACHReportingInfo  interFreqRACHReportingInfo
    No value
    rrc.InterFreqRACHReportingInfo

rrc.interFreqRACHReportingThreshold  interFreqRACHReportingThreshold
    Signed 32-bit integer
    rrc.Threshold

rrc.interFreqRepQuantityRACH_FDD  interFreqRepQuantityRACH-FDD
    Unsigned 32-bit integer
    rrc.InterFreqRepQuantityRACH_FDD
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```
rrc.interFreqRepQuantityRACH_TDDList  interFreqRepQuantityRACH-TDDList
    Unsigned 32-bit integer
    rrc.InterFreqRepQuantityRACH_TDDList
rrc.interFreqReportingCriteria  interFreqReportingCriteria
    No value
    rrc.T_interFreqReportingCriteria
rrc.interFreqReportingQuantity  interFreqReportingQuantity
    No value
    rrc.InterFreqReportingQuantity
rrc.interFreqSetUpdate  interFreqSetUpdate
    Unsigned 32-bit integer
    rrc.UE_AutonomousUpdateMode
rrc.interFrequencyMeasuredResultsList  interFrequencyMeasuredResultsList
    Unsigned 32-bit integer
    rrc.InterFrequencyMeasuredResultsList_v590ext
rrc.interFrequencyMeasurement  interFrequencyMeasurement
    No value
    rrc.InterFrequencyMeasurement
rrc.interFrequencyTresselectionScalingFactor  interFrequencyTresselectionScalingFactor
    Unsigned 32-bit integer
    rrc.TresselectionScalingFactor
rrc.interRATCellID  interRATCellID
    Unsigned 32-bit integer
    rrc.InterRATCellID
rrc.interRATCellIndividualOffset  interRATCellIndividualOffset
    Signed 32-bit integer
    rrc.InterRATCellIndividualOffset
rrc.interRATCellInfoIndication  interRATCellInfoIndication
    Unsigned 32-bit integer
    rrc.InterRATCellInfoIndication
rrc.interRATCellInfoIndication_r6  interRATCellInfoIndication-r6
    Unsigned 32-bit integer
    rrc.InterRATCellInfoIndication
rrc.interRATCellInfoList  interRATCellInfoList
    No value
    rrc.InterRATCellInfoList
rrc.interRATEventList  interRATEventList
    Unsigned 32-bit integer
    rrc.InterRATEventList
rrc.interRATEventResults  interRATEventResults
    No value
    rrc.InterRATEventResults
rrc.interRATHandoverInfo  interRATHandoverInfo
    Unsigned 32-bit integer
    rrc.InterRATHandoverInfoWithInterRATCapabilities_r3
rrc.interRATHandoverInfoWithInterRATCapabilities_v390ext  interRATHandoverInfoWithInterRATCapabilities_v390ext
    No value
    rrc.InterRATHandoverInfoWithInterRATCapabilities_v390ext_IEs
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rrc.interRATHandoverInfoWithInterRATCapabilities_v690ext  interRATHandoverInfoWi
    No value
    rrc.InterRATHandoverInfoWithInterRATCapabilities_v690ext_IEs
rrc.interRATHandoverInfo_r3  interRATHandoverInfo-r3
    No value
    rrc.InterRATHandoverInfoWithInterRATCapabilities_r3_IEs
rrc.interRATHandoverInfo_r3_add_ext  interRATHandoverInfo-r3-add-ext
    Byte array
    rrc.T_interRATHandoverInfo_r3_add_ext
rrc.interRATHandoverInfo_v390ext  interRATHandoverInfo-v390ext
    No value
    rrc.InterRATHandoverInfo_v390ext_IEs
rrc.interRATHandoverInfo_v3a0ext  interRATHandoverInfo-v3a0ext
    No value
    rrc.InterRATHandoverInfo_v3a0ext_IEs
rrc.interRATHandoverInfo_v3d0ext  interRATHandoverInfo-v3d0ext
    No value
    rrc.InterRATHandoverInfo_v3d0ext_IEs
rrc.interRATHandoverInfo_v3g0ext  interRATHandoverInfo-v3g0ext
    No value
    rrc.InterRATHandoverInfo_v3g0ext_IEs
rrc.interRATHandoverInfo_v4b0ext  interRATHandoverInfo-v4b0ext
    No value
    rrc.InterRATHandoverInfo_v4b0ext_IEs
rrc.interRATHandoverInfo_v4d0ext  interRATHandoverInfo-v4d0ext
    No value
    rrc.InterRATHandoverInfo_v4d0ext_IEs
rrc.interRATHandoverInfo_v590ext  interRATHandoverInfo-v590ext
    No value
    rrc.InterRATHandoverInfo_v590ext_IEs
rrc.interRATHandoverInfo_v690ext  interRATHandoverInfo-v690ext
    No value
    rrc.InterRATHandoverInfo_v690ext_IEs
rrc.interRATHandoverInfo_v690ext1  interRATHandoverInfo-v690ext1
    No value
    rrc.InterRATHandoverInfo_v690ext1_IEs
rrc.interRATHandoverInfo_v6b0ext  interRATHandoverInfo-v6b0ext
    No value
    rrc.InterRATHandoverInfo_v6b0ext_IEs
rrc.interRATInfo  interRATInfo
    Unsigned 32-bit integer
    rrc.InterRATInfo
rrc.interRATMeasQuantity  interRATMeasQuantity
    No value
    rrc.InterRATMeasQuantity
rrc.interRATMeasuredResultsList  interRATMeasuredResultsList
    Unsigned 32-bit integer
    rrc.InterRATMeasuredResultsList
```



```
rrc.interRATMeasurement  interRATMeasurement
    No value
    rrc.InterRATMeasurement
rrc.interRATMeasurementSysInfo  interRATMeasurementSysInfo
    No value
    rrc.InterRATMeasurementSysInfo_B
rrc.interRATMessage  interRATMessage
    Unsigned 32-bit integer
    rrc.T_interRATMessage
rrc.interRATReportingCriteria  interRATReportingCriteria
    No value
    rrc.InterRATReportingCriteria
rrc.interRATReportingQuantity  interRATReportingQuantity
    No value
    rrc.InterRATReportingQuantity
rrc.interRATTreselectionScalingFactor  interRATTreselectionScalingFactor
    Unsigned 32-bit integer
    rrc.TreselectionScalingFactor
rrc.interRAT_ChangeFailureCause  interRAT-ChangeFailureCause
    Unsigned 32-bit integer
    rrc.InterRAT_ChangeFailureCause
rrc.interRAT_HO_FailureCause  interRAT-HO-FailureCause
    Unsigned 32-bit integer
    rrc.InterRAT_HO_FailureCause
rrc.interRAT_ProtocolError  interRAT-ProtocolError
    No value
    rrc.NULL
rrc.interRAT_TargetCellDescription  interRAT-TargetCellDescription
    No value
    rrc.InterRAT_TargetCellDescription
rrc.interRAT_UE_RadioAccessCapability  interRAT-UE-RadioAccessCapability
    Unsigned 32-bit integer
    rrc.InterRAT_UE_RadioAccessCapabilityList
rrc.inter_RAT_meas_ind  inter-RAT-meas-ind
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxOtherRAT_OF_RAT_Type
rrc.inter_RAT_meas_ind_item  Item
    Unsigned 32-bit integer
    rrc.RAT_Type
rrc.inter_freq_FDD_meas_ind  inter-freq-FDD-meas-ind
    Boolean
    rrc.BOOLEAN
rrc.inter_freq_TDD128_meas_ind  inter-freq-TDD128-meas-ind
    Boolean
    rrc.BOOLEAN
rrc.inter_freq_TDD_meas_ind  inter-freq-TDD-meas-ind
    Boolean
    rrc.BOOLEAN
```

```
rrc.inter_frequency inter-frequency
    Unsigned 32-bit integer
    rrc.Inter_FreqEventCriteriaList_v590ext

rrc.intraDomainNasNodeSelector intraDomainNasNodeSelector
    No value
    rrc.IntraDomainNasNodeSelector

rrc.intraFreqCellID intraFreqCellID
    Unsigned 32-bit integer
    rrc.IntraFreqCellID

rrc.intraFreqCellInfoList intraFreqCellInfoList
    No value
    rrc.IntraFreqCellInfoList

rrc.intraFreqCellInfoSI_List intraFreqCellInfoSI-List
    No value
    rrc.IntraFreqCellInfoSI_List_RSCP

rrc.intraFreqCellReselectionInd intraFreqCellReselectionInd
    Unsigned 32-bit integer
    rrc.AllowedIndicator

rrc.intraFreqEventCriteriaList_v590ext intraFreqEventCriteriaList-v590ext
    Unsigned 32-bit integer
    rrc.Intra_FreqEventCriteriaList_v590ext

rrc.intraFreqEventResults intraFreqEventResults
    No value
    rrc.IntraFreqEventResults

rrc.intraFreqEvent_ld_r5 intraFreqEvent-ld-r5
    No value
    rrc.IntraFreqEvent_ld_r5

rrc.intraFreqMeasQuantity intraFreqMeasQuantity
    No value
    rrc.IntraFreqMeasQuantity

rrc.intraFreqMeasQuantity_FDD intraFreqMeasQuantity-FDD
    Unsigned 32-bit integer
    rrc.IntraFreqMeasQuantity_FDD

rrc.intraFreqMeasQuantity_TDDList intraFreqMeasQuantity-TDDList
    Unsigned 32-bit integer
    rrc.IntraFreqMeasQuantity_TDDList

rrc.intraFreqMeasuredResultsList intraFreqMeasuredResultsList
    Unsigned 32-bit integer
    rrc.IntraFreqMeasuredResultsList

rrc.intraFreqMeasurementID intraFreqMeasurementID
    Unsigned 32-bit integer
    rrc.MeasurementIdentity

rrc.intraFreqMeasurementSysInfo intraFreqMeasurementSysInfo
    No value
    rrc.IntraFreqMeasurementSysInfo_RSCP

rrc.intraFreqRepQuantityRACH_FDD intraFreqRepQuantityRACH-FDD
    Unsigned 32-bit integer
    rrc.IntraFreqRepQuantityRACH_FDD
```

```
rrc.intraFreqRepQuantityRACH_TDDList  intraFreqRepQuantityRACH-TDDList
    Unsigned 32-bit integer
    rrc.IntraFreqRepQuantityRACH_TDDList
rrc.intraFreqReportingCriteria  intraFreqReportingCriteria
    No value
    rrc.IntraFreqReportingCriteria
rrc.intraFreqReportingCriteria_l1b_r5  intraFreqReportingCriteria-l1b-r5
    No value
    rrc.IntraFreqReportingCriteria_l1b_r5
rrc.intraFreqReportingQuantity  intraFreqReportingQuantity
    No value
    rrc.IntraFreqReportingQuantity
rrc.intraFreqReportingQuantityForRACH  intraFreqReportingQuantityForRACH
    No value
    rrc.IntraFreqReportingQuantityForRACH
rrc.intraFrequencyMeasuredResultsList  intraFrequencyMeasuredResultsList
    Unsigned 32-bit integer
    rrc.IntraFrequencyMeasuredResultsList_v590ext
rrc.intraFrequencyMeasurement  intraFrequencyMeasurement
    No value
    rrc.IntraFrequencyMeasurement
rrc.intra_frequency  intra-frequency
    Unsigned 32-bit integer
    rrc.Intra_FreqEventCriteriaList_v590ext
rrc.invalidConfiguration  invalidConfiguration
    No value
    rrc.NULL
rrc.iodec  iodec
    Byte array
    rrc.BIT_STRING_SIZE_10
rrc.iode  iode
    Unsigned 32-bit integer
    rrc.IODE
rrc.ionosphericModelRequest  ionosphericModelRequest
    Boolean
    rrc.BOOLEAN
rrc.ip_Length  ip-Length
    Unsigned 32-bit integer
    rrc.IP_Length
rrc.ip_Offset  ip-Offset
    Unsigned 32-bit integer
    rrc.INTEGER_0_9
rrc.ip_PCCPCG  ip-PCCPCG
    Boolean
    rrc.IP_PCCPCH_r4
rrc.ip_Spacing  ip-Spacing
    Unsigned 32-bit integer
    rrc.IP_Spacing
```

```
rrc.ip_Spacing_TDD ip-Spacing-TDD
    Unsigned 32-bit integer
    rrc.IP_Spacing_TDD

rrc.ip_Start ip-Start
    Unsigned 32-bit integer
    rrc.INTEGER_0_4095

rrc.ip_slot ip-slot
    Unsigned 32-bit integer
    rrc.INTEGER_0_14

rrc.ipdl_alpha ipdl-alpha
    Unsigned 32-bit integer
    rrc.Alpha

rrc.isActive isActive
    Unsigned 32-bit integer
    rrc.AvailableMinimumSF_ListVCAM

rrc.is_2000 is-2000
    No value
    rrc.NULL

rrc.is_2000SpecificMeasInfo is-2000SpecificMeasInfo
    Unsigned 32-bit integer
    rrc.IS_2000SpecificMeasInfo

rrc.iscpTimeslotList iscpTimeslotList
    Unsigned 32-bit integer
    rrc.TimeslotList

rrc.itp itp
    Unsigned 32-bit integer
    rrc.ITP

rrc.l2Pflag l2Pflag
    Byte array
    rrc.BIT_STRING_SIZE_1

rrc.lac lac
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.lai lai
    No value
    rrc.LAI

rrc.large large
    Unsigned 32-bit integer
    rrc.INTEGER_18_512

rrc.lastAndComplete lastAndComplete
    No value
    rrc.T_lastAndComplete

rrc.lastAndCompleteAndFirst lastAndCompleteAndFirst
    No value
    rrc.T_lastAndCompleteAndFirst

rrc.lastAndFirst lastAndFirst
    No value
    rrc.T_lastAndFirst
```

```
rrc.lastChannelisationCode  lastChannelisationCode
    Unsigned 32-bit integer
    rrc.DL_TS_ChannelisationCode

rrc.lastRetransmissionPDU_Poll  lastRetransmissionPDU-Poll
    Boolean
    rrc.BOOLEAN

rrc.lastSegment  lastSegment
    No value
    rrc.LastSegment

rrc.lastSegmentShort  lastSegmentShort
    No value
    rrc.LastSegmentShort

rrc.lastTransmissionPDU_Poll  lastTransmissionPDU-Poll
    Boolean
    rrc.BOOLEAN

rrc.later  later
    No value
    rrc.T_later

rrc.laterNonCriticalExtensions  laterNonCriticalExtensions
    No value
    rrc.T_laterNonCriticalExtensions

rrc.later_than_r3  later-than-r3
    No value
    rrc.T_later_than_r3

rrc.later_than_r4  later-than-r4
    No value
    rrc.T_later_than_r4

rrc.later_than_r5  later-than-r5
    No value
    rrc.T_later_than_r5

rrc.latestConfiguredCN_Domain  latestConfiguredCN-Domain
    Unsigned 32-bit integer
    rrc.CN_DomainIdentity

rrc.latitude  latitude
    Unsigned 32-bit integer
    rrc.INTEGER_0_8388607

rrc.latitudeSign  latitudeSign
    Unsigned 32-bit integer
    rrc.T_latitudeSign

rrc.layer1Combining  layer1Combining
    Unsigned 32-bit integer
    rrc.T_layer1Combining

rrc.layer1_CombiningStatus  layer1-CombiningStatus
    Boolean
    rrc.BOOLEAN

rrc.layerConvergenceInformation  layerConvergenceInformation
    Unsigned 32-bit integer
    rrc.T_layerConvergenceInformation
```

```
rrc.length length
    No value
    rrc.NULL

rrc.length_of_TTRI_field length-of-TTRI-field
    Unsigned 32-bit integer
    rrc.INTEGER_1_12

rrc.localPTMSI localPTMSI
    No value
    rrc.T_localPTMSI

rrc.logChOfRb logChOfRb
    Unsigned 32-bit integer
    rrc.INTEGER_0_1

rrc.logicalChIdentity logicalChIdentity
    Unsigned 32-bit integer
    rrc.MBMS_LogicalChIdentity

rrc.logicalChannelIdentity logicalChannelIdentity
    Unsigned 32-bit integer
    rrc.LogicalChannelIdentity

rrc.logicalChannelList logicalChannelList
    Unsigned 32-bit integer
    rrc.LogicalChannelList

rrc.long_Term_Grant_Indicator long-Term-Grant-Indicator
    Boolean
    rrc.BOOLEAN

rrc.longitude longitude
    Signed 32-bit integer
    rrc.INTEGER_M8388608_8388607

rrc.losslessDLRLC_PDUSizeChange losslessDLRLC-PDUSizeChange
    Unsigned 32-bit integer
    rrc.T_losslessDLRLC_PDUSizeChange

rrc.losslessSRNS_RelocSupport losslessSRNS-RelocSupport
    Unsigned 32-bit integer
    rrc.LosslessSRNS_RelocSupport

rrc.losslessSRNS_RelocationSupport losslessSRNS-RelocationSupport
    Boolean
    rrc.BOOLEAN

rrc.lowerPriorityMBMSService lowerPriorityMBMSService
    No value
    rrc.NULL

rrc.ls_part ls-part
    Unsigned 32-bit integer
    rrc.INTEGER_0_4294967295

rrc.lsbTOW lsbTOW
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.m0 m0
    Byte array
    rrc.BIT_STRING_SIZE_24
```

```
rrc.mac_InactivityThreshold mac-InactivityThreshold
    Unsigned 32-bit integer
    rrc.MAC_InactivityThreshold

rrc.mac_LogicalChannelPriority mac-LogicalChannelPriority
    Unsigned 32-bit integer
    rrc.MAC_LogicalChannelPriority

rrc.mac_dFlowId mac-dFlowId
    Unsigned 32-bit integer
    rrc.MAC_d_FlowIdentity

rrc.mac_d_FlowIdentity mac-d-FlowIdentity
    Unsigned 32-bit integer
    rrc.E_DCH_MAC_d_FlowIdentity

rrc.mac_d_FlowMaxRetrans mac-d-FlowMaxRetrans
    Unsigned 32-bit integer
    rrc.E_DCH_MAC_d_FlowMaxRetrans

rrc.mac_d_FlowMultiplexingList mac-d-FlowMultiplexingList
    Byte array
    rrc.E_DCH_MAC_d_FlowMultiplexingList

rrc.mac_d_FlowPowerOffset mac-d-FlowPowerOffset
    Unsigned 32-bit integer
    rrc.E_DCH_MAC_d_FlowPowerOffset

rrc.mac_d_FlowRetransTimer mac-d-FlowRetransTimer
    Unsigned 32-bit integer
    rrc.E_DCH_MAC_d_FlowRetransTimer

rrc.mac_d_HFN_initial_value mac-d-HFN-initial-value
    Byte array
    rrc.MAC_d_HFN_initial_value

rrc.mac_d_PDU_Index mac-d-PDU-Index
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.mac_d_PDU_Size mac-d-PDU-Size
    Unsigned 32-bit integer
    rrc.INTEGER_1_5000

rrc.mac_d_PDU_SizeInfo_List mac-d-PDU-SizeInfo-List
    Unsigned 32-bit integer
    rrc.MAC_d_PDU_SizeInfo_List

rrc.mac_dtx_Cycle_10ms mac-dtx-Cycle-10ms
    Unsigned 32-bit integer
    rrc.MAC_DTX_Cycle_10ms

rrc.mac_dtx_Cycle_2ms mac-dtx-Cycle-2ms
    Unsigned 32-bit integer
    rrc.MAC_DTX_Cycle_2ms

rrc.mac_es_e_resetIndicator mac-es-e-resetIndicator
    Unsigned 32-bit integer
    rrc.T_mac_es_e_resetIndicator

rrc.mac_hsQueueId mac-hsQueueId
    Unsigned 32-bit integer
    rrc.INTEGER_0_7
```

```
rrc.mac_hsResetIndicator mac-hsResetIndicator
    Unsigned 32-bit integer
    rrc.T_mac_hsResetIndicator

rrc.mac_hsWindowSize mac-hsWindowSize
    Unsigned 32-bit integer
    rrc.MAC_hs_WindowSize

rrc.mac_hs_AddReconfQueue_List mac-hs-AddReconfQueue-List
    Unsigned 32-bit integer
    rrc.MAC_hs_AddReconfQueue_List

rrc.mac_hs_DelQueue_List mac-hs-DelQueue-List
    Unsigned 32-bit integer
    rrc.MAC_hs_DelQueue_List

rrc.maintain maintain
    No value
    rrc.NULL

rrc.mapParameter1 mapParameter1
    Unsigned 32-bit integer
    rrc.MapParameter

rrc.mapParameter2 mapParameter2
    Unsigned 32-bit integer
    rrc.MapParameter

rrc.mappingFunctionParameterList mappingFunctionParameterList
    Unsigned 32-bit integer
    rrc.MappingFunctionParameterList

rrc.mappingInfo mappingInfo
    Unsigned 32-bit integer
    rrc.MappingInfo

rrc.mapping_LCR mapping-LCR
    No value
    rrc.Mapping_LCR_r4

rrc.masterInformationBlock_v690ext masterInformationBlock-v690ext
    No value
    rrc.MasterInformationBlock_v690ext

rrc.masterInformationBlock_v6b0ext masterInformationBlock-v6b0ext
    No value
    rrc.MasterInformationBlock_v6b0ext_IEs

rrc.maxAllowedUL_TX_Power maxAllowedUL-TX-Power
    Signed 32-bit integer
    rrc.MaxAllowedUL_TX_Power

rrc.maxAvailablePCPCH_Number maxAvailablePCPCH-Number
    Unsigned 32-bit integer
    rrc.MaxAvailablePCPCH_Number

rrc.maxChannelisationCodes maxChannelisationCodes
    Unsigned 32-bit integer
    rrc.E_DPDCH_MaxChannelisationCodes

rrc.maxConvCodeBitsReceived maxConvCodeBitsReceived
    Unsigned 32-bit integer
    rrc.MaxNoBits
```



```
rrc.maxConvCodeBitsTransmitted  maxConvCodeBitsTransmitted
    Unsigned 32-bit integer
    rrc.MaxNoBits

rrc.maxDAT  maxDAT
    Unsigned 32-bit integer
    rrc.MaxDAT

rrc.maxDAT_Retransmissions  maxDAT-Retransmissions
    No value
    rrc.MaxDAT_Retransmissions

rrc.maxHcContextSpace  maxHcContextSpace
    Unsigned 32-bit integer
    rrc.MaxHcContextSpace_r5_ext

rrc.maxMAC_e_PDUContents  maxMAC-e-PDUContents
    Unsigned 32-bit integer
    rrc.INTEGER_1_19982

rrc.maxMRW  maxMRW
    Unsigned 32-bit integer
    rrc.MaxMRW

rrc.maxNoBitsReceived  maxNoBitsReceived
    Unsigned 32-bit integer
    rrc.MaxNoBits

rrc.maxNoBitsTransmitted  maxNoBitsTransmitted
    Unsigned 32-bit integer
    rrc.MaxNoBits

rrc.maxNoDPCH_PDSCH_Codes  maxNoDPCH-PDSCH-Codes
    Unsigned 32-bit integer
    rrc.INTEGER_1_8

rrc.maxNoDPDCH_BitsTransmitted  maxNoDPDCH-BitsTransmitted
    Unsigned 32-bit integer
    rrc.MaxNoDPDCH_BitsTransmitted

rrc.maxNoPhysChBitsReceived  maxNoPhysChBitsReceived
    Unsigned 32-bit integer
    rrc.MaxNoPhysChBitsReceived

rrc.maxNoSCCPCH_RL  maxNoSCCPCH-RL
    Unsigned 32-bit integer
    rrc.MaxNoSCCPCH_RL

rrc.maxNumberOfTF  maxNumberOfTF
    Unsigned 32-bit integer
    rrc.MaxNumberOfTF

rrc.maxNumberOfTFC  maxNumberOfTFC
    Unsigned 32-bit integer
    rrc.MaxNumberOfTFC_DL

rrc.maxPhysChPerFrame  maxPhysChPerFrame
    Unsigned 32-bit integer
    rrc.MaxPhysChPerFrame

rrc.maxPhysChPerTS  maxPhysChPerTS
    Unsigned 32-bit integer
    rrc.MaxPhysChPerTS
```

```
rrc.maxPhysChPerTimeslot  maxPhysChPerTimeslot
    Unsigned 32-bit integer
    rrc.MaxPhysChPerTimeslot

rrc.maxPowerIncrease  maxPowerIncrease
    Unsigned 32-bit integer
    rrc.MaxPowerIncrease_r4

rrc.maxROHC_ContextSessions  maxROHC-ContextSessions
    Unsigned 32-bit integer
    rrc.MaxROHC_ContextSessions_r4

rrc.maxReceivedTransportBlocks  maxReceivedTransportBlocks
    Unsigned 32-bit integer
    rrc.MaxTransportBlocksDL

rrc.maxReportedCellsOnRACH  maxReportedCellsOnRACH
    Unsigned 32-bit integer
    rrc.MaxReportedCellsOnRACH

rrc.maxReportedCellsOnRACHinterFreq  maxReportedCellsOnRACHinterFreq
    Unsigned 32-bit integer
    rrc.MaxReportedCellsOnRACHinterFreq

rrc.maxSimultaneousCCTrCH_Count  maxSimultaneousCCTrCH-Count
    Unsigned 32-bit integer
    rrc.MaxSimultaneousCCTrCH_Count

rrc.maxSimultaneousTransChs  maxSimultaneousTransChs
    Unsigned 32-bit integer
    rrc.MaxSimultaneousTransChsDL

rrc.maxTFCIField2Value  maxTFCIField2Value
    Unsigned 32-bit integer
    rrc.INTEGER_1_1023

rrc.maxTFCI_Field2Value  maxTFCI-Field2Value
    Unsigned 32-bit integer
    rrc.MaxTFCI_Field2Value

rrc.maxTS_PerFrame  maxTS-PerFrame
    Unsigned 32-bit integer
    rrc.MaxTS_PerFrame

rrc.maxTS_PerSubFrame  maxTS-PerSubFrame
    Unsigned 32-bit integer
    rrc.MaxTS_PerSubFrame_r4

rrc.maxTransmittedBlocks  maxTransmittedBlocks
    Unsigned 32-bit integer
    rrc.MaxTransportBlocksUL

rrc.max_CID  max-CID
    Unsigned 32-bit integer
    rrc.INTEGER_1_16383

rrc.max_HEADER  max-HEADER
    Unsigned 32-bit integer
    rrc.INTEGER_60_65535

rrc.max_RST  max-RST
    Unsigned 32-bit integer
    rrc.MaxRST
```

```
rrc.max_SYNC_UL_Transmissions max-SYNC-UL-Transmissions
  Unsigned 32-bit integer
  rrc.T_max_SYNC_UL_Transmissions

rrc.maximumAM_EntityNumber maximumAM-EntityNumber
  Unsigned 32-bit integer
  rrc.MaximumAM_EntityNumberRLC_Cap

rrc.maximumBitRate maximumBitRate
  Unsigned 32-bit integer
  rrc.MaximumBitRate

rrc.maximumRLC_WindowSize maximumRLC-WindowSize
  Unsigned 32-bit integer
  rrc.MaximumRLC_WindowSize

rrc.maximum_Allowed_Code_Rate maximum-Allowed-Code-Rate
  Unsigned 32-bit integer
  rrc.INTEGER_0_63

rrc.mbmsAccessInformation mbmsAccessInformation
  No value
  rrc.MBMSAccessInformation

rrc.mbmsCommonPTMRBInformation mbmsCommonPTMRBInformation
  No value
  rrc.MBMSCommonPTMRBInformation

rrc.mbmsCurrentCellPTMRBInformation mbmsCurrentCellPTMRBInformation
  No value
  rrc.MBMSCurrentCellPTMRBInformation

rrc.mbmsGeneralInformation_v7xyext mbmsGeneralInformation-v7xyext
  No value
  rrc.MBMSGeneralInformation_v7xyext_IEs

rrc.mbmsGeneralInformation mbmsGeneralInformation
  No value
  rrc.MBMSGeneralInformation

rrc.mbmsGeneralInformation_v6b0ext mbmsGeneralInformation-v6b0ext
  No value
  rrc.MBMSGeneralInformation_v6b0ext_IEs

rrc.mbmsMICHConfiguration_v7xyext mbmsMICHConfiguration-v7xyext
  No value
  rrc.MBMS_MICHConfigurationInfo_r7

rrc.mbmsModificationRequest mbmsModificationRequest
  No value
  rrc.MBMSModificationRequest

rrc.mbmsModificationRequest_v6b0ext mbmsModificationRequest-v6b0ext
  No value
  rrc.MBMSModificationRequest_v6b0ext_IEs

rrc.mbmsModifiedServicesInformation mbmsModifiedServicesInformation
  No value
  rrc.MBMSModifiedServicesInformation

rrc.mbmsNeighbouringCellPTMRBInformation mbmsNeighbouringCellPTMRBInformation
  No value
  rrc.MBMSNeighbouringCellPTMRBInformation
```

```
rrc.mbmsNotificationIndLength  mbmsNotificationIndLength
    Unsigned 32-bit integer
    rrc.MBMS_MICHNotificationIndLength

rrc.mbmsNumberOfNeighbourCells  mbmsNumberOfNeighbourCells
    Unsigned 32-bit integer
    rrc.MBMS_NumberOfNeighbourCells_r6

rrc.mbmsPreferredFrequency  mbmsPreferredFrequency
    Unsigned 32-bit integer
    rrc.INTEGER_1_maxMBMS_Freq

rrc.mbmsSchedulingInformation  mbmsSchedulingInformation
    No value
    rrc.MBMS_SchedulingInformation

rrc.mbmsSelectedServiceInfo  mbmsSelectedServiceInfo
    No value
    rrc.MBMS_SelectedServiceInfo

rrc.mbmsSelectedServices  mbmsSelectedServices
    No value
    rrc.MBMS_SelectedServicesShort

rrc.mbmsSessionAlreadyReceivedCorrectly  mbmsSessionAlreadyReceivedCorrectly
    No value
    rrc.NULL

rrc.mbmsUnmodifiedServicesInformation  mbmsUnmodifiedServicesInformation
    No value
    rrc.MBMSUnmodifiedServicesInformation

rrc.mbms_AllUnmodifiedPTMServices  mbms-AllUnmodifiedPTMServices
    Unsigned 32-bit integer
    rrc.T_mbms_AllUnmodifiedPTMServices

rrc.mbms_CommonPhyChIdentity  mbms-CommonPhyChIdentity
    Unsigned 32-bit integer
    rrc.MBMS_CommonPhyChIdentity

rrc.mbms_CommonRBInformationList  mbms-CommonRBInformationList
    Unsigned 32-bit integer
    rrc.MBMS_CommonRBInformationList_r6

rrc.mbms_ConnectedModeCountingScope  mbms-ConnectedModeCountingScope
    No value
    rrc.MBMS_ConnectedModeCountingScope

rrc.mbms_CurrentCell_SCCPCHList  mbms-CurrentCell-SCCPCHList
    Unsigned 32-bit integer
    rrc.MBMS_CurrentCell_SCCPCHList_r6

rrc.mbms_DispersionIndicator  mbms-DispersionIndicator
    Unsigned 32-bit integer
    rrc.T_mbms_DispersionIndicator

rrc.mbms_DynamicPersistenceLevel  mbms-DynamicPersistenceLevel
    Unsigned 32-bit integer
    rrc.DynamicPersistenceLevel

rrc.mbms_HCSoffset  mbms-HCSoffset
    Unsigned 32-bit integer
    rrc.INTEGER_0_7
```

```
rrc.mbms_JoinedInformation  mbms-JoinedInformation
    No value
    rrc.MBMS_JoinedInformation_r6

rrc.mbms_L1CombiningSchedule  mbms-L1CombiningSchedule
    Unsigned 32-bit integer
    rrc.MBMS_L1CombiningSchedule

rrc.mbms_L1CombiningTransmTimeDiff  mbms-L1CombiningTransmTimeDiff
    Unsigned 32-bit integer
    rrc.MBMS_L1CombiningTransmTimeDiff

rrc.mbms_L23Configuration  mbms-L23Configuration
    Unsigned 32-bit integer
    rrc.MBMS_L23Configuration

rrc.mbms_PL_ServiceRestrictInfo  mbms-PL-ServiceRestrictInfo
    Unsigned 32-bit integer
    rrc.MBMS_PL_ServiceRestrictInfo_r6

rrc.mbms_PTMActivationTime  mbms-PTMActivationTime
    Unsigned 32-bit integer
    rrc.MBMS_PTMActivationTime_r6

rrc.mbms_PhyChInformationList  mbms-PhyChInformationList
    Unsigned 32-bit integer
    rrc.MBMS_PhyChInformationList_r6

rrc.mbms_PREFERREDFreqRequest  mbms-PreferredFreqRequest
    No value
    rrc.MBMS_ServiceIdentity_r6

rrc.mbms_PREFERREDFrequency  mbms-PreferredFrequency
    Unsigned 32-bit integer
    rrc.T_mbms_PREFERREDFrequency

rrc.mbms_PREFERREDFrequencyInfo  mbms-PreferredFrequencyInfo
    Unsigned 32-bit integer
    rrc.MBMS_PREFERREDFrequencyList_r6

rrc.mbms_Qoffset  mbms-Qoffset
    Unsigned 32-bit integer
    rrc.MBMS_Qoffset

rrc.mbms_RB_ListReleasedToChangeTransferMode  mbms-RB-ListReleasedToChangeTransferMode
    Unsigned 32-bit integer
    rrc.RB_InformationReleaseList

rrc.mbms_ReacquireMCCH  mbms-ReacquireMCCH
    Unsigned 32-bit integer
    rrc.T_mbms_ReacquireMCCH

rrc.mbms_RequiredUEAction  mbms-RequiredUEAction
    Unsigned 32-bit integer
    rrc.MBMS_RequiredUEAction_Mod

rrc.mbms_SIBType5_SCCPCHList  mbms-SIBType5-SCCPCHList
    Unsigned 32-bit integer
    rrc.MBMS_SIBType5_SCCPCHList_r6

rrc.mbms_SelectedServicesList  mbms-SelectedServicesList
    Unsigned 32-bit integer
    rrc.MBMS_SelectedServicesListShort
```

```
rrc.mbms_ServiceAccessInfoList  mbms-ServiceAccessInfoList
    Unsigned 32-bit integer
    rrc.MBMS_ServiceAccessInfoList_r6

rrc.mbms_ServiceIdentity  mbms-ServiceIdentity
    Byte array
    rrc.OCTET_STRING_SIZE_3

rrc.mbms_ServiceTransmInfoList  mbms-ServiceTransmInfoList
    Unsigned 32-bit integer
    rrc.MBMS_ServiceTransmInfoList

rrc.mbms_SessionIdentity  mbms-SessionIdentity
    Byte array
    rrc.MBMS_SessionIdentity

rrc.mbms_TimersAndCounters  mbms-TimersAndCounters
    No value
    rrc.MBMS_TimersAndCounters_r6

rrc.mbms_TransmissionIdentity  mbms-TransmissionIdentity
    No value
    rrc.MBMS_TransmissionIdentity

rrc.mbms_TranspChInfoForEachCCTrCh  mbms-TranspChInfoForEachCCTrCh
    Unsigned 32-bit integer
    rrc.MBMS_TranspChInfoForEachCCTrCh_r6

rrc.mbms_TranspChInfoForEachTrCh  mbms-TranspChInfoForEachTrCh
    Unsigned 32-bit integer
    rrc.MBMS_TranspChInfoForEachTrCh_r6

rrc.mcc  mcc
    Unsigned 32-bit integer
    rrc.MCC

rrc.mcch  mcch
    Unsigned 32-bit integer
    rrc.MBMS_PFLIndex

rrc.mcchOnSCCPCHusedForNonMBMS  mcchOnSCCPCHusedForNonMBMS
    No value
    rrc.MBMS_MCCH_ConfigurationInfo_r6

rrc.mcchOnSCCPCHusedOnlyForMBMS  mcchOnSCCPCHusedOnlyForMBMS
    No value
    rrc.SCCPCH_SystemInformation_MBMS_r6

rrc.mcch_ConfigurationInfo  mcch-ConfigurationInfo
    No value
    rrc.MBMS_MCCH_ConfigurationInfo_r6

rrc.mcch_transportFormatSet  mcch-transportFormatSet
    Unsigned 32-bit integer
    rrc.TransportFormatSet

rrc.measQuantityUTRAN_QualityEstimate  measQuantityUTRAN-QualityEstimate
    No value
    rrc.IntraFreqMeasQuantity

rrc.measuredResults  measuredResults
    Unsigned 32-bit integer
    rrc.MeasuredResults
```

```
rrc.measuredResultsOnRACH measuredResultsOnRACH
    No value
    rrc.MeasuredResultsOnRACH
rrc.measuredResultsOnRACHinterFreq measuredResultsOnRACHinterFreq
    No value
    rrc.MeasuredResultsOnRACHinterFreq
rrc.measuredResults_v390ext measuredResults-v390ext
    No value
    rrc.MeasuredResults_v390ext
rrc.measuredResults_v590ext measuredResults-v590ext
    Unsigned 32-bit integer
    rrc.MeasuredResults_v590ext
rrc.measurementCapability measurementCapability
    No value
    rrc.MeasurementCapability
rrc.measurementCapability2 measurementCapability2
    No value
    rrc.MeasurementCapabilityExt2
rrc.measurementCapability_r4_ext measurementCapability-r4-ext
    No value
    rrc.MeasurementCapability_r4_ext
rrc.measurementCommand measurementCommand
    Unsigned 32-bit integer
    rrc.MeasurementCommand
rrc.measurementCommandWithType measurementCommandWithType
    Unsigned 32-bit integer
    rrc.MeasurementCommandWithType
rrc.measurementCommand_v590ext measurementCommand-v590ext
    Unsigned 32-bit integer
    rrc.T_measurementCommand_v590ext
rrc.measurementControl measurementControl
    Unsigned 32-bit integer
    rrc.MeasurementControl
rrc.measurementControlFailure measurementControlFailure
    No value
    rrc.MeasurementControlFailure
rrc.measurementControlFailure_r3_add_ext measurementControlFailure-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.measurementControlFailure_v590ext measurementControlFailure-v590ext
    No value
    rrc.MeasurementControlFailure_v590ext_IEs
rrc.measurementControlSysInfo measurementControlSysInfo
    No value
    rrc.MeasurementControlSysInfo
rrc.measurementControlSysInfoExtensionAddon_r5 measurementControlSysInfoExtensi
    No value
    rrc.MeasurementControlSysInfoExtensionAddon_r5
```

```
rrc.measurementControlSysInfo_LCR measurementControlSysInfo-LCR
  No value
  rrc.MeasurementControlSysInfo_LCR_r4_ext
rrc.measurementControl_r3 measurementControl-r3
  No value
  rrc.MeasurementControl_r3_IEs
rrc.measurementControl_r3_add_ext measurementControl-r3-add-ext
  Byte array
  rrc.BIT_STRING
rrc.measurementControl_r4 measurementControl-r4
  No value
  rrc.MeasurementControl_r4_IEs
rrc.measurementControl_r4_add_ext measurementControl-r4-add-ext
  Byte array
  rrc.BIT_STRING
rrc.measurementControl_r6 measurementControl-r6
  No value
  rrc.MeasurementControl_r6_IEs
rrc.measurementControl_v390ext measurementControl-v390ext
  No value
  rrc.MeasurementControl_v390ext
rrc.measurementControl_v3a0ext measurementControl-v3a0ext
  No value
  rrc.MeasurementControl_v3a0ext
rrc.measurementControl_v590ext measurementControl-v590ext
  No value
  rrc.MeasurementControl_v590ext_IEs
rrc.measurementControl_v5b0ext measurementControl-v5b0ext
  No value
  rrc.MeasurementControl_v5b0ext_IEs
rrc.measurementControl_v6a0ext measurementControl-v6a0ext
  No value
  rrc.MeasurementControl_v6a0ext_IEs
rrc.measurementControl_v7xyext measurementControl-v7xyext
  No value
  rrc.MeasurementControl_v7xyext_IEs
rrc.measurementIdentity measurementIdentity
  Unsigned 32-bit integer
  rrc.MeasurementIdentity
rrc.measurementInterval measurementInterval
  Unsigned 32-bit integer
  rrc.UE_Positioning_MeasurementInterval
rrc.measurementPowerOffset measurementPowerOffset
  Signed 32-bit integer
  rrc.MeasurementPowerOffset
rrc.measurementQuantity measurementQuantity
  Unsigned 32-bit integer
  rrc.MeasurementQuantityGSM
```



```
rrc.measurementReport measurementReport
    No value
    rrc.MeasurementReport

rrc.measurementReportTransferMode measurementReportTransferMode
    Unsigned 32-bit integer
    rrc.TransferMode

rrc.measurementReport_r3_add_ext measurementReport-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.measurementReport_v390ext measurementReport-v390ext
    No value
    rrc.MeasurementReport_v390ext

rrc.measurementReport_v4b0ext measurementReport-v4b0ext
    No value
    rrc.MeasurementReport_v4b0ext_IEs

rrc.measurementReport_v590ext measurementReport-v590ext
    No value
    rrc.MeasurementReport_v590ext_IEs

rrc.measurementReport_v5b0ext measurementReport-v5b0ext
    No value
    rrc.MeasurementReport_v5b0ext_IEs

rrc.measurementReport_v690ext measurementReport-v690ext
    No value
    rrc.MeasurementReport_v690ext_IEs

rrc.measurementReport_v7xyext measurementReport-v7xyext
    No value
    rrc.MeasurementReport_v7xyext_IEs

rrc.measurementReportingMode measurementReportingMode
    No value
    rrc.MeasurementReportingMode

rrc.measurementType measurementType
    Unsigned 32-bit integer
    rrc.MeasurementType

rrc.measurementValidity measurementValidity
    No value
    rrc.MeasurementValidity

rrc.measurement_feedback_Info measurement-feedback-Info
    No value
    rrc.Measurement_Feedback_Info

rrc.memoryPartitioning memoryPartitioning
    Unsigned 32-bit integer
    rrc.T_memoryPartitioning

rrc.messType messType
    Unsigned 32-bit integer
    rrc.MessType

rrc.message message
    Unsigned 32-bit integer
    rrc.DL_DCCH_MessageType
```

```
rrc.messageAuthenticationCode  messageAuthenticationCode
    Byte array
    rrc.MessageAuthenticationCode

rrc.messageExtensionNotComprehended  messageExtensionNotComprehended
    No value
    rrc.IdentificationOfReceivedMessage

rrc.messageNotCompatibleWithReceiverState  messageNotCompatibleWithReceiverState
    No value
    rrc.IdentificationOfReceivedMessage

rrc.messageTypeNonexistent  messageTypeNonexistent
    No value
    rrc.NULL

rrc.methodType  methodType
    Unsigned 32-bit integer
    rrc.UE_Positioning_MethodType

rrc.mibPLMN_Identity  mibPLMN-Identity
    Boolean
    rrc.BOOLEAN

rrc.mib_ValueTag  mib-ValueTag
    Unsigned 32-bit integer
    rrc.MIB_ValueTag

rrc.michConfigurationInfo  michConfigurationInfo
    No value
    rrc.MBMS_MICHConfigurationInfo_r6

rrc.michPowerOffset  michPowerOffset
    Signed 32-bit integer
    rrc.MBMS_MICHPowerOffset

rrc.midambleAllocationMode  midambleAllocationMode
    Unsigned 32-bit integer
    rrc.T_midambleAllocationMode

rrc.midambleConfiguration  midambleConfiguration
    Unsigned 32-bit integer
    rrc.INTEGER_1_8

rrc.midambleConfigurationBurstTypeland3  midambleConfigurationBurstTypeland3
    Unsigned 32-bit integer
    rrc.MidambleConfigurationBurstTypeland3

rrc.midambleConfigurationBurstType2  midambleConfigurationBurstType2
    Unsigned 32-bit integer
    rrc.MidambleConfigurationBurstType2

rrc.midambleShift  midambleShift
    Unsigned 32-bit integer
    rrc.MidambleShiftLong

rrc.midambleShiftAndBurstType  midambleShiftAndBurstType
    No value
    rrc.MidambleShiftAndBurstType_DL

rrc.midambleShiftAndBurstType_VHCR  midambleShiftAndBurstType-VHCR
    No value
    rrc.MidambleShiftAndBurstType_VHCR
```

```
rrc.midamble_Allocation_Mode  midamble-Allocation-Mode
    Unsigned 32-bit integer
    rrc.T_midamble_Allocation_Mode

rrc.midambleconfiguration  midambleconfiguration
    Unsigned 32-bit integer
    rrc.MidambleConfigurationBurstTypeland3

rrc.mimoN_M_Ratio  mimoN-M-Ratio
    Unsigned 32-bit integer
    rrc.MIMO_N_M_Ratio

rrc.mimoOperation  mimoOperation
    Unsigned 32-bit integer
    rrc.MIMO_Operation

rrc.mimoParameters  mimoParameters
    No value
    rrc.MIMO_Parameters

rrc.mimoPilotConfiguration  mimoPilotConfiguration
    No value
    rrc.MIMO_PilotConfiguration

rrc.min_P_REV  min-P-REV
    Byte array
    rrc.Min_P_REV

rrc.minimumAllowedTFC_Number  minimumAllowedTFC-Number
    Unsigned 32-bit integer
    rrc.TFC_Value

rrc.minimumSF  minimumSF
    Unsigned 32-bit integer
    rrc.MinimumSF_DL

rrc.minimumSpreadingFactor  minimumSpreadingFactor
    Unsigned 32-bit integer
    rrc.MinimumSpreadingFactor

rrc.minimum_Allowed_Code_Rate  minimum-Allowed-Code-Rate
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.missingPDU_Indicator  missingPDU-Indicator
    Boolean
    rrc.BOOLEAN

rrc.mmax  mmax
    Unsigned 32-bit integer
    rrc.INTEGER_1_32

rrc.mnc  mnc
    Unsigned 32-bit integer
    rrc.MNC

rrc.mode  mode
    Unsigned 32-bit integer
    rrc.T_mode

rrc.model  model
    No value
    rrc.NULL
```

```
rrc.mode2 mode2
    No value
    rrc.T_mode2

rrc.modeSpecific modeSpecific
    Unsigned 32-bit integer
    rrc.T_modeSpecific

rrc.modeSpecificInfo modeSpecificInfo
    Unsigned 32-bit integer
    rrc.T_modeSpecificInfo

rrc.modeSpecificInfo2 modeSpecificInfo2
    Unsigned 32-bit integer
    rrc.T_modeSpecificInfo2

rrc.modeSpecificPhysChInfo modeSpecificPhysChInfo
    Unsigned 32-bit integer
    rrc.T_modeSpecificPhysChInfo

rrc.modeSpecificTransChInfo modeSpecificTransChInfo
    Unsigned 32-bit integer
    rrc.T_modeSpecificTransChInfo

rrc.modifiedServiceList modifiedServiceList
    Unsigned 32-bit integer
    rrc.MBMS_ModifiedServiceList_r6

rrc.modificationPeriodCoefficient modificationPeriodCoefficient
    Unsigned 32-bit integer
    rrc.INTEGER_7_10

rrc.modificationPeriodIdentity modificationPeriodIdentity
    Unsigned 32-bit integer
    rrc.INTEGER_0_1

rrc.modify modify
    No value
    rrc.T_modify

rrc.modulation modulation
    Unsigned 32-bit integer
    rrc.T_modulation

rrc.monitoredCells monitoredCells
    Unsigned 32-bit integer
    rrc.MonitoredCellRACH_List

rrc.monitoredSetReportingQuantities monitoredSetReportingQuantities
    No value
    rrc.CellReportingQuantities

rrc.moreTimeslots moreTimeslots
    Unsigned 32-bit integer
    rrc.T_moreTimeslots

rrc.ms2_NonSchedTransmGranthARQAlloc ms2-NonSchedTransmGranthARQAlloc
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.ms2_SchedTransmGranthARQAlloc ms2-SchedTransmGranthARQAlloc
    Byte array
    rrc.BIT_STRING_SIZE_8
```

```
rrc.ms_part    ms-part
               Unsigned 32-bit integer
               rrc.INTEGER_0_1023

rrc.mschDefaultConfigurationInfo  mschDefaultConfigurationInfo
               No value
               rrc.MBMS_MSCH_ConfigurationInfo_r6

rrc.mschSchedulingInfo  mschSchedulingInfo
               Unsigned 32-bit integer
               rrc.MBMS_MSCHSchedulingInfo

rrc.msch_ConfigurationInfo  msch-ConfigurationInfo
               No value
               rrc.MBMS_MSCH_ConfigurationInfo_r6

rrc.msch_transportFormatSet  msch-transportFormatSet
               Unsigned 32-bit integer
               rrc.TransportFormatSet

rrc.msg_Type    msg-Type
               Byte array
               rrc.BIT_STRING_SIZE_8

rrc.mtch_L1CombiningPeriodList  mtch-L1CombiningPeriodList
               Unsigned 32-bit integer
               rrc.T_mtch_L1CombiningPeriodList

rrc.mtch_L1CombiningPeriodList_item  Item
               No value
               rrc.T_mtch_L1CombiningPeriodList_item

rrc.multiCarrierMeasurements  multiCarrierMeasurements
               Boolean
               rrc.BOOLEAN

rrc.multiCodeInfo  multiCodeInfo
               Unsigned 32-bit integer
               rrc.MultiCodeInfo

rrc.multiModeCapability  multiModeCapability
               Unsigned 32-bit integer
               rrc.MultiModeCapability

rrc.multiModeRAT_Capability_v590ext  multiModeRAT-Capability-v590ext
               No value
               rrc.MultiModeRAT_Capability_v590ext

rrc.multiModeRAT_Capability_v680ext  multiModeRAT-Capability-v680ext
               No value
               rrc.MultiModeRAT_Capability_v680ext

rrc.multiRAT_CapabilityList  multiRAT-CapabilityList
               No value
               rrc.MultiRAT_Capability

rrc.multipathIndicator  multipathIndicator
               Unsigned 32-bit integer
               rrc.MultipathIndicator

rrc.multiplePLMN_List  multiplePLMN-List
               No value
               rrc.MultiplePLMN_List_r6
```

```
rrc.multiplePLMNs  multiplePLMNs
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_5_OF_PLMN_IdentityWithOptionalMCC_r6
rrc.multiplePLMNs_item  Item
    No value
    rrc.PLMN_IdentityWithOptionalMCC_r6
rrc.n_300  n-300
    Unsigned 32-bit integer
    rrc.N_300
rrc.n_301  n-301
    Unsigned 32-bit integer
    rrc.N_301
rrc.n_302  n-302
    Unsigned 32-bit integer
    rrc.N_302
rrc.n_304  n-304
    Unsigned 32-bit integer
    rrc.N_304
rrc.n_308  n-308
    Unsigned 32-bit integer
    rrc.N_308
rrc.n_310  n-310
    Unsigned 32-bit integer
    rrc.N_310
rrc.n_312  n-312
    Unsigned 32-bit integer
    rrc.N_312
rrc.n_313  n-313
    Unsigned 32-bit integer
    rrc.N_313
rrc.n_315  n-315
    Unsigned 32-bit integer
    rrc.N_315
rrc.n_AP_RetransMax  n-AP-RetransMax
    Unsigned 32-bit integer
    rrc.N_AP_RetransMax
rrc.n_AccessFails  n-AccessFails
    Unsigned 32-bit integer
    rrc.N_AccessFails
rrc.n_CR  n-CR
    Unsigned 32-bit integer
    rrc.INTEGER_1_16
rrc.n_EOT  n-EOT
    Unsigned 32-bit integer
    rrc.N_EOT
rrc.n_E_HICH  n-E-HICH
    Unsigned 32-bit integer
    rrc.INTEGER_4_44
```

```
rrc.n_GAP n-GAP
    Unsigned 32-bit integer
    rrc.N_GAP

rrc.n_PCH n-PCH
    Unsigned 32-bit integer
    rrc.N_PCH

rrc.n_RUCCH n-RUCCH
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.n_StartMessage n-StartMessage
    Unsigned 32-bit integer
    rrc.N_StartMessage

rrc.nack_ack_power_offset nack-ack-power-offset
    Signed 32-bit integer
    rrc.INTEGER_M7_8

rrc.nas_Message nas-Message
    Byte array
    rrc.NAS_Message

rrc.nas_Synchronisation_Indicator nas-Synchronisation-Indicator
    Byte array
    rrc.NAS_Synchronisation_Indicator

rrc.navModelAddDataRequest navModelAddDataRequest
    No value
    rrc.UE_Positioning_GPS_NavModelAddDataReq

rrc.navigationModelRequest navigationModelRequest
    Boolean
    rrc.BOOLEAN

rrc.navigationModelSatInfoList navigationModelSatInfoList
    Unsigned 32-bit integer
    rrc.NavigationModelSatInfoList

rrc.nb01Max nb01Max
    Unsigned 32-bit integer
    rrc.NB01

rrc.nb01Min nb01Min
    Unsigned 32-bit integer
    rrc.NB01

rrc.ncMode ncMode
    Byte array
    rrc.NC_Mode

rrc.ncc ncc
    Unsigned 32-bit integer
    rrc.NCC

rrc.neighbourAndChannelIdentity neighbourAndChannelIdentity
    No value
    rrc.CellAndChannelIdentity

rrc.neighbourIdentity neighbourIdentity
    No value
    rrc.PrimaryCPICH_Info
```

```
rrc.neighbourList neighbourList
    Unsigned 32-bit integer
    rrc.NeighbourList

rrc.neighbourList_v390ext neighbourList-v390ext
    Unsigned 32-bit integer
    rrc.NeighbourList_v390ext

rrc.neighbourQuality neighbourQuality
    No value
    rrc.NeighbourQuality

rrc.neighbouringCellIdentity neighbouringCellIdentity
    Unsigned 32-bit integer
    rrc.IntraFreqCellID

rrc.neighbouringCellSCCPCHList neighbouringCellSCCPCHList
    Unsigned 32-bit integer
    rrc.MBMS_NeighbouringCellSCCPCHList_r6

rrc.networkAssistedGPS_Supported networkAssistedGPS-Supported
    Unsigned 32-bit integer
    rrc.NetworkAssistedGPS_Supported

rrc.newH_RNTI newH-RNTI
    Byte array
    rrc.H_RNTI

rrc.newInterFreqCellList newInterFreqCellList
    Unsigned 32-bit integer
    rrc.NewInterFreqCellList

rrc.newInterFrequencyCellInfoListAddon_r5 newInterFrequencyCellInfoListAddon-r5
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_CellSelectReselectInfo_v590ext

rrc.newInterFrequencyCellInfoListAddon_r5_item Item
    No value
    rrc.CellSelectReselectInfo_v590ext

rrc.newInterFrequencyCellInfoList_v590ext newInterFrequencyCellInfoList-v590ext
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_CellSelectReselectInfo_v590ext

rrc.newInterFrequencyCellInfoList_v590ext_item Item
    No value
    rrc.CellSelectReselectInfo_v590ext

rrc.newInterRATCellInfoListAddon_r5 newInterRATCellInfoListAddon-r5
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_CellSelectReselectInfo_v590ext

rrc.newInterRATCellInfoListAddon_r5_item Item
    No value
    rrc.CellSelectReselectInfo_v590ext

rrc.newInterRATCellInfoList_v590ext newInterRATCellInfoList-v590ext
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_CellSelectReselectInfo_v590ext

rrc.newInterRATCellInfoList_v590ext_item Item
    No value
    rrc.CellSelectReselectInfo_v590ext
```



```
rrc.newInterRATCellList newInterRATCellList
    Unsigned 32-bit integer
    rrc.NewInterRATCellList

rrc.newIntraFreqCellList newIntraFreqCellList
    Unsigned 32-bit integer
    rrc.NewIntraFreqCellList

rrc.newIntraFrequencyCellInfoListAddon_r5 newIntraFrequencyCellInfoListAddon-r5
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_CellSelectReselectInfo_v590ext

rrc.newIntraFrequencyCellInfoListAddon_r5_item Item
    No value
    rrc.CellSelectReselectInfo_v590ext

rrc.newIntraFrequencyCellInfoList_v590ext newIntraFrequencyCellInfoList-v590ext
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_CellSelectReselectInfo_v590ext

rrc.newIntraFrequencyCellInfoList_v590ext_item Item
    No value
    rrc.CellSelectReselectInfo_v590ext

rrc.newOperation newOperation
    No value
    rrc.HS_SCCH_Less_NewOperation

rrc.newParameters newParameters
    No value
    rrc.T_newParameters

rrc.newPrimary_E_RNTI newPrimary-E-RNTI
    Byte array
    rrc.E_RNTI

rrc.newSecondary_E_RNTI newSecondary-E-RNTI
    Byte array
    rrc.E_RNTI

rrc.newTiming newTiming
    No value
    rrc.NewTiming

rrc.newU_RNTI newU-RNTI
    No value
    rrc.U_RNTI

rrc.new_C_RNTI new-C-RNTI
    Byte array
    rrc.C_RNTI

rrc.new_Configuration new-Configuration
    No value
    rrc.T_new_Configuration

rrc.new_DSCH_RNTI new-DSCH-RNTI
    Byte array
    rrc.DSCH_RNTI

rrc.new_H_RNTI new-H-RNTI
    Byte array
    rrc.H_RNTI
```

```
rrc.new_U_RNTI    new-U-RNTI
                 No value
                 rrc.U_RNTI
rrc.new_c_RNTI    new-c-RNTI
                 Byte array
                 rrc.C_RNTI
rrc.nextSchedulingperiod  nextSchedulingperiod
                 Unsigned 32-bit integer
                 rrc.INTEGER_0_31
rrc.nf_BO_AllBusy  nf-BO-AllBusy
                 Unsigned 32-bit integer
                 rrc.NF_BO_AllBusy
rrc.nf_BO_Mismatch  nf-BO-Mismatch
                 Unsigned 32-bit integer
                 rrc.NF_BO_Mismatch
rrc.nf_BO_NoAICH   nf-BO-NoAICH
                 Unsigned 32-bit integer
                 rrc.NF_BO_NoAICH
rrc.nf_Max         nf-Max
                 Unsigned 32-bit integer
                 rrc.NF_Max
rrc.ni_CountPerFrame  ni-CountPerFrame
                 Unsigned 32-bit integer
                 rrc.MBMS_NI_CountPerFrame
rrc.nid           nid
                 Byte array
                 rrc.NID
rrc.nidentityAbort  nidentityAbort
                 Unsigned 32-bit integer
                 rrc.NidentityAbort
rrc.noCoding       noCoding
                 No value
                 rrc.NULL
rrc.noDiscard      noDiscard
                 Unsigned 32-bit integer
                 rrc.MaxDAT
rrc.noError        noError
                 No value
                 rrc.NULL
rrc.noMore         noMore
                 No value
                 rrc.NULL
rrc.noRelease      noRelease
                 No value
                 rrc.NULL
rrc.noReporting    noReporting
                 No value
                 rrc.ReportingCellStatusOpt
```

```
rrc.noRestriction  noRestriction
    No value
    rrc.NULL

rrc.noSegment  noSegment
    No value
    rrc.NULL

rrc.noSlotsForTFClAndTPC  noSlotsForTFClAndTPC
    Unsigned 32-bit integer
    rrc.INTEGER_1_5

rrc.nonCriticalExtension  nonCriticalExtension
    No value
    rrc.T_nonCriticalExtension

rrc.nonCriticalExtensions  nonCriticalExtensions
    No value
    rrc.T_nonCriticalExtensions

rrc.nonFreqRelatedEventResults  nonFreqRelatedEventResults
    Unsigned 32-bit integer
    rrc.CellMeasurementEventResults

rrc.nonFreqRelatedQuantities  nonFreqRelatedQuantities
    No value
    rrc.CellReportingQuantities

rrc.nonUsedFreqParameterList  nonUsedFreqParameterList
    Unsigned 32-bit integer
    rrc.NonUsedFreqParameterList

rrc.nonUsedFreqThreshold  nonUsedFreqThreshold
    Signed 32-bit integer
    rrc.Threshold

rrc.nonUsedFreqW  nonUsedFreqW
    Unsigned 32-bit integer
    rrc.W

rrc.nonVerifiedBSIC  nonVerifiedBSIC
    Unsigned 32-bit integer
    rrc.BCCH_ARFCN

rrc.non_HCS_t_CR_Max  non-HCS-t-CR-Max
    Unsigned 32-bit integer
    rrc.T_CRMax

rrc.non_ScheduledTransGrantInfo  non-ScheduledTransGrantInfo
    No value
    rrc.T_non_ScheduledTransGrantInfo

rrc.non_TCP_SPACE  non-TCP-SPACE
    Unsigned 32-bit integer
    rrc.INTEGER_3_65535

rrc.non_allowedTFC_List  non-allowedTFC-List
    Unsigned 32-bit integer
    rrc.Non_allowedTFC_List

rrc.noncriticalExtensions  noncriticalExtensions
    No value
    rrc.T_noncriticalExtensions
```

```
rrc.none none
    No value
    rrc.NULL

rrc.normalPattern normalPattern
    No value
    rrc.NULL

rrc.normalTFCI_Signalling normalTFCI-Signalling
    Unsigned 32-bit integer
    rrc.ExplicitTFCS_Configuration

rrc.notActive notActive
    No value
    rrc.NULL

rrc.notBarred notBarred
    No value
    rrc.NULL

rrc.notPresent notPresent
    No value
    rrc.T_notPresent

rrc.notStored notStored
    No value
    rrc.NULL

rrc.notSupported notSupported
    No value
    rrc.NULL

rrc.notUsed notUsed
    No value
    rrc.NULL

rrc.ns_BO_Busy ns-BO-Busy
    Unsigned 32-bit integer
    rrc.NS_BO_Busy

rrc.numAdditionalTimeslots numAdditionalTimeslots
    Unsigned 32-bit integer
    rrc.INTEGER_1_maxTS_1

rrc.numberOfDPDCH numberOfDPDCH
    Unsigned 32-bit integer
    rrc.NumberOfDPDCH

rrc.numberOfFBI_Bits numberOfFBI-Bits
    Unsigned 32-bit integer
    rrc.NumberOfFBI_Bits

rrc.numberOfOTDOA_Measurements numberOfOTDOA-Measurements
    Byte array
    rrc.BIT_STRING_SIZE_3

rrc.numberOfProcesses numberOfProcesses
    Unsigned 32-bit integer
    rrc.INTEGER_1_8

rrc.numberOfRepetitionsPerSFNPeriod numberOfRepetitionsPerSFNPeriod
    Unsigned 32-bit integer
    rrc.T_numberOfRepetitionsPerSFNPeriod
```

```
rrc.numberOfTbSizeAndTTIList  numberOfTbSizeAndTTIList
    Unsigned 32-bit integer
    rrc.NumberOfTbSizeAndTTIList

rrc.numberOfTbSizeList  numberOfTbSizeList
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxTF_OF_NumberOfTransportBlocks

rrc.numberOfTbSizeList_item  Item
    Unsigned 32-bit integer
    rrc.NumberOfTransportBlocks

rrc.numberOfTransportBlocks  numberOfTransportBlocks
    Unsigned 32-bit integer
    rrc.NumberOfTransportBlocks

rrc.octetModeRLC_SizeInfoType1  octetModeRLC-SizeInfoType1
    Unsigned 32-bit integer
    rrc.OctetModeRLC_SizeInfoType1

rrc.octetModeRLC_SizeInfoType2  octetModeRLC-SizeInfoType2
    Unsigned 32-bit integer
    rrc.OctetModeRLC_SizeInfoType2

rrc.octetModeType1  octetModeType1
    Unsigned 32-bit integer
    rrc.OctetModeRLC_SizeInfoType1

rrc.off  off
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.offset  offset
    Unsigned 32-bit integer
    rrc.INTEGER_0_1

rrc.old_Configuration  old-Configuration
    No value
    rrc.T_old_Configuration

rrc.omega  omega
    Byte array
    rrc.BIT_STRING_SIZE_24

rrc.omega0  omega0
    Byte array
    rrc.BIT_STRING_SIZE_24

rrc.omegaDot  omegaDot
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.onWithNoReporting  onWithNoReporting
    No value
    rrc.NULL

rrc.one  one
    No value
    rrc.NULL

rrc.oneLogicalChannel  oneLogicalChannel
    No value
    rrc.UL_LogicalChannelMapping
```

```
rrc.ongoingMeasRepList ongoingMeasRepList
    Unsigned 32-bit integer
    rrc.OngoingMeasRepList

rrc.openLoopPowerControl_IPDL_TDD openLoopPowerControl-IPDL-TDD
    No value
    rrc.OpenLoopPowerControl_IPDL_TDD_r4

rrc.openLoopPowerControl_TDD openLoopPowerControl-TDD
    No value
    rrc.OpenLoopPowerControl_TDD

rrc.orientationMajorAxis orientationMajorAxis
    Unsigned 32-bit integer
    rrc.INTEGER_0_89

rrc.other other
    Unsigned 32-bit integer
    rrc.T_other

rrc.otherEntries otherEntries
    Unsigned 32-bit integer
    rrc.PredefinedConfigStatusListVarSz

rrc.pCCPCH_LCR_Extensions pCCPCH-LCR-Extensions
    No value
    rrc.PrimaryCCPCH_Info_LCR_r4_ext

rrc.pCPICH_UsageForChannelEst pCPICH-UsageForChannelEst
    Unsigned 32-bit integer
    rrc.PCPICH_UsageForChannelEst

rrc.pNBSCH_Allocation_r4 pNBSCH-Allocation-r4
    No value
    rrc.PNBSCH_Allocation_r4

rrc.pSDomainSpecificAccessRestriction pSDomainSpecificAccessRestriction
    Unsigned 32-bit integer
    rrc.DomainSpecificAccessRestriction_v670ext

rrc.pSI pSI
    Unsigned 32-bit integer
    rrc.GERAN_SystemInformation

rrc.p_REV p-REV
    Byte array
    rrc.P_REV

rrc.p_TMSI p-TMSI
    Byte array
    rrc.P_TMSI_GSM_MAP

rrc.p_TMSI_GSM_MAP p-TMSI-GSM-MAP
    Byte array
    rrc.P_TMSI_GSM_MAP

rrc.p_TMSI_and_RAI p-TMSI-and-RAI
    No value
    rrc.P_TMSI_and_RAI_GSM_MAP

rrc.pagingCause pagingCause
    Unsigned 32-bit integer
    rrc.PagingCause
```

```
rrc.pagingIndicatorLength pagingIndicatorLength
    Unsigned 32-bit integer
    rrc.PagingIndicatorLength

rrc.pagingRecord2List pagingRecord2List
    Unsigned 32-bit integer
    rrc.PagingRecord2List_r5

rrc.pagingRecordList pagingRecordList
    Unsigned 32-bit integer
    rrc.PagingRecordList

rrc.pagingRecordTypeID pagingRecordTypeID
    Unsigned 32-bit integer
    rrc.PagingRecordTypeID

rrc.pagingType1 pagingType1
    No value
    rrc.PagingType1

rrc.pagingType1_r3_add_ext pagingType1-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.pagingType1_v590ext pagingType1-v590ext
    No value
    rrc.PagingType1_v590ext_IEs

rrc.pagingType2 pagingType2
    No value
    rrc.PagingType2

rrc.pagingType2_r3_add_ext pagingType2-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.parameters parameters
    Unsigned 32-bit integer
    rrc.T_parameters

rrc.part1 part1
    Unsigned 32-bit integer
    rrc.INTEGER_0_15

rrc.part2 part2
    Unsigned 32-bit integer
    rrc.INTEGER_1_7

rrc.pathloss pathloss
    Unsigned 32-bit integer
    rrc.Pathloss

rrc.pathloss_reportingIndicator pathloss-reportingIndicator
    Boolean
    rrc.BOOLEAN

rrc.payload payload
    Unsigned 32-bit integer
    rrc.T_payload

rrc.pc_Preamble pc-Preamble
    Unsigned 32-bit integer
    rrc.PC_Preamble
```

```
rrc.pcp_Length   pcp-Length
  Unsigned 32-bit integer
  rrc.PCP_Length

rrc.pcpch_ChannelInfoList  pcpch-ChannelInfoList
  Unsigned 32-bit integer
  rrc.PCPCH_ChannelInfoList

rrc.pcpch_DL_ChannelisationCode  pcpch-DL-ChannelisationCode
  Unsigned 32-bit integer
  rrc.INTEGER_0_511

rrc.pcpch_DL_ScramblingCode  pcpch-DL-ScramblingCode
  Unsigned 32-bit integer
  rrc.SecondaryScramblingCode

rrc.pcpch_UL_ScramblingCode  pcpch-UL-ScramblingCode
  Unsigned 32-bit integer
  rrc.INTEGER_0_79

rrc.pdcp_Capability  pdcp-Capability
  No value
  rrc.PDCP_Capability

rrc.pdcp_Capability_r4_ext  pdcp-Capability-r4-ext
  No value
  rrc.PDCP_Capability_r4_ext

rrc.pdcp_Capability_r5_ext  pdcp-Capability-r5-ext
  No value
  rrc.PDCP_Capability_r5_ext

rrc.pdcp_Capability_r5_ext2  pdcp-Capability-r5-ext2
  No value
  rrc.PDCP_Capability_r5_ext2

rrc.pdcp_Info  pdcp-Info
  No value
  rrc.PDCP_Info

rrc.pdcp_PDU_Header  pdcp-PDU-Header
  Unsigned 32-bit integer
  rrc.PDCP_PDU_Header

rrc.pdcp_ROHC_TargetMode  pdcp-ROHC-TargetMode
  Unsigned 32-bit integer
  rrc.PDCP_ROHC_TargetMode

rrc.pdcp_SN_Info  pdcp-SN-Info
  Unsigned 32-bit integer
  rrc.PDCP_SN_Info

rrc.pdschConfirmation  pdschConfirmation
  Unsigned 32-bit integer
  rrc.PDSCH_Identity

rrc.pdsch_AllocationPeriodInfo  pdsch-AllocationPeriodInfo
  No value
  rrc.AllocationPeriodInfo

rrc.pdsch_CapacityAllocationInfo  pdsch-CapacityAllocationInfo
  No value
  rrc.PDSCH_CapacityAllocationInfo
```



```
rrc.pdsch_CodeMapList pdsch-CodeMapList
    Unsigned 32-bit integer
    rrc.PDSCH_CodeMapList

rrc.pdsch_Identity pdsch-Identity
    Unsigned 32-bit integer
    rrc.PDSCH_Identity

rrc.pdsch_Info pdsch-Info
    No value
    rrc.PDSCH_Info

rrc.pdsch_PowerControlInfo pdsch-PowerControlInfo
    No value
    rrc.PDSCH_PowerControlInfo

rrc.pdsch_SysInfo pdsch-SysInfo
    No value
    rrc.PDSCH_SysInfo

rrc.pdsch_SysInfoList pdsch-SysInfoList
    Unsigned 32-bit integer
    rrc.PDSCH_SysInfoList

rrc.pdsch_SysInfoList_SFNI pdsch-SysInfoList-SFN
    Unsigned 32-bit integer
    rrc.PDSCH_SysInfoList_SFNI

rrc.pdsch_SysInfoList_SFNI_r7 pdsch-SysInfoList-SFN-r7
    Unsigned 32-bit integer
    rrc.PDSCH_SysInfoList_r7

rrc.pdsch_SysInfoList_r7 pdsch-SysInfoList-r7
    Unsigned 32-bit integer
    rrc.PDSCH_SysInfoList_r7

rrc.pdsch_TimeslotsCodes pdsch-TimeslotsCodes
    No value
    rrc.DownlinkTimeslotsCodes

rrc.penaltyTime penaltyTime
    Unsigned 32-bit integer
    rrc.PenaltyTime_RSCP

rrc.pendingAfterTrigger pendingAfterTrigger
    Unsigned 32-bit integer
    rrc.INTEGER_1_512

rrc.pendingTimeAfterTrigger pendingTimeAfterTrigger
    Unsigned 32-bit integer
    rrc.PendingTimeAfterTrigger

rrc.periodDuration periodDuration
    Unsigned 32-bit integer
    rrc.INTEGER_1_8

rrc.periodStart periodStart
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.periodicReportingInfo_1b periodicReportingInfo-1b
    No value
    rrc.PeriodicReportingInfo_1b
```

```
rrc.periodicalOrEventTrigger    periodicalOrEventTrigger
    Unsigned 32-bit integer
    rrc.PeriodicalOrEventTrigger

rrc.periodicalReportingCriteria  periodicalReportingCriteria
    No value
    rrc.PeriodicalReportingCriteria

rrc.periodicityOfSchedInfo_Grant  periodicityOfSchedInfo-Grant
    Unsigned 32-bit integer
    rrc.E_DPDCH_PeriodicityOfSchedInfo

rrc.periodicityOfSchedInfo_NoGrant  periodicityOfSchedInfo-NoGrant
    Unsigned 32-bit integer
    rrc.E_DPDCH_PeriodicityOfSchedInfo

rrc.persistenceScalingFactorList  persistenceScalingFactorList
    Unsigned 32-bit integer
    rrc.PersistenceScalingFactorList

rrc.physChDuration    physChDuration
    Unsigned 32-bit integer
    rrc.DurationTimeInfo

rrc.physicalChannelCapabComp_hspdsch_r6  physicalChannelCapabComp-hspdsch-r6
    Unsigned 32-bit integer
    rrc.HSDSCH_physical_layer_category

rrc.physicalChannelCapability  physicalChannelCapability
    No value
    rrc.PhysicalChannelCapability

rrc.physicalChannelCapability_LCR  physicalChannelCapability-LCR
    No value
    rrc.PhysicalChannelCapability_LCR_r4

rrc.physicalChannelCapability_edch_r6  physicalChannelCapability-edch-r6
    No value
    rrc.PhysicalChannelCapability_edch_r6

rrc.physicalChannelCapability_hspdsch_r7  physicalChannelCapability-hspdsch-r7
    No value
    rrc.PhysicalChannelCapability_hspdsch_r7

rrc.physicalChannelCapability_r7  physicalChannelCapability-r7
    No value
    rrc.PhysicalChannelCapability_r7

rrc.physicalChannelFailure  physicalChannelFailure
    No value
    rrc.NULL

rrc.physicalChannelReconfiguration  physicalChannelReconfiguration
    Unsigned 32-bit integer
    rrc.PhysicalChannelReconfiguration

rrc.physicalChannelReconfigurationComplete  physicalChannelReconfigurationComple
    No value
    rrc.PhysicalChannelReconfigurationComplete

rrc.physicalChannelReconfigurationComplete_r3_add_ext  physicalChannelReconfigur
    Byte array
    rrc.BIT_STRING
```

```
rrc.physicalChannelReconfigurationComplete_v7xyext  physicalChannelReconfigurati
  No value
  rrc.PhysicalChannelReconfigurationComplete_v7xyext_IEs
rrc.physicalChannelReconfigurationFailure  physicalChannelReconfigurationFailure
  No value
  rrc.PhysicalChannelReconfigurationFailure
rrc.physicalChannelReconfigurationFailure_r3_add_ext  physicalChannelReconfigura
  Byte array
  rrc.BIT_STRING
rrc.physicalChannelReconfiguration_r3  physicalChannelReconfiguration-r3
  No value
  rrc.PhysicalChannelReconfiguration_r3_IEs
rrc.physicalChannelReconfiguration_r3_add_ext  physicalChannelReconfiguration-r3
  Byte array
  rrc.BIT_STRING
rrc.physicalChannelReconfiguration_r4  physicalChannelReconfiguration-r4
  No value
  rrc.PhysicalChannelReconfiguration_r4_IEs
rrc.physicalChannelReconfiguration_r4_add_ext  physicalChannelReconfiguration-r4
  Byte array
  rrc.BIT_STRING
rrc.physicalChannelReconfiguration_r5  physicalChannelReconfiguration-r5
  No value
  rrc.PhysicalChannelReconfiguration_r5_IEs
rrc.physicalChannelReconfiguration_r5_add_ext  physicalChannelReconfiguration-r5
  Byte array
  rrc.BIT_STRING
rrc.physicalChannelReconfiguration_r6  physicalChannelReconfiguration-r6
  No value
  rrc.PhysicalChannelReconfiguration_r6_IEs
rrc.physicalChannelReconfiguration_r6_add_ext  physicalChannelReconfiguration-r6
  Byte array
  rrc.BIT_STRING
rrc.physicalChannelReconfiguration_r7  physicalChannelReconfiguration-r7
  No value
  rrc.PhysicalChannelReconfiguration_r7_IEs
rrc.physicalChannelReconfiguration_r7_add_ext  physicalChannelReconfiguration-r7
  Byte array
  rrc.BIT_STRING
rrc.physicalChannelReconfiguration_v3a0ext  physicalChannelReconfiguration-v3a0e
  No value
  rrc.PhysicalChannelReconfiguration_v3a0ext
rrc.physicalChannelReconfiguration_v4b0ext  physicalChannelReconfiguration-v4b0e
  No value
  rrc.PhysicalChannelReconfiguration_v4b0ext_IEs
rrc.physicalChannelReconfiguration_v590ext  physicalChannelReconfiguration-v590e
  No value
  rrc.PhysicalChannelReconfiguration_v590ext_IEs
```

```
rrc.physicalChannelReconfiguration_v690ext  physicalChannelReconfiguration-v690e
    No value
    rrc.PhysicalChannelReconfiguration_v690ext_IEs
rrc.physicalChannelReconfiguration_v6b0ext  physicalChannelReconfiguration-v6b0e
    No value
    rrc.PhysicalChannelReconfiguration_v6b0ext_IEs
rrc.physicalChannelReconfiguration_v7xyext  physicalChannelReconfiguration-v7xye
    No value
    rrc.PhysicalChannelReconfiguration_v7xyext_IEs
rrc.physicalSharedChannelAllocation  physicalSharedChannelAllocation
    Unsigned 32-bit integer
    rrc.PhysicalSharedChannelAllocation
rrc.physicalSharedChannelAllocation_r3  physicalSharedChannelAllocation-r3
    No value
    rrc.PhysicalSharedChannelAllocation_r3_IEs
rrc.physicalSharedChannelAllocation_r3_add_ext  physicalSharedChannelAllocation-
    Byte array
    rrc.BIT_STRING
rrc.physicalSharedChannelAllocation_r4  physicalSharedChannelAllocation-r4
    No value
    rrc.PhysicalSharedChannelAllocation_r4_IEs
rrc.physicalSharedChannelAllocation_r4_add_ext  physicalSharedChannelAllocation-
    Byte array
    rrc.BIT_STRING
rrc.physicalSharedChannelAllocation_v690ext  physicalSharedChannelAllocation-v69
    No value
    rrc.PhysicalSharedChannelAllocation_v690ext_IEs
rrc.physicalSharedChannelAllocation_v7xyext  physicalSharedChannelAllocation-v7x
    No value
    rrc.PhysicalSharedChannelAllocation_v7xyext_IEs
rrc.physicalchannelcapability_edch  physicalchannelcapability-edch
    No value
    rrc.PhysicalChannelCapability_edch_r6
rrc.physicalchannelcapability_tddedch  physicalchannelcapability-tddedch
    No value
    rrc.PhysicalChannelCapability_tddedch_r7
rrc.pi_CountPerFrame  pi-CountPerFrame
    Unsigned 32-bit integer
    rrc.PI_CountPerFrame
rrc.pichChannelisationCodeList_LCR_r4  pichChannelisationCodeList-LCR-r4
    Unsigned 32-bit integer
    rrc.PichChannelisationCodeList_LCR_r4
rrc.pich_Info  pich-Info
    Unsigned 32-bit integer
    rrc.PICH_Info
rrc.pich_PowerOffset  pich-PowerOffset
    Signed 32-bit integer
    rrc.PICH_PowerOffset
```

```
rrc.pilotSymbolExistence pilotSymbolExistence
  Boolean
  rrc.BOOLEAN

rrc.pl_NonMax pl-NonMax
  Unsigned 32-bit integer
  rrc.E_DPDCH_PL_NonMax

rrc.plcchSequenceNumber plcchSequenceNumber
  Unsigned 32-bit integer
  rrc.INTEGER_1_14

rrc.plcch_info plcch-info
  No value
  rrc.PLCCH_Info

rrc.plmn_Identity plmn-Identity
  No value
  rrc.PLMN_Identity

rrc.plmn_Type plmn-Type
  Unsigned 32-bit integer
  rrc.PLMN_Type

rrc.plmn_ValueTag plmn-ValueTag
  Unsigned 32-bit integer
  rrc.PLMN_ValueTag

rrc.plmnsOfInterFreqCellsList plmnsOfInterFreqCellsList
  Unsigned 32-bit integer
  rrc.PLMNsOfInterFreqCellsList

rrc.plmnsOfInterRATCellsList plmnsOfInterRATCellsList
  Unsigned 32-bit integer
  rrc.PLMNsOfInterRATCellsList

rrc.plmnsOfIntraFreqCellsList plmnsOfIntraFreqCellsList
  Unsigned 32-bit integer
  rrc.PLMNsOfIntraFreqCellsList

rrc.pollWindow pollWindow
  Unsigned 32-bit integer
  rrc.PollWindow

rrc.poll_PDU poll-PDU
  Unsigned 32-bit integer
  rrc.Poll_PDU

rrc.poll_SDU poll-SDU
  Unsigned 32-bit integer
  rrc.Poll_SDU

rrc.pollingInfo pollingInfo
  No value
  rrc.PollingInfo

rrc.positionEstimate positionEstimate
  Unsigned 32-bit integer
  rrc.PositionEstimate

rrc.positionFixedOrFlexible positionFixedOrFlexible
  Unsigned 32-bit integer
  rrc.PositionFixedOrFlexible
```

```
rrc.positioningMethod positioningMethod
    Unsigned 32-bit integer
    rrc.PositioningMethod

rrc.positioningMode positioningMode
    Unsigned 32-bit integer
    rrc.T_positioningMode

rrc.postVerificationPeriod postVerificationPeriod
    Unsigned 32-bit integer
    rrc.T_postVerificationPeriod

rrc.potentiallySuccessfulBearerList potentiallySuccessfulBearerList
    Unsigned 32-bit integer
    rrc.RB_IdentityList

rrc.powerControlAlgorithm powerControlAlgorithm
    Unsigned 32-bit integer
    rrc.PowerControlAlgorithm

rrc.powerOffsetForSchedInfo powerOffsetForSchedInfo
    Unsigned 32-bit integer
    rrc.INTEGER_0_6

rrc.powerOffsetInfoShort powerOffsetInfoShort
    No value
    rrc.PowerOffsetInfoShort

rrc.powerOffsetInformation powerOffsetInformation
    No value
    rrc.PowerOffsetInformation

rrc.powerOffsetPilot_pdpdch powerOffsetPilot-pdpdch
    Unsigned 32-bit integer
    rrc.PowerOffsetPilot_pdpdch

rrc.powerOffsetPp_m powerOffsetPp-m
    Signed 32-bit integer
    rrc.PowerOffsetPp_m

rrc.powerOffsetTPC_pdpdch powerOffsetTPC-pdpdch
    Unsigned 32-bit integer
    rrc.PowerOffsetTPC_pdpdch

rrc.powerRampStep powerRampStep
    Unsigned 32-bit integer
    rrc.PowerRampStep

rrc.powerResourceRelatedInfo powerResourceRelatedInfo
    Unsigned 32-bit integer
    rrc.INTEGER_1_16

rrc.power_level_HSSICH power-level-HSSICH
    Signed 32-bit integer
    rrc.INTEGER_M120_M58

rrc.prach_ChanCodes_LCR prach-ChanCodes-LCR
    Unsigned 32-bit integer
    rrc.PRACH_ChanCodes_LCR_r4

rrc.prach_ConstantValue prach-ConstantValue
    Signed 32-bit integer
    rrc.ConstantValueTdd
```

```
rrc.prach_DefinitionList prach-DefinitionList
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxPRACH_FPACH_OF_PRACH_Definition_LCR_r4
rrc.prach_DefinitionList_item Item
    No value
    rrc.PRACH_Definition_LCR_r4
rrc.prach_Information_SIB5_List prach-Information-SIB5-List
    Unsigned 32-bit integer
    rrc.DynamicPersistenceLevelList
rrc.prach_Information_SIB6_List prach-Information-SIB6-List
    Unsigned 32-bit integer
    rrc.DynamicPersistenceLevelList
rrc.prach_Midamble prach-Midamble
    Unsigned 32-bit integer
    rrc.PRACH_Midamble
rrc.prach_Partitioning prach-Partitioning
    Unsigned 32-bit integer
    rrc.PRACH_Partitioning
rrc.prach_Partitioning_LCR prach-Partitioning-LCR
    Unsigned 32-bit integer
    rrc.PRACH_Partitioning_LCR_r4
rrc.prach_PowerOffset prach-PowerOffset
    No value
    rrc.PRACH_PowerOffset
rrc.prach_RACH_Info prach-RACH-Info
    No value
    rrc.PRACH_RACH_Info
rrc.prach_RACH_Info_LCR prach-RACH-Info-LCR
    No value
    rrc.PRACH_RACH_Info_LCR_r4
rrc.prach_SystemInformationList prach-SystemInformationList
    Unsigned 32-bit integer
    rrc.PRACH_SystemInformationList
rrc.prach_SystemInformationList_LCR_r4 prach-SystemInformationList-LCR-r4
    Unsigned 32-bit integer
    rrc.PRACH_SystemInformationList_LCR_r4
rrc.prach_SystemInformationList_r7 prach-SystemInformationList-r7
    Unsigned 32-bit integer
    rrc.PRACH_SystemInformationList_r7
rrc.prach_TFCS prach-TFCS
    Unsigned 32-bit integer
    rrc.TFCS
rrc.prc prc
    Signed 32-bit integer
    rrc.PRC
rrc.preConfigMode preConfigMode
    Unsigned 32-bit integer
    rrc.T_preConfigMode
```

```
rrc.preDefPhyChConfiguration  preDefPhyChConfiguration
    No value
    rrc.PreDefPhyChConfiguration
rrc.preDefTransChConfiguration  preDefTransChConfiguration
    No value
    rrc.PreDefTransChConfiguration
rrc.preDefinedRadioConfiguration  preDefinedRadioConfiguration
    No value
    rrc.PreDefRadioConfiguration
rrc.preambleRetransMax  preambleRetransMax
    Unsigned 32-bit integer
    rrc.PreambleRetransMax
rrc.preambleScramblingCodeWordNumber  preambleScramblingCodeWordNumber
    Unsigned 32-bit integer
    rrc.PreambleScramblingCodeWordNumber
rrc.preconfiguration  preconfiguration
    No value
    rrc.T_preconfiguration
rrc.predefinedConfigIdentity  predefinedConfigIdentity
    Unsigned 32-bit integer
    rrc.PredefinedConfigIdentity
rrc.predefinedConfigStatusInfo  predefinedConfigStatusInfo
    Boolean
    rrc.BOOLEAN
rrc.predefinedConfigStatusList  predefinedConfigStatusList
    Unsigned 32-bit integer
    rrc.T_predefinedConfigStatusList
rrc.predefinedConfigStatusListComp  predefinedConfigStatusListComp
    No value
    rrc.PredefinedConfigStatusListComp
rrc.predefinedConfigValueTag  predefinedConfigValueTag
    Unsigned 32-bit integer
    rrc.PredefinedConfigValueTag
rrc.predefinedRB_Configuration  predefinedRB-Configuration
    No value
    rrc.PredefinedRB_Configuration
rrc.preferredFreqRequest  preferredFreqRequest
    No value
    rrc.FrequencyInfo
rrc.present  present
    Unsigned 32-bit integer
    rrc.PredefinedConfigStatusList
rrc.primaryCCPCH_Info  primaryCCPCH-Info
    No value
    rrc.PrimaryCCPCH_InfoPost
rrc.primaryCCPCH_RSCP  primaryCCPCH-RSCP
    Unsigned 32-bit integer
    rrc.PrimaryCCPCH_RSCP
```



```
rrc.primaryCCPCH_RSCP_delta  primaryCCPCH-RSCP-delta
Signed 32-bit integer
rrc.DeltaRSCP

rrc.primaryCCPCH_RSCP_reportingIndicator  primaryCCPCH-RSCP-reportingIndicator
Boolean
rrc.BOOLEAN

rrc.primaryCCPCH_TX_Power  primaryCCPCH-TX-Power
Unsigned 32-bit integer
rrc.PrimaryCCPCH_TX_Power

rrc.primaryCPICH_Info  primaryCPICH-Info
No value
rrc.PrimaryCPICH_Info

rrc.primaryCPICH_TX_Power  primaryCPICH-TX-Power
Signed 32-bit integer
rrc.PrimaryCPICH_TX_Power

rrc.primaryScramblingCode  primaryScramblingCode
Unsigned 32-bit integer
rrc.PrimaryScramblingCode

rrc.primary_Secondary_GrantSelector  primary-Secondary-GrantSelector
Unsigned 32-bit integer
rrc.T_primary_Secondary_GrantSelector

rrc.primary_plmn_Identity  primary-plmn-Identity
No value
rrc.PLMN_Identity

rrc.proposedTGSN  proposedTGSN
Unsigned 32-bit integer
rrc.TGSN

rrc.proposedTGSN_ReportingRequired  proposedTGSN-ReportingRequired
Boolean
rrc.BOOLEAN

rrc.protocolError  protocolError
No value
rrc.ProtocolErrorInformation

rrc.protocolErrorCause  protocolErrorCause
Unsigned 32-bit integer
rrc.ProtocolErrorCause

rrc.protocolErrorIndicator  protocolErrorIndicator
Unsigned 32-bit integer
rrc.ProtocolErrorIndicatorWithMoreInfo

rrc.protocolErrorInformation  protocolErrorInformation
No value
rrc.ProtocolErrorMoreInformation

rrc.prxBASEdes  prxBASEdes
Signed 32-bit integer
rrc.INTEGER_M112_M50

rrc.prxUpPCHdes  prxUpPCHdes
Unsigned 32-bit integer
rrc.INTEGER_0_62
```

```
rrc.ps_domain ps-domain
  No value
  rrc.NULL

rrc.pseudorangeRMS_Error pseudorangeRMS-Error
  Unsigned 32-bit integer
  rrc.INTEGER_0_63

rrc.pt10 pt10
  Unsigned 32-bit integer
  rrc.TemporaryOffset1

rrc.pt20 pt20
  Unsigned 32-bit integer
  rrc.TemporaryOffset1

rrc.pt30 pt30
  Unsigned 32-bit integer
  rrc.TemporaryOffset1

rrc.pt40 pt40
  Unsigned 32-bit integer
  rrc.TemporaryOffset1

rrc.pt50 pt50
  Unsigned 32-bit integer
  rrc.TemporaryOffset1

rrc.pt60 pt60
  Unsigned 32-bit integer
  rrc.TemporaryOffset1

rrc.puncturingLimit puncturingLimit
  Unsigned 32-bit integer
  rrc.PuncturingLimit

rrc.puschCapacityRequest puschCapacityRequest
  No value
  rrc.PUSCHCapacityRequest

rrc.puschCapacityRequest_r3_add_ext puschCapacityRequest-r3-add-ext
  Byte array
  rrc.BIT_STRING

rrc.puschCapacityRequest_v590ext puschCapacityRequest-v590ext
  No value
  rrc.PUSCHCapacityRequest_v590ext

rrc.puschConfirmation puschConfirmation
  Unsigned 32-bit integer
  rrc.PUSCH_Identity

rrc.pusch_Allocation pusch-Allocation
  Unsigned 32-bit integer
  rrc.T_pusch_Allocation

rrc.pusch_AllocationAssignment pusch-AllocationAssignment
  No value
  rrc.T_pusch_AllocationAssignment

rrc.pusch_AllocationPending pusch-AllocationPending
  No value
  rrc.NULL
```

```
rrc.pusch_AllocationPeriodInfo  pusch-AllocationPeriodInfo
    No value
    rrc.AllocationPeriodInfo
rrc.pusch_CapacityAllocationInfo  pusch-CapacityAllocationInfo
    No value
    rrc.PUSCH_CapacityAllocationInfo
rrc.pusch_ConstantValue  pusch-ConstantValue
    Signed 32-bit integer
    rrc.ConstantValueTdd
rrc.pusch_Identity  pusch-Identity
    Unsigned 32-bit integer
    rrc.PUSCH_Identity
rrc.pusch_Info  pusch-Info
    No value
    rrc.PUSCH_Info
rrc.pusch_Info_VHCR  pusch-Info-VHCR
    No value
    rrc.PUSCH_Info_VHCR
rrc.pusch_PowerControlInfo  pusch-PowerControlInfo
    Unsigned 32-bit integer
    rrc.UL_TargetSIR
rrc.pusch_SysInfo  pusch-SysInfo
    No value
    rrc.PUSCH_SysInfo
rrc.pusch_SysInfoList  pusch-SysInfoList
    Unsigned 32-bit integer
    rrc.PUSCH_SysInfoList
rrc.pusch_SysInfoList_SFN  pusch-SysInfoList-SFN
    Unsigned 32-bit integer
    rrc.PUSCH_SysInfoList_SFN
rrc.pusch_SysInfoList_SFN_VHCR  pusch-SysInfoList-SFN-VHCR
    Unsigned 32-bit integer
    rrc.PUSCH_SysInfoList_SFN_VHCR
rrc.pusch_SysInfo_VHCR  pusch-SysInfo-VHCR
    No value
    rrc.PUSCH_SysInfo_VHCR
rrc.pusch_TimeslotsCodes  pusch-TimeslotsCodes
    No value
    rrc.UplinkTimeslotsCodes
rrc.pusch_TimeslotsCodes_VHCR  pusch-TimeslotsCodes-VHCR
    No value
    rrc.UplinkTimeslotsCodes_VHCR
rrc.q_HCS  q-HCS
    Unsigned 32-bit integer
    rrc.Q_HCS
rrc.q_HYST_2_S  q-HYST-2-S
    Unsigned 32-bit integer
    rrc.Q_Hyst_S
```

```
rrc.q_Hyst_2_S_FACH  q-Hyst-2-S-FACH
    Unsigned 32-bit integer
    rrc.Q_Hyst_S_Fine

rrc.q_Hyst_2_S_PCH  q-Hyst-2-S-PCH
    Unsigned 32-bit integer
    rrc.Q_Hyst_S_Fine

rrc.q_Hyst_1_S  q-Hyst-1-S
    Unsigned 32-bit integer
    rrc.Q_Hyst_S

rrc.q_Hyst_1_S_FACH  q-Hyst-1-S-FACH
    Unsigned 32-bit integer
    rrc.Q_Hyst_S_Fine

rrc.q_Hyst_1_S_PCH  q-Hyst-1-S-PCH
    Unsigned 32-bit integer
    rrc.Q_Hyst_S_Fine

rrc.q_Offset1S_N  q-Offset1S-N
    Signed 32-bit integer
    rrc.Q_OffsetS_N

rrc.q_Offset2S_N  q-Offset2S-N
    Signed 32-bit integer
    rrc.Q_OffsetS_N

rrc.q_OffsetS_N  q-OffsetS-N
    Signed 32-bit integer
    rrc.Q_OffsetS_N

rrc.q_QualMin  q-QualMin
    Signed 32-bit integer
    rrc.Q_QualMin

rrc.q_RxlevMin  q-RxlevMin
    Signed 32-bit integer
    rrc.Q_RxlevMin

rrc.qualityEventResults  qualityEventResults
    Unsigned 32-bit integer
    rrc.QualityEventResults

rrc.qualityMeasuredResults  qualityMeasuredResults
    No value
    rrc.QualityMeasuredResults

rrc.qualityMeasurement  qualityMeasurement
    No value
    rrc.QualityMeasurement

rrc.qualityReportingCriteria  qualityReportingCriteria
    Unsigned 32-bit integer
    rrc.QualityReportingCriteria

rrc.qualityReportingQuantity  qualityReportingQuantity
    No value
    rrc.QualityReportingQuantity

rrc.qualityTarget  qualityTarget
    No value
    rrc.QualityTarget
```

```
rrc.r3 r3
    No value
    rrc.T_r3
rrc.r4 r4
    No value
    rrc.T_r4
rrc.r5 r5
    No value
    rrc.T_r5
rrc.r6 r6
    No value
    rrc.T_r6
rrc.r7 r7
    No value
    rrc.T_r7
rrc.rB_WithPDCP_InfoList rB-WithPDCP-InfoList
    Unsigned 32-bit integer
    rrc.RB_WithPDCP_InfoList
rrc.rFC3095_ContextInfoList_r5 rFC3095-ContextInfoList-r5
    Unsigned 32-bit integer
    rrc.RFC3095_ContextInfoList_r5
rrc.rL_RemovalInformationList rL-RemovalInformationList
    Unsigned 32-bit integer
    rrc.RL_RemovalInformationList
rrc.rRCCConnectionRequest_v3d0ext rRCCConnectionRequest-v3d0ext
    No value
    rrc.RRCCConnectionRequest_v3d0ext_IEs
rrc.rRC_FailureInfo_r3 rRC-FailureInfo-r3
    No value
    rrc.RRC_FailureInfo_r3_IEs
rrc.rab_Identity rab-Identity
    Unsigned 32-bit integer
    rrc.RAB_Identity
rrc.rab_Info rab-Info
    No value
    rrc.RAB_Info_Post
rrc.rab_Info_r6_ext rab-Info-r6-ext
    No value
    rrc.RAB_Info_r6_ext
rrc.rab_Info_v6b0ext rab-Info-v6b0ext
    No value
    rrc.RAB_Info_v6b0ext
rrc.rab_InformationList rab-InformationList
    Unsigned 32-bit integer
    rrc.RAB_InformationList
rrc.rab_InformationReconfigList rab-InformationReconfigList
    Unsigned 32-bit integer
    rrc.RAB_InformationReconfigList
```

```
rrc.rab_InformationSetupList  rab-InformationSetupList
    Unsigned 32-bit integer
    rrc.RAB_InformationSetupList

rrc.rab_InformationSetupListExt  rab-InformationSetupListExt
    Unsigned 32-bit integer
    rrc.RAB_InformationSetupList_v6b0ext

rrc.rac  rac
    Byte array
    rrc.RoutingAreaCode

rrc.rach  rach
    No value
    rrc.NULL

rrc.rach_TFCS  rach-TFCS
    Unsigned 32-bit integer
    rrc.TFCS

rrc.rach_TransmissionParameters  rach-TransmissionParameters
    No value
    rrc.RACH_TransmissionParameters

rrc.rach_TransportFormatSet  rach-TransportFormatSet
    Unsigned 32-bit integer
    rrc.TransportFormatSet

rrc.rach_TransportFormatSet_LCR  rach-TransportFormatSet-LCR
    Unsigned 32-bit integer
    rrc.TransportFormatSet_LCR

rrc.rachorcpcch  rachorcpcch
    No value
    rrc.NULL

rrc.radioBearerReconfiguration  radioBearerReconfiguration
    Unsigned 32-bit integer
    rrc.RadioBearerReconfiguration

rrc.radioBearerReconfigurationComplete  radioBearerReconfigurationComplete
    No value
    rrc.RadioBearerReconfigurationComplete

rrc.radioBearerReconfigurationComplete_r3_add_ext  radioBearerReconfigurationCom
    Byte array
    rrc.BIT_STRING

rrc.radioBearerReconfigurationComplete_v7xyext  radioBearerReconfigurationComple
    No value
    rrc.RadioBearerReconfigurationComplete_v7xyext_IEs

rrc.radioBearerReconfigurationFailure  radioBearerReconfigurationFailure
    No value
    rrc.RadioBearerReconfigurationFailure

rrc.radioBearerReconfigurationFailure_r3_add_ext  radioBearerReconfigurationFail
    Byte array
    rrc.BIT_STRING

rrc.radioBearerReconfiguration_r3  radioBearerReconfiguration-r3
    No value
    rrc.RadioBearerReconfiguration_r3_IEs
```

```
rrc.radioBearerReconfiguration_r3_add_ext  radioBearerReconfiguration-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.radioBearerReconfiguration_r4  radioBearerReconfiguration-r4
    No value
    rrc.RadioBearerReconfiguration_r4_IEs

rrc.radioBearerReconfiguration_r4_add_ext  radioBearerReconfiguration-r4-add-ext
    Byte array
    rrc.BIT_STRING

rrc.radioBearerReconfiguration_r5  radioBearerReconfiguration-r5
    No value
    rrc.RadioBearerReconfiguration_r5_IEs

rrc.radioBearerReconfiguration_r5_add_ext  radioBearerReconfiguration-r5-add-ext
    Byte array
    rrc.BIT_STRING

rrc.radioBearerReconfiguration_r6  radioBearerReconfiguration-r6
    No value
    rrc.RadioBearerReconfiguration_r6_IEs

rrc.radioBearerReconfiguration_r6_add_ext  radioBearerReconfiguration-r6-add-ext
    Byte array
    rrc.BIT_STRING

rrc.radioBearerReconfiguration_r7  radioBearerReconfiguration-r7
    No value
    rrc.RadioBearerReconfiguration_r7_IEs

rrc.radioBearerReconfiguration_v3a0ext  radioBearerReconfiguration-v3a0ext
    No value
    rrc.RadioBearerReconfiguration_v3a0ext

rrc.radioBearerReconfiguration_v4b0ext  radioBearerReconfiguration-v4b0ext
    No value
    rrc.RadioBearerReconfiguration_v4b0ext_IEs

rrc.radioBearerReconfiguration_v590ext  radioBearerReconfiguration-v590ext
    No value
    rrc.RadioBearerReconfiguration_v590ext_IEs

rrc.radioBearerReconfiguration_v5d0ext  radioBearerReconfiguration-v5d0ext
    No value
    rrc.RadioBearerReconfiguration_v5d0ext_IEs

rrc.radioBearerReconfiguration_v690ext  radioBearerReconfiguration-v690ext
    No value
    rrc.RadioBearerReconfiguration_v690ext_IEs

rrc.radioBearerReconfiguration_v6b0ext  radioBearerReconfiguration-v6b0ext
    No value
    rrc.RadioBearerReconfiguration_v6b0ext_IEs

rrc.radioBearerReconfiguration_v7xyext  radioBearerReconfiguration-v7xyext
    No value
    rrc.RadioBearerReconfiguration_v7xyext_IEs

rrc.radioBearerRelease  radioBearerRelease
    Unsigned 32-bit integer
    rrc.RadioBearerRelease
```

```
rrc.radioBearerReleaseComplete  radioBearerReleaseComplete
    No value
    rrc.RadioBearerReleaseComplete
rrc.radioBearerReleaseComplete_r3_add_ext  radioBearerReleaseComplete-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerReleaseComplete_v7xyext  radioBearerReleaseComplete-v7xyext
    No value
    rrc.RadioBearerReleaseComplete_v7xyext_IEs
rrc.radioBearerReleaseFailure  radioBearerReleaseFailure
    No value
    rrc.RadioBearerReleaseFailure
rrc.radioBearerReleaseFailure_r3_add_ext  radioBearerReleaseFailure-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerRelease_r3  radioBearerRelease-r3
    No value
    rrc.RadioBearerRelease_r3_IEs
rrc.radioBearerRelease_r3_add_ext  radioBearerRelease-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerRelease_r4  radioBearerRelease-r4
    No value
    rrc.RadioBearerRelease_r4_IEs
rrc.radioBearerRelease_r4_add_ext  radioBearerRelease-r4-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerRelease_r5  radioBearerRelease-r5
    No value
    rrc.RadioBearerRelease_r5_IEs
rrc.radioBearerRelease_r5_add_ext  radioBearerRelease-r5-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerRelease_r6  radioBearerRelease-r6
    No value
    rrc.RadioBearerRelease_r6_IEs
rrc.radioBearerRelease_r6_add_ext  radioBearerRelease-r6-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerRelease_r7  radioBearerRelease-r7
    No value
    rrc.RadioBearerRelease_r7_IEs
rrc.radioBearerRelease_r7_add_ext  radioBearerRelease-r7-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerRelease_v3a0ext  radioBearerRelease-v3a0ext
    No value
    rrc.RadioBearerRelease_v3a0ext
```



```
rrc.radioBearerRelease_v4b0ext  radioBearerRelease-v4b0ext
    No value
    rrc.RadioBearerRelease_v4b0ext_IEs
rrc.radioBearerRelease_v590ext  radioBearerRelease-v590ext
    No value
    rrc.RadioBearerRelease_v590ext_IEs
rrc.radioBearerRelease_v690ext  radioBearerRelease-v690ext
    No value
    rrc.RadioBearerRelease_v690ext_IEs
rrc.radioBearerRelease_v6b0ext  radioBearerRelease-v6b0ext
    No value
    rrc.RadioBearerRelease_v6b0ext_IEs
rrc.radioBearerRelease_v7xyext  radioBearerRelease-v7xyext
    No value
    rrc.RadioBearerRelease_v7xyext_IEs
rrc.radioBearerSetup  radioBearerSetup
    Unsigned 32-bit integer
    rrc.RadioBearerSetup
rrc.radioBearerSetupComplete  radioBearerSetupComplete
    No value
    rrc.RadioBearerSetupComplete
rrc.radioBearerSetupComplete_r3_add_ext  radioBearerSetupComplete-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerSetupComplete_v7xyext  radioBearerSetupComplete-v7xyext
    No value
    rrc.RadioBearerSetupComplete_v7xyext_IEs
rrc.radioBearerSetupFailure  radioBearerSetupFailure
    No value
    rrc.RadioBearerSetupFailure
rrc.radioBearerSetupFailure_r3_add_ext  radioBearerSetupFailure-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerSetup_r3  radioBearerSetup-r3
    No value
    rrc.RadioBearerSetup_r3_IEs
rrc.radioBearerSetup_r3_add_ext  radioBearerSetup-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerSetup_r4  radioBearerSetup-r4
    No value
    rrc.RadioBearerSetup_r4_IEs
rrc.radioBearerSetup_r4_add_ext  radioBearerSetup-r4-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerSetup_r5  radioBearerSetup-r5
    No value
    rrc.RadioBearerSetup_r5_IEs
```

```
rrc.radioBearerSetup_r5_add_ext  radioBearerSetup-r5-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerSetup_r6  radioBearerSetup-r6
    No value
    rrc.RadioBearerSetup_r6_IEs
rrc.radioBearerSetup_r6_add_ext  radioBearerSetup-r6-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerSetup_r7  radioBearerSetup-r7
    No value
    rrc.RadioBearerSetup_r7_IEs
rrc.radioBearerSetup_r7_add_ext  radioBearerSetup-r7-add-ext
    Byte array
    rrc.BIT_STRING
rrc.radioBearerSetup_v3a0ext  radioBearerSetup-v3a0ext
    No value
    rrc.RadioBearerSetup_v3a0ext
rrc.radioBearerSetup_v4b0ext  radioBearerSetup-v4b0ext
    No value
    rrc.RadioBearerSetup_v4b0ext_IEs
rrc.radioBearerSetup_v590ext  radioBearerSetup-v590ext
    No value
    rrc.RadioBearerSetup_v590ext_IEs
rrc.radioBearerSetup_v5d0ext  radioBearerSetup-v5d0ext
    No value
    rrc.RadioBearerSetup_v5d0ext_IEs
rrc.radioBearerSetup_v690ext  radioBearerSetup-v690ext
    No value
    rrc.RadioBearerSetup_v690ext_IEs
rrc.radioBearerSetup_v6b0ext  radioBearerSetup-v6b0ext
    No value
    rrc.RadioBearerSetup_v6b0ext_IEs
rrc.radioFrequencyBandFDD  radioFrequencyBandFDD
    Unsigned 32-bit integer
    rrc.RadioFrequencyBandFDD
rrc.radioFrequencyBandFDD2  radioFrequencyBandFDD2
    Unsigned 32-bit integer
    rrc.RadioFrequencyBandFDD2
rrc.radioFrequencyBandGSM  radioFrequencyBandGSM
    Unsigned 32-bit integer
    rrc.RadioFrequencyBandGSM
rrc.radioFrequencyBandTDD  radioFrequencyBandTDD
    Unsigned 32-bit integer
    rrc.RadioFrequencyBandTDD
rrc.radioFrequencyBandTDDList  radioFrequencyBandTDDList
    Unsigned 32-bit integer
    rrc.RadioFrequencyBandTDDList
```

```
rrc.radioFrequencyTDDBandList  radioFrequencyTDDBandList
    Unsigned 32-bit integer
    rrc.RadioFrequencyBandTDDList

rrc.ra_i  rai
    No value
    rrc.RAI

rrc.rat  rat
    Unsigned 32-bit integer
    rrc.RAT

rrc.ratSpecificInfo  ratSpecificInfo
    Unsigned 32-bit integer
    rrc.T_ratSpecificInfo

rrc.rat_Identifier  rat-Identifier
    Unsigned 32-bit integer
    rrc.RAT_Identifier

rrc.rat_List  rat-List
    Unsigned 32-bit integer
    rrc.RAT_FDD_InfoList

rrc.rateMatchingAttribute  rateMatchingAttribute
    Unsigned 32-bit integer
    rrc.RateMatchingAttribute

rrc.rbInformation  rbInformation
    Unsigned 32-bit integer
    rrc.MBMS_CommonRBIIdentity

rrc.rb_COUNT_C_InformationList  rb-COUNT-C-InformationList
    Unsigned 32-bit integer
    rrc.RB_COUNT_C_InformationList

rrc.rb_COUNT_C_MSB_InformationList  rb-COUNT-C-MSB-InformationList
    Unsigned 32-bit integer
    rrc.RB_COUNT_C_MSB_InformationList

rrc.rb_Change  rb-Change
    Unsigned 32-bit integer
    rrc.T_rb_Change

rrc.rb_DL_CiphActivationTimeInfo  rb-DL-CiphActivationTimeInfo
    Unsigned 32-bit integer
    rrc.RB_ActivationTimeInfoList

rrc.rb_Identity  rb-Identity
    Unsigned 32-bit integer
    rrc.RB_Identity

rrc.rb_IdentityForHOMessage  rb-IdentityForHOMessage
    Unsigned 32-bit integer
    rrc.RB_Identity

rrc.rb_InformationAffectedList  rb-InformationAffectedList
    Unsigned 32-bit integer
    rrc.RB_InformationAffectedList

rrc.rb_InformationChangedList  rb-InformationChangedList
    Unsigned 32-bit integer
    rrc.RB_InformationChangedList_r6
```

```
rrc.rb_InformationList rb-InformationList
    Unsigned 32-bit integer
    rrc.RB_InformationSetupList

rrc.rb_InformationReconfigList rb-InformationReconfigList
    Unsigned 32-bit integer
    rrc.RB_InformationReconfigList

rrc.rb_InformationReleaseList rb-InformationReleaseList
    Unsigned 32-bit integer
    rrc.RB_InformationReleaseList

rrc.rb_InformationSetupList rb-InformationSetupList
    Unsigned 32-bit integer
    rrc.RB_InformationSetupList

rrc.rb_MappingInfo rb-MappingInfo
    Unsigned 32-bit integer
    rrc.RB_MappingInfo

rrc.rb_PDCPContextRelocationList rb-PDCPContextRelocationList
    Unsigned 32-bit integer
    rrc.RB_PDCPContextRelocationList

rrc.rb_StopContinue rb-StopContinue
    Unsigned 32-bit integer
    rrc.RB_StopContinue

rrc.rb_UL_CiphActivationTimeInfo rb-UL-CiphActivationTimeInfo
    Unsigned 32-bit integer
    rrc.RB_ActivationTimeInfoList

rrc.rb_WithPDCP_InfoList rb-WithPDCP-InfoList
    Unsigned 32-bit integer
    rrc.RB_WithPDCP_InfoList

rrc.rb_timer_indicator rb-timer-indicator
    No value
    rrc.Rb_timer_indicator

rrc.rdi_Indicator rdi-Indicator
    Boolean
    rrc.BOOLEAN

rrc.re_EstablishmentTimer re-EstablishmentTimer
    Unsigned 32-bit integer
    rrc.Re_EstablishmentTimer

rrc.re_mapToDefaultRb re-mapToDefaultRb
    Unsigned 32-bit integer
    rrc.RB_Identity

rrc.readSFN_Indicator readSFN-Indicator
    Boolean
    rrc.BOOLEAN

rrc.realTimeIntegrityRequest realTimeIntegrityRequest
    Boolean
    rrc.BOOLEAN

rrc.receivedMessageType receivedMessageType
    Unsigned 32-bit integer
    rrc.ReceivedMessageType
```

```
rrc.receivingWindowSize receivingWindowSize
    Unsigned 32-bit integer
    rrc.ReceivingWindowSize

rrc.reconfigurationStatusIndicator reconfigurationStatusIndicator
    Unsigned 32-bit integer
    rrc.T_reconfigurationStatusIndicator

rrc.redirectionInfo redirectionInfo
    Unsigned 32-bit integer
    rrc.RedirectionInfo

rrc.redirectionInfo_v690ext redirectionInfo-v690ext
    Unsigned 32-bit integer
    rrc.GSM_TargetCellInfoList

rrc.reducedScramblingCodeNumber reducedScramblingCodeNumber
    Unsigned 32-bit integer
    rrc.ReducedScramblingCodeNumber

rrc.referenceCellIdentity referenceCellIdentity
    No value
    rrc.PrimaryCPICH_Info

rrc.referenceCellIdentity referenceCellIdentity
    Unsigned 32-bit integer
    rrc.CellParametersID

rrc.referenceIdentity referenceIdentity
    No value
    rrc.PrimaryCPICH_Info

rrc.referenceLocationRequest referenceLocationRequest
    Boolean
    rrc.BOOLEAN

rrc.referenceTFC referenceTFC
    Unsigned 32-bit integer
    rrc.TFC_Value

rrc.referenceTFC_ID referenceTFC-ID
    Unsigned 32-bit integer
    rrc.ReferenceTFC_ID

rrc.referenceTime referenceTime
    Unsigned 32-bit integer
    rrc.T_referenceTime

rrc.referenceTimeDifferenceToCell referenceTimeDifferenceToCell
    Unsigned 32-bit integer
    rrc.ReferenceTimeDifferenceToCell

rrc.referenceTimeRequest referenceTimeRequest
    Boolean
    rrc.BOOLEAN

rrc.reference_Beta reference-Beta
    Signed 32-bit integer
    rrc.INTEGER_M15_16

rrc.reference_Beta_16QAM_List reference-Beta-16QAM-List
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_8_OF_Reference_Beta_16QAM
```

```
rrc.reference_Beta_16QAM_List_item  Item
    No value
    rrc.Reference_Beta_16QAM
rrc.reference_Beta_QPSK_List  reference-Beta-QPSK-List
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_8_OF_Reference_Beta_QPSK
rrc.reference_Beta_QPSK_List_item  Item
    No value
    rrc.Reference_Beta_QPSK
rrc.reference_Code_Rate  reference-Code-Rate
    Unsigned 32-bit integer
    rrc.INTEGER_0_10
rrc.reference_E_TFCI  reference-E-TFCI
    Unsigned 32-bit integer
    rrc.INTEGER_0_127
rrc.reference_E_TFCI_PO  reference-E-TFCI-PO
    Unsigned 32-bit integer
    rrc.INTEGER_0_29
rrc.reference_E_TFCIs  reference-E-TFCIs
    Unsigned 32-bit integer
    rrc.E_DPDCH_Reference_E_TFCIList
rrc.rejectionCause  rejectionCause
    Unsigned 32-bit integer
    rrc.RejectionCause
rrc.relativeAltitude  relativeAltitude
    Signed 32-bit integer
    rrc.INTEGER_M4000_4000
rrc.relativeEast  relativeEast
    Signed 32-bit integer
    rrc.INTEGER_M20000_20000
rrc.relativeNorth  relativeNorth
    Signed 32-bit integer
    rrc.INTEGER_M20000_20000
rrc.release  release
    No value
    rrc.T_release
rrc.release99  release99
    No value
    rrc.T_release99
rrc.releaseCause  releaseCause
    Unsigned 32-bit integer
    rrc.ReleaseCause
rrc.releaseIndicator  releaseIndicator
    No value
    rrc.NULL
rrc.removal  removal
    Unsigned 32-bit integer
    rrc.TFCS_RemovalList
```

```
rrc.removeAllInterFreqCells  removeAllInterFreqCells
    No value
    rrc.NULL

rrc.removeAllInterRATCells  removeAllInterRATCells
    No value
    rrc.NULL

rrc.removeAllIntraFreqCells  removeAllIntraFreqCells
    No value
    rrc.NULL

rrc.removeNoInterFreqCells  removeNoInterFreqCells
    No value
    rrc.NULL

rrc.removeNoInterRATCells  removeNoInterRATCells
    No value
    rrc.NULL

rrc.removeNoIntraFreqCells  removeNoIntraFreqCells
    No value
    rrc.NULL

rrc.removeSomeInterFreqCells  removeSomeInterFreqCells
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_InterFreqCellID

rrc.removeSomeInterFreqCells_item  Item
    Unsigned 32-bit integer
    rrc.InterFreqCellID

rrc.removeSomeInterRATCells  removeSomeInterRATCells
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_InterRATCellID

rrc.removeSomeInterRATCells_item  Item
    Unsigned 32-bit integer
    rrc.InterRATCellID

rrc.removeSomeIntraFreqCells  removeSomeIntraFreqCells
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxCellMeas_OF_IntraFreqCellID

rrc.removeSomeIntraFreqCells_item  Item
    Unsigned 32-bit integer
    rrc.IntraFreqCellID

rrc.removedInterFreqCellList  removedInterFreqCellList
    Unsigned 32-bit integer
    rrc.RemovedInterFreqCellList

rrc.removedInterRATCellList  removedInterRATCellList
    Unsigned 32-bit integer
    rrc.RemovedInterRATCellList

rrc.removedIntraFreqCellList  removedIntraFreqCellList
    Unsigned 32-bit integer
    rrc.RemovedIntraFreqCellList

rrc.reorderingReleaseTimer  reorderingReleaseTimer
    Unsigned 32-bit integer
    rrc.T1_ReleaseTimer
```

```
rrc.rep1024 rep1024
    Unsigned 32-bit integer
    rrc.INTEGER_0_511

rrc.rep128 rep128
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.rep16 rep16
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.rep2048 rep2048
    Unsigned 32-bit integer
    rrc.INTEGER_0_1023

rrc.rep256 rep256
    Unsigned 32-bit integer
    rrc.INTEGER_0_127

rrc.rep32 rep32
    Unsigned 32-bit integer
    rrc.INTEGER_0_15

rrc.rep4 rep4
    Unsigned 32-bit integer
    rrc.INTEGER_0_1

rrc.rep4096 rep4096
    Unsigned 32-bit integer
    rrc.INTEGER_0_2047

rrc.rep512 rep512
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.rep64 rep64
    Unsigned 32-bit integer
    rrc.INTEGER_0_31

rrc.rep8 rep8
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.repetitionLength repetitionLength
    Unsigned 32-bit integer
    rrc.INTEGER_0_64

rrc.repetitionPeriod repetitionPeriod
    Unsigned 32-bit integer
    rrc.T_repetitionPeriod

rrc.repetitionPeriod1 repetitionPeriod1
    No value
    rrc.NULL

rrc.repetitionPeriod16 repetitionPeriod16
    Unsigned 32-bit integer
    rrc.INTEGER_1_15

rrc.repetitionPeriod2 repetitionPeriod2
    Unsigned 32-bit integer
    rrc.INTEGER_1_1
```



```
rrc.repetitionPeriod32 repetitionPeriod32
    Unsigned 32-bit integer
    rrc.INTEGER_1_31

rrc.repetitionPeriod4 repetitionPeriod4
    Unsigned 32-bit integer
    rrc.INTEGER_1_3

rrc.repetitionPeriod64 repetitionPeriod64
    Unsigned 32-bit integer
    rrc.INTEGER_1_63

rrc.repetitionPeriod8 repetitionPeriod8
    Unsigned 32-bit integer
    rrc.INTEGER_1_7

rrc.repetitionPeriodAndLength repetitionPeriodAndLength
    Unsigned 32-bit integer
    rrc.RepetitionPeriodAndLength

rrc.repetitionPeriodCoefficient repetitionPeriodCoefficient
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.repetitionPeriodLengthAndOffset repetitionPeriodLengthAndOffset
    Unsigned 32-bit integer
    rrc.RepetitionPeriodLengthAndOffset

rrc.repetitionPeriodLengthOffset repetitionPeriodLengthOffset
    Unsigned 32-bit integer
    rrc.RepPerLengthOffset_PICH

rrc.replace replace
    Unsigned 32-bit integer
    rrc.ReplacedPDSCH_CodeInfoList

rrc.replacement replacement
    No value
    rrc.T_replacement

rrc.replacementActivationThreshold replacementActivationThreshold
    Unsigned 32-bit integer
    rrc.ReplacementActivationThreshold

rrc.reportCriteria reportCriteria
    Unsigned 32-bit integer
    rrc.InterFreqReportCriteria

rrc.reportCriteriaSysInf reportCriteriaSysInf
    Unsigned 32-bit integer
    rrc.TrafficVolumeReportCriteriaSysInfo

rrc.reportDeactivationThreshold reportDeactivationThreshold
    Unsigned 32-bit integer
    rrc.ReportDeactivationThreshold

rrc.reportFirstFix reportFirstFix
    Boolean
    rrc.BOOLEAN

rrc.reportingAmount reportingAmount
    Unsigned 32-bit integer
    rrc.ReportingAmount
```

```
rrc.reportingCellStatus reportingCellStatus
    Unsigned 32-bit integer
    rrc.ReportingCellStatus

rrc.reportingCriteria reportingCriteria
    Unsigned 32-bit integer
    rrc.T_reportingCriteria

rrc.reportingInfoForCellDCH reportingInfoForCellDCH
    No value
    rrc.ReportingInfoForCellDCH

rrc.reportingInterval reportingInterval
    Unsigned 32-bit integer
    rrc.ReportingInterval

rrc.reportingRange reportingRange
    Unsigned 32-bit integer
    rrc.ReportingRange

rrc.reportingThreshold reportingThreshold
    Unsigned 32-bit integer
    rrc.TrafficVolumeThreshold

rrc.requestPCCPCHRSCP requestPCCPCHRSCP
    Boolean
    rrc.BOOLEAN

rrc.reserved1 reserved1
    Byte array
    rrc.BIT_STRING_SIZE_23

rrc.reserved2 reserved2
    Byte array
    rrc.BIT_STRING_SIZE_24

rrc.reserved3 reserved3
    Byte array
    rrc.BIT_STRING_SIZE_24

rrc.reserved4 reserved4
    Byte array
    rrc.BIT_STRING_SIZE_16

rrc.restrictedDL_TrCH_Identity restrictedDL-TrCH-Identity
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.restrictedTrCH_InfoList restrictedTrCH-InfoList
    Unsigned 32-bit integer
    rrc.RestrictedTrCH_InfoList

rrc.restrictedTrChIdentity restrictedTrChIdentity
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.restrictedTrChInfoList restrictedTrChInfoList
    Unsigned 32-bit integer
    rrc.RestrictedTrChInfoList

rrc.restriction restriction
    No value
    rrc.T_restriction
```

```
rrc.reverseCompressionDepth reverseCompressionDepth
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535

rrc.reverseDecompressionDepth reverseDecompressionDepth
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535

rrc.rf_Capability rf-Capability
    No value
    rrc.RF_Capability

rrc.rf_CapabilityComp rf-CapabilityComp
    No value
    rrc.RF_CapabilityComp

rrc.rf_CapabilityFDDComp rf-CapabilityFDDComp
    Unsigned 32-bit integer
    rrc.RF_CapabBandListFDDComp_ext

rrc.rfc2507_Info rfc2507-Info
    No value
    rrc.RFC2507_Info

rrc.rfc3095_ContextInfo rfc3095-ContextInfo
    Unsigned 32-bit integer
    rrc.RFC3095_ContextInfo_r5

rrc.rfc3095_Context_Identity rfc3095-Context-Identity
    Unsigned 32-bit integer
    rrc.INTEGER_0_16383

rrc.rfc3095_Context_List rfc3095-Context-List
    Unsigned 32-bit integer
    rrc.RFC3095_Context_List

rrc.rfc3095_Info rfc3095-Info
    No value
    rrc.RFC3095_Info_r4

rrc.rg_CombinationIndex rg-CombinationIndex
    Unsigned 32-bit integer
    rrc.E_RGCH_CombinationIndex

rrc.rl_AdditionInfoList rl-AdditionInfoList
    Unsigned 32-bit integer
    rrc.RL_AdditionInfoList

rrc.rl_AdditionInformationList rl-AdditionInformationList
    Unsigned 32-bit integer
    rrc.RL_AdditionInformationList

rrc.rl_AdditionInformation_list_v6b0ext rl-AdditionInformation-list-v6b0ext
    Unsigned 32-bit integer
    rrc.RL_AdditionInformation_list_v6b0ext

rrc.rl_IdentifierList rl-IdentifierList
    Unsigned 32-bit integer
    rrc.RL_IdentifierList

rrc.rl_RemovalInformationList rl-RemovalInformationList
    Unsigned 32-bit integer
    rrc.RL_RemovalInformationList
```

```
rrc.rlc_BufferPayload  rlc-BufferPayload
    No value
    rrc.NULL

rrc.rlc_BuffersPayload  rlc-BuffersPayload
    Unsigned 32-bit integer
    rrc.RLC_BuffersPayload

rrc.rlc_Capability  rlc-Capability
    No value
    rrc.RLC_Capability

rrc.rlc_Capability_r5_ext  rlc-Capability-r5-ext
    No value
    rrc.RLC_Capability_r5_ext

rrc.rlc_Info  rlc-Info
    No value
    rrc.RLC_Info

rrc.rlc_InfoChoice  rlc-InfoChoice
    Unsigned 32-bit integer
    rrc.RLC_InfoChoice

rrc.rlc_LogicalChannelMappingIndicator  rlc-LogicalChannelMappingIndicator
    Boolean
    rrc.BOOLEAN

rrc.rlc_OneSidedReEst  rlc-OneSidedReEst
    Boolean
    rrc.BOOLEAN

rrc.rlc_PDU_SizeList  rlc-PDU-SizeList
    Unsigned 32-bit integer
    rrc.RLC_PDU_SizeList

rrc.rlc_RB_BufferPayload  rlc-RB-BufferPayload
    Boolean
    rrc.BOOLEAN

rrc.rlc_RB_BufferPayloadAverage  rlc-RB-BufferPayloadAverage
    Boolean
    rrc.BOOLEAN

rrc.rlc_RB_BufferPayloadVariance  rlc-RB-BufferPayloadVariance
    Boolean
    rrc.BOOLEAN

rrc.rlc_Re_establishIndicatorRb2_3or4  rlc-Re-establishIndicatorRb2-3or4
    Boolean
    rrc.BOOLEAN

rrc.rlc_Re_establishIndicatorRb5orAbove  rlc-Re-establishIndicatorRb5orAbove
    Boolean
    rrc.BOOLEAN

rrc.rlc_SequenceNumber  rlc-SequenceNumber
    Unsigned 32-bit integer
    rrc.RLC_SequenceNumber

rrc.rlc_Size  rlc-Size
    Unsigned 32-bit integer
    rrc.T_rlc_Size
```

```
rrc.rlc_SizeIndex rlc-SizeIndex
    Unsigned 32-bit integer
    rrc.INTEGER_1_maxTF

rrc.rlc_SizeList rlc-SizeList
    Unsigned 32-bit integer
    rrc.T_rlc_SizeList

rrc.rohcProfileList rohcProfileList
    Unsigned 32-bit integer
    rrc.ROHC_ProfileList_r4

rrc.roundTripTime roundTripTime
    Unsigned 32-bit integer
    rrc.INTEGER_0_32766

rrc.roundTripTimeExtension roundTripTimeExtension
    Unsigned 32-bit integer
    rrc.INTEGER_0_70274

rrc.routingbasis routingbasis
    Unsigned 32-bit integer
    rrc.T_routingbasis

rrc.routingparameter routingparameter
    Byte array
    rrc.RoutingParameter

rrc.rplmn_information rplmn-information
    No value
    rrc.Rplmn_Information

rrc.rpp rpp
    Unsigned 32-bit integer
    rrc.RPP

rrc.rpp16_2 rpp16-2
    Unsigned 32-bit integer
    rrc.INTEGER_0_15

rrc.rpp16_4 rpp16-4
    Unsigned 32-bit integer
    rrc.INTEGER_0_15

rrc.rpp32_2 rpp32-2
    Unsigned 32-bit integer
    rrc.INTEGER_0_31

rrc.rpp32_4 rpp32-4
    Unsigned 32-bit integer
    rrc.INTEGER_0_31

rrc.rpp4_2 rpp4-2
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.rpp64_2 rpp64-2
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.rpp64_4 rpp64-4
    Unsigned 32-bit integer
    rrc.INTEGER_0_63
```

```
rrc.rpp8_2 rpp8-2
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.rpp8_4 rpp8-4
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.rrc rrc
    Signed 32-bit integer
    rrc.RRC

rrc.rrcConnectionSetupComplete_v7xyext rrcConnectionSetupComplete-v7xyext
    No value
    rrc.RRCConnectionSetupComplete_v7xyext_IEs

rrc.rrcConnectionReject rrcConnectionReject
    Unsigned 32-bit integer
    rrc.RRCConnectionReject

rrc.rrcConnectionReject_r3 rrcConnectionReject-r3
    No value
    rrc.RRCConnectionReject_r3_IEs

rrc.rrcConnectionReject_r3_add_ext rrcConnectionReject-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.rrcConnectionReject_v690ext rrcConnectionReject-v690ext
    No value
    rrc.RRCConnectionReject_v690ext_IEs

rrc.rrcConnectionRelease rrcConnectionRelease
    Unsigned 32-bit integer
    rrc.RRCConnectionRelease

rrc.rrcConnectionReleaseComplete rrcConnectionReleaseComplete
    No value
    rrc.RRCConnectionReleaseComplete

rrc.rrcConnectionReleaseComplete_r3_add_ext rrcConnectionReleaseComplete-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.rrcConnectionRelease_CCCH_r3 rrcConnectionRelease-CCCH-r3
    No value
    rrc.RRCConnectionRelease_CCCH_r3_IEs

rrc.rrcConnectionRelease_CCCH_r3_add_ext rrcConnectionRelease-CCCH-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.rrcConnectionRelease_CCCH_r4 rrcConnectionRelease-CCCH-r4
    No value
    rrc.RRCConnectionRelease_CCCH_r4_IEs

rrc.rrcConnectionRelease_CCCH_r4_add_ext rrcConnectionRelease-CCCH-r4-add-ext
    Byte array
    rrc.BIT_STRING

rrc.rrcConnectionRelease_CCCH_r5 rrcConnectionRelease-CCCH-r5
    No value
    rrc.RRCConnectionRelease_CCCH_r5_IEs
```

```
rrc.rrcConnectionRelease_CCCH_r5_add_ext  rrcConnectionRelease-CCCH-r5-add-ext
    Byte array
    rrc.BIT_STRING

rrc.rrcConnectionRelease_r3  rrcConnectionRelease-r3
    No value
    rrc.RRCConnectionRelease_r3_IEs

rrc.rrcConnectionRelease_r3_add_ext  rrcConnectionRelease-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.rrcConnectionRelease_r4  rrcConnectionRelease-r4
    No value
    rrc.RRCConnectionRelease_r4_IEs

rrc.rrcConnectionRelease_r4_add_ext  rrcConnectionRelease-r4-add-ext
    Byte array
    rrc.BIT_STRING

rrc.rrcConnectionRelease_v690ext  rrcConnectionRelease-v690ext
    No value
    rrc.RRCConnectionRelease_v690ext_IEs

rrc.rrcConnectionRelease_v7xyext  rrcConnectionRelease-v7xyext
    No value
    rrc.RRCConnectionRelease_v7xyext_IEs

rrc.rrcConnectionRequest  rrcConnectionRequest
    No value
    rrc.RRCConnectionRequest

rrc.rrcConnectionRequest_v4b0ext  rrcConnectionRequest-v4b0ext
    No value
    rrc.RRCConnectionRequest_v4b0ext_IEs

rrc.rrcConnectionRequest_v590ext  rrcConnectionRequest-v590ext
    No value
    rrc.RRCConnectionRequest_v590ext_IEs

rrc.rrcConnectionRequest_v690ext  rrcConnectionRequest-v690ext
    No value
    rrc.RRCConnectionRequest_v690ext_IEs

rrc.rrcConnectionRequest_v6b0ext  rrcConnectionRequest-v6b0ext
    No value
    rrc.RRCConnectionRequest_v6b0ext_IEs

rrc.rrcConnectionRequest_v7xyext  rrcConnectionRequest-v7xyext
    No value
    rrc.RRCConnectionRequest_v7xyext_IEs

rrc.rrcConnectionSetup  rrcConnectionSetup
    Unsigned 32-bit integer
    rrc.RRCConnectionSetup

rrc.rrcConnectionSetupComplete  rrcConnectionSetupComplete
    No value
    rrc.RRCConnectionSetupComplete

rrc.rrcConnectionSetupComplete_r3_add_ext  rrcConnectionSetupComplete-r3-add-ext
    Byte array
    rrc.T_rrcConnectionSetupComplete_r3_add_ext
```

```
rrc.rrcConnectionSetupComplete_v370ext  rrcConnectionSetupComplete-v370ext
No value
rrc.RRCConnectionSetupComplete_v370ext

rrc.rrcConnectionSetupComplete_v380ext  rrcConnectionSetupComplete-v380ext
No value
rrc.RRCConnectionSetupComplete_v380ext_IEs

rrc.rrcConnectionSetupComplete_v3a0ext  rrcConnectionSetupComplete-v3a0ext
No value
rrc.RRCConnectionSetupComplete_v3a0ext_IEs

rrc.rrcConnectionSetupComplete_v3g0ext  rrcConnectionSetupComplete-v3g0ext
No value
rrc.RRCConnectionSetupComplete_v3g0ext_IEs

rrc.rrcConnectionSetupComplete_v4b0ext  rrcConnectionSetupComplete-v4b0ext
No value
rrc.RRCConnectionSetupComplete_v4b0ext_IEs

rrc.rrcConnectionSetupComplete_v590ext  rrcConnectionSetupComplete-v590ext
No value
rrc.RRCConnectionSetupComplete_v590ext_IEs

rrc.rrcConnectionSetupComplete_v5c0ext  rrcConnectionSetupComplete-v5c0ext
No value
rrc.RRCConnectionSetupComplete_v5c0ext_IEs

rrc.rrcConnectionSetupComplete_v650ext  rrcConnectionSetupComplete-v650ext
No value
rrc.RRCConnectionSetupComplete_v650ext_IEs

rrc.rrcConnectionSetupComplete_v680ext  rrcConnectionSetupComplete-v680ext
No value
rrc.RRCConnectionSetupComplete_v680ext_IEs

rrc.rrcConnectionSetupComplete_v690ext  rrcConnectionSetupComplete-v690ext
No value
rrc.RRCConnectionSetupComplete_v690ext_IEs

rrc.rrcConnectionSetup_r3  rrcConnectionSetup-r3
No value
rrc.RRCConnectionSetup_r3_IEs

rrc.rrcConnectionSetup_r3_add_ext  rrcConnectionSetup-r3-add-ext
Byte array
rrc.BIT_STRING

rrc.rrcConnectionSetup_r4  rrcConnectionSetup-r4
No value
rrc.RRCConnectionSetup_r4_IEs

rrc.rrcConnectionSetup_r4_add_ext  rrcConnectionSetup-r4-add-ext
Byte array
rrc.BIT_STRING

rrc.rrcConnectionSetup_r5  rrcConnectionSetup-r5
No value
rrc.RRCConnectionSetup_r5_IEs

rrc.rrcConnectionSetup_r5_add_ext  rrcConnectionSetup-r5-add-ext
Byte array
rrc.BIT_STRING
```



```
rrc.rrcConnectionSetup_r6  rrcConnectionSetup-r6
    No value
    rrc.RRCConnectionSetup_r6_IEs
rrc.rrcConnectionSetup_r6_add_ext  rrcConnectionSetup-r6-add-ext
    Byte array
    rrc.BIT_STRING
rrc.rrcConnectionSetup_r7  rrcConnectionSetup-r7
    No value
    rrc.RRCConnectionSetup_r7_IEs
rrc.rrcConnectionSetup_r7_add_ext  rrcConnectionSetup-r7-add-ext
    Byte array
    rrc.BIT_STRING
rrc.rrcConnectionSetup_v4b0ext  rrcConnectionSetup-v4b0ext
    No value
    rrc.RRCConnectionSetup_v4b0ext_IEs
rrc.rrcConnectionSetup_v590ext  rrcConnectionSetup-v590ext
    No value
    rrc.RRCConnectionSetup_v590ext_IEs
rrc.rrcConnectionSetup_v690ext  rrcConnectionSetup-v690ext
    No value
    rrc.RRCConnectionSetup_v690ext_IEs
rrc.rrcConnectionSetup_v6b0ext  rrcConnectionSetup-v6b0ext
    No value
    rrc.RRCConnectionSetup_v6b0ext_IEs
rrc.rrcConnectionSetup_v7xyext  rrcConnectionSetup-v7xyext
    No value
    rrc.RRCConnectionSetup_v7xyext_IEs
rrc.rrcStatus  rrcStatus
    No value
    rrc.RRCStatus
rrc.rrcStatus_r3_add_ext  rrcStatus-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.rrc_ConnectionReleaseInformation  rrc-ConnectionReleaseInformation
    Unsigned 32-bit integer
    rrc.RRC_ConnectionReleaseInformation
rrc.rrc_FailureInfo  rrc-FailureInfo
    Unsigned 32-bit integer
    rrc.RRC_FailureInfo
rrc.rrc_FailureInfo_r3_add_ext  rrc-FailureInfo-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.rrc_MessageSequenceNumber  rrc-MessageSequenceNumber
    Unsigned 32-bit integer
    rrc.RRC_MessageSequenceNumber
rrc.rrc_MessageSequenceNumberList  rrc-MessageSequenceNumberList
    Unsigned 32-bit integer
    rrc.RRC_MessageSequenceNumberList
```

```
rrc.rrc_StateIndicator rrc-StateIndicator
    Unsigned 32-bit integer
    rrc.RRC_StateIndicator

rrc.rrc_TransactionIdentifier rrc-TransactionIdentifier
    Unsigned 32-bit integer
    rrc.RRC_TransactionIdentifier

rrc.rrc_TransactionIdentifier_MSP rrc-TransactionIdentifier-MSP
    Unsigned 32-bit integer
    rrc.RRC_TransactionIdentifier

rrc.rrc_TransactionIdentifier_MSP_v590ext rrc-TransactionIdentifier-MSP-v590ext
    Unsigned 32-bit integer
    rrc.RRC_TransactionIdentifier

rrc.rx_tx_TimeDifferenceType2Capable rx-tx-TimeDifferenceType2Capable
    Boolean
    rrc.BOOLEAN

rrc.sCCPCH_LCR_ExtensionsList sCCPCH-LCR-ExtensionsList
    Unsigned 32-bit integer
    rrc.SCCPCH_SystemInformationList_LCR_r4_ext

rrc.sCCPCH_SystemInformationList sCCPCH-SystemInformationList
    Unsigned 32-bit integer
    rrc.SCCPCH_SystemInformationList

rrc.sCCPCH_SystemInformationList_r7 sCCPCH-SystemInformationList-r7
    Unsigned 32-bit integer
    rrc.SCCPCH_SystemInformationList_r7

rrc.sF16 sF16
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_8_OF_SF16Codes

rrc.sF16_item Item
    Unsigned 32-bit integer
    rrc.SF16Codes

rrc.sF32 sF32
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_16_OF_SF32Codes

rrc.sF32_item Item
    Unsigned 32-bit integer
    rrc.SF32Codes

rrc.sF8 sF8
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_8_OF_SF8Codes

rrc.sF816 sF816
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_16_OF_SF16Codes2

rrc.sF816_item Item
    Unsigned 32-bit integer
    rrc.SF16Codes2

rrc.sF8_item Item
    Unsigned 32-bit integer
    rrc.SF8Codes
```

```
rrc.sI sI
    Unsigned 32-bit integer
    rrc.GERAN_SystemInformation

rrc.sIBOccurrenceIdentityAndValueTag sIBOccurrenceIdentityAndValueTag
    No value
    rrc.sIBOccurrenceIdentityAndValueTag

rrc.sRB_delay sRB-delay
    Unsigned 32-bit integer
    rrc.sRB_delay

rrc.sRNC_RelocationInfo_r3 sRNC-RelocationInfo-r3
    No value
    rrc.sRNC_RelocationInfo_r3_IEs

rrc.sRNC_RelocationInfo_r3_add_ext sRNC-RelocationInfo-r3-add-ext
    Byte array
    rrc.T_sRNC_RelocationInfo_r3_add_ext

rrc.sRNC_RelocationInfo_r4 sRNC-RelocationInfo-r4
    No value
    rrc.sRNC_RelocationInfo_r4_IEs

rrc.sRNC_RelocationInfo_r4_add_ext sRNC-RelocationInfo-r4-add-ext
    Byte array
    rrc.BIT_STRING

rrc.sRNC_RelocationInfo_r5 sRNC-RelocationInfo-r5
    No value
    rrc.sRNC_RelocationInfo_r5_IEs

rrc.sRNC_RelocationInfo_r5_add_ext sRNC-RelocationInfo-r5-add-ext
    Byte array
    rrc.BIT_STRING

rrc.sRNC_RelocationInfo_r6 sRNC-RelocationInfo-r6
    No value
    rrc.sRNC_RelocationInfo_r6_IEs

rrc.sRNC_RelocationInfo_r6_add_ext sRNC-RelocationInfo-r6-add-ext
    Byte array
    rrc.BIT_STRING

rrc.sRNC_RelocationInfo_r7 sRNC-RelocationInfo-r7
    No value
    rrc.sRNC_RelocationInfo_r7_IEs

rrc.sRNC_RelocationInfo_r7_add_ext sRNC-RelocationInfo-r7-add-ext
    Byte array
    rrc.BIT_STRING

rrc.sRNC_RelocationInfo_v380ext sRNC-RelocationInfo-v380ext
    No value
    rrc.sRNC_RelocationInfo_v380ext_IEs

rrc.sRNC_RelocationInfo_v390ext sRNC-RelocationInfo-v390ext
    No value
    rrc.sRNC_RelocationInfo_v390ext_IEs

rrc.sRNC_RelocationInfo_v3a0ext sRNC-RelocationInfo-v3a0ext
    No value
    rrc.sRNC_RelocationInfo_v3a0ext_IEs
```

```
rrc.sRNC_RelocationInfo_v3b0ext  sRNC-RelocationInfo-v3b0ext
    No value
    rrc.sRNC_RelocationInfo_v3b0ext_IEs
rrc.sRNC_RelocationInfo_v3c0ext  sRNC-RelocationInfo-v3c0ext
    No value
    rrc.sRNC_RelocationInfo_v3c0ext_IEs
rrc.sRNC_RelocationInfo_v3d0ext  sRNC-RelocationInfo-v3d0ext
    No value
    rrc.sRNC_RelocationInfo_v3d0ext_IEs
rrc.sRNC_RelocationInfo_v3g0ext  sRNC-RelocationInfo-v3g0ext
    No value
    rrc.sRNC_RelocationInfo_v3g0ext_IEs
rrc.sRNC_RelocationInfo_v4b0ext  sRNC-RelocationInfo-v4b0ext
    No value
    rrc.sRNC_RelocationInfo_v4b0ext_IEs
rrc.sRNC_RelocationInfo_v4d0ext  sRNC-RelocationInfo-v4d0ext
    No value
    rrc.sRNC_RelocationInfo_v4d0ext_IEs
rrc.sRNC_RelocationInfo_v590ext  sRNC-RelocationInfo-v590ext
    No value
    rrc.sRNC_RelocationInfo_v590ext_IEs
rrc.sRNC_RelocationInfo_v5a0ext  sRNC-RelocationInfo-v5a0ext
    No value
    rrc.sRNC_RelocationInfo_v5a0ext_IEs
rrc.sRNC_RelocationInfo_v5b0ext  sRNC-RelocationInfo-v5b0ext
    No value
    rrc.sRNC_RelocationInfo_v5b0ext_IEs
rrc.sRNC_RelocationInfo_v5c0ext  sRNC-RelocationInfo-v5c0ext
    No value
    rrc.sRNC_RelocationInfo_v5c0ext_IEs
rrc.sRNC_RelocationInfo_v690ext  sRNC-RelocationInfo-v690ext
    No value
    rrc.sRNC_RelocationInfo_v690ext_IEs
rrc.sRNC_RelocationInfo_v6b0ext  sRNC-RelocationInfo-v6b0ext
    No value
    rrc.sRNC_RelocationInfo_v6b0ext_IEs
rrc.sRNC_RelocationInfo_v7xyext  sRNC-RelocationInfo-v7xyext
    No value
    rrc.sRNC_RelocationInfo_v7xyext_IEs
rrc.s_Field  s-Field
    Unsigned 32-bit integer
    rrc.S_Field
rrc.s_HCS_RAT  s-HCS-RAT
    Signed 32-bit integer
    rrc.S_SearchRXLEV
rrc.s_Intersearch  s-Intersearch
    Signed 32-bit integer
    rrc.S_SearchQual
```

```
rrc.s_Intrasearch s-Intrasearch
Signed 32-bit integer
rrc.S_SearchQual

rrc.s_Limit_SearchRAT s-Limit-SearchRAT
Signed 32-bit integer
rrc.S_SearchQual

rrc.s_RNTI s-RNTI
Byte array
rrc.S_RNTI

rrc.s_RNTI_2 s-RNTI-2
Byte array
rrc.S_RNTI_2

rrc.s_SearchHCS s-SearchHCS
Signed 32-bit integer
rrc.S_SearchRXLEV

rrc.s_SearchRAT s-SearchRAT
Signed 32-bit integer
rrc.S_SearchQual

rrc.sameAsCurrent sameAsCurrent
No value
rrc.T_sameAsCurrent

rrc.sameAsLast sameAsLast
No value
rrc.T_sameAsLast

rrc.sameAsMIB_MultiPLMN_Id sameAsMIB-MultiPLMN-Id
Unsigned 32-bit integer
rrc.INTEGER_1_5

rrc.sameAsMIB_PLMN_Id sameAsMIB-PLMN-Id
No value
rrc.NULL

rrc.sameAsUL sameAsUL
No value
rrc.NULL

rrc.sameAsULTrCH sameAsULTrCH
No value
rrc.UL_TransportChannelIdentity

rrc.same_as_RB same-as-RB
Unsigned 32-bit integer
rrc.RB_Identity

rrc.satDataList satDataList
Unsigned 32-bit integer
rrc.SatDataList

rrc.satHealth satHealth
Byte array
rrc.BIT_STRING_SIZE_8

rrc.satID satID
Unsigned 32-bit integer
rrc.SatID
```

```
rrc.satMask satMask
  Byte array
  rrc.BIT_STRING_SIZE_1_32
rrc.satelliteID satelliteID
  Unsigned 32-bit integer
  rrc.INTEGER_0_63
rrc.satelliteInformationList satelliteInformationList
  Unsigned 32-bit integer
  rrc.AcquisitionSatInfoList
rrc.satelliteStatus satelliteStatus
  Unsigned 32-bit integer
  rrc.SatelliteStatus
rrc.sccpchIdentity sccpchIdentity
  Unsigned 32-bit integer
  rrc.MBMS_SCCPCHIdentity
rrc.sccpch_SystemInformation_MBMS sccpch-SystemInformation-MBMS
  Unsigned 32-bit integer
  rrc.T_sccpch_SystemInformation_MBMS
rrc.sccpch_TFCS sccpch-TFCS
  Unsigned 32-bit integer
  rrc.TFCS
rrc.scheduledTransmissionGrantInfo scheduledTransmissionGrantInfo
  No value
  rrc.NULL
rrc.scheduling scheduling
  No value
  rrc.T_scheduling
rrc.schedulingInfo schedulingInfo
  No value
  rrc.SchedulingInformation
rrc.schedulingInfoConfiguration schedulingInfoConfiguration
  No value
  rrc.E_DPDCH_SchedulingInfoConfiguration
rrc.schedulingPeriod_1024_Offset schedulingPeriod-1024-Offset
  Unsigned 32-bit integer
  rrc.INTEGER_0_1023
rrc.schedulingPeriod_128_Offset schedulingPeriod-128-Offset
  Unsigned 32-bit integer
  rrc.INTEGER_0_127
rrc.schedulingPeriod_256_Offset schedulingPeriod-256-Offset
  Unsigned 32-bit integer
  rrc.INTEGER_0_255
rrc.schedulingPeriod_32_Offset schedulingPeriod-32-Offset
  Unsigned 32-bit integer
  rrc.INTEGER_0_31
rrc.schedulingPeriod_512_Offset schedulingPeriod-512-Offset
  Unsigned 32-bit integer
  rrc.INTEGER_0_511
```

```
rrc.schedulingPeriod_64_Offset  schedulingPeriod-64-Offset
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.schedulingTransmConfiguration  schedulingTransmConfiguration
    No value
    rrc.E_DPDCH_SchedulingTransmConfiguration

rrc.scramblingCode  scramblingCode
    Unsigned 32-bit integer
    rrc.UL_ScramblingCode

rrc.scramblingCodeChange  scramblingCodeChange
    Unsigned 32-bit integer
    rrc.ScramblingCodeChange

rrc.scramblingCodeType  scramblingCodeType
    Unsigned 32-bit integer
    rrc.ScramblingCodeType

rrc.sctd_Indicator  sctd-Indicator
    Boolean
    rrc.BOOLEAN

rrc.searchWindowSize  searchWindowSize
    Unsigned 32-bit integer
    rrc.OTDOA_SearchWindowSize

rrc.secondCPICH_Pattern  secondCPICH-Pattern
    Unsigned 32-bit integer
    rrc.T_secondCPICH_Pattern

rrc.secondChannelisationCode  secondChannelisationCode
    Unsigned 32-bit integer
    rrc.HS_ChannelisationCode_LCR

rrc.secondInterleavingMode  secondInterleavingMode
    Unsigned 32-bit integer
    rrc.SecondInterleavingMode

rrc.secondaryCCPCHInfo_MBMS  secondaryCCPCHInfo-MBMS
    No value
    rrc.SecondaryCCPCHInfo_MBMS_r6

rrc.secondaryCCPCHPwrOffsetDiff  secondaryCCPCHPwrOffsetDiff
    Unsigned 32-bit integer
    rrc.MBMS_SCCPCHPwrOffsetDiff

rrc.secondaryCCPCH_Info  secondaryCCPCH-Info
    No value
    rrc.SecondaryCCPCH_Info

rrc.secondaryCCPCH_LCR_Extensions  secondaryCCPCH-LCR-Extensions
    No value
    rrc.SecondaryCCPCH_Info_LCR_r4_ext

rrc.secondaryCPICH_Info  secondaryCPICH-Info
    No value
    rrc.SecondaryCPICH_Info

rrc.secondaryDL_ScramblingCode  secondaryDL-ScramblingCode
    Unsigned 32-bit integer
    rrc.SecondaryScramblingCode
```

```
rrc.secondaryScramblingCode  secondaryScramblingCode
    Unsigned 32-bit integer
    rrc.SecondaryScramblingCode

rrc.securityCapability  securityCapability
    No value
    rrc.SecurityCapability

rrc.securityModeCommand  securityModeCommand
    Unsigned 32-bit integer
    rrc.SecurityModeCommand

rrc.securityModeCommand_r3  securityModeCommand-r3
    No value
    rrc.SecurityModeCommand_r3_IEs

rrc.securityModeCommand_r3_add_ext  securityModeCommand-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.securityModeCommand_r7  securityModeCommand-r7
    No value
    rrc.SecurityModeCommand_r7_IEs

rrc.securityModeCommand_r7_add_ext  securityModeCommand-r7-add-ext
    Byte array
    rrc.BIT_STRING

rrc.securityModeComplete  securityModeComplete
    No value
    rrc.SecurityModeComplete

rrc.securityModeComplete_r3_add_ext  securityModeComplete-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.securityModeFailure  securityModeFailure
    No value
    rrc.SecurityModeFailure

rrc.securityModeFailure_r3_add_ext  securityModeFailure-r3-add-ext
    Byte array
    rrc.BIT_STRING

rrc.seed  seed
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.segCount  segCount
    Unsigned 32-bit integer
    rrc.SegCount

rrc.seg_Count  seg-Count
    Unsigned 32-bit integer
    rrc.SegCount

rrc.segmentIndex  segmentIndex
    Unsigned 32-bit integer
    rrc.SegmentIndex

rrc.segmentationIndication  segmentationIndication
    Boolean
    rrc.BOOLEAN
```



```
rrc.semistaticTF_Information  semistaticTF-Information
    No value
    rrc.SemistaticTF_Information
rrc.serviceIdentity  serviceIdentity
    Byte array
    rrc.OCTET_STRING_SIZE_3
rrc.serviceSchedulingInfoList  serviceSchedulingInfoList
    Unsigned 32-bit integer
    rrc.MBMS_ServiceSchedulingInfoList_r6
rrc.servingEDCH_RL_indicator  servingEDCH-RL-indicator
    Boolean
    rrc.BOOLEAN
rrc.servingGrant  servingGrant
    No value
    rrc.T_servingGrant
rrc.servingHSDSCH_RL_indicator  servingHSDSCH-RL-indicator
    Boolean
    rrc.BOOLEAN
rrc.serving_HSDSCH_CellInformation  serving-HSDSCH-CellInformation
    No value
    rrc.Serving_HSDSCH_CellInformation
rrc.setsWithDifferentValueTag  setsWithDifferentValueTag
    Unsigned 32-bit integer
    rrc.PredefinedConfigSetsWithDifferentValueTag
rrc.setup  setup
    Unsigned 32-bit integer
    rrc.MeasurementType
rrc.sf128  sf128
    Unsigned 32-bit integer
    rrc.INTEGER_0_127
rrc.sf16  sf16
    Unsigned 32-bit integer
    rrc.INTEGER_0_15
rrc.sf16_item  Item
    Unsigned 32-bit integer
    rrc.TDD_PRACH_CCode16
rrc.sf1Revd  sf1Revd
    No value
    rrc.SubFrame1Reserved
rrc.sf256  sf256
    Unsigned 32-bit integer
    rrc.INTEGER_0_255
rrc.sf32  sf32
    Unsigned 32-bit integer
    rrc.INTEGER_0_31
rrc.sf32_item  Item
    Unsigned 32-bit integer
    rrc.TDD768_PRACH_CCode32
```

```
rrc.sf4 sf4
    Unsigned 32-bit integer
    rrc.INTEGER_0_3

rrc.sf512 sf512
    Unsigned 32-bit integer
    rrc.INTEGER_0_511

rrc.sf64 sf64
    Unsigned 32-bit integer
    rrc.INTEGER_0_63

rrc.sf8 sf8
    Unsigned 32-bit integer
    rrc.INTEGER_0_7

rrc.sf8_item Item
    Unsigned 32-bit integer
    rrc.TDD_PRACH_CCode8

rrc.sf_AndCodeNumber sf-AndCodeNumber
    Unsigned 32-bit integer
    rrc.SF512_AndCodeNumber

rrc.sfd128 sfd128
    Unsigned 32-bit integer
    rrc.PilotBits128

rrc.sfd16 sfd16
    No value
    rrc.NULL

rrc.sfd256 sfd256
    Unsigned 32-bit integer
    rrc.PilotBits256

rrc.sfd32 sfd32
    No value
    rrc.NULL

rrc.sfd4 sfd4
    No value
    rrc.NULL

rrc.sfd512 sfd512
    No value
    rrc.NULL

rrc.sfd64 sfd64
    No value
    rrc.NULL

rrc.sfd8 sfd8
    No value
    rrc.NULL

rrc.sfn sfn
    Unsigned 32-bit integer
    rrc.INTEGER_0_4095

rrc.sfnNum sfnNum
    Unsigned 32-bit integer
    rrc.INTEGER_0_1
```

```
rrc.sfn_Offset  sfn-Offset
  Unsigned 32-bit integer
  rrc.INTEGER_0_4095

rrc.sfn_Offset_Validity  sfn-Offset-Validity
  Unsigned 32-bit integer
  rrc.SFN_Offset_Validity

rrc.sfn_Prime  sfn-Prime
  Unsigned 32-bit integer
  rrc.SFN_Prime

rrc.sfn_SFN_Drift  sfn-SFN-Drift
  Unsigned 32-bit integer
  rrc.SFN_SFN_Drift

rrc.sfn_SFN_OTD_Type  sfn-SFN-OTD-Type
  Unsigned 32-bit integer
  rrc.SFN_SFN_OTD_Type

rrc.sfn_SFN_ObsTimeDifference  sfn-SFN-ObsTimeDifference
  Unsigned 32-bit integer
  rrc.SFN_SFN_ObsTimeDifference

rrc.sfn_SFN_ObsTimeDifference2  sfn-SFN-ObsTimeDifference2
  Unsigned 32-bit integer
  rrc.SFN_SFN_ObsTimeDifference2

rrc.sfn_SFN_RelTimeDifference  sfn-SFN-RelTimeDifference
  No value
  rrc.SFN_SFN_RelTimeDifference1

rrc.sfn_TimeInfo  sfn-TimeInfo
  No value
  rrc.SFN_TimeInfo

rrc.sfn_sfnType2Capability  sfn-sfnType2Capability
  Unsigned 32-bit integer
  rrc.T_sfn_sfnType2Capability

rrc.sfn_sfn_RelTimeDifference  sfn-sfn-RelTimeDifference
  Unsigned 32-bit integer
  rrc.INTEGER_0_38399

rrc.sfn_tow_Uncertainty  sfn-tow-Uncertainty
  Unsigned 32-bit integer
  rrc.SFN_TOW_Uncertainty

rrc.sharedChannelIndicator  sharedChannelIndicator
  Boolean
  rrc.BOOLEAN

rrc.shortTransmissionID  shortTransmissionID
  Unsigned 32-bit integer
  rrc.MBMS_ShortTransmissionID

rrc.sib12indicator  sib12indicator
  Boolean
  rrc.BOOLEAN

rrc.sib4indicator  sib4indicator
  Boolean
  rrc.BOOLEAN
```

```
rrc.sib6indicator sib6indicator
  Boolean
  rrc.BOOLEAN

rrc.sibOccurIdentity sibOccurIdentity
  Unsigned 32-bit integer
  rrc.SIBOccurIdentity

rrc.sibOccurValueTag sibOccurValueTag
  Unsigned 32-bit integer
  rrc.SIBOccurValueTag

rrc.sibSb_ReferenceList sibSb-ReferenceList
  Unsigned 32-bit integer
  rrc.SIBSb_ReferenceList

rrc.sibSb_Type sibSb-Type
  Unsigned 32-bit integer
  rrc.SIBSb_TypeAndTag

rrc.sib_Data_fixed sib-Data-fixed
  Byte array
  rrc.SIB_Data_fixed

rrc.sib_Data_variable sib-Data-variable
  Byte array
  rrc.SIB_Data_variable

rrc.sib_Pos sib-Pos
  Unsigned 32-bit integer
  rrc.T_sib_Pos

rrc.sib_PosOffsetInfo sib-PosOffsetInfo
  Unsigned 32-bit integer
  rrc.SibOFF_List

rrc.sib_ReferenceList sib-ReferenceList
  Unsigned 32-bit integer
  rrc.SIB_ReferenceList

rrc.sib_ReferenceListFACH sib-ReferenceListFACH
  Unsigned 32-bit integer
  rrc.SIB_ReferenceListFACH

rrc.sib_Type sib-Type
  Unsigned 32-bit integer
  rrc.SIB_Type

rrc.sid sid
  Byte array
  rrc.SID

rrc.signalledGainFactors signalledGainFactors
  No value
  rrc.SignalledGainFactors

rrc.signallingConnectionRelIndication signallingConnectionRelIndication
  Unsigned 32-bit integer
  rrc.CN_DomainIdentity

rrc.signallingConnectionRelease signallingConnectionRelease
  Unsigned 32-bit integer
  rrc.SignallingConnectionRelease
```

```

rrc.signallingConnectionReleaseIndication  signallingConnectionReleaseIndication
    No value
    rrc.SignallingConnectionReleaseIndication
rrc.signallingConnectionReleaseIndication_r3_add_ext  signallingConnectionReleas
    Byte array
    rrc.BIT_STRING
rrc.signallingConnectionRelease_r3  signallingConnectionRelease-r3
    No value
    rrc.SignallingConnectionRelease_r3_IEs
rrc.signallingConnectionRelease_r3_add_ext  signallingConnectionRelease-r3-add-e
    Byte array
    rrc.BIT_STRING
rrc.signallingMethod  signallingMethod
    Unsigned 32-bit integer
    rrc.T_signallingMethod
rrc.signature0  signature0
    Boolean
rrc.signature1  signature1
    Boolean
rrc.signature10  signature10
    Boolean
rrc.signature11  signature11
    Boolean
rrc.signature12  signature12
    Boolean
rrc.signature13  signature13
    Boolean
rrc.signature14  signature14
    Boolean
rrc.signature15  signature15
    Boolean
rrc.signature2  signature2
    Boolean
rrc.signature3  signature3
    Boolean
rrc.signature4  signature4
    Boolean
rrc.signature5  signature5
    Boolean
rrc.signature6  signature6
    Boolean
rrc.signature7  signature7
    Boolean
rrc.signature8  signature8
    Boolean

```

```
rrc.signature9 signature9
    Boolean

rrc.signatureSequence signatureSequence
    Unsigned 32-bit integer
    rrc.E_HICH_RGCH_SignatureSequence

rrc.simultaneousSCCPCH_DPCH_DPDCH_Reception simultaneousSCCPCH-DPCH-DPDCH-Recep
    Boolean
    rrc.BOOLEAN

rrc.single_GERANIu_Message single-GERANIu-Message
    No value
    rrc.T_single_GERANIu_Message

rrc.single_GSM_Message single-GSM-Message
    No value
    rrc.T_single_GSM_Message

rrc.sir_MeasurementResults sir-MeasurementResults
    Unsigned 32-bit integer
    rrc.SIR_MeasurementList

rrc.sir_TFCS_List sir-TFCS-List
    Unsigned 32-bit integer
    rrc.SIR_TFCS_List

rrc.sir_TimeslotList sir-TimeslotList
    Unsigned 32-bit integer
    rrc.SIR_TimeslotList

rrc.size1 size1
    No value
    rrc.NULL

rrc.size16 size16
    No value
    rrc.T_size16

rrc.size2 size2
    No value
    rrc.T_size2

rrc.size4 size4
    No value
    rrc.T_size4

rrc.size8 size8
    No value
    rrc.T_size8

rrc.sizeType1 sizeType1
    Unsigned 32-bit integer
    rrc.INTEGER_0_127

rrc.sizeType2 sizeType2
    No value
    rrc.T_sizeType2

rrc.sizeType3 sizeType3
    No value
    rrc.T_sizeType3
```

```
rrc.sizeType4 sizeType4
    No value
    rrc.T_sizeType4
rrc.small small
    Unsigned 32-bit integer
    rrc.INTEGER_2_17
rrc.snpl_ReportType snpl-ReportType
    Unsigned 32-bit integer
    rrc.T_snpl_ReportType
rrc.softComb_TimingOffset softComb-TimingOffset
    Unsigned 32-bit integer
    rrc.MBMS_SoftComb_TimingOffset
rrc.softSlope softSlope
    Unsigned 32-bit integer
    rrc.INTEGER_0_63
rrc.some some
    Unsigned 32-bit integer
    rrc.MBMS_SelectedServicesListFull
rrc.spare spare
    No value
    rrc.NULL
rrc.spare0 spare0
    Boolean
rrc.spare1 spare1
    No value
    rrc.NULL
rrc.spare10 spare10
    No value
    rrc.NULL
rrc.spare11 spare11
    No value
    rrc.NULL
rrc.spare12 spare12
    Boolean
rrc.spare13 spare13
    Boolean
rrc.spare14 spare14
    Boolean
rrc.spare15 spare15
    Boolean
rrc.spare2 spare2
    No value
    rrc.NULL
rrc.spare3 spare3
    No value
    rrc.NULL
```

```
rrc.spare4 spare4
    No value
    rrc.NULL

rrc.spare5 spare5
    No value
    rrc.NULL

rrc.spare6 spare6
    No value
    rrc.NULL

rrc.spare7 spare7
    No value
    rrc.NULL

rrc.spare8 spare8
    No value
    rrc.NULL

rrc.spare9 spare9
    No value
    rrc.NULL

rrc.specialBurstScheduling specialBurstScheduling
    Unsigned 32-bit integer
    rrc.SpecialBurstScheduling

rrc.specificationMode specificationMode
    Unsigned 32-bit integer
    rrc.T_specificationMode

rrc.speedDependentScalingFactor speedDependentScalingFactor
    Unsigned 32-bit integer
    rrc.SpeedDependentScalingFactor

rrc.splitType splitType
    Unsigned 32-bit integer
    rrc.SplitType

rrc.spreadingFactor spreadingFactor
    Unsigned 32-bit integer
    rrc.SF_PDSCH

rrc.spreadingFactorAndPilot spreadingFactorAndPilot
    Unsigned 32-bit integer
    rrc.SF512_AndPilot

rrc.srb_InformationList srb-InformationList
    Unsigned 32-bit integer
    rrc.SRB_InformationSetupList

rrc.srb_InformationSetupList srb-InformationSetupList
    Unsigned 32-bit integer
    rrc.SRB_InformationSetupList

rrc.srb_SpecificIntegrityProtInfo srb-SpecificIntegrityProtInfo
    Unsigned 32-bit integer
    rrc.SRB_SpecificIntegrityProtInfoList

rrc.srncRelocation srncRelocation
    Unsigned 32-bit integer
    rrc.SRNC_RelocationInfo_r3
```



```

rrc.srnc_Identity  srnc-Identity
    Byte array
    rrc.SRNC_Identity

rrc.ss_TPC_Symbols  ss-TPC-Symbols
    Unsigned 32-bit integer
    rrc.T_ss_TPC_Symbols

rrc.ssdT_UL_r4  ssdt-UL-r4
    Unsigned 32-bit integer
    rrc.SSDT_UL

rrc.standaloneLocMethodsSupported  standaloneLocMethodsSupported
    Boolean
    rrc.BOOLEAN

rrc.start  start
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.startIntegrityProtection  startIntegrityProtection
    No value
    rrc.T_startIntegrityProtection

rrc.startList  startList
    Unsigned 32-bit integer
    rrc.STARTList

rrc.startPosition  startPosition
    Unsigned 32-bit integer
    rrc.INTEGER_0_10

rrc.startRestart  startRestart
    Unsigned 32-bit integer
    rrc.CipheringAlgorithm

rrc.startValueForCiphering_v3a0ext  startValueForCiphering-v3a0ext
    Byte array
    rrc.START_Value

rrc.startValueForCiphering_v3b0ext  startValueForCiphering-v3b0ext
    Unsigned 32-bit integer
    rrc.STARTList2

rrc.start_CS  start-CS
    Byte array
    rrc.START_Value

rrc.start_PS  start-PS
    Byte array
    rrc.START_Value

rrc.start_Value  start-Value
    Byte array
    rrc.START_Value

rrc.stateOfRRC  stateOfRRC
    Unsigned 32-bit integer
    rrc.StateOfRRC

rrc.stateOfRRC_Procedure  stateOfRRC-Procedure
    Unsigned 32-bit integer
    rrc.StateOfRRC_Procedure

```

```
rrc.status      status
    Unsigned 32-bit integer
    rrc.T_status

rrc.statusHealth statusHealth
    Unsigned 32-bit integer
    rrc.DiffCorrectionStatus

rrc.stdOfOTDOA_Measurements stdOfOTDOA-Measurements
    Byte array
    rrc.BIT_STRING_SIZE_5

rrc.stdResolution stdResolution
    Byte array
    rrc.BIT_STRING_SIZE_2

rrc.stepSize    stepSize
    Unsigned 32-bit integer
    rrc.INTEGER_1_8

rrc.storedCompressedModeInfo storedCompressedModeInfo
    No value
    rrc.StoredCompressedModeInfo

rrc.storedTGP_SequenceList storedTGP-SequenceList
    Unsigned 32-bit integer
    rrc.StoredTGP_SequenceList

rrc.storedWithDifferentValueTag storedWithDifferentValueTag
    Unsigned 32-bit integer
    rrc.PredefinedConfigValueTag

rrc.storedWithValueTagSameAsPrevious storedWithValueTagSameAsPrevious
    No value
    rrc.NULL

rrc.sttdIndication sttdIndication
    Unsigned 32-bit integer
    rrc.STTDIndication

rrc.sttd_Indicator sttd-Indicator
    Boolean
    rrc.BOOLEAN

rrc.subCh0    subCh0
    Boolean

rrc.subCh1    subCh1
    Boolean

rrc.subCh10   subCh10
    Boolean

rrc.subCh11   subCh11
    Boolean

rrc.subCh12   subCh12
    Boolean

rrc.subCh13   subCh13
    Boolean

rrc.subCh14   subCh14
    Boolean
```

```
rrc.subCh15  subCh15
  Boolean
rrc.subCh2   subCh2
  Boolean
rrc.subCh3   subCh3
  Boolean
rrc.subCh4   subCh4
  Boolean
rrc.subCh5   subCh5
  Boolean
rrc.subCh6   subCh6
  Boolean
rrc.subCh7   subCh7
  Boolean
rrc.subCh8   subCh8
  Boolean
rrc.subCh9   subCh9
  Boolean

rrc.subchannelSize  subchannelSize
  Unsigned 32-bit integer
  rrc.T_subchannelSize

rrc.subchannels  subchannels
  Unsigned 32-bit integer
  rrc.T_subchannels

rrc.subsequentSegment  subsequentSegment
  No value
  rrc.SubsequentSegment

rrc.sulCodeIndex0  sulCodeIndex0
  Boolean
rrc.sulCodeIndex1  sulCodeIndex1
  Boolean
rrc.sulCodeIndex2  sulCodeIndex2
  Boolean
rrc.sulCodeIndex3  sulCodeIndex3
  Boolean
rrc.sulCodeIndex4  sulCodeIndex4
  Boolean
rrc.sulCodeIndex5  sulCodeIndex5
  Boolean
rrc.sulCodeIndex6  sulCodeIndex6
  Boolean
rrc.sulCodeIndex7  sulCodeIndex7
  Boolean

rrc.supportForIPDL  supportForIPDL
  Boolean
  rrc.BOOLEAN
```

```
rrc.supportForRfc2507 supportForRfc2507
    Unsigned 32-bit integer
    rrc.T_supportForRfc2507

rrc.supportForRfc3095 supportForRfc3095
    Unsigned 32-bit integer
    rrc.T_supportForRfc3095

rrc.supportForRfc3095ContextRelocation supportForRfc3095ContextRelocation
    Boolean
    rrc.BOOLEAN

rrc.supportForSF_512 supportForSF-512
    Boolean
    rrc.BOOLEAN

rrc.supportForSIB11bis supportForSIB11bis
    Unsigned 32-bit integer
    rrc.T_supportForSIB11bis

rrc.supportForUE_GPS_TimingOfCellFrames supportForUE-GPS-TimingOfCellFrames
    Boolean
    rrc.BOOLEAN

rrc.supportOf8PSK supportOf8PSK
    Boolean
    rrc.BOOLEAN

rrc.supportOfGSM supportOfGSM
    Boolean
    rrc.BOOLEAN

rrc.supportOfHandoverToGAN supportOfHandoverToGAN
    Unsigned 32-bit integer
    rrc.T_supportOfHandoverToGAN

rrc.supportOfInter_RAT_PS_Handover supportOfInter-RAT-PS-Handover
    Unsigned 32-bit integer
    rrc.T_supportOfInter_RAT_PS_Handover

rrc.supportOfMulticarrier supportOfMulticarrier
    Boolean
    rrc.BOOLEAN

rrc.supportOfPDSCH supportOfPDSCH
    Boolean
    rrc.BOOLEAN

rrc.supportOfPUSCH supportOfPUSCH
    Boolean
    rrc.BOOLEAN

rrc.supportOfUTRAN_ToGERAN_NACC supportOfUTRAN-ToGERAN-NACC
    Boolean
    rrc.BOOLEAN

rrc.supported supported
    Unsigned 32-bit integer
    rrc.MaxHcContextSpace

rrc.sv_GlobalHealth sv-GlobalHealth
    Byte array
    rrc.BIT_STRING_SIZE_364
```

```
rrc.syncCase syncCase
    Unsigned 32-bit integer
    rrc.T_syncCase

rrc.syncCase1 syncCase1
    No value
    rrc.T_syncCase1

rrc.syncCase2 syncCase2
    No value
    rrc.T_syncCase2

rrc.sync_UL_CodesBitmap sync-UL-CodesBitmap
    Byte array
    rrc.T_sync_UL_CodesBitmap

rrc.sync_UL_Codes_Bitmap sync-UL-Codes-Bitmap
    Byte array
    rrc.T_sync_UL_Codes_Bitmap

rrc.sync_UL_Info sync-UL-Info
    No value
    rrc.SYNC_UL_Info_r4

rrc.sync_UL_Procedure sync-UL-Procedure
    No value
    rrc.SYNC_UL_Procedure_r4

rrc.synchronisationParameters synchronisationParameters
    No value
    rrc.SynchronisationParameters_r4

rrc.sysInfoType1 sysInfoType1
    Unsigned 32-bit integer
    rrc.PLMN_ValueTag

rrc.sysInfoType11 sysInfoType11
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType11_v4b0ext sysInfoType11-v4b0ext
    No value
    rrc.SysInfoType11_v4b0ext_IEs

rrc.sysInfoType11_v590ext sysInfoType11-v590ext
    No value
    rrc.SysInfoType11_v590ext_IEs

rrc.sysInfoType11_v690ext sysInfoType11-v690ext
    No value
    rrc.SysInfoType11_v690ext_IEs

rrc.sysInfoType11_v6b0ext sysInfoType11-v6b0ext
    No value
    rrc.SysInfoType11_v6b0ext_IEs

rrc.sysInfoType12 sysInfoType12
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType12_v4b0ext sysInfoType12-v4b0ext
    No value
    rrc.SysInfoType12_v4b0ext_IEs
```

```
rrc.sysInfoType12_v590ext sysInfoType12-v590ext
  No value
  rrc.SysInfoType12_v590ext_IEs
rrc.sysInfoType12_v690ext sysInfoType12-v690ext
  No value
  rrc.SysInfoType12_v690ext_IEs
rrc.sysInfoType12_v6b0ext sysInfoType12-v6b0ext
  No value
  rrc.SysInfoType12_v6b0ext_IEs
rrc.sysInfoType13 sysInfoType13
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType13_1 sysInfoType13-1
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType13_2 sysInfoType13-2
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType13_3 sysInfoType13-3
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType13_4 sysInfoType13-4
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType13_v3a0ext sysInfoType13-v3a0ext
  No value
  rrc.SysInfoType13_v3a0ext_IEs
rrc.sysInfoType13_v4b0ext sysInfoType13-v4b0ext
  No value
  rrc.SysInfoType13_v4b0ext_IEs
rrc.sysInfoType13_v7xyext sysInfoType13-v7xyext
  No value
  rrc.SysInfoType13_v7xyext_IEs
rrc.sysInfoType14 sysInfoType14
  No value
  rrc.NULL
rrc.sysInfoType15 sysInfoType15
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType15_1 sysInfoType15-1
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType15_2 sysInfoType15-2
  No value
  rrc.SIBOccurrenceIdentityAndValueTag
rrc.sysInfoType15_3 sysInfoType15-3
  No value
  rrc.SIBOccurrenceIdentityAndValueTag
```

```
rrc.sysInfoType15_4 sysInfoType15-4
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType15_4_v3a0ext sysInfoType15-4-v3a0ext
    No value
    rrc.SysInfoType15_4_v3a0ext

rrc.sysInfoType15_4_v4b0ext sysInfoType15-4-v4b0ext
    No value
    rrc.SysInfoType15_4_v4b0ext

rrc.sysInfoType15_5 sysInfoType15-5
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType15_5_v3a0ext sysInfoType15-5-v3a0ext
    No value
    rrc.SysInfoType15_5_v3a0ext

rrc.sysInfoType15_5_v7xyext sysInfoType15-5-v7xyext
    No value
    rrc.SysInfoType15_5_v7xyext_IEs

rrc.sysInfoType15_v4b0ext sysInfoType15-v4b0ext
    No value
    rrc.SysInfoType15_v4b0ext_IEs

rrc.sysInfoType15_v7xyext sysInfoType15-v7xyext
    No value
    rrc.SysInfoType15_v7xyext_IEs

rrc.sysInfoType16 sysInfoType16
    No value
    rrc.PredefinedConfigIdentityAndValueTag

rrc.sysInfoType17 sysInfoType17
    No value
    rrc.NULL

rrc.sysInfoType17_v4b0ext sysInfoType17-v4b0ext
    No value
    rrc.SysInfoType17_v4b0ext_IEs

rrc.sysInfoType17_v590ext sysInfoType17-v590ext
    No value
    rrc.SysInfoType17_v590ext_IEs

rrc.sysInfoType17_v7xyext sysInfoType17-v7xyext
    No value
    rrc.SysInfoType17_v7xyext_IEs

rrc.sysInfoType18 sysInfoType18
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType18_v6b0ext sysInfoType18-v6b0ext
    No value
    rrc.SysInfoType18_v6b0ext

rrc.sysInfoType1_v3a0ext sysInfoType1-v3a0ext
    No value
    rrc.SysInfoType1_v3a0ext_IEs
```

```
rrc.sysInfoType2  sysInfoType2
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType3  sysInfoType3
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType3_v4b0ext  sysInfoType3-v4b0ext
    No value
    rrc.SysInfoType3_v4b0ext_IEs

rrc.sysInfoType3_v590ext  sysInfoType3-v590ext
    No value
    rrc.SysInfoType3_v590ext

rrc.sysInfoType3_v5c0ext  sysInfoType3-v5c0ext
    No value
    rrc.SysInfoType3_v5c0ext_IEs

rrc.sysInfoType3_v670ext  sysInfoType3-v670ext
    No value
    rrc.SysInfoType3_v670ext

rrc.sysInfoType3_v7xyext  sysInfoType3-v7xyext
    No value
    rrc.SysInfoType3_v7xyext

rrc.sysInfoType4  sysInfoType4
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType4_v4b0ext  sysInfoType4-v4b0ext
    No value
    rrc.SysInfoType4_v4b0ext_IEs

rrc.sysInfoType4_v590ext  sysInfoType4-v590ext
    No value
    rrc.SysInfoType4_v590ext

rrc.sysInfoType4_v5b0ext  sysInfoType4-v5b0ext
    No value
    rrc.SysInfoType4_v5b0ext_IEs

rrc.sysInfoType4_v5c0ext  sysInfoType4-v5c0ext
    No value
    rrc.SysInfoType4_v5c0ext_IEs

rrc.sysInfoType5  sysInfoType5
    Unsigned 32-bit integer
    rrc.CellValueTag

rrc.sysInfoType5_v4b0ext  sysInfoType5-v4b0ext
    No value
    rrc.SysInfoType5_v4b0ext_IEs

rrc.sysInfoType5_v590ext  sysInfoType5-v590ext
    No value
    rrc.SysInfoType5_v590ext_IEs

rrc.sysInfoType5_v650ext  sysInfoType5-v650ext
    No value
    rrc.SysInfoType5_v650ext_IEs
```



```
rrc.sysInfoType5_v680ext sysInfoType5-v680ext
  No value
  rrc.SysInfoType5_v680ext_IEs
rrc.sysInfoType5_v690ext sysInfoType5-v690ext
  No value
  rrc.SysInfoType5_v690ext_IEs
rrc.sysInfoType5_v7xyext sysInfoType5-v7xyext
  No value
  rrc.SysInfoType5_v7xyext_IEs
rrc.sysInfoType5bis sysInfoType5bis
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType6 sysInfoType6
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoType6_v4b0ext sysInfoType6-v4b0ext
  No value
  rrc.SysInfoType6_v4b0ext_IEs
rrc.sysInfoType6_v590ext sysInfoType6-v590ext
  No value
  rrc.SysInfoType6_v590ext_IEs
rrc.sysInfoType6_v650ext sysInfoType6-v650ext
  No value
  rrc.SysInfoType6_v650ext_IEs
rrc.sysInfoType6_v690ext sysInfoType6-v690ext
  No value
  rrc.SysInfoType6_v690ext_IEs
rrc.sysInfoType6_v7xyext sysInfoType6-v7xyext
  No value
  rrc.SysInfoType6_v7xyext_IEs
rrc.sysInfoType7 sysInfoType7
  No value
  rrc.NULL
rrc.sysInfoTypeSB1 sysInfoTypeSB1
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoTypeSB1_v6b0ext sysInfoTypeSB1-v6b0ext
  No value
  rrc.SysInfoTypeSB1_v6b0ext
rrc.sysInfoTypeSB2 sysInfoTypeSB2
  Unsigned 32-bit integer
  rrc.CellValueTag
rrc.sysInfoTypeSB2_v6b0ext sysInfoTypeSB2-v6b0ext
  No value
  rrc.SysInfoTypeSB2_v6b0ext
rrc.systemInformation systemInformation
  No value
  rrc.SystemInformation_FACH
```

```
rrc.systemInformationBlockType11bis  systemInformationBlockType11bis
  No value
  rrc.NULL

rrc.systemInformationChangeIndication  systemInformationChangeIndication
  No value
  rrc.SystemInformationChangeIndication

rrc.systemInformationChangeIndication_r3_add_ext  systemInformationChangeIndicat
  Byte array
  rrc.BIT_STRING

rrc.systemSpecificCapUpdateReq  systemSpecificCapUpdateReq
  Unsigned 32-bit integer
  rrc.SystemSpecificCapUpdateReq_v590ext

rrc.systemSpecificCapUpdateReqList  systemSpecificCapUpdateReqList
  Unsigned 32-bit integer
  rrc.SystemSpecificCapUpdateReqList

rrc.t120  t120
  No value
  rrc.N_CR_T_CRMaxHyst

rrc.t180  t180
  No value
  rrc.N_CR_T_CRMaxHyst

rrc.t240  t240
  No value
  rrc.N_CR_T_CRMaxHyst

rrc.t30  t30
  No value
  rrc.N_CR_T_CRMaxHyst

rrc.t314_expired  t314-expired
  Boolean
  rrc.BOOLEAN

rrc.t315_expired  t315-expired
  Boolean
  rrc.BOOLEAN

rrc.t60  t60
  No value
  rrc.N_CR_T_CRMaxHyst

rrc.tMSIofdifferentPLMN  tMSIofdifferentPLMN
  No value
  rrc.T_tMSIofdifferentPLMN

rrc.tMSIofsamePLMN  tMSIofsamePLMN
  No value
  rrc.T_tMSIofsamePLMN

rrc.tS_Number  tS-Number
  Unsigned 32-bit integer
  rrc.INTEGER_0_14

rrc.tS_Numnber  tS-Numnber
  Unsigned 32-bit integer
  rrc.INTEGER_0_14
```

```
rrc.tS_number  tS-number
    Unsigned 32-bit integer
    rrc.INTEGER_0_14

rrc.tToeLimit  tToeLimit
    Unsigned 32-bit integer
    rrc.INTEGER_0_15

rrc.t_300      t-300
    Unsigned 32-bit integer
    rrc.T_300

rrc.t_301      t-301
    Unsigned 32-bit integer
    rrc.T_301

rrc.t_302      t-302
    Unsigned 32-bit integer
    rrc.T_302

rrc.t_304      t-304
    Unsigned 32-bit integer
    rrc.T_304

rrc.t_305      t-305
    Unsigned 32-bit integer
    rrc.T_305

rrc.t_307      t-307
    Unsigned 32-bit integer
    rrc.T_307

rrc.t_308      t-308
    Unsigned 32-bit integer
    rrc.T_308

rrc.t_309      t-309
    Unsigned 32-bit integer
    rrc.T_309

rrc.t_310      t-310
    Unsigned 32-bit integer
    rrc.T_310

rrc.t_311      t-311
    Unsigned 32-bit integer
    rrc.T_311

rrc.t_312      t-312
    Unsigned 32-bit integer
    rrc.T_312

rrc.t_313      t-313
    Unsigned 32-bit integer
    rrc.T_313

rrc.t_314      t-314
    Unsigned 32-bit integer
    rrc.T_314

rrc.t_315      t-315
    Unsigned 32-bit integer
    rrc.T_315
```

```
rrc.t_316 t-316
    Unsigned 32-bit integer
    rrc.T_316

rrc.t_317 t-317
    Unsigned 32-bit integer
    rrc.T_317

rrc.t_318 t-318
    Unsigned 32-bit integer
    rrc.T_318

rrc.t_ADV t-ADV
    Unsigned 32-bit integer
    rrc.INTEGER_0_2047

rrc.t_ADVinfo t-ADVinfo
    No value
    rrc.T_ADVinfo

rrc.t_Barred t-Barred
    Unsigned 32-bit integer
    rrc.T_Barred

rrc.t_CPCH t-CPCH
    Unsigned 32-bit integer
    rrc.T_CPCH

rrc.t_CRMaxHyst t-CRMaxHyst
    Unsigned 32-bit integer
    rrc.T_CRMaxHyst

rrc.t_CR_Max t-CR-Max
    Unsigned 32-bit integer
    rrc.T_CRMax

rrc.t_GD t-GD
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.t_RUCCH t-RUCCH
    Unsigned 32-bit integer
    rrc.T_t_RUCCH

rrc.t_Reselection_S t-Reselection-S
    Unsigned 32-bit integer
    rrc.T_Reselection_S

rrc.t_Reselection_S_FACH t-Reselection-S-FACH
    Unsigned 32-bit integer
    rrc.T_Reselection_S_Fine

rrc.t_Reselection_S_PCH t-Reselection-S-PCH
    Unsigned 32-bit integer
    rrc.T_Reselection_S

rrc.t_WAIT t-WAIT
    Unsigned 32-bit integer
    rrc.T_t_WAIT

rrc.t_oa t-oa
    Byte array
    rrc.BIT_STRING_SIZE_8
```

```
rrc.t_oc t-oc
  Byte array
  rrc.BIT_STRING_SIZE_16

rrc.t_oe t-oe
  Byte array
  rrc.BIT_STRING_SIZE_16

rrc.t_ot t-ot
  Byte array
  rrc.BIT_STRING_SIZE_8

rrc.tadd_EcIo tadd-EcIo
  Unsigned 32-bit integer
  rrc.INTEGER_0_63

rrc.tcomp_EcIo tcomp-EcIo
  Unsigned 32-bit integer
  rrc.INTEGER_0_15

rrc.tcp_SPACE tcp-SPACE
  Unsigned 32-bit integer
  rrc.INTEGER_3_255

rrc.tctf_Presence tctf-Presence
  Unsigned 32-bit integer
  rrc.MBMS_TCTF_Presence

rrc.tdd tdd
  No value
  rrc.NULL

rrc.tdd128 tdd128
  No value
  rrc.T_tdd128

rrc.tdd128SpecificInfo tdd128SpecificInfo
  No value
  rrc.T_tdd128SpecificInfo

rrc.tdd128_Measurements tdd128-Measurements
  Boolean
  rrc.BOOLEAN

rrc.tdd128_PhysChCapability tdd128-PhysChCapability
  No value
  rrc.T_tdd128_PhysChCapability

rrc.tdd128_RF_Capability tdd128-RF-Capability
  Unsigned 32-bit integer
  rrc.RadioFrequencyBandTDDList

rrc.tdd128_UMTS_Frequency_List tdd128-UMTS-Frequency-List
  Unsigned 32-bit integer
  rrc.TDD_UMTS_Frequency_List

rrc.tdd128_edch tdd128-edch
  Unsigned 32-bit integer
  rrc.T_tdd128_edch

rrc.tdd128_hspdsch tdd128-hspdsch
  Unsigned 32-bit integer
  rrc.T_tdd128_hspdsch
```

```
rrc.tdd128_item Item
  No value
  rrc.HS_SCCH_TDD128
rrc.tdd348_tdd768 tdd348-tdd768
  No value
  rrc.T_tdd348_tdd768
rrc.tdd384 tdd384
  No value
  rrc.T_tdd384
rrc.tdd384_768 tdd384-768
  No value
  rrc.T_tdd384_768
rrc.tdd384_Measurements tdd384-Measurements
  Boolean
  rrc.BOOLEAN
rrc.tdd384_PhysChCapability tdd384-PhysChCapability
  No value
  rrc.T_tdd384_PhysChCapability
rrc.tdd384_RF_Capability tdd384-RF-Capability
  Unsigned 32-bit integer
  rrc.T_tdd384_RF_Capability
rrc.tdd384_UMTS_Frequency_List tdd384-UMTS-Frequency-List
  Unsigned 32-bit integer
  rrc.TDD_UMTS_Frequency_List
rrc.tdd384_hspdsch tdd384-hspdsch
  Unsigned 32-bit integer
  rrc.T_tdd384_hspdsch
rrc.tdd384_item Item
  Unsigned 32-bit integer
  rrc.TimeslotNumber
rrc.tdd384_tdd768 tdd384-tdd768
  No value
  rrc.T_tdd384_tdd768
rrc.tdd384_tdd768_edch tdd384-tdd768-edch
  Unsigned 32-bit integer
  rrc.T_tdd384_tdd768_edch
rrc.tdd768 tdd768
  No value
  rrc.T_tdd768
rrc.tdd768_RF_Capability tdd768-RF-Capability
  Unsigned 32-bit integer
  rrc.T_tdd768_RF_Capability
rrc.tddOption tddOption
  Unsigned 32-bit integer
  rrc.T_tddOption
rrc.tddPhysChCapability tddPhysChCapability
  No value
  rrc.T_tddPhysChCapability
```

```
rrc.tddPhysChCapability_768  tddPhysChCapability-768
    No value
    rrc.T_tddPhysChCapability_768
rrc.tddRF_Capability  tddRF-Capability
    No value
    rrc.T_tddRF_Capability
rrc.tdd_CapabilityExt  tdd-CapabilityExt
    No value
    rrc.T_tdd_CapabilityExt
rrc.tdd_Measurements  tdd-Measurements
    Boolean
    rrc.BOOLEAN
rrc.tdd_UMTS_Frequency_List  tdd-UMTS-Frequency-List
    Unsigned 32-bit integer
    rrc.TDD_UMTS_Frequency_List
rrc.tdd_edch_PhysicalLayerCategory  tdd-edch-PhysicalLayerCategory
    Unsigned 32-bit integer
    rrc.INTEGER_1_16
rrc.tdd_item  Item
    No value
    rrc.ASCSetting_TDD
rrc.technologySpecificInfo  technologySpecificInfo
    Unsigned 32-bit integer
    rrc.T_technologySpecificInfo
rrc.temporaryOffset1  temporaryOffset1
    Unsigned 32-bit integer
    rrc.TemporaryOffset1
rrc.temporaryOffset2  temporaryOffset2
    Unsigned 32-bit integer
    rrc.TemporaryOffset2
rrc.tfc_ControlDuration  tfc-ControlDuration
    Unsigned 32-bit integer
    rrc.TFC_ControlDuration
rrc.tfc_Subset  tfc-Subset
    Unsigned 32-bit integer
    rrc.TFC_Subset
rrc.tfc_SubsetList  tfc-SubsetList
    Unsigned 32-bit integer
    rrc.TFC_SubsetList
rrc.tfci  tfci
    Unsigned 32-bit integer
    rrc.INTEGER_0_1023
rrc.tfci_Coding  tfci-Coding
    Unsigned 32-bit integer
    rrc.TFCI_Coding
rrc.tfci_Existence  tfci-Existence
    Boolean
    rrc.BOOLEAN
```

```
rrc.tfci_Field1_Information  tfci-Field1-Information
    Unsigned 32-bit integer
    rrc.ExplicitTFCS_Configuration

rrc.tfci_Field2  tfci-Field2
    Unsigned 32-bit integer
    rrc.MaxTFCI_Field2Value

rrc.tfci_Field2_Information  tfci-Field2-Information
    Unsigned 32-bit integer
    rrc.TFCI_Field2_Information

rrc.tfci_Field2_Length  tfci-Field2-Length
    Unsigned 32-bit integer
    rrc.INTEGER_1_10

rrc.tfci_Range  tfci-Range
    Unsigned 32-bit integer
    rrc.TFCI_RangeList

rrc.tfcs  tfcs
    Unsigned 32-bit integer
    rrc.TFCS

rrc.tfcsAdd  tfcsAdd
    No value
    rrc.TFCS_ReconfAdd

rrc.tfcsRemoval  tfcsRemoval
    Unsigned 32-bit integer
    rrc.TFCS_RemovalList

rrc.tfcs_ID  tfcs-ID
    No value
    rrc.TFCS_Identity

rrc.tfcs_Identity  tfcs-Identity
    No value
    rrc.TFCS_Identity

rrc.tfcs_InfoForDSCH  tfcs-InfoForDSCH
    Unsigned 32-bit integer
    rrc.TFCS_InfoForDSCH

rrc.tfcs_SignallingMode  tfcs-SignallingMode
    Unsigned 32-bit integer
    rrc.T_tfcs_SignallingMode

rrc.tfs_SignallingMode  tfs-SignallingMode
    Unsigned 32-bit integer
    rrc.T_tfs_SignallingMode

rrc.tgcfn  tgcfn
    Unsigned 32-bit integer
    rrc.TGCFN

rrc.tgd  tgd
    Unsigned 32-bit integer
    rrc.TGD

rrc.tgl1  tgl1
    Unsigned 32-bit integer
    rrc.TGL
```



```
rrc.tgl2    tgl2
            Unsigned 32-bit integer
            rrc.TGL

rrc.tgmp    tgmp
            Unsigned 32-bit integer
            rrc.TGMP

rrc.tgp_SequenceList  tgp-SequenceList
            Unsigned 32-bit integer
            rrc.TGP_SequenceList

rrc.tgp_SequenceShortList  tgp-SequenceShortList
            Unsigned 32-bit integer
            rrc.SEQUENCE_SIZE_1_maxTGPS_OF_TGP_SequenceShort

rrc.tgp_SequenceShortList_item  Item
            No value
            rrc.TGP_SequenceShort

rrc.tgpl1   tgpl1
            Unsigned 32-bit integer
            rrc.TGPL

rrc.tgprc   tgprc
            Unsigned 32-bit integer
            rrc.TGPRC

rrc.tgps_ConfigurationParams  tgps-ConfigurationParams
            No value
            rrc.TGPS_ConfigurationParams

rrc.tgps_Reconfiguration_CFN  tgps-Reconfiguration-CFN
            Unsigned 32-bit integer
            rrc.TGPS_Reconfiguration_CFN

rrc.tgps_Status  tgps-Status
            Unsigned 32-bit integer
            rrc.T_tgps_Status

rrc.tgpsi   tgpsi
            Unsigned 32-bit integer
            rrc.TGPSI

rrc.tgsn   tgsn
            Unsigned 32-bit integer
            rrc.TGSN

rrc.threeIndexStepThreshold  threeIndexStepThreshold
            Unsigned 32-bit integer
            rrc.INTEGER_0_37

rrc.thresholdNonUsedFrequency_deltaList  thresholdNonUsedFrequency-deltaList
            Unsigned 32-bit integer
            rrc.ThresholdNonUsedFrequency_deltaList

rrc.thresholdUsedFrequency_delta  thresholdUsedFrequency-delta
            Signed 32-bit integer
            rrc.DeltaRSCP

rrc.thresholdOtherSystem  thresholdOtherSystem
            Signed 32-bit integer
            rrc.Threshold
```

```
rrc.thresholdOwnSystem thresholdOwnSystem
Signed 32-bit integer
rrc.Threshold

rrc.thresholdSFN_GPS_TOW_us thresholdSFN-GPS-TOW-us
Unsigned 32-bit integer
rrc.ThresholdSFN_GPS_TOW_us

rrc.thresholdUsedFrequency thresholdUsedFrequency
Signed 32-bit integer
rrc.ThresholdUsedFrequency

rrc.timeDurationBeforeRetry timeDurationBeforeRetry
Unsigned 32-bit integer
rrc.TimeDurationBeforeRetry

rrc.timeInfo timeInfo
No value
rrc.TimeInfo

rrc.timeToTrigger timeToTrigger
Unsigned 32-bit integer
rrc.TimeToTrigger

rrc.timerBasedExplicit timerBasedExplicit
No value
rrc.ExplicitDiscard

rrc.timerBasedNoExplicit timerBasedNoExplicit
Unsigned 32-bit integer
rrc.NoExplicitDiscard

rrc.timerDiscard timerDiscard
Unsigned 32-bit integer
rrc.TimerDiscard

rrc.timerMRW timerMRW
Unsigned 32-bit integer
rrc.TimerMRW

rrc.timerPoll timerPoll
Unsigned 32-bit integer
rrc.TimerPoll

rrc.timerPollPeriodic timerPollPeriodic
Unsigned 32-bit integer
rrc.TimerPollPeriodic

rrc.timerPollProhibit timerPollProhibit
Unsigned 32-bit integer
rrc.TimerPollProhibit

rrc.timerRST timerRST
Unsigned 32-bit integer
rrc.TimerRST

rrc.timerStatusPeriodic timerStatusPeriodic
Unsigned 32-bit integer
rrc.TimerStatusPeriodic

rrc.timerStatusProhibit timerStatusProhibit
Unsigned 32-bit integer
rrc.TimerStatusProhibit
```

```
rrc.timer_DAR timer-DAR
    Unsigned 32-bit integer
    rrc.TimerDAR_r6

rrc.timer_OSD timer-OSD
    Unsigned 32-bit integer
    rrc.TimerOSD_r6

rrc.timeslot timeslot
    Unsigned 32-bit integer
    rrc.TimeslotNumber

rrc.timeslotISCP timeslotISCP
    Unsigned 32-bit integer
    rrc.TimeslotISCP_List

rrc.timeslotISCP_List timeslotISCP-List
    Unsigned 32-bit integer
    rrc.TimeslotISCP_List

rrc.timeslotISCP_reportingIndicator timeslotISCP-reportingIndicator
    Boolean
    rrc.BOOLEAN

rrc.timeslotInfoList timeslotInfoList
    Unsigned 32-bit integer
    rrc.TimeslotInfoList

rrc.timeslotList timeslotList
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxTS_1_OF_DownlinkAdditionalTimeslots

rrc.timeslotListWithISCP timeslotListWithISCP
    Unsigned 32-bit integer
    rrc.TimeslotListWithISCP

rrc.timeslotList_item Item
    No value
    rrc.DownlinkAdditionalTimeslots

rrc.timeslotNumber timeslotNumber
    Unsigned 32-bit integer
    rrc.TimeslotNumber_LCR_r4

rrc.timeslotResourceRelatedInfo timeslotResourceRelatedInfo
    Byte array
    rrc.BIT_STRING_SIZE_13

rrc.timeslotSync2 timeslotSync2
    Unsigned 32-bit integer
    rrc.TimeslotSync2

rrc.timing timing
    Unsigned 32-bit integer
    rrc.T_timing

rrc.timingAdvance timingAdvance
    Unsigned 32-bit integer
    rrc.UL_TimingAdvanceControl

rrc.timingInfo timingInfo
    No value
    rrc.TimingInfo_r7
```

```
rrc.timingMaintainedSynchInd  timingMaintainedSynchInd
    Unsigned 32-bit integer
    rrc.TimingMaintainedSynchInd

rrc.timingOffset  timingOffset
    Unsigned 32-bit integer
    rrc.TimingOffset

rrc.timingmaintainedsynchind  timingmaintainedsynchind
    Unsigned 32-bit integer
    rrc.TimingMaintainedSynchInd

rrc.tlm_Message  tlm-Message
    Byte array
    rrc.BIT_STRING_SIZE_14

rrc.tlm_Reserved  tlm-Reserved
    Byte array
    rrc.BIT_STRING_SIZE_2

rrc.tm  tm
    Unsigned 32-bit integer
    rrc.INTEGER_0_38399

rrc.tm_SignallingMode  tm-SignallingMode
    Unsigned 32-bit integer
    rrc.T_tm_SignallingMode

rrc.tmsi  tmsi
    Byte array
    rrc.TMSI_GSM_MAP

rrc.tmsi_DS_41  tmsi-DS-41
    Byte array
    rrc.TMSI_DS_41

rrc.tmsi_GSM_MAP  tmsi-GSM-MAP
    Byte array
    rrc.TMSI_GSM_MAP

rrc.tmsi_and_LAI  tmsi-and-LAI
    No value
    rrc.TMSI_and_LAI_GSM_MAP

rrc.toHandoverRAB_Info  toHandoverRAB-Info
    No value
    rrc.RAB_Info

rrc.totalAM_RLCMemoryExceeds10kB  totalAM-RLCMemoryExceeds10kB
    Boolean
    rrc.BOOLEAN

rrc.totalCRC  totalCRC
    Unsigned 32-bit integer
    rrc.INTEGER_1_512

rrc.totalRLC_AM_BufferSize  totalRLC-AM-BufferSize
    Unsigned 32-bit integer
    rrc.TotalRLC_AM_BufferSize

rrc.tpcCommandTargetRate  tpcCommandTargetRate
    Unsigned 32-bit integer
    rrc.TPC_CommandTargetRate
```

```
rrc.tpc_CombinationIndex tpc-CombinationIndex
    Unsigned 32-bit integer
    rrc.TPC_CombinationIndex

rrc.tpc_CombinationInfoList tpc-CombinationInfoList
    Unsigned 32-bit integer
    rrc.TPC_CombinationInfoList

rrc.tpc_StepSize tpc-StepSize
    Unsigned 32-bit integer
    rrc.TPC_StepSizeTDD

rrc.tpc_StepSizeTDD tpc-StepSizeTDD
    Unsigned 32-bit integer
    rrc.TPC_StepSizeTDD

rrc.tpc_Step_Size tpc-Step-Size
    Unsigned 32-bit integer
    rrc.T_tpc_Step_Size

rrc.tpc_step_size tpc-step-size
    Unsigned 32-bit integer
    rrc.T_tpc_step_size

rrc.trafficVolume trafficVolume
    Unsigned 32-bit integer
    rrc.TrafficVolumeMeasuredResultsList

rrc.trafficVolumeEventIdentity trafficVolumeEventIdentity
    Unsigned 32-bit integer
    rrc.TrafficVolumeEventType

rrc.trafficVolumeEventResults trafficVolumeEventResults
    No value
    rrc.TrafficVolumeEventResults

rrc.trafficVolumeIndicator trafficVolumeIndicator
    Unsigned 32-bit integer
    rrc.T_trafficVolumeIndicator

rrc.trafficVolumeMeasQuantity trafficVolumeMeasQuantity
    Unsigned 32-bit integer
    rrc.TrafficVolumeMeasQuantity

rrc.trafficVolumeMeasSysInfo trafficVolumeMeasSysInfo
    No value
    rrc.TrafficVolumeMeasSysInfo

rrc.trafficVolumeMeasuredResultsList trafficVolumeMeasuredResultsList
    Unsigned 32-bit integer
    rrc.TrafficVolumeMeasuredResultsList

rrc.trafficVolumeMeasurement trafficVolumeMeasurement
    No value
    rrc.TrafficVolumeMeasurement

rrc.trafficVolumeMeasurementID trafficVolumeMeasurementID
    Unsigned 32-bit integer
    rrc.MeasurementIdentity

rrc.trafficVolumeMeasurementObjectList trafficVolumeMeasurementObjectList
    Unsigned 32-bit integer
    rrc.TrafficVolumeMeasurementObjectList
```

```
rrc.trafficVolumeReportRequest trafficVolumeReportRequest
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.trafficVolumeReportingCriteria trafficVolumeReportingCriteria
    No value
    rrc.TrafficVolumeReportingCriteria

rrc.trafficVolumeReportingQuantity trafficVolumeReportingQuantity
    No value
    rrc.TrafficVolumeReportingQuantity

rrc.transChCriteriaList transChCriteriaList
    Unsigned 32-bit integer
    rrc.TransChCriteriaList

rrc.transmissionGrantType transmissionGrantType
    Unsigned 32-bit integer
    rrc.T_transmissionGrantType

rrc.transmissionProbability transmissionProbability
    Unsigned 32-bit integer
    rrc.TransmissionProbability

rrc.transmissionRLC_Discard transmissionRLC-Discard
    Unsigned 32-bit integer
    rrc.TransmissionRLC_Discard

rrc.transmissionTOW transmissionTOW
    Unsigned 32-bit integer
    rrc.INTEGER_0_604799

rrc.transmissionTimeInterval transmissionTimeInterval
    Unsigned 32-bit integer
    rrc.TransmissionTimeInterval

rrc.transmissionTimeValidity transmissionTimeValidity
    Unsigned 32-bit integer
    rrc.TransmissionTimeValidity

rrc.transmissionWindowSize transmissionWindowSize
    Unsigned 32-bit integer
    rrc.TransmissionWindowSize

rrc.transmittedPowerThreshold transmittedPowerThreshold
    Signed 32-bit integer
    rrc.TransmittedPowerThreshold

rrc.transpCHInformation transpCHInformation
    Unsigned 32-bit integer
    rrc.MBMS_TrCHInformation_CurrList

rrc.transpCh_CombiningStatus transpCh-CombiningStatus
    Boolean
    rrc.BOOLEAN

rrc.transpCh_Identity transpCh-Identity
    Unsigned 32-bit integer
    rrc.INTEGER_1_maxFACHPCH

rrc.transpCh_Info transpCh-Info
    Unsigned 32-bit integer
    rrc.MBMS_CommonTrChIdentity
```

```
rrc.transpCh_InfoCommonForAllTrCh  transpCh-InfoCommonForAllTrCh
    Unsigned 32-bit integer
    rrc.MBMS_CommonCCTrChIdentity
rrc.transportChannelCapability  transportChannelCapability
    No value
    rrc.TransportChannelCapability
rrc.transportChannelIdentity  transportChannelIdentity
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity
rrc.transportChannelReconfiguration  transportChannelReconfiguration
    Unsigned 32-bit integer
    rrc.TransportChannelReconfiguration
rrc.transportChannelReconfigurationComplete  transportChannelReconfigurationComp
    No value
    rrc.TransportChannelReconfigurationComplete
rrc.transportChannelReconfigurationComplete_r3_add_ext  transportChannelReconfig
    Byte array
    rrc.BIT_STRING
rrc.transportChannelReconfigurationComplete_v7xyext  transportChannelReconfigura
    No value
    rrc.TransportChannelReconfigurationComplete_v7xyext_IEs
rrc.transportChannelReconfigurationFailure  transportChannelReconfigurationFailu
    No value
    rrc.TransportChannelReconfigurationFailure
rrc.transportChannelReconfigurationFailure_r3_add_ext  transportChannelReconfigu
    Byte array
    rrc.BIT_STRING
rrc.transportChannelReconfiguration_r3  transportChannelReconfiguration-r3
    No value
    rrc.TransportChannelReconfiguration_r3_IEs
rrc.transportChannelReconfiguration_r3_add_ext  transportChannelReconfiguration-
    Byte array
    rrc.BIT_STRING
rrc.transportChannelReconfiguration_r4  transportChannelReconfiguration-r4
    No value
    rrc.TransportChannelReconfiguration_r4_IEs
rrc.transportChannelReconfiguration_r4_add_ext  transportChannelReconfiguration-
    Byte array
    rrc.BIT_STRING
rrc.transportChannelReconfiguration_r5  transportChannelReconfiguration-r5
    No value
    rrc.TransportChannelReconfiguration_r5_IEs
rrc.transportChannelReconfiguration_r5_add_ext  transportChannelReconfiguration-
    Byte array
    rrc.BIT_STRING
rrc.transportChannelReconfiguration_r6  transportChannelReconfiguration-r6
    No value
    rrc.TransportChannelReconfiguration_r6_IEs
```

```
rrc.transportChannelReconfiguration_r6_add_ext  transportChannelReconfiguration-  
    Byte array  
    rrc.BIT_STRING  
rrc.transportChannelReconfiguration_r7  transportChannelReconfiguration-r7  
    No value  
    rrc.TransportChannelReconfiguration_r7_IEs  
rrc.transportChannelReconfiguration_r7_add_ext  transportChannelReconfiguration-  
    Byte array  
    rrc.BIT_STRING  
rrc.transportChannelReconfiguration_v3a0ext  transportChannelReconfiguration-v3a  
    No value  
    rrc.TransportChannelReconfiguration_v3a0ext  
rrc.transportChannelReconfiguration_v4b0ext  transportChannelReconfiguration-v4b  
    No value  
    rrc.TransportChannelReconfiguration_v4b0ext_IEs  
rrc.transportChannelReconfiguration_v590ext  transportChannelReconfiguration-v59  
    No value  
    rrc.TransportChannelReconfiguration_v590ext_IEs  
rrc.transportChannelReconfiguration_v690ext  transportChannelReconfiguration-v69  
    No value  
    rrc.TransportChannelReconfiguration_v690ext_IEs  
rrc.transportChannelReconfiguration_v6b0ext  transportChannelReconfiguration-v6b  
    No value  
    rrc.TransportChannelReconfiguration_v6b0ext_IEs  
rrc.transportChannelReconfiguration_v7xyext  transportChannelReconfiguration-v7x  
    No value  
    rrc.TransportChannelReconfiguration_v7xyext_IEs  
rrc.transportFormatCombinationControl  transportFormatCombinationControl  
    No value  
    rrc.TransportFormatCombinationControl  
rrc.transportFormatCombinationControlFailure  transportFormatCombinationControlF  
    No value  
    rrc.TransportFormatCombinationControlFailure  
rrc.transportFormatCombinationControlFailure_r3_add_ext  transportFormatCombinat  
    Byte array  
    rrc.BIT_STRING  
rrc.transportFormatCombinationControl_r3_add_ext  transportFormatCombinationCont  
    Byte array  
    rrc.BIT_STRING  
rrc.transportFormatCombinationSet  transportFormatCombinationSet  
    Unsigned 32-bit integer  
    rrc.TFCS  
rrc.transportFormatSet  transportFormatSet  
    Unsigned 32-bit integer  
    rrc.TransportFormatSet  
rrc.treconfirmAbort  treconfirmAbort  
    Unsigned 32-bit integer  
    rrc.TreconfirmAbort
```



```
rrc.triggeringCondition triggeringCondition
    Unsigned 32-bit integer
    rrc.TriggeringCondition2

rrc.tstd_Indicator tstd-Indicator
    Boolean
    rrc.BOOLEAN

rrc.tti tti
    Unsigned 32-bit integer
    rrc.T_tti

rrc.tti10 tti10
    Unsigned 32-bit integer
    rrc.CommonDynamicTF_InfoList

rrc.tti20 tti20
    Unsigned 32-bit integer
    rrc.CommonDynamicTF_InfoList

rrc.tti40 tti40
    Unsigned 32-bit integer
    rrc.CommonDynamicTF_InfoList

rrc.tti5 tti5
    Unsigned 32-bit integer
    rrc.CommonDynamicTF_InfoList

rrc.tti80 tti80
    Unsigned 32-bit integer
    rrc.CommonDynamicTF_InfoList

rrc.turbo turbo
    No value
    rrc.NULL

rrc.turboDecodingSupport turboDecodingSupport
    Unsigned 32-bit integer
    rrc.TurboSupport

rrc.turboEncodingSupport turboEncodingSupport
    Unsigned 32-bit integer
    rrc.TurboSupport

rrc.twoIndexStepThreshold twoIndexStepThreshold
    Unsigned 32-bit integer
    rrc.INTEGER_0_37

rrc.twoLogicalChannels twoLogicalChannels
    No value
    rrc.UL_LogicalChannelMappingList

rrc.txRxFrequencySeparation txRxFrequencySeparation
    Unsigned 32-bit integer
    rrc.TxRxFrequencySeparation

rrc.tx_DiversityIndicator tx-DiversityIndicator
    Boolean
    rrc.BOOLEAN

rrc.tx_DiversityMode tx-DiversityMode
    Unsigned 32-bit integer
    rrc.TX_DiversityMode
```

```

rrc.tx_InterruptionAfterTrigger  tx-InterruptionAfterTrigger
    Unsigned 32-bit integer
    rrc.TX_InterruptionAfterTrigger

rrc.type1  type1
    Unsigned 32-bit integer
    rrc.T_type1

rrc.type2  type2
    No value
    rrc.T_type2

rrc.type3  type3
    No value
    rrc.T_type3

rrc.uESpecificBehaviourInformationlidle  uESpecificBehaviourInformationlidle
    Byte array
    rrc.UESpecificBehaviourInformationlidle

rrc.uESpecificBehaviourInformationlinterRAT  uESpecificBehaviourInformationlinterRAT
    Byte array
    rrc.UESpecificBehaviourInformationlinterRAT

rrc.uE_RX_TX_TimeDifferenceType2Info  uE-RX-TX-TimeDifferenceType2Info
    No value
    rrc.UE_RX_TX_TimeDifferenceType2Info

rrc.uE_SecurityInformation  uE-SecurityInformation
    Unsigned 32-bit integer
    rrc.T_uE_SecurityInformation

rrc.uRNTI_Group  uRNTI-Group
    Unsigned 32-bit integer
    rrc.U_RNTI_Group

rrc.u_RNTI  u-RNTI
    No value
    rrc.U_RNTI

rrc.u_RNTI_BitMaskIndex_b1  u-RNTI-BitMaskIndex-b1
    Byte array
    rrc.BIT_STRING_SIZE_31

rrc.u_RNTI_BitMaskIndex_b10  u-RNTI-BitMaskIndex-b10
    Byte array
    rrc.BIT_STRING_SIZE_22

rrc.u_RNTI_BitMaskIndex_b11  u-RNTI-BitMaskIndex-b11
    Byte array
    rrc.BIT_STRING_SIZE_21

rrc.u_RNTI_BitMaskIndex_b12  u-RNTI-BitMaskIndex-b12
    Byte array
    rrc.BIT_STRING_SIZE_20

rrc.u_RNTI_BitMaskIndex_b13  u-RNTI-BitMaskIndex-b13
    Byte array
    rrc.BIT_STRING_SIZE_19

rrc.u_RNTI_BitMaskIndex_b14  u-RNTI-BitMaskIndex-b14
    Byte array
    rrc.BIT_STRING_SIZE_18

```

```
rrc.u_RNTI_BitMaskIndex_b15  u-RNTI-BitMaskIndex-b15
    Byte array
    rrc.BIT_STRING_SIZE_17
rrc.u_RNTI_BitMaskIndex_b16  u-RNTI-BitMaskIndex-b16
    Byte array
    rrc.BIT_STRING_SIZE_16
rrc.u_RNTI_BitMaskIndex_b17  u-RNTI-BitMaskIndex-b17
    Byte array
    rrc.BIT_STRING_SIZE_15
rrc.u_RNTI_BitMaskIndex_b18  u-RNTI-BitMaskIndex-b18
    Byte array
    rrc.BIT_STRING_SIZE_14
rrc.u_RNTI_BitMaskIndex_b19  u-RNTI-BitMaskIndex-b19
    Byte array
    rrc.BIT_STRING_SIZE_13
rrc.u_RNTI_BitMaskIndex_b2   u-RNTI-BitMaskIndex-b2
    Byte array
    rrc.BIT_STRING_SIZE_30
rrc.u_RNTI_BitMaskIndex_b20  u-RNTI-BitMaskIndex-b20
    Byte array
    rrc.BIT_STRING_SIZE_12
rrc.u_RNTI_BitMaskIndex_b21  u-RNTI-BitMaskIndex-b21
    Byte array
    rrc.BIT_STRING_SIZE_11
rrc.u_RNTI_BitMaskIndex_b22  u-RNTI-BitMaskIndex-b22
    Byte array
    rrc.BIT_STRING_SIZE_10
rrc.u_RNTI_BitMaskIndex_b23  u-RNTI-BitMaskIndex-b23
    Byte array
    rrc.BIT_STRING_SIZE_9
rrc.u_RNTI_BitMaskIndex_b24  u-RNTI-BitMaskIndex-b24
    Byte array
    rrc.BIT_STRING_SIZE_8
rrc.u_RNTI_BitMaskIndex_b25  u-RNTI-BitMaskIndex-b25
    Byte array
    rrc.BIT_STRING_SIZE_7
rrc.u_RNTI_BitMaskIndex_b26  u-RNTI-BitMaskIndex-b26
    Byte array
    rrc.BIT_STRING_SIZE_6
rrc.u_RNTI_BitMaskIndex_b27  u-RNTI-BitMaskIndex-b27
    Byte array
    rrc.BIT_STRING_SIZE_5
rrc.u_RNTI_BitMaskIndex_b28  u-RNTI-BitMaskIndex-b28
    Byte array
    rrc.BIT_STRING_SIZE_4
rrc.u_RNTI_BitMaskIndex_b29  u-RNTI-BitMaskIndex-b29
    Byte array
    rrc.BIT_STRING_SIZE_3
```

```

rrc.u_RNTI_BitMaskIndex_b3  u-RNTI-BitMaskIndex-b3
    Byte array
    rrc.BIT_STRING_SIZE_29
rrc.u_RNTI_BitMaskIndex_b30  u-RNTI-BitMaskIndex-b30
    Byte array
    rrc.BIT_STRING_SIZE_2
rrc.u_RNTI_BitMaskIndex_b31  u-RNTI-BitMaskIndex-b31
    Byte array
    rrc.BIT_STRING_SIZE_1
rrc.u_RNTI_BitMaskIndex_b4   u-RNTI-BitMaskIndex-b4
    Byte array
    rrc.BIT_STRING_SIZE_28
rrc.u_RNTI_BitMaskIndex_b5   u-RNTI-BitMaskIndex-b5
    Byte array
    rrc.BIT_STRING_SIZE_27
rrc.u_RNTI_BitMaskIndex_b6   u-RNTI-BitMaskIndex-b6
    Byte array
    rrc.BIT_STRING_SIZE_26
rrc.u_RNTI_BitMaskIndex_b7   u-RNTI-BitMaskIndex-b7
    Byte array
    rrc.BIT_STRING_SIZE_25
rrc.u_RNTI_BitMaskIndex_b8   u-RNTI-BitMaskIndex-b8
    Byte array
    rrc.BIT_STRING_SIZE_24
rrc.u_RNTI_BitMaskIndex_b9   u-RNTI-BitMaskIndex-b9
    Byte array
    rrc.BIT_STRING_SIZE_23
rrc.uarfcn_DL  uarfcn-DL
    Unsigned 32-bit integer
    rrc.UARFCN
rrc.uarfcn_Nt  uarfcn-Nt
    Unsigned 32-bit integer
    rrc.UARFCN
rrc.uarfcn_UL  uarfcn-UL
    Unsigned 32-bit integer
    rrc.UARFCN
rrc.ucsm_Info  ucsm-Info
    No value
    rrc.UCSM_Info
rrc.udre  udre
    Unsigned 32-bit integer
    rrc.UDRE
rrc.ueAssisted  ueAssisted
    No value
    rrc.T_ueAssisted
rrc.ueBased  ueBased
    No value
    rrc.T_ueBased

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```
rrc.ueCapabilityContainer ueCapabilityContainer
  Byte array
  rrc.T_ueCapabilityContainer
rrc.ueCapabilityContainer_RSC ueCapabilityContainer-RSC
  Byte array
  rrc.T_ueCapabilityContainer_RSC
rrc.ueCapabilityContainer_UCI ueCapabilityContainer-UCI
  Byte array
  rrc.T_ueCapabilityContainer_UCI
rrc.ueCapabilityEnquiry ueCapabilityEnquiry
  Unsigned 32-bit integer
  rrc.UECapabilityEnquiry
rrc.ueCapabilityEnquiry_r3 ueCapabilityEnquiry-r3
  No value
  rrc.UECapabilityEnquiry_r3_IEs
rrc.ueCapabilityEnquiry_r3_add_ext ueCapabilityEnquiry-r3-add-ext
  Byte array
  rrc.BIT_STRING
rrc.ueCapabilityEnquiry_v4b0ext ueCapabilityEnquiry-v4b0ext
  No value
  rrc.UECapabilityEnquiry_v4b0ext_IEs
rrc.ueCapabilityEnquiry_v590ext ueCapabilityEnquiry-v590ext
  No value
  rrc.UECapabilityEnquiry_v590ext_IEs
rrc.ueCapabilityEnquiry_v7xyext ueCapabilityEnquiry-v7xyext
  No value
  rrc.UECapabilityEnquiry_v7xyext_IEs
rrc.ueCapabilityIndication ueCapabilityIndication
  Unsigned 32-bit integer
  rrc.T_ueCapabilityIndication
rrc.ueCapabilityInformation ueCapabilityInformation
  No value
  rrc.UECapabilityInformation
rrc.ueCapabilityInformationConfirm ueCapabilityInformationConfirm
  Unsigned 32-bit integer
  rrc.UECapabilityInformationConfirm
rrc.ueCapabilityInformationConfirm_r3 ueCapabilityInformationConfirm-r3
  No value
  rrc.UECapabilityInformationConfirm_r3_IEs
rrc.ueCapabilityInformationConfirm_r3_add_ext ueCapabilityInformationConfirm-r3
  Byte array
  rrc.BIT_STRING
rrc.ueCapabilityInformation_r3_add_ext ueCapabilityInformation-r3-add-ext
  Byte array
  rrc.T_ueCapabilityInformation_r3_add_ext
rrc.ueCapabilityInformation_v370ext ueCapabilityInformation-v370ext
  No value
  rrc.UECapabilityInformation_v370ext
```

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rrc.ueCapabilityInformation_v380ext ueCapabilityInformation-v380ext
No value
rrc.UECapabilityInformation_v380ext_IEs
rrc.ueCapabilityInformation_v3a0ext ueCapabilityInformation-v3a0ext
No value
rrc.UECapabilityInformation_v3a0ext_IEs
rrc.ueCapabilityInformation_v4b0ext ueCapabilityInformation-v4b0ext
No value
rrc.UECapabilityInformation_v4b0ext
rrc.ueCapabilityInformation_v590ext ueCapabilityInformation-v590ext
No value
rrc.UECapabilityInformation_v590ext
rrc.ueCapabilityInformation_v5c0ext ueCapabilityInformation-v5c0ext
No value
rrc.UECapabilityInformation_v5c0ext
rrc.ueCapabilityInformation_v650ext ueCapabilityInformation-v650ext
No value
rrc.UECapabilityInformation_v650ext_IEs
rrc.ueCapabilityInformation_v680ext ueCapabilityInformation-v680ext
No value
rrc.UECapabilityInformation_v680ext_IEs
rrc.ueCapabilityInformation_v690ext ueCapabilityInformation-v690ext
No value
rrc.UECapabilityInformation_v690ext_IEs
rrc.ueCapabilityInformation_v7xyext ueCapabilityInformation-v7xyext
No value
rrc.UECapabilityInformation_v7xyext_IEs
rrc.ueInternalMeasuredResults ueInternalMeasuredResults
No value
rrc.UE_InternalMeasuredResults_r7
rrc.ueMobilityStateIndicator ueMobilityStateIndicator
Unsigned 32-bit integer
rrc.High_MobilityDetected
rrc.ueSpecificMidamble ueSpecificMidamble
Unsigned 32-bit integer
rrc.INTEGER_0_15
rrc.ue_BasedOTDOA_Supported ue-BasedOTDOA-Supported
Boolean
rrc.BOOLEAN
rrc.ue_CapabilityContainer ue-CapabilityContainer
Unsigned 32-bit integer
rrc.T_ue_CapabilityContainer
rrc.ue_ConnTimersAndConstants ue-ConnTimersAndConstants
No value
rrc.UE_ConnTimersAndConstants
rrc.ue_ConnTimersAndConstants_v3a0ext ue-ConnTimersAndConstants-v3a0ext
No value
rrc.UE_ConnTimersAndConstants_v3a0ext
```

```
rrc.ue_GPSTimingOfCell ue-GPSTimingOfCell
  No value
  rrc.T_ue_GPSTimingOfCell
rrc.ue_GrantMonitoring_InactivityThreshold ue-GrantMonitoring-InactivityThresho
  Unsigned 32-bit integer
  rrc.UE_GrantMonitoring_InactivityThreshold
rrc.ue_IdleTimersAndConstants ue-IdleTimersAndConstants
  No value
  rrc.UE_IdleTimersAndConstants
rrc.ue_IdleTimersAndConstants_v3a0ext ue-IdleTimersAndConstants-v3a0ext
  No value
  rrc.UE_IdleTimersAndConstants_v3a0ext
rrc.ue_InternalEventParamList ue-InternalEventParamList
  Unsigned 32-bit integer
  rrc.UE_InternalEventParamList
rrc.ue_InternalEventResults ue-InternalEventResults
  Unsigned 32-bit integer
  rrc.UE_InternalEventResults
rrc.ue_InternalMeasQuantity ue-InternalMeasQuantity
  No value
  rrc.UE_InternalMeasQuantity
rrc.ue_InternalMeasuredResults ue-InternalMeasuredResults
  No value
  rrc.UE_InternalMeasuredResults_r7
rrc.ue_InternalMeasurement ue-InternalMeasurement
  No value
  rrc.UE_InternalMeasurement
rrc.ue_InternalMeasurementID ue-InternalMeasurementID
  Unsigned 32-bit integer
  rrc.MeasurementIdentity
rrc.ue_InternalReportingCriteria ue-InternalReportingCriteria
  No value
  rrc.UE_InternalReportingCriteria
rrc.ue_InternalReportingQuantity ue-InternalReportingQuantity
  No value
  rrc.UE_InternalReportingQuantity
rrc.ue_MIMO_Support ue-MIMO-Support
  Unsigned 32-bit integer
  rrc.T_ue_MIMO_Support
rrc.ue_MultiModeRAT_Capability ue-MultiModeRAT-Capability
  No value
  rrc.UE_MultiModeRAT_Capability
rrc.ue_PositioningCapabilityExt_v380 ue-PositioningCapabilityExt-v380
  No value
  rrc.UE_PositioningCapabilityExt_v380
rrc.ue_PositioningCapabilityExt_v3a0 ue-PositioningCapabilityExt-v3a0
  No value
  rrc.UE_PositioningCapabilityExt_v3a0
```

```
rrc.ue_PositioningCapabilityExt_v3g0 ue-PositioningCapabilityExt-v3g0
  No value
  rrc.UE_PositioningCapabilityExt_v3g0
rrc.ue_Positioning_GPS_ReferenceTimeUncertainty ue-Positioning-GPS-ReferenceTim
  Unsigned 32-bit integer
  rrc.UE_Positioning_GPS_ReferenceTimeUncertainty
rrc.ue_Positioning_IPDL_Parameters_TDDList_r4_ext ue-Positioning-IPDL-Parameter
  Unsigned 32-bit integer
  rrc.UE_Positioning_IPDL_Parameters_TDDList_r4_ext
rrc.ue_Positioning_IPDL_Parameters_TDD_r4_ext ue-Positioning-IPDL-Parameters-TD
  No value
  rrc.UE_Positioning_IPDL_Parameters_TDD_r4_ext
rrc.ue_Positioning_LastKnownPos ue-Positioning-LastKnownPos
  No value
  rrc.UE_Positioning_LastKnownPos
rrc.ue_Positioning_Measurement_v390ext ue-Positioning-Measurement-v390ext
  No value
  rrc.UE_Positioning_Measurement_v390ext
rrc.ue_Positioning_Measurement_v7xyext ue-Positioning-Measurement-v7xyext
  No value
  rrc.UE_Positioning_Measurement_v7xyext
rrc.ue_Positioning_OTDOA_AssistanceData_UEB_ext ue-Positioning-OTDOA-Assistance
  No value
  rrc.UE_Positioning_OTDOA_AssistanceData_UEB_ext
rrc.ue_Positioning_OTDOA_AssistanceData_r4ext ue-Positioning-OTDOA-AssistanceDa
  No value
  rrc.UE_Positioning_OTDOA_AssistanceData_r4ext
rrc.ue_Positioning_OTDOA_Measurement_v390ext ue-Positioning-OTDOA-Measurement-v
  No value
  rrc.UE_Positioning_OTDOA_Measurement_v390ext
rrc.ue_Positioning_OTDOA_Quality ue-Positioning-OTDOA-Quality
  No value
  rrc.UE_Positioning_OTDOA_Quality
rrc.ue_PowerClass ue-PowerClass
  Unsigned 32-bit integer
  rrc.UE_PowerClass
rrc.ue_RATSpecificCapability ue-RATSpecificCapability
  Unsigned 32-bit integer
  rrc.InterRAT_UE_RadioAccessCapabilityList
rrc.ue_RATSpecificCapability_v590ext ue-RATSpecificCapability-v590ext
  No value
  rrc.InterRAT_UE_RadioAccessCapability_v590ext
rrc.ue_RATSpecificCapability_v690ext ue-RATSpecificCapability-v690ext
  No value
  rrc.InterRAT_UE_RadioAccessCapability_v690ext
rrc.ue_RX_TX_ReportEntryList ue-RX-TX-ReportEntryList
  Unsigned 32-bit integer
  rrc.UE_RX_TX_ReportEntryList
```



```
rrc.ue_RX_TX_TimeDifference    ue-RX-TX-TimeDifference
    Boolean
    rrc.BOOLEAN

rrc.ue_RX_TX_TimeDifferenceThreshold    ue-RX-TX-TimeDifferenceThreshold
    Unsigned 32-bit integer
    rrc.UE_RX_TX_TimeDifferenceThreshold

rrc.ue_RX_TX_TimeDifferenceType1    ue-RX-TX-TimeDifferenceType1
    Unsigned 32-bit integer
    rrc.UE_RX_TX_TimeDifferenceType1

rrc.ue_RX_TX_TimeDifferenceType2    ue-RX-TX-TimeDifferenceType2
    Unsigned 32-bit integer
    rrc.UE_RX_TX_TimeDifferenceType2

rrc.ue_RX_TX_TimeDifferenceType2Info    ue-RX-TX-TimeDifferenceType2Info
    No value
    rrc.UE_RX_TX_TimeDifferenceType2Info

rrc.ue_RadioAccessCapabBandFDDList    ue-RadioAccessCapabBandFDDList
    Unsigned 32-bit integer
    rrc.UE_RadioAccessCapabBandFDDList

rrc.ue_RadioAccessCapabBandFDDList2    ue-RadioAccessCapabBandFDDList2
    Unsigned 32-bit integer
    rrc.UE_RadioAccessCapabBandFDDList2

rrc.ue_RadioAccessCapabBandFDDList_ext    ue-RadioAccessCapabBandFDDList-ext
    Unsigned 32-bit integer
    rrc.UE_RadioAccessCapabBandFDDList_ext

rrc.ue_RadioAccessCapability    ue-RadioAccessCapability
    No value
    rrc.UE_RadioAccessCapability

rrc.ue_RadioAccessCapabilityComp    ue-RadioAccessCapabilityComp
    No value
    rrc.UE_RadioAccessCapabilityComp

rrc.ue_RadioAccessCapabilityComp2    ue-RadioAccessCapabilityComp2
    No value
    rrc.UE_RadioAccessCapabilityComp2

rrc.ue_RadioAccessCapability_ext    ue-RadioAccessCapability-ext
    Unsigned 32-bit integer
    rrc.UE_RadioAccessCapabBandFDDList

rrc.ue_RadioAccessCapability_v370ext    ue-RadioAccessCapability-v370ext
    No value
    rrc.UE_RadioAccessCapability_v370ext

rrc.ue_RadioAccessCapability_v380ext    ue-RadioAccessCapability-v380ext
    No value
    rrc.UE_RadioAccessCapability_v380ext

rrc.ue_RadioAccessCapability_v3a0ext    ue-RadioAccessCapability-v3a0ext
    No value
    rrc.UE_RadioAccessCapability_v3a0ext

rrc.ue_RadioAccessCapability_v3g0ext    ue-RadioAccessCapability-v3g0ext
    No value
    rrc.UE_RadioAccessCapability_v3g0ext
```

```
rrc.ue_RadioAccessCapability_v4b0ext  ue-RadioAccessCapability-v4b0ext
No value
rrc.UE_RadioAccessCapability_v4b0ext

rrc.ue_RadioAccessCapability_v590ext  ue-RadioAccessCapability-v590ext
No value
rrc.UE_RadioAccessCapability_v590ext

rrc.ue_RadioAccessCapability_v5c0ext  ue-RadioAccessCapability-v5c0ext
No value
rrc.UE_RadioAccessCapability_v5c0ext

rrc.ue_RadioAccessCapability_v650ext  ue-RadioAccessCapability-v650ext
No value
rrc.UE_RadioAccessCapability_v650ext

rrc.ue_RadioAccessCapability_v680ext  ue-RadioAccessCapability-v680ext
No value
rrc.UE_RadioAccessCapability_v680ext

rrc.ue_RadioAccessCapability_v690ext  ue-RadioAccessCapability-v690ext
No value
rrc.UE_RadioAccessCapability_v690ext

rrc.ue_RadioAccessCapability_v6b0ext  ue-RadioAccessCapability-v6b0ext
No value
rrc.UE_RadioAccessCapability_v6b0ext_IEs

rrc.ue_RadioAccessCapability_v7xyext  ue-RadioAccessCapability-v7xyext
No value
rrc.UE_RadioAccessCapability_v7xyext

rrc.ue_RadioCapabilityFDDUpdateRequirement  ue-RadioCapabilityFDDUpdateRequireme
Boolean
rrc.BOOLEAN

rrc.ue_RadioCapabilityFDDUpdateRequirement_FDD  ue-RadioCapabilityFDDUpdateRequi
Boolean
rrc.BOOLEAN

rrc.ue_RadioCapabilityTDDUpdateRequirement  ue-RadioCapabilityTDDUpdateRequireme
Boolean
rrc.BOOLEAN

rrc.ue_RadioCapabilityTDDUpdateRequirement_TDD128  ue-RadioCapabilityTDDUpdateRe
Boolean
rrc.BOOLEAN

rrc.ue_RadioCapabilityTDDUpdateRequirement_TDD384  ue-RadioCapabilityTDDUpdateRe
Boolean
rrc.BOOLEAN

rrc.ue_RadioCapabilityUpdateRequirement_TDD128  ue-RadioCapabilityUpdateRequirem
Boolean
rrc.BOOLEAN

rrc.ue_RadioCapabilityUpdateRequirement_TDD768  ue-RadioCapabilityUpdateRequirem
Boolean
rrc.BOOLEAN

rrc.ue_SecurityInformation2  ue-SecurityInformation2
No value
rrc.UE_SecurityInformation2
```

```
rrc.ue_State ue-State
    Unsigned 32-bit integer
    rrc.T_ue_State

rrc.ue_SystemSpecificSecurityCap ue-SystemSpecificSecurityCap
    Unsigned 32-bit integer
    rrc.InterRAT_UE_SecurityCapList

rrc.ue_TransmittedPower ue-TransmittedPower
    Boolean
    rrc.BOOLEAN

rrc.ue_TransmittedPowerFDD ue-TransmittedPowerFDD
    Unsigned 32-bit integer
    rrc.UE_TransmittedPower

rrc.ue_TransmittedPowerTDD_List ue-TransmittedPowerTDD-List
    Unsigned 32-bit integer
    rrc.UE_TransmittedPowerTDD_List

rrc.ue_dpcch_Burst1 ue-dpcch-Burst1
    Unsigned 32-bit integer
    rrc.UE_DPCCH_Burst

rrc.ue_dpcch_Burst2 ue-dpcch-Burst2
    Unsigned 32-bit integer
    rrc.UE_DPCCH_Burst

rrc.ue_drx_Cycle ue-drx-Cycle
    Unsigned 32-bit integer
    rrc.UE_DRX_Cycle

rrc.ue_drx_Cycle_InactivityThreshold ue-drx-Cycle-InactivityThreshold
    Unsigned 32-bit integer
    rrc.UE_DRX_Cycle_InactivityThreshold

rrc.ue_drx_GrantMonitoring ue-drx-GrantMonitoring
    Boolean
    rrc.BOOLEAN

rrc.ue_dtx_Cycle1_10ms ue-dtx-Cycle1-10ms
    Unsigned 32-bit integer
    rrc.UE_DTX_Cycle1_10ms

rrc.ue_dtx_Cycle1_2ms ue-dtx-Cycle1-2ms
    Unsigned 32-bit integer
    rrc.UE_DTX_Cycle1_2ms

rrc.ue_dtx_Cycle2_10ms ue-dtx-Cycle2-10ms
    Unsigned 32-bit integer
    rrc.UE_DTX_Cycle2_10ms

rrc.ue_dtx_Cycle2_2ms ue-dtx-Cycle2-2ms
    Unsigned 32-bit integer
    rrc.UE_DTX_Cycle2_2ms

rrc.ue_dtx_cycle2InactivityThreshold ue-dtx-cycle2InactivityThreshold
    Unsigned 32-bit integer
    rrc.UE_DTX_Cycle2InactivityThreshold

rrc.ue_dtx_drx_Offset ue-dtx-drx-Offset
    Unsigned 32-bit integer
    rrc.UE_DTX_DRX_Offset
```

```
rrc.ue_dtx_long_preamble_length ue-dtx-long-preamble-length
    Unsigned 32-bit integer
    rrc.UE_DTX_long_preamble_length
rrc.ue_hspa_identities ue-hspa-identities
    No value
    rrc.UE_HSPA_Identities_r6
rrc.ue_positioning_MeasuredResults ue-positioning-MeasuredResults
    No value
    rrc.UE_Positioning_MeasuredResults
rrc.ue_positioning_Capability ue-positioning-Capability
    No value
    rrc.UE_Positioning_Capability
rrc.ue_positioning_Error ue-positioning-Error
    No value
    rrc.UE_Positioning_Error
rrc.ue_positioning_GPS_AcquisitionAssistance ue-positioning-GPS-AcquisitionAssistance
    No value
    rrc.UE_Positioning_GPS_AcquisitionAssistance
rrc.ue_positioning_GPS_Almanac ue-positioning-GPS-Almanac
    No value
    rrc.UE_Positioning_GPS_Almanac
rrc.ue_positioning_GPS_AssistanceData ue-positioning-GPS-AssistanceData
    No value
    rrc.UE_Positioning_GPS_AssistanceData
rrc.ue_positioning_GPS_CipherParameters ue-positioning-GPS-CipherParameters
    No value
    rrc.UE_Positioning_CipherParameters
rrc.ue_positioning_GPS_DGPS_Corrections ue-positioning-GPS-DGPS-Corrections
    No value
    rrc.UE_Positioning_GPS_DGPS_Corrections
rrc.ue_positioning_GPS_IonosphericModel ue-positioning-GPS-IonosphericModel
    No value
    rrc.UE_Positioning_GPS_IonosphericModel
rrc.ue_positioning_GPS_Measurement ue-positioning-GPS-Measurement
    No value
    rrc.UE_Positioning_GPS_MeasurementResults
rrc.ue_positioning_GPS_NavigationModel ue-positioning-GPS-NavigationModel
    No value
    rrc.UE_Positioning_GPS_NavigationModel
rrc.ue_positioning_GPS_Real_timeIntegrity ue-positioning-GPS-Real-timeIntegrity
    Unsigned 32-bit integer
    rrc.BadSatList
rrc.ue_positioning_GPS_ReferenceLocation ue-positioning-GPS-ReferenceLocation
    No value
    rrc.ReferenceLocation
rrc.ue_positioning_GPS_ReferenceTime ue-positioning-GPS-ReferenceTime
    No value
    rrc.UE_Positioning_GPS_ReferenceTime
```

```
rrc.ue_positioning_GPS_UTC_Model    ue-positioning-GPS-UTC-Model
    No value
    rrc.UE_Positioning_GPS_UTC_Model

rrc.ue_positioning_GPS_additionalAssistanceDataRequest ue-positioning-GPS-addit
    No value
    rrc.UE_Positioning_GPS_AdditionalAssistanceDataRequest

rrc.ue_positioning_IPDL_Paremers     ue-positioning-IPDL-Paremers
    No value
    rrc.UE_Positioning_IPDL_Parameters

rrc.ue_positioning_MeasuredResults  ue-positioning-MeasuredResults
    No value
    rrc.UE_Positioning_MeasuredResults

rrc.ue_positioning_MeasuredResults_v390ext ue-positioning-MeasuredResults-v390e
    No value
    rrc.UE_Positioning_MeasuredResults_v390ext

rrc.ue_positioning_Measurement      ue-positioning-Measurement
    No value
    rrc.UE_Positioning_Measurement

rrc.ue_positioning_MeasurementEventResults ue-positioning-MeasurementEventResul
    Unsigned 32-bit integer
    rrc.UE_Positioning_MeasurementEventResults

rrc.ue_positioning_OTDOA_AssistanceData ue-positioning-OTDOA-AssistanceData
    No value
    rrc.UE_Positioning_OTDOA_AssistanceData

rrc.ue_positioning_OTDOA_AssistanceData_UEB ue-positioning-OTDOA-AssistanceData
    No value
    rrc.UE_Positioning_OTDOA_AssistanceData_UEB

rrc.ue_positioning_OTDOA_CipherParameters ue-positioning-OTDOA-CipherParameters
    No value
    rrc.UE_Positioning_CipherParameters

rrc.ue_positioning_OTDOA_Measurement ue-positioning-OTDOA-Measurement
    No value
    rrc.UE_Positioning_OTDOA_Measurement

rrc.ue_positioning_OTDOA_NeighbourCellList ue-positioning-OTDOA-NeighbourCellLi
    Unsigned 32-bit integer
    rrc.UE_Positioning_OTDOA_NeighbourCellList

rrc.ue_positioning_OTDOA_NeighbourCellList_UEB ue-positioning-OTDOA-NeighbourCe
    Unsigned 32-bit integer
    rrc.UE_Positioning_OTDOA_NeighbourCellList_UEB

rrc.ue_positioning_OTDOA_NeighbourCellList_UEB_ext ue-positioning-OTDOA-Neighbo
    Unsigned 32-bit integer
    rrc.UE_Positioning_OTDOA_NeighbourCellList_UEB_ext

rrc.ue_positioning_OTDOA_ReferenceCellInfo ue-positioning-OTDOA-ReferenceCellIn
    No value
    rrc.UE_Positioning_OTDOA_ReferenceCellInfo

rrc.ue_positioning_OTDOA_ReferenceCellInfo_UEB ue-positioning-OTDOA-ReferenceCe
    No value
    rrc.UE_Positioning_OTDOA_ReferenceCellInfo_UEB
```

```
rrc.ue_positioning_OTDOA_ReferenceCellInfo_UEB_ext  ue-positioning-OTDOA-Referen
  No value
  rrc.UE_Positioning_OTDOA_ReferenceCellInfo_UEB_ext
rrc.ue_positioning_PositionEstimateInfo  ue-positioning-PositionEstimateInfo
  No value
  rrc.UE_Positioning_PositionEstimateInfo
rrc.ue_positioning_ReportingCriteria  ue-positioning-ReportingCriteria
  Unsigned 32-bit integer
  rrc.UE_Positioning_EventParamList
rrc.ue_positioning_ReportingQuantity  ue-positioning-ReportingQuantity
  No value
  rrc.UE_Positioning_ReportingQuantity
rrc.ue_positioning_ReportingQuantity_v390ext  ue-positioning-ReportingQuantity-v
  No value
  rrc.UE_Positioning_ReportingQuantity_v390ext
rrc.uea0  uea0
  Boolean
rrc.uea1  uea1
  Boolean
rrc.uea2  uea2
  Boolean
rrc.uia1  uia1
  Boolean
rrc.uia2  uia2
  Boolean
rrc.ul  ul
  Unsigned 32-bit integer
  rrc.UL_CompressedModeMethod
rrc.ul_AM_RLC_Mode  ul-AM-RLC-Mode
  No value
  rrc.UL_AM_RLC_Mode
rrc.ul_AddReconfTrChInfoList  ul-AddReconfTrChInfoList
  Unsigned 32-bit integer
  rrc.UL_AddReconfTransChInfoList
rrc.ul_AddReconfTransChInfoList  ul-AddReconfTransChInfoList
  Unsigned 32-bit integer
  rrc.UL_AddReconfTransChInfoList
rrc.ul_CCTrCHList  ul-CCTrCHList
  Unsigned 32-bit integer
  rrc.UL_CCTrCHList
rrc.ul_CCTrCHListToRemove  ul-CCTrCHListToRemove
  Unsigned 32-bit integer
  rrc.UL_CCTrCHListToRemove
rrc.ul_CCTrCH_TimeslotsCodes  ul-CCTrCH-TimeslotsCodes
  No value
  rrc.UplinkTimeslotsCodes
```

```
rrc.ul_CCTrChTPCList  ul-CCTrChTPCList
    Unsigned 32-bit integer
    rrc.UL_CCTrChTPCList

rrc.ul_ChannelRequirement  ul-ChannelRequirement
    Unsigned 32-bit integer
    rrc.UL_ChannelRequirement

rrc.ul_CommonTransChInfo  ul-CommonTransChInfo
    No value
    rrc.UL_CommonTransChInfo

rrc.ul_CounterSynchronisationInfo  ul-CounterSynchronisationInfo
    No value
    rrc.UL_CounterSynchronisationInfo

rrc.ul_DL_Mode  ul-DL-Mode
    Unsigned 32-bit integer
    rrc.UL_DL_Mode

rrc.ul_DPCCH_SlotFormat  ul-DPCCH-SlotFormat
    Unsigned 32-bit integer
    rrc.UL_DPCCH_SlotFormat

rrc.ul_DPCH_Info  ul-DPCH-Info
    No value
    rrc.UL_DPCH_Info_r6

rrc.ul_DPCH_InfoPredef  ul-DPCH-InfoPredef
    No value
    rrc.UL_DPCH_InfoPredef

rrc.ul_DPCH_PowerControlInfo  ul-DPCH-PowerControlInfo
    Unsigned 32-bit integer
    rrc.UL_DPCH_PowerControlInfo

rrc.ul_EDCH_Information  ul-EDCH-Information
    No value
    rrc.UL_EDCH_Information_r6

rrc.ul_EDCH_Information_r7  ul-EDCH-Information-r7
    No value
    rrc.UL_EDCH_Information_r7

rrc.ul_HFN  ul-HFN
    Byte array
    rrc.BIT_STRING_SIZE_20_25

rrc.ul_IntegProtActivationInfo  ul-IntegProtActivationInfo
    No value
    rrc.IntegrityProtActivationInfo

rrc.ul_Interference  ul-Interference
    Signed 32-bit integer
    rrc.UL_Interference

rrc.ul_LogicalChannelMapping  ul-LogicalChannelMapping
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_maxLoCHperRLC_OF_UL_LogicalChannelMapping

rrc.ul_LogicalChannelMapping_item  Item
    No value
    rrc.UL_LogicalChannelMapping
```

```
rrc.ul_LogicalChannelMappings  ul-LogicalChannelMappings
    Unsigned 32-bit integer
    rrc.UL_LogicalChannelMappings

rrc.ul_MeasurementsFDD  ul-MeasurementsFDD
    Boolean
    rrc.BOOLEAN

rrc.ul_MeasurementsGSM  ul-MeasurementsGSM
    Boolean
    rrc.BOOLEAN

rrc.ul_MeasurementsMC  ul-MeasurementsMC
    Boolean
    rrc.BOOLEAN

rrc.ul_MeasurementsTDD  ul-MeasurementsTDD
    Boolean
    rrc.BOOLEAN

rrc.ul_OL_PC_Signalling  ul-OL-PC-Signalling
    Unsigned 32-bit integer
    rrc.T_ul_OL_PC_Signalling

rrc.ul_RFC3095  ul-RFC3095
    No value
    rrc.UL_RFC3095_r4

rrc.ul_RFC3095_Context  ul-RFC3095-Context
    No value
    rrc.UL_RFC3095_Context

rrc.ul_RFC3095_Context_Relocation  ul-RFC3095-Context-Relocation
    Boolean
    rrc.BOOLEAN

rrc.ul_RLC_Mode  ul-RLC-Mode
    Unsigned 32-bit integer
    rrc.UL_RLC_Mode

rrc.ul_RRC_HFN  ul-RRC-HFN
    Byte array
    rrc.BIT_STRING_SIZE_28

rrc.ul_RRC_SequenceNumber  ul-RRC-SequenceNumber
    Unsigned 32-bit integer
    rrc.RRC_MessageSequenceNumber

rrc.ul_SynchronisationParameters  ul-SynchronisationParameters
    No value
    rrc.UL_SynchronisationParameters_r4

rrc.ul_TFCS  ul-TFCS
    Unsigned 32-bit integer
    rrc.TFCS

rrc.ul_TFCS_Identity  ul-TFCS-Identity
    No value
    rrc.TFCS_Identity

rrc.ul_TM_RLC_Mode  ul-TM-RLC-Mode
    No value
    rrc.UL_TM_RLC_Mode
```



```
rrc.ul_TS_ChannelisationCodeList  ul-TS-ChannelisationCodeList
    Unsigned 32-bit integer
    rrc.UL_TS_ChannelisationCodeList

rrc.ul_TS_Channelisation_Code  ul-TS-Channelisation-Code
    Unsigned 32-bit integer
    rrc.UL_TS_ChannelisationCode

rrc.ul_TargetSIR  ul-TargetSIR
    Unsigned 32-bit integer
    rrc.UL_TargetSIR

rrc.ul_TimeslotInterference  ul-TimeslotInterference
    Signed 32-bit integer
    rrc.TDD_UL_Interference

rrc.ul_TimingAdvance  ul-TimingAdvance
    Unsigned 32-bit integer
    rrc.UL_TimingAdvance

rrc.ul_TrCH_Type  ul-TrCH-Type
    Unsigned 32-bit integer
    rrc.T_ul_TrCH_Type

rrc.ul_TransChCapability  ul-TransChCapability
    No value
    rrc.UL_TransChCapability

rrc.ul_TransChInfoList  ul-TransChInfoList
    Unsigned 32-bit integer
    rrc.UL_AddReconfTransChInfoList

rrc.ul_TransportChannelIdentity  ul-TransportChannelIdentity
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity

rrc.ul_TransportChannelType  ul-TransportChannelType
    Unsigned 32-bit integer
    rrc.UL_TransportChannelType

rrc.ul_UM_RLC_Mode  ul-UM-RLC-Mode
    No value
    rrc.UL_UM_RLC_Mode

rrc.ul_and_dl  ul-and-dl
    No value
    rrc.T_ul_and_dl

rrc.ul_controlledTrChList  ul-controlledTrChList
    Unsigned 32-bit integer
    rrc.UL_ControlledTrChList

rrc.ul_curr_time  ul-curr-time
    Unsigned 32-bit integer
    rrc.INTEGER_0_4294967295

rrc.ul_deletedTransChInfoList  ul-deletedTransChInfoList
    Unsigned 32-bit integer
    rrc.UL_DeletedTransChInfoList

rrc.ul_mode  ul-mode
    Unsigned 32-bit integer
    rrc.T_ul_mode
```

```
rrc.ul_ref_ir    ul-ref-ir
    Byte array
    rrc.OCTET_STRING_SIZE_1_3000
rrc.ul_ref_sn_1  ul-ref-sn-1
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535
rrc.ul_ref_time  ul-ref-time
    Unsigned 32-bit integer
    rrc.INTEGER_0_4294967295
rrc.ul_syn_offset_id  ul-syn-offset-id
    Unsigned 32-bit integer
    rrc.INTEGER_0_65535
rrc.ul_syn_slope_ts  ul-syn-slope-ts
    Unsigned 32-bit integer
    rrc.INTEGER_0_4294967295
rrc.ul_target_SIR  ul-target-SIR
    Signed 32-bit integer
    rrc.INTEGER_M22_40
rrc.ul_transportChannelCausingEvent  ul-transportChannelCausingEvent
    Unsigned 32-bit integer
    rrc.UL_TrCH_Identity
rrc.ul_transportChannelID  ul-transportChannelID
    Unsigned 32-bit integer
    rrc.UL_TrCH_Identity
rrc.uncertaintyAltitude  uncertaintyAltitude
    Unsigned 32-bit integer
    rrc.INTEGER_0_127
rrc.uncertaintyCode  uncertaintyCode
    Unsigned 32-bit integer
    rrc.INTEGER_0_127
rrc.uncertaintySemiMajor  uncertaintySemiMajor
    Unsigned 32-bit integer
    rrc.INTEGER_0_127
rrc.uncertaintySemiMinor  uncertaintySemiMinor
    Unsigned 32-bit integer
    rrc.INTEGER_0_127
rrc.unmodifiedServiceList  unmodifiedServiceList
    Unsigned 32-bit integer
    rrc.MBMS_UnmodifiedServiceList_r6
rrc.unspecified  unspecified
    No value
    rrc.NULL
rrc.unsupported  unsupported
    No value
    rrc.NULL
rrc.unsupportedMeasurement  unsupportedMeasurement
    No value
    rrc.NULL
```

```
rrc.up_Ipdl_Parameters_TDD up-Ipdl-Parameters-TDD
  No value
  rrc.UE_Positioning_IPDL_Parameters_TDD_r4_ext
rrc.up_Measurement up-Measurement
  No value
  rrc.UE_Positioning_Measurement_r4
rrc.uplinkCompressedMode uplinkCompressedMode
  No value
  rrc.CompressedModeMeasCapability
rrc.uplinkCompressedMode_LCR uplinkCompressedMode-LCR
  No value
  rrc.CompressedModeMeasCapability_LCR_r4
rrc.uplinkDirectTransfer uplinkDirectTransfer
  No value
  rrc.UplinkDirectTransfer
rrc.uplinkDirectTransfer_r3_add_ext uplinkDirectTransfer-r3-add-ext
  Byte array
  rrc.BIT_STRING
rrc.uplinkDirectTransfer_v690ext uplinkDirectTransfer-v690ext
  No value
  rrc.UplinkDirectTransfer_v690ext_IEs
rrc.uplinkPhysChCapability uplinkPhysChCapability
  No value
  rrc.UL_PhysChCapabilityFDD
rrc.uplinkPhysicalChannelControl uplinkPhysicalChannelControl
  Unsigned 32-bit integer
  rrc.UplinkPhysicalChannelControl
rrc.uplinkPhysicalChannelControl_r3 uplinkPhysicalChannelControl-r3
  No value
  rrc.UplinkPhysicalChannelControl_r3_IEs
rrc.uplinkPhysicalChannelControl_r3_add_ext uplinkPhysicalChannelControl-r3-add-ext
  Byte array
  rrc.BIT_STRING
rrc.uplinkPhysicalChannelControl_r4 uplinkPhysicalChannelControl-r4
  No value
  rrc.UplinkPhysicalChannelControl_r4_IEs
rrc.uplinkPhysicalChannelControl_r4_add_ext uplinkPhysicalChannelControl-r4-add-ext
  Byte array
  rrc.BIT_STRING
rrc.uplinkPhysicalChannelControl_r5 uplinkPhysicalChannelControl-r5
  No value
  rrc.UplinkPhysicalChannelControl_r5_IEs
rrc.uplinkPhysicalChannelControl_r5_add_ext uplinkPhysicalChannelControl-r5-add-ext
  Byte array
  rrc.BIT_STRING
rrc.uplinkPhysicalChannelControl_r7 uplinkPhysicalChannelControl-r7
  No value
  rrc.UplinkPhysicalChannelControl_r7_IEs
```

```
rrc.uplinkPhysicalChannelControl_r7_add_ext  uplinkPhysicalChannelControl-r7-add
  Byte array
  rrc.BIT_STRING

rrc.uplinkPhysicalChannelControl_v690ext  uplinkPhysicalChannelControl-v690ext
  No value
  rrc.UplinkPhysicalChannelControl_v690ext_IEs

rrc.uplinkPhysicalChannelControl_v6a0ext  uplinkPhysicalChannelControl-v6a0ext
  No value
  rrc.UplinkPhysicalChannelControl_v6a0ext_IEs

rrc.uplinkPhysicalChannelControl_v4b0ext  uplinkPhysicalChannelControl-v4b0ext
  No value
  rrc.UplinkPhysicalChannelControl_v4b0ext_IEs

rrc.uplink_DPCCHSlotFormatInformation  uplink-DPCCHSlotFormatInformation
  Unsigned 32-bit integer
  rrc.Uplink_DPCCH_Slot_Format_Information

rrc.upperLimit  upperLimit
  Unsigned 32-bit integer
  rrc.UpperLimit

rrc.uraIndex  uraIndex
  Byte array
  rrc.BIT_STRING_SIZE_4

rrc.uraUpdate  uraUpdate
  No value
  rrc.URAUpdate

rrc.uraUpdateConfirm  uraUpdateConfirm
  Unsigned 32-bit integer
  rrc.URAUpdateConfirm

rrc.uraUpdateConfirm_CCCH_r3  uraUpdateConfirm-CCCH-r3
  No value
  rrc.URAUpdateConfirm_CCCH_r3_IEs

rrc.uraUpdateConfirm_CCCH_r3_add_ext  uraUpdateConfirm-CCCH-r3-add-ext
  Byte array
  rrc.BIT_STRING

rrc.uraUpdateConfirm_r3  uraUpdateConfirm-r3
  No value
  rrc.URAUpdateConfirm_r3_IEs

rrc.uraUpdateConfirm_r3_add_ext  uraUpdateConfirm-r3-add-ext
  Byte array
  rrc.BIT_STRING

rrc.uraUpdateConfirm_r5  uraUpdateConfirm-r5
  No value
  rrc.URAUpdateConfirm_r5_IEs

rrc.uraUpdateConfirm_r7  uraUpdateConfirm-r7
  No value
  rrc.URAUpdateConfirm_r7_IEs

rrc.uraUpdateConfirm_r7_add_ext  uraUpdateConfirm-r7-add-ext
  Byte array
  rrc.BIT_STRING
```

```
rrc.uraUpdateConfirm_v690ext  uraUpdateConfirm-v690ext
    No value
    rrc.URAUpdateConfirm_v690ext_IEs
rrc.uraUpdate_r3_add_ext  uraUpdate-r3-add-ext
    Byte array
    rrc.BIT_STRING
rrc.ura_Identity  ura-Identity
    Byte array
    rrc.URA_Identity
rrc.ura_IdentityList  ura-IdentityList
    Unsigned 32-bit integer
    rrc.URA_IdentityList
rrc.ura_UpdateCause  ura-UpdateCause
    Unsigned 32-bit integer
    rrc.URA_UpdateCause
rrc.usch  usch
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity
rrc.usch_TFCS  usch-TFCS
    Unsigned 32-bit integer
    rrc.TFCS
rrc.usch_TFS  usch-TFS
    Unsigned 32-bit integer
    rrc.TransportFormatSet
rrc.usch_TransportChannelIdentity  usch-TransportChannelIdentity
    Unsigned 32-bit integer
    rrc.TransportChannelIdentity
rrc.usch_TransportChannelsInfo  usch-TransportChannelsInfo
    Unsigned 32-bit integer
    rrc.USCH_TransportChannelsInfo
rrc.useCIO  useCIO
    Boolean
    rrc.BOOLEAN
rrc.use_of_HCS  use-of-HCS
    Unsigned 32-bit integer
    rrc.T_use_of_HCS
rrc.usedFreqThreshold  usedFreqThreshold
    Signed 32-bit integer
    rrc.Threshold
rrc.usedFreqW  usedFreqW
    Unsigned 32-bit integer
    rrc.W
rrc.utcModelRequest  utcModelRequest
    Boolean
    rrc.BOOLEAN
rrc.utra_CarrierRSSI  utra-CarrierRSSI
    Unsigned 32-bit integer
    rrc.UTRA_CarrierRSSI
```

```
rrc.utra_Carrier_RSSI   utra-Carrier-RSSI
  Boolean
  rrc.BOOLEAN

rrc.utranMobilityInformation   utranMobilityInformation
  Unsigned 32-bit integer
  rrc.UTRANMobilityInformation

rrc.utranMobilityInformationConfirm   utranMobilityInformationConfirm
  No value
  rrc.UTRANMobilityInformationConfirm

rrc.utranMobilityInformationConfirm_r3_add_ext   utranMobilityInformationConfirm-
  Byte array
  rrc.BIT_STRING

rrc.utranMobilityInformationConfirm_v7xyext   utranMobilityInformationConfirm-v7x
  No value
  rrc.UTRANMobilityInformationConfirm_v7xyext_IEs

rrc.utranMobilityInformationFailure   utranMobilityInformationFailure
  No value
  rrc.UTRANMobilityInformationFailure

rrc.utranMobilityInformationFailure_r3_add_ext   utranMobilityInformationFailure-
  Byte array
  rrc.BIT_STRING

rrc.utranMobilityInformation_r3   utranMobilityInformation-r3
  No value
  rrc.UTRANMobilityInformation_r3_IEs

rrc.utranMobilityInformation_r3_add_ext   utranMobilityInformation-r3-add-ext
  Byte array
  rrc.BIT_STRING

rrc.utranMobilityInformation_r5   utranMobilityInformation-r5
  No value
  rrc.UTRANMobilityInformation_r5_IEs

rrc.utranMobilityInformation_r7   utranMobilityInformation-r7
  No value
  rrc.UTRANMobilityInformation_r7_IEs

rrc.utranMobilityInformation_r7_add_ext   utranMobilityInformation-r7-add-ext
  Byte array
  rrc.BIT_STRING

rrc.utranMobilityInformation_v3a0ext   utranMobilityInformation-v3a0ext
  No value
  rrc.UTRANMobilityInformation_v3a0ext_IEs

rrc.utranMobilityInformation_v690ext   utranMobilityInformation-v690ext
  No value
  rrc.UtranMobilityInformation_v690ext_IEs

rrc.utran_DRX_CycleLengthCoeff   utran-DRX-CycleLengthCoeff
  Unsigned 32-bit integer
  rrc.UTRAN_DRX_CycleLengthCoefficient

rrc.utran_EstimatedQuality   utran-EstimatedQuality
  Boolean
  rrc.BOOLEAN
```

```
rrc.utran_GPSReferenceTime    utran-GPSReferenceTime
    No value
    rrc.UTRAN_GPSReferenceTime

rrc.utran_GPSReferenceTimeResult  utran-GPSReferenceTimeResult
    No value
    rrc.UTRAN_GPSReferenceTimeResult

rrc.utran_GPSTimingOfCell    utran-GPSTimingOfCell
    No value
    rrc.T_utran_GPSTimingOfCell

rrc.utran_GPS_DriftRate    utran-GPS-DriftRate
    Unsigned 32-bit integer
    rrc.UTRAN_GPS_DriftRate

rrc.utran_GroupIdentity    utran-GroupIdentity
    Unsigned 32-bit integer
    rrc.SEQUENCE_SIZE_1_maxURNTI_Group_OF_GroupIdentityWithReleaseInformation

rrc.utran_GroupIdentity_item    Item
    No value
    rrc.GroupIdentityWithReleaseInformation

rrc.utran_Identity    utran-Identity
    No value
    rrc.T_utran_Identity

rrc.utran_SingleUE_Identity    utran-SingleUE-Identity
    No value
    rrc.T_utran_SingleUE_Identity

rrc.v370NonCriticalExtensions    v370NonCriticalExtensions
    No value
    rrc.T_v370NonCriticalExtensions

rrc.v380NonCriticalExtensions    v380NonCriticalExtensions
    No value
    rrc.T_v380NonCriticalExtensions

rrc.v390NonCriticalExtensions    v390NonCriticalExtensions
    Unsigned 32-bit integer
    rrc.T_v390NonCriticalExtensions

rrc.v390nonCriticalExtensions    v390nonCriticalExtensions
    No value
    rrc.T_v390nonCriticalExtensions

rrc.v3a0NonCriticalExtensions    v3a0NonCriticalExtensions
    No value
    rrc.T_v3a0NonCriticalExtensions

rrc.v3aoNonCriticalExtensions    v3aoNonCriticalExtensions
    No value
    rrc.T_v3aoNonCriticalExtensions

rrc.v3b0NonCriticalExtensions    v3b0NonCriticalExtensions
    No value
    rrc.T_v3b0NonCriticalExtensions

rrc.v3c0NonCriticalExtensions    v3c0NonCriticalExtensions
    No value
    rrc.T_v3c0NonCriticalExtensions
```

```
rrc.v3d0NonCriticalExtensions v3d0NonCriticalExtensions
No value
rrc.T_v3d0NonCriticalExtensions
rrc.v3g0NonCriticalExtensions v3g0NonCriticalExtensions
No value
rrc.T_v3g0NonCriticalExtensions
rrc.v4b0NonCriticalExtensions v4b0NonCriticalExtensions
No value
rrc.T_v4b0NonCriticalExtensions
rrc.v4b0NonCriticalExtensstions v4b0NonCriticalExtensstions
No value
rrc.T_v4b0NonCriticalExtensstions
rrc.v4d0NonCriticalExtensions v4d0NonCriticalExtensions
No value
rrc.T_v4d0NonCriticalExtensions
rrc.v590NonCriticalExtension v590NonCriticalExtension
No value
rrc.T_v590NonCriticalExtension
rrc.v590NonCriticalExtensions v590NonCriticalExtensions
No value
rrc.T_v590NonCriticalExtensions
rrc.v590NonCriticalExtensstions v590NonCriticalExtensstions
No value
rrc.T_v590NonCriticalExtensstions
rrc.v5a0NonCriticalExtensions v5a0NonCriticalExtensions
No value
rrc.T_v5a0NonCriticalExtensions
rrc.v5b0NonCriticalExtension v5b0NonCriticalExtension
No value
rrc.T_v5b0NonCriticalExtension
rrc.v5b0NonCriticalExtensions v5b0NonCriticalExtensions
No value
rrc.T_v5b0NonCriticalExtensions
rrc.v5c0NonCriticalExtension v5c0NonCriticalExtension
No value
rrc.T_v5c0NonCriticalExtension
rrc.v5c0NonCriticalExtensions v5c0NonCriticalExtensions
No value
rrc.T_v5c0NonCriticalExtensions
rrc.v5c0NoncriticalExtension v5c0NoncriticalExtension
No value
rrc.T_v5c0NoncriticalExtension
rrc.v5d0NonCriticalExtensstions v5d0NonCriticalExtensstions
No value
rrc.T_v5d0NonCriticalExtensstions
rrc.v650NonCriticalExtensions v650NonCriticalExtensions
No value
rrc.T_v650NonCriticalExtensions
```



```
rrc.v650nonCriticalExtensions v650nonCriticalExtensions
  No value
  rrc.T_v650nonCriticalExtensions
rrc.v670NonCriticalExtension v670NonCriticalExtension
  No value
  rrc.T_v670NonCriticalExtension
rrc.v680NonCriticalExtensions v680NonCriticalExtensions
  No value
  rrc.T_v680NonCriticalExtensions
rrc.v690NonCriticalExtensions v690NonCriticalExtensions
  No value
  rrc.T_v690NonCriticalExtensions
rrc.v690nonCriticalExtensions v690nonCriticalExtensions
  No value
  rrc.T_v690nonCriticalExtensions
rrc.v6a0NonCriticalExtensions v6a0NonCriticalExtensions
  No value
  rrc.T_v6a0NonCriticalExtensions
rrc.v6b0NonCriticalExtensions v6b0NonCriticalExtensions
  No value
  rrc.T_v6b0NonCriticalExtensions
rrc.v7xyNonCriticalExtension v7xyNonCriticalExtension
  No value
  rrc.T_v7xyNonCriticalExtension
rrc.v7xyNonCriticalExtensions v7xyNonCriticalExtensions
  No value
  rrc.T_v7xyNonCriticalExtensions
rrc.validity_CellPCH_UraPCH validity-CellPCH-UraPCH
  Unsigned 32-bit integer
  rrc.T_validity_CellPCH_UraPCH
rrc.value value
  Unsigned 32-bit integer
  rrc.INTEGER_0_38
rrc.valueTagInfo valueTagInfo
  Unsigned 32-bit integer
  rrc.ValueTagInfo
rrc.valueTagList valueTagList
  Unsigned 32-bit integer
  rrc.PredefinedConfigValueTagList
rrc.varianceOfRLC_BufferPayload varianceOfRLC-BufferPayload
  Unsigned 32-bit integer
  rrc.TimeInterval
rrc.velocityEstimate velocityEstimate
  Unsigned 32-bit integer
  rrc.VelocityEstimate
rrc.velocityRequested velocityRequested
  Unsigned 32-bit integer
  rrc.T_velocityRequested
```

```
rrc.verifiedBSIC verifiedBSIC
    Unsigned 32-bit integer
    rrc.INTEGER_0_maxCellMeas

rrc.version version
    Unsigned 32-bit integer
    rrc.T_version

rrc.verticalAccuracy verticalAccuracy
    Byte array
    rrc.UE_Positioning_Accuracy

rrc.verticalSpeed verticalSpeed
    Unsigned 32-bit integer
    rrc.INTEGER_0_255

rrc.verticalSpeedDirection verticalSpeedDirection
    Unsigned 32-bit integer
    rrc.T_verticalSpeedDirection

rrc.vertical_Accuracy vertical-Accuracy
    Byte array
    rrc.UE_Positioning_Accuracy

rrc.w w
    Unsigned 32-bit integer
    rrc.W

rrc.waitTime waitTime
    Unsigned 32-bit integer
    rrc.WaitTime

rrc.wholeGPS_Chips wholeGPS-Chips
    Unsigned 32-bit integer
    rrc.INTEGER_0_1022

rrc.wi wi
    Unsigned 32-bit integer
    rrc.Wi_LCR

rrc.widowSize_DAR widowSize-DAR
    Unsigned 32-bit integer
    rrc.WindowSizeDAR_r6

rrc.windowSize_OSD widowSize-OSD
    Unsigned 32-bit integer
    rrc.WindowSizeOSD_r6

rrc.withinActSetAndOrMonitoredUsedFreqOrVirtualActSetAndOrMonitoredNonUsedFreq
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType2

rrc.withinActSetOrVirtualActSet_InterRATcells withinActSetOrVirtualActSet-Inter
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType2

rrc.withinActiveAndOrMonitoredUsedFreq withinActiveAndOrMonitoredUsedFreq
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1

rrc.withinActiveSet withinActiveSet
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1
```

```

rrc.withinDetectedSetUsedFreq  withinDetectedSetUsedFreq
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1

rrc.withinMonitoredAndOrDetectedUsedFreq  withinMonitoredAndOrDetectedUsedFreq
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1

rrc.withinMonitoredAndOrVirtualActiveSetNonUsedFreq  withinMonitoredAndOrVirtual
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1

rrc.withinMonitoredSetNonUsedFreq  withinMonitoredSetNonUsedFreq
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1

rrc.withinMonitoredSetUsedFreq  withinMonitoredSetUsedFreq
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1

rrc.withinVirtualActSet  withinVirtualActSet
    Unsigned 32-bit integer
    rrc.MaxNumberOfReportingCellsType1

rrc.wn_a  wn-a
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.wn_lsf  wn-lsf
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.wn_t  wn-t
    Byte array
    rrc.BIT_STRING_SIZE_8

rrc.zero  zero
    No value
    rrc.NULL

```

### Radio Resource LCS Protocol (RRLP) (rrlp)

```

rrlp.GPSTOWAssist_item  Item
    No value
    rrlp.GPSTOWAssistElement

rrlp.PDU  PDU
    No value
    rrlp.PDU

rrlp.PrivateExtensionList_item  Item
    No value
    rrlp.PrivateExtension

rrlp.SeqOfAcquisElement_item  Item
    No value
    rrlp.AcquisElement

rrlp.SeqOfAlmanacElement_item  Item
    No value
    rrlp.AlmanacElement

```

```
rrlp.SeqOfBadSignalElement_item  Item
    No value
    rrlp.BadSignalElement
rrlp.SeqOfDGANSSSgnElement_item  Item
    No value
    rrlp.DGANSSSgnElement
rrlp.SeqOfGANSSAlmanacElement_item  Item
    Unsigned 32-bit integer
    rrlp.GANSSAlmanacElement
rrlp.SeqOfGANSSGenericAssistDataElement_item  Item
    No value
    rrlp.GANSSGenericAssistDataElement
rrlp.SeqOfGANSSRefMeasurementElement_item  Item
    No value
    rrlp.GANSSRefMeasurementElement
rrlp.SeqOfGANSSSatelliteElement_item  Item
    No value
    rrlp.GANSSSatelliteElement
rrlp.SeqOfGANSSTimeModel_item  Item
    No value
    rrlp.GANSSTimeModelElement
rrlp.SeqOfGANSS_MsrSetElement_item  Item
    No value
    rrlp.GANSS_MsrSetElement
rrlp.SeqOfGANSS_SgnElement_item  Item
    No value
    rrlp.GANSS_SgnElement
rrlp.SeqOfGANSS_SgnTypeElement_item  Item
    No value
    rrlp.GANSS_SgnTypeElement
rrlp.SeqOfGPS_MsrElement_item  Item
    No value
    rrlp.GPS_MsrElement
rrlp.SeqOfGPS_MsrSetElement_item  Item
    No value
    rrlp.GPS_MsrSetElement
rrlp.SeqOfMsrAssistBTS_R98_ExpOTD_item  Item
    No value
    rrlp.MsrAssistBTS_R98_ExpOTD
rrlp.SeqOfMsrAssistBTS_item  Item
    No value
    rrlp.MsrAssistBTS
rrlp.SeqOfNavModelElement_item  Item
    No value
    rrlp.NavModelElement
rrlp.SeqOfOTD_FirstSetMsrs_R98_Ext_item  Item
    No value
    rrlp.OTD_FirstSetMsrs
```

```
rrlp.SeqOfOTD_FirstSetMsrs_item  Item
    No value
    rrlp.OTD_FirstSetMsrs
rrlp.SeqOfOTD_MsrElementRest_item  Item
    No value
    rrlp.OTD_MsrElementRest
rrlp.SeqOfOTD_MsrsOfOtherSets_item  Item
    Unsigned 32-bit integer
    rrlp.OTD_MsrsOfOtherSets
rrlp.SeqOfReferenceIdentityType_item  Item
    Unsigned 32-bit integer
    rrlp.ReferenceIdentityType
rrlp.SeqOfSatElement_item  Item
    No value
    rrlp.SatElement
rrlp.SeqOfSgnTypeElement_item  Item
    No value
    rrlp.SgnTypeElement
rrlp.SeqOfStandardClockModelElement_item  Item
    No value
    rrlp.StandardClockModelElement
rrlp.SeqOfSystemInfoAssistBTS_R98_ExpOTD_item  Item
    Unsigned 32-bit integer
    rrlp.SystemInfoAssistBTS_R98_ExpOTD
rrlp.SeqOfSystemInfoAssistBTS_item  Item
    Unsigned 32-bit integer
    rrlp.SystemInfoAssistBTS
rrlp.SeqOf_BadSatelliteSet_item  Item
    Unsigned 32-bit integer
    rrlp.SatelliteID
rrlp.SeqOf_GANSSDataBits_item  Item
    Unsigned 32-bit integer
    rrlp.GANSSDataBit
rrlp.accuracy  accuracy
    Unsigned 32-bit integer
    rrlp.Accuracy
rrlp.acquisAssist  acquisAssist
    No value
    rrlp.AcquisAssist
rrlp.acquisList  acquisList
    Unsigned 32-bit integer
    rrlp.SeqOfAcquisElement
rrlp.additionalAngle  additionalAngle
    No value
    rrlp.AdditionalAngleFields
rrlp.additionalDoppler  additionalDoppler
    No value
    rrlp.AdditionalDopplerFields
```

```
rrlp.additionalAngle  additionalAngle
    No value
    rrlp.AdditionalAngleFields
rrlp.additionalAssistanceData  additionalAssistanceData
    No value
    rrlp.AdditionalAssistanceData
rrlp.additionalDoppler  additionalDoppler
    No value
    rrlp.AdditionalDopplerFields
rrlp.adr  adr
    Unsigned 32-bit integer
    rrlp.INTEGER_0_33554431
rrlp.ai0  ai0
    Unsigned 32-bit integer
    rrlp.INTEGER_0_4095
rrlp.ai1  ai1
    Unsigned 32-bit integer
    rrlp.INTEGER_0_4095
rrlp.ai2  ai2
    Unsigned 32-bit integer
    rrlp.INTEGER_0_4095
rrlp.alamanacToa  alamanacToa
    Unsigned 32-bit integer
    rrlp.INTEGER_0_255
rrlp.alamanacWNa  alamanacWNa
    Unsigned 32-bit integer
    rrlp.INTEGER_0_255
rrlp.alert  alert
    Unsigned 32-bit integer
    rrlp.AlertFlag
rrlp.alfa0  alfa0
    Signed 32-bit integer
    rrlp.INTEGER_M128_127
rrlp.alfa1  alfa1
    Signed 32-bit integer
    rrlp.INTEGER_M128_127
rrlp.alfa2  alfa2
    Signed 32-bit integer
    rrlp.INTEGER_M128_127
rrlp.alfa3  alfa3
    Signed 32-bit integer
    rrlp.INTEGER_M128_127
rrlp.almanac  almanac
    No value
    rrlp.Almanac
rrlp.almanacAF0  almanacAF0
    Signed 32-bit integer
    rrlp.INTEGER_M1024_1023
```

```
rrlp.almanacAF1 almanacAF1
    Signed 32-bit integer
    rrlp.INTEGER_M1024_1023

rrlp.almanacAPowerHalf almanacAPowerHalf
    Unsigned 32-bit integer
    rrlp.INTEGER_0_16777215

rrlp.almanacE almanacE
    Unsigned 32-bit integer
    rrlp.INTEGER_0_65535

rrlp.almanacKsii almanacKsii
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.almanacList almanacList
    Unsigned 32-bit integer
    rrlp.SeqOfAlmanacElement

rrlp.almanacM0 almanacM0
    Signed 32-bit integer
    rrlp.INTEGER_M8388608_8388607

rrlp.almanacOmega0 almanacOmega0
    Signed 32-bit integer
    rrlp.INTEGER_M8388608_8388607

rrlp.almanacOmegaDot almanacOmegaDot
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.almanacSVhealth almanacSVhealth
    Unsigned 32-bit integer
    rrlp.INTEGER_0_255

rrlp.almanacW almanacW
    Signed 32-bit integer
    rrlp.INTEGER_M8388608_8388607

rrlp.antiSpooF antiSpooF
    Unsigned 32-bit integer
    rrlp.AntiSpooFFlag

rrlp.assistanceData assistanceData
    No value
    rrlp.AssistanceData

rrlp.assistanceDataAck assistanceDataAck
    No value
    rrlp.NULL

rrlp.azimuth azimuth
    Unsigned 32-bit integer
    rrlp.INTEGER_0_31

rrlp.badSVID badSVID
    Unsigned 32-bit integer
    rrlp.SVID

rrlp.badSignalID badSignalID
    Unsigned 32-bit integer
    rrlp.INTEGER_0_3
```

```
rrlp.bcchCarrier  bcchCarrier
    Unsigned 32-bit integer
    rrlp.BCCHCarrier

rrlp.beta0  beta0
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.beta1  beta1
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.beta2  beta2
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.beta3  beta3
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.bitNumber  bitNumber
    Unsigned 32-bit integer
    rrlp.BitNumber

rrlp.bsic  bsic
    Unsigned 32-bit integer
    rrlp.BSIC

rrlp.bsicAndCarrier  bsicAndCarrier
    No value
    rrlp.BSICAndCarrier

rrlp.btsPosition  btsPosition
    Byte array
    rrlp.BTSPosition

rrlp.cNo  cNo
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.calcAssistanceBTS  calcAssistanceBTS
    No value
    rrlp.CalcAssistanceBTS

rrlp.carrier  carrier
    Unsigned 32-bit integer
    rrlp.BCCHCarrier

rrlp.carrierQualityInd  carrierQualityInd
    Unsigned 32-bit integer
    rrlp.INTEGER_0_3

rrlp.ci  ci
    Unsigned 32-bit integer
    rrlp.CellID

rrlp.ciAndLAC  ciAndLAC
    No value
    rrlp.CellIDAndLAC

rrlp.codePhase  codePhase
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1022
```



```
rrlp.codePhaseRMSError codePhaseRMSError
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.codePhaseSearchWindow codePhaseSearchWindow
    Unsigned 32-bit integer
    rrlp.INTEGER_0_15

rrlp.component component
    Unsigned 32-bit integer
    rrlp.RRLP_Component

rrlp.controlHeader controlHeader
    No value
    rrlp.ControlHeader

rrlp.deltaGNASSTOD deltaGNASSTOD
    Unsigned 32-bit integer
    rrlp.INTEGER_0_127

rrlp.deltaPseudoRangeCor2 deltaPseudoRangeCor2
    Signed 32-bit integer
    rrlp.INTEGER_M127_127

rrlp.deltaPseudoRangeCor3 deltaPseudoRangeCor3
    Signed 32-bit integer
    rrlp.INTEGER_M127_127

rrlp.deltaRangeRateCor2 deltaRangeRateCor2
    Signed 32-bit integer
    rrlp.INTEGER_M7_7

rrlp.deltaRangeRateCor3 deltaRangeRateCor3
    Signed 32-bit integer
    rrlp.INTEGER_M7_7

rrlp.deltaTow deltaTow
    Unsigned 32-bit integer
    rrlp.INTEGER_0_127

rrlp.dganssRefTime dganssRefTime
    Unsigned 32-bit integer
    rrlp.INTEGER_0_119

rrlp.dganssSgnList dganssSgnList
    Unsigned 32-bit integer
    rrlp.SeqOfDGANSSSgnElement

rrlp.dgpsCorrections dgpsCorrections
    No value
    rrlp.DGPSCorrections

rrlp.doppler doppler
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.doppler0 doppler0
    Signed 32-bit integer
    rrlp.INTEGER_M2048_2047

rrlp.doppler1 doppler1
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63
```

```
rrlp.dopplerUncertainty dopplerUncertainty
    Unsigned 32-bit integer
    rrlp.INTEGER_0_7

rrlp.e-otd e-otd
    Boolean

rrlp.eMSB eMSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_127

rrlp.elevation elevation
    Unsigned 32-bit integer
    rrlp.INTEGER_0_7

rrlp.environmentCharacter environmentCharacter
    Unsigned 32-bit integer
    rrlp.EnvironmentCharacter

rrlp.eotdQuality eotdQuality
    No value
    rrlp.EOTDQuality

rrlp.ephemAF0 ephemAF0
    Signed 32-bit integer
    rrlp.INTEGER_M2097152_2097151

rrlp.ephemAF1 ephemAF1
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.ephemAF2 ephemAF2
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.ephemAODA ephemAODA
    Unsigned 32-bit integer
    rrlp.INTEGER_0_31

rrlp.ephemAPowerHalf ephemAPowerHalf
    Unsigned 32-bit integer
    rrlp.INTEGER_0_4294967295

rrlp.ephemCic ephemCic
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.ephemCis ephemCis
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.ephemCodeOnL2 ephemCodeOnL2
    Unsigned 32-bit integer
    rrlp.INTEGER_0_3

rrlp.ephemCrc ephemCrc
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.ephemCrs ephemCrs
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767
```

```
rrlp.ephemCuc  ephemCuc
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.ephemCus  ephemCus
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.ephemDeltaN  ephemDeltaN
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.ephemE  ephemE
    Unsigned 32-bit integer
    rrlp.INTEGER_0_4294967295

rrlp.ephemFitFlag  ephemFitFlag
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.ephemI0  ephemI0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.ephemIDot  ephemIDot
    Signed 32-bit integer
    rrlp.INTEGER_M8192_8191

rrlp.ephemIODC  ephemIODC
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1023

rrlp.ephemL2Pflag  ephemL2Pflag
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.ephemM0  ephemM0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.ephemOmegaA0  ephemOmegaA0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.ephemOmegaADot  ephemOmegaADot
    Signed 32-bit integer
    rrlp.INTEGER_M8388608_8388607

rrlp.ephemSF1Rsvd  ephemSF1Rsvd
    No value
    rrlp.EphemerisSubframe1Reserved

rrlp.ephemSVhealth  ephemSVhealth
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.ephemTgd  ephemTgd
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.ephemToc  ephemToc
    Unsigned 32-bit integer
    rrlp.INTEGER_0_37799
```

```
rrlp.ephemToe  ephemToe
    Unsigned 32-bit integer
    rrlp.INTEGER_0_37799
rrlp.ephemURA  ephemURA
    Unsigned 32-bit integer
    rrlp.INTEGER_0_15
rrlp.ephemW  ephemW
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647
rrlp.errorCause  errorCause
    Unsigned 32-bit integer
    rrlp.ErrorCodes
rrlp.expOTDUncertainty  expOTDUncertainty
    Unsigned 32-bit integer
    rrlp.ExpOTDUncertainty
rrlp.expOTDUncertainty  expOTDUncertainty
    Unsigned 32-bit integer
    rrlp.ExpOTDUncertainty
rrlp.expectedOTD  expectedOTD
    Unsigned 32-bit integer
    rrlp.ExpectedOTD
rrlp.extId  extId
    rrlp.OBJECT_IDENTIFIER
rrlp.extType  extType
    No value
    rrlp.T_extType
rrlp.extended_reference  extended-reference
    No value
    rrlp.Extended_reference
rrlp.extensionContainer  extensionContainer
    No value
    rrlp.ExtensionContainer
rrlp.finERTD  finERTD
    Unsigned 32-bit integer
    rrlp.FinERTD
rrlp.fixType  fixType
    Unsigned 32-bit integer
    rrlp.FixType
rrlp.fracChips  fracChips
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1024
rrlp.frameDrift  frameDrift
    Signed 32-bit integer
    rrlp.FrameDrift
rrlp.frameNumber  frameNumber
    Unsigned 32-bit integer
    rrlp.FrameNumber
```

```
rrlp.galileo galileo
  Boolean

rrlp.ganssAlmanacList ganssAlmanacList
  Unsigned 32-bit integer
  rrlp.SeqOfGANSSAlmanacElement

rrlp.ganssAlmanacModel ganssAlmanacModel
  No value
  rrlp.GANSSAlmanacModel

rrlp.ganssAssistanceData ganssAssistanceData
  Byte array
  rrlp.GANSSAssistanceData

rrlp.ganssBadSignalList ganssBadSignalList
  Unsigned 32-bit integer
  rrlp.SeqOfBadSignalElement

rrlp.ganssCarrierPhaseMeasurementRequest ganssCarrierPhaseMeasurementRequest
  No value
  rrlp.NULL

rrlp.ganssClockModel ganssClockModel
  Unsigned 32-bit integer
  rrlp.GANSSClockModel

rrlp.ganssCommonAssistData ganssCommonAssistData
  No value
  rrlp.GANSSCommonAssistData

rrlp.ganssDataBitAssist ganssDataBitAssist
  No value
  rrlp.GANSSDataBitAssist

rrlp.ganssDataBits ganssDataBits
  Unsigned 32-bit integer
  rrlp.SeqOf_GANSSDataBits

rrlp.ganssDataTypeID ganssDataTypeID
  Unsigned 32-bit integer
  rrlp.INTEGER_0_2

rrlp.ganssDay ganssDay
  Unsigned 32-bit integer
  rrlp.INTEGER_0_8191

rrlp.ganssDiffCorrections ganssDiffCorrections
  No value
  rrlp.GANSSDiffCorrections

rrlp.ganssGenericAssistDataList ganssGenericAssistDataList
  Unsigned 32-bit integer
  rrlp.SeqOfGANSSGenericAssistDataElement

rrlp.ganssID ganssID
  Unsigned 32-bit integer
  rrlp.INTEGER_0_7

rrlp.ganssIonoModel ganssIonoModel
  No value
  rrlp.GANSSIonosphereModel
```

```
rrlp.ganssIonoStormFlags  ganssIonoStormFlags
    No value
    rrlp.GANSSIonoStormFlags
rrlp.ganssIonosphericModel  ganssIonosphericModel
    No value
    rrlp.GANSSIonosphericModel
rrlp.ganssLocationInfo  ganssLocationInfo
    No value
    rrlp.GANSSLocationInfo
rrlp.ganssMeasureInfo  ganssMeasureInfo
    No value
    rrlp.GANSSMeasureInfo
rrlp.ganssMsrSetList  ganssMsrSetList
    Unsigned 32-bit integer
    rrlp.SeqOfGANSS_MsrSetElement
rrlp.ganssNavigationModel  ganssNavigationModel
    No value
    rrlp.GANSSNavModel
rrlp.ganssOrbitModel  ganssOrbitModel
    Unsigned 32-bit integer
    rrlp.GANSSOrbitModel
rrlp.ganssPositionMethod  ganssPositionMethod
    Byte array
    rrlp.GANSSPositioningMethod
rrlp.ganssRealTimeIntegrity  ganssRealTimeIntegrity
    No value
    rrlp.GANSSRealTimeIntegrity
rrlp.ganssRefLocation  ganssRefLocation
    No value
    rrlp.GANSSRefLocation
rrlp.ganssRefMeasAssitList  ganssRefMeasAssitList
    Unsigned 32-bit integer
    rrlp.SeqOfGANSSRefMeasurementElement
rrlp.ganssRefMeasurementAssist  ganssRefMeasurementAssist
    No value
    rrlp.GANSSRefMeasurementAssist
rrlp.ganssRefTimeInfo  ganssRefTimeInfo
    No value
    rrlp.GANSSRefTimeInfo
rrlp.ganssReferenceTime  ganssReferenceTime
    No value
    rrlp.GANSSReferenceTime
rrlp.ganssSatelliteList  ganssSatelliteList
    Unsigned 32-bit integer
    rrlp.SeqOfGANSSSatelliteElement
rrlp.ganssSignalID  ganssSignalID
    Unsigned 32-bit integer
    rrlp.GANSSSignalID
```

```
rrlp.ganssStatusHealth ganssStatusHealth
    Unsigned 32-bit integer
    rrlp.INTEGER_0_7

rrlp.ganssTOD ganssTOD
    Unsigned 32-bit integer
    rrlp.GANSSTOD

rrlp.ganssTODFrac ganssTODFrac
    Unsigned 32-bit integer
    rrlp.INTEGER_0_16384

rrlp.ganssTODGSMTTimeAssociationMeasurementRequest ganssTODGSMTTimeAssociationMea
    No value
    rrlp.NULL

rrlp.ganssTODUncertainty ganssTODUncertainty
    Unsigned 32-bit integer
    rrlp.GANSSTODUncertainty

rrlp.ganssTOD_GSMTTimeAssociation ganssTOD-GSMTTimeAssociation
    No value
    rrlp.GANSSTOD_GSMTTimeAssociation

rrlp.ganssTODm ganssTODm
    Unsigned 32-bit integer
    rrlp.GANSSTODm

rrlp.ganssTimeID ganssTimeID
    Unsigned 32-bit integer
    rrlp.INTEGER_0_7

rrlp.ganssTimeModel ganssTimeModel
    Unsigned 32-bit integer
    rrlp.SeqOfGANSSTimeModel

rrlp.ganssTimeModelRefTime ganssTimeModelRefTime
    Unsigned 32-bit integer
    rrlp.INTEGER_0_65535

rrlp.ganssUTCModel ganssUTCModel
    No value
    rrlp.GANSSUTCModel

rrlp.ganssUtcA0 ganssUtcA0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.ganssUtcA1 ganssUtcA1
    Signed 32-bit integer
    rrlp.INTEGER_M8388608_8388607

rrlp.ganssUtcDN ganssUtcDN
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.ganssUtcDeltaTls ganssUtcDeltaTls
    Signed 32-bit integer
    rrlp.INTEGER_M128_127

rrlp.ganssUtcDeltaTlsf ganssUtcDeltaTlsf
    Signed 32-bit integer
    rrlp.INTEGER_M128_127
```

```
rrlp.ganssUtcTot  ganssUtcTot
    Unsigned 32-bit integer
    rrlp.INTEGER_0_255

rrlp.ganssUtcWNlfsf  ganssUtcWNlfsf
    Unsigned 32-bit integer
    rrlp.INTEGER_0_255

rrlp.ganssUtcWNT  ganssUtcWNT
    Unsigned 32-bit integer
    rrlp.INTEGER_0_255

rrlp.ganss_AssistData  ganss-AssistData
    No value
    rrlp.GANSS_AssistData

rrlp.ganss_SgnList  ganss-SgnList
    Unsigned 32-bit integer
    rrlp.SeqOfGANSS_SgnElement

rrlp.ganss_SgnTypeList  ganss-SgnTypeList
    Unsigned 32-bit integer
    rrlp.SeqOfGANSS_SgnTypeElement

rrlp.ganss_controlHeader  ganss-controlHeader
    No value
    rrlp.GANSS_ControlHeader

rrlp.gnssTOID  gnssTOID
    Unsigned 32-bit integer
    rrlp.INTEGER_0_7

rrlp.gps  gps
    Boolean

rrlp.gpsAssistanceData  gpsAssistanceData
    Byte array
    rrlp.GPSAssistanceData

rrlp.gpsBitNumber  gpsBitNumber
    Unsigned 32-bit integer
    rrlp.INTEGER_0_3

rrlp.gpsMsrSetList  gpsMsrSetList
    Unsigned 32-bit integer
    rrlp.SeqOfGPS_MsrSetElement

rrlp.gpsReferenceTimeUncertainty  gpsReferenceTimeUncertainty
    Unsigned 32-bit integer
    rrlp.GPSReferenceTimeUncertainty

rrlp.gpsTOW  gpsTOW
    Unsigned 32-bit integer
    rrlp.INTEGER_0_14399999

rrlp.gpsTOW23b  gpsTOW23b
    Unsigned 32-bit integer
    rrlp.GPSTOW23b

rrlp.gpsTime  gpsTime
    No value
    rrlp.GPSTime
```



```
rrlp.gpsTimeAssistanceMeasurementRequest  gpsTimeAssistanceMeasurementRequest
    No value
    rrlp.NULL

rrlp.gpsTowAssist  gpsTowAssist
    Unsigned 32-bit integer
    rrlp.GPSTOWAssist

rrlp.gpsTowSubms  gpsTowSubms
    Unsigned 32-bit integer
    rrlp.INTEGER_0_9999

rrlp.gpsWeek  gpsWeek
    Unsigned 32-bit integer
    rrlp.GPSWeek

rrlp.gps_AssistData  gps-AssistData
    No value
    rrlp.GPS_AssistData

rrlp.gps_MeasureInfo  gps-MeasureInfo
    No value
    rrlp.GPS_MeasureInfo

rrlp.gps_msrList  gps-msrList
    Unsigned 32-bit integer
    rrlp.SeqOfGPS_MsrElement

rrlp.gsmTime  gsmTime
    No value
    rrlp.GSMTime

rrlp.identityNotPresent  identityNotPresent
    No value
    rrlp.OTD_Measurement

rrlp.identityPresent  identityPresent
    No value
    rrlp.OTD_MeasurementWithID

rrlp.intCodePhase  intCodePhase
    Unsigned 32-bit integer
    rrlp.INTEGER_0_19

rrlp.integerCodePhase  integerCodePhase
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.iod  iod
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1023

rrlp.ioda  ioda
    Unsigned 32-bit integer
    rrlp.INTEGER_0_3

rrlp.iode  iode
    Unsigned 32-bit integer
    rrlp.INTEGER_0_239

rrlp.ionoStormFlag1  ionoStormFlag1
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1
```

```
rrlp.ionoStormFlag2  ionoStormFlag2
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.ionoStormFlag3  ionoStormFlag3
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.ionoStormFlag4  ionoStormFlag4
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.ionoStormFlag5  ionoStormFlag5
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.ionosphericModel  ionosphericModel
    No value
    rrlp.IonosphericModel

rrlp.kepAlmanacAF0  kepAlmanacAF0
    Signed 32-bit integer
    rrlp.INTEGER_M8192_8191

rrlp.kepAlmanacAF1  kepAlmanacAF1
    Signed 32-bit integer
    rrlp.INTEGER_M1024_1023

rrlp.kepAlmanacAPowerHalf  kepAlmanacAPowerHalf
    Signed 32-bit integer
    rrlp.INTEGER_M65536_65535

rrlp.kepAlmanacDeltaI  kepAlmanacDeltaI
    Signed 32-bit integer
    rrlp.INTEGER_M1024_1023

rrlp.kepAlmanacE  kepAlmanacE
    Unsigned 32-bit integer
    rrlp.INTEGER_0_2047

rrlp.kepAlmanacM0  kepAlmanacM0
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.kepAlmanacOmega0  kepAlmanacOmega0
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.kepAlmanacOmegaDot  kepAlmanacOmegaDot
    Signed 32-bit integer
    rrlp.INTEGER_M1024_1023

rrlp.kepAlmanacW  kepAlmanacW
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.kepSVHealth  kepSVHealth
    Unsigned 32-bit integer
    rrlp.INTEGER_0_15

rrlp.keplerAPowerHalfLSB  keplerAPowerHalfLSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_67108863
```

```
rrlp.keplerCic keplerCic
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.keplerCis keplerCis
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.keplerCrc keplerCrc
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.keplerCrs keplerCrs
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.keplerCuc keplerCuc
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.keplerCus keplerCus
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.keplerDeltaN keplerDeltaN
    Signed 32-bit integer
    rrlp.INTEGER_M32768_32767

rrlp.keplerELSB keplerELSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_33554431

rrlp.keplerI0 keplerI0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.keplerIDot keplerIDot
    Signed 32-bit integer
    rrlp.INTEGER_M8192_8191

rrlp.keplerM0 keplerM0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.keplerOmega0 keplerOmega0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.keplerOmegaDot keplerOmegaDot
    Signed 32-bit integer
    rrlp.INTEGER_M8388608_8388607

rrlp.keplerToeLSB keplerToeLSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_511

rrlp.keplerW keplerW
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647

rrlp.keplerianAlmanacSet keplerianAlmanacSet
    No value
    rrlp.Almanac_KeplerianSet
```

```
rrlp.keplerianSet keplerianSet
    No value
    rrlp.NavModel_KeplerianSet
rrlp.locErrorReason locErrorReason
    Unsigned 32-bit integer
    rrlp.LocErrorReason
rrlp.locationError locationError
    No value
    rrlp.LocationError
rrlp.locationInfo locationInfo
    No value
    rrlp.LocationInfo
rrlp.measureResponseTime measureResponseTime
    Unsigned 32-bit integer
    rrlp.MeasureResponseTime
rrlp.methodType methodType
    Unsigned 32-bit integer
    rrlp.MethodType
rrlp.moreAssDataToBeSent moreAssDataToBeSent
    Unsigned 32-bit integer
    rrlp.MoreAssDataToBeSent
rrlp.mpathDet mpathDet
    Unsigned 32-bit integer
    rrlp.MpathIndic
rrlp.mpathIndic mpathIndic
    Unsigned 32-bit integer
    rrlp.MpathIndic
rrlp.msAssisted msAssisted
    No value
    rrlp.AccuracyOpt
rrlp.msAssistedPref msAssistedPref
    Unsigned 32-bit integer
    rrlp.Accuracy
rrlp.msBased msBased
    Unsigned 32-bit integer
    rrlp.Accuracy
rrlp.msBasedPref msBasedPref
    Unsigned 32-bit integer
    rrlp.Accuracy
rrlp.msrAssistData msrAssistData
    No value
    rrlp.MsrAssistData
rrlp.msrAssistData_R98_ExpOTD msrAssistData-R98-ExpOTD
    No value
    rrlp.MsrAssistData_R98_ExpOTD
rrlp.msrAssistList msrAssistList
    Unsigned 32-bit integer
    rrlp.SeqOfMsrAssistBTS
```

```
rrlp.msrAssistList_R98_ExpOTD  msrAssistList-R98-ExpOTD
    Unsigned 32-bit integer
    rrlp.SeqOfMsrAssistBTS_R98_ExpOTD
rrlp.msrPositionReq  msrPositionReq
    No value
    rrlp.MsrPosition_Req
rrlp.msrPositionRsp  msrPositionRsp
    No value
    rrlp.MsrPosition_Rsp
rrlp.multiFrameCarrier  multiFrameCarrier
    No value
    rrlp.MultiFrameCarrier
rrlp.multiFrameOffset  multiFrameOffset
    Unsigned 32-bit integer
    rrlp.MultiFrameOffset
rrlp.multipleSets  multipleSets
    No value
    rrlp.MultipleSets
rrlp.na_ESRK_Request  na-ESRK-Request
    No value
    rrlp.NULL
rrlp.navModelList  navModelList
    Unsigned 32-bit integer
    rrlp.SeqOfNavModelElement
rrlp.navigationModel  navigationModel
    No value
    rrlp.NavigationModel
rrlp.nborTimeSlot  nborTimeSlot
    Unsigned 32-bit integer
    rrlp.ModuloTimeSlot
rrlp.nbrOfMeasurements  nbrOfMeasurements
    Unsigned 32-bit integer
    rrlp.INTEGER_0_7
rrlp.nbrOfReferenceBTSS  nbrOfReferenceBTSS
    Unsigned 32-bit integer
    rrlp.INTEGER_1_3
rrlp.nbrOfSets  nbrOfSets
    Unsigned 32-bit integer
    rrlp.INTEGER_2_3
rrlp.neighborIdentity  neighborIdentity
    Unsigned 32-bit integer
    rrlp.NeighborIdentity
rrlp.newNaviModelUC  newNaviModelUC
    No value
    rrlp.UncompressedEphemeris
rrlp.newSatelliteAndModelUC  newSatelliteAndModelUC
    No value
    rrlp.UncompressedEphemeris
```

```
rrlp.nonBroadcastIndFlag  nonBroadcastIndFlag
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.notPresent  notPresent
    No value
    rrlp.NULL

rrlp.numOfMeasurements  numOfMeasurements
    Unsigned 32-bit integer
    rrlp.NumOfMeasurements

rrlp.oldSatelliteAndModel  oldSatelliteAndModel
    No value
    rrlp.NULL

rrlp.otdMsrFirstSets  otdMsrFirstSets
    No value
    rrlp.OTD_MsrElementFirst

rrlp.otdMsrFirstSets_R98_Ext  otdMsrFirstSets-R98-Ext
    No value
    rrlp.OTD_MsrElementFirst_R98_Ext

rrlp.otdMsrRestSets  otdMsrRestSets
    Unsigned 32-bit integer
    rrlp.SeqOfOTD_MsrElementRest

rrlp.otdValue  otdValue
    Unsigned 32-bit integer
    rrlp.OTDValue

rrlp.otd_FirstSetMsrs  otd-FirstSetMsrs
    Unsigned 32-bit integer
    rrlp.SeqOfOTD_FirstSetMsrs

rrlp.otd_FirstSetMsrs_R98_Ext  otd-FirstSetMsrs-R98-Ext
    Unsigned 32-bit integer
    rrlp.SeqOfOTD_FirstSetMsrs_R98_Ext

rrlp.otd_MeasureInfo  otd-MeasureInfo
    No value
    rrlp.OTD_MeasureInfo

rrlp.otd_MeasureInfo_5_Ext  otd-MeasureInfo-5-Ext
    Unsigned 32-bit integer
    rrlp.OTD_MeasureInfo_5_Ext

rrlp.otd_MeasureInfo_R98_Ext  otd-MeasureInfo-R98-Ext
    No value
    rrlp.OTD_MeasureInfo_R98_Ext

rrlp.otd_MsrsOfOtherSets  otd-MsrsOfOtherSets
    Unsigned 32-bit integer
    rrlp.SeqOfOTD_MsrsOfOtherSets

rrlp.pcs_Extensions  pcs-Extensions
    No value
    rrlp.PCS_Extensions

rrlp.posData  posData
    Byte array
    rrlp.PositionData
```

```
rrlp.posEstimate posEstimate
    Byte array
    rrlp.Ext_GeographicalInformation
rrlp.positionInstruct positionInstruct
    No value
    rrlp.PositionInstruct
rrlp.positionMethod positionMethod
    Unsigned 32-bit integer
    rrlp.PositionMethod
rrlp.present present
    No value
    rrlp.AssistBTSDData
rrlp.privateExtensionList privateExtensionList
    Unsigned 32-bit integer
    rrlp.PrivateExtensionList
rrlp.protocolError protocolError
    No value
    rrlp.ProtocolError
rrlp.pseuRangeRMSErr pseuRangeRMSErr
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63
rrlp.pseudoRangeCor pseudoRangeCor
    Signed 32-bit integer
    rrlp.INTEGER_M2047_2047
rrlp.rangeRateCor rangeRateCor
    Signed 32-bit integer
    rrlp.INTEGER_M127_127
rrlp.realTimeIntegrity realTimeIntegrity
    Unsigned 32-bit integer
    rrlp.SeqOf_BadSatelliteSet
rrlp.refBTSList refBTSList
    Unsigned 32-bit integer
    rrlp.SeqOfReferenceIdentityType
rrlp.refFrame refFrame
    Unsigned 32-bit integer
    rrlp.INTEGER_0_65535
rrlp.refFrameNumber refFrameNumber
    Unsigned 32-bit integer
    rrlp.INTEGER_0_42431
rrlp.refLocation refLocation
    No value
    rrlp.RefLocation
rrlp.refQuality refQuality
    Unsigned 32-bit integer
    rrlp.RefQuality
rrlp.referenceAssistData referenceAssistData
    No value
    rrlp.ReferenceAssistData
```

```
rrlp.referenceCI referenceCI
    Unsigned 32-bit integer
    rrlp.CellID

rrlp.referenceFN referenceFN
    Unsigned 32-bit integer
    rrlp.INTEGER_0_65535

rrlp.referenceFNMSB referenceFNMSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.referenceFrame referenceFrame
    No value
    rrlp.ReferenceFrame

rrlp.referenceFrameMSB referenceFrameMSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.referenceIdentity referenceIdentity
    No value
    rrlp.ReferenceIdentity

rrlp.referenceLAC referenceLAC
    Unsigned 32-bit integer
    rrlp.LAC

rrlp.referenceNumber referenceNumber
    Unsigned 32-bit integer
    rrlp.INTEGER_0_7

rrlp.referenceRelation referenceRelation
    Unsigned 32-bit integer
    rrlp.ReferenceRelation

rrlp.referenceTime referenceTime
    No value
    rrlp.ReferenceTime

rrlp.referenceTimeSlot referenceTimeSlot
    Unsigned 32-bit integer
    rrlp.ModuloTimeSlot

rrlp.referenceWGS84 referenceWGS84
    No value
    rrlp.ReferenceWGS84

rrlp.rel5_AssistanceData_Extension rel5-AssistanceData-Extension
    No value
    rrlp.Rel5_AssistanceData_Extension

rrlp.rel5_MsrPosition_Req_extension rel5-MsrPosition-Req-extension
    No value
    rrlp.Rel5_MsrPosition_Req_Extension

rrlp.rel7_AssistanceData_Extension rel7-AssistanceData-Extension
    No value
    rrlp.Rel7_AssistanceData_Extension

rrlp.rel7_MsrPosition_Req_extension rel7-MsrPosition-Req-extension
    No value
    rrlp.Rel7_MsrPosition_Req_Extension
```



```
rrlp.rel98_AssistanceData_Extension  rel98-AssistanceData-Extension
    No value
    rrlp.Rel98_AssistanceData_Extension
rrlp.rel98_Ext_ExpOTD  rel98-Ext-ExpOTD
    No value
    rrlp.Rel98_Ext_ExpOTD
rrlp.rel98_MsrPosition_Req_extension  rel98-MsrPosition-Req-extension
    No value
    rrlp.Rel98_MsrPosition_Req_Extension
rrlp.rel_5_MsrPosition_Rsp_Extension  rel-5-MsrPosition-Rsp-Extension
    No value
    rrlp.Rel_5_MsrPosition_Rsp_Extension
rrlp.rel_5_ProtocolError_Extension  rel-5-ProtocolError-Extension
    No value
    rrlp.Rel_5_ProtocolError_Extension
rrlp.rel_7_MsrPosition_Rsp_Extension  rel-7-MsrPosition-Rsp-Extension
    No value
    rrlp.Rel_7_MsrPosition_Rsp_Extension
rrlp.rel_98_Ext_MeasureInfo  rel-98-Ext-MeasureInfo
    No value
    rrlp.T_rel_98_Ext_MeasureInfo
rrlp.rel_98_MsrPosition_Rsp_Extension  rel-98-MsrPosition-Rsp-Extension
    No value
    rrlp.Rel_98_MsrPosition_Rsp_Extension
rrlp.relativeAlt  relativeAlt
    Signed 32-bit integer
    rrlp.RelativeAlt
rrlp.relativeEast  relativeEast
    Signed 32-bit integer
    rrlp.RelDistance
rrlp.relativeNorth  relativeNorth
    Signed 32-bit integer
    rrlp.RelDistance
rrlp.requestIndex  requestIndex
    Unsigned 32-bit integer
    rrlp.RequestIndex
rrlp.requiredResponseTime  requiredResponseTime
    Unsigned 32-bit integer
    rrlp.RequiredResponseTime
rrlp.reserved1  reserved1
    Unsigned 32-bit integer
    rrlp.INTEGER_0_8388607
rrlp.reserved2  reserved2
    Unsigned 32-bit integer
    rrlp.INTEGER_0_16777215
rrlp.reserved3  reserved3
    Unsigned 32-bit integer
    rrlp.INTEGER_0_16777215
```

```
rrlp.reserved4 reserved4
    Unsigned 32-bit integer
    rrlp.INTEGER_0_65535

rrlp.roughRTD roughRTD
    Unsigned 32-bit integer
    rrlp.RoughRTD

rrlp.satList satList
    Unsigned 32-bit integer
    rrlp.SeqOfSatElement

rrlp.satStatus satStatus
    Unsigned 32-bit integer
    rrlp.SatStatus

rrlp.satelliteID satelliteID
    Unsigned 32-bit integer
    rrlp.SatelliteID

rrlp.sgnTypeList sgnTypeList
    Unsigned 32-bit integer
    rrlp.SeqOfSgnTypeElement

rrlp.smlc_code smlc-code
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.sqrtAMBS sqrtAMBS
    Unsigned 32-bit integer
    rrlp.INTEGER_0_63

rrlp.stanClockAF0 stanClockAF0
    Signed 32-bit integer
    rrlp.INTEGER_M134217728_134217727

rrlp.stanClockAF1 stanClockAF1
    Signed 32-bit integer
    rrlp.INTEGER_M131072_131071

rrlp.stanClockAF2 stanClockAF2
    Signed 32-bit integer
    rrlp.INTEGER_M2048_2047

rrlp.stanClockTgd stanClockTgd
    Signed 32-bit integer
    rrlp.INTEGER_M512_511

rrlp.stanClockTocLSB stanClockTocLSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_511

rrlp.stanModelID stanModelID
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1

rrlp.standardClockModelList standardClockModelList
    Unsigned 32-bit integer
    rrlp.SeqOfStandardClockModelElement

rrlp.stationaryIndication stationaryIndication
    Unsigned 32-bit integer
    rrlp.INTEGER_0_1
```

```
rrlp.status status
  Unsigned 32-bit integer
  rrlp.INTEGER_0_7

rrlp.stdOfEOTD stdOfEOTD
  Unsigned 32-bit integer
  rrlp.INTEGER_0_31

rrlp.stdResolution stdResolution
  Unsigned 32-bit integer
  rrlp.StdResolution

rrlp.svHealth svHealth
  Signed 32-bit integer
  rrlp.INTEGER_M7_13

rrlp.svID svID
  Unsigned 32-bit integer
  rrlp.SVID

rrlp.svIDMask svIDMask
  Byte array
  rrlp.SVIDMASK

rrlp.svid svid
  Unsigned 32-bit integer
  rrlp.SatelliteID

rrlp.systemInfoAssistData systemInfoAssistData
  No value
  rrlp.SystemInfoAssistData

rrlp.systemInfoAssistData_R98_ExpOTD systemInfoAssistData-R98-ExpOTD
  No value
  rrlp.SystemInfoAssistData_R98_ExpOTD

rrlp.systemInfoAssistList systemInfoAssistList
  Unsigned 32-bit integer
  rrlp.SeqOfSystemInfoAssistBTS

rrlp.systemInfoAssistListR98_ExpOTD systemInfoAssistListR98-ExpOTD
  Unsigned 32-bit integer
  rrlp.SeqOfSystemInfoAssistBTS_R98_ExpOTD

rrlp.systemInfoIndex systemInfoIndex
  Unsigned 32-bit integer
  rrlp.SystemInfoIndex

rrlp.ta0 ta0
  Signed 32-bit integer
  rrlp.TA0

rrlp.ta1 ta1
  Signed 32-bit integer
  rrlp.TA1

rrlp.ta2 ta2
  Signed 32-bit integer
  rrlp.TA2

rrlp.taCorrection taCorrection
  Unsigned 32-bit integer
  rrlp.INTEGER_0_960
```

```
rrlp.threeDLocation  threeDLocation
    Byte array
    rrlp.Ext_GeographicalInformation
rrlp.timeAssistanceMeasurements  timeAssistanceMeasurements
    No value
    rrlp.GPSTimeAssistanceMeasurements
rrlp.timeRelation  timeRelation
    No value
    rrlp.TimeRelation
rrlp.timeSlot  timeSlot
    Unsigned 32-bit integer
    rrlp.TimeSlot
rrlp.timeSlotScheme  timeSlotScheme
    Unsigned 32-bit integer
    rrlp.TimeSlotScheme
rrlp.tlmRsvdBits  tlmRsvdBits
    Unsigned 32-bit integer
    rrlp.TLMReservedBits
rrlp.tlmWord  tlmWord
    Unsigned 32-bit integer
    rrlp.TLMWord
rrlp.toa  toa
    Unsigned 32-bit integer
    rrlp.INTEGER_0_255
rrlp.toaMeasurementsOfRef  toaMeasurementsOfRef
    No value
    rrlp.TOA_MeasurementsOfRef
rrlp.toeMSB  toeMSB
    Unsigned 32-bit integer
    rrlp.INTEGER_0_31
rrlp.transaction_ID  transaction-ID
    Unsigned 32-bit integer
    rrlp.INTEGER_0_262143
rrlp.udre  udre
    Unsigned 32-bit integer
    rrlp.INTEGER_0_3
rrlp.ulPseudoSegInd  ulPseudoSegInd
    Unsigned 32-bit integer
    rrlp.UlPseudoSegInd
rrlp.useMultipleSets  useMultipleSets
    Unsigned 32-bit integer
    rrlp.UseMultipleSets
rrlp.utca0  utca0
    Signed 32-bit integer
    rrlp.INTEGER_M2147483648_2147483647
rrlp.utca1  utca1
    Signed 32-bit integer
    rrlp.INTEGER_M8388608_8388607
```

```
rrlp.utcdN   utcdN
  Signed 32-bit integer
  rrlp.INTEGER_M128_127

rrlp.utcdeltaTls  utcdeltaTls
  Signed 32-bit integer
  rrlp.INTEGER_M128_127

rrlp.utcdeltaTlsf  utcdeltaTlsf
  Signed 32-bit integer
  rrlp.INTEGER_M128_127

rrlp.utcModel  utcModel
  No value
  rrlp.UTCModel

rrlp.utcTot  utcTot
  Unsigned 32-bit integer
  rrlp.INTEGER_0_255

rrlp.utcWNlsf  utcWNlsf
  Unsigned 32-bit integer
  rrlp.INTEGER_0_255

rrlp.utcWNt  utcWNt
  Unsigned 32-bit integer
  rrlp.INTEGER_0_255

rrlp.velEstimate  velEstimate
  Byte array
  rrlp.VelocityEstimate

rrlp.velocityRequested  velocityRequested
  No value
  rrlp.NULL

rrlp.weekNumber  weekNumber
  Unsigned 32-bit integer
  rrlp.INTEGER_0_8191

rrlp.wholeChips  wholeChips
  Unsigned 32-bit integer
  rrlp.INTEGER_0_1022
```

#### **Radio Signalling Link (RSL) (rsl)**

```
rsl.T_bit  T bit
  Boolean
  T bit

rsl.a1_0  A1
  Boolean
  A1

rsl.a1_1  A1
  Boolean
  A1

rsl.a2_0  A1
  Boolean
  A1
```

```
rs1.a3a2  A3A2
  Unsigned 8-bit integer
  A3A2

rs1.acc_del  Access Delay
  Unsigned 8-bit integer
  Access Delay

rs1.act_timing_adv  Actual Timing Advance
  Unsigned 8-bit integer
  Actual Timing Advance

rs1.alg_id  Algorithm Identifier
  Unsigned 8-bit integer
  Algorithm Identifier

rs1.bs_power  Power Level
  Unsigned 8-bit integer
  Power Level

rs1.cause  Cause
  Unsigned 8-bit integer
  Cause

rs1.cbch_load_type  CBCH Load Type
  Boolean
  CBCH Load Type

rs1.ch_ind  Channel Ind
  Unsigned 8-bit integer
  Channel Ind

rs1.ch_needed  Channel Needed
  Unsigned 8-bit integer
  Channel Needed

rs1.ch_no_Cbits  C-bits
  Unsigned 8-bit integer
  C-bits

rs1.ch_no_TN  Time slot number (TN)
  Unsigned 8-bit integer
  Time slot number (TN)

rs1.ch_type  channel type
  Unsigned 8-bit integer
  channel type

rs1.class  Class
  Unsigned 8-bit integer
  Class

rs1.cm_dtxd  DTXd
  Boolean
  DTXd

rs1.cm_dtxu  DTXu
  Boolean
  DTXu

rs1.cmd  Command
  Unsigned 16-bit integer
  Command
```

```
rsl.data_rte  Data rate
  Unsigned 8-bit integer
  Data rate

rsl.delay_ind  Delay IND
  Unsigned 8-bit integer
  Delay IND

rsl.dtxd  DTXd
  Boolean
  DTXd

rsl.emlpp_prio  eMLPP Priority
  Unsigned 8-bit integer
  eMLPP Priority

rsl.epc_mode  EPC mode
  Boolean
  EPC mode

rsl.extension_bit  Extension
  Boolean
  Extension

rsl.fpc_epc_mode  FPC-EPC mode
  Boolean
  FPC-EPC mode

rsl.ho_ref  Hand-over reference
  Unsigned 8-bit integer
  Hand-over reference

rsl.ie_id  Element identifier
  Unsigned 8-bit integer
  Element identifier

rsl.ie_length  Length
  Unsigned 16-bit integer
  Length

rsl.interf_band  Interf Band
  Unsigned 8-bit integer
  Release Mode

rsl.key  KEY
  Byte array
  KEY

rsl.meas_res_no  Measurement result number
  Unsigned 8-bit integer
  Measurement result number

rsl.ms_fpc  FPC/EPC
  Boolean
  FPC/EPC

rsl.ms_power_lev  MS power level
  Unsigned 8-bit integer
  MS power level

rsl.msg_dsc  Message discriminator
  Unsigned 8-bit integer
  Message discriminator
```

```
rsl.msg_type  Message type
               Unsigned 8-bit integer
               Message type

rsl.na        Not applicable (NA)
               Boolean
               Not applicable (NA)

rsl.paging_grp  Paging Group
                Unsigned 8-bit integer
                Paging Group

rsl.paging_load  Paging Buffer Space
                 Unsigned 16-bit integer
                 Paging Buffer Space

rsl.phy_ctx    Physical Context
               Byte array
               Physical Context

rsl.power_lev  Power level
               Unsigned 8-bit integer
               Power level

rsl.prio       Priority
               Unsigned 8-bit integer
               Priority

rsl.ra_if_data_rte  Radio interface data rate
                    Unsigned 8-bit integer
                    Radio interface data rate

rsl.rach_acc_cnt  RACH Access Count
                  Unsigned 16-bit integer
                  RACH Access Count

rsl.rach_busy_cnt  RACH Busy Count
                   Unsigned 16-bit integer
                   RACH Busy Count

rsl.rach_slot_cnt  RACH Slot Count
                   Unsigned 16-bit integer
                   RACH Slot Count

rsl.rbit         R
                 Boolean
                 R

rsl.rel_mode     Release Mode
                 Unsigned 8-bit integer
                 Release Mode

rsl.req_ref_T1prim  T1'
                   Unsigned 8-bit integer
                   T1'

rsl.req_ref_T2     T2
                   Unsigned 8-bit integer
                   T2

rsl.req_ref_T3     T3
                   Unsigned 16-bit integer
                   T3
```



```
rsl.req_ref_ra  Random Access Information (RA)
    Unsigned 8-bit integer
    Random Access Information (RA)

rsl.rtd  Round Trip Delay (RTD)
    Unsigned 8-bit integer
    Round Trip Delay (RTD)

rsl.rxlev_full_up  RXLEV.FULL.up
    Unsigned 8-bit integer
    RXLEV.FULL.up

rsl.rxlev_sub_up  RXLEV.SUB.up
    Unsigned 8-bit integer
    RXLEV.SUB.up

rsl.rxqual_full_up  RXQUAL.FULL.up
    Unsigned 8-bit integer
    RXQUAL.FULL.up

rsl.rxqual_sub_up  RXQUAL.SUB.up
    Unsigned 8-bit integer
    RXQUAL.SUB.up

rsl.sapi  SAPI
    Unsigned 8-bit integer
    SAPI

rsl.sg_slt_cnt  Message Slot Count
    Unsigned 8-bit integer
    Message Slot Count

rsl.speech_coding_alg  Speech coding algorithm
    Unsigned 8-bit integer
    Speech coding algorithm

rsl.speech_or_data  Speech or data indicator
    Unsigned 8-bit integer
    Speech or data indicator

rsl.sys_info_type  System Info Type
    Unsigned 8-bit integer
    System Info Type

rsl.t_nt_bit  Transparent indication
    Boolean
    Transparent indication

rsl.tfo  TFO
    Boolean
    TFO

rsl.timing_adv  Timing Advance
    Unsigned 8-bit integer
    Timing Advance

rsl.timing_offset  Timing Offset
    Unsigned 8-bit integer
    Timing Offset
```

**Radius Protocol (radius)**

```
radius.3Com_User_Access_Level  3Com-User-Access-Level
    Unsigned 32-bit integer

radius.3Com_User_Access_Level.len  Length
    Unsigned 8-bit integer
    3Com-User-Access-Level Length

radius.3GPP2_A10_Connection_ID  3GPP2-A10-Connection-ID
    Unsigned 32-bit integer

radius.3GPP2_A10_Connection_ID.len  Length
    Unsigned 8-bit integer
    3GPP2-A10-Connection-ID Length

radius.3GPP2_Accounting_Container  3GPP2-Accounting-Container
    Byte array

radius.3GPP2_Accounting_Container.len  Length
    Unsigned 8-bit integer
    3GPP2-Accounting-Container Length

radius.3GPP2_Acct_Stop_Trigger  3GPP2-Acct-Stop-Trigger
    Unsigned 32-bit integer

radius.3GPP2_Acct_Stop_Trigger.len  Length
    Unsigned 8-bit integer
    3GPP2-Acct-Stop-Trigger Length

radius.3GPP2_Active_Time  3GPP2-Active-Time
    Unsigned 32-bit integer

radius.3GPP2_Active_Time.len  Length
    Unsigned 8-bit integer
    3GPP2-Active-Time Length

radius.3GPP2_Airlink_Priority  3GPP2-Airlink-Priority
    Unsigned 32-bit integer

radius.3GPP2_Airlink_Priority.len  Length
    Unsigned 8-bit integer
    3GPP2-Airlink-Priority Length

radius.3GPP2_Airlink_Record_Type  3GPP2-Airlink-Record-Type
    Unsigned 32-bit integer

radius.3GPP2_Airlink_Record_Type.len  Length
    Unsigned 8-bit integer
    3GPP2-Airlink-Record-Type Length

radius.3GPP2_Airlink_Sequence_Number  3GPP2-Airlink-Sequence-Number
    Unsigned 32-bit integer

radius.3GPP2_Airlink_Sequence_Number.len  Length
    Unsigned 8-bit integer
    3GPP2-Airlink-Sequence-Number Length

radius.3GPP2_Allowed_Diffserv_Marking  3GPP2-Allowed-Diffserv-Marking
    Byte array

radius.3GPP2_Allowed_Diffserv_Marking.len  Length
    Unsigned 8-bit integer
    3GPP2-Allowed-Diffserv-Marking Length
```

```
radius.3GPP2_Allowed_Persistent_TFTs  3GPP2-Allowed-Persistent-TFTs
    Unsigned 32-bit integer
radius.3GPP2_Allowed_Persistent_TFTs.len  Length
    Unsigned 8-bit integer
    3GPP2-Allowed-Persistent-TFTs Length
radius.3GPP2_BSID  3GPP2-BSID
    String
radius.3GPP2_BSID.len  Length
    Unsigned 8-bit integer
    3GPP2-BSID Length
radius.3GPP2_Bad_PPP_Frame_Count  3GPP2-Bad-PPP-Frame-Count
    Unsigned 32-bit integer
radius.3GPP2_Bad_PPP_Frame_Count.len  Length
    Unsigned 8-bit integer
    3GPP2-Bad-PPP-Frame-Count Length
radius.3GPP2_Begin_Session  3GPP2-Begin-Session
    Unsigned 32-bit integer
radius.3GPP2_Begin_Session.len  Length
    Unsigned 8-bit integer
    3GPP2-Begin-Session Length
radius.3GPP2_Compulsory_Tunnel_Indicator  3GPP2-Compulsory-Tunnel-Indicator
    Unsigned 32-bit integer
radius.3GPP2_Compulsory_Tunnel_Indicator.len  Length
    Unsigned 8-bit integer
    3GPP2-Compulsory-Tunnel-Indicator Length
radius.3GPP2_Correlation_Id  3GPP2-Correlation-Id
    String
radius.3GPP2_Correlation_Id.len  Length
    Unsigned 8-bit integer
    3GPP2-Correlation-Id Length
radius.3GPP2_DCCH_Frame_Size  3GPP2-DCCH-Frame-Size
    Unsigned 32-bit integer
radius.3GPP2_DCCH_Frame_Size.len  Length
    Unsigned 8-bit integer
    3GPP2-DCCH-Frame-Size Length
radius.3GPP2_DNS_Update_Capability  3GPP2-DNS-Update-Capability
    Unsigned 32-bit integer
radius.3GPP2_DNS_Update_Capability.len  Length
    Unsigned 8-bit integer
    3GPP2-DNS-Update-Capability Length
radius.3GPP2_DNS_Update_Required  3GPP2-DNS-Update-Required
    Unsigned 32-bit integer
radius.3GPP2_DNS_Update_Required.len  Length
    Unsigned 8-bit integer
    3GPP2-DNS-Update-Required Length
```

```
radius.3GPP2_Diffserv_Class_Option  3GPP2-Diffserv-Class-Option
    Unsigned 32-bit integer
radius.3GPP2_Diffserv_Class_Option.len  Length
    Unsigned 8-bit integer
    3GPP2-Diffserv-Class-Option Length
radius.3GPP2_Disconnect_Reason  3GPP2-Disconnect-Reason
    Unsigned 32-bit integer
radius.3GPP2_Disconnect_Reason.len  Length
    Unsigned 8-bit integer
    3GPP2-Disconnect-Reason Length
radius.3GPP2_ESN  3GPP2-ESN
    String
radius.3GPP2_ESN.len  Length
    Unsigned 8-bit integer
    3GPP2-ESN Length
radius.3GPP2_FCH_Frame_Size  3GPP2-FCH-Frame-Size
    Unsigned 32-bit integer
radius.3GPP2_FCH_Frame_Size.len  Length
    Unsigned 8-bit integer
    3GPP2-FCH-Frame-Size Length
radius.3GPP2_Foreign_Agent_Address  3GPP2-Foreign-Agent-Address
    IPv4 address
radius.3GPP2_Foreign_Agent_Address.len  Length
    Unsigned 8-bit integer
    3GPP2-Foreign-Agent-Address Length
radius.3GPP2_Forward_DCCH_Mux_Option  3GPP2-Forward-DCCH-Mux-Option
    Unsigned 32-bit integer
radius.3GPP2_Forward_DCCH_Mux_Option.len  Length
    Unsigned 8-bit integer
    3GPP2-Forward-DCCH-Mux-Option Length
radius.3GPP2_Forward_DCCH_RC  3GPP2-Forward-DCCH-RC
    Unsigned 32-bit integer
radius.3GPP2_Forward_DCCH_RC.len  Length
    Unsigned 8-bit integer
    3GPP2-Forward-DCCH-RC Length
radius.3GPP2_Forward_FCH_Mux_Option  3GPP2-Forward-FCH-Mux-Option
    Unsigned 32-bit integer
radius.3GPP2_Forward_FCH_Mux_Option.len  Length
    Unsigned 8-bit integer
    3GPP2-Forward-FCH-Mux-Option Length
radius.3GPP2_Forward_FCH_RC  3GPP2-Forward-FCH-RC
    Unsigned 32-bit integer
radius.3GPP2_Forward_FCH_RC.len  Length
    Unsigned 8-bit integer
    3GPP2-Forward-FCH-RC Length
```

```
radius.3GPP2_Forward_PDCH_RC  3GPP2-Forward-PDCH-RC
    Unsigned 32-bit integer
radius.3GPP2_Forward_PDCH_RC.len  Length
    Unsigned 8-bit integer
    3GPP2-Forward-PDCH-RC Length
radius.3GPP2_Forward_Traffic_Type  3GPP2-Forward-Traffic-Type
    Unsigned 32-bit integer
radius.3GPP2_Forward_Traffic_Type.len  Length
    Unsigned 8-bit integer
    3GPP2-Forward-Traffic-Type Length
radius.3GPP2_Home_Agent_IP_Address  3GPP2-Home-Agent-IP-Address
    IPv4 address
radius.3GPP2_Home_Agent_IP_Address.len  Length
    Unsigned 8-bit integer
    3GPP2-Home-Agent-IP-Address Length
radius.3GPP2_IP_QoS  3GPP2-IP-QoS
    Unsigned 32-bit integer
radius.3GPP2_IP_QoS.len  Length
    Unsigned 8-bit integer
    3GPP2-IP-QoS Length
radius.3GPP2_IP_Technology  3GPP2-IP-Technology
    Unsigned 32-bit integer
radius.3GPP2_IP_Technology.len  Length
    Unsigned 8-bit integer
    3GPP2-IP-Technology Length
radius.3GPP2_Ike_Preshared_Secret_Request  3GPP2-Ike-Preshared-Secret-Request
    Unsigned 32-bit integer
radius.3GPP2_Ike_Preshared_Secret_Request.len  Length
    Unsigned 8-bit integer
    3GPP2-Ike-Preshared-Secret-Request Length
radius.3GPP2_Inbound_Mobile_IP_Sig_Octets  3GPP2-Inbound-Mobile-IP-Sig-Octets
    Unsigned 32-bit integer
radius.3GPP2_Inbound_Mobile_IP_Sig_Octets.len  Length
    Unsigned 8-bit integer
    3GPP2-Inbound-Mobile-IP-Sig-Octets Length
radius.3GPP2_KeyID  3GPP2-KeyID
    String
radius.3GPP2_KeyID.len  Length
    Unsigned 8-bit integer
    3GPP2-KeyID Length
radius.3GPP2_Last_User_Activity_Time  3GPP2-Last-User-Activity-Time
    Unsigned 32-bit integer
radius.3GPP2_Last_User_Activity_Time.len  Length
    Unsigned 8-bit integer
    3GPP2-Last-User-Activity-Time Length
```

```
radius.3GPP2_MEID      3GPP2-MEID
    String
radius.3GPP2_MEID.len  Length
    Unsigned 8-bit integer
    3GPP2-MEID Length
radius.3GPP2_MIP_Lifetime  3GPP2-MIP-Lifetime
    Byte array
radius.3GPP2_MIP_Lifetime.len  Length
    Unsigned 8-bit integer
    3GPP2-MIP-Lifetime Length
radius.3GPP2_MN_AAA_Reoval_Indication  3GPP2-MN-AAA-Reoval-Indication
    Unsigned 32-bit integer
radius.3GPP2_MN_AAA_Reoval_Indication.len  Length
    Unsigned 8-bit integer
    3GPP2-MN-AAA-Reoval-Indication Length
radius.3GPP2_MN_HA_SPI  3GPP2-MN-HA-SPI
    Unsigned 32-bit integer
radius.3GPP2_MN_HA_SPI.len  Length
    Unsigned 8-bit integer
    3GPP2-MN-HA-SPI Length
radius.3GPP2_MN_HA_Shared_Key  3GPP2-MN-HA-Shared-Key
    String
radius.3GPP2_MN_HA_Shared_Key.len  Length
    Unsigned 8-bit integer
    3GPP2-MN-HA-Shared-Key Length
radius.3GPP2_Module_Orig_Term_Indicator  3GPP2-Module-Orig-Term-Indicator
    Byte array
radius.3GPP2_Module_Orig_Term_Indicator.len  Length
    Unsigned 8-bit integer
    3GPP2-Module-Orig-Term-Indicator Length
radius.3GPP2_Number_Active_Transitions  3GPP2-Number-Active-Transitions
    Unsigned 32-bit integer
radius.3GPP2_Number_Active_Transitions.len  Length
    Unsigned 8-bit integer
    3GPP2-Number-Active-Transitions Length
radius.3GPP2_Originating_Number_SDBs  3GPP2-Originating-Number-SDBs
    Unsigned 32-bit integer
radius.3GPP2_Originating_Number_SDBs.len  Length
    Unsigned 8-bit integer
    3GPP2-Originating-Number-SDBs Length
radius.3GPP2_Originating_SDB_Octet_Count  3GPP2-Originating-SDB-Octet-Count
    Unsigned 32-bit integer
radius.3GPP2_Originating_SDB_Octet_Count.len  Length
    Unsigned 8-bit integer
    3GPP2-Originating-SDB-Octet-Count Length
```

```
radius.3GPP2_Outbound_Mobile_IP_Sig_Octets  3GPP2-Outbound-Mobile-IP-Sig-Octets
    Unsigned 32-bit integer
radius.3GPP2_Outbound_Mobile_IP_Sig_Octets.len  Length
    Unsigned 8-bit integer
    3GPP2-Outbound-Mobile-IP-Sig-Octets Length
radius.3GPP2_PCF_IP_Address  3GPP2-PCF-IP-Address
    IPv4 address
radius.3GPP2_PCF_IP_Address.len  Length
    Unsigned 8-bit integer
    3GPP2-PCF-IP-Address Length
radius.3GPP2_PrePaid_Tariff_Switching  3GPP2-PrePaid-Tariff-Switching
    Byte array
radius.3GPP2_PrePaid_Tariff_Switching.len  Length
    Unsigned 8-bit integer
    3GPP2-PrePaid-Tariff-Switching Length
radius.3GPP2_Pre_Shared_Secret  3GPP2-Pre-Shared-Secret
    String
radius.3GPP2_Pre_Shared_Secret.len  Length
    Unsigned 8-bit integer
    3GPP2-Pre-Shared-Secret Length
radius.3GPP2_Prepaid_Acct_Quota  3GPP2-Prepaid-Acct-Quota
    Byte array
radius.3GPP2_Prepaid_Acct_Quota.len  Length
    Unsigned 8-bit integer
    3GPP2-Prepaid-Acct-Quota Length
radius.3GPP2_Prepaid_acct_Capability  3GPP2-Prepaid-acct-Capability
    Byte array
radius.3GPP2_Prepaid_acct_Capability.len  Length
    Unsigned 8-bit integer
    3GPP2-Prepaid-acct-Capability Length
radius.3GPP2_RN_Packet_Data_Inactivity_Timer  3GPP2-RN-Packet-Data-Inactivity-Ti
    Unsigned 32-bit integer
radius.3GPP2_RN_Packet_Data_Inactivity_Timer.len  Length
    Unsigned 8-bit integer
    3GPP2-RN-Packet-Data-Inactivity-Timer Length
radius.3GPP2_Received_HDLC_Octets  3GPP2-Received-HDLC-Octets
    Unsigned 32-bit integer
radius.3GPP2_Received_HDLC_Octets.len  Length
    Unsigned 8-bit integer
    3GPP2-Received-HDLC-Octets Length
radius.3GPP2_Release_Indicator  3GPP2-Release-Indicator
    Unsigned 32-bit integer
radius.3GPP2_Release_Indicator.len  Length
    Unsigned 8-bit integer
    3GPP2-Release-Indicator Length
```

```
radius.3GPP2_Remote_Address_Table_Index  3GPP2-Remote-Address-Table-Index
      Byte array
radius.3GPP2_Remote_Address_Table_Index.len  Length
      Unsigned 8-bit integer
      3GPP2-Remote-Address-Table-Index Length
radius.3GPP2_Remote_IP_Address  3GPP2-Remote-IP-Address
      Byte array
radius.3GPP2_Remote_IP_Address.len  Length
      Unsigned 8-bit integer
      3GPP2-Remote-IP-Address Length
radius.3GPP2_Remote_IPv4_Addr_Octet_Count  3GPP2-Remote-IPv4-Addr-Octet-Count
      Byte array
radius.3GPP2_Remote_IPv4_Addr_Octet_Count.len  Length
      Unsigned 8-bit integer
      3GPP2-Remote-IPv4-Addr-Octet-Count Length
radius.3GPP2_Remote_IPv6_Address  3GPP2-Remote-IPv6-Address
      Byte array
radius.3GPP2_Remote_IPv6_Address.len  Length
      Unsigned 8-bit integer
      3GPP2-Remote-IPv6-Address Length
radius.3GPP2_Remote_IPv6_Octet_Count  3GPP2-Remote-IPv6-Octet-Count
      Byte array
radius.3GPP2_Remote_IPv6_Octet_Count.len  Length
      Unsigned 8-bit integer
      3GPP2-Remote-IPv6-Octet-Count Length
radius.3GPP2_Reverse_DCCH_Mux_Option  3GPP2-Reverse-DCCH-Mux-Option
      Unsigned 32-bit integer
radius.3GPP2_Reverse_DCCH_Mux_Option.len  Length
      Unsigned 8-bit integer
      3GPP2-Reverse-DCCH-Mux-Option Length
radius.3GPP2_Reverse_DCCH_RC  3GPP2-Reverse-DCCH-RC
      Unsigned 32-bit integer
radius.3GPP2_Reverse_DCCH_RC.len  Length
      Unsigned 8-bit integer
      3GPP2-Reverse-DCCH-RC Length
radius.3GPP2_Reverse_FCH_Mux_Option  3GPP2-Reverse-FCH-Mux-Option
      Unsigned 32-bit integer
radius.3GPP2_Reverse_FCH_Mux_Option.len  Length
      Unsigned 8-bit integer
      3GPP2-Reverse-FCH-Mux-Option Length
radius.3GPP2_Reverse_FCH_RC  3GPP2-Reverse-FCH-RC
      Unsigned 32-bit integer
radius.3GPP2_Reverse_FCH_RC.len  Length
      Unsigned 8-bit integer
      3GPP2-Reverse-FCH-RC Length
```



```
radius.3GPP2_Reverse_PDCH_RC  3GPP2-Reverse-PDCH-RC
    Unsigned 32-bit integer
radius.3GPP2_Reverse_PDCH_RC.len  Length
    Unsigned 8-bit integer
    3GPP2-Reverse-PDCH-RC Length
radius.3GPP2_Reverse_Traffic_Type  3GPP2-Reverse-Traffic-Type
    Unsigned 32-bit integer
radius.3GPP2_Reverse_Traffic_Type.len  Length
    Unsigned 8-bit integer
    3GPP2-Reverse-Traffic-Type Length
radius.3GPP2_Reverse_Tunnel_Spec  3GPP2-Reverse-Tunnel-Spec
    Unsigned 32-bit integer
radius.3GPP2_Reverse_Tunnel_Spec.len  Length
    Unsigned 8-bit integer
    3GPP2-Reverse-Tunnel-Spec Length
radius.3GPP2_S_Key  3GPP2-S-Key
    Byte array
radius.3GPP2_S_Key.len  Length
    Unsigned 8-bit integer
    3GPP2-S-Key Length
radius.3GPP2_S_Lifetime  3GPP2-S-Lifetime
    Date/Time stamp
radius.3GPP2_S_Lifetime.len  Length
    Unsigned 8-bit integer
    3GPP2-S-Lifetime Length
radius.3GPP2_S_Request  3GPP2-S-Request
    Unsigned 32-bit integer
radius.3GPP2_S_Request.len  Length
    Unsigned 8-bit integer
    3GPP2-S-Request Length
radius.3GPP2_Security_Level  3GPP2-Security-Level
    Unsigned 32-bit integer
radius.3GPP2_Security_Level.len  Length
    Unsigned 8-bit integer
    3GPP2-Security-Level Length
radius.3GPP2_Service_Option  3GPP2-Service-Option
    Unsigned 32-bit integer
radius.3GPP2_Service_Option.len  Length
    Unsigned 8-bit integer
    3GPP2-Service-Option Length
radius.3GPP2_Service_Option_Profile  3GPP2-Service-Option-Profile
    Byte array
radius.3GPP2_Service_Option_Profile.len  Length
    Unsigned 8-bit integer
    3GPP2-Service-Option-Profile Length
```

```
radius.3GPP2_Service_Reference_Id  3GPP2-Service-Reference-Id
    Byte array
radius.3GPP2_Service_Reference_Id.len  Length
    Unsigned 8-bit integer
    3GPP2-Service-Reference-Id Length
radius.3GPP2_Session_Continue  3GPP2-Session-Continue
    Unsigned 32-bit integer
radius.3GPP2_Session_Continue.len  Length
    Unsigned 8-bit integer
    3GPP2-Session-Continue Length
radius.3GPP2_Session_Termination_Capability  3GPP2-Session-Termination-Capability
    Unsigned 32-bit integer
radius.3GPP2_Session_Termination_Capability.len  Length
    Unsigned 8-bit integer
    3GPP2-Session-Termination-Capability Length
radius.3GPP2_Subnet  3GPP2-Subnet
    String
radius.3GPP2_Subnet.len  Length
    Unsigned 8-bit integer
    3GPP2-Subnet Length
radius.3GPP2_Terminating_Number_SDBs  3GPP2-Terminating-Number-SDBs
    Unsigned 32-bit integer
radius.3GPP2_Terminating_Number_SDBs.len  Length
    Unsigned 8-bit integer
    3GPP2-Terminating-Number-SDBs Length
radius.3GPP2_Terminating_SDB_Octet_Count  3GPP2-Terminating-SDB-Octet-Count
    Unsigned 32-bit integer
radius.3GPP2_Terminating_SDB_Octet_Count.len  Length
    Unsigned 8-bit integer
    3GPP2-Terminating-SDB-Octet-Count Length
radius.3GPP2_User_Id  3GPP2-User-Id
    Unsigned 32-bit integer
radius.3GPP2_User_Id.len  Length
    Unsigned 8-bit integer
    3GPP2-User-Id Length
radius.3GPP_Camel_Charging_Info  3GPP-Camel-Charging-Info
    Byte array
radius.3GPP_Camel_Charging_Info.len  Length
    Unsigned 8-bit integer
    3GPP-Camel-Charging-Info Length
radius.3GPP_Charging_Characteristics  3GPP-Charging-Characteristics
    String
radius.3GPP_Charging_Characteristics.len  Length
    Unsigned 8-bit integer
    3GPP-Charging-Characteristics Length
```

```
radius.3GPP_Charging_Gateway_Address  3GPP-Charging-Gateway-Address
    IPv4 address
radius.3GPP_Charging_Gateway_Address.len  Length
    Unsigned 8-bit integer
    3GPP-Charging-Gateway-Address Length
radius.3GPP_Charging_Gateway_IPv6_Address  3GPP-Charging-Gateway-IPv6-Address
    IPv6 address
radius.3GPP_Charging_Gateway_IPv6_Address.len  Length
    Unsigned 8-bit integer
    3GPP-Charging-Gateway-IPv6-Address Length
radius.3GPP_Charging_ID  3GPP-Charging-ID
    Unsigned 32-bit integer
radius.3GPP_Charging_ID.len  Length
    Unsigned 8-bit integer
    3GPP-Charging-ID Length
radius.3GPP_GGSN_Address  3GPP-GGSN-Address
    IPv4 address
radius.3GPP_GGSN_Address.len  Length
    Unsigned 8-bit integer
    3GPP-GGSN-Address Length
radius.3GPP_GGSN_IPv6_Address  3GPP-GGSN-IPv6-Address
    IPv6 address
radius.3GPP_GGSN_IPv6_Address.len  Length
    Unsigned 8-bit integer
    3GPP-GGSN-IPv6-Address Length
radius.3GPP_GGSN_MCC_MNC  3GPP-GGSN-MCC-MNC
    String
radius.3GPP_GGSN_MCC_MNC.len  Length
    Unsigned 8-bit integer
    3GPP-GGSN-MCC-MNC Length
radius.3GPP_GPRS_Negotiated_QoS_profile  3GPP-GPRS-Negotiated-QoS-profile
    String
radius.3GPP_GPRS_Negotiated_QoS_profile.len  Length
    Unsigned 8-bit integer
    3GPP-GPRS-Negotiated-QoS-profile Length
radius.3GPP_IMEISV  3GPP-IMEISV
    Byte array
radius.3GPP_IMEISV.len  Length
    Unsigned 8-bit integer
    3GPP-IMEISV Length
radius.3GPP_IMSI  3GPP-IMSI
    String
radius.3GPP_IMSI.len  Length
    Unsigned 8-bit integer
    3GPP-IMSI Length
```

```
radius.3GPP_IMSI_MCC_MNC  3GPP-IMSI-MCC-MNC
    String
radius.3GPP_IMSI_MCC_MNC.len  Length
    Unsigned 8-bit integer
    3GPP-IMSI-MCC-MNC Length
radius.3GPP_IPv6_DNS_Servers  3GPP-IPv6-DNS-Servers
    Byte array
radius.3GPP_IPv6_DNS_Servers.len  Length
    Unsigned 8-bit integer
    3GPP-IPv6-DNS-Servers Length
radius.3GPP_MS_TimeZone  3GPP-MS-TimeZone
    Byte array
radius.3GPP_MS_TimeZone.len  Length
    Unsigned 8-bit integer
    3GPP-MS-TimeZone Length
radius.3GPP_NSAPI  3GPP-NSAPI
    String
radius.3GPP_NSAPI.len  Length
    Unsigned 8-bit integer
    3GPP-NSAPI Length
radius.3GPP_Negotiated_DSCP  3GPP-Negotiated-DSCP
    Byte array
radius.3GPP_Negotiated_DSCP.len  Length
    Unsigned 8-bit integer
    3GPP-Negotiated-DSCP Length
radius.3GPP_PDP_Type  3GPP-PDP-Type
    Unsigned 32-bit integer
radius.3GPP_PDP_Type.len  Length
    Unsigned 8-bit integer
    3GPP-PDP-Type Length
radius.3GPP_Packet_Filter  3GPP-Packet-Filter
    Byte array
radius.3GPP_Packet_Filter.len  Length
    Unsigned 8-bit integer
    3GPP-Packet-Filter Length
radius.3GPP_RAT_Type  3GPP-RAT-Type
    Byte array
radius.3GPP_RAT_Type.len  Length
    Unsigned 8-bit integer
    3GPP-RAT-Type Length
radius.3GPP_SGSN_Address  3GPP-SGSN-Address
    IPv4 address
radius.3GPP_SGSN_Address.len  Length
    Unsigned 8-bit integer
    3GPP-SGSN-Address Length
```

```
radius.3GPP_SGSN_IPv6_Address  3GPP-SGSN-IPv6-Address
    IPv6 address
radius.3GPP_SGSN_IPv6_Address.len  Length
    Unsigned 8-bit integer
    3GPP-SGSN-IPv6-Address Length
radius.3GPP_SGSN_MCC_MNC  3GPP-SGSN-MCC-MNC
    String
radius.3GPP_SGSN_MCC_MNC.len  Length
    Unsigned 8-bit integer
    3GPP-SGSN-MCC-MNC Length
radius.3GPP_Selection_Mode  3GPP-Selection-Mode
    String
radius.3GPP_Selection_Mode.len  Length
    Unsigned 8-bit integer
    3GPP-Selection-Mode Length
radius.3GPP_Session_Stop_Indicator  3GPP-Session-Stop-Indicator
    Byte array
radius.3GPP_Session_Stop_Indicator.len  Length
    Unsigned 8-bit integer
    3GPP-Session-Stop-Indicator Length
radius.3GPP_Teardown_Indicator  3GPP-Teardown-Indicator
    Byte array
radius.3GPP_Teardown_Indicator.len  Length
    Unsigned 8-bit integer
    3GPP-Teardown-Indicator Length
radius.3GPP_User_Location_Info  3GPP-User-Location-Info
    Byte array
radius.3GPP_User_Location_Info.len  Length
    Unsigned 8-bit integer
    3GPP-User-Location-Info Length
radius.3PP2_Flow_ID_Parameter  3PP2-Flow-ID-Parameter
    Unsigned 32-bit integer
radius.3PP2_Flow_ID_Parameter.len  Length
    Unsigned 8-bit integer
    3PP2-Flow-ID-Parameter Length
radius.3PP2_Flow_Statusb  3PP2-Flow-Statusb
    Unsigned 32-bit integer
radius.3PP2_Flow_Statusb.len  Length
    Unsigned 8-bit integer
    3PP2-Flow-Statusb Length
radius.3PP2_Granted_QoS_Parameters  3PP2-Granted-QoS-Parameters
    Unsigned 32-bit integer
radius.3PP2_Granted_QoS_Parameters.len  Length
    Unsigned 8-bit integer
    3PP2-Granted-QoS-Parameters Length
```

```
radius.AAT_ATM_Direct  AAT-ATM-Direct
  String
radius.AAT_ATM_Direct.len  Length
  Unsigned 8-bit integer
  AAT-ATM-Direct Length
radius.AAT_ATM_Traffic_Profile  AAT-ATM-Traffic-Profile
  String
radius.AAT_ATM_Traffic_Profile.len  Length
  Unsigned 8-bit integer
  AAT-ATM-Traffic-Profile Length
radius.AAT_ATM_VCI  AAT-ATM-VCI
  Unsigned 32-bit integer
radius.AAT_ATM_VCI.len  Length
  Unsigned 8-bit integer
  AAT-ATM-VCI Length
radius.AAT_ATM_VPI  AAT-ATM-VPI
  Unsigned 32-bit integer
radius.AAT_ATM_VPI.len  Length
  Unsigned 8-bit integer
  AAT-ATM-VPI Length
radius.AAT_Assign_IP_Pool  AAT-Assign-IP-Pool
  Unsigned 32-bit integer
radius.AAT_Assign_IP_Pool.len  Length
  Unsigned 8-bit integer
  AAT-Assign-IP-Pool Length
radius.AAT_Client_Primary_DNS  AAT-Client-Primary-DNS
  IPv4 address
radius.AAT_Client_Primary_DNS.len  Length
  Unsigned 8-bit integer
  AAT-Client-Primary-DNS Length
radius.AAT_Client_Primary_WINS_NBNS  AAT-Client-Primary-WINS-NBNS
  IPv4 address
radius.AAT_Client_Primary_WINS_NBNS.len  Length
  Unsigned 8-bit integer
  AAT-Client-Primary-WINS-NBNS Length
radius.AAT_Client_Secondary_WINS_NBNS  AAT-Client-Secondary-WINS-NBNS
  IPv4 address
radius.AAT_Client_Secondary_WINS_NBNS.len  Length
  Unsigned 8-bit integer
  AAT-Client-Secondary-WINS-NBNS Length
radius.AAT_Data_Filter  AAT-Data-Filter
  String
radius.AAT_Data_Filter.len  Length
  Unsigned 8-bit integer
  AAT-Data-Filter Length
```

```
radius.AAT_IP_Pool_Definition  AAT-IP-Pool-Definition
    String
radius.AAT_IP_Pool_Definition.len  Length
    Unsigned 8-bit integer
    AAT-IP-Pool-Definition Length
radius.AAT_IP_TOS  AAT-IP-TOS
    Unsigned 32-bit integer
radius.AAT_IP_TOS.len  Length
    Unsigned 8-bit integer
    AAT-IP-TOS Length
radius.AAT_IP_TOS_Apply_To  AAT-IP-TOS-Apply-To
    Unsigned 32-bit integer
radius.AAT_IP_TOS_Apply_To.len  Length
    Unsigned 8-bit integer
    AAT-IP-TOS-Apply-To Length
radius.AAT_IP_TOS_Precedence  AAT-IP-TOS-Precedence
    Unsigned 32-bit integer
radius.AAT_IP_TOS_Precedence.len  Length
    Unsigned 8-bit integer
    AAT-IP-TOS-Precedence Length
radius.AAT_Input_Octets_Diff  AAT-Input-Octets-Diff
    Unsigned 32-bit integer
radius.AAT_Input_Octets_Diff.len  Length
    Unsigned 8-bit integer
    AAT-Input-Octets-Diff Length
radius.AAT_MCast_Client  AAT-MCast-Client
    Unsigned 32-bit integer
radius.AAT_MCast_Client.len  Length
    Unsigned 8-bit integer
    AAT-MCast-Client Length
radius.AAT_Output_Octets_Diff  AAT-Output-Octets-Diff
    Unsigned 32-bit integer
radius.AAT_Output_Octets_Diff.len  Length
    Unsigned 8-bit integer
    AAT-Output-Octets-Diff Length
radius.AAT_PPP_Address  AAT-PPP-Address
    IPv4 address
radius.AAT_PPP_Address.len  Length
    Unsigned 8-bit integer
    AAT-PPP-Address Length
radius.AAT_Require_Auth  AAT-Require-Auth
    Unsigned 32-bit integer
radius.AAT_Require_Auth.len  Length
    Unsigned 8-bit integer
    AAT-Require-Auth Length
```

```
radius.AAT_Source_IP_Check  AAT-Source-IP-Check
    Unsigned 32-bit integer
radius.AAT_Source_IP_Check.len  Length
    Unsigned 8-bit integer
    AAT-Source-IP-Check Length
radius.AAT_User_MAC_Address  AAT-User-MAC-Address
    String
radius.AAT_User_MAC_Address.len  Length
    Unsigned 8-bit integer
    AAT-User-MAC-Address Length
radius.AAT_Vrouter_Name  AAT-Vrouter-Name
    String
radius.AAT_Vrouter_Name.len  Length
    Unsigned 8-bit integer
    AAT-Vrouter-Name Length
radius.ARAP_Challenge_Response  ARAP-Challenge-Response
    String
radius.ARAP_Challenge_Response.len  Length
    Unsigned 8-bit integer
    ARAP-Challenge-Response Length
radius.ARAP_Features  ARAP-Features
    String
radius.ARAP_Features.len  Length
    Unsigned 8-bit integer
    ARAP-Features Length
radius.ARAP_Password  ARAP-Password
    String
radius.ARAP_Password.len  Length
    Unsigned 8-bit integer
    ARAP-Password Length
radius.ARAP_Security  ARAP-Security
    Unsigned 32-bit integer
radius.ARAP_Security.len  Length
    Unsigned 8-bit integer
    ARAP-Security Length
radius.ARAP_Security_Data  ARAP-Security-Data
    String
radius.ARAP_Security_Data.len  Length
    Unsigned 8-bit integer
    ARAP-Security-Data Length
radius.ARAP_Zone_Access  ARAP-Zone-Access
    Unsigned 32-bit integer
radius.ARAP_Zone_Access.len  Length
    Unsigned 8-bit integer
    ARAP-Zone-Access Length
```



```
radius.Acc_Access_Community  Acc-Access-Community
    Unsigned 32-bit integer
radius.Acc_Access_Community.len  Length
    Unsigned 8-bit integer
    Acc-Access-Community Length
radius.Acc_Access_Partition  Acc-Access-Partition
    String
radius.Acc_Access_Partition.len  Length
    Unsigned 8-bit integer
    Acc-Access-Partition Length
radius.Acc_Acct_On_Off_Reason  Acc-Acct-On-Off-Reason
    Unsigned 32-bit integer
radius.Acc_Acct_On_Off_Reason.len  Length
    Unsigned 8-bit integer
    Acc-Acct-On-Off-Reason Length
radius.Acc_Ace-Token  Acc-Ace-Token
    String
radius.Acc_Ace-Token.len  Length
    Unsigned 8-bit integer
    Acc-Ace-Token Length
radius.Acc_Ace-Token_Ttl  Acc-Ace-Token-Ttl
    Unsigned 32-bit integer
radius.Acc_Ace-Token_Ttl.len  Length
    Unsigned 8-bit integer
    Acc-Ace-Token-Ttl Length
radius.Acc_Apsm_Oversubscribed  Acc-Apsm-Oversubscribed
    Unsigned 32-bit integer
radius.Acc_Apsm_Oversubscribed.len  Length
    Unsigned 8-bit integer
    Acc-Apsm-Oversubscribed Length
radius.Acc_Bridging_Support  Acc-Bridging-Support
    Unsigned 32-bit integer
radius.Acc_Bridging_Support.len  Length
    Unsigned 8-bit integer
    Acc-Bridging-Support Length
radius.Acc_Callback_CBCP_Type  Acc-Callback-CBCP-Type
    Unsigned 32-bit integer
radius.Acc_Callback_CBCP_Type.len  Length
    Unsigned 8-bit integer
    Acc-Callback-CBCP-Type Length
radius.Acc_Callback_Delay  Acc-Callback-Delay
    Unsigned 32-bit integer
radius.Acc_Callback_Delay.len  Length
    Unsigned 8-bit integer
    Acc-Callback-Delay Length
```

```
radius.Acc_Callback_Mode  Acc-Callback-Mode
    Unsigned 32-bit integer
radius.Acc_Callback_Mode.len  Length
    Unsigned 8-bit integer
    Acc-Callback-Mode Length
radius.Acc_Callback_Num_Valid  Acc-Callback-Num-Valid
    String
radius.Acc_Callback_Num_Valid.len  Length
    Unsigned 8-bit integer
    Acc-Callback-Num-Valid Length
radius.Acc_Ccp_Option  Acc-Ccp-Option
    Unsigned 32-bit integer
radius.Acc_Ccp_Option.len  Length
    Unsigned 8-bit integer
    Acc-Ccp-Option Length
radius.Acc_Clearing_Cause  Acc-Clearing-Cause
    Unsigned 32-bit integer
radius.Acc_Clearing_Cause.len  Length
    Unsigned 8-bit integer
    Acc-Clearing-Cause Length
radius.Acc_Clearing_Location  Acc-Clearing-Location
    Unsigned 32-bit integer
radius.Acc_Clearing_Location.len  Length
    Unsigned 8-bit integer
    Acc-Clearing-Location Length
radius.Acc_Connect_Rx_Speed  Acc-Connect-Rx-Speed
    Unsigned 32-bit integer
radius.Acc_Connect_Rx_Speed.len  Length
    Unsigned 8-bit integer
    Acc-Connect-Rx-Speed Length
radius.Acc_Connect_Tx_Speed  Acc-Connect-Tx-Speed
    Unsigned 32-bit integer
radius.Acc_Connect_Tx_Speed.len  Length
    Unsigned 8-bit integer
    Acc-Connect-Tx-Speed Length
radius.Acc_Customer_Id  Acc-Customer-Id
    String
radius.Acc_Customer_Id.len  Length
    Unsigned 8-bit integer
    Acc-Customer-Id Length
radius.Acc_Dial_Port_Index  Acc-Dial-Port-Index
    Unsigned 32-bit integer
radius.Acc_Dial_Port_Index.len  Length
    Unsigned 8-bit integer
    Acc-Dial-Port-Index Length
```

```
radius.Acc_Dialout_Auth_Mode  Acc-Dialout-Auth-Mode
    Unsigned 32-bit integer
radius.Acc_Dialout_Auth_Mode.len  Length
    Unsigned 8-bit integer
    Acc-Dialout-Auth-Mode Length
radius.Acc_Dialout_Auth_Password  Acc-Dialout-Auth-Password
    String
radius.Acc_Dialout_Auth_Password.len  Length
    Unsigned 8-bit integer
    Acc-Dialout-Auth-Password Length
radius.Acc_Dialout_Auth_Username  Acc-Dialout-Auth-Username
    String
radius.Acc_Dialout_Auth_Username.len  Length
    Unsigned 8-bit integer
    Acc-Dialout-Auth-Username Length
radius.Acc_Dns_Server_Pri  Acc-Dns-Server-Pri
    IPv4 address
radius.Acc_Dns_Server_Pri.len  Length
    Unsigned 8-bit integer
    Acc-Dns-Server-Pri Length
radius.Acc_Dns_Server_Sec  Acc-Dns-Server-Sec
    IPv4 address
radius.Acc_Dns_Server_Sec.len  Length
    Unsigned 8-bit integer
    Acc-Dns-Server-Sec Length
radius.Acc_Igmp_Admin_State  Acc-Igmp-Admin-State
    Unsigned 32-bit integer
radius.Acc_Igmp_Admin_State.len  Length
    Unsigned 8-bit integer
    Acc-Igmp-Admin-State Length
radius.Acc_Igmp_Version  Acc-Igmp-Version
    Unsigned 32-bit integer
radius.Acc_Igmp_Version.len  Length
    Unsigned 8-bit integer
    Acc-Igmp-Version Length
radius.Acc_Input_Errors  Acc-Input-Errors
    Unsigned 32-bit integer
radius.Acc_Input_Errors.len  Length
    Unsigned 8-bit integer
    Acc-Input-Errors Length
radius.Acc_Ip_Compression  Acc-Ip-Compression
    Unsigned 32-bit integer
radius.Acc_Ip_Compression.len  Length
    Unsigned 8-bit integer
    Acc-Ip-Compression Length
```

```
radius.Acc_Ip_Gateway_Pri  Acc-Ip-Gateway-Pri
    IPv4 address
radius.Acc_Ip_Gateway_Pri.len  Length
    Unsigned 8-bit integer
    Acc-Ip-Gateway-Pri Length
radius.Acc_Ip_Gateway_Sec  Acc-Ip-Gateway-Sec
    IPv4 address
radius.Acc_Ip_Gateway_Sec.len  Length
    Unsigned 8-bit integer
    Acc-Ip-Gateway-Sec Length
radius.Acc_Ip_Pool_Name  Acc-Ip-Pool-Name
    String
radius.Acc_Ip_Pool_Name.len  Length
    Unsigned 8-bit integer
    Acc-Ip-Pool-Name Length
radius.Acc_Ipx_Compression  Acc-Ipx-Compression
    Unsigned 32-bit integer
radius.Acc_Ipx_Compression.len  Length
    Unsigned 8-bit integer
    Acc-Ipx-Compression Length
radius.Acc_ML_Call_Threshold  Acc-ML-Call-Threshold
    Unsigned 32-bit integer
radius.Acc_ML_Call_Threshold.len  Length
    Unsigned 8-bit integer
    Acc-ML-Call-Threshold Length
radius.Acc_ML_Clear_Threshold  Acc-ML-Clear-Threshold
    Unsigned 32-bit integer
radius.Acc_ML_Clear_Threshold.len  Length
    Unsigned 8-bit integer
    Acc-ML-Clear-Threshold Length
radius.Acc_ML_Damping_Factor  Acc-ML-Damping-Factor
    Unsigned 32-bit integer
radius.Acc_ML_Damping_Factor.len  Length
    Unsigned 8-bit integer
    Acc-ML-Damping-Factor Length
radius.Acc_ML_MLX_Admin_State  Acc-ML-MLX-Admin-State
    Unsigned 32-bit integer
radius.Acc_ML_MLX_Admin_State.len  Length
    Unsigned 8-bit integer
    Acc-ML-MLX-Admin-State Length
radius.Acc_Modem_Error_Protocol  Acc-Modem-Error-Protocol
    String
radius.Acc_Modem_Error_Protocol.len  Length
    Unsigned 8-bit integer
    Acc-Modem-Error-Protocol Length
```

```
radius.Acc_Modem_Modulation_Type  Acc-Modem-Modulation-Type
String
radius.Acc_Modem_Modulation_Type.len  Length
Unsigned 8-bit integer
Acc-Modem-Modulation-Type Length
radius.Acc_Nbns_Server_Pri  Acc-Nbns-Server-Pri
IPv4 address
radius.Acc_Nbns_Server_Pri.len  Length
Unsigned 8-bit integer
Acc-Nbns-Server-Pri Length
radius.Acc_Nbns_Server_Sec  Acc-Nbns-Server-Sec
IPv4 address
radius.Acc_Nbns_Server_Sec.len  Length
Unsigned 8-bit integer
Acc-Nbns-Server-Sec Length
radius.Acc_Output_Errors  Acc-Output-Errors
Unsigned 32-bit integer
radius.Acc_Output_Errors.len  Length
Unsigned 8-bit integer
Acc-Output-Errors Length
radius.Acc_Reason_Code  Acc-Reason-Code
Unsigned 32-bit integer
radius.Acc_Reason_Code.len  Length
Unsigned 8-bit integer
Acc-Reason-Code Length
radius.Acc_Request_Type  Acc-Request-Type
Unsigned 32-bit integer
radius.Acc_Request_Type.len  Length
Unsigned 8-bit integer
Acc-Request-Type Length
radius.Acc_Route_Policy  Acc-Route-Policy
Unsigned 32-bit integer
radius.Acc_Route_Policy.len  Length
Unsigned 8-bit integer
Acc-Route-Policy Length
radius.Acc_Service_Profile  Acc-Service-Profile
String
radius.Acc_Service_Profile.len  Length
Unsigned 8-bit integer
Acc-Service-Profile Length
radius.Acc_Tunnel_Port  Acc-Tunnel-Port
Unsigned 32-bit integer
radius.Acc_Tunnel_Port.len  Length
Unsigned 8-bit integer
Acc-Tunnel-Port Length
```

```
radius.Acc_Tunnel_Secret  Acc-Tunnel-Secret
    String
radius.Acc_Tunnel_Secret.len  Length
    Unsigned 8-bit integer
    Acc-Tunnel-Secret Length
radius.Acc_Vpsm_Reject_Cause  Acc-Vpsm-Reject-Cause
    Unsigned 32-bit integer
radius.Acc_Vpsm_Reject_Cause.len  Length
    Unsigned 8-bit integer
    Acc-Vpsm-Reject-Cause Length
radius.Acct_Authentic  Acct-Authentic
    Unsigned 32-bit integer
radius.Acct_Authentic.len  Length
    Unsigned 8-bit integer
    Acct-Authentic Length
radius.Acct_Delay_Time  Acct-Delay-Time
    Unsigned 32-bit integer
radius.Acct_Delay_Time.len  Length
    Unsigned 8-bit integer
    Acct-Delay-Time Length
radius.Acct_Dyn_Ac_Ent  Acct-Dyn-Ac-Ent
    String
radius.Acct_Dyn_Ac_Ent.len  Length
    Unsigned 8-bit integer
    Acct-Dyn-Ac-Ent Length
radius.Acct_Input_Gigawords  Acct-Input-Gigawords
    Unsigned 32-bit integer
radius.Acct_Input_Gigawords.len  Length
    Unsigned 8-bit integer
    Acct-Input-Gigawords Length
radius.Acct_Input_Octets  Acct-Input-Octets
    Unsigned 32-bit integer
radius.Acct_Input_Octets.len  Length
    Unsigned 8-bit integer
    Acct-Input-Octets Length
radius.Acct_Input_Octets_64  Acct-Input-Octets-64
    Byte array
radius.Acct_Input_Octets_64.len  Length
    Unsigned 8-bit integer
    Acct-Input-Octets-64 Length
radius.Acct_Input_Packets  Acct-Input-Packets
    Unsigned 32-bit integer
radius.Acct_Input_Packets.len  Length
    Unsigned 8-bit integer
    Acct-Input-Packets Length
```

```
radius.Acct_Input_Packets_64  Acct-Input-Packets-64
    Byte array
radius.Acct_Input_Packets_64.len  Length
    Unsigned 8-bit integer
    Acct-Input-Packets-64 Length
radius.Acct_Interim_Interval  Acct-Interim-Interval
    Unsigned 32-bit integer
radius.Acct_Interim_Interval.len  Length
    Unsigned 8-bit integer
    Acct-Interim-Interval Length
radius.Acct_Link_Count  Acct-Link-Count
    Unsigned 32-bit integer
radius.Acct_Link_Count.len  Length
    Unsigned 8-bit integer
    Acct-Link-Count Length
radius.Acct_Mcast_In_Octets  Acct-Mcast-In-Octets
    Unsigned 32-bit integer
radius.Acct_Mcast_In_Octets.len  Length
    Unsigned 8-bit integer
    Acct-Mcast-In-Octets Length
radius.Acct_Mcast_In_Packets  Acct-Mcast-In-Packets
    Unsigned 32-bit integer
radius.Acct_Mcast_In_Packets.len  Length
    Unsigned 8-bit integer
    Acct-Mcast-In-Packets Length
radius.Acct_Mcast_Out_Octets  Acct-Mcast-Out-Octets
    Unsigned 32-bit integer
radius.Acct_Mcast_Out_Octets.len  Length
    Unsigned 8-bit integer
    Acct-Mcast-Out-Octets Length
radius.Acct_Mcast_Out_Packets  Acct-Mcast-Out-Packets
    Unsigned 32-bit integer
radius.Acct_Mcast_Out_Packets.len  Length
    Unsigned 8-bit integer
    Acct-Mcast-Out-Packets Length
radius.Acct_Multi_Session_Id  Acct-Multi-Session-Id
    String
radius.Acct_Multi_Session_Id.len  Length
    Unsigned 8-bit integer
    Acct-Multi-Session-Id Length
radius.Acct_Output_Gigawords  Acct-Output-Gigawords
    Unsigned 32-bit integer
radius.Acct_Output_Gigawords.len  Length
    Unsigned 8-bit integer
    Acct-Output-Gigawords Length
```

```
radius.Acct_Output_Octets  Acct-Output-Octets
    Unsigned 32-bit integer
radius.Acct_Output_Octets.len  Length
    Unsigned 8-bit integer
    Acct-Output-Octets Length
radius.Acct_Output_Octets_64  Acct-Output-Octets-64
    Byte array
radius.Acct_Output_Octets_64.len  Length
    Unsigned 8-bit integer
    Acct-Output-Octets-64 Length
radius.Acct_Output_Packets  Acct-Output-Packets
    Unsigned 32-bit integer
radius.Acct_Output_Packets.len  Length
    Unsigned 8-bit integer
    Acct-Output-Packets Length
radius.Acct_Output_Packets_64  Acct-Output-Packets-64
    Byte array
radius.Acct_Output_Packets_64.len  Length
    Unsigned 8-bit integer
    Acct-Output-Packets-64 Length
radius.Acct_Session_Gigawords  Acct-Session-Gigawords
    Unsigned 32-bit integer
radius.Acct_Session_Gigawords.len  Length
    Unsigned 8-bit integer
    Acct-Session-Gigawords Length
radius.Acct_Session_Id  Acct-Session-Id
    String
radius.Acct_Session_Id.len  Length
    Unsigned 8-bit integer
    Acct-Session-Id Length
radius.Acct_Session_Input_Gigawords  Acct-Session-Input-Gigawords
    Unsigned 32-bit integer
radius.Acct_Session_Input_Gigawords.len  Length
    Unsigned 8-bit integer
    Acct-Session-Input-Gigawords Length
radius.Acct_Session_Input_Octets  Acct-Session-Input-Octets
    Unsigned 32-bit integer
radius.Acct_Session_Input_Octets.len  Length
    Unsigned 8-bit integer
    Acct-Session-Input-Octets Length
radius.Acct_Session_Octets  Acct-Session-Octets
    Unsigned 32-bit integer
radius.Acct_Session_Octets.len  Length
    Unsigned 8-bit integer
    Acct-Session-Octets Length
```



```
radius.Acct_Session_Output_Gigawords  Acct-Session-Output-Gigawords
    Unsigned 32-bit integer
radius.Acct_Session_Output_Gigawords.len  Length
    Unsigned 8-bit integer
    Acct-Session-Output-Gigawords Length
radius.Acct_Session_Output_Octets  Acct-Session-Output-Octets
    Unsigned 32-bit integer
radius.Acct_Session_Output_Octets.len  Length
    Unsigned 8-bit integer
    Acct-Session-Output-Octets Length
radius.Acct_Session_Time  Acct-Session-Time
    Unsigned 32-bit integer
radius.Acct_Session_Time.len  Length
    Unsigned 8-bit integer
    Acct-Session-Time Length
radius.Acct_Status_Type  Acct-Status-Type
    Unsigned 32-bit integer
radius.Acct_Status_Type.len  Length
    Unsigned 8-bit integer
    Acct-Status-Type Length
radius.Acct_Terminate_Cause  Acct-Terminate-Cause
    Unsigned 32-bit integer
radius.Acct_Terminate_Cause.len  Length
    Unsigned 8-bit integer
    Acct-Terminate-Cause Length
radius.Acct_Tunnel_Connection  Acct-Tunnel-Connection
    String
radius.Acct_Tunnel_Connection.len  Length
    Unsigned 8-bit integer
    Acct-Tunnel-Connection Length
radius.Acct_Tunnel_Packets_Lost  Acct-Tunnel-Packets-Lost
    Unsigned 32-bit integer
radius.Acct_Tunnel_Packets_Lost.len  Length
    Unsigned 8-bit integer
    Acct-Tunnel-Packets-Lost Length
radius.Agent_Circuit_Id  Agent-Circuit-Id
    String
radius.Agent_Circuit_Id.len  Length
    Unsigned 8-bit integer
    Agent-Circuit-Id Length
radius.Alteon_Service_Type  Alteon-Service-Type
    Unsigned 32-bit integer
radius.Alteon_Service_Type.len  Length
    Unsigned 8-bit integer
    Alteon-Service-Type Length
```

```
radius.Annex_Acct_Servers  Annex-Acct-Servers
    String
radius.Annex_Acct_Servers.len  Length
    Unsigned 8-bit integer
    Annex-Acct-Servers Length
radius.Annex_Acct_Servers.Protocol  Annex-Acct-Resolution-Protocol
    Unsigned 32-bit integer
radius.Annex_Acct_Servers.Protocol.len  Length
    Unsigned 8-bit integer
    Annex-Acct-Resolution-Protocol Length
radius.Annex_Acct_Servers.Servers  Annex-Acct-Resolution-Servers
    String
radius.Annex_Acct_Servers.Servers.len  Length
    Unsigned 8-bit integer
    Annex-Acct-Resolution-Servers Length
radius.Annex_Audit_Level  Annex-Audit-Level
    Unsigned 32-bit integer
radius.Annex_Audit_Level.len  Length
    Unsigned 8-bit integer
    Annex-Audit-Level Length
radius.Annex_Authen_Servers  Annex-Authen-Servers
    String
radius.Annex_Authen_Servers.len  Length
    Unsigned 8-bit integer
    Annex-Authen-Servers Length
radius.Annex_Begin_Modulation  Annex-Begin-Modulation
    String
radius.Annex_Begin_Modulation.len  Length
    Unsigned 8-bit integer
    Annex-Begin-Modulation Length
radius.Annex_Begin_Receive_Line_Level  Annex-Begin-Receive-Line-Level
    Unsigned 32-bit integer
radius.Annex_Begin_Receive_Line_Level.len  Length
    Unsigned 8-bit integer
    Annex-Begin-Receive-Line-Level Length
radius.Annex_CLI_Command  Annex-CLI-Command
    String
radius.Annex_CLI_Command.len  Length
    Unsigned 8-bit integer
    Annex-CLI-Command Length
radius.Annex_CLI_Filter  Annex-CLI-Filter
    String
radius.Annex_CLI_Filter.len  Length
    Unsigned 8-bit integer
    Annex-CLI-Filter Length
```

```
radius.Annex_Callback_Portlist  Annex-Callback-Portlist
    Unsigned 32-bit integer
radius.Annex_Callback_Portlist.len  Length
    Unsigned 8-bit integer
    Annex-Callback-Portlist Length
radius.Annex_Compression_Protocol  Annex-Compression-Protocol
    String
radius.Annex_Compression_Protocol.len  Length
    Unsigned 8-bit integer
    Annex-Compression-Protocol Length
radius.Annex_Connect_Progress  Annex-Connect-Progress
    Unsigned 32-bit integer
radius.Annex_Connect_Progress.len  Length
    Unsigned 8-bit integer
    Annex-Connect-Progress Length
radius.Annex_Disconnect_Reason  Annex-Disconnect-Reason
    Unsigned 32-bit integer
radius.Annex_Disconnect_Reason.len  Length
    Unsigned 8-bit integer
    Annex-Disconnect-Reason Length
radius.Annex_Domain_Name  Annex-Domain-Name
    String
radius.Annex_Domain_Name.len  Length
    Unsigned 8-bit integer
    Annex-Domain-Name Length
radius.Annex_EDO  Annex-EDO
    String
radius.Annex_EDO.len  Length
    Unsigned 8-bit integer
    Annex-EDO Length
radius.Annex_End_Modulation  Annex-End-Modulation
    String
radius.Annex_End_Modulation.len  Length
    Unsigned 8-bit integer
    Annex-End-Modulation Length
radius.Annex_End_Receive_Line_Level  Annex-End-Receive-Line-Level
    Unsigned 32-bit integer
radius.Annex_End_Receive_Line_Level.len  Length
    Unsigned 8-bit integer
    Annex-End-Receive-Line-Level Length
radius.Annex_Error_Correction_Prot  Annex-Error-Correction-Prot
    String
radius.Annex_Error_Correction_Prot.len  Length
    Unsigned 8-bit integer
    Annex-Error-Correction-Prot Length
```

```
radius.Annex_Filter Annex-Filter
String

radius.Annex_Filter.len Length
Unsigned 8-bit integer
Annex-Filter Length

radius.Annex_Host_Allow Annex-Host-Allow
String

radius.Annex_Host_Allow.len Length
Unsigned 8-bit integer
Annex-Host-Allow Length

radius.Annex_Host_Restrict Annex-Host-Restrict
String

radius.Annex_Host_Restrict.len Length
Unsigned 8-bit integer
Annex-Host-Restrict Length

radius.Annex_Input_Filter Annex-Input-Filter
String

radius.Annex_Input_Filter.len Length
Unsigned 8-bit integer
Annex-Input-Filter Length

radius.Annex_Keypress_Timeout Annex-Keypress-Timeout
Unsigned 32-bit integer

radius.Annex_Keypress_Timeout.len Length
Unsigned 8-bit integer
Annex-Keypress-Timeout Length

radius.Annex_Local_IP_Address Annex-Local-IP-Address
IPv4 address

radius.Annex_Local_IP_Address.len Length
Unsigned 8-bit integer
Annex-Local-IP-Address Length

radius.Annex_Local_Username Annex-Local-Username
String

radius.Annex_Local_Username.len Length
Unsigned 8-bit integer
Annex-Local-Username Length

radius.Annex_Logical_Channel_Number Annex-Logical-Channel-Number
Unsigned 32-bit integer

radius.Annex_Logical_Channel_Number.len Length
Unsigned 8-bit integer
Annex-Logical-Channel-Number Length

radius.Annex_MRRU Annex-MRRU
Unsigned 32-bit integer

radius.Annex_MRRU.len Length
Unsigned 8-bit integer
Annex-MRRU Length
```

```
radius.Annex_Maximum_Call_Duration  Annex-Maximum-Call-Duration
    Unsigned 32-bit integer
radius.Annex_Maximum_Call_Duration.len  Length
    Unsigned 8-bit integer
    Annex-Maximum-Call-Duration Length
radius.Annex_Modem_Disc_Reason  Annex-Modem-Disc-Reason
    Unsigned 32-bit integer
radius.Annex_Modem_Disc_Reason.len  Length
    Unsigned 8-bit integer
    Annex-Modem-Disc-Reason Length
radius.Annex_Multicast_Rate_Limit  Annex-Multicast-Rate-Limit
    Unsigned 32-bit integer
radius.Annex_Multicast_Rate_Limit.len  Length
    Unsigned 8-bit integer
    Annex-Multicast-Rate-Limit Length
radius.Annex_Multilink_Id  Annex-Multilink-Id
    Unsigned 32-bit integer
radius.Annex_Multilink_Id.len  Length
    Unsigned 8-bit integer
    Annex-Multilink-Id Length
radius.Annex_Num_In_Multilink  Annex-Num-In-Multilink
    Unsigned 32-bit integer
radius.Annex_Num_In_Multilink.len  Length
    Unsigned 8-bit integer
    Annex-Num-In-Multilink Length
radius.Annex_Output_Filter  Annex-Output-Filter
    String
radius.Annex_Output_Filter.len  Length
    Unsigned 8-bit integer
    Annex-Output-Filter Length
radius.Annex_PPP_Trace_Level  Annex-PPP-Trace-Level
    Unsigned 32-bit integer
radius.Annex_PPP_Trace_Level.len  Length
    Unsigned 8-bit integer
    Annex-PPP-Trace-Level Length
radius.Annex_Pool_Id  Annex-Pool-Id
    Unsigned 32-bit integer
radius.Annex_Pool_Id.len  Length
    Unsigned 8-bit integer
    Annex-Pool-Id Length
radius.Annex_Port  Annex-Port
    Unsigned 32-bit integer
radius.Annex_Port.len  Length
    Unsigned 8-bit integer
    Annex-Port Length
```

```
radius.Annex_Pre_Input_Octets  Annex-Pre-Input-Octets
    Unsigned 32-bit integer
radius.Annex_Pre_Input_Octets.len  Length
    Unsigned 8-bit integer
    Annex-Pre-Input-Octets Length
radius.Annex_Pre_Input_Packets  Annex-Pre-Input-Packets
    Unsigned 32-bit integer
radius.Annex_Pre_Input_Packets.len  Length
    Unsigned 8-bit integer
    Annex-Pre-Input-Packets Length
radius.Annex_Pre_Output_Octets  Annex-Pre-Output-Octets
    Unsigned 32-bit integer
radius.Annex_Pre_Output_Octets.len  Length
    Unsigned 8-bit integer
    Annex-Pre-Output-Octets Length
radius.Annex_Pre_Output_Packets  Annex-Pre-Output-Packets
    Unsigned 32-bit integer
radius.Annex_Pre_Output_Packets.len  Length
    Unsigned 8-bit integer
    Annex-Pre-Output-Packets Length
radius.Annex_Primary_DNS_Server  Annex-Primary-DNS-Server
    IPv4 address
radius.Annex_Primary_DNS_Server.len  Length
    Unsigned 8-bit integer
    Annex-Primary-DNS-Server Length
radius.Annex_Primary_NBNS_Server  Annex-Primary-NBNS-Server
    IPv4 address
radius.Annex_Primary_NBNS_Server.len  Length
    Unsigned 8-bit integer
    Annex-Primary-NBNS-Server Length
radius.Annex_Product_Name  Annex-Product-Name
    String
radius.Annex_Product_Name.len  Length
    Unsigned 8-bit integer
    Annex-Product-Name Length
radius.Annex_Rate_Reneg_Req_Rcvd  Annex-Rate-Reneg-Req-Rcvd
    Unsigned 32-bit integer
radius.Annex_Rate_Reneg_Req_Rcvd.len  Length
    Unsigned 8-bit integer
    Annex-Rate-Reneg-Req-Rcvd Length
radius.Annex_Rate_Reneg_Req_Sent  Annex-Rate-Reneg-Req-Sent
    Unsigned 32-bit integer
radius.Annex_Rate_Reneg_Req_Sent.len  Length
    Unsigned 8-bit integer
    Annex-Rate-Reneg-Req-Sent Length
```

```
radius.Annex_Re_CHAP_Timeout  Annex-Re-CHAP-Timeout
    Unsigned 32-bit integer
radius.Annex_Re_CHAP_Timeout.len  Length
    Unsigned 8-bit integer
    Annex-Re-CHAP-Timeout Length
radius.Annex_Receive_Speed  Annex-Receive-Speed
    Unsigned 32-bit integer
radius.Annex_Receive_Speed.len  Length
    Unsigned 8-bit integer
    Annex-Receive-Speed Length
radius.Annex_Retrain_Requests_Rcvd  Annex-Retrain-Requests-Rcvd
    Unsigned 32-bit integer
radius.Annex_Retrain_Requests_Rcvd.len  Length
    Unsigned 8-bit integer
    Annex-Retrain-Requests-Rcvd Length
radius.Annex_Retrain_Requests_Sent  Annex-Retrain-Requests-Sent
    Unsigned 32-bit integer
radius.Annex_Retrain_Requests_Sent.len  Length
    Unsigned 8-bit integer
    Annex-Retrain-Requests-Sent Length
radius.Annex_Retransmitted_Packets  Annex-Retransmitted-Packets
    Unsigned 32-bit integer
radius.Annex_Retransmitted_Packets.len  Length
    Unsigned 8-bit integer
    Annex-Retransmitted-Packets Length
radius.Annex_SW_Version  Annex-SW-Version
    String
radius.Annex_SW_Version.len  Length
    Unsigned 8-bit integer
    Annex-SW-Version Length
radius.Annex_Sec_Profile_Index  Annex-Sec-Profile-Index
    Unsigned 32-bit integer
radius.Annex_Sec_Profile_Index.len  Length
    Unsigned 8-bit integer
    Annex-Sec-Profile-Index Length
radius.Annex_Secondary_DNS_Server  Annex-Secondary-DNS-Server
    IPv4 address
radius.Annex_Secondary_DNS_Server.len  Length
    Unsigned 8-bit integer
    Annex-Secondary-DNS-Server Length
radius.Annex_Secondary_NBNS_Server  Annex-Secondary-NBNS-Server
    IPv4 address
radius.Annex_Secondary_NBNS_Server.len  Length
    Unsigned 8-bit integer
    Annex-Secondary-NBNS-Server Length
```

```
radius.Annex_Signal_to_Noise_Ratio  Annex-Signal-to-Noise-Ratio
    Unsigned 32-bit integer
radius.Annex_Signal_to_Noise_Ratio.len  Length
    Unsigned 8-bit integer
    Annex-Signal-to-Noise-Ratio Length
radius.Annex_Syslog_Tap  Annex-Syslog-Tap
    Unsigned 32-bit integer
radius.Annex_Syslog_Tap.len  Length
    Unsigned 8-bit integer
    Annex-Syslog-Tap Length
radius.Annex_System_Disc_Reason  Annex-System-Disc-Reason
    Unsigned 32-bit integer
radius.Annex_System_Disc_Reason.len  Length
    Unsigned 8-bit integer
    Annex-System-Disc-Reason Length
radius.Annex_Transmit_Speed  Annex-Transmit-Speed
    Unsigned 32-bit integer
radius.Annex_Transmit_Speed.len  Length
    Unsigned 8-bit integer
    Annex-Transmit-Speed Length
radius.Annex_Transmitted_Packets  Annex-Transmitted-Packets
    Unsigned 32-bit integer
radius.Annex_Transmitted_Packets.len  Length
    Unsigned 8-bit integer
    Annex-Transmitted-Packets Length
radius.Annex_Tunnel_Authen_Mode  Annex-Tunnel-Authen-Mode
    Unsigned 32-bit integer
radius.Annex_Tunnel_Authen_Mode.len  Length
    Unsigned 8-bit integer
    Annex-Tunnel-Authen-Mode Length
radius.Annex_Tunnel_Authen_Type  Annex-Tunnel-Authen-Type
    Unsigned 32-bit integer
radius.Annex_Tunnel_Authen_Type.len  Length
    Unsigned 8-bit integer
    Annex-Tunnel-Authen-Type Length
radius.Annex_Unauthenticated_Time  Annex-Unauthenticated-Time
    Unsigned 32-bit integer
radius.Annex_Unauthenticated_Time.len  Length
    Unsigned 8-bit integer
    Annex-Unauthenticated-Time Length
radius.Annex_User_Level  Annex-User-Level
    Unsigned 32-bit integer
radius.Annex_User_Level.len  Length
    Unsigned 8-bit integer
    Annex-User-Level Length
```



```
radius.Annex_User_Server_Location  Annex-User-Server-Location
    Unsigned 32-bit integer
radius.Annex_User_Server_Location.len  Length
    Unsigned 8-bit integer
    Annex-User-Server-Location Length
radius.Annex_Wan_Number  Annex-Wan-Number
    Unsigned 32-bit integer
radius.Annex_Wan_Number.len  Length
    Unsigned 8-bit integer
    Annex-Wan-Number Length
radius.Ascend_ATM_Connect_Group  Ascend-ATM-Connect-Group
    Unsigned 32-bit integer
radius.Ascend_ATM_Connect_Group.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Connect-Group Length
radius.Ascend_ATM_Connect_Vci  Ascend-ATM-Connect-Vci
    Unsigned 32-bit integer
radius.Ascend_ATM_Connect_Vci.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Connect-Vci Length
radius.Ascend_ATM_Connect_Vpi  Ascend-ATM-Connect-Vpi
    Unsigned 32-bit integer
radius.Ascend_ATM_Connect_Vpi.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Connect-Vpi Length
radius.Ascend_ATM_Direct  Ascend-ATM-Direct
    Unsigned 32-bit integer
radius.Ascend_ATM_Direct.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Direct Length
radius.Ascend_ATM_Direct_Profile  Ascend-ATM-Direct-Profile
    String
radius.Ascend_ATM_Direct_Profile.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Direct-Profile Length
radius.Ascend_ATM_Fault_Management  Ascend-ATM-Fault-Management
    Unsigned 32-bit integer
radius.Ascend_ATM_Fault_Management.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Fault-Management Length
radius.Ascend_ATM_Group  Ascend-ATM-Group
    Unsigned 32-bit integer
radius.Ascend_ATM_Group.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Group Length
```

```
radius.Ascend_ATM_Loopback_Cell_Loss  Ascend-ATM-Loopback-Cell-Loss
    Unsigned 32-bit integer
radius.Ascend_ATM_Loopback_Cell_Loss.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Loopback-Cell-Loss Length
radius.Ascend_ATM_Vci  Ascend-ATM-Vci
    Unsigned 32-bit integer
radius.Ascend_ATM_Vci.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Vci Length
radius.Ascend_ATM_Vpi  Ascend-ATM-Vpi
    Unsigned 32-bit integer
radius.Ascend_ATM_Vpi.len  Length
    Unsigned 8-bit integer
    Ascend-ATM-Vpi Length
radius.Ascend_Access_Intercept_LEA  Ascend-Access-Intercept-LEA
    String
radius.Ascend_Access_Intercept_LEA.len  Length
    Unsigned 8-bit integer
    Ascend-Access-Intercept-LEA Length
radius.Ascend_Access_Intercept_Log  Ascend-Access-Intercept-Log
    String
radius.Ascend_Access_Intercept_Log.len  Length
    Unsigned 8-bit integer
    Ascend-Access-Intercept-Log Length
radius.Ascend_Add_Seconds  Ascend-Add-Seconds
    Unsigned 32-bit integer
radius.Ascend_Add_Seconds.len  Length
    Unsigned 8-bit integer
    Ascend-Add-Seconds Length
radius.Ascend_Appletalk_Peer_Mode  Ascend-Appletalk-Peer-Mode
    Unsigned 32-bit integer
radius.Ascend_Appletalk_Peer_Mode.len  Length
    Unsigned 8-bit integer
    Ascend-Appletalk-Peer-Mode Length
radius.Ascend_Appletalk_Route  Ascend-Appletalk-Route
    String
radius.Ascend_Appletalk_Route.len  Length
    Unsigned 8-bit integer
    Ascend-Appletalk-Route Length
radius.Ascend_Ara_PW  Ascend-Ara-PW
    String
radius.Ascend_Ara_PW.len  Length
    Unsigned 8-bit integer
    Ascend-Ara-PW Length
```

```
radius.Ascend_Assign_IP_Client  Ascend-Assign-IP-Client
    IPv4 address
radius.Ascend_Assign_IP_Client.len  Length
    Unsigned 8-bit integer
    Ascend-Assign-IP-Client Length
radius.Ascend_Assign_IP_Global_Pool  Ascend-Assign-IP-Global-Pool
    String
radius.Ascend_Assign_IP_Global_Pool.len  Length
    Unsigned 8-bit integer
    Ascend-Assign-IP-Global-Pool Length
radius.Ascend_Assign_IP_Pool  Ascend-Assign-IP-Pool
    Unsigned 32-bit integer
radius.Ascend_Assign_IP_Pool.len  Length
    Unsigned 8-bit integer
    Ascend-Assign-IP-Pool Length
radius.Ascend_Assign_IP_Server  Ascend-Assign-IP-Server
    IPv4 address
radius.Ascend_Assign_IP_Server.len  Length
    Unsigned 8-bit integer
    Ascend-Assign-IP-Server Length
radius.Ascend_Auth_Delay  Ascend-Auth-Delay
    Unsigned 32-bit integer
radius.Ascend_Auth_Delay.len  Length
    Unsigned 8-bit integer
    Ascend-Auth-Delay Length
radius.Ascend_Auth_Type  Ascend-Auth-Type
    Unsigned 32-bit integer
radius.Ascend_Auth_Type.len  Length
    Unsigned 8-bit integer
    Ascend-Auth-Type Length
radius.Ascend_Authen_Alias  Ascend-Authen-Alias
    String
radius.Ascend_Authen_Alias.len  Length
    Unsigned 8-bit integer
    Ascend-Authen-Alias Length
radius.Ascend_BACP_Enable  Ascend-BACP-Enable
    Unsigned 32-bit integer
radius.Ascend_BACP_Enable.len  Length
    Unsigned 8-bit integer
    Ascend-BACP-Enable Length
radius.Ascend_BIR_Bridge_Group  Ascend-BIR-Bridge-Group
    Unsigned 32-bit integer
radius.Ascend_BIR_Bridge_Group.len  Length
    Unsigned 8-bit integer
    Ascend-BIR-Bridge-Group Length
```

```
radius.Ascend_BIR_Enable  Ascend-BIR-Enable
    Unsigned 32-bit integer
radius.Ascend_BIR_Enable.len  Length
    Unsigned 8-bit integer
    Ascend-BIR-Enable Length
radius.Ascend_BIR_Proxy  Ascend-BIR-Proxy
    Unsigned 32-bit integer
radius.Ascend_BIR_Proxy.len  Length
    Unsigned 8-bit integer
    Ascend-BIR-Proxy Length
radius.Ascend_Backup  Ascend-Backup
    String
radius.Ascend_Backup.len  Length
    Unsigned 8-bit integer
    Ascend-Backup Length
radius.Ascend_Base_Channel_Count  Ascend-Base-Channel-Count
    Unsigned 32-bit integer
radius.Ascend_Base_Channel_Count.len  Length
    Unsigned 8-bit integer
    Ascend-Base-Channel-Count Length
radius.Ascend_Bi_Directional_Auth  Ascend-Bi-Directional-Auth
    Unsigned 32-bit integer
radius.Ascend_Bi_Directional_Auth.len  Length
    Unsigned 8-bit integer
    Ascend-Bi-Directional-Auth Length
radius.Ascend_Billing_Number  Ascend-Billing-Number
    String
radius.Ascend_Billing_Number.len  Length
    Unsigned 8-bit integer
    Ascend-Billing-Number Length
radius.Ascend_Bridge  Ascend-Bridge
    Unsigned 32-bit integer
radius.Ascend_Bridge.len  Length
    Unsigned 8-bit integer
    Ascend-Bridge Length
radius.Ascend_Bridge_Address  Ascend-Bridge-Address
    String
radius.Ascend_Bridge_Address.len  Length
    Unsigned 8-bit integer
    Ascend-Bridge-Address Length
radius.Ascend_Bridge_Non_PPpOE  Ascend-Bridge-Non-PPPoE
    Unsigned 32-bit integer
radius.Ascend_Bridge_Non_PPpOE.len  Length
    Unsigned 8-bit integer
    Ascend-Bridge-Non-PPPoE Length
```

```
radius.Ascend_CBCP_Delay Ascend-CBCP-Delay
    Unsigned 32-bit integer
radius.Ascend_CBCP_Delay.len Length
    Unsigned 8-bit integer
    Ascend-CBCP-Delay Length
radius.Ascend_CBCP_Enable Ascend-CBCP-Enable
    Unsigned 32-bit integer
radius.Ascend_CBCP_Enable.len Length
    Unsigned 8-bit integer
    Ascend-CBCP-Enable Length
radius.Ascend_CBCP_Mode Ascend-CBCP-Mode
    Unsigned 32-bit integer
radius.Ascend_CBCP_Mode.len Length
    Unsigned 8-bit integer
    Ascend-CBCP-Mode Length
radius.Ascend_CBCP_Trunk_Group Ascend-CBCP-Trunk-Group
    Unsigned 32-bit integer
radius.Ascend_CBCP_Trunk_Group.len Length
    Unsigned 8-bit integer
    Ascend-CBCP-Trunk-Group Length
radius.Ascend_CIR_Timer Ascend-CIR-Timer
    Unsigned 32-bit integer
radius.Ascend_CIR_Timer.len Length
    Unsigned 8-bit integer
    Ascend-CIR-Timer Length
radius.Ascend_Cache_Refresh Ascend-Cache-Refresh
    Unsigned 32-bit integer
radius.Ascend_Cache_Refresh.len Length
    Unsigned 8-bit integer
    Ascend-Cache-Refresh Length
radius.Ascend_Cache_Time Ascend-Cache-Time
    Unsigned 32-bit integer
radius.Ascend_Cache_Time.len Length
    Unsigned 8-bit integer
    Ascend-Cache-Time Length
radius.Ascend_Call_Attempt_Limit Ascend-Call-Attempt-Limit
    Unsigned 32-bit integer
radius.Ascend_Call_Attempt_Limit.len Length
    Unsigned 8-bit integer
    Ascend-Call-Attempt-Limit Length
radius.Ascend_Call_Block_Duration Ascend-Call-Block-Duration
    Unsigned 32-bit integer
radius.Ascend_Call_Block_Duration.len Length
    Unsigned 8-bit integer
    Ascend-Call-Block-Duration Length
```

```
radius.Ascend_Call_By_Call Ascend-Call-By-Call
    Unsigned 32-bit integer
radius.Ascend_Call_By_Call.len Length
    Unsigned 8-bit integer
    Ascend-Call-By-Call Length
radius.Ascend_Call_Direction Ascend-Call-Direction
    Unsigned 32-bit integer
radius.Ascend_Call_Direction.len Length
    Unsigned 8-bit integer
    Ascend-Call-Direction Length
radius.Ascend_Call_Filter Ascend-Call-Filter
    String
radius.Ascend_Call_Filter.len Length
    Unsigned 8-bit integer
    Ascend-Call-Filter Length
radius.Ascend_Call_Type Ascend-Call-Type
    Unsigned 32-bit integer
radius.Ascend_Call_Type.len Length
    Unsigned 8-bit integer
    Ascend-Call-Type Length
radius.Ascend_Callback Ascend-Callback
    Unsigned 32-bit integer
radius.Ascend_Callback.len Length
    Unsigned 8-bit integer
    Ascend-Callback Length
radius.Ascend_Callback_Delay Ascend-Callback-Delay
    Unsigned 32-bit integer
radius.Ascend_Callback_Delay.len Length
    Unsigned 8-bit integer
    Ascend-Callback-Delay Length
radius.Ascend_Calling_Id_Number_Plan Ascend-Calling-Id-Number-Plan
    Unsigned 32-bit integer
radius.Ascend_Calling_Id_Number_Plan.len Length
    Unsigned 8-bit integer
    Ascend-Calling-Id-Number-Plan Length
radius.Ascend_Calling_Id_Presentatn Ascend-Calling-Id-Presentatn
    Unsigned 32-bit integer
radius.Ascend_Calling_Id_Presentatn.len Length
    Unsigned 8-bit integer
    Ascend-Calling-Id-Presentatn Length
radius.Ascend_Calling_Id_Screening Ascend-Calling-Id-Screening
    Unsigned 32-bit integer
radius.Ascend_Calling_Id_Screening.len Length
    Unsigned 8-bit integer
    Ascend-Calling-Id-Screening Length
```

```
radius.Ascend_Calling_Id_Type_Of_Num  Ascend-Calling-Id-Type-Of-Num
    Unsigned 32-bit integer
radius.Ascend_Calling_Id_Type_Of_Num.len  Length
    Unsigned 8-bit integer
    Ascend-Calling-Id-Type-Of-Num Length
radius.Ascend_Calling_Subaddress  Ascend-Calling-Subaddress
    String
radius.Ascend_Calling_Subaddress.len  Length
    Unsigned 8-bit integer
    Ascend-Calling-Subaddress Length
radius.Ascend_Ckt_Type  Ascend-Ckt-Type
    Unsigned 32-bit integer
radius.Ascend_Ckt_Type.len  Length
    Unsigned 8-bit integer
    Ascend-Ckt-Type Length
radius.Ascend_Client_Assign_DNS  Ascend-Client-Assign-DNS
    Unsigned 32-bit integer
radius.Ascend_Client_Assign_DNS.len  Length
    Unsigned 8-bit integer
    Ascend-Client-Assign-DNS Length
radius.Ascend_Client_Assign_WINS  Ascend-Client-Assign-WINS
    Unsigned 32-bit integer
radius.Ascend_Client_Assign_WINS.len  Length
    Unsigned 8-bit integer
    Ascend-Client-Assign-WINS Length
radius.Ascend_Client_Gateway  Ascend-Client-Gateway
    IPv4 address
radius.Ascend_Client_Gateway.len  Length
    Unsigned 8-bit integer
    Ascend-Client-Gateway Length
radius.Ascend_Client_Primary_DNS  Ascend-Client-Primary-DNS
    IPv4 address
radius.Ascend_Client_Primary_DNS.len  Length
    Unsigned 8-bit integer
    Ascend-Client-Primary-DNS Length
radius.Ascend_Client_Primary_WINS  Ascend-Client-Primary-WINS
    IPv4 address
radius.Ascend_Client_Primary_WINS.len  Length
    Unsigned 8-bit integer
    Ascend-Client-Primary-WINS Length
radius.Ascend_Client_Secondary_DNS  Ascend-Client-Secondary-DNS
    IPv4 address
radius.Ascend_Client_Secondary_DNS.len  Length
    Unsigned 8-bit integer
    Ascend-Client-Secondary-DNS Length
```

```
radius.Ascend_Client_Secondary_WINS  Ascend-Client-Secondary-WINS
    IPv4 address
radius.Ascend_Client_Secondary_WINS.len  Length
    Unsigned 8-bit integer
    Ascend-Client-Secondary-WINS Length
radius.Ascend_Connect_Progress  Ascend-Connect-Progress
    Unsigned 32-bit integer
radius.Ascend_Connect_Progress.len  Length
    Unsigned 8-bit integer
    Ascend-Connect-Progress Length
radius.Ascend_DBA_Monitor  Ascend-DBA-Monitor
    Unsigned 32-bit integer
radius.Ascend_DBA_Monitor.len  Length
    Unsigned 8-bit integer
    Ascend-DBA-Monitor Length
radius.Ascend_DHCP_Maximum_Leases  Ascend-DHCP-Maximum-Leases
    Unsigned 32-bit integer
radius.Ascend_DHCP_Maximum_Leases.len  Length
    Unsigned 8-bit integer
    Ascend-DHCP-Maximum-Leases Length
radius.Ascend_DHCP_Pool_Number  Ascend-DHCP-Pool-Number
    Unsigned 32-bit integer
radius.Ascend_DHCP_Pool_Number.len  Length
    Unsigned 8-bit integer
    Ascend-DHCP-Pool-Number Length
radius.Ascend_DHCP_Reply  Ascend-DHCP-Reply
    Unsigned 32-bit integer
radius.Ascend_DHCP_Reply.len  Length
    Unsigned 8-bit integer
    Ascend-DHCP-Reply Length
radius.Ascend_Data_Filter  Ascend-Data-Filter
    String
radius.Ascend_Data_Filter.len  Length
    Unsigned 8-bit integer
    Ascend-Data-Filter Length
radius.Ascend_Data_Rate  Ascend-Data-Rate
    Unsigned 32-bit integer
radius.Ascend_Data_Rate.len  Length
    Unsigned 8-bit integer
    Ascend-Data-Rate Length
radius.Ascend_Data_Svc  Ascend-Data-Svc
    Unsigned 32-bit integer
radius.Ascend_Data_Svc.len  Length
    Unsigned 8-bit integer
    Ascend-Data-Svc Length
```



```
radius.Ascend_Dec_Channel_Count  Ascend-Dec-Channel-Count
    Unsigned 32-bit integer
radius.Ascend_Dec_Channel_Count.len  Length
    Unsigned 8-bit integer
    Ascend-Dec-Channel-Count Length
radius.Ascend_Destination_Nas_Port  Ascend-Destination-Nas-Port
    Unsigned 32-bit integer
radius.Ascend_Destination_Nas_Port.len  Length
    Unsigned 8-bit integer
    Ascend-Destination-Nas-Port Length
radius.Ascend_Dial_Number  Ascend-Dial-Number
    String
radius.Ascend_Dial_Number.len  Length
    Unsigned 8-bit integer
    Ascend-Dial-Number Length
radius.Ascend_Dialed_Number  Ascend-Dialed-Number
    String
radius.Ascend_Dialed_Number.len  Length
    Unsigned 8-bit integer
    Ascend-Dialed-Number Length
radius.Ascend_Dialout_Allowed  Ascend-Dialout-Allowed
    Unsigned 32-bit integer
radius.Ascend_Dialout_Allowed.len  Length
    Unsigned 8-bit integer
    Ascend-Dialout-Allowed Length
radius.Ascend_Disconnect_Cause  Ascend-Disconnect-Cause
    Unsigned 32-bit integer
radius.Ascend_Disconnect_Cause.len  Length
    Unsigned 8-bit integer
    Ascend-Disconnect-Cause Length
radius.Ascend_Dropped_Octets  Ascend-Dropped-Octets
    Unsigned 32-bit integer
radius.Ascend_Dropped_Octets.len  Length
    Unsigned 8-bit integer
    Ascend-Dropped-Octets Length
radius.Ascend_Dropped_Packets  Ascend-Dropped-Packets
    Unsigned 32-bit integer
radius.Ascend_Dropped_Packets.len  Length
    Unsigned 8-bit integer
    Ascend-Dropped-Packets Length
radius.Ascend_Dsl_CIR_Recv_Limit  Ascend-Dsl-CIR-Recv-Limit
    Unsigned 32-bit integer
radius.Ascend_Dsl_CIR_Recv_Limit.len  Length
    Unsigned 8-bit integer
    Ascend-Dsl-CIR-Recv-Limit Length
```

```
radius.Ascend_Dsl_CIR_Xmit_Limit  Ascend-Dsl-CIR-Xmit-Limit
    Unsigned 32-bit integer
radius.Ascend_Dsl_CIR_Xmit_Limit.len  Length
    Unsigned 8-bit integer
    Ascend-Dsl-CIR-Xmit-Limit Length
radius.Ascend_Dsl_Downstream_Limit  Ascend-Dsl-Downstream-Limit
    Unsigned 32-bit integer
radius.Ascend_Dsl_Downstream_Limit.len  Length
    Unsigned 8-bit integer
    Ascend-Dsl-Downstream-Limit Length
radius.Ascend_Dsl_Rate_Mode  Ascend-Dsl-Rate-Mode
    Unsigned 32-bit integer
radius.Ascend_Dsl_Rate_Mode.len  Length
    Unsigned 8-bit integer
    Ascend-Dsl-Rate-Mode Length
radius.Ascend_Dsl_Rate_Type  Ascend-Dsl-Rate-Type
    Unsigned 32-bit integer
radius.Ascend_Dsl_Rate_Type.len  Length
    Unsigned 8-bit integer
    Ascend-Dsl-Rate-Type Length
radius.Ascend_Dsl_Upstream_Limit  Ascend-Dsl-Upstream-Limit
    Unsigned 32-bit integer
radius.Ascend_Dsl_Upstream_Limit.len  Length
    Unsigned 8-bit integer
    Ascend-Dsl-Upstream-Limit Length
radius.Ascend_Egress_Enabled  Ascend-Egress-Enabled
    Unsigned 32-bit integer
radius.Ascend_Egress_Enabled.len  Length
    Unsigned 8-bit integer
    Ascend-Egress-Enabled Length
radius.Ascend_Endpoint_Disc  Ascend-Endpoint-Disc
    String
radius.Ascend_Endpoint_Disc.len  Length
    Unsigned 8-bit integer
    Ascend-Endpoint-Disc Length
radius.Ascend_Event_Type  Ascend-Event-Type
    Unsigned 32-bit integer
radius.Ascend_Event_Type.len  Length
    Unsigned 8-bit integer
    Ascend-Event-Type Length
radius.Ascend_Expect_Callback  Ascend-Expect-Callback
    Unsigned 32-bit integer
radius.Ascend_Expect_Callback.len  Length
    Unsigned 8-bit integer
    Ascend-Expect-Callback Length
```

```
radius.Ascend_FCP_Parameter  Ascend-FCP-Parameter
    String
radius.Ascend_FCP_Parameter.len  Length
    Unsigned 8-bit integer
    Ascend-FCP-Parameter Length
radius.Ascend_FR_08_Mode  Ascend-FR-08-Mode
    Unsigned 32-bit integer
radius.Ascend_FR_08_Mode.len  Length
    Unsigned 8-bit integer
    Ascend-FR-08-Mode Length
radius.Ascend_FR_Circuit_Name  Ascend-FR-Circuit-Name
    String
radius.Ascend_FR_Circuit_Name.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Circuit-Name Length
radius.Ascend_FR_DCE_N392  Ascend-FR-DCE-N392
    Unsigned 32-bit integer
radius.Ascend_FR_DCE_N392.len  Length
    Unsigned 8-bit integer
    Ascend-FR-DCE-N392 Length
radius.Ascend_FR_DCE_N393  Ascend-FR-DCE-N393
    Unsigned 32-bit integer
radius.Ascend_FR_DCE_N393.len  Length
    Unsigned 8-bit integer
    Ascend-FR-DCE-N393 Length
radius.Ascend_FR_DLCI  Ascend-FR-DLCI
    Unsigned 32-bit integer
radius.Ascend_FR_DLCI.len  Length
    Unsigned 8-bit integer
    Ascend-FR-DLCI Length
radius.Ascend_FR_DTE_N392  Ascend-FR-DTE-N392
    Unsigned 32-bit integer
radius.Ascend_FR_DTE_N392.len  Length
    Unsigned 8-bit integer
    Ascend-FR-DTE-N392 Length
radius.Ascend_FR_DTE_N393  Ascend-FR-DTE-N393
    Unsigned 32-bit integer
radius.Ascend_FR_DTE_N393.len  Length
    Unsigned 8-bit integer
    Ascend-FR-DTE-N393 Length
radius.Ascend_FR_Direct  Ascend-FR-Direct
    Unsigned 32-bit integer
radius.Ascend_FR_Direct.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Direct Length
```

```
radius.Ascend_FR_Direct_DLCI  Ascend-FR-Direct-DLCI
    Unsigned 32-bit integer
radius.Ascend_FR_Direct_DLCI.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Direct-DLCI Length
radius.Ascend_FR_Direct_Profile  Ascend-FR-Direct-Profile
    String
radius.Ascend_FR_Direct_Profile.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Direct-Profile Length
radius.Ascend_FR_LinkUp  Ascend-FR-LinkUp
    Unsigned 32-bit integer
radius.Ascend_FR_LinkUp.len  Length
    Unsigned 8-bit integer
    Ascend-FR-LinkUp Length
radius.Ascend_FR_Link_Mgt  Ascend-FR-Link-Mgt
    Unsigned 32-bit integer
radius.Ascend_FR_Link_Mgt.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Link-Mgt Length
radius.Ascend_FR_Link_Status_DLCI  Ascend-FR-Link-Status-DLCI
    Unsigned 32-bit integer
radius.Ascend_FR_Link_Status_DLCI.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Link-Status-DLCI Length
radius.Ascend_FR_N391  Ascend-FR-N391
    Unsigned 32-bit integer
radius.Ascend_FR_N391.len  Length
    Unsigned 8-bit integer
    Ascend-FR-N391 Length
radius.Ascend_FR_Nailed_Grp  Ascend-FR-Nailed-Grp
    Unsigned 32-bit integer
radius.Ascend_FR_Nailed_Grp.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Nailed-Grp Length
radius.Ascend_FR_Profile_Name  Ascend-FR-Profile-Name
    String
radius.Ascend_FR_Profile_Name.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Profile-Name Length
radius.Ascend_FR_SVC_Addr  Ascend-FR-SVC-Addr
    String
radius.Ascend_FR_SVC_Addr.len  Length
    Unsigned 8-bit integer
    Ascend-FR-SVC-Addr Length
```

```
radius.Ascend_FR_T391  Ascend-FR-T391
    Unsigned 32-bit integer
radius.Ascend_FR_T391.len  Length
    Unsigned 8-bit integer
    Ascend-FR-T391 Length
radius.Ascend_FR_T392  Ascend-FR-T392
    Unsigned 32-bit integer
radius.Ascend_FR_T392.len  Length
    Unsigned 8-bit integer
    Ascend-FR-T392 Length
radius.Ascend_FR_Type  Ascend-FR-Type
    Unsigned 32-bit integer
radius.Ascend_FR_Type.len  Length
    Unsigned 8-bit integer
    Ascend-FR-Type Length
radius.Ascend_FT1_Caller  Ascend-FT1-Caller
    Unsigned 32-bit integer
radius.Ascend_FT1_Caller.len  Length
    Unsigned 8-bit integer
    Ascend-FT1-Caller Length
radius.Ascend_Filter  Ascend-Filter
    String
radius.Ascend_Filter.len  Length
    Unsigned 8-bit integer
    Ascend-Filter Length
radius.Ascend_Filter_Required  Ascend-Filter-Required
    Unsigned 32-bit integer
radius.Ascend_Filter_Required.len  Length
    Unsigned 8-bit integer
    Ascend-Filter-Required Length
radius.Ascend_First_Dest  Ascend-First-Dest
    IPv4 address
radius.Ascend_First_Dest.len  Length
    Unsigned 8-bit integer
    Ascend-First-Dest Length
radius.Ascend_Force_56  Ascend-Force-56
    Unsigned 32-bit integer
radius.Ascend_Force_56.len  Length
    Unsigned 8-bit integer
    Ascend-Force-56 Length
radius.Ascend_Global_Call_Id  Ascend-Global-Call-Id
    String
radius.Ascend_Global_Call_Id.len  Length
    Unsigned 8-bit integer
    Ascend-Global-Call-Id Length
```

```
radius.Ascend_Group Ascend-Group
    String
radius.Ascend_Group.len Length
    Unsigned 8-bit integer
    Ascend-Group Length
radius.Ascend_H323_Conference_Id Ascend-H323-Conference-Id
    Unsigned 32-bit integer
radius.Ascend_H323_Conference_Id.len Length
    Unsigned 8-bit integer
    Ascend-H323-Conference-Id Length
radius.Ascend_H323_Dialed_Time Ascend-H323-Dialed-Time
    Unsigned 32-bit integer
radius.Ascend_H323_Dialed_Time.len Length
    Unsigned 8-bit integer
    Ascend-H323-Dialed-Time Length
radius.Ascend_H323_Fegw_Address Ascend-H323-Fegw-Address
    IPv4 address
radius.Ascend_H323_Fegw_Address.len Length
    Unsigned 8-bit integer
    Ascend-H323-Fegw-Address Length
radius.Ascend_H323_Gatekeeper Ascend-H323-Gatekeeper
    IPv4 address
radius.Ascend_H323_Gatekeeper.len Length
    Unsigned 8-bit integer
    Ascend-H323-Gatekeeper Length
radius.Ascend_Handle_IPX Ascend-Handle-IPX
    Unsigned 32-bit integer
radius.Ascend_Handle_IPX.len Length
    Unsigned 8-bit integer
    Ascend-Handle-IPX Length
radius.Ascend_History_Weigh_Type Ascend-History-Weigh-Type
    Unsigned 32-bit integer
radius.Ascend_History_Weigh_Type.len Length
    Unsigned 8-bit integer
    Ascend-History-Weigh-Type Length
radius.Ascend_Home_Agent_IP_Addr Ascend-Home-Agent-IP-Addr
    IPv4 address
radius.Ascend_Home_Agent_IP_Addr.len Length
    Unsigned 8-bit integer
    Ascend-Home-Agent-IP-Addr Length
radius.Ascend_Home_Agent_Password Ascend-Home-Agent-Password
    String
radius.Ascend_Home_Agent_Password.len Length
    Unsigned 8-bit integer
    Ascend-Home-Agent-Password Length
```

```
radius.Ascend_Home_Agent_UDP_Port  Ascend-Home-Agent-UDP-Port
    Unsigned 32-bit integer
radius.Ascend_Home_Agent_UDP_Port.len  Length
    Unsigned 8-bit integer
    Ascend-Home-Agent-UDP-Port Length
radius.Ascend_Home_Network_Name  Ascend-Home-Network-Name
    String
radius.Ascend_Home_Network_Name.len  Length
    Unsigned 8-bit integer
    Ascend-Home-Network-Name Length
radius.Ascend_Host_Info  Ascend-Host-Info
    String
radius.Ascend_Host_Info.len  Length
    Unsigned 8-bit integer
    Ascend-Host-Info Length
radius.Ascend_IF_Netmask  Ascend-IF-Netmask
    IPv4 address
radius.Ascend_IF_Netmask.len  Length
    Unsigned 8-bit integer
    Ascend-IF-Netmask Length
radius.Ascend_IPSEC_Profile  Ascend-IPSEC-Profile
    String
radius.Ascend_IPSEC_Profile.len  Length
    Unsigned 8-bit integer
    Ascend-IPSEC-Profile Length
radius.Ascend_IPX_Alias  Ascend-IPX-Alias
    Unsigned 32-bit integer
radius.Ascend_IPX_Alias.len  Length
    Unsigned 8-bit integer
    Ascend-IPX-Alias Length
radius.Ascend_IPX_Header_Compression  Ascend-IPX-Header-Compression
    Unsigned 32-bit integer
radius.Ascend_IPX_Header_Compression.len  Length
    Unsigned 8-bit integer
    Ascend-IPX-Header-Compression Length
radius.Ascend_IPX_Node_Addr  Ascend-IPX-Node-Addr
    String
radius.Ascend_IPX_Node_Addr.len  Length
    Unsigned 8-bit integer
    Ascend-IPX-Node-Addr Length
radius.Ascend_IPX_Peer_Mode  Ascend-IPX-Peer-Mode
    Unsigned 32-bit integer
radius.Ascend_IPX_Peer_Mode.len  Length
    Unsigned 8-bit integer
    Ascend-IPX-Peer-Mode Length
```

```
radius.Ascend_IPX_Route Ascend-IPX-Route
String
radius.Ascend_IPX_Route.len Length
Unsigned 8-bit integer
Ascend-IPX-Route Length
radius.Ascend_IP_Direct Ascend-IP-Direct
IPv4 address
radius.Ascend_IP_Direct.len Length
Unsigned 8-bit integer
Ascend-IP-Direct Length
radius.Ascend_IP_Pool_Chaining Ascend-IP-Pool-Chaining
Unsigned 32-bit integer
radius.Ascend_IP_Pool_Chaining.len Length
Unsigned 8-bit integer
Ascend-IP-Pool-Chaining Length
radius.Ascend_IP_Pool_Definition Ascend-IP-Pool-Definition
String
radius.Ascend_IP_Pool_Definition.len Length
Unsigned 8-bit integer
Ascend-IP-Pool-Definition Length
radius.Ascend_IP_TOS Ascend-IP-TOS
Unsigned 32-bit integer
radius.Ascend_IP_TOS.len Length
Unsigned 8-bit integer
Ascend-IP-TOS Length
radius.Ascend_IP_TOS_Apply_To Ascend-IP-TOS-Apply-To
Unsigned 32-bit integer
radius.Ascend_IP_TOS_Apply_To.len Length
Unsigned 8-bit integer
Ascend-IP-TOS-Apply-To Length
radius.Ascend_IP_TOS_Precedence Ascend-IP-TOS-Precedence
Unsigned 32-bit integer
radius.Ascend_IP_TOS_Precedence.len Length
Unsigned 8-bit integer
Ascend-IP-TOS-Precedence Length
radius.Ascend_Idle_Limit Ascend-Idle-Limit
Unsigned 32-bit integer
radius.Ascend_Idle_Limit.len Length
Unsigned 8-bit integer
Ascend-Idle-Limit Length
radius.Ascend_Inc_Channel_Count Ascend-Inc-Channel-Count
Unsigned 32-bit integer
radius.Ascend_Inc_Channel_Count.len Length
Unsigned 8-bit integer
Ascend-Inc-Channel-Count Length
```



```
radius.Ascend_Inter_Arrival_Jitter  Ascend-Inter-Arrival-Jitter
    Unsigned 32-bit integer
radius.Ascend_Inter_Arrival_Jitter.len  Length
    Unsigned 8-bit integer
    Ascend-Inter-Arrival-Jitter Length
radius.Ascend_Link_Compression  Ascend-Link-Compression
    Unsigned 32-bit integer
radius.Ascend_Link_Compression.len  Length
    Unsigned 8-bit integer
    Ascend-Link-Compression Length
radius.Ascend_MPP_Idle_Percent  Ascend-MPP-Idle-Percent
    Unsigned 32-bit integer
radius.Ascend_MPP_Idle_Percent.len  Length
    Unsigned 8-bit integer
    Ascend-MPP-Idle-Percent Length
radius.Ascend_MTU  Ascend-MTU
    Unsigned 32-bit integer
radius.Ascend_MTU.len  Length
    Unsigned 8-bit integer
    Ascend-MTU Length
radius.Ascend_Max_Shared_Users  Ascend-Max-Shared-Users
    Unsigned 32-bit integer
radius.Ascend_Max_Shared_Users.len  Length
    Unsigned 8-bit integer
    Ascend-Max-Shared-Users Length
radius.Ascend_Maximum_Call_Duration  Ascend-Maximum-Call-Duration
    Unsigned 32-bit integer
radius.Ascend_Maximum_Call_Duration.len  Length
    Unsigned 8-bit integer
    Ascend-Maximum-Call-Duration Length
radius.Ascend_Maximum_Channels  Ascend-Maximum-Channels
    Unsigned 32-bit integer
radius.Ascend_Maximum_Channels.len  Length
    Unsigned 8-bit integer
    Ascend-Maximum-Channels Length
radius.Ascend_Maximum_Time  Ascend-Maximum-Time
    Unsigned 32-bit integer
radius.Ascend_Maximum_Time.len  Length
    Unsigned 8-bit integer
    Ascend-Maximum-Time Length
radius.Ascend_Menu_Item  Ascend-Menu-Item
    String
radius.Ascend_Menu_Item.len  Length
    Unsigned 8-bit integer
    Ascend-Menu-Item Length
```

```
radius.Ascend_Menu_Selector  Ascend-Menu-Selector
    String
radius.Ascend_Menu_Selector.len  Length
    Unsigned 8-bit integer
    Ascend-Menu-Selector Length
radius.Ascend_Metric  Ascend-Metric
    Unsigned 32-bit integer
radius.Ascend_Metric.len  Length
    Unsigned 8-bit integer
    Ascend-Metric Length
radius.Ascend_Minimum_Channels  Ascend-Minimum-Channels
    Unsigned 32-bit integer
radius.Ascend_Minimum_Channels.len  Length
    Unsigned 8-bit integer
    Ascend-Minimum-Channels Length
radius.Ascend_Modem_PortNo  Ascend-Modem-PortNo
    Unsigned 32-bit integer
radius.Ascend_Modem_PortNo.len  Length
    Unsigned 8-bit integer
    Ascend-Modem-PortNo Length
radius.Ascend_Modem_ShelfNo  Ascend-Modem-ShelfNo
    Unsigned 32-bit integer
radius.Ascend_Modem_ShelfNo.len  Length
    Unsigned 8-bit integer
    Ascend-Modem-ShelfNo Length
radius.Ascend_Modem_SlotNo  Ascend-Modem-SlotNo
    Unsigned 32-bit integer
radius.Ascend_Modem_SlotNo.len  Length
    Unsigned 8-bit integer
    Ascend-Modem-SlotNo Length
radius.Ascend_Multicast_Client  Ascend-Multicast-Client
    Unsigned 32-bit integer
radius.Ascend_Multicast_Client.len  Length
    Unsigned 8-bit integer
    Ascend-Multicast-Client Length
radius.Ascend_Multicast_GLeave_Delay  Ascend-Multicast-GLeave-Delay
    Unsigned 32-bit integer
radius.Ascend_Multicast_GLeave_Delay.len  Length
    Unsigned 8-bit integer
    Ascend-Multicast-GLeave-Delay Length
radius.Ascend_Multicast_Rate_Limit  Ascend-Multicast-Rate-Limit
    Unsigned 32-bit integer
radius.Ascend_Multicast_Rate_Limit.len  Length
    Unsigned 8-bit integer
    Ascend-Multicast-Rate-Limit Length
```

```
radius.Ascend_Multilink_ID  Ascend-Multilink-ID
    Unsigned 32-bit integer
radius.Ascend_Multilink_ID.len  Length
    Unsigned 8-bit integer
    Ascend-Multilink-ID Length
radius.Ascend_NAS_Port_Format  Ascend-NAS-Port-Format
    Unsigned 32-bit integer
radius.Ascend_NAS_Port_Format.len  Length
    Unsigned 8-bit integer
    Ascend-NAS-Port-Format Length
radius.Ascend_Netware_timeout  Ascend-Netware-timeout
    Unsigned 32-bit integer
radius.Ascend_Netware_timeout.len  Length
    Unsigned 8-bit integer
    Ascend-Netware-timeout Length
radius.Ascend_Num_In_Multilink  Ascend-Num-In-Multilink
    Unsigned 32-bit integer
radius.Ascend_Num_In_Multilink.len  Length
    Unsigned 8-bit integer
    Ascend-Num-In-Multilink Length
radius.Ascend_Number_Sessions  Ascend-Number-Sessions
    String
radius.Ascend_Number_Sessions.len  Length
    Unsigned 8-bit integer
    Ascend-Number-Sessions Length
radius.Ascend_Numbering_Plan_ID  Ascend-Numbering-Plan-ID
    Unsigned 32-bit integer
radius.Ascend_Numbering_Plan_ID.len  Length
    Unsigned 8-bit integer
    Ascend-Numbering-Plan-ID Length
radius.Ascend_Owner_IP_Addr  Ascend-Owner-IP-Addr
    IPv4 address
radius.Ascend_Owner_IP_Addr.len  Length
    Unsigned 8-bit integer
    Ascend-Owner-IP-Addr Length
radius.Ascend_PPP_Address  Ascend-PPP-Address
    IPv4 address
radius.Ascend_PPP_Address.len  Length
    Unsigned 8-bit integer
    Ascend-PPP-Address Length
radius.Ascend_PPP_Async_Map  Ascend-PPP-Async-Map
    Unsigned 32-bit integer
radius.Ascend_PPP_Async_Map.len  Length
    Unsigned 8-bit integer
    Ascend-PPP-Async-Map Length
```

```
radius.Ascend_PPP_VJ_1172 Ascend-PPP-VJ-1172
    Unsigned 32-bit integer
radius.Ascend_PPP_VJ_1172.len Length
    Unsigned 8-bit integer
    Ascend-PPP-VJ-1172 Length
radius.Ascend_PPP_VJ_Slot_Comp Ascend-PPP-VJ-Slot-Comp
    Unsigned 32-bit integer
radius.Ascend_PPP_VJ_Slot_Comp.len Length
    Unsigned 8-bit integer
    Ascend-PPP-VJ-Slot-Comp Length
radius.Ascend_PPPOE_Enable Ascend-PPPoE-Enable
    Unsigned 32-bit integer
radius.Ascend_PPPOE_Enable.len Length
    Unsigned 8-bit integer
    Ascend-PPPoE-Enable Length
radius.Ascend_PRI_Number_Type Ascend-PRI-Number-Type
    Unsigned 32-bit integer
radius.Ascend_PRI_Number_Type.len Length
    Unsigned 8-bit integer
    Ascend-PRI-Number-Type Length
radius.Ascend_PW_Lifetime Ascend-PW-Lifetime
    Unsigned 32-bit integer
radius.Ascend_PW_Lifetime.len Length
    Unsigned 8-bit integer
    Ascend-PW-Lifetime Length
radius.Ascend_PW_Warntime Ascend-PW-Warntime
    Unsigned 32-bit integer
radius.Ascend_PW_Warntime.len Length
    Unsigned 8-bit integer
    Ascend-PW-Warntime Length
radius.Ascend_Port_Redir_Portnum Ascend-Port-Redir-Portnum
    Unsigned 32-bit integer
radius.Ascend_Port_Redir_Portnum.len Length
    Unsigned 8-bit integer
    Ascend-Port-Redir-Portnum Length
radius.Ascend_Port_Redir_Protocol Ascend-Port-Redir-Protocol
    Unsigned 32-bit integer
radius.Ascend_Port_Redir_Protocol.len Length
    Unsigned 8-bit integer
    Ascend-Port-Redir-Protocol Length
radius.Ascend_Port_Redir_Server Ascend-Port-Redir-Server
    IPv4 address
radius.Ascend_Port_Redir_Server.len Length
    Unsigned 8-bit integer
    Ascend-Port-Redir-Server Length
```

```
radius.Ascend_PreSession_Time  Ascend-PreSession-Time
    Unsigned 32-bit integer
radius.Ascend_PreSession_Time.len  Length
    Unsigned 8-bit integer
    Ascend-PreSession-Time Length
radius.Ascend_Pre_Input_Octets  Ascend-Pre-Input-Octets
    Unsigned 32-bit integer
radius.Ascend_Pre_Input_Octets.len  Length
    Unsigned 8-bit integer
    Ascend-Pre-Input-Octets Length
radius.Ascend_Pre_Input_Packets  Ascend-Pre-Input-Packets
    Unsigned 32-bit integer
radius.Ascend_Pre_Input_Packets.len  Length
    Unsigned 8-bit integer
    Ascend-Pre-Input-Packets Length
radius.Ascend_Pre_Output_Octets  Ascend-Pre-Output-Octets
    Unsigned 32-bit integer
radius.Ascend_Pre_Output_Octets.len  Length
    Unsigned 8-bit integer
    Ascend-Pre-Output-Octets Length
radius.Ascend_Pre_Output_Packets  Ascend-Pre-Output-Packets
    Unsigned 32-bit integer
radius.Ascend_Pre_Output_Packets.len  Length
    Unsigned 8-bit integer
    Ascend-Pre-Output-Packets Length
radius.Ascend_Preempt_Limit  Ascend-Preempt-Limit
    Unsigned 32-bit integer
radius.Ascend_Preempt_Limit.len  Length
    Unsigned 8-bit integer
    Ascend-Preempt-Limit Length
radius.Ascend_Primary_Home_Agent  Ascend-Primary-Home-Agent
    String
radius.Ascend_Primary_Home_Agent.len  Length
    Unsigned 8-bit integer
    Ascend-Primary-Home-Agent Length
radius.Ascend_Private_Route  Ascend-Private-Route
    String
radius.Ascend_Private_Route.len  Length
    Unsigned 8-bit integer
    Ascend-Private-Route Length
radius.Ascend_Private_Route_Required  Ascend-Private-Route-Required
    Unsigned 32-bit integer
radius.Ascend_Private_Route_Required.len  Length
    Unsigned 8-bit integer
    Ascend-Private-Route-Required Length
```

```
radius.Ascend_Private_Route_Table_ID  Ascend-Private-Route-Table-ID
String
radius.Ascend_Private_Route_Table_ID.len  Length
Unsigned 8-bit integer
Ascend-Private-Route-Table-ID Length
radius.Ascend_QOS_Downstream  Ascend-QOS-Downstream
String
radius.Ascend_QOS_Downstream.len  Length
Unsigned 8-bit integer
Ascend-QOS-Downstream Length
radius.Ascend_QOS_Upstream  Ascend-QOS-Upstream
String
radius.Ascend_QOS_Upstream.len  Length
Unsigned 8-bit integer
Ascend-QOS-Upstream Length
radius.Ascend_Receive_Secret  Ascend-Receive-Secret
String
radius.Ascend_Receive_Secret.len  Length
Unsigned 8-bit integer
Ascend-Receive-Secret Length
radius.Ascend_Recv_Name  Ascend-Recv-Name
String
radius.Ascend_Recv_Name.len  Length
Unsigned 8-bit integer
Ascend-Recv-Name Length
radius.Ascend_Redirect_Number  Ascend-Redirect-Number
String
radius.Ascend_Redirect_Number.len  Length
Unsigned 8-bit integer
Ascend-Redirect-Number Length
radius.Ascend_Remote_Addr  Ascend-Remote-Addr
IPv4 address
radius.Ascend_Remote_Addr.len  Length
Unsigned 8-bit integer
Ascend-Remote-Addr Length
radius.Ascend_Remote_FW  Ascend-Remote-FW
String
radius.Ascend_Remote_FW.len  Length
Unsigned 8-bit integer
Ascend-Remote-FW Length
radius.Ascend_Remove_Seconds  Ascend-Remove-Seconds
Unsigned 32-bit integer
radius.Ascend_Remove_Seconds.len  Length
Unsigned 8-bit integer
Ascend-Remove-Seconds Length
```

```
radius.Ascend_Require_Auth Ascend-Require-Auth
    Unsigned 32-bit integer
radius.Ascend_Require_Auth.len Length
    Unsigned 8-bit integer
    Ascend-Require-Auth Length
radius.Ascend_Route_Appletalk Ascend-Route-Appletalk
    Unsigned 32-bit integer
radius.Ascend_Route_Appletalk.len Length
    Unsigned 8-bit integer
    Ascend-Route-Appletalk Length
radius.Ascend_Route_IP Ascend-Route-IP
    Unsigned 32-bit integer
radius.Ascend_Route_IP.len Length
    Unsigned 8-bit integer
    Ascend-Route-IP Length
radius.Ascend_Route_IPX Ascend-Route-IPX
    Unsigned 32-bit integer
radius.Ascend_Route_IPX.len Length
    Unsigned 8-bit integer
    Ascend-Route-IPX Length
radius.Ascend_SVC_Enabled Ascend-SVC-Enabled
    Unsigned 32-bit integer
radius.Ascend_SVC_Enabled.len Length
    Unsigned 8-bit integer
    Ascend-SVC-Enabled Length
radius.Ascend_Secondary_Home_Agent Ascend-Secondary-Home-Agent
    String
radius.Ascend_Secondary_Home_Agent.len Length
    Unsigned 8-bit integer
    Ascend-Secondary-Home-Agent Length
radius.Ascend_Seconds_Of_History Ascend-Seconds-Of-History
    Unsigned 32-bit integer
radius.Ascend_Seconds_Of_History.len Length
    Unsigned 8-bit integer
    Ascend-Seconds-Of-History Length
radius.Ascend_Send_Auth Ascend-Send-Auth
    Unsigned 32-bit integer
radius.Ascend_Send_Auth.len Length
    Unsigned 8-bit integer
    Ascend-Send-Auth Length
radius.Ascend_Send_Passwd Ascend-Send-Passwd
    String
radius.Ascend_Send_Passwd.len Length
    Unsigned 8-bit integer
    Ascend-Send-Passwd Length
```

```
radius.Ascend_Send_Secret  Ascend-Send-Secret
    String
radius.Ascend_Send_Secret.len  Length
    Unsigned 8-bit integer
    Ascend-Send-Secret Length
radius.Ascend_Service_Type  Ascend-Service-Type
    Unsigned 32-bit integer
radius.Ascend_Service_Type.len  Length
    Unsigned 8-bit integer
    Ascend-Service-Type Length
radius.Ascend_Session_Svr_Key  Ascend-Session-Svr-Key
    String
radius.Ascend_Session_Svr_Key.len  Length
    Unsigned 8-bit integer
    Ascend-Session-Svr-Key Length
radius.Ascend_Session_Type  Ascend-Session-Type
    Unsigned 32-bit integer
radius.Ascend_Session_Type.len  Length
    Unsigned 8-bit integer
    Ascend-Session-Type Length
radius.Ascend_Shared_Profile_Enable  Ascend-Shared-Profile-Enable
    Unsigned 32-bit integer
radius.Ascend_Shared_Profile_Enable.len  Length
    Unsigned 8-bit integer
    Ascend-Shared-Profile-Enable Length
radius.Ascend_Source_Auth  Ascend-Source-Auth
    String
radius.Ascend_Source_Auth.len  Length
    Unsigned 8-bit integer
    Ascend-Source-Auth Length
radius.Ascend_Source_IP_Check  Ascend-Source-IP-Check
    Unsigned 32-bit integer
radius.Ascend_Source_IP_Check.len  Length
    Unsigned 8-bit integer
    Ascend-Source-IP-Check Length
radius.Ascend_TS_Idle_Limit  Ascend-TS-Idle-Limit
    Unsigned 32-bit integer
radius.Ascend_TS_Idle_Limit.len  Length
    Unsigned 8-bit integer
    Ascend-TS-Idle-Limit Length
radius.Ascend_TS_Idle_Mode  Ascend-TS-Idle-Mode
    Unsigned 32-bit integer
radius.Ascend_TS_Idle_Mode.len  Length
    Unsigned 8-bit integer
    Ascend-TS-Idle-Mode Length
```



```
radius.Ascend_Target_Util Ascend-Target-Util
    Unsigned 32-bit integer
radius.Ascend_Target_Util.len Length
    Unsigned 8-bit integer
    Ascend-Target-Util Length
radius.Ascend_Telnet_Profile Ascend-Telnet-Profile
    String
radius.Ascend_Telnet_Profile.len Length
    Unsigned 8-bit integer
    Ascend-Telnet-Profile Length
radius.Ascend_Temporary_Rtes Ascend-Temporary-Rtes
    Unsigned 32-bit integer
radius.Ascend_Temporary_Rtes.len Length
    Unsigned 8-bit integer
    Ascend-Temporary-Rtes Length
radius.Ascend_Third_Prompt Ascend-Third-Prompt
    String
radius.Ascend_Third_Prompt.len Length
    Unsigned 8-bit integer
    Ascend-Third-Prompt Length
radius.Ascend-Token_Expiry Ascend-Token-Expiry
    Unsigned 32-bit integer
radius.Ascend-Token_Expiry.len Length
    Unsigned 8-bit integer
    Ascend-Token-Expiry Length
radius.Ascend-Token_Idle Ascend-Token-Idle
    Unsigned 32-bit integer
radius.Ascend-Token_Idle.len Length
    Unsigned 8-bit integer
    Ascend-Token-Idle Length
radius.Ascend-Token_Immediate Ascend-Token-Immediate
    Unsigned 32-bit integer
radius.Ascend-Token_Immediate.len Length
    Unsigned 8-bit integer
    Ascend-Token-Immediate Length
radius.Ascend_Traffic_Shaper Ascend-Traffic-Shaper
    Unsigned 32-bit integer
radius.Ascend_Traffic_Shaper.len Length
    Unsigned 8-bit integer
    Ascend-Traffic-Shaper Length
radius.Ascend_Transit_Number Ascend-Transit-Number
    String
radius.Ascend_Transit_Number.len Length
    Unsigned 8-bit integer
    Ascend-Transit-Number Length
```

```
radius.Ascend_Tunnel_VRouter_Name  Ascend-Tunnel-VRouter-Name
String

radius.Ascend_Tunnel_VRouter_Name.len  Length
Unsigned 8-bit integer
Ascend-Tunnel-VRouter-Name Length

radius.Ascend_Tunneling_Protocol  Ascend-Tunneling-Protocol
Unsigned 32-bit integer

radius.Ascend_Tunneling_Protocol.len  Length
Unsigned 8-bit integer
Ascend-Tunneling-Protocol Length

radius.Ascend_UU_Info  Ascend-UU-Info
String

radius.Ascend_UU_Info.len  Length
Unsigned 8-bit integer
Ascend-UU-Info Length

radius.Ascend_User_Acct_Base  Ascend-User-Acct-Base
Unsigned 32-bit integer

radius.Ascend_User_Acct_Base.len  Length
Unsigned 8-bit integer
Ascend-User-Acct-Base Length

radius.Ascend_User_Acct_Host  Ascend-User-Acct-Host
IPv4 address

radius.Ascend_User_Acct_Host.len  Length
Unsigned 8-bit integer
Ascend-User-Acct-Host Length

radius.Ascend_User_Acct_Key  Ascend-User-Acct-Key
String

radius.Ascend_User_Acct_Key.len  Length
Unsigned 8-bit integer
Ascend-User-Acct-Key Length

radius.Ascend_User_Acct_Port  Ascend-User-Acct-Port
Unsigned 32-bit integer

radius.Ascend_User_Acct_Port.len  Length
Unsigned 8-bit integer
Ascend-User-Acct-Port Length

radius.Ascend_User_Acct_Time  Ascend-User-Acct-Time
Unsigned 32-bit integer

radius.Ascend_User_Acct_Time.len  Length
Unsigned 8-bit integer
Ascend-User-Acct-Time Length

radius.Ascend_User_Acct_Type  Ascend-User-Acct-Type
Unsigned 32-bit integer

radius.Ascend_User_Acct_Type.len  Length
Unsigned 8-bit integer
Ascend-User-Acct-Type Length
```

```
radius.Ascend_VRouter_Name  Ascend-VRouter-Name
    String
radius.Ascend_VRouter_Name.len  Length
    Unsigned 8-bit integer
    Ascend-VRouter-Name Length
radius.Ascend_X25_Cug  Ascend-X25-Cug
    String
radius.Ascend_X25_Cug.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Cug Length
radius.Ascend_X25_Nui  Ascend-X25-Nui
    String
radius.Ascend_X25_Nui.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Nui Length
radius.Ascend_X25_Nui_Password_Prompt  Ascend-X25-Nui-Password-Prompt
    String
radius.Ascend_X25_Nui_Password_Prompt.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Nui-Password-Prompt Length
radius.Ascend_X25_Nui_Prompt  Ascend-X25-Nui-Prompt
    String
radius.Ascend_X25_Nui_Prompt.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Nui-Prompt Length
radius.Ascend_X25_Pad_Alias_1  Ascend-X25-Pad-Alias-1
    String
radius.Ascend_X25_Pad_Alias_1.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Pad-Alias-1 Length
radius.Ascend_X25_Pad_Alias_2  Ascend-X25-Pad-Alias-2
    String
radius.Ascend_X25_Pad_Alias_2.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Pad-Alias-2 Length
radius.Ascend_X25_Pad_Alias_3  Ascend-X25-Pad-Alias-3
    String
radius.Ascend_X25_Pad_Alias_3.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Pad-Alias-3 Length
radius.Ascend_X25_Pad_Banner  Ascend-X25-Pad-Banner
    String
radius.Ascend_X25_Pad_Banner.len  Length
    Unsigned 8-bit integer
    Ascend-X25-Pad-Banner Length
```

```
radius.Ascend_X25_Pad_Prompt Ascend-X25-Pad-Prompt
String
radius.Ascend_X25_Pad_Prompt.len Length
Unsigned 8-bit integer
Ascend-X25-Pad-Prompt Length
radius.Ascend_X25_Pad_X3_Parameters Ascend-X25-Pad-X3-Parameters
String
radius.Ascend_X25_Pad_X3_Parameters.len Length
Unsigned 8-bit integer
Ascend-X25-Pad-X3-Parameters Length
radius.Ascend_X25_Pad_X3_Profile Ascend-X25-Pad-X3-Profile
Unsigned 32-bit integer
radius.Ascend_X25_Pad_X3_Profile.len Length
Unsigned 8-bit integer
Ascend-X25-Pad-X3-Profile Length
radius.Ascend_X25_Profile_Name Ascend-X25-Profile-Name
String
radius.Ascend_X25_Profile_Name.len Length
Unsigned 8-bit integer
Ascend-X25-Profile-Name Length
radius.Ascend_X25_Reverse_Charging Ascend-X25-Reverse-Charging
Unsigned 32-bit integer
radius.Ascend_X25_Reverse_Charging.len Length
Unsigned 8-bit integer
Ascend-X25-Reverse-Charging Length
radius.Ascend_X25_Rpoa Ascend-X25-Rpoa
String
radius.Ascend_X25_Rpoa.len Length
Unsigned 8-bit integer
Ascend-X25-Rpoa Length
radius.Ascend_X25_X121_Address Ascend-X25-X121-Address
String
radius.Ascend_X25_X121_Address.len Length
Unsigned 8-bit integer
Ascend-X25-X121-Address Length
radius.Ascend_Xmit_Rate Ascend-Xmit-Rate
Unsigned 32-bit integer
radius.Ascend_Xmit_Rate.len Length
Unsigned 8-bit integer
Ascend-Xmit-Rate Length
radius.Assigned_IP_Address Assigned-IP-Address
IPv4 address
radius.Assigned_IP_Address.len Length
Unsigned 8-bit integer
Assigned-IP-Address Length
```

```
radius.BG_Aging_Time  BG-Aging-Time
    String

radius.BG_Aging_Time.len  Length
    Unsigned 8-bit integer
    BG-Aging-Time Length

radius.BG_Path_Cost  BG-Path-Cost
    String

radius.BG_Path_Cost.len  Length
    Unsigned 8-bit integer
    BG-Path-Cost Length

radius.BG_Span_Dis  BG-Span-Dis
    String

radius.BG_Span_Dis.len  Length
    Unsigned 8-bit integer
    BG-Span-Dis Length

radius.BG_Trans_BPDU  BG-Trans-BPDU
    String

radius.BG_Trans_BPDU.len  Length
    Unsigned 8-bit integer
    BG-Trans-BPDU Length

radius.BinTec_biboDialTable  BinTec-biboDialTable
    String

radius.BinTec_biboDialTable.len  Length
    Unsigned 8-bit integer
    BinTec-biboDialTable Length

radius.BinTec_biboPPPTable  BinTec-biboPPPTable
    String

radius.BinTec_biboPPPTable.len  Length
    Unsigned 8-bit integer
    BinTec-biboPPPTable Length

radius.BinTec_ipExtIfTable  BinTec-ipExtIfTable
    String

radius.BinTec_ipExtIfTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipExtIfTable Length

radius.BinTec_ipExtRtTable  BinTec-ipExtRtTable
    String

radius.BinTec_ipExtRtTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipExtRtTable Length

radius.BinTec_ipFilterTable  BinTec-ipFilterTable
    String

radius.BinTec_ipFilterTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipFilterTable Length
```

```
radius.BinTec_ipNatPresetTable  BinTec-ipNatPresetTable
    String
radius.BinTec_ipNatPresetTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipNatPresetTable Length
radius.BinTec_ipQoSTable  BinTec-ipQoSTable
    String
radius.BinTec_ipQoSTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipQoSTable Length
radius.BinTec_ipRouteTable  BinTec-ipRouteTable
    String
radius.BinTec_ipRouteTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipRouteTable Length
radius.BinTec_ipxCircTable  BinTec-ipxCircTable
    String
radius.BinTec_ipxCircTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipxCircTable Length
radius.BinTec_ipxStaticRouteTable  BinTec-ipxStaticRouteTable
    String
radius.BinTec_ipxStaticRouteTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipxStaticRouteTable Length
radius.BinTec_ipxStaticServTable  BinTec-ipxStaticServTable
    String
radius.BinTec_ipxStaticServTable.len  Length
    Unsigned 8-bit integer
    BinTec-ipxStaticServTable Length
radius.BinTec_ospfIfTable  BinTec-ospfIfTable
    String
radius.BinTec_ospfIfTable.len  Length
    Unsigned 8-bit integer
    BinTec-ospfIfTable Length
radius.BinTec_pppExtIfTable  BinTec-pppExtIfTable
    String
radius.BinTec_pppExtIfTable.len  Length
    Unsigned 8-bit integer
    BinTec-pppExtIfTable Length
radius.BinTec_qosIfTable  BinTec-qosIfTable
    String
radius.BinTec_qosIfTable.len  Length
    Unsigned 8-bit integer
    BinTec-qosIfTable Length
```

```
radius.BinTec_qosPolicyTable  BinTec-qosPolicyTable
    String
radius.BinTec_qosPolicyTable.len  Length
    Unsigned 8-bit integer
    BinTec-qosPolicyTable Length
radius.BinTec_ripCircTable  BinTec-ripCircTable
    String
radius.BinTec_ripCircTable.len  Length
    Unsigned 8-bit integer
    BinTec-ripCircTable Length
radius.BinTec_sapCircTable  BinTec-sapCircTable
    String
radius.BinTec_sapCircTable.len  Length
    Unsigned 8-bit integer
    BinTec-sapCircTable Length
radius.Bind_Auth_Context  Bind-Auth-Context
    String
radius.Bind_Auth_Context.len  Length
    Unsigned 8-bit integer
    Bind-Auth-Context Length
radius.Bind_Auth_Max_Sessions  Bind-Auth-Max-Sessions
    Unsigned 32-bit integer
radius.Bind_Auth_Max_Sessions.len  Length
    Unsigned 8-bit integer
    Bind-Auth-Max-Sessions Length
radius.Bind_Auth_Protocol  Bind-Auth-Protocol
    Unsigned 32-bit integer
radius.Bind_Auth_Protocol.len  Length
    Unsigned 8-bit integer
    Bind-Auth-Protocol Length
radius.Bind_Auth_Service_Grp  Bind-Auth-Service-Grp
    String
radius.Bind_Auth_Service_Grp.len  Length
    Unsigned 8-bit integer
    Bind-Auth-Service-Grp Length
radius.Bind_Bypass_Bypass  Bind-Bypass-Bypass
    String
radius.Bind_Bypass_Bypass.len  Length
    Unsigned 8-bit integer
    Bind-Bypass-Bypass Length
radius.Bind_Bypass_Context  Bind-Bypass-Context
    String
radius.Bind_Bypass_Context.len  Length
    Unsigned 8-bit integer
    Bind-Bypass-Context Length
```

```
radius.Bind_Dot1q_Port  Bind-Dot1q-Port
    Unsigned 32-bit integer
radius.Bind_Dot1q_Port.len  Length
    Unsigned 8-bit integer
    Bind-Dot1q-Port Length
radius.Bind_Dot1q_Slot  Bind-Dot1q-Slot
    Unsigned 32-bit integer
radius.Bind_Dot1q_Slot.len  Length
    Unsigned 8-bit integer
    Bind-Dot1q-Slot Length
radius.Bind_Dot1q_Vlan_Tag_Id  Bind-Dot1q-Vlan-Tag-Id
    Unsigned 32-bit integer
radius.Bind_Dot1q_Vlan_Tag_Id.len  Length
    Unsigned 8-bit integer
    Bind-Dot1q-Vlan-Tag-Id Length
radius.Bind_Int_Context  Bind-Int-Context
    String
radius.Bind_Int_Context.len  Length
    Unsigned 8-bit integer
    Bind-Int-Context Length
radius.Bind_Int_Interface_Name  Bind-Int-Interface-Name
    String
radius.Bind_Int_Interface_Name.len  Length
    Unsigned 8-bit integer
    Bind-Int-Interface-Name Length
radius.Bind_L2TP_Flow_Control  Bind-L2TP-Flow-Control
    Unsigned 32-bit integer
radius.Bind_L2TP_Flow_Control.len  Length
    Unsigned 8-bit integer
    Bind-L2TP-Flow-Control Length
radius.Bind_L2TP_Tunnel_Name  Bind-L2TP-Tunnel-Name
    String
radius.Bind_L2TP_Tunnel_Name.len  Length
    Unsigned 8-bit integer
    Bind-L2TP-Tunnel-Name Length
radius.Bind_Ses_Context  Bind-Ses-Context
    String
radius.Bind_Ses_Context.len  Length
    Unsigned 8-bit integer
    Bind-Ses-Context Length
radius.Bind_Sub_Password  Bind-Sub-Password
    String
radius.Bind_Sub_Password.len  Length
    Unsigned 8-bit integer
    Bind-Sub-Password Length
```



```
radius.Bind_Sub_User_At_Context  Bind-Sub-User-At-Context
String

radius.Bind_Sub_User_At_Context.len  Length
Unsigned 8-bit integer
Bind-Sub-User-At-Context Length

radius.Bind_Tun_Context  Bind-Tun-Context
String

radius.Bind_Tun_Context.len  Length
Unsigned 8-bit integer
Bind-Tun-Context Length

radius.Bind_Type  Bind-Type
Unsigned 32-bit integer

radius.Bind_Type.len  Length
Unsigned 8-bit integer
Bind-Type Length

radius.Bridge_Group  Bridge-Group
String

radius.Bridge_Group.len  Length
Unsigned 8-bit integer
Bridge-Group Length

radius.CBBSM_Bandwidth  CBBSM-Bandwidth
Unsigned 32-bit integer

radius.CBBSM_Bandwidth.len  Length
Unsigned 8-bit integer
CBBSM-Bandwidth Length

radius.CHAP_Challenge  CHAP-Challenge
Byte array

radius.CHAP_Challenge.len  Length
Unsigned 8-bit integer
CHAP-Challenge Length

radius.CHAP_Password  CHAP-Password
Byte array

radius.CHAP_Password.len  Length
Unsigned 8-bit integer
CHAP-Password Length

radius.CVPN3000_Access_Hours  CVPN3000-Access-Hours
String

radius.CVPN3000_Access_Hours.len  Length
Unsigned 8-bit integer
CVPN3000-Access-Hours Length

radius.CVPN3000_Allow_Network_Extension_Mode  CVPN3000-Allow-Network-Extension-M
Unsigned 32-bit integer

radius.CVPN3000_Allow_Network_Extension_Mode.len  Length
Unsigned 8-bit integer
CVPN3000-Allow-Network-Extension-Mode Length
```

```
radius.CVPN3000_Auth_Server_Password  CVPN3000-Auth-Server-Password
String
radius.CVPN3000_Auth_Server_Password.len  Length
Unsigned 8-bit integer
CVPN3000-Auth-Server-Password Length
radius.CVPN3000_Auth_Server_Priority  CVPN3000-Auth-Server-Priority
Unsigned 32-bit integer
radius.CVPN3000_Auth_Server_Priority.len  Length
Unsigned 8-bit integer
CVPN3000-Auth-Server-Priority Length
radius.CVPN3000_Auth_Server_Type  CVPN3000-Auth-Server-Type
Unsigned 32-bit integer
radius.CVPN3000_Auth_Server_Type.len  Length
Unsigned 8-bit integer
CVPN3000-Auth-Server-Type Length
radius.CVPN3000_Authd_User_Idle_Timeout  CVPN3000-Authd-User-Idle-Timeout
Unsigned 32-bit integer
radius.CVPN3000_Authd_User_Idle_Timeout.len  Length
Unsigned 8-bit integer
CVPN3000-Authd-User-Idle-Timeout Length
radius.CVPN3000_Cisco_IP_Phone_Bypass  CVPN3000-Cisco-IP-Phone-Bypass
Unsigned 32-bit integer
radius.CVPN3000_Cisco_IP_Phone_Bypass.len  Length
Unsigned 8-bit integer
CVPN3000-Cisco-IP-Phone-Bypass Length
radius.CVPN3000_DHCP_Network_Scope  CVPN3000-DHCP-Network-Scope
IPv4 address
radius.CVPN3000_DHCP_Network_Scope.len  Length
Unsigned 8-bit integer
CVPN3000-DHCP-Network-Scope Length
radius.CVPN3000_IKE_Keep_Alives  CVPN3000-IKE-Keep-Alives
Unsigned 32-bit integer
radius.CVPN3000_IKE_Keep_Alives.len  Length
Unsigned 8-bit integer
CVPN3000-IKE-Keep-Alives Length
radius.CVPN3000_IPSec_Allow_Passwd_Store  CVPN3000-IPSec-Allow-Passwd-Store
Unsigned 32-bit integer
radius.CVPN3000_IPSec_Allow_Passwd_Store.len  Length
Unsigned 8-bit integer
CVPN3000-IPSec-Allow-Passwd-Store Length
radius.CVPN3000_IPSec_Auth_On_Rekey  CVPN3000-IPSec-Auth-On-Rekey
Unsigned 32-bit integer
radius.CVPN3000_IPSec_Auth_On_Rekey.len  Length
Unsigned 8-bit integer
CVPN3000-IPSec-Auth-On-Rekey Length
```

```
radius.CVPN3000_IPSec_Authentication  CVPN3000-IPSec-Authentication
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Authentication.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Authentication Length
radius.CVPN3000_IPSec_Authorization_Required  CVPN3000-IPSec-Authorization-Required
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Authorization_Required.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Authorization-Required Length
radius.CVPN3000_IPSec_Authorization_Type  CVPN3000-IPSec-Authorization-Type
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Authorization_Type.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Authorization-Type Length
radius.CVPN3000_IPSec_Backup_Server_List  CVPN3000-IPSec-Backup-Server-List
    String
radius.CVPN3000_IPSec_Backup_Server_List.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Backup-Server-List Length
radius.CVPN3000_IPSec_Backup_Servers  CVPN3000-IPSec-Backup-Servers
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Backup_Servers.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Backup-Servers Length
radius.CVPN3000_IPSec_Banner1  CVPN3000-IPSec-Banner1
    String
radius.CVPN3000_IPSec_Banner1.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Banner1 Length
radius.CVPN3000_IPSec_Banner2  CVPN3000-IPSec-Banner2
    String
radius.CVPN3000_IPSec_Banner2.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Banner2 Length
radius.CVPN3000_IPSec_Client_Fw_Filter_Name  CVPN3000-IPSec-Client-Fw-Filter-Name
    String
radius.CVPN3000_IPSec_Client_Fw_Filter_Name.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Client-Fw-Filter-Name Length
radius.CVPN3000_IPSec_Client_Fw_Filter_Opt  CVPN3000-IPSec-Client-Fw-Filter-Opt
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Client_Fw_Filter_Opt.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Client-Fw-Filter-Opt Length
```

```
radius.CVPN3000_IPSec_Confidence_Level  CVPN3000-IPSec-Confidence-Level
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Confidence_Level.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Confidence-Level Length
radius.CVPN3000_IPSec_DN_Field  CVPN3000-IPSec-DN-Field
    String
radius.CVPN3000_IPSec_DN_Field.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-DN-Field Length
radius.CVPN3000_IPSec_Default_Domain  CVPN3000-IPSec-Default-Domain
    String
radius.CVPN3000_IPSec_Default_Domain.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Default-Domain Length
radius.CVPN3000_IPSec_Group_Name  CVPN3000-IPSec-Group-Name
    String
radius.CVPN3000_IPSec_Group_Name.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Group-Name Length
radius.CVPN3000_IPSec_IKE_Peer_ID_Check  CVPN3000-IPSec-IKE-Peer-ID-Check
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_IKE_Peer_ID_Check.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-IKE-Peer-ID-Check Length
radius.CVPN3000_IPSec_IP_Compression  CVPN3000-IPSec-IP-Compression
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_IP_Compression.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-IP-Compression Length
radius.CVPN3000_IPSec_LTL_Keepalives  CVPN3000-IPSec-LTL-Keepalives
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_LTL_Keepalives.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-LTL-Keepalives Length
radius.CVPN3000_IPSec_Mode_Config  CVPN3000-IPSec-Mode-Config
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Mode_Config.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Mode-Config Length
radius.CVPN3000_IPSec_Over_UDP  CVPN3000-IPSec-Over-UDP
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Over_UDP.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Over-UDP Length
```

```
radius.CVPN3000_IPSec_Over_UDP_Port  CVPN3000-IPSec-Over-UDP-Port
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Over_UDP_Port.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Over-UDP-Port Length
radius.CVPN3000_IPSec_Reqr Client_Fw_Cap  CVPN3000-IPSec-Reqr-Client-Fw-Cap
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Reqr Client_Fw_Cap.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Reqr-Client-Fw-Cap Length
radius.CVPN3000_IPSec_Sec_Association  CVPN3000-IPSec-Sec-Association
    String
radius.CVPN3000_IPSec_Sec_Association.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Sec-Association Length
radius.CVPN3000_IPSec_Split_DNS_Names  CVPN3000-IPSec-Split-DNS-Names
    String
radius.CVPN3000_IPSec_Split_DNS_Names.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Split-DNS-Names Length
radius.CVPN3000_IPSec_Split_Tunnel_List  CVPN3000-IPSec-Split-Tunnel-List
    String
radius.CVPN3000_IPSec_Split_Tunnel_List.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Split-Tunnel-List Length
radius.CVPN3000_IPSec_Split_Tunneling_Policy  CVPN3000-IPSec-Split-Tunneling-Pol
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Split_Tunneling_Policy.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Split-Tunneling-Policy Length
radius.CVPN3000_IPSec_Tunnel_Type  CVPN3000-IPSec-Tunnel-Type
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_Tunnel_Type.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-Tunnel-Type Length
radius.CVPN3000_IPSec_User_Group_Lock  CVPN3000-IPSec-User-Group-Lock
    Unsigned 32-bit integer
radius.CVPN3000_IPSec_User_Group_Lock.len  Length
    Unsigned 8-bit integer
    CVPN3000-IPSec-User-Group-Lock Length
radius.CVPN3000_L2TP_Encryption  CVPN3000-L2TP-Encryption
    Unsigned 32-bit integer
radius.CVPN3000_L2TP_Encryption.len  Length
    Unsigned 8-bit integer
    CVPN3000-L2TP-Encryption Length
```

```
radius.CVPN3000_L2TP_MPPC_Compression  CVPN3000-L2TP-MPPC-Compression
    Unsigned 32-bit integer
radius.CVPN3000_L2TP_MPPC_Compression.len  Length
    Unsigned 8-bit integer
    CVPN3000-L2TP-MPPC-Compression Length
radius.CVPN3000_L2TP_Min_Auth_Protocol  CVPN3000-L2TP-Min-Auth-Protocol
    Unsigned 32-bit integer
radius.CVPN3000_L2TP_Min_Auth_Protocol.len  Length
    Unsigned 8-bit integer
    CVPN3000-L2TP-Min-Auth-Protocol Length
radius.CVPN3000_LEAP_Bypass  CVPN3000-LEAP-Bypass
    Unsigned 32-bit integer
radius.CVPN3000_LEAP_Bypass.len  Length
    Unsigned 8-bit integer
    CVPN3000-LEAP-Bypass Length
radius.CVPN3000_MS_Client_Icpt_DHCP_Conf_Msg  CVPN3000-MS-Client-Icpt-DHCP-Conf-
    Unsigned 32-bit integer
radius.CVPN3000_MS_Client_Icpt_DHCP_Conf_Msg.len  Length
    Unsigned 8-bit integer
    CVPN3000-MS-Client-Icpt-DHCP-Conf-Msg Length
radius.CVPN3000_MS_Client_Subnet_Mask  CVPN3000-MS-Client-Subnet-Mask
    IPv4 address
radius.CVPN3000_MS_Client_Subnet_Mask.len  Length
    Unsigned 8-bit integer
    CVPN3000-MS-Client-Subnet-Mask Length
radius.CVPN3000_PPTP_Encryption  CVPN3000-PPTP-Encryption
    Unsigned 32-bit integer
radius.CVPN3000_PPTP_Encryption.len  Length
    Unsigned 8-bit integer
    CVPN3000-PPTP-Encryption Length
radius.CVPN3000_PPTP_MPPC_Compression  CVPN3000-PPTP-MPPC-Compression
    Unsigned 32-bit integer
radius.CVPN3000_PPTP_MPPC_Compression.len  Length
    Unsigned 8-bit integer
    CVPN3000-PPTP-MPPC-Compression Length
radius.CVPN3000_PPTP_Min_Auth_Protocol  CVPN3000-PPTP-Min-Auth-Protocol
    Unsigned 32-bit integer
radius.CVPN3000_PPTP_Min_Auth_Protocol.len  Length
    Unsigned 8-bit integer
    CVPN3000-PPTP-Min-Auth-Protocol Length
radius.CVPN3000_Partition_Max_Sessions  CVPN3000-Partition-Max-Sessions
    Unsigned 32-bit integer
radius.CVPN3000_Partition_Max_Sessions.len  Length
    Unsigned 8-bit integer
    CVPN3000-Partition-Max-Sessions Length
```

```
radius.CVPN3000_Partition_Mobile_IP_Address  CVPN3000-Partition-Mobile-IP-Address
IPv4 address
radius.CVPN3000_Partition_Mobile_IP_Address.len  Length
Unsigned 8-bit integer
CVPN3000-Partition-Mobile-IP-Address Length
radius.CVPN3000_Partition_Mobile_IP_Key  CVPN3000-Partition-Mobile-IP-Key
String
radius.CVPN3000_Partition_Mobile_IP_Key.len  Length
Unsigned 8-bit integer
CVPN3000-Partition-Mobile-IP-Key Length
radius.CVPN3000_Partition_Mobile_IP_SPI  CVPN3000-Partition-Mobile-IP-SPI
Unsigned 32-bit integer
radius.CVPN3000_Partition_Mobile_IP_SPI.len  Length
Unsigned 8-bit integer
CVPN3000-Partition-Mobile-IP-SPI Length
radius.CVPN3000_Partition_Premise_Router  CVPN3000-Partition-Premise-Router
IPv4 address
radius.CVPN3000_Partition_Premise_Router.len  Length
Unsigned 8-bit integer
CVPN3000-Partition-Premise-Router Length
radius.CVPN3000_Partition_Primary_DHCP  CVPN3000-Partition-Primary-DHCP
IPv4 address
radius.CVPN3000_Partition_Primary_DHCP.len  Length
Unsigned 8-bit integer
CVPN3000-Partition-Primary-DHCP Length
radius.CVPN3000_Partition_Secondary_DHCP  CVPN3000-Partition-Secondary-DHCP
IPv4 address
radius.CVPN3000_Partition_Secondary_DHCP.len  Length
Unsigned 8-bit integer
CVPN3000-Partition-Secondary-DHCP Length
radius.CVPN3000_Primary_DNS  CVPN3000-Primary-DNS
IPv4 address
radius.CVPN3000_Primary_DNS.len  Length
Unsigned 8-bit integer
CVPN3000-Primary-DNS Length
radius.CVPN3000_Primary_WINS  CVPN3000-Primary-WINS
IPv4 address
radius.CVPN3000_Primary_WINS.len  Length
Unsigned 8-bit integer
CVPN3000-Primary-WINS Length
radius.CVPN3000_Priority_On_SEP  CVPN3000-Priority-On-SEP
IPv4 address
radius.CVPN3000_Priority_On_SEP.len  Length
Unsigned 8-bit integer
CVPN3000-Priority-On-SEP Length
```

```
radius.CVPN3000_Reqr_Client_Fw_Description  CVPN3000-Reqrd-Client-Fw-Descriptio
String
radius.CVPN3000_Reqr_Client_Fw_Description.len  Length
Unsigned 8-bit integer
CVPN3000-Reqrd-Client-Fw-Description Length
radius.CVPN3000_Reqr_Client_Fw_Product_Code  CVPN3000-Reqrd-Client-Fw-Product-C
Unsigned 32-bit integer
radius.CVPN3000_Reqr_Client_Fw_Product_Code.len  Length
Unsigned 8-bit integer
CVPN3000-Reqrd-Client-Fw-Product-Code Length
radius.CVPN3000_Reqr_Client_Fw_Vendor_Code  CVPN3000-Reqrd-Client-Fw-Vendor-Cod
Unsigned 32-bit integer
radius.CVPN3000_Reqr_Client_Fw_Vendor_Code.len  Length
Unsigned 8-bit integer
CVPN3000-Reqrd-Client-Fw-Vendor-Code Length
radius.CVPN3000_Request_Auth_Vector  CVPN3000-Request-Auth-Vector
String
radius.CVPN3000_Request_Auth_Vector.len  Length
Unsigned 8-bit integer
CVPN3000-Request-Auth-Vector Length
radius.CVPN3000_Require_HW_Client_Auth  CVPN3000-Require-HW-Client-Auth
Unsigned 32-bit integer
radius.CVPN3000_Require_HW_Client_Auth.len  Length
Unsigned 8-bit integer
CVPN3000-Require-HW-Client-Auth Length
radius.CVPN3000_Require_Individual_User_Auth  CVPN3000-Require-Individual-User-A
Unsigned 32-bit integer
radius.CVPN3000_Require_Individual_User_Auth.len  Length
Unsigned 8-bit integer
CVPN3000-Require-Individual-User-Auth Length
radius.CVPN3000_SEP_Card_Assignment  CVPN3000-SEP-Card-Assignment
Unsigned 32-bit integer
radius.CVPN3000_SEP_Card_Assignment.len  Length
Unsigned 8-bit integer
CVPN3000-SEP-Card-Assignment Length
radius.CVPN3000_Secondary_DNS  CVPN3000-Secondary-DNS
IPv4 address
radius.CVPN3000_Secondary_DNS.len  Length
Unsigned 8-bit integer
CVPN3000-Secondary-DNS Length
radius.CVPN3000_Secondary_WINS  CVPN3000-Secondary-WINS
IPv4 address
radius.CVPN3000_Secondary_WINS.len  Length
Unsigned 8-bit integer
CVPN3000-Secondary-WINS Length
```



```
radius.CVPN3000_Simultaneous_Logins  CVPN3000-Simultaneous-Logins
    Unsigned 32-bit integer
radius.CVPN3000_Simultaneous_Logins.len  Length
    Unsigned 8-bit integer
    CVPN3000-Simultaneous-Logins Length
radius.CVPN3000_Strip_Realm  CVPN3000-Strip-Realm
    Unsigned 32-bit integer
radius.CVPN3000_Strip_Realm.len  Length
    Unsigned 8-bit integer
    CVPN3000-Strip-Realm Length
radius.CVPN3000_Tunneling_Protocols  CVPN3000-Tunneling-Protocols
    Unsigned 32-bit integer
radius.CVPN3000_Tunneling_Protocols.len  Length
    Unsigned 8-bit integer
    CVPN3000-Tunneling-Protocols Length
radius.CVPN3000_Use_Client_Address  CVPN3000-Use-Client-Address
    Unsigned 32-bit integer
radius.CVPN3000_Use_Client_Address.len  Length
    Unsigned 8-bit integer
    CVPN3000-Use-Client-Address Length
radius.CVPN3000_User_Auth_Server_Name  CVPN3000-User-Auth-Server-Name
    String
radius.CVPN3000_User_Auth_Server_Name.len  Length
    Unsigned 8-bit integer
    CVPN3000-User-Auth-Server-Name Length
radius.CVPN3000_User_Auth_Server_Port  CVPN3000-User-Auth-Server-Port
    Unsigned 32-bit integer
radius.CVPN3000_User_Auth_Server_Port.len  Length
    Unsigned 8-bit integer
    CVPN3000-User-Auth-Server-Port Length
radius.CVPN3000_User_Auth_Server_Secret  CVPN3000-User-Auth-Server-Secret
    String
radius.CVPN3000_User_Auth_Server_Secret.len  Length
    Unsigned 8-bit integer
    CVPN3000-User-Auth-Server-Secret Length
radius.CVPN3000_WebVPN_Content_Filter_Parameters  CVPN3000-WebVPN-Content-Filter
    Unsigned 32-bit integer
radius.CVPN3000_WebVPN_Content_Filter_Parameters.len  Length
    Unsigned 8-bit integer
    CVPN3000-WebVPN-Content-Filter-Parameters Length
radius.CVPN3000_WebVPN_Enable_functions  CVPN3000-WebVPN-Enable-functions
    Unsigned 32-bit integer
radius.CVPN3000_WebVPN_Enable_functions.len  Length
    Unsigned 8-bit integer
    CVPN3000-WebVPN-Enable-functions Length
```

```
radius.CVPN5000_Client_Assigned_IP  CVPN5000-Client-Assigned-IP
    String
radius.CVPN5000_Client_Assigned_IP.len  Length
    Unsigned 8-bit integer
    CVPN5000-Client-Assigned-IP Length
radius.CVPN5000_Client_Assigned_IPX  CVPN5000-Client-Assigned-IPX
    Unsigned 32-bit integer
radius.CVPN5000_Client_Assigned_IPX.len  Length
    Unsigned 8-bit integer
    CVPN5000-Client-Assigned-IPX Length
radius.CVPN5000_Client_Real_IP  CVPN5000-Client-Real-IP
    String
radius.CVPN5000_Client_Real_IP.len  Length
    Unsigned 8-bit integer
    CVPN5000-Client-Real-IP Length
radius.CVPN5000_Echo  CVPN5000-Echo
    Unsigned 32-bit integer
radius.CVPN5000_Echo.len  Length
    Unsigned 8-bit integer
    CVPN5000-Echo Length
radius.CVPN5000_Tunnel_Throughput  CVPN5000-Tunnel-Throughput
    Unsigned 32-bit integer
radius.CVPN5000_Tunnel_Throughput.len  Length
    Unsigned 8-bit integer
    CVPN5000-Tunnel-Throughput Length
radius.CVPN5000_VPN_GroupInfo  CVPN5000-VPN-GroupInfo
    String
radius.CVPN5000_VPN_GroupInfo.len  Length
    Unsigned 8-bit integer
    CVPN5000-VPN-GroupInfo Length
radius.CVPN5000_VPN_Password  CVPN5000-VPN-Password
    String
radius.CVPN5000_VPN_Password.len  Length
    Unsigned 8-bit integer
    CVPN5000-VPN-Password Length
radius.CVX_Assign_IP_Pool  CVX-Assign-IP-Pool
    Unsigned 32-bit integer
radius.CVX_Assign_IP_Pool.len  Length
    Unsigned 8-bit integer
    CVX-Assign-IP-Pool Length
radius.CVX_Client_Assign_DNS  CVX-Client-Assign-DNS
    Unsigned 32-bit integer
radius.CVX_Client_Assign_DNS.len  Length
    Unsigned 8-bit integer
    CVX-Client-Assign-DNS Length
```

```
radius.CVX_Data_Filter  CVX-Data-Filter
    String
radius.CVX_Data_Filter.len  Length
    Unsigned 8-bit integer
    CVX-Data-Filter Length
radius.CVX_Data_Rate  CVX-Data-Rate
    Unsigned 32-bit integer
radius.CVX_Data_Rate.len  Length
    Unsigned 8-bit integer
    CVX-Data-Rate Length
radius.CVX_Disconnect_Cause  CVX-Disconnect-Cause
    Unsigned 32-bit integer
radius.CVX_Disconnect_Cause.len  Length
    Unsigned 8-bit integer
    CVX-Disconnect-Cause Length
radius.CVX_IPSVC_AZNLVL  CVX-IP SVC-AZNLVL
    Unsigned 32-bit integer
radius.CVX_IPSVC_AZNLVL.len  Length
    Unsigned 8-bit integer
    CVX-IP SVC-AZNLVL Length
radius.CVX_IPSVC_Mask  CVX-IP SVC-Mask
    Unsigned 32-bit integer
radius.CVX_IPSVC_Mask.len  Length
    Unsigned 8-bit integer
    CVX-IP SVC-Mask Length
radius.CVX_Identification  CVX-Identification
    String
radius.CVX_Identification.len  Length
    Unsigned 8-bit integer
    CVX-Identification Length
radius.CVX_Idle_Limit  CVX-Idle-Limit
    Unsigned 32-bit integer
radius.CVX_Idle_Limit.len  Length
    Unsigned 8-bit integer
    CVX-Idle-Limit Length
radius.CVX_Maximum_Channels  CVX-Maximum-Channels
    Unsigned 32-bit integer
radius.CVX_Maximum_Channels.len  Length
    Unsigned 8-bit integer
    CVX-Maximum-Channels Length
radius.CVX_Modem_Begin_Modulation  CVX-Modem-Begin-Modulation
    String
radius.CVX_Modem_Begin_Modulation.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Begin-Modulation Length
```

```
radius.CVX_Modem_Begin_Recv_Line_Lvl  CVX-Modem-BEGIN-Recv-Line-Lvl
    Unsigned 32-bit integer
radius.CVX_Modem_Begin_Recv_Line_Lvl.len  Length
    Unsigned 8-bit integer
    CVX-Modem-BEGIN-Recv-Line-Lvl Length
radius.CVX_Modem_Data_Compression  CVX-Modem-Data-Compression
    String
radius.CVX_Modem_Data_Compression.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Data-Compression Length
radius.CVX_Modem_End_Modulation  CVX-Modem-End-Modulation
    String
radius.CVX_Modem_End_Modulation.len  Length
    Unsigned 8-bit integer
    CVX-Modem-End-Modulation Length
radius.CVX_Modem_End_Recv_Line_Lvl  CVX-Modem-End-Recv-Line-Lvl
    Unsigned 32-bit integer
radius.CVX_Modem_End_Recv_Line_Lvl.len  Length
    Unsigned 8-bit integer
    CVX-Modem-End-Recv-Line-Lvl Length
radius.CVX_Modem_Error_Correction  CVX-Modem-Error-Correction
    String
radius.CVX_Modem_Error_Correction.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Error-Correction Length
radius.CVX_Modem_Local_Rate_Negs  CVX-Modem-Local-Rate-Negs
    Unsigned 32-bit integer
radius.CVX_Modem_Local_Rate_Negs.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Local-Rate-Negs Length
radius.CVX_Modem_Local_Retrains  CVX-Modem-Local-Retrains
    Unsigned 32-bit integer
radius.CVX_Modem_Local_Retrains.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Local-Retrains Length
radius.CVX_Modem_ReTx_Packets  CVX-Modem-ReTx-Packets
    Unsigned 32-bit integer
radius.CVX_Modem_ReTx_Packets.len  Length
    Unsigned 8-bit integer
    CVX-Modem-ReTx-Packets Length
radius.CVX_Modem_Remote_Rate_Negs  CVX-Modem-Remote-Rate-Negs
    Unsigned 32-bit integer
radius.CVX_Modem_Remote_Rate_Negs.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Remote-Rate-Negs Length
```

```
radius.CVX_Modem_Remote_Retrains  CVX-Modem-Remote-Retrains
    Unsigned 32-bit integer
radius.CVX_Modem_Remote_Retrains.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Remote-Retrains Length
radius.CVX_Modem_SNR  CVX-Modem-SNR
    Unsigned 32-bit integer
radius.CVX_Modem_SNR.len  Length
    Unsigned 8-bit integer
    CVX-Modem-SNR Length
radius.CVX_Modem_Tx_Packets  CVX-Modem-Tx-Packets
    Unsigned 32-bit integer
radius.CVX_Modem_Tx_Packets.len  Length
    Unsigned 8-bit integer
    CVX-Modem-Tx-Packets Length
radius.CVX_Multicast_Client  CVX-Multicast-Client
    Unsigned 32-bit integer
radius.CVX_Multicast_Client.len  Length
    Unsigned 8-bit integer
    CVX-Multicast-Client Length
radius.CVX_Multicast_Rate_Limit  CVX-Multicast-Rate-Limit
    Unsigned 32-bit integer
radius.CVX_Multicast_Rate_Limit.len  Length
    Unsigned 8-bit integer
    CVX-Multicast-Rate-Limit Length
radius.CVX_Multilink_Group_Number  CVX-Multilink-Group-Number
    Unsigned 32-bit integer
radius.CVX_Multilink_Group_Number.len  Length
    Unsigned 8-bit integer
    CVX-Multilink-Group-Number Length
radius.CVX_Multilink_Match_Info  CVX-Multilink-Match-Info
    Unsigned 32-bit integer
radius.CVX_Multilink_Match_Info.len  Length
    Unsigned 8-bit integer
    CVX-Multilink-Match-Info Length
radius.CVX_PPP_Address  CVX-PPP-Address
    IPv4 address
radius.CVX_PPP_Address.len  Length
    Unsigned 8-bit integer
    CVX-PPP-Address Length
radius.CVX_PPP_Log_Mask  CVX-PPP-Log-Mask
    Unsigned 32-bit integer
radius.CVX_PPP_Log_Mask.len  Length
    Unsigned 8-bit integer
    CVX-PPP-Log-Mask Length
```

```
radius.CVX_PreSession_Time  CVX-PreSession-Time
    Unsigned 32-bit integer
radius.CVX_PreSession_Time.len  Length
    Unsigned 8-bit integer
    CVX-PreSession-Time Length
radius.CVX_Primary_DNS  CVX-Primary-DNS
    IPv4 address
radius.CVX_Primary_DNS.len  Length
    Unsigned 8-bit integer
    CVX-Primary-DNS Length
radius.CVX_Radius_Redirect  CVX-Radius-Redirect
    Unsigned 32-bit integer
radius.CVX_Radius_Redirect.len  Length
    Unsigned 8-bit integer
    CVX-Radius-Redirect Length
radius.CVX_SS7_Session_ID_Type  CVX-SS7-Session-ID-Type
    Unsigned 32-bit integer
radius.CVX_SS7_Session_ID_Type.len  Length
    Unsigned 8-bit integer
    CVX-SS7-Session-ID-Type Length
radius.CVX_Secondary_DNS  CVX-Secondary-DNS
    IPv4 address
radius.CVX_Secondary_DNS.len  Length
    Unsigned 8-bit integer
    CVX-Secondary-DNS Length
radius.CVX_VPOP_ID  CVX-VPOP-ID
    Unsigned 32-bit integer
radius.CVX_VPOP_ID.len  Length
    Unsigned 8-bit integer
    CVX-VPOP-ID Length
radius.CVX_Xmit_Rate  CVX-Xmit-Rate
    Unsigned 32-bit integer
radius.CVX_Xmit_Rate.len  Length
    Unsigned 8-bit integer
    CVX-Xmit-Rate Length
radius.CableLabs_AM_Opaque_Data  CableLabs-AM-Opaque-Data
    Unsigned 32-bit integer
radius.CableLabs_AM_Opaque_Data.len  Length
    Unsigned 8-bit integer
    CableLabs-AM-Opaque-Data Length
radius.CableLabs_Account_Code  CableLabs-Account-Code
    String
radius.CableLabs_Account_Code.len  Length
    Unsigned 8-bit integer
    CableLabs-Account-Code Length
```

```
radius.CableLabs_Alerting_Signal  CableLabs-Alerting-Signal
    Unsigned 32-bit integer
radius.CableLabs_Alerting_Signal.len  Length
    Unsigned 8-bit integer
    CableLabs-Alerting-Signal Length
radius.CableLabs_Application_Manager_ID  CableLabs-Application-Manager-ID
    Unsigned 32-bit integer
radius.CableLabs_Application_Manager_ID.len  Length
    Unsigned 8-bit integer
    CableLabs-Application-Manager-ID Length
radius.CableLabs_Authorization_Code  CableLabs-Authorization-Code
    String
radius.CableLabs_Authorization_Code.len  Length
    Unsigned 8-bit integer
    CableLabs-Authorization-Code Length
radius.CableLabs_Billing_Type  CableLabs-Billing-Type
    Unsigned 32-bit integer
radius.CableLabs_Billing_Type.len  Length
    Unsigned 8-bit integer
    CableLabs-Billing-Type Length
radius.CableLabs_CCC_ID  CableLabs-CCC-ID
    Byte array
radius.CableLabs_CCC_ID.len  Length
    Unsigned 8-bit integer
    CableLabs-CCC-ID Length
radius.CableLabs_Call_Termination_Cause  CableLabs-Call-Termination-Cause
    Byte array
radius.CableLabs_Call_Termination_Cause.len  Length
    Unsigned 8-bit integer
    CableLabs-Call-Termination-Cause Length
radius.CableLabs_Called_Party_NP_Source  CableLabs-Called-Party-NP-Source
    Unsigned 32-bit integer
radius.CableLabs_Called_Party_NP_Source.len  Length
    Unsigned 8-bit integer
    CableLabs-Called-Party-NP-Source Length
radius.CableLabs_Called_Party_Number  CableLabs-Called-Party-Number
    String
radius.CableLabs_Called_Party_Number.len  Length
    Unsigned 8-bit integer
    CableLabs-Called-Party-Number Length
radius.CableLabs_Calling_Party_NP_Source  CableLabs-Calling-Party-NP-Source
    Unsigned 32-bit integer
radius.CableLabs_Calling_Party_NP_Source.len  Length
    Unsigned 8-bit integer
    CableLabs-Calling-Party-NP-Source Length
```

```
radius.CableLabs_Calling_Party_Number  CableLabs-Calling-Party-Number
String
radius.CableLabs_Calling_Party_Number.len  Length
Unsigned 8-bit integer
CableLabs-Calling-Party-Number Length
radius.CableLabs_Carrier_Identification_Code  CableLabs-Carrier-Identification-C
String
radius.CableLabs_Carrier_Identification_Code.len  Length
Unsigned 8-bit integer
CableLabs-Carrier-Identification-Code Length
radius.CableLabs_Channel_State  CableLabs-Channel-State
Unsigned 32-bit integer
radius.CableLabs_Channel_State.len  Length
Unsigned 8-bit integer
CableLabs-Channel-State Length
radius.CableLabs_Charge_Number  CableLabs-Charge-Number
String
radius.CableLabs_Charge_Number.len  Length
Unsigned 8-bit integer
CableLabs-Charge-Number Length
radius.CableLabs_Communicating_Party  CableLabs-Communicating-Party
Byte array
radius.CableLabs_Communicating_Party.len  Length
Unsigned 8-bit integer
CableLabs-Communicating-Party Length
radius.CableLabs_Database_ID  CableLabs-Database-ID
String
radius.CableLabs_Database_ID.len  Length
Unsigned 8-bit integer
CableLabs-Database-ID Length
radius.CableLabs_Dial_Around_Code  CableLabs-Dial-Around-Code
String
radius.CableLabs_Dial_Around_Code.len  Length
Unsigned 8-bit integer
CableLabs-Dial-Around-Code Length
radius.CableLabs_Dialed_Digits  CableLabs-Dialed-Digits
String
radius.CableLabs_Dialed_Digits.len  Length
Unsigned 8-bit integer
CableLabs-Dialed-Digits Length
radius.CableLabs_Direction_indicator  CableLabs-Direction-indicator
Unsigned 32-bit integer
radius.CableLabs_Direction_indicator.len  Length
Unsigned 8-bit integer
CableLabs-Direction-indicator Length
```



```
radius.CableLabs_Electronic_Surveillance_DF_Security  CableLabs-Electronic-Survei
    Byte array
radius.CableLabs_Electronic_Surveillance_DF_Security.len  Length
    Unsigned 8-bit integer
    CableLabs-Electronic-Surveillance-DF-Security Length
radius.CableLabs_Electronic_Surveillance_Indication  CableLabs-Electronic-Survei
    Byte array
radius.CableLabs_Electronic_Surveillance_Indication.len  Length
    Unsigned 8-bit integer
    CableLabs-Electronic-Surveillance-Indication Length
radius.CableLabs_Element_Requesting_QoS  CableLabs-Element-Requesting-QoS
    Unsigned 32-bit integer
radius.CableLabs_Element_Requesting_QoS.len  Length
    Unsigned 8-bit integer
    CableLabs-Element-Requesting-QoS Length
radius.CableLabs_Error_Description  CableLabs-Error-Description
    String
radius.CableLabs_Error_Description.len  Length
    Unsigned 8-bit integer
    CableLabs-Error-Description Length
radius.CableLabs_Event_Message  CableLabs-Event-Message
    Byte array
radius.CableLabs_Event_Message.len  Length
    Unsigned 8-bit integer
    CableLabs-Event-Message Length
radius.CableLabs_Financial_Entity_ID  CableLabs-Financial-Entity-ID
    String
radius.CableLabs_Financial_Entity_ID.len  Length
    Unsigned 8-bit integer
    CableLabs-Financial-Entity-ID Length
radius.CableLabs_First_Call_Calling_Party_Number  CableLabs-First-Call-Calling-P
    String
radius.CableLabs_First_Call_Calling_Party_Number.len  Length
    Unsigned 8-bit integer
    CableLabs-First-Call-Calling-Party-Number Length
radius.CableLabs_Flow_Direction  CableLabs-Flow-Direction
    Unsigned 32-bit integer
radius.CableLabs_Flow_Direction.len  Length
    Unsigned 8-bit integer
    CableLabs-Flow-Direction Length
radius.CableLabs_Forwarded_Number  CableLabs-Forwarded-Number
    String
radius.CableLabs_Forwarded_Number.len  Length
    Unsigned 8-bit integer
    CableLabs-Forwarded-Number Length
```

```
radius.CableLabs_Gate_Time_Info  CableLabs-Gate-Time-Info
    Unsigned 32-bit integer
radius.CableLabs_Gate_Time_Info.len  Length
    Unsigned 8-bit integer
    CableLabs-Gate-Time-Info Length
radius.CableLabs_Gate_Usage_Info  CableLabs-Gate-Usage-Info
    Unsigned 32-bit integer
radius.CableLabs_Gate_Usage_Info.len  Length
    Unsigned 8-bit integer
    CableLabs-Gate-Usage-Info Length
radius.CableLabs_Intl_Code  CableLabs-Intl-Code
    String
radius.CableLabs_Intl_Code.len  Length
    Unsigned 8-bit integer
    CableLabs-Intl-Code Length
radius.CableLabs_Joined_Party  CableLabs-Joined-Party
    Byte array
radius.CableLabs_Joined_Party.len  Length
    Unsigned 8-bit integer
    CableLabs-Joined-Party Length
radius.CableLabs_Jurisdiction_Information_Parameter  CableLabs-Jurisdiction-Info
    String
radius.CableLabs_Jurisdiction_Information_Parameter.len  Length
    Unsigned 8-bit integer
    CableLabs-Jurisdiction-Information-Parameter Length
radius.CableLabs_Local_XR_Block  CableLabs-Local-XR-Block
    String
radius.CableLabs_Local_XR_Block.len  Length
    Unsigned 8-bit integer
    CableLabs-Local-XR-Block Length
radius.CableLabs_Location_Routing_Number  CableLabs-Location-Routing-Number
    String
radius.CableLabs_Location_Routing_Number.len  Length
    Unsigned 8-bit integer
    CableLabs-Location-Routing-Number Length
radius.CableLabs_MTA_Endpoint_Name  CableLabs-MTA-Endpoint-Name
    String
radius.CableLabs_MTA_Endpoint_Name.len  Length
    Unsigned 8-bit integer
    CableLabs-MTA-Endpoint-Name Length
radius.CableLabs_MTA_UDP_Portnum  CableLabs-MTA-UDP-Portnum
    Unsigned 32-bit integer
radius.CableLabs_MTA_UDP_Portnum.len  Length
    Unsigned 8-bit integer
    CableLabs-MTA-UDP-Portnum Length
```

```
radius.CableLabs_Misc_Signaling_Information  CableLabs-Misc-Signaling-Information
String
radius.CableLabs_Misc_Signaling_Information.len  Length
Unsigned 8-bit integer
CableLabs-Misc-Signaling-Information Length
radius.CableLabs_Policy_Decision_Status  CableLabs-Policy-Decision-Status
Unsigned 32-bit integer
radius.CableLabs_Policy_Decision_Status.len  Length
Unsigned 8-bit integer
CableLabs-Policy-Decision-Status Length
radius.CableLabs_Policy_Deleted_Reason  CableLabs-Policy-Deleted-Reason
Unsigned 32-bit integer
radius.CableLabs_Policy_Deleted_Reason.len  Length
Unsigned 8-bit integer
CableLabs-Policy-Deleted-Reason Length
radius.CableLabs_Policy_Denied_Reason  CableLabs-Policy-Denied-Reason
Unsigned 32-bit integer
radius.CableLabs_Policy_Denied_Reason.len  Length
Unsigned 8-bit integer
CableLabs-Policy-Denied-Reason Length
radius.CableLabs_Policy_Update_Reason  CableLabs-Policy-Update-Reason
Unsigned 32-bit integer
radius.CableLabs_Policy_Update_Reason.len  Length
Unsigned 8-bit integer
CableLabs-Policy-Update-Reason Length
radius.CableLabs_Ported_In_Called_Number  CableLabs-Ported-In-Called-Number
Unsigned 32-bit integer
radius.CableLabs_Ported_In_Called_Number.len  Length
Unsigned 8-bit integer
CableLabs-Ported-In-Called-Number Length
radius.CableLabs_Ported_In_Calling_Number  CableLabs-Ported-In-Calling-Number
Unsigned 32-bit integer
radius.CableLabs_Ported_In_Calling_Number.len  Length
Unsigned 8-bit integer
CableLabs-Ported-In-Calling-Number Length
radius.CableLabs_QoS_Descriptor  CableLabs-QoS-Descriptor
Byte array
radius.CableLabs_QoS_Descriptor.len  Length
Unsigned 8-bit integer
CableLabs-QoS-Descriptor Length
radius.CableLabs_QoS_Release_Reason  CableLabs-QoS-Release-Reason
Unsigned 32-bit integer
radius.CableLabs_QoS_Release_Reason.len  Length
Unsigned 8-bit integer
CableLabs-QoS-Release-Reason Length
```

```
radius.CableLabs_Query_Type  CableLabs-Query-Type
    Unsigned 32-bit integer
radius.CableLabs_Query_Type.len  Length
    Unsigned 8-bit integer
    CableLabs-Query-Type Length
radius.CableLabs_RTCP_Data  CableLabs-RTCP-Data
    String
radius.CableLabs_RTCP_Data.len  Length
    Unsigned 8-bit integer
    CableLabs-RTCP-Data Length
radius.CableLabs_Redirected_From_Info  CableLabs-Redirected-From-Info
    Byte array
radius.CableLabs_Redirected_From_Info.len  Length
    Unsigned 8-bit integer
    CableLabs-Redirected-From-Info Length
radius.CableLabs_Redirected_From_Party_Number  CableLabs-Redirected-From-Party-N
    String
radius.CableLabs_Redirected_From_Party_Number.len  Length
    Unsigned 8-bit integer
    CableLabs-Redirected-From-Party-Number Length
radius.CableLabs_Redirected_To_Party_Number  CableLabs-Redirected-To-Party-Numbe
    String
radius.CableLabs_Redirected_To_Party_Number.len  Length
    Unsigned 8-bit integer
    CableLabs-Redirected-To-Party-Number Length
radius.CableLabs_Related_Call_Billing_Correlation_ID  CableLabs-Related-Call-Bil
    Byte array
radius.CableLabs_Related_Call_Billing_Correlation_ID.len  Length
    Unsigned 8-bit integer
    CableLabs-Related-Call-Billing-Correlation-ID Length
radius.CableLabs_Remote_XR_Block  CableLabs-Remote-XR-Block
    String
radius.CableLabs_Remote_XR_Block.len  Length
    Unsigned 8-bit integer
    CableLabs-Remote-XR-Block Length
radius.CableLabs_Removed_Party  CableLabs-Removed-Party
    Byte array
radius.CableLabs_Removed_Party.len  Length
    Unsigned 8-bit integer
    CableLabs-Removed-Party Length
radius.CableLabs_Reserved  CableLabs-Reserved
    Byte array
radius.CableLabs_Reserved.len  Length
    Unsigned 8-bit integer
    CableLabs-Reserved Length
```

```
radius.CableLabs_Returned_Number  CableLabs-Returned-Number
String

radius.CableLabs_Returned_Number.len  Length
Unsigned 8-bit integer
CableLabs-Returned-Number Length

radius.CableLabs_Routing_Number  CableLabs-Routing-Number
String

radius.CableLabs_Routing_Number.len  Length
Unsigned 8-bit integer
CableLabs-Routing-Number Length

radius.CableLabs_SDP_Downstream  CableLabs-SDP-Downstream
String

radius.CableLabs_SDP_Downstream.len  Length
Unsigned 8-bit integer
CableLabs-SDP-Downstream Length

radius.CableLabs_SDP_Upstream  CableLabs-SDP-Upstream
String

radius.CableLabs_SDP_Upstream.len  Length
Unsigned 8-bit integer
CableLabs-SDP-Upstream Length

radius.CableLabs_SF_ID  CableLabs-SF-ID
Unsigned 32-bit integer

radius.CableLabs_SF_ID.len  Length
Unsigned 8-bit integer
CableLabs-SF-ID Length

radius.CableLabs_Second_Call_Calling_Party_Number  CableLabs-Second-Call-Calling
String

radius.CableLabs_Second_Call_Calling_Party_Number.len  Length
Unsigned 8-bit integer
CableLabs-Second-Call-Calling-Party-Number Length

radius.CableLabs_Service_Name  CableLabs-Service-Name
String

radius.CableLabs_Service_Name.len  Length
Unsigned 8-bit integer
CableLabs-Service-Name Length

radius.CableLabs_Signal_Type  CableLabs-Signal-Type
Unsigned 32-bit integer

radius.CableLabs_Signal_Type.len  Length
Unsigned 8-bit integer
CableLabs-Signal-Type Length

radius.CableLabs_Signaled_From_Number  CableLabs-Signaled-From-Number
String

radius.CableLabs_Signaled_From_Number.len  Length
Unsigned 8-bit integer
CableLabs-Signaled-From-Number Length
```

```
radius.CableLabs_Signaled_To_Number  CableLabs-Signaled-To-Number
String
radius.CableLabs_Signaled_To_Number.len  Length
Unsigned 8-bit integer
CableLabs-Signaled-To-Number Length
radius.CableLabs_Subject_Audible_Signal  CableLabs-Subject-Audible-Signal
Unsigned 32-bit integer
radius.CableLabs_Subject_Audible_Signal.len  Length
Unsigned 8-bit integer
CableLabs-Subject-Audible-Signal Length
radius.CableLabs_Subscriber_ID  CableLabs-Subscriber-ID
Unsigned 32-bit integer
radius.CableLabs_Subscriber_ID.len  Length
Unsigned 8-bit integer
CableLabs-Subscriber-ID Length
radius.CableLabs_Switch_Hook_Flash  CableLabs-Switch-Hook-Flash
String
radius.CableLabs_Switch_Hook_Flash.len  Length
Unsigned 8-bit integer
CableLabs-Switch-Hook-Flash Length
radius.CableLabs_Terminal_Display_Info  CableLabs-Terminal-Display-Info
Byte array
radius.CableLabs_Terminal_Display_Info.len  Length
Unsigned 8-bit integer
CableLabs-Terminal-Display-Info Length
radius.CableLabs_Time_Adjustment  CableLabs-Time-Adjustment
Byte array
radius.CableLabs_Time_Adjustment.len  Length
Unsigned 8-bit integer
CableLabs-Time-Adjustment Length
radius.CableLabs_Time_Usage_Limit  CableLabs-Time-Usage-Limit
Unsigned 32-bit integer
radius.CableLabs_Time_Usage_Limit.len  Length
Unsigned 8-bit integer
CableLabs-Time-Usage-Limit Length
radius.CableLabs_Translation_Input  CableLabs-Translation-Input
String
radius.CableLabs_Translation_Input.len  Length
Unsigned 8-bit integer
CableLabs-Translation-Input Length
radius.CableLabs_Trunk_Group_ID  CableLabs-Trunk-Group-ID
Byte array
radius.CableLabs_Trunk_Group_ID.len  Length
Unsigned 8-bit integer
CableLabs-Trunk-Group-ID Length
```

```
radius.CableLabs_User_Input  CableLabs-User-Input
    String
radius.CableLabs_User_Input.len  Length
    Unsigned 8-bit integer
    CableLabs-User-Input Length
radius.CableLabs_Volume_Usage_Limit  CableLabs-Volume-Usage-Limit
    Unsigned 32-bit integer
radius.CableLabs_Volume_Usage_Limit.len  Length
    Unsigned 8-bit integer
    CableLabs-Volume-Usage-Limit Length
radius.Cabletron_Protocol_Callable  Cabletron-Protocol-Callable
    Unsigned 32-bit integer
radius.Cabletron_Protocol_Callable.len  Length
    Unsigned 8-bit integer
    Cabletron-Protocol-Callable Length
radius.Cabletron_Protocol_Enable  Cabletron-Protocol-Enable
    Unsigned 32-bit integer
radius.Cabletron_Protocol_Enable.len  Length
    Unsigned 8-bit integer
    Cabletron-Protocol-Enable Length
radius.Callback_Id  Callback-Id
    String
radius.Callback_Id.len  Length
    Unsigned 8-bit integer
    Callback-Id Length
radius.Callback_Number  Callback-Number
    String
radius.Callback_Number.len  Length
    Unsigned 8-bit integer
    Callback-Number Length
radius.Called_Station_Id  Called-Station-Id
    String
radius.Called_Station_Id.len  Length
    Unsigned 8-bit integer
    Called-Station-Id Length
radius.Calling_Station_Id  Calling-Station-Id
    String
radius.Calling_Station_Id.len  Length
    Unsigned 8-bit integer
    Calling-Station-Id Length
radius.Cisco_AVPair  Cisco-AVPair
    String
radius.Cisco_AVPair.len  Length
    Unsigned 8-bit integer
    Cisco-AVPair Length
```

```
radius.Cisco_Abort_Cause  Cisco-Abort-Cause
    String
radius.Cisco_Abort_Cause.len  Length
    Unsigned 8-bit integer
    Cisco-Abort-Cause Length
radius.Cisco_Account_Info  Cisco-Account-Info
    String
radius.Cisco_Account_Info.len  Length
    Unsigned 8-bit integer
    Cisco-Account-Info Length
radius.Cisco_Assign_IP_Pool  Cisco-Assign-IP-Pool
    Unsigned 32-bit integer
radius.Cisco_Assign_IP_Pool.len  Length
    Unsigned 8-bit integer
    Cisco-Assign-IP-Pool Length
radius.Cisco_Call_Filter  Cisco-Call-Filter
    Unsigned 32-bit integer
radius.Cisco_Call_Filter.len  Length
    Unsigned 8-bit integer
    Cisco-Call-Filter Length
radius.Cisco_Call_Type  Cisco-Call-Type
    String
radius.Cisco_Call_Type.len  Length
    Unsigned 8-bit integer
    Cisco-Call-Type Length
radius.Cisco_Command_Code  Cisco-Command-Code
    String
radius.Cisco_Command_Code.len  Length
    Unsigned 8-bit integer
    Cisco-Command-Code Length
radius.Cisco_Control_Info  Cisco-Control-Info
    String
radius.Cisco_Control_Info.len  Length
    Unsigned 8-bit integer
    Cisco-Control-Info Length
radius.Cisco_Data_Filter  Cisco-Data-Filter
    Unsigned 32-bit integer
radius.Cisco_Data_Filter.len  Length
    Unsigned 8-bit integer
    Cisco-Data-Filter Length
radius.Cisco_Data_Rate  Cisco-Data-Rate
    Unsigned 32-bit integer
radius.Cisco_Data_Rate.len  Length
    Unsigned 8-bit integer
    Cisco-Data-Rate Length
```



```
radius.Cisco_Disconnect_Cause  Cisco-Disconnect-Cause
    Unsigned 32-bit integer
radius.Cisco_Disconnect_Cause.len  Length
    Unsigned 8-bit integer
    Cisco-Disconnect-Cause Length
radius.Cisco_Email_Server_Ack_Flag  Cisco-Email-Server-Ack-Flag
    String
radius.Cisco_Email_Server_Ack_Flag.len  Length
    Unsigned 8-bit integer
    Cisco-Email-Server-Ack-Flag Length
radius.Cisco_Email_Server_Address  Cisco-Email-Server-Address
    String
radius.Cisco_Email_Server_Address.len  Length
    Unsigned 8-bit integer
    Cisco-Email-Server-Address Length
radius.Cisco_Fax_Account_Id_Origin  Cisco-Fax-Account-Id-Origin
    String
radius.Cisco_Fax_Account_Id_Origin.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Account-Id-Origin Length
radius.Cisco_Fax_Auth_Status  Cisco-Fax-Auth-Status
    String
radius.Cisco_Fax_Auth_Status.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Auth-Status Length
radius.Cisco_Fax_Connect_Speed  Cisco-Fax-Connect-Speed
    String
radius.Cisco_Fax_Connect_Speed.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Connect-Speed Length
radius.Cisco_Fax_Coverpage_Flag  Cisco-Fax-Coverpage-Flag
    String
radius.Cisco_Fax_Coverpage_Flag.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Coverpage-Flag Length
radius.Cisco_Fax_Dsn_Address  Cisco-Fax-Dsn-Address
    String
radius.Cisco_Fax_Dsn_Address.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Dsn-Address Length
radius.Cisco_Fax_Dsn_Flag  Cisco-Fax-Dsn-Flag
    String
radius.Cisco_Fax_Dsn_Flag.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Dsn-Flag Length
```

```
radius.Cisco_Fax_Mdn_Address  Cisco-Fax-Mdn-Address
    String
radius.Cisco_Fax_Mdn_Address.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Mdn-Address Length
radius.Cisco_Fax_Mdn_Flag  Cisco-Fax-Mdn-Flag
    String
radius.Cisco_Fax_Mdn_Flag.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Mdn-Flag Length
radius.Cisco_Fax_Modem_Time  Cisco-Fax-Modem-Time
    String
radius.Cisco_Fax_Modem_Time.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Modem-Time Length
radius.Cisco_Fax_Msg_Id  Cisco-Fax-Msg-Id
    String
radius.Cisco_Fax_Msg_Id.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Msg-Id Length
radius.Cisco_Fax_Pages  Cisco-Fax-Pages
    String
radius.Cisco_Fax_Pages.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Pages Length
radius.Cisco_Fax_Process_Abort_Flag  Cisco-Fax-Process-Abort-Flag
    String
radius.Cisco_Fax_Process_Abort_Flag.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Process-Abort-Flag Length
radius.Cisco_Fax_Recipient_Count  Cisco-Fax-Recipient-Count
    String
radius.Cisco_Fax_Recipient_Count.len  Length
    Unsigned 8-bit integer
    Cisco-Fax-Recipient-Count Length
radius.Cisco_Gateway_Id  Cisco-Gateway-Id
    String
radius.Cisco_Gateway_Id.len  Length
    Unsigned 8-bit integer
    Cisco-Gateway-Id Length
radius.Cisco_IP_Direct  Cisco-IP-Direct
    Unsigned 32-bit integer
radius.Cisco_IP_Direct.len  Length
    Unsigned 8-bit integer
    Cisco-IP-Direct Length
```

```
radius.Cisco_IP_Pool_Definition  Cisco-IP-Pool-Definition
    String
radius.Cisco_IP_Pool_Definition.len  Length
    Unsigned 8-bit integer
    Cisco-IP-Pool-Definition Length
radius.Cisco_Idle_Limit  Cisco-Idle-Limit
    Unsigned 32-bit integer
radius.Cisco_Idle_Limit.len  Length
    Unsigned 8-bit integer
    Cisco-Idle-Limit Length
radius.Cisco_Link_Compression  Cisco-Link-Compression
    Unsigned 32-bit integer
radius.Cisco_Link_Compression.len  Length
    Unsigned 8-bit integer
    Cisco-Link-Compression Length
radius.Cisco_Maximum_Channels  Cisco-Maximum-Channels
    Unsigned 32-bit integer
radius.Cisco_Maximum_Channels.len  Length
    Unsigned 8-bit integer
    Cisco-Maximum-Channels Length
radius.Cisco_Maximum_Time  Cisco-Maximum-Time
    Unsigned 32-bit integer
radius.Cisco_Maximum_Time.len  Length
    Unsigned 8-bit integer
    Cisco-Maximum-Time Length
radius.Cisco_Multilink_ID  Cisco-Multilink-ID
    Unsigned 32-bit integer
radius.Cisco_Multilink_ID.len  Length
    Unsigned 8-bit integer
    Cisco-Multilink-ID Length
radius.Cisco_NAS_Port  Cisco-NAS-Port
    String
radius.Cisco_NAS_Port.len  Length
    Unsigned 8-bit integer
    Cisco-NAS-Port Length
radius.Cisco_Num_In_Multilink  Cisco-Num-In-Multilink
    Unsigned 32-bit integer
radius.Cisco_Num_In_Multilink.len  Length
    Unsigned 8-bit integer
    Cisco-Num-In-Multilink Length
radius.Cisco_PPP_Async_Map  Cisco-PPP-Async-Map
    Unsigned 32-bit integer
radius.Cisco_PPP_Async_Map.len  Length
    Unsigned 8-bit integer
    Cisco-PPP-Async-Map Length
```

```
radius.Cisco_PPP_VJ_Slot_Comp  Cisco-PPP-VJ-Slot-Comp
    Unsigned 32-bit integer
radius.Cisco_PPP_VJ_Slot_Comp.len  Length
    Unsigned 8-bit integer
    Cisco-PPP-VJ-Slot-Comp Length
radius.Cisco_PW_Lifetime  Cisco-PW-Lifetime
    Unsigned 32-bit integer
radius.Cisco_PW_Lifetime.len  Length
    Unsigned 8-bit integer
    Cisco-PW-Lifetime Length
radius.Cisco_Port_Used  Cisco-Port-Used
    String
radius.Cisco_Port_Used.len  Length
    Unsigned 8-bit integer
    Cisco-Port-Used Length
radius.Cisco_PreSession_Time  Cisco-PreSession-Time
    Unsigned 32-bit integer
radius.Cisco_PreSession_Time.len  Length
    Unsigned 8-bit integer
    Cisco-PreSession-Time Length
radius.Cisco_Pre_Input_Octets  Cisco-Pre-Input-Octets
    Unsigned 32-bit integer
radius.Cisco_Pre_Input_Octets.len  Length
    Unsigned 8-bit integer
    Cisco-Pre-Input-Octets Length
radius.Cisco_Pre_Input_Packets  Cisco-Pre-Input-Packets
    Unsigned 32-bit integer
radius.Cisco_Pre_Input_Packets.len  Length
    Unsigned 8-bit integer
    Cisco-Pre-Input-Packets Length
radius.Cisco_Pre_Output_Octets  Cisco-Pre-Output-Octets
    Unsigned 32-bit integer
radius.Cisco_Pre_Output_Octets.len  Length
    Unsigned 8-bit integer
    Cisco-Pre-Output-Octets Length
radius.Cisco_Pre_Output_Packets  Cisco-Pre-Output-Packets
    Unsigned 32-bit integer
radius.Cisco_Pre_Output_Packets.len  Length
    Unsigned 8-bit integer
    Cisco-Pre-Output-Packets Length
radius.Cisco_Route_IP  Cisco-Route-IP
    Unsigned 32-bit integer
radius.Cisco_Route_IP.len  Length
    Unsigned 8-bit integer
    Cisco-Route-IP Length
```

```
radius.Cisco_Service_Info  Cisco-Service-Info
    String
radius.Cisco_Service_Info.len  Length
    Unsigned 8-bit integer
    Cisco-Service-Info Length
radius.Cisco_Target_Util  Cisco-Target-Util
    Unsigned 32-bit integer
radius.Cisco_Target_Util.len  Length
    Unsigned 8-bit integer
    Cisco-Target-Util Length
radius.Cisco_Xmit_Rate  Cisco-Xmit-Rate
    Unsigned 32-bit integer
radius.Cisco_Xmit_Rate.len  Length
    Unsigned 8-bit integer
    Cisco-Xmit-Rate Length
radius.Class  Class
    Byte array
radius.Class.len  Length
    Unsigned 8-bit integer
    Class Length
radius.Client_DNS_Pri  Client-DNS-Pri
    IPv4 address
radius.Client_DNS_Pri.len  Length
    Unsigned 8-bit integer
    Client-DNS-Pri Length
radius.Client_DNS_Sec  Client-DNS-Sec
    IPv4 address
radius.Client_DNS_Sec.len  Length
    Unsigned 8-bit integer
    Client-DNS-Sec Length
radius.Colubris_AVPair  Colubris-AVPair
    String
radius.Colubris_AVPair.len  Length
    Unsigned 8-bit integer
    Colubris-AVPair Length
radius.Configuration-Token  Configuration-Token
    String
radius.Configuration-Token.len  Length
    Unsigned 8-bit integer
    Configuration-Token Length
radius.Connect_Info  Connect-Info
    String
radius.Connect_Info.len  Length
    Unsigned 8-bit integer
    Connect-Info Length
```

```
radius.Context_Name Context-Name
    String
radius.Context_Name.len Length
    Unsigned 8-bit integer
    Context-Name Length
radius.Cosine-Vci Cosine-VCI
    Unsigned 16-bit integer
radius.Cosine-Vpi Cosine-VPI
    Unsigned 16-bit integer
radius.Cosine_Address_Pool_Name Cosine-Address-Pool-Name
    String
radius.Cosine_Address_Pool_Name.len Length
    Unsigned 8-bit integer
    Cosine-Address-Pool-Name Length
radius.Cosine_CLI_User_Permission_ID Cosine-CLI-User-Permission-ID
    String
radius.Cosine_CLI_User_Permission_ID.len Length
    Unsigned 8-bit integer
    Cosine-CLI-User-Permission-ID Length
radius.Cosine_Connection_Profile_Name Cosine-Connection-Profile-Name
    String
radius.Cosine_Connection_Profile_Name.len Length
    Unsigned 8-bit integer
    Cosine-Connection-Profile-Name Length
radius.Cosine_DLCI Cosine-DLCI
    Unsigned 32-bit integer
radius.Cosine_DLCI.len Length
    Unsigned 8-bit integer
    Cosine-DLCI Length
radius.Cosine_DS_Byte Cosine-DS-Byte
    Unsigned 32-bit integer
radius.Cosine_DS_Byte.len Length
    Unsigned 8-bit integer
    Cosine-DS-Byte Length
radius.Cosine_Enterprise_ID Cosine-Enterprise-ID
    String
radius.Cosine_Enterprise_ID.len Length
    Unsigned 8-bit integer
    Cosine-Enterprise-ID Length
radius.Cosine_LNS_IP_Address Cosine-LNS-IP-Address
    IPv4 address
radius.Cosine_LNS_IP_Address.len Length
    Unsigned 8-bit integer
    Cosine-LNS-IP-Address Length
radius.Cosine_VPI_VCI Cosine-VPI-VCI
    Byte array
```

```
radius.Cosine_VPI_VCI.len Length
    Unsigned 8-bit integer
    Cosine-VPI-VCI Length

radius.DHCP_Max_Leases DHCP-Max-Leases
    Unsigned 32-bit integer

radius.DHCP_Max_Leases.len Length
    Unsigned 8-bit integer
    DHCP-Max-Leases Length

radius.Digest_AKA_Auts Digest-AKA-Auts
    String

radius.Digest_AKA_Auts.len Length
    Unsigned 8-bit integer
    Digest-AKA-Auts Length

radius.Digest_Algorithm Digest-Algorithm
    String

radius.Digest_Algorithm.len Length
    Unsigned 8-bit integer
    Digest-Algorithm Length

radius.Digest_Attributes Digest-Attributes
    Byte array

radius.Digest_Attributes.len Length
    Unsigned 8-bit integer
    Digest-Attributes Length

radius.Digest_Auth_Param Digest-Auth-Param
    String

radius.Digest_Auth_Param.len Length
    Unsigned 8-bit integer
    Digest-Auth-Param Length

radius.Digest_CNonce Digest-CNonce
    String

radius.Digest_CNonce.len Length
    Unsigned 8-bit integer
    Digest-CNonce Length

radius.Digest_Domain Digest-Domain
    String

radius.Digest_Domain.len Length
    Unsigned 8-bit integer
    Digest-Domain Length

radius.Digest_Entity_Body_Hash Digest-Entity-Body-Hash
    String

radius.Digest_Entity_Body_Hash.len Length
    Unsigned 8-bit integer
    Digest-Entity-Body-Hash Length

radius.Digest_HA1 Digest-HA1
    String
```

```
radius.Digest_HA1.len Length
    Unsigned 8-bit integer
    Digest-HA1 Length

radius.Digest_Method Digest-Method
    String

radius.Digest_Method.len Length
    Unsigned 8-bit integer
    Digest-Method Length

radius.Digest_Nextnonce Digest-Nextnonce
    String

radius.Digest_Nextnonce.len Length
    Unsigned 8-bit integer
    Digest-Nextnonce Length

radius.Digest_Nonce Digest-Nonce
    String

radius.Digest_Nonce.len Length
    Unsigned 8-bit integer
    Digest-Nonce Length

radius.Digest_Nonce_Count Digest-Nonce-Count
    String

radius.Digest_Nonce_Count.len Length
    Unsigned 8-bit integer
    Digest-Nonce-Count Length

radius.Digest_Opaque Digest-Opaque
    String

radius.Digest_Opaque.len Length
    Unsigned 8-bit integer
    Digest-Opaque Length

radius.Digest_Qop Digest-Qop
    String

radius.Digest_Qop.len Length
    Unsigned 8-bit integer
    Digest-Qop Length

radius.Digest_Realm Digest-Realm
    String

radius.Digest_Realm.len Length
    Unsigned 8-bit integer
    Digest-Realm Length

radius.Digest_Response Digest-Response
    String

radius.Digest_Response.len Length
    Unsigned 8-bit integer
    Digest-Response Length

radius.Digest_Response_Auth Digest-Response-Auth
    String
```



```
radius.Digest_Response_Auth.len  Length
    Unsigned 8-bit integer
    Digest-Response-Auth Length
radius.Digest_Stale  Digest-Stale
    String
radius.Digest_Stale.len  Length
    Unsigned 8-bit integer
    Digest-Stale Length
radius.Digest_URI  Digest-URI
    String
radius.Digest_URI.len  Length
    Unsigned 8-bit integer
    Digest-URI Length
radius.Digest_Username  Digest-Username
    String
radius.Digest_Username.len  Length
    Unsigned 8-bit integer
    Digest-Username Length
radius.EAP_Message  EAP-Message
    Byte array
radius.EAP_Message.len  Length
    Unsigned 8-bit integer
    EAP-Message Length
radius.ERX_Address_Pool_Name  ERX-Address-Pool-Name
    String
radius.ERX_Address_Pool_Name.len  Length
    Unsigned 8-bit integer
    ERX-Address-Pool-Name Length
radius.ERX_Alternate_Cli_Access_Level  ERX-Alternate-Cli-Access-Level
    String
radius.ERX_Alternate_Cli_Access_Level.len  Length
    Unsigned 8-bit integer
    ERX-Alternate-Cli-Access-Level Length
radius.ERX_Alternate_Cli_Vrouter_Name  ERX-Alternate-Cli-Vrouter-Name
    String
radius.ERX_Alternate_Cli_Vrouter_Name.len  Length
    Unsigned 8-bit integer
    ERX-Alternate-Cli-Vrouter-Name Length
radius.ERX_Atm_MBS  ERX-Atm-MBS
    Unsigned 32-bit integer
radius.ERX_Atm_MBS.len  Length
    Unsigned 8-bit integer
    ERX-Atm-MBS Length
radius.ERX_Atm_PCR  ERX-Atm-PCR
    Unsigned 32-bit integer
```

```
radius.ERX_Atm_PCR.len Length
    Unsigned 8-bit integer
    ERX-Atm-PCR Length

radius.ERX_Atm_SCR ERX-Atm-SCR
    Unsigned 32-bit integer

radius.ERX_Atm_SCR.len Length
    Unsigned 8-bit integer
    ERX-Atm-SCR Length

radius.ERX_Atm_Service_Category ERX-Atm-Service-Category
    Unsigned 32-bit integer

radius.ERX_Atm_Service_Category.len Length
    Unsigned 8-bit integer
    ERX-Atm-Service-Category Length

radius.ERX_Bearer_Type ERX-Bearer-Type
    Unsigned 32-bit integer

radius.ERX_Bearer_Type.len Length
    Unsigned 8-bit integer
    ERX-Bearer-Type Length

radius.ERX_Cli_Allow_All_VR_Access ERX-Cli-Allow-All-VR-Access
    Unsigned 32-bit integer

radius.ERX_Cli_Allow_All_VR_Access.len Length
    Unsigned 8-bit integer
    ERX-Cli-Allow-All-VR-Access Length

radius.ERX_Cli_Initial_Access_Level ERX-Cli-Initial-Access-Level
    String

radius.ERX_Cli_Initial_Access_Level.len Length
    Unsigned 8-bit integer
    ERX-Cli-Initial-Access-Level Length

radius.ERX_Dial_Out_Number ERX-Dial-Out-Number
    String

radius.ERX_Dial_Out_Number.len Length
    Unsigned 8-bit integer
    ERX-Dial-Out-Number Length

radius.ERX_Egress_Policy_Name ERX-Egress-Policy-Name
    String

radius.ERX_Egress_Policy_Name.len Length
    Unsigned 8-bit integer
    ERX-Egress-Policy-Name Length

radius.ERX_Egress_Statistics ERX-Egress-Statistics
    String

radius.ERX_Egress_Statistics.len Length
    Unsigned 8-bit integer
    ERX-Egress-Statistics Length

radius.ERX_Framed_Ip_Route_Tag ERX-Framed-Ip-Route-Tag
    String
```

```
radius.ERX_Framed_Ip_Route_Tag.len  Length
    Unsigned 8-bit integer
    ERX-Framed-Ip-Route-Tag Length
radius.ERX_Igmp_Enable  ERX-Igmp-Enable
    Unsigned 32-bit integer
radius.ERX_Igmp_Enable.len  Length
    Unsigned 8-bit integer
    ERX-Igmp-Enable Length
radius.ERX_Ingress_Policy_Name  ERX-Ingress-Policy-Name
    String
radius.ERX_Ingress_Policy_Name.len  Length
    Unsigned 8-bit integer
    ERX-Ingress-Policy-Name Length
radius.ERX_Ingress_Statistics  ERX-Ingress-Statistics
    String
radius.ERX_Ingress_Statistics.len  Length
    Unsigned 8-bit integer
    ERX-Ingress-Statistics Length
radius.ERX_Input_Gigapkts  ERX-Input-Gigapkts
    Unsigned 32-bit integer
radius.ERX_Input_Gigapkts.len  Length
    Unsigned 8-bit integer
    ERX-Input-Gigapkts Length
radius.ERX_IpV6_Local_Interface  ERX-IpV6-Local-Interface
    String
radius.ERX_IpV6_Local_Interface.len  Length
    Unsigned 8-bit integer
    ERX-IpV6-Local-Interface Length
radius.ERX_IpV6_Virtual_Router  ERX-IpV6-Virtual-Router
    String
radius.ERX_IpV6_Virtual_Router.len  Length
    Unsigned 8-bit integer
    ERX-IpV6-Virtual-Router Length
radius.ERX_Ipv6_Primary_Dns  ERX-Ipv6-Primary-Dns
    String
radius.ERX_Ipv6_Primary_Dns.len  Length
    Unsigned 8-bit integer
    ERX-Ipv6-Primary-Dns Length
radius.ERX_Ipv6_Secondary_Dns  ERX-Ipv6-Secondary-Dns
    String
radius.ERX_Ipv6_Secondary_Dns.len  Length
    Unsigned 8-bit integer
    ERX-Ipv6-Secondary-Dns Length
radius.ERX_Local_Loopback_Interface  ERX-Local-Loopback-Interface
    String
```

```
radius.ERX_Local_Loopback_Interface.len  Length
    Unsigned 8-bit integer
    ERX-Local-Loopback-Interface Length
radius.ERX_Maximum_BPS  ERX-Maximum-BPS
    Unsigned 32-bit integer
radius.ERX_Maximum_BPS.len  Length
    Unsigned 8-bit integer
    ERX-Maximum-BPS Length
radius.ERX_Minimum_BPS  ERX-Minimum-BPS
    Unsigned 32-bit integer
radius.ERX_Minimum_BPS.len  Length
    Unsigned 8-bit integer
    ERX-Minimum-BPS Length
radius.ERX_Output_Gigapkts  ERX-Output-Gigapkts
    Unsigned 32-bit integer
radius.ERX_Output_Gigapkts.len  Length
    Unsigned 8-bit integer
    ERX-Output-Gigapkts Length
radius.ERX_PPP_Auth_Protocol  ERX-PPP-Auth-Protocol
    Unsigned 32-bit integer
radius.ERX_PPP_Auth_Protocol.len  Length
    Unsigned 8-bit integer
    ERX-PPP-Auth-Protocol Length
radius.ERX_PPP_Password  ERX-PPP-Password
    String
radius.ERX_PPP_Password.len  Length
    Unsigned 8-bit integer
    ERX-PPP-Password Length
radius.ERX_PPP_Username  ERX-PPP-Username
    String
radius.ERX_PPP_Username.len  Length
    Unsigned 8-bit integer
    ERX-PPP-Username Length
radius.ERX_Pppoe_Description  ERX-Pppoe-Description
    String
radius.ERX_Pppoe_Description.len  Length
    Unsigned 8-bit integer
    ERX-Pppoe-Description Length
radius.ERX_Pppoe_Max_Sessions  ERX-Pppoe-Max-Sessions
    Unsigned 32-bit integer
radius.ERX_Pppoe_Max_Sessions.len  Length
    Unsigned 8-bit integer
    ERX-Pppoe-Max-Sessions Length
radius.ERX_Pppoe_Url  ERX-Pppoe-Url
    String
```

```
radius.ERX_Pppoe_Url.len  Length
    Unsigned 8-bit integer
    ERX-Pppoe-Url Length

radius.ERX_Primary_Dns  ERX-Primary-Dns
    IPv4 address

radius.ERX_Primary_Dns.len  Length
    Unsigned 8-bit integer
    ERX-Primary-Dns Length

radius.ERX_Primary_Wins  ERX-Primary-Wins
    IPv4 address

radius.ERX_Primary_Wins.len  Length
    Unsigned 8-bit integer
    ERX-Primary-Wins Length

radius.ERX_Qos_Profile_Interface_Type  ERX-Qos-Profile-Interface-Type
    Unsigned 32-bit integer

radius.ERX_Qos_Profile_Interface_Type.len  Length
    Unsigned 8-bit integer
    ERX-Qos-Profile-Interface-Type Length

radius.ERX_Qos_Profile_Name  ERX-Qos-Profile-Name
    String

radius.ERX_Qos_Profile_Name.len  Length
    Unsigned 8-bit integer
    ERX-Qos-Profile-Name Length

radius.ERX_Redirect_VR_Name  ERX-Redirect-VR-Name
    String

radius.ERX_Redirect_VR_Name.len  Length
    Unsigned 8-bit integer
    ERX-Redirect-VR-Name Length

radius.ERX_Sa_Validate  ERX-Sa-Validate
    Unsigned 32-bit integer

radius.ERX_Sa_Validate.len  Length
    Unsigned 8-bit integer
    ERX-Sa-Validate Length

radius.ERX_Secondary_Dns  ERX-Secondary-Dns
    IPv4 address

radius.ERX_Secondary_Dns.len  Length
    Unsigned 8-bit integer
    ERX-Secondary-Dns Length

radius.ERX_Secondary_Wins  ERX-Secondary-Wins
    IPv4 address

radius.ERX_Secondary_Wins.len  Length
    Unsigned 8-bit integer
    ERX-Secondary-Wins Length

radius.ERX_Service_Bundle  ERX-Service-Bundle
    String
```

```
radius.ERX_Service_Bundle.len  Length
    Unsigned 8-bit integer
    ERX-Service-Bundle Length

radius.ERX_Tunnel_Interface_Id  ERX-Tunnel-Interface-Id
    String

radius.ERX_Tunnel_Interface_Id.len  Length
    Unsigned 8-bit integer
    ERX-Tunnel-Interface-Id Length

radius.ERX_Tunnel_Maximum_Sessions  ERX-Tunnel-Maximum-Sessions
    Unsigned 32-bit integer

radius.ERX_Tunnel_Maximum_Sessions.len  Length
    Unsigned 8-bit integer
    ERX-Tunnel-Maximum-Sessions Length

radius.ERX_Tunnel_Nas_Port_Method  ERX-Tunnel-Nas-Port-Method
    Unsigned 32-bit integer

radius.ERX_Tunnel_Nas_Port_Method.len  Length
    Unsigned 8-bit integer
    ERX-Tunnel-Nas-Port-Method Length

radius.ERX_Tunnel_Password  ERX-Tunnel-Password
    String

radius.ERX_Tunnel_Password.len  Length
    Unsigned 8-bit integer
    ERX-Tunnel-Password Length

radius.ERX_Tunnel_Tos  ERX-Tunnel-Tos
    Unsigned 32-bit integer

radius.ERX_Tunnel_Tos.len  Length
    Unsigned 8-bit integer
    ERX-Tunnel-Tos Length

radius.ERX_Tunnel_Virtual_Router  ERX-Tunnel-Virtual-Router
    String

radius.ERX_Tunnel_Virtual_Router.len  Length
    Unsigned 8-bit integer
    ERX-Tunnel-Virtual-Router Length

radius.ERX_Virtual_Router_Name  ERX-Virtual-Router-Name
    String

radius.ERX_Virtual_Router_Name.len  Length
    Unsigned 8-bit integer
    ERX-Virtual-Router-Name Length

radius.Error_Cause  Error-Cause
    Unsigned 32-bit integer

radius.Error_Cause.len  Length
    Unsigned 8-bit integer
    Error-Cause Length

radius.Event_Timestamp  Event-Timestamp
    Date/Time stamp
```

```
radius.Event_Stamp.len Length
    Unsigned 8-bit integer
    Event-Stamp Length

radius.Extreme_Netlogin_Only Extreme-Netlogin-Only
    Unsigned 32-bit integer

radius.Extreme_Netlogin_Only.len Length
    Unsigned 8-bit integer
    Extreme-Netlogin-Only Length

radius.Extreme_Netlogin_Url Extreme-Netlogin-Url
    String

radius.Extreme_Netlogin_Url.len Length
    Unsigned 8-bit integer
    Extreme-Netlogin-Url Length

radius.Extreme_Netlogin_Url_Desc Extreme-Netlogin-Url-Desc
    String

radius.Extreme_Netlogin_Url_Desc.len Length
    Unsigned 8-bit integer
    Extreme-Netlogin-Url-Desc Length

radius.Extreme_Netlogin_Vlan Extreme-Netlogin-Vlan
    String

radius.Extreme_Netlogin_Vlan.len Length
    Unsigned 8-bit integer
    Extreme-Netlogin-Vlan Length

radius.Filter_Id Filter-Id
    String

radius.Filter_Id.len Length
    Unsigned 8-bit integer
    Filter-Id Length

radius.Foundry_Command_Exception_Flag Foundry-Command-Exception-Flag
    Unsigned 32-bit integer

radius.Foundry_Command_Exception_Flag.len Length
    Unsigned 8-bit integer
    Foundry-Command-Exception-Flag Length

radius.Foundry_Command_String Foundry-Command-String
    String

radius.Foundry_Command_String.len Length
    Unsigned 8-bit integer
    Foundry-Command-String Length

radius.Foundry_INM_Privilege Foundry-INM-Privilege
    Unsigned 32-bit integer

radius.Foundry_INM_Privilege.len Length
    Unsigned 8-bit integer
    Foundry-INM-Privilege Length

radius.Foundry_Privilege_Level Foundry-Privilege-Level
    Unsigned 32-bit integer
```

```
radius.Foundry_Privilege_Level.len  Length
    Unsigned 8-bit integer
    Foundry-Privilege-Level Length
radius.Framed-IP-Address  Framed-IP-Address
    IPv4 address
radius.Framed-IPX-Network  Framed-IPX-Network
    IPX network or server name
radius.Framed_AppleTalk_Link  Framed-AppleTalk-Link
    Unsigned 32-bit integer
radius.Framed_AppleTalk_Link.len  Length
    Unsigned 8-bit integer
    Framed-AppleTalk-Link Length
radius.Framed_AppleTalk_Network  Framed-AppleTalk-Network
    Unsigned 32-bit integer
radius.Framed_AppleTalk_Network.len  Length
    Unsigned 8-bit integer
    Framed-AppleTalk-Network Length
radius.Framed_AppleTalk_Zone  Framed-AppleTalk-Zone
    String
radius.Framed_AppleTalk_Zone.len  Length
    Unsigned 8-bit integer
    Framed-AppleTalk-Zone Length
radius.Framed_Compression  Framed-Compression
    Unsigned 32-bit integer
radius.Framed_Compression.len  Length
    Unsigned 8-bit integer
    Framed-Compression Length
radius.Framed_IPX_Network  Framed-IPX-Network
    IPv4 address
radius.Framed_IPX_Network.len  Length
    Unsigned 8-bit integer
    Framed-IPX-Network Length
radius.Framed_IP_Address  Framed-IP-Address
    IPv4 address
radius.Framed_IP_Address.len  Length
    Unsigned 8-bit integer
    Framed-IP-Address Length
radius.Framed_IP_Netmask  Framed-IP-Netmask
    IPv4 address
radius.Framed_IP_Netmask.len  Length
    Unsigned 8-bit integer
    Framed-IP-Netmask Length
radius.Framed_IPv6_Pool  Framed-IPv6-Pool
    String
```



```
radius.Framed_IPv6_Pool.len  Length
    Unsigned 8-bit integer
    Framed-IPv6-Pool Length
radius.Framed_IPv6_Prefix  Framed-IPv6-Prefix
    Byte array
radius.Framed_IPv6_Prefix.len  Length
    Unsigned 8-bit integer
    Framed-IPv6-Prefix Length
radius.Framed_IPv6_Route  Framed-IPv6-Route
    String
radius.Framed_IPv6_Route.len  Length
    Unsigned 8-bit integer
    Framed-IPv6-Route Length
radius.Framed_Interface_Id  Framed-Interface-Id
    Byte array
radius.Framed_Interface_Id.len  Length
    Unsigned 8-bit integer
    Framed-Interface-Id Length
radius.Framed_MTU  Framed-MTU
    Unsigned 32-bit integer
radius.Framed_MTU.len  Length
    Unsigned 8-bit integer
    Framed-MTU Length
radius.Framed_Pool  Framed-Pool
    String
radius.Framed_Pool.len  Length
    Unsigned 8-bit integer
    Framed-Pool Length
radius.Framed_Protocol  Framed-Protocol
    Unsigned 32-bit integer
radius.Framed_Protocol.len  Length
    Unsigned 8-bit integer
    Framed-Protocol Length
radius.Framed_Route  Framed-Route
    String
radius.Framed_Route.len  Length
    Unsigned 8-bit integer
    Framed-Route Length
radius.Framed_Routing  Framed-Routing
    Unsigned 32-bit integer
radius.Framed_Routing.len  Length
    Unsigned 8-bit integer
    Framed-Routing Length
radius.FreeRADIUS_Proxied_To  FreeRADIUS-Proxied-To
    IPv4 address
```

```
radius.FreeRADIUS_Proxied_To.len  Length
    Unsigned 8-bit integer
    FreeRADIUS-Proxied-To Length
radius.Gandalf_Around_The_Corner  Gandalf-Around-The-Corner
    Unsigned 32-bit integer
radius.Gandalf_Around_The_Corner.len  Length
    Unsigned 8-bit integer
    Gandalf-Around-The-Corner Length
radius.Gandalf_Authentication_String  Gandalf-Authentication-String
    String
radius.Gandalf_Authentication_String.len  Length
    Unsigned 8-bit integer
    Gandalf-Authentication-String Length
radius.Gandalf_Calling_Line_ID_1  Gandalf-Calling-Line-ID-1
    String
radius.Gandalf_Calling_Line_ID_1.len  Length
    Unsigned 8-bit integer
    Gandalf-Calling-Line-ID-1 Length
radius.Gandalf_Calling_Line_ID_2  Gandalf-Calling-Line-ID-2
    String
radius.Gandalf_Calling_Line_ID_2.len  Length
    Unsigned 8-bit integer
    Gandalf-Calling-Line-ID-2 Length
radius.Gandalf_Channel_Group_Name_1  Gandalf-Channel-Group-Name-1
    String
radius.Gandalf_Channel_Group_Name_1.len  Length
    Unsigned 8-bit integer
    Gandalf-Channel-Group-Name-1 Length
radius.Gandalf_Channel_Group_Name_2  Gandalf-Channel-Group-Name-2
    String
radius.Gandalf_Channel_Group_Name_2.len  Length
    Unsigned 8-bit integer
    Gandalf-Channel-Group-Name-2 Length
radius.Gandalf_Compression_Status  Gandalf-Compression-Status
    Unsigned 32-bit integer
radius.Gandalf_Compression_Status.len  Length
    Unsigned 8-bit integer
    Gandalf-Compression-Status Length
radius.Gandalf_Dial_Prefix_Name_1  Gandalf-Dial-Prefix-Name-1
    String
radius.Gandalf_Dial_Prefix_Name_1.len  Length
    Unsigned 8-bit integer
    Gandalf-Dial-Prefix-Name-1 Length
radius.Gandalf_Dial_Prefix_Name_2  Gandalf-Dial-Prefix-Name-2
    String
```

```
radius.Gandalf_Dial_Prefix_Name_2.len  Length
    Unsigned 8-bit integer
    Gandalf-Dial-Prefix-Name-2 Length
radius.Gandalf_Fwd_Broadcast_In  Gandalf-Fwd-Broadcast-In
    Unsigned 32-bit integer
radius.Gandalf_Fwd_Broadcast_In.len  Length
    Unsigned 8-bit integer
    Gandalf-Fwd-Broadcast-In Length
radius.Gandalf_Fwd_Broadcast_Out  Gandalf-Fwd-Broadcast-Out
    Unsigned 32-bit integer
radius.Gandalf_Fwd_Broadcast_Out.len  Length
    Unsigned 8-bit integer
    Gandalf-Fwd-Broadcast-Out Length
radius.Gandalf_Fwd_Multicast_In  Gandalf-Fwd-Multicast-In
    Unsigned 32-bit integer
radius.Gandalf_Fwd_Multicast_In.len  Length
    Unsigned 8-bit integer
    Gandalf-Fwd-Multicast-In Length
radius.Gandalf_Fwd_Multicast_Out  Gandalf-Fwd-Multicast-Out
    Unsigned 32-bit integer
radius.Gandalf_Fwd_Multicast_Out.len  Length
    Unsigned 8-bit integer
    Gandalf-Fwd-Multicast-Out Length
radius.Gandalf_Fwd_Unicast_In  Gandalf-Fwd-Unicast-In
    Unsigned 32-bit integer
radius.Gandalf_Fwd_Unicast_In.len  Length
    Unsigned 8-bit integer
    Gandalf-Fwd-Unicast-In Length
radius.Gandalf_Fwd_Unicast_Out  Gandalf-Fwd-Unicast-Out
    Unsigned 32-bit integer
radius.Gandalf_Fwd_Unicast_Out.len  Length
    Unsigned 8-bit integer
    Gandalf-Fwd-Unicast-Out Length
radius.Gandalf_Hunt_Group  Gandalf-Hunt-Group
    String
radius.Gandalf_Hunt_Group.len  Length
    Unsigned 8-bit integer
    Gandalf-Hunt-Group Length
radius.Gandalf_IPX_Spoofing_State  Gandalf-IPX-Spoofing-State
    Unsigned 32-bit integer
radius.Gandalf_IPX_Spoofing_State.len  Length
    Unsigned 8-bit integer
    Gandalf-IPX-Spoofing-State Length
radius.Gandalf_IPX_Watchdog_Spoof  Gandalf-IPX-Watchdog-Spoof
    Unsigned 32-bit integer
```

```
radius.Gandalf_IPX_Watchdog_Spoof.len  Length
    Unsigned 8-bit integer
    Gandalf-IPX-Watchdog-Spoof Length
radius.Gandalf_Min_Outgoing_Bearer  Gandalf-Min-Outgoing-Bearer
    Unsigned 32-bit integer
radius.Gandalf_Min_Outgoing_Bearer.len  Length
    Unsigned 8-bit integer
    Gandalf-Min-Outgoing-Bearer Length
radius.Gandalf_Modem_Mode  Gandalf-Modem-Mode
    Unsigned 32-bit integer
radius.Gandalf_Modem_Mode.len  Length
    Unsigned 8-bit integer
    Gandalf-Modem-Mode Length
radius.Gandalf_Modem_Required_1  Gandalf-Modem-Required-1
    Unsigned 32-bit integer
radius.Gandalf_Modem_Required_1.len  Length
    Unsigned 8-bit integer
    Gandalf-Modem-Required-1 Length
radius.Gandalf_Modem_Required_2  Gandalf-Modem-Required-2
    Unsigned 32-bit integer
radius.Gandalf_Modem_Required_2.len  Length
    Unsigned 8-bit integer
    Gandalf-Modem-Required-2 Length
radius.Gandalf_Operational_Modes  Gandalf-Operational-Modes
    Unsigned 32-bit integer
radius.Gandalf_Operational_Modes.len  Length
    Unsigned 8-bit integer
    Gandalf-Operational-Modes Length
radius.Gandalf_PPP_Authentication  Gandalf-PPP-Authentication
    Unsigned 32-bit integer
radius.Gandalf_PPP_Authentication.len  Length
    Unsigned 8-bit integer
    Gandalf-PPP-Authentication Length
radius.Gandalf_PPP_NCP_Type  Gandalf-PPP-NCP-Type
    Unsigned 32-bit integer
radius.Gandalf_PPP_NCP_Type.len  Length
    Unsigned 8-bit integer
    Gandalf-PPP-NCP-Type Length
radius.Gandalf_Phone_Number_1  Gandalf-Phone-Number-1
    String
radius.Gandalf_Phone_Number_1.len  Length
    Unsigned 8-bit integer
    Gandalf-Phone-Number-1 Length
radius.Gandalf_Phone_Number_2  Gandalf-Phone-Number-2
    String
```

```
radius.Gandalf_Phone_Number_2.len  Length
    Unsigned 8-bit integer
    Gandalf-Phone-Number-2 Length

radius.Gandalf_Remote_LAN_Name  Gandalf-Remote-LAN-Name
    String

radius.Gandalf_Remote_LAN_Name.len  Length
    Unsigned 8-bit integer
    Gandalf-Remote-LAN-Name Length

radius.Gandalf_SAP_Group_Name_1  Gandalf-SAP-Group-Name-1
    String

radius.Gandalf_SAP_Group_Name_1.len  Length
    Unsigned 8-bit integer
    Gandalf-SAP-Group-Name-1 Length

radius.Gandalf_SAP_Group_Name_2  Gandalf-SAP-Group-Name-2
    String

radius.Gandalf_SAP_Group_Name_2.len  Length
    Unsigned 8-bit integer
    Gandalf-SAP-Group-Name-2 Length

radius.Gandalf_SAP_Group_Name_3  Gandalf-SAP-Group-Name-3
    String

radius.Gandalf_SAP_Group_Name_3.len  Length
    Unsigned 8-bit integer
    Gandalf-SAP-Group-Name-3 Length

radius.Gandalf_SAP_Group_Name_4  Gandalf-SAP-Group-Name-4
    String

radius.Gandalf_SAP_Group_Name_4.len  Length
    Unsigned 8-bit integer
    Gandalf-SAP-Group-Name-4 Length

radius.Gandalf_SAP_Group_Name_5  Gandalf-SAP-Group-Name-5
    String

radius.Gandalf_SAP_Group_Name_5.len  Length
    Unsigned 8-bit integer
    Gandalf-SAP-Group-Name-5 Length

radius.Garderos_Location_Name  Garderos-Location-Name
    String

radius.Garderos_Location_Name.len  Length
    Unsigned 8-bit integer
    Garderos-Location-Name Length

radius.Garderos_Service_Name  Garderos-Service-Name
    String

radius.Garderos_Service_Name.len  Length
    Unsigned 8-bit integer
    Garderos-Service-Name Length

radius.IP_TOS_Field  IP-TOS-Field
    Unsigned 32-bit integer
```

```
radius.IP_TOS_Field.len Length
    Unsigned 8-bit integer
    IP-TOS-Field Length

radius.ITK_Acct_Serv_IP ITK-Acct-Serv-IP
    IPv4 address

radius.ITK_Acct_Serv_IP.len Length
    Unsigned 8-bit integer
    ITK-Acct-Serv-IP Length

radius.ITK_Acct_Serv_Prot ITK-Acct-Serv-Prot
    Unsigned 32-bit integer

radius.ITK_Acct_Serv_Prot.len Length
    Unsigned 8-bit integer
    ITK-Acct-Serv-Prot Length

radius.ITK_Auth_Req_Type ITK-Auth-Req-Type
    String

radius.ITK_Auth_Req_Type.len Length
    Unsigned 8-bit integer
    ITK-Auth-Req-Type Length

radius.ITK_Auth_Serv_IP ITK-Auth-Serv-IP
    IPv4 address

radius.ITK_Auth_Serv_IP.len Length
    Unsigned 8-bit integer
    ITK-Auth-Serv-IP Length

radius.ITK_Auth_Serv_Prot ITK-Auth-Serv-Prot
    Unsigned 32-bit integer

radius.ITK_Auth_Serv_Prot.len Length
    Unsigned 8-bit integer
    ITK-Auth-Serv-Prot Length

radius.ITK_Banner ITK-Banner
    String

radius.ITK_Banner.len Length
    Unsigned 8-bit integer
    ITK-Banner Length

radius.ITK_Channel_Binding ITK-Channel-Binding
    Unsigned 32-bit integer

radius.ITK_Channel_Binding.len Length
    Unsigned 8-bit integer
    ITK-Channel-Binding Length

radius.ITK_DDI ITK-DDI
    String

radius.ITK_DDI.len Length
    Unsigned 8-bit integer
    ITK-DDI Length

radius.ITK_Dest_No ITK-Dest-No
    String
```

```
radius.ITK_Dest_No.len Length
    Unsigned 8-bit integer
    ITK-Dest-No Length

radius.ITK_Dialout_Type ITK-Dialout-Type
    Unsigned 32-bit integer

radius.ITK_Dialout_Type.len Length
    Unsigned 8-bit integer
    ITK-Dialout-Type Length

radius.ITK_Filter_Rule ITK-Filter-Rule
    String

radius.ITK_Filter_Rule.len Length
    Unsigned 8-bit integer
    ITK-Filter-Rule Length

radius.ITK_Ftp_Auth_IP ITK-Ftp-Auth-IP
    IPv4 address

radius.ITK_Ftp_Auth_IP.len Length
    Unsigned 8-bit integer
    ITK-Ftp-Auth-IP Length

radius.ITK_IP_Pool ITK-IP-Pool
    Unsigned 32-bit integer

radius.ITK_IP_Pool.len Length
    Unsigned 8-bit integer
    ITK-IP-Pool Length

radius.ITK_ISDN_Prot ITK-ISDN-Prot
    Unsigned 32-bit integer

radius.ITK_ISDN_Prot.len Length
    Unsigned 8-bit integer
    ITK-ISDN-Prot Length

radius.ITK_Modem_Init_String ITK-Modem-Init-String
    String

radius.ITK_Modem_Init_String.len Length
    Unsigned 8-bit integer
    ITK-Modem-Init-String Length

radius.ITK_Modem_Pool_Id ITK-Modem-Pool-Id
    Unsigned 32-bit integer

radius.ITK_Modem_Pool_Id.len Length
    Unsigned 8-bit integer
    ITK-Modem-Pool-Id Length

radius.ITK_NAS_Name ITK-NAS-Name
    String

radius.ITK_NAS_Name.len Length
    Unsigned 8-bit integer
    ITK-NAS-Name Length

radius.ITK_PPP_Auth_Type ITK-PPP-Auth-Type
    Unsigned 32-bit integer
```

```
radius.ITK_PPP_Auth_Type.len  Length
    Unsigned 8-bit integer
    ITK-PPP-Auth-Type Length

radius.ITK_PPP_Client_Server_Mode  ITK-PPP-Client-Server-Mode
    Unsigned 32-bit integer

radius.ITK_PPP_Client_Server_Mode.len  Length
    Unsigned 8-bit integer
    ITK-PPP-Client-Server-Mode Length

radius.ITK_PPP_Compression_Prot  ITK-PPP-Compression-Prot
    String

radius.ITK_PPP_Compression_Prot.len  Length
    Unsigned 8-bit integer
    ITK-PPP-Compression-Prot Length

radius.ITK_Password_Prompt  ITK-Password-Prompt
    String

radius.ITK_Password_Prompt.len  Length
    Unsigned 8-bit integer
    ITK-Password-Prompt Length

radius.ITK_Prompt  ITK-Prompt
    String

radius.ITK_Prompt.len  Length
    Unsigned 8-bit integer
    ITK-Prompt Length

radius.ITK_Provider_Id  ITK-Provider-Id
    Unsigned 32-bit integer

radius.ITK_Provider_Id.len  Length
    Unsigned 8-bit integer
    ITK-Provider-Id Length

radius.ITK_Start_Delay  ITK-Start-Delay
    Unsigned 32-bit integer

radius.ITK_Start_Delay.len  Length
    Unsigned 8-bit integer
    ITK-Start-Delay Length

radius.ITK_Tunnel_IP  ITK-Tunnel-IP
    IPv4 address

radius.ITK_Tunnel_IP.len  Length
    Unsigned 8-bit integer
    ITK-Tunnel-IP Length

radius.ITK_Tunnel_Prot  ITK-Tunnel-Prot
    Unsigned 32-bit integer

radius.ITK_Tunnel_Prot.len  Length
    Unsigned 8-bit integer
    ITK-Tunnel-Prot Length

radius.ITK_Usergroup  ITK-Usergroup
    Unsigned 32-bit integer
```



```
radius.ITK_Usergroup.len  Length
    Unsigned 8-bit integer
    ITK-Usergroup Length

radius.ITK_Username  ITK-Username
    String

radius.ITK_Username.len  Length
    Unsigned 8-bit integer
    ITK-Username Length

radius.ITK_Username_Prompt  ITK-Username-Prompt
    String

radius.ITK_Username_Prompt.len  Length
    Unsigned 8-bit integer
    ITK-Username-Prompt Length

radius.ITK_Users_Default_Entry  ITK-Users-Default-Entry
    String

radius.ITK_Users_Default_Entry.len  Length
    Unsigned 8-bit integer
    ITK-Users-Default-Entry Length

radius.ITK_Users_Default_Pw  ITK-Users-Default-Pw
    String

radius.ITK_Users_Default_Pw.len  Length
    Unsigned 8-bit integer
    ITK-Users-Default-Pw Length

radius.ITK_Welcome_Message  ITK-Welcome-Message
    String

radius.ITK_Welcome_Message.len  Length
    Unsigned 8-bit integer
    ITK-Welcome-Message Length

radius.Idle_Timeout  Idle-Timeout
    Unsigned 32-bit integer

radius.Idle_Timeout.len  Length
    Unsigned 8-bit integer
    Idle-Timeout Length

radius.Ip_Address_Pool_Name  Ip-Address-Pool-Name
    String

radius.Ip_Address_Pool_Name.len  Length
    Unsigned 8-bit integer
    Ip-Address-Pool-Name Length

radius.Ip_Host_Addr  Ip-Host-Addr
    String

radius.Ip_Host_Addr.len  Length
    Unsigned 8-bit integer
    Ip-Host-Addr Length

radius.Juniper_Allow_Commands  Juniper-Allow-Commands
    String
```

```
radius.Juniper_Allow_Commands.len  Length
    Unsigned 8-bit integer
    Juniper-Allow-Commands Length
radius.Juniper_Allow_Configuration  Juniper-Allow-Configuration
    String
radius.Juniper_Allow_Configuration.len  Length
    Unsigned 8-bit integer
    Juniper-Allow-Configuration Length
radius.Juniper_Deny_Commands  Juniper-Deny-Commands
    String
radius.Juniper_Deny_Commands.len  Length
    Unsigned 8-bit integer
    Juniper-Deny-Commands Length
radius.Juniper_Deny_Configuration  Juniper-Deny-Configuration
    String
radius.Juniper_Deny_Configuration.len  Length
    Unsigned 8-bit integer
    Juniper-Deny-Configuration Length
radius.Juniper_Local_User_Name  Juniper-Local-User-Name
    String
radius.Juniper_Local_User_Name.len  Length
    Unsigned 8-bit integer
    Juniper-Local-User-Name Length
radius.KarlNet_TurboCell_Name  KarlNet-TurboCell-Name
    String
radius.KarlNet_TurboCell_Name.len  Length
    Unsigned 8-bit integer
    KarlNet-TurboCell-Name Length
radius.KarlNet_TurboCell_OpMode  KarlNet-TurboCell-OpMode
    Unsigned 32-bit integer
radius.KarlNet_TurboCell_OpMode.len  Length
    Unsigned 8-bit integer
    KarlNet-TurboCell-OpMode Length
radius.KarlNet_TurboCell_OpState  KarlNet-TurboCell-OpState
    Unsigned 32-bit integer
radius.KarlNet_TurboCell_OpState.len  Length
    Unsigned 8-bit integer
    KarlNet-TurboCell-OpState Length
radius.KarlNet_TurboCell_TxRate  KarlNet-TurboCell-TxRate
    Unsigned 32-bit integer
radius.KarlNet_TurboCell_TxRate.len  Length
    Unsigned 8-bit integer
    KarlNet-TurboCell-TxRate Length
radius.LAC_Port  LAC-Port
    Unsigned 32-bit integer
```

```
radius.LAC_Port.len Length
    Unsigned 8-bit integer
    LAC-Port Length

radius.LAC_Port_Type LAC-Port-Type
    Unsigned 32-bit integer

radius.LAC_Port_Type.len Length
    Unsigned 8-bit integer
    LAC-Port-Type Length

radius.LAC_Real_Port LAC-Real-Port
    Unsigned 32-bit integer

radius.LAC_Real_Port.len Length
    Unsigned 8-bit integer
    LAC-Real-Port Length

radius.LAC_Real_Port_Type LAC-Real-Port-Type
    Unsigned 32-bit integer

radius.LAC_Real_Port_Type.len Length
    Unsigned 8-bit integer
    LAC-Real-Port-Type Length

radius.LE_Admin_Group LE-Admin-Group
    String

radius.LE_Admin_Group.len Length
    Unsigned 8-bit integer
    LE-Admin-Group Length

radius.LE_Advice_of_Charge LE-Advice-of-Charge
    String

radius.LE_Advice_of_Charge.len Length
    Unsigned 8-bit integer
    LE-Advice-of-Charge Length

radius.LE_Connect_Detail LE-Connect-Detail
    String

radius.LE_Connect_Detail.len Length
    Unsigned 8-bit integer
    LE-Connect-Detail Length

radius.LE_IPSec_Active_Profile LE-IPSec-Active-Profile
    String

radius.LE_IPSec_Active_Profile.len Length
    Unsigned 8-bit integer
    LE-IPSec-Active-Profile Length

radius.LE_IPSec_Deny_Action LE-IPSec-Deny-Action
    Unsigned 32-bit integer

radius.LE_IPSec_Deny_Action.len Length
    Unsigned 8-bit integer
    LE-IPSec-Deny-Action Length

radius.LE_IPSec_Log_Options LE-IPSec-Log-Options
    Unsigned 32-bit integer
```

```
radius.LE_IPSec_Log_Options.len  Length
    Unsigned 8-bit integer
    LE-IPSec-Log-Options Length
radius.LE_IPSec_Outsource_Profile  LE-IPSec-Outsource-Profile
    String
radius.LE_IPSec_Outsource_Profile.len  Length
    Unsigned 8-bit integer
    LE-IPSec-Outsource-Profile Length
radius.LE_IPSec_Passive_Profile  LE-IPSec-Passive-Profile
    String
radius.LE_IPSec_Passive_Profile.len  Length
    Unsigned 8-bit integer
    LE-IPSec-Passive-Profile Length
radius.LE_IP_Gateway  LE-IP-Gateway
    IPv4 address
radius.LE_IP_Gateway.len  Length
    Unsigned 8-bit integer
    LE-IP-Gateway Length
radius.LE_IP_Pool  LE-IP-Pool
    String
radius.LE_IP_Pool.len  Length
    Unsigned 8-bit integer
    LE-IP-Pool Length
radius.LE_Modem_Info  LE-Modem-Info
    String
radius.LE_Modem_Info.len  Length
    Unsigned 8-bit integer
    LE-Modem-Info Length
radius.LE_Multicast_Client  LE-Multicast-Client
    Unsigned 32-bit integer
radius.LE_Multicast_Client.len  Length
    Unsigned 8-bit integer
    LE-Multicast-Client Length
radius.LE_NAT_Inmap  LE-NAT-Inmap
    String
radius.LE_NAT_Inmap.len  Length
    Unsigned 8-bit integer
    LE-NAT-Inmap Length
radius.LE_NAT_Log_Options  LE-NAT-Log-Options
    Unsigned 32-bit integer
radius.LE_NAT_Log_Options.len  Length
    Unsigned 8-bit integer
    LE-NAT-Log-Options Length
radius.LE_NAT_Other_Session_Timeout  LE-NAT-Other-Session-Timeout
    Unsigned 32-bit integer
```

```
radius.LE_NAT_Other_Session_Timeout.len  Length
    Unsigned 8-bit integer
    LE-NAT-Other-Session-Timeout Length

radius.LE_NAT_Outmap  LE-NAT-Outmap
    String

radius.LE_NAT_Outmap.len  Length
    Unsigned 8-bit integer
    LE-NAT-Outmap Length

radius.LE_NAT_Outsource_Inmap  LE-NAT-Outsource-Inmap
    String

radius.LE_NAT_Outsource_Inmap.len  Length
    Unsigned 8-bit integer
    LE-NAT-Outsource-Inmap Length

radius.LE_NAT_Outsource_Outmap  LE-NAT-Outsource-Outmap
    String

radius.LE_NAT_Outsource_Outmap.len  Length
    Unsigned 8-bit integer
    LE-NAT-Outsource-Outmap Length

radius.LE_NAT_Sess_Dir_Fail_Action  LE-NAT-Sess-Dir-Fail-Action
    Unsigned 32-bit integer

radius.LE_NAT_Sess_Dir_Fail_Action.len  Length
    Unsigned 8-bit integer
    LE-NAT-Sess-Dir-Fail-Action Length

radius.LE_NAT_TCP_Session_Timeout  LE-NAT-TCP-Session-Timeout
    Unsigned 32-bit integer

radius.LE_NAT_TCP_Session_Timeout.len  Length
    Unsigned 8-bit integer
    LE-NAT-TCP-Session-Timeout Length

radius.LE_Terminate_Detail  LE-Terminate-Detail
    String

radius.LE_Terminate_Detail.len  Length
    Unsigned 8-bit integer
    LE-Terminate-Detail Length

radius.Local_Web_Acct_Duration  Local-Web-Acct-Duration
    Unsigned 32-bit integer

radius.Local_Web_Acct_Duration.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Duration Length

radius.Local_Web_Acct_Interim_Rx_Bytes  Local-Web-Acct-Interim-Rx-Bytes
    Unsigned 32-bit integer

radius.Local_Web_Acct_Interim_Rx_Bytes.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Interim-Rx-Bytes Length

radius.Local_Web_Acct_Interim_Rx_Gigawords  Local-Web-Acct-Interim-Rx-Gigawords
    Unsigned 32-bit integer
```

```
radius.Local_Web_Acct_Interim_Rx_Gigawords.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Interim-Rx-Gigawords Length
radius.Local_Web_Acct_Interim_Rx_Mgmt  Local-Web-Acct-Interim-Rx-Mgmt
    Unsigned 32-bit integer
radius.Local_Web_Acct_Interim_Rx_Mgmt.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Interim-Rx-Mgmt Length
radius.Local_Web_Acct_Interim_Tx_Bytes  Local-Web-Acct-Interim-Tx-Bytes
    Unsigned 32-bit integer
radius.Local_Web_Acct_Interim_Tx_Bytes.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Interim-Tx-Bytes Length
radius.Local_Web_Acct_Interim_Tx_Gigawords  Local-Web-Acct-Interim-Tx-Gigawords
    Unsigned 32-bit integer
radius.Local_Web_Acct_Interim_Tx_Gigawords.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Interim-Tx-Gigawords Length
radius.Local_Web_Acct_Interim_Tx_Mgmt  Local-Web-Acct-Interim-Tx-Mgmt
    Unsigned 32-bit integer
radius.Local_Web_Acct_Interim_Tx_Mgmt.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Interim-Tx-Mgmt Length
radius.Local_Web_Acct_Rx_Mgmt  Local-Web-Acct-Rx-Mgmt
    Unsigned 32-bit integer
radius.Local_Web_Acct_Rx_Mgmt.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Rx-Mgmt Length
radius.Local_Web_Acct_Time  Local-Web-Acct-Time
    Unsigned 32-bit integer
radius.Local_Web_Acct_Time.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Time Length
radius.Local_Web_Acct_Tx_Mgmt  Local-Web-Acct-Tx-Mgmt
    Unsigned 32-bit integer
radius.Local_Web_Acct_Tx_Mgmt.len  Length
    Unsigned 8-bit integer
    Local-Web-Acct-Tx-Mgmt Length
radius.Local_Web_Border_Router  Local-Web-Border-Router
    String
radius.Local_Web_Border_Router.len  Length
    Unsigned 8-bit integer
    Local-Web-Border-Router Length
radius.Local_Web_Client_Ip  Local-Web-Client-Ip
    String
```

```
radius.Local_Web_Client_Ip.len  Length
    Unsigned 8-bit integer
    Local-Web-Client-Ip Length

radius.Local_Web_Reauth_Counter  Local-Web-Reauth-Counter
    Unsigned 32-bit integer

radius.Local_Web_Reauth_Counter.len  Length
    Unsigned 8-bit integer
    Local-Web-Reauth-Counter Length

radius.Local_Web_Rx_Limit  Local-Web-Rx-Limit
    Unsigned 32-bit integer

radius.Local_Web_Rx_Limit.len  Length
    Unsigned 8-bit integer
    Local-Web-Rx-Limit Length

radius.Local_Web_Tx_Limit  Local-Web-Tx-Limit
    Unsigned 32-bit integer

radius.Local_Web_Tx_Limit.len  Length
    Unsigned 8-bit integer
    Local-Web-Tx-Limit Length

radius.Login-IP-Host  Login-IP-Host
    IPv4 address

radius.Login_IP_Host  Login-IP-Host
    IPv4 address

radius.Login_IP_Host.len  Length
    Unsigned 8-bit integer
    Login-IP-Host Length

radius.Login_IPv6_Host  Login-IPv6-Host
    IPv6 address

radius.Login_IPv6_Host.len  Length
    Unsigned 8-bit integer
    Login-IPv6-Host Length

radius.Login_LAT_Group  Login-LAT-Group
    Byte array

radius.Login_LAT_Group.len  Length
    Unsigned 8-bit integer
    Login-LAT-Group Length

radius.Login_LAT_Node  Login-LAT-Node
    String

radius.Login_LAT_Node.len  Length
    Unsigned 8-bit integer
    Login-LAT-Node Length

radius.Login_LAT_Port  Login-LAT-Port
    Unsigned 32-bit integer

radius.Login_LAT_Port.len  Length
    Unsigned 8-bit integer
    Login-LAT-Port Length
```

```
radius.Login_LAT_Service  Login-LAT-Service
    String
radius.Login_LAT_Service.len  Length
    Unsigned 8-bit integer
    Login-LAT-Service Length
radius.Login_Service  Login-Service
    Unsigned 32-bit integer
radius.Login_Service.len  Length
    Unsigned 8-bit integer
    Login-Service Length
radius.Login_TCP_Port  Login-TCP-Port
    Unsigned 32-bit integer
radius.Login_TCP_Port.len  Length
    Unsigned 8-bit integer
    Login-TCP-Port Length
radius.MAC_Address  MAC-Address
    String
radius.MAC_Address.len  Length
    Unsigned 8-bit integer
    MAC-Address Length
radius.MS_ARAP_PW_Change_Reason  MS-ARAP-PW-Change-Reason
    Unsigned 32-bit integer
radius.MS_ARAP_PW_Change_Reason.len  Length
    Unsigned 8-bit integer
    MS-ARAP-PW-Change-Reason Length
radius.MS_Acct_Auth_Type  MS-Acct-Auth-Type
    Unsigned 32-bit integer
radius.MS_Acct_Auth_Type.len  Length
    Unsigned 8-bit integer
    MS-Acct-Auth-Type Length
radius.MS_Acct_EAP_Type  MS-Acct-EAP-Type
    Unsigned 32-bit integer
radius.MS_Acct_EAP_Type.len  Length
    Unsigned 8-bit integer
    MS-Acct-EAP-Type Length
radius.MS_BAP_Usage  MS-BAP-Usage
    Unsigned 32-bit integer
radius.MS_BAP_Usage.len  Length
    Unsigned 8-bit integer
    MS-BAP-Usage Length
radius.MS_CHAP2_CPW  MS-CHAP2-CPW
    Byte array
radius.MS_CHAP2_CPW.len  Length
    Unsigned 8-bit integer
    MS-CHAP2-CPW Length
```



```
radius.MS_CHAP2_Response  MS-CHAP2-Response
    Byte array
radius.MS_CHAP2_Response.len  Length
    Unsigned 8-bit integer
    MS-CHAP2-Response Length
radius.MS_CHAP2_Success  MS-CHAP2-Success
    Byte array
radius.MS_CHAP2_Success.len  Length
    Unsigned 8-bit integer
    MS-CHAP2-Success Length
radius.MS_CHAP_CPW_1  MS-CHAP-CPW-1
    Byte array
radius.MS_CHAP_CPW_1.len  Length
    Unsigned 8-bit integer
    MS-CHAP-CPW-1 Length
radius.MS_CHAP_CPW_2  MS-CHAP-CPW-2
    Byte array
radius.MS_CHAP_CPW_2.len  Length
    Unsigned 8-bit integer
    MS-CHAP-CPW-2 Length
radius.MS_CHAP_Challenge  MS-CHAP-Challenge
    Byte array
radius.MS_CHAP_Challenge.len  Length
    Unsigned 8-bit integer
    MS-CHAP-Challenge Length
radius.MS_CHAP_Domain  MS-CHAP-Domain
    String
radius.MS_CHAP_Domain.len  Length
    Unsigned 8-bit integer
    MS-CHAP-Domain Length
radius.MS_CHAP_Error  MS-CHAP-Error
    String
radius.MS_CHAP_Error.len  Length
    Unsigned 8-bit integer
    MS-CHAP-Error Length
radius.MS_CHAP_LM_Enc_PW  MS-CHAP-LM-Enc-PW
    Byte array
radius.MS_CHAP_LM_Enc_PW.len  Length
    Unsigned 8-bit integer
    MS-CHAP-LM-Enc-PW Length
radius.MS_CHAP_MPPE_Keys  MS-CHAP-MPPE-Keys
    Byte array
radius.MS_CHAP_MPPE_Keys.len  Length
    Unsigned 8-bit integer
    MS-CHAP-MPPE-Keys Length
```

```
radius.MS_CHAP_NT_Enc_PW  MS-CHAP-NT-Enc-PW
    Byte array
radius.MS_CHAP_NT_Enc_PW.len  Length
    Unsigned 8-bit integer
    MS-CHAP-NT-Enc-PW Length
radius.MS_CHAP_Response  MS-CHAP-Response
    Byte array
radius.MS_CHAP_Response.len  Length
    Unsigned 8-bit integer
    MS-CHAP-Response Length
radius.MS_Filter  MS-Filter
    Byte array
radius.MS_Filter.len  Length
    Unsigned 8-bit integer
    MS-Filter Length
radius.MS_Link_Drop_Time_Limit  MS-Link-Drop-Time-Limit
    Unsigned 32-bit integer
radius.MS_Link_Drop_Time_Limit.len  Length
    Unsigned 8-bit integer
    MS-Link-Drop-Time-Limit Length
radius.MS_Link_Utilization_Threshold  MS-Link-Utilization-Threshold
    Unsigned 32-bit integer
radius.MS_Link_Utilization_Threshold.len  Length
    Unsigned 8-bit integer
    MS-Link-Utilization-Threshold Length
radius.MS_MPPE_Encryption_Policy  MS-MPPE-Encryption-Policy
    Unsigned 32-bit integer
radius.MS_MPPE_Encryption_Policy.len  Length
    Unsigned 8-bit integer
    MS-MPPE-Encryption-Policy Length
radius.MS_MPPE_Encryption_Types  MS-MPPE-Encryption-Types
    Unsigned 32-bit integer
radius.MS_MPPE_Encryption_Types.len  Length
    Unsigned 8-bit integer
    MS-MPPE-Encryption-Types Length
radius.MS_MPPE_Recv_Key  MS-MPPE-Recv-Key
    Byte array
radius.MS_MPPE_Recv_Key.len  Length
    Unsigned 8-bit integer
    MS-MPPE-Recv-Key Length
radius.MS_MPPE_Send_Key  MS-MPPE-Send-Key
    Byte array
radius.MS_MPPE_Send_Key.len  Length
    Unsigned 8-bit integer
    MS-MPPE-Send-Key Length
```

```
radius.MS_New_ARAP_Password  MS-New-ARAP-Password
    Byte array
radius.MS_New_ARAP_Password.len  Length
    Unsigned 8-bit integer
    MS-New-ARAP-Password Length
radius.MS_Old_ARAP_Password  MS-Old-ARAP-Password
    Byte array
radius.MS_Old_ARAP_Password.len  Length
    Unsigned 8-bit integer
    MS-Old-ARAP-Password Length
radius.MS_Primary_DNS_Server  MS-Primary-DNS-Server
    IPv4 address
radius.MS_Primary_DNS_Server.len  Length
    Unsigned 8-bit integer
    MS-Primary-DNS-Server Length
radius.MS_Primary_NBNS_Server  MS-Primary-NBNS-Server
    IPv4 address
radius.MS_Primary_NBNS_Server.len  Length
    Unsigned 8-bit integer
    MS-Primary-NBNS-Server Length
radius.MS_RAS_Vendor  MS-RAS-Vendor
    Unsigned 32-bit integer
radius.MS_RAS_Vendor.len  Length
    Unsigned 8-bit integer
    MS-RAS-Vendor Length
radius.MS_RAS_Version  MS-RAS-Version
    String
radius.MS_RAS_Version.len  Length
    Unsigned 8-bit integer
    MS-RAS-Version Length
radius.MS_Secondary_DNS_Server  MS-Secondary-DNS-Server
    IPv4 address
radius.MS_Secondary_DNS_Server.len  Length
    Unsigned 8-bit integer
    MS-Secondary-DNS-Server Length
radius.MS_Secondary_NBNS_Server  MS-Secondary-NBNS-Server
    IPv4 address
radius.MS_Secondary_NBNS_Server.len  Length
    Unsigned 8-bit integer
    MS-Secondary-NBNS-Server Length
radius.Major_Protocol_Version  Major-Protocol-Version
    Unsigned 32-bit integer
radius.Major_Protocol_Version.len  Length
    Unsigned 8-bit integer
    Major-Protocol-Version Length
```

```
radius.Mcast_MaxGroups  Mcast-MaxGroups
    Unsigned 32-bit integer
radius.Mcast_MaxGroups.len  Length
    Unsigned 8-bit integer
    Mcast-MaxGroups Length
radius.Mcast_Receive  Mcast-Receive
    Unsigned 32-bit integer
radius.Mcast_Receive.len  Length
    Unsigned 8-bit integer
    Mcast-Receive Length
radius.Mcast_Send  Mcast-Send
    Unsigned 32-bit integer
radius.Mcast_Send.len  Length
    Unsigned 8-bit integer
    Mcast-Send Length
radius.Medium_Type  Medium-Type
    Unsigned 32-bit integer
radius.Medium_Type.len  Length
    Unsigned 8-bit integer
    Medium-Type Length
radius.Merit_Proxy_Action  Merit-Proxy-Action
    String
radius.Merit_Proxy_Action.len  Length
    Unsigned 8-bit integer
    Merit-Proxy-Action Length
radius.Merit_User_Id  Merit-User-Id
    String
radius.Merit_User_Id.len  Length
    Unsigned 8-bit integer
    Merit-User-Id Length
radius.Merit_User_Realm  Merit-User-Realm
    String
radius.Merit_User_Realm.len  Length
    Unsigned 8-bit integer
    Merit-User-Realm Length
radius.Message_Authenticator  Message-Authenticator
    Byte array
radius.Message_Authenticator.len  Length
    Unsigned 8-bit integer
    Message-Authenticator Length
radius.Mikrotik_Group  Mikrotik-Group
    String
radius.Mikrotik_Group.len  Length
    Unsigned 8-bit integer
    Mikrotik-Group Length
```

```
radius.Mikrotik_Recv_Limit  Mikrotik-Recv-Limit
    Unsigned 32-bit integer
radius.Mikrotik_Recv_Limit.len  Length
    Unsigned 8-bit integer
    Mikrotik-Recv-Limit Length
radius.Mikrotik_Xmit_Limit  Mikrotik-Xmit-Limit
    Unsigned 32-bit integer
radius.Mikrotik_Xmit_Limit.len  Length
    Unsigned 8-bit integer
    Mikrotik-Xmit-Limit Length
radius.Minor_Protocol_Version  Minor-Protocol-Version
    Unsigned 32-bit integer
radius.Minor_Protocol_Version.len  Length
    Unsigned 8-bit integer
    Minor-Protocol-Version Length
radius.NAS_IP_Address  NAS-IP-Address
    IPv4 address
radius.NAS_IP_Address.len  Length
    Unsigned 8-bit integer
    NAS-IP-Address Length
radius.NAS_IPv6_Address  NAS-IPv6-Address
    IPv6 address
radius.NAS_IPv6_Address.len  Length
    Unsigned 8-bit integer
    NAS-IPv6-Address Length
radius.NAS_Identifier  NAS-Identifier
    String
radius.NAS_Identifier.len  Length
    Unsigned 8-bit integer
    NAS-Identifier Length
radius.NAS_Port  NAS-Port
    Unsigned 32-bit integer
radius.NAS_Port.len  Length
    Unsigned 8-bit integer
    NAS-Port Length
radius.NAS_Port_Id  NAS-Port-Id
    String
radius.NAS_Port_Id.len  Length
    Unsigned 8-bit integer
    NAS-Port-Id Length
radius.NAS_Port_Type  NAS-Port-Type
    Unsigned 32-bit integer
radius.NAS_Port_Type.len  Length
    Unsigned 8-bit integer
    NAS-Port-Type Length
```

```
radius.NAS_Real_Port  NAS-Real-Port
    Unsigned 32-bit integer
radius.NAS_Real_Port.len  Length
    Unsigned 8-bit integer
    NAS-Real-Port Length
radius.NS_Admin_Privilege  NS-Admin-Privilege
    Unsigned 32-bit integer
radius.NS_Admin_Privilege.len  Length
    Unsigned 8-bit integer
    NS-Admin-Privilege Length
radius.NS_Primary_DNS  NS-Primary-DNS
    IPv4 address
radius.NS_Primary_DNS.len  Length
    Unsigned 8-bit integer
    NS-Primary-DNS Length
radius.NS_Primary_WINS  NS-Primary-WINS
    IPv4 address
radius.NS_Primary_WINS.len  Length
    Unsigned 8-bit integer
    NS-Primary-WINS Length
radius.NS_Secondary_DNS  NS-Secondary-DNS
    IPv4 address
radius.NS_Secondary_DNS.len  Length
    Unsigned 8-bit integer
    NS-Secondary-DNS Length
radius.NS_Secondary_WINS  NS-Secondary-WINS
    IPv4 address
radius.NS_Secondary_WINS.len  Length
    Unsigned 8-bit integer
    NS-Secondary-WINS Length
radius.NS_User_Group  NS-User-Group
    String
radius.NS_User_Group.len  Length
    Unsigned 8-bit integer
    NS-User-Group Length
radius.NS_VSYS_Name  NS-VSYS-Name
    String
radius.NS_VSYS_Name.len  Length
    Unsigned 8-bit integer
    NS-VSYS-Name Length
radius.Navini_AVPair  Navini-AVPair
    String
radius.Navini_AVPair.len  Length
    Unsigned 8-bit integer
    Navini-AVPair Length
```

```
radius.Nomadix_Bw_Down  Nomadix-Bw-Down
    Unsigned 32-bit integer
radius.Nomadix_Bw_Down.len  Length
    Unsigned 8-bit integer
    Nomadix-Bw-Down Length
radius.Nomadix_Bw_Up  Nomadix-Bw-Up
    Unsigned 32-bit integer
radius.Nomadix_Bw_Up.len  Length
    Unsigned 8-bit integer
    Nomadix-Bw-Up Length
radius.Nomadix_Config_URL  Nomadix-Config-URL
    String
radius.Nomadix_Config_URL.len  Length
    Unsigned 8-bit integer
    Nomadix-Config-URL Length
radius.Nomadix_EndofSession  Nomadix-EndofSession
    Unsigned 32-bit integer
radius.Nomadix_EndofSession.len  Length
    Unsigned 8-bit integer
    Nomadix-EndofSession Length
radius.Nomadix_Expiration  Nomadix-Expiration
    String
radius.Nomadix_Expiration.len  Length
    Unsigned 8-bit integer
    Nomadix-Expiration Length
radius.Nomadix_Goodbye_URL  Nomadix-Goodbye-URL
    String
radius.Nomadix_Goodbye_URL.len  Length
    Unsigned 8-bit integer
    Nomadix-Goodbye-URL Length
radius.Nomadix_IP_Upsell  Nomadix-IP-Upsell
    Unsigned 32-bit integer
radius.Nomadix_IP_Upsell.len  Length
    Unsigned 8-bit integer
    Nomadix-IP-Upsell Length
radius.Nomadix_Logoff_URL  Nomadix-Logoff-URL
    String
radius.Nomadix_Logoff_URL.len  Length
    Unsigned 8-bit integer
    Nomadix-Logoff-URL Length
radius.Nomadix_MaxBytesDown  Nomadix-MaxBytesDown
    Unsigned 32-bit integer
radius.Nomadix_MaxBytesDown.len  Length
    Unsigned 8-bit integer
    Nomadix-MaxBytesDown Length
```

```
radius.Nomadix_MaxBytesUp  Nomadix-MaxBytesUp
    Unsigned 32-bit integer
radius.Nomadix_MaxBytesUp.len  Length
    Unsigned 8-bit integer
    Nomadix-MaxBytesUp Length
radius.Nomadix_Net_VLAN  Nomadix-Net-VLAN
    Unsigned 32-bit integer
radius.Nomadix_Net_VLAN.len  Length
    Unsigned 8-bit integer
    Nomadix-Net-VLAN Length
radius.Nomadix_Subnet  Nomadix-Subnet
    String
radius.Nomadix_Subnet.len  Length
    Unsigned 8-bit integer
    Nomadix-Subnet Length
radius.Nomadix_URL_Redirection  Nomadix-URL-Redirection
    String
radius.Nomadix_URL_Redirection.len  Length
    Unsigned 8-bit integer
    Nomadix-URL-Redirection Length
radius.OS_Version  OS_Version
    String
radius.OS_Version.len  Length
    Unsigned 8-bit integer
    OS_Version Length
radius.PPPOE_MOTM  PPPOE-MOTM
    String
radius.PPPOE_MOTM.len  Length
    Unsigned 8-bit integer
    PPPOE-MOTM Length
radius.PPPOE_URL  PPPOE-URL
    String
radius.PPPOE_URL.len  Length
    Unsigned 8-bit integer
    PPPOE-URL Length
radius.PVC_Circuit_Padding  PVC-Circuit-Padding
    Unsigned 32-bit integer
radius.PVC_Circuit_Padding.len  Length
    Unsigned 8-bit integer
    PVC-Circuit-Padding Length
radius.PVC_Encapsulation_Type  PVC-Encapsulation-Type
    Unsigned 32-bit integer
radius.PVC_Encapsulation_Type.len  Length
    Unsigned 8-bit integer
    PVC-Encapsulation-Type Length
```



```
radius.PVC_Profile_Name PVC-Profile-Name
    String
radius.PVC_Profile_Name.len Length
    Unsigned 8-bit integer
    PVC-Profile-Name Length
radius.Password_Retry Password-Retry
    Unsigned 32-bit integer
radius.Password_Retry.len Length
    Unsigned 8-bit integer
    Password-Retry Length
radius.Platform_Type Platform_Type
    Unsigned 32-bit integer
radius.Platform_Type.len Length
    Unsigned 8-bit integer
    Platform_Type Length
radius.Police_Burst Police-Burst
    Unsigned 32-bit integer
radius.Police_Burst.len Length
    Unsigned 8-bit integer
    Police-Burst Length
radius.Police_Rate Police-Rate
    Unsigned 32-bit integer
radius.Police_Rate.len Length
    Unsigned 8-bit integer
    Police-Rate Length
radius.Port_Limit Port-Limit
    Unsigned 32-bit integer
radius.Port_Limit.len Length
    Unsigned 8-bit integer
    Port-Limit Length
radius.Prompt Prompt
    Unsigned 32-bit integer
radius.Prompt.len Length
    Unsigned 8-bit integer
    Prompt Length
radius.Propel_Accelerate Propel-Accelerate
    Unsigned 32-bit integer
radius.Propel_Accelerate.len Length
    Unsigned 8-bit integer
    Propel-Accelerate Length
radius.Propel_Client_IP_Address Propel-Client-IP-Address
    IPv4 address
radius.Propel_Client_IP_Address.len Length
    Unsigned 8-bit integer
    Propel-Client-IP-Address Length
```

```
radius.Propel_Client_NAS_IP_Address  Propel-Client-NAS-IP-Address
    IPv4 address
radius.Propel_Client_NAS_IP_Address.len  Length
    Unsigned 8-bit integer
    Propel-Client-NAS-IP-Address Length
radius.Propel_Client_Source_ID  Propel-Client-Source-ID
    Unsigned 32-bit integer
radius.Propel_Client_Source_ID.len  Length
    Unsigned 8-bit integer
    Propel-Client-Source-ID Length
radius.Propel_Dialed_Digits  Propel-Dialed-Digits
    String
radius.Propel_Dialed_Digits.len  Length
    Unsigned 8-bit integer
    Propel-Dialed-Digits Length
radius.Proxy_State  Proxy-State
    Byte array
radius.Proxy_State.len  Length
    Unsigned 8-bit integer
    Proxy-State Length
radius.Quintum_AVPair  Quintum-AVPair
    String
radius.Quintum_AVPair.len  Length
    Unsigned 8-bit integer
    Quintum-AVPair Length
radius.Quintum_NAS_Port  Quintum-NAS-Port
    String
radius.Quintum_NAS_Port.len  Length
    Unsigned 8-bit integer
    Quintum-NAS-Port Length
radius.Quintum_h323_billing_model  Quintum-h323-billing-model
    String
radius.Quintum_h323_billing_model.len  Length
    Unsigned 8-bit integer
    Quintum-h323-billing-model Length
radius.Quintum_h323_call_origin  Quintum-h323-call-origin
    String
radius.Quintum_h323_call_origin.len  Length
    Unsigned 8-bit integer
    Quintum-h323-call-origin Length
radius.Quintum_h323_call_type  Quintum-h323-call-type
    String
radius.Quintum_h323_call_type.len  Length
    Unsigned 8-bit integer
    Quintum-h323-call-type Length
```

```
radius.Quintum_h323_conf_id    Quintum-h323-conf-id
    String
radius.Quintum_h323_conf_id.len  Length
    Unsigned 8-bit integer
    Quintum-h323-conf-id Length
radius.Quintum_h323_connect_time  Quintum-h323-connect-time
    String
radius.Quintum_h323_connect_time.len  Length
    Unsigned 8-bit integer
    Quintum-h323-connect-time Length
radius.Quintum_h323_credit_amount  Quintum-h323-credit-amount
    String
radius.Quintum_h323_credit_amount.len  Length
    Unsigned 8-bit integer
    Quintum-h323-credit-amount Length
radius.Quintum_h323_credit_time  Quintum-h323-credit-time
    String
radius.Quintum_h323_credit_time.len  Length
    Unsigned 8-bit integer
    Quintum-h323-credit-time Length
radius.Quintum_h323_currency_type  Quintum-h323-currency-type
    String
radius.Quintum_h323_currency_type.len  Length
    Unsigned 8-bit integer
    Quintum-h323-currency-type Length
radius.Quintum_h323_disconnect_cause  Quintum-h323-disconnect-cause
    String
radius.Quintum_h323_disconnect_cause.len  Length
    Unsigned 8-bit integer
    Quintum-h323-disconnect-cause Length
radius.Quintum_h323_disconnect_time  Quintum-h323-disconnect-time
    String
radius.Quintum_h323_disconnect_time.len  Length
    Unsigned 8-bit integer
    Quintum-h323-disconnect-time Length
radius.Quintum_h323_gw_id    Quintum-h323-gw-id
    String
radius.Quintum_h323_gw_id.len  Length
    Unsigned 8-bit integer
    Quintum-h323-gw-id Length
radius.Quintum_h323_incoming_conf_id  Quintum-h323-incoming-conf-id
    String
radius.Quintum_h323_incoming_conf_id.len  Length
    Unsigned 8-bit integer
    Quintum-h323-incoming-conf-id Length
```

```
radius.Quintum_h323_preferred_lang  Quintum-h323-preferred-lang
String
radius.Quintum_h323_preferred_lang.len  Length
Unsigned 8-bit integer
Quintum-h323-preferred-lang Length
radius.Quintum_h323_prompt_id  Quintum-h323-prompt-id
String
radius.Quintum_h323_prompt_id.len  Length
Unsigned 8-bit integer
Quintum-h323-prompt-id Length
radius.Quintum_h323_redirect_ip_address  Quintum-h323-redirect-ip-address
String
radius.Quintum_h323_redirect_ip_address.len  Length
Unsigned 8-bit integer
Quintum-h323-redirect-ip-address Length
radius.Quintum_h323_redirect_number  Quintum-h323-redirect-number
String
radius.Quintum_h323_redirect_number.len  Length
Unsigned 8-bit integer
Quintum-h323-redirect-number Length
radius.Quintum_h323_remote_address  Quintum-h323-remote-address
String
radius.Quintum_h323_remote_address.len  Length
Unsigned 8-bit integer
Quintum-h323-remote-address Length
radius.Quintum_h323_return_code  Quintum-h323-return-code
String
radius.Quintum_h323_return_code.len  Length
Unsigned 8-bit integer
Quintum-h323-return-code Length
radius.Quintum_h323_setup_time  Quintum-h323-setup-time
String
radius.Quintum_h323_setup_time.len  Length
Unsigned 8-bit integer
Quintum-h323-setup-time Length
radius.Quintum_h323_time_and_day  Quintum-h323-time-and-day
String
radius.Quintum_h323_time_and_day.len  Length
Unsigned 8-bit integer
Quintum-h323-time-and-day Length
radius.Quintum_h323_voice_quality  Quintum-h323-voice-quality
String
radius.Quintum_h323_voice_quality.len  Length
Unsigned 8-bit integer
Quintum-h323-voice-quality Length
```

```
radius.Rate_Limit_Burst  Rate-Limit-Burst
    Unsigned 32-bit integer
radius.Rate_Limit_Burst.len  Length
    Unsigned 8-bit integer
    Rate-Limit-Burst Length
radius.Rate_Limit_Rate  Rate-Limit-Rate
    Unsigned 32-bit integer
radius.Rate_Limit_Rate.len  Length
    Unsigned 8-bit integer
    Rate-Limit-Rate Length
radius.RedCreek_Tunneled_DNS_Server  RedCreek-Tunneled-DNS-Server
    String
radius.RedCreek_Tunneled_DNS_Server.len  Length
    Unsigned 8-bit integer
    RedCreek-Tunneled-DNS-Server Length
radius.RedCreek_Tunneled_DomainName  RedCreek-Tunneled-DomainName
    String
radius.RedCreek_Tunneled_DomainName.len  Length
    Unsigned 8-bit integer
    RedCreek-Tunneled-DomainName Length
radius.RedCreek_Tunneled_Gateway  RedCreek-Tunneled-Gateway
    IPv4 address
radius.RedCreek_Tunneled_Gateway.len  Length
    Unsigned 8-bit integer
    RedCreek-Tunneled-Gateway Length
radius.RedCreek_Tunneled_HostName  RedCreek-Tunneled-HostName
    String
radius.RedCreek_Tunneled_HostName.len  Length
    Unsigned 8-bit integer
    RedCreek-Tunneled-HostName Length
radius.RedCreek_Tunneled_IP_Addr  RedCreek-Tunneled-IP-Addr
    IPv4 address
radius.RedCreek_Tunneled_IP_Addr.len  Length
    Unsigned 8-bit integer
    RedCreek-Tunneled-IP-Addr Length
radius.RedCreek_Tunneled_IP_Netmask  RedCreek-Tunneled-IP-Netmask
    IPv4 address
radius.RedCreek_Tunneled_IP_Netmask.len  Length
    Unsigned 8-bit integer
    RedCreek-Tunneled-IP-Netmask Length
radius.RedCreek_Tunneled_Search_List  RedCreek-Tunneled-Search-List
    String
radius.RedCreek_Tunneled_Search_List.len  Length
    Unsigned 8-bit integer
    RedCreek-Tunneled-Search-List Length
```

```
radius.RedCreek_Tunneled_WINS_Server1  RedCreek-Tunneled-WINS-Server1
String
radius.RedCreek_Tunneled_WINS_Server1.len  Length
Unsigned 8-bit integer
RedCreek-Tunneled-WINS-Server1 Length
radius.RedCreek_Tunneled_WINS_Server2  RedCreek-Tunneled-WINS-Server2
String
radius.RedCreek_Tunneled_WINS_Server2.len  Length
Unsigned 8-bit integer
RedCreek-Tunneled-WINS-Server2 Length
radius.Reply_Message  Reply-Message
String
radius.Reply_Message.len  Length
Unsigned 8-bit integer
Reply-Message Length
radius.SIP_AOR  SIP-AOR
String
radius.SIP_AOR.len  Length
Unsigned 8-bit integer
SIP-AOR Length
radius.ST_Acct_VC_Connection_Id  ST-Acct-VC-Connection-Id
String
radius.ST_Acct_VC_Connection_Id.len  Length
Unsigned 8-bit integer
ST-Acct-VC-Connection-Id Length
radius.ST_Policy_Name  ST-Policy-Name
String
radius.ST_Policy_Name.len  Length
Unsigned 8-bit integer
ST-Policy-Name Length
radius.ST_Primary_DNS_Server  ST-Primary-DNS-Server
IPv4 address
radius.ST_Primary_DNS_Server.len  Length
Unsigned 8-bit integer
ST-Primary-DNS-Server Length
radius.ST_Primary_NBNS_Server  ST-Primary-NBNS-Server
IPv4 address
radius.ST_Primary_NBNS_Server.len  Length
Unsigned 8-bit integer
ST-Primary-NBNS-Server Length
radius.ST_Secondary_DNS_Server  ST-Secondary-DNS-Server
IPv4 address
radius.ST_Secondary_DNS_Server.len  Length
Unsigned 8-bit integer
ST-Secondary-DNS-Server Length
```

```
radius.ST_Secondary_NBNS_Server  ST-Secondary-NBNS-Server
    IPv4 address
radius.ST_Secondary_NBNS_Server.len  Length
    Unsigned 8-bit integer
    ST-Secondary-NBNS-Server Length
radius.ST_Service_Domain  ST-Service-Domain
    Unsigned 32-bit integer
radius.ST_Service_Domain.len  Length
    Unsigned 8-bit integer
    ST-Service-Domain Length
radius.ST_Service_Name  ST-Service-Name
    String
radius.ST_Service_Name.len  Length
    Unsigned 8-bit integer
    ST-Service-Name Length
radius.Sdx_Service_Name  Sdx-Service-Name
    String
radius.Sdx_Service_Name.len  Length
    Unsigned 8-bit integer
    Sdx-Service-Name Length
radius.Sdx_Session_Volume_Quota  Sdx-Session-Volume-Quota
    String
radius.Sdx_Session_Volume_Quota.len  Length
    Unsigned 8-bit integer
    Sdx-Session-Volume-Quota Length
radius.Sdx_Tunnel_Disconnect_Cause_Info  Sdx-Tunnel-Disconnect-Cause-Info
    String
radius.Sdx_Tunnel_Disconnect_Cause_Info.len  Length
    Unsigned 8-bit integer
    Sdx-Tunnel-Disconnect-Cause-Info Length
radius.Service_Type  Service-Type
    Unsigned 32-bit integer
radius.Service_Type.len  Length
    Unsigned 8-bit integer
    Service-Type Length
radius.Session_Error_Code  Session-Error-Code
    Unsigned 32-bit integer
radius.Session_Error_Code.len  Length
    Unsigned 8-bit integer
    Session-Error-Code Length
radius.Session_Error_Msg  Session-Error-Msg
    String
radius.Session_Error_Msg.len  Length
    Unsigned 8-bit integer
    Session-Error-Msg Length
```

```
radius.Session_Timeout  Session-Timeout
    Unsigned 32-bit integer
radius.Session_Timeout.len  Length
    Unsigned 8-bit integer
    Session-Timeout Length
radius.Shasta_Service_Profile  Shasta-Service-Profile
    String
radius.Shasta_Service_Profile.len  Length
    Unsigned 8-bit integer
    Shasta-Service-Profile Length
radius.Shasta_User_Privilege  Shasta-User-Privilege
    Unsigned 32-bit integer
radius.Shasta_User_Privilege.len  Length
    Unsigned 8-bit integer
    Shasta-User-Privilege Length
radius.Shasta_VPN_Name  Shasta-VPN-Name
    String
radius.Shasta_VPN_Name.len  Length
    Unsigned 8-bit integer
    Shasta-VPN-Name Length
radius.Shiva_Acct_Serv_Switch  Shiva-Acct-Serv-Switch
    IPv4 address
radius.Shiva_Acct_Serv_Switch.len  Length
    Unsigned 8-bit integer
    Shiva-Acct-Serv-Switch Length
radius.Shiva_Called_Number  Shiva-Called-Number
    String
radius.Shiva_Called_Number.len  Length
    Unsigned 8-bit integer
    Shiva-Called-Number Length
radius.Shiva_Calling_Number  Shiva-Calling-Number
    String
radius.Shiva_Calling_Number.len  Length
    Unsigned 8-bit integer
    Shiva-Calling-Number Length
radius.Shiva_Compression_Type  Shiva-Compression-Type
    Unsigned 32-bit integer
radius.Shiva_Compression_Type.len  Length
    Unsigned 8-bit integer
    Shiva-Compression-Type Length
radius.Shiva_Connect_Reason  Shiva-Connect-Reason
    Unsigned 32-bit integer
radius.Shiva_Connect_Reason.len  Length
    Unsigned 8-bit integer
    Shiva-Connect-Reason Length
```



```
radius.Shiva_Customer_Id  Shiva-Customer-Id
    String
radius.Shiva_Customer_Id.len  Length
    Unsigned 8-bit integer
    Shiva-Customer-Id Length
radius.Shiva_Disconnect_Reason  Shiva-Disconnect-Reason
    Unsigned 32-bit integer
radius.Shiva_Disconnect_Reason.len  Length
    Unsigned 8-bit integer
    Shiva-Disconnect-Reason Length
radius.Shiva_Event_Flags  Shiva-Event-Flags
    Unsigned 32-bit integer
radius.Shiva_Event_Flags.len  Length
    Unsigned 8-bit integer
    Shiva-Event-Flags Length
radius.Shiva_Function  Shiva-Function
    Unsigned 32-bit integer
radius.Shiva_Function.len  Length
    Unsigned 8-bit integer
    Shiva-Function Length
radius.Shiva_Link_Protocol  Shiva-Link-Protocol
    Unsigned 32-bit integer
radius.Shiva_Link_Protocol.len  Length
    Unsigned 8-bit integer
    Shiva-Link-Protocol Length
radius.Shiva_Link_Speed  Shiva-Link-Speed
    Unsigned 32-bit integer
radius.Shiva_Link_Speed.len  Length
    Unsigned 8-bit integer
    Shiva-Link-Speed Length
radius.Shiva_Links_In_Bundle  Shiva-Links-In-Bundle
    Unsigned 32-bit integer
radius.Shiva_Links_In_Bundle.len  Length
    Unsigned 8-bit integer
    Shiva-Links-In-Bundle Length
radius.Shiva_Network_Protocols  Shiva-Network-Protocols
    Unsigned 32-bit integer
radius.Shiva_Network_Protocols.len  Length
    Unsigned 8-bit integer
    Shiva-Network-Protocols Length
radius.Shiva_Session_Id  Shiva-Session-Id
    Unsigned 32-bit integer
radius.Shiva_Session_Id.len  Length
    Unsigned 8-bit integer
    Shiva-Session-Id Length
```

```
radius.Shiva_Type_Of_Service  Shiva-Type-Of-Service
    Unsigned 32-bit integer
radius.Shiva_Type_Of_Service.len  Length
    Unsigned 8-bit integer
    Shiva-Type-Of-Service Length
radius.Shiva_User_Attributes  Shiva-User-Attributes
    String
radius.Shiva_User_Attributes.len  Length
    Unsigned 8-bit integer
    Shiva-User-Attributes Length
radius.Sip_From  Sip-From
    String
radius.Sip_From.len  Length
    Unsigned 8-bit integer
    Sip-From Length
radius.Sip_Method  Sip-Method
    Unsigned 32-bit integer
radius.Sip_Method.len  Length
    Unsigned 8-bit integer
    Sip-Method Length
radius.Sip_To  Sip-To
    String
radius.Sip_To.len  Length
    Unsigned 8-bit integer
    Sip-To Length
radius.Sip_Translated_Request_URI  Sip-Translated-Request-URI
    String
radius.Sip_Translated_Request_URI.len  Length
    Unsigned 8-bit integer
    Sip-Translated-Request-URI Length
radius.SonicWall_User_Group  SonicWall-User-Group
    String
radius.SonicWall_User_Group.len  Length
    Unsigned 8-bit integer
    SonicWall-User-Group Length
radius.SonicWall_User_Privilege  SonicWall-User-Privilege
    Unsigned 32-bit integer
radius.SonicWall_User_Privilege.len  Length
    Unsigned 8-bit integer
    SonicWall-User-Privilege Length
radius.Source_Validation  Source-Validation
    Unsigned 32-bit integer
radius.Source_Validation.len  Length
    Unsigned 8-bit integer
    Source-Validation Length
```

```
radius.State      State
    Byte array
radius.State.len  Length
    Unsigned 8-bit integer
    State Length
radius.Surveillance_Stop_Destination  Surveillance-Stop-Destination
    Unsigned 32-bit integer
radius.Surveillance_Stop_Destination.len  Length
    Unsigned 8-bit integer
    Surveillance-Stop-Destination Length
radius.Surveillance_Stop_Type  Surveillance-Stop-Type
    Unsigned 32-bit integer
radius.Surveillance_Stop_Type.len  Length
    Unsigned 8-bit integer
    Surveillance-Stop-Type Length
radius.TTY_Level_Max  TTY-Level-Max
    Unsigned 32-bit integer
radius.TTY_Level_Max.len  Length
    Unsigned 8-bit integer
    TTY-Level-Max Length
radius.TTY_Level_Start  TTY-Level-Start
    Unsigned 32-bit integer
radius.TTY_Level_Start.len  Length
    Unsigned 8-bit integer
    TTY-Level-Start Length
radius.T_Systems_Nova_Bandwidth_Max_Down  T-Systems-Nova-Bandwidth-Max-Down
    Unsigned 32-bit integer
radius.T_Systems_Nova_Bandwidth_Max_Down.len  Length
    Unsigned 8-bit integer
    T-Systems-Nova-Bandwidth-Max-Down Length
radius.T_Systems_Nova_Bandwidth_Max_Up  T-Systems-Nova-Bandwidth-Max-Up
    Unsigned 32-bit integer
radius.T_Systems_Nova_Bandwidth_Max_Up.len  Length
    Unsigned 8-bit integer
    T-Systems-Nova-Bandwidth-Max-Up Length
radius.T_Systems_Nova_Bandwidth_Min_Down  T-Systems-Nova-Bandwidth-Min-Down
    Unsigned 32-bit integer
radius.T_Systems_Nova_Bandwidth_Min_Down.len  Length
    Unsigned 8-bit integer
    T-Systems-Nova-Bandwidth-Min-Down Length
radius.T_Systems_Nova_Bandwidth_Min_Up  T-Systems-Nova-Bandwidth-Min-Up
    Unsigned 32-bit integer
radius.T_Systems_Nova_Bandwidth_Min_Up.len  Length
    Unsigned 8-bit integer
    T-Systems-Nova-Bandwidth-Min-Up Length
```

```
radius.T_Systems_Nova_Billing_Class_Of_Service  T-Systems-Nova-Billing-Class-Of-String
radius.T_Systems_Nova_Billing_Class_Of_Service.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Billing-Class-Of-Service Length
radius.T_Systems_Nova_Location_ID  T-Systems-Nova-Location-ID
String
radius.T_Systems_Nova_Location_ID.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Location-ID Length
radius.T_Systems_Nova_Location_Name  T-Systems-Nova-Location-Name
String
radius.T_Systems_Nova_Location_Name.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Location-Name Length
radius.T_Systems_Nova_Logoff_URL  T-Systems-Nova-Logoff-URL
String
radius.T_Systems_Nova_Logoff_URL.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Logoff-URL Length
radius.T_Systems_Nova_Price_Of_Service  T-Systems-Nova-Price-Of-Service
Unsigned 32-bit integer
radius.T_Systems_Nova_Price_Of_Service.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Price-Of-Service Length
radius.T_Systems_Nova_Redirection_URL  T-Systems-Nova-Redirection-URL
String
radius.T_Systems_Nova_Redirection_URL.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Redirection-URL Length
radius.T_Systems_Nova_Service_Name  T-Systems-Nova-Service-Name
String
radius.T_Systems_Nova_Service_Name.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Service-Name Length
radius.T_Systems_Nova_Session_Terminate_End_Of_Day  T-Systems-Nova-Session-Terminate-End-Of-Day
Unsigned 32-bit integer
radius.T_Systems_Nova_Session_Terminate_End_Of_Day.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Session-Terminate-End-Of-Day Length
radius.T_Systems_Nova_Session_Terminate_Time  T-Systems-Nova-Session-Terminate-Time
Unsigned 32-bit integer
radius.T_Systems_Nova_Session_Terminate_Time.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Session-Terminate-Time Length
```

```
radius.T_Systems_Nova_UnknownAVP  T-Systems-Nova-UnknownAVP
String

radius.T_Systems_Nova_UnknownAVP.len  Length
Unsigned 8-bit integer
T-Systems-Nova-UnknownAVP Length

radius.T_Systems_Nova_Visiting_Provider_Code  T-Systems-Nova-Visiting-Provider-C
String

radius.T_Systems_Nova_Visiting_Provider_Code.len  Length
Unsigned 8-bit integer
T-Systems-Nova-Visiting-Provider-Code Length

radius.Telebit_Accounting_Info  Telebit-Accounting-Info
String

radius.Telebit_Accounting_Info.len  Length
Unsigned 8-bit integer
Telebit-Accounting-Info Length

radius.Telebit_Activate_Command  Telebit-Activate-Command
String

radius.Telebit_Activate_Command.len  Length
Unsigned 8-bit integer
Telebit-Activate-Command Length

radius.Telebit_Login_Command  Telebit-Login-Command
String

radius.Telebit_Login_Command.len  Length
Unsigned 8-bit integer
Telebit-Login-Command Length

radius.Telebit_Port_Name  Telebit-Port-Name
String

radius.Telebit_Port_Name.len  Length
Unsigned 8-bit integer
Telebit-Port-Name Length

radius.Termination_Action  Termination-Action
Unsigned 32-bit integer

radius.Termination_Action.len  Length
Unsigned 8-bit integer
Termination-Action Length

radius.Trapeze_Encryption_Type  Trapeze-Encryption-Type
String

radius.Trapeze_Encryption_Type.len  Length
Unsigned 8-bit integer
Trapeze-Encryption-Type Length

radius.Trapeze_End_Date  Trapeze-End-Date
String

radius.Trapeze_End_Date.len  Length
Unsigned 8-bit integer
Trapeze-End-Date Length
```

```
radius.Trapeze_Mobility_Profile  Trapeze-Mobility-Profile
    String
radius.Trapeze_Mobility_Profile.len  Length
    Unsigned 8-bit integer
    Trapeze-Mobility-Profile Length
radius.Trapeze_SSID  Trapeze-SSID
    String
radius.Trapeze_SSID.len  Length
    Unsigned 8-bit integer
    Trapeze-SSID Length
radius.Trapeze_Start_Date  Trapeze-Start-Date
    String
radius.Trapeze_Start_Date.len  Length
    Unsigned 8-bit integer
    Trapeze-Start-Date Length
radius.Trapeze_Time_Of_Day  Trapeze-Time-Of-Day
    String
radius.Trapeze_Time_Of_Day.len  Length
    Unsigned 8-bit integer
    Trapeze-Time-Of-Day Length
radius.Trapeze_URL  Trapeze-URL
    String
radius.Trapeze_URL.len  Length
    Unsigned 8-bit integer
    Trapeze-URL Length
radius.Trapeze_VLAN_Name  Trapeze-VLAN-Name
    String
radius.Trapeze_VLAN_Name.len  Length
    Unsigned 8-bit integer
    Trapeze-VLAN-Name Length
radius.Tunnel_Algorithm  Tunnel-Algorithm
    Unsigned 32-bit integer
radius.Tunnel_Algorithm.len  Length
    Unsigned 8-bit integer
    Tunnel-Algorithm Length
radius.Tunnel_Assignment_Id  Tunnel-Assignment-Id
    String
radius.Tunnel_Assignment_Id.len  Length
    Unsigned 8-bit integer
    Tunnel-Assignment-Id Length
radius.Tunnel_Assignment_Id.tag  Tag
    Unsigned 8-bit integer
    Tunnel-Assignment-Id Tag
radius.Tunnel_Client_Auth_Id  Tunnel-Client-Auth-Id
    String
```

```
radius.Tunnel_Client_Auth_Id.len  Length
    Unsigned 8-bit integer
    Tunnel-Client-Auth-Id Length
radius.Tunnel_Client_Auth_Id.tag  Tag
    Unsigned 8-bit integer
    Tunnel-Client-Auth-Id Tag
radius.Tunnel_Client_Endpoint  Tunnel-Client-Endpoint
    String
radius.Tunnel_Client_Endpoint.len  Length
    Unsigned 8-bit integer
    Tunnel-Client-Endpoint Length
radius.Tunnel_Client_Endpoint.tag  Tag
    Unsigned 8-bit integer
    Tunnel-Client-Endpoint Tag
radius.Tunnel_Cmd_Timeout  Tunnel-Cmd-Timeout
    Unsigned 32-bit integer
radius.Tunnel_Cmd_Timeout.len  Length
    Unsigned 8-bit integer
    Tunnel-Cmd-Timeout Length
radius.Tunnel_Context  Tunnel-Context
    String
radius.Tunnel_Context.len  Length
    Unsigned 8-bit integer
    Tunnel-Context Length
radius.Tunnel_DNIS  Tunnel-DNIS
    Unsigned 32-bit integer
radius.Tunnel_DNIS.len  Length
    Unsigned 8-bit integer
    Tunnel-DNIS Length
radius.Tunnel_Deadtime  Tunnel-Deadtime
    Unsigned 32-bit integer
radius.Tunnel_Deadtime.len  Length
    Unsigned 8-bit integer
    Tunnel-Deadtime Length
radius.Tunnel_Domain  Tunnel-Domain
    Unsigned 32-bit integer
radius.Tunnel_Domain.len  Length
    Unsigned 8-bit integer
    Tunnel-Domain Length
radius.Tunnel_Function  Tunnel-Function
    Unsigned 32-bit integer
radius.Tunnel_Function.len  Length
    Unsigned 8-bit integer
    Tunnel-Function Length
radius.Tunnel_Group  Tunnel-Group
    Unsigned 32-bit integer
```

```
radius.Tunnel_Group.len  Length
    Unsigned 8-bit integer
    Tunnel-Group Length

radius.Tunnel_L2F_Second_Password  Tunnel-L2F-Second-Password
    String

radius.Tunnel_L2F_Second_Password.len  Length
    Unsigned 8-bit integer
    Tunnel-L2F-Second-Password Length

radius.Tunnel_Local_Name  Tunnel-Local-Name
    String

radius.Tunnel_Local_Name.len  Length
    Unsigned 8-bit integer
    Tunnel-Local-Name Length

radius.Tunnel_Max_Sessions  Tunnel-Max-Sessions
    Unsigned 32-bit integer

radius.Tunnel_Max_Sessions.len  Length
    Unsigned 8-bit integer
    Tunnel-Max-Sessions Length

radius.Tunnel_Max_Tunnels  Tunnel-Max-Tunnels
    Unsigned 32-bit integer

radius.Tunnel_Max_Tunnels.len  Length
    Unsigned 8-bit integer
    Tunnel-Max-Tunnels Length

radius.Tunnel_Medium_Type  Tunnel-Medium-Type
    Unsigned 32-bit integer

radius.Tunnel_Medium_Type.len  Length
    Unsigned 8-bit integer
    Tunnel-Medium-Type Length

radius.Tunnel_Medium_Type.tag  Tag
    Unsigned 8-bit integer
    Tunnel-Medium-Type Tag

radius.Tunnel_Password  Tunnel-Password
    String

radius.Tunnel_Password.len  Length
    Unsigned 8-bit integer
    Tunnel-Password Length

radius.Tunnel_Password.tag  Tag
    Unsigned 8-bit integer
    Tunnel-Password Tag

radius.Tunnel_Police_Burst  Tunnel-Police-Burst
    Unsigned 32-bit integer

radius.Tunnel_Police_Burst.len  Length
    Unsigned 8-bit integer
    Tunnel-Police-Burst Length

radius.Tunnel_Police_Rate  Tunnel-Police-Rate
    Unsigned 32-bit integer
```



```
radius.Tunnel_Police_Rate.len Length
    Unsigned 8-bit integer
    Tunnel-Police-Rate Length

radius.Tunnel_Preference Tunnel-Preference
    Unsigned 32-bit integer

radius.Tunnel_Preference.len Length
    Unsigned 8-bit integer
    Tunnel-Preference Length

radius.Tunnel_Preference.tag Tag
    Unsigned 8-bit integer
    Tunnel-Preference Tag

radius.Tunnel_Private_Group_Id Tunnel-Private-Group-Id
    String

radius.Tunnel_Private_Group_Id.len Length
    Unsigned 8-bit integer
    Tunnel-Private-Group-Id Length

radius.Tunnel_Private_Group_Id.tag Tag
    Unsigned 8-bit integer
    Tunnel-Private-Group-Id Tag

radius.Tunnel_Rate_Limit_Burst Tunnel-Rate-Limit-Burst
    Unsigned 32-bit integer

radius.Tunnel_Rate_Limit_Burst.len Length
    Unsigned 8-bit integer
    Tunnel-Rate-Limit-Burst Length

radius.Tunnel_Rate_Limit_Rate Tunnel-Rate-Limit-Rate
    Unsigned 32-bit integer

radius.Tunnel_Rate_Limit_Rate.len Length
    Unsigned 8-bit integer
    Tunnel-Rate-Limit-Rate Length

radius.Tunnel_Remote_Name Tunnel-Remote-Name
    String

radius.Tunnel_Remote_Name.len Length
    Unsigned 8-bit integer
    Tunnel-Remote-Name Length

radius.Tunnel_Retransmit Tunnel-Retransmit
    Unsigned 32-bit integer

radius.Tunnel_Retransmit.len Length
    Unsigned 8-bit integer
    Tunnel-Retransmit Length

radius.Tunnel_Server_Auth_Id Tunnel-Server-Auth-Id
    String

radius.Tunnel_Server_Auth_Id.len Length
    Unsigned 8-bit integer
    Tunnel-Server-Auth-Id Length

radius.Tunnel_Server_Auth_Id.tag Tag
    Unsigned 8-bit integer
    Tunnel-Server-Auth-Id Tag
```

```
radius.Tunnel_Server_Endpoint  Tunnel-Server-Endpoint
    String
radius.Tunnel_Server_Endpoint.len  Length
    Unsigned 8-bit integer
    Tunnel-Server-Endpoint Length
radius.Tunnel_Server_Endpoint.tag  Tag
    Unsigned 8-bit integer
    Tunnel-Server-Endpoint Tag
radius.Tunnel_Session_Auth  Tunnel-Session-Auth
    Unsigned 32-bit integer
radius.Tunnel_Session_Auth.len  Length
    Unsigned 8-bit integer
    Tunnel-Session-Auth Length
radius.Tunnel_Session_Auth_Ctx  Tunnel-Session-Auth-Ctx
    String
radius.Tunnel_Session_Auth_Ctx.len  Length
    Unsigned 8-bit integer
    Tunnel-Session-Auth-Ctx Length
radius.Tunnel_Session_Auth_Service_Grp  Tunnel-Session-Auth-Service-Grp
    String
radius.Tunnel_Session_Auth_Service_Grp.len  Length
    Unsigned 8-bit integer
    Tunnel-Session-Auth-Service-Grp Length
radius.Tunnel_Type  Tunnel-Type
    Unsigned 32-bit integer
radius.Tunnel_Type.len  Length
    Unsigned 8-bit integer
    Tunnel-Type Length
radius.Tunnel_Type.tag  Tag
    Unsigned 8-bit integer
    Tunnel-Type Tag
radius.Tunnel_Window  Tunnel-Window
    Unsigned 32-bit integer
radius.Tunnel_Window.len  Length
    Unsigned 8-bit integer
    Tunnel-Window Length
radius.Unisphere_Allow_All_VR_Access  Unisphere-Allow-All-VR-Access
    Unsigned 32-bit integer
radius.Unisphere_Allow_All_VR_Access.len  Length
    Unsigned 8-bit integer
    Unisphere-Allow-All-VR-Access Length
radius.Unisphere_Alt_CLI_Access_Level  Unisphere-Alt-CLI-Access-Level
    String
radius.Unisphere_Alt_CLI_Access_Level.len  Length
    Unsigned 8-bit integer
    Unisphere-Alt-CLI-Access-Level Length
```

```
radius.Unisphere_Alt_CLI_VRouter_Name  Unisphere-Alt-CLI-VRouter-Name
String

radius.Unisphere_Alt_CLI_VRouter_Name.len  Length
Unsigned 8-bit integer
Unisphere-Alt-CLI-VRouter-Name Length

radius.Unisphere_Dhcp_Gi_Address  Unisphere-Dhcp-Gi-Address
IPv4 address

radius.Unisphere_Dhcp_Gi_Address.len  Length
Unsigned 8-bit integer
Unisphere-Dhcp-Gi-Address Length

radius.Unisphere_Dhcp_Mac_Addr  Unisphere-Dhcp-Mac-Addr
String

radius.Unisphere_Dhcp_Mac_Addr.len  Length
Unsigned 8-bit integer
Unisphere-Dhcp-Mac-Addr Length

radius.Unisphere_Dhcp_Options  Unisphere-Dhcp-Options
Byte array

radius.Unisphere_Dhcp_Options.len  Length
Unsigned 8-bit integer
Unisphere-Dhcp-Options Length

radius.Unisphere_Disconnect_Cause  Unisphere-Disconnect-Cause
Byte array

radius.Unisphere_Disconnect_Cause.len  Length
Unsigned 8-bit integer
Unisphere-Disconnect-Cause Length

radius.Unisphere_Egress_Policy_Name  Unisphere-Egress-Policy-Name
String

radius.Unisphere_Egress_Policy_Name.len  Length
Unsigned 8-bit integer
Unisphere-Egress-Policy-Name Length

radius.Unisphere_Egress_Statistics  Unisphere-Egress-Statistics
Unsigned 32-bit integer

radius.Unisphere_Egress_Statistics.len  Length
Unsigned 8-bit integer
Unisphere-Egress-Statistics Length

radius.Unisphere_Framed_Ip_Route_Tag  Unisphere-Framed-Ip-Route-Tag
Unsigned 32-bit integer

radius.Unisphere_Framed_Ip_Route_Tag.len  Length
Unsigned 8-bit integer
Unisphere-Framed-Ip-Route-Tag Length

radius.Unisphere_Igmp_enable  Unisphere-Igmp-enable
Unsigned 32-bit integer

radius.Unisphere_Igmp_enable.len  Length
Unsigned 8-bit integer
Unisphere-Igmp-enable Length
```

```
radius.Unisphere_Ingress_Policy_Name  Unisphere-Ingress-Policy-Name
String

radius.Unisphere_Ingress_Policy_Name.len  Length
Unsigned 8-bit integer
Unisphere-Ingress-Policy-Name Length

radius.Unisphere_Ingress_Statistics  Unisphere-Ingress-Statistics
Unsigned 32-bit integer

radius.Unisphere_Ingress_Statistics.len  Length
Unsigned 8-bit integer
Unisphere-Ingress-Statistics Length

radius.Unisphere_Init_CLI_Access_Level  Unisphere-Init-CLI-Access-Level
String

radius.Unisphere_Init_CLI_Access_Level.len  Length
Unsigned 8-bit integer
Unisphere-Init-CLI-Access-Level Length

radius.Unisphere_Input_Gigapackets  Unisphere-Input-Gigapackets
Unsigned 32-bit integer

radius.Unisphere_Input_Gigapackets.len  Length
Unsigned 8-bit integer
Unisphere-Input-Gigapackets Length

radius.Unisphere_IpV6_Local_Interface  Unisphere-IpV6-Local-Interface
String

radius.Unisphere_IpV6_Local_Interface.len  Length
Unsigned 8-bit integer
Unisphere-IpV6-Local-Interface Length

radius.Unisphere_IpV6_Virtual_Router  Unisphere-IpV6-Virtual-Router
String

radius.Unisphere_IpV6_Virtual_Router.len  Length
Unsigned 8-bit integer
Unisphere-IpV6-Virtual-Router Length

radius.Unisphere_Ipv6_Primary_Dns  Unisphere-Ipv6-Primary-Dns
IPv6 address

radius.Unisphere_Ipv6_Primary_Dns.len  Length
Unsigned 8-bit integer
Unisphere-Ipv6-Primary-Dns Length

radius.Unisphere_Ipv6_Secondary_Dns  Unisphere-Ipv6-Secondary-Dns
IPv6 address

radius.Unisphere_Ipv6_Secondary_Dns.len  Length
Unsigned 8-bit integer
Unisphere-Ipv6-Secondary-Dns Length

radius.Unisphere_Local_Address_Pool  Unisphere-Local-Address-Pool
String

radius.Unisphere_Local_Address_Pool.len  Length
Unsigned 8-bit integer
Unisphere-Local-Address-Pool Length
```

```
radius.Unisphere_Local_Interface  Unisphere-Local-Interface
    String
radius.Unisphere_Local_Interface.len  Length
    Unsigned 8-bit integer
    Unisphere-Local-Interface Length
radius.Unisphere_Output_Gigapackets  Unisphere-Output-Gigapackets
    Unsigned 32-bit integer
radius.Unisphere_Output_Gigapackets.len  Length
    Unsigned 8-bit integer
    Unisphere-Output-Gigapackets Length
radius.Unisphere_Ppp_Password  Unisphere-Ppp-Password
    String
radius.Unisphere_Ppp_Password.len  Length
    Unsigned 8-bit integer
    Unisphere-Ppp-Password Length
radius.Unisphere_Ppp_Protocol  Unisphere-Ppp-Protocol
    Unsigned 32-bit integer
radius.Unisphere_Ppp_Protocol.len  Length
    Unsigned 8-bit integer
    Unisphere-Ppp-Protocol Length
radius.Unisphere_Ppp_Username  Unisphere-Ppp-Username
    String
radius.Unisphere_Ppp_Username.len  Length
    Unsigned 8-bit integer
    Unisphere-Ppp-Username Length
radius.Unisphere_PppoE_Url  Unisphere-PppoE-Url
    String
radius.Unisphere_PppoE_Url.len  Length
    Unsigned 8-bit integer
    Unisphere-PppoE-Url Length
radius.Unisphere_Pppoe_Description  Unisphere-Pppoe-Description
    String
radius.Unisphere_Pppoe_Description.len  Length
    Unsigned 8-bit integer
    Unisphere-Pppoe-Description Length
radius.Unisphere_Primary_Dns  Unisphere-Primary-Dns
    IPv4 address
radius.Unisphere_Primary_Dns.len  Length
    Unsigned 8-bit integer
    Unisphere-Primary-Dns Length
radius.Unisphere_Primary_Wins  Unisphere-Primary-Wins
    IPv4 address
radius.Unisphere_Primary_Wins.len  Length
    Unsigned 8-bit integer
    Unisphere-Primary-Wins Length
```

```
radius.Unisphere_Qos_Profile_Name  Unisphere-Qos-Profile-Name
String

radius.Unisphere_Qos_Profile_Name.len  Length
Unsigned 8-bit integer
Unisphere-Qos-Profile-Name Length

radius.Unisphere_Redirect_VRouter_Name  Unisphere-Redirect-VRouter-Name
String

radius.Unisphere_Redirect_VRouter_Name.len  Length
Unsigned 8-bit integer
Unisphere-Redirect-VRouter-Name Length

radius.Unisphere_SA_Validate  Unisphere-SA-Validate
Unsigned 32-bit integer

radius.Unisphere_SA_Validate.len  Length
Unsigned 8-bit integer
Unisphere-SA-Validate Length

radius.Unisphere_Secondary_Dns  Unisphere-Secondary-Dns
IPv4 address

radius.Unisphere_Secondary_Dns.len  Length
Unsigned 8-bit integer
Unisphere-Secondary-Dns Length

radius.Unisphere_Secondary_Wins  Unisphere-Secondary-Wins
IPv4 address

radius.Unisphere_Secondary_Wins.len  Length
Unsigned 8-bit integer
Unisphere-Secondary-Wins Length

radius.Unisphere_Service_Bundle  Unisphere-Service-Bundle
String

radius.Unisphere_Service_Bundle.len  Length
Unsigned 8-bit integer
Unisphere-Service-Bundle Length

radius.Unisphere_Service_Category  Unisphere-Service-Category
Unsigned 32-bit integer

radius.Unisphere_Service_Category.len  Length
Unsigned 8-bit integer
Unisphere-Service-Category Length

radius.Unisphere_Service_Description  Unisphere-Service-Description
String

radius.Unisphere_Service_Description.len  Length
Unsigned 8-bit integer
Unisphere-Service-Description Length

radius.Unisphere_Tunnel_Bearer_Type  Unisphere-Tunnel-Bearer-Type
Unsigned 32-bit integer

radius.Unisphere_Tunnel_Bearer_Type.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Bearer-Type Length
```

```
radius.Unisphere_Tunnel_Dialout_Number  Unisphere-Tunnel-Dialout-Number
String
radius.Unisphere_Tunnel_Dialout_Number.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Dialout-Number Length
radius.Unisphere_Tunnel_Interface_Id  Unisphere-Tunnel-Interface-Id
String
radius.Unisphere_Tunnel_Interface_Id.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Interface-Id Length
radius.Unisphere_Tunnel_Max_Bps  Unisphere-Tunnel-Max-Bps
Unsigned 32-bit integer
radius.Unisphere_Tunnel_Max_Bps.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Max-Bps Length
radius.Unisphere_Tunnel_Max_Sessions  Unisphere-Tunnel-Max-Sessions
Unsigned 32-bit integer
radius.Unisphere_Tunnel_Max_Sessions.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Max-Sessions Length
radius.Unisphere_Tunnel_Min_Bps  Unisphere-Tunnel-Min-Bps
Unsigned 32-bit integer
radius.Unisphere_Tunnel_Min_Bps.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Min-Bps Length
radius.Unisphere_Tunnel_Password  Unisphere-Tunnel-Password
String
radius.Unisphere_Tunnel_Password.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Password Length
radius.Unisphere_Tunnel_Virtual_Router  Unisphere-Tunnel-Virtual-Router
String
radius.Unisphere_Tunnel_Virtual_Router.len  Length
Unsigned 8-bit integer
Unisphere-Tunnel-Virtual-Router Length
radius.Unisphere_Virtual_Router  Unisphere-Virtual-Router
String
radius.Unisphere_Virtual_Router.len  Length
Unsigned 8-bit integer
Unisphere-Virtual-Router Length
radius.Unisphere_mbs  Unisphere-mbs
Unsigned 32-bit integer
radius.Unisphere_mbs.len  Length
Unsigned 8-bit integer
Unisphere-mbs Length
```

```
radius.Unisphere_pcr  Unisphere-pcr
    Unsigned 32-bit integer
radius.Unisphere_pcr.len  Length
    Unsigned 8-bit integer
    Unisphere-pcr Length
radius.Unisphere_scr  Unisphere-scr
    Unsigned 32-bit integer
radius.Unisphere_scr.len  Length
    Unsigned 8-bit integer
    Unisphere-scr Length
radius.Unknown_Attribute  Unknown-Attribute
    Byte array
radius.Unknown_Attribute.length  Unknown-Attribute Length
    Unsigned 8-bit integer
radius.User_Name  User-Name
    String
radius.User_Name.len  Length
    Unsigned 8-bit integer
    User-Name Length
radius.User_Password  User-Password
    String
radius.User_Password.len  Length
    Unsigned 8-bit integer
    User-Password Length
radius.VNC_PPpOE_CBQ_RX  VNC-PPPoE-CBQ-RX
    Unsigned 32-bit integer
radius.VNC_PPpOE_CBQ_RX.len  Length
    Unsigned 8-bit integer
    VNC-PPPoE-CBQ-RX Length
radius.VNC_PPpOE_CBQ_RX_Fallback  VNC-PPPoE-CBQ-RX-Fallback
    Unsigned 32-bit integer
radius.VNC_PPpOE_CBQ_RX_Fallback.len  Length
    Unsigned 8-bit integer
    VNC-PPPoE-CBQ-RX-Fallback Length
radius.VNC_PPpOE_CBQ_TX  VNC-PPPoE-CBQ-TX
    Unsigned 32-bit integer
radius.VNC_PPpOE_CBQ_TX.len  Length
    Unsigned 8-bit integer
    VNC-PPPoE-CBQ-TX Length
radius.VNC_PPpOE_CBQ_TX_Fallback  VNC-PPPoE-CBQ-TX-Fallback
    Unsigned 32-bit integer
radius.VNC_PPpOE_CBQ_TX_Fallback.len  Length
    Unsigned 8-bit integer
    VNC-PPPoE-CBQ-TX-Fallback Length
radius.VNC_Splash  VNC-Splash
    Unsigned 32-bit integer
```



```
radius.VNC_Splash.len Length
    Unsigned 8-bit integer
    VNC-Splash Length

radius.Vendor_Specific Vendor-Specific
    Byte array

radius.Vendor_Specific.len Length
    Unsigned 8-bit integer
    Vendor-Specific Length

radius.Versanet_Termination_Cause Versanet-Termination-Cause
    Unsigned 32-bit integer

radius.Versanet_Termination_Cause.len Length
    Unsigned 8-bit integer
    Versanet-Termination-Cause Length

radius.WISPr_Bandwidth_Max_Down WISPr-Bandwidth-Max-Down
    Unsigned 32-bit integer

radius.WISPr_Bandwidth_Max_Down.len Length
    Unsigned 8-bit integer
    WISPr-Bandwidth-Max-Down Length

radius.WISPr_Bandwidth_Max_Up WISPr-Bandwidth-Max-Up
    Unsigned 32-bit integer

radius.WISPr_Bandwidth_Max_Up.len Length
    Unsigned 8-bit integer
    WISPr-Bandwidth-Max-Up Length

radius.WISPr_Bandwidth_Min_Down WISPr-Bandwidth-Min-Down
    Unsigned 32-bit integer

radius.WISPr_Bandwidth_Min_Down.len Length
    Unsigned 8-bit integer
    WISPr-Bandwidth-Min-Down Length

radius.WISPr_Bandwidth_Min_Up WISPr-Bandwidth-Min-Up
    Unsigned 32-bit integer

radius.WISPr_Bandwidth_Min_Up.len Length
    Unsigned 8-bit integer
    WISPr-Bandwidth-Min-Up Length

radius.WISPr_Billing_Class_Of_Service WISPr-Billing-Class-Of-Service
    String

radius.WISPr_Billing_Class_Of_Service.len Length
    Unsigned 8-bit integer
    WISPr-Billing-Class-Of-Service Length

radius.WISPr_Location_ID WISPr-Location-ID
    String

radius.WISPr_Location_ID.len Length
    Unsigned 8-bit integer
    WISPr-Location-ID Length

radius.WISPr_Location_Name WISPr-Location-Name
    String
```

```
radius.WISPr_Location_Name.len  Length
    Unsigned 8-bit integer
    WISPr-Location-Name Length
radius.WISPr_Logoff_URL  WISPr-Logoff-URL
    String
radius.WISPr_Logoff_URL.len  Length
    Unsigned 8-bit integer
    WISPr-Logoff-URL Length
radius.WISPr_Redirection_URL  WISPr-Redirection-URL
    String
radius.WISPr_Redirection_URL.len  Length
    Unsigned 8-bit integer
    WISPr-Redirection-URL Length
radius.WISPr_Session_Terminate_End_Of_Day  WISPr-Session-Terminate-End-Of-Day
    String
radius.WISPr_Session_Terminate_End_Of_Day.len  Length
    Unsigned 8-bit integer
    WISPr-Session-Terminate-End-Of-Day Length
radius.WISPr_Session_Terminate_Time  WISPr-Session-Terminate-Time
    String
radius.WISPr_Session_Terminate_Time.len  Length
    Unsigned 8-bit integer
    WISPr-Session-Terminate-Time Length
radius.X_Ascend_Add_Seconds  X-Ascend-Add-Seconds
    Unsigned 32-bit integer
radius.X_Ascend_Add_Seconds.len  Length
    Unsigned 8-bit integer
    X-Ascend-Add-Seconds Length
radius.X_Ascend_Ara_PW  X-Ascend-Ara-PW
    String
radius.X_Ascend_Ara_PW.len  Length
    Unsigned 8-bit integer
    X-Ascend-Ara-PW Length
radius.X_Ascend_Assign_IP_Client  X-Ascend-Assign-IP-Client
    IPv4 address
radius.X_Ascend_Assign_IP_Client.len  Length
    Unsigned 8-bit integer
    X-Ascend-Assign-IP-Client Length
radius.X_Ascend_Assign_IP_Global_Pool  X-Ascend-Assign-IP-Global-Pool
    String
radius.X_Ascend_Assign_IP_Global_Pool.len  Length
    Unsigned 8-bit integer
    X-Ascend-Assign-IP-Global-Pool Length
radius.X_Ascend_Assign_IP_Pool  X-Ascend-Assign-IP-Pool
    Unsigned 32-bit integer
```

```
radius.X_Ascend_Assign_IP_Pool.len  Length
    Unsigned 8-bit integer
    X-Ascend-Assign-IP-Pool Length

radius.X_Ascend_Assign_IP_Server  X-Ascend-Assign-IP-Server
    IPv4 address

radius.X_Ascend_Assign_IP_Server.len  Length
    Unsigned 8-bit integer
    X-Ascend-Assign-IP-Server Length

radius.X_Ascend_Authen_Alias  X-Ascend-Authen-Alias
    String

radius.X_Ascend_Authen_Alias.len  Length
    Unsigned 8-bit integer
    X-Ascend-Authen-Alias Length

radius.X_Ascend_BACP_Enable  X-Ascend-BACP-Enable
    Unsigned 32-bit integer

radius.X_Ascend_BACP_Enable.len  Length
    Unsigned 8-bit integer
    X-Ascend-BACP-Enable Length

radius.X_Ascend_Backup  X-Ascend-Backup
    String

radius.X_Ascend_Backup.len  Length
    Unsigned 8-bit integer
    X-Ascend-Backup Length

radius.X_Ascend_Base_Channel_Count  X-Ascend-Base-Channel-Count
    Unsigned 32-bit integer

radius.X_Ascend_Base_Channel_Count.len  Length
    Unsigned 8-bit integer
    X-Ascend-Base-Channel-Count Length

radius.X_Ascend_Billing_Number  X-Ascend-Billing-Number
    String

radius.X_Ascend_Billing_Number.len  Length
    Unsigned 8-bit integer
    X-Ascend-Billing-Number Length

radius.X_Ascend_Bridge  X-Ascend-Bridge
    Unsigned 32-bit integer

radius.X_Ascend_Bridge.len  Length
    Unsigned 8-bit integer
    X-Ascend-Bridge Length

radius.X_Ascend_Bridge_Address  X-Ascend-Bridge-Address
    String

radius.X_Ascend_Bridge_Address.len  Length
    Unsigned 8-bit integer
    X-Ascend-Bridge-Address Length

radius.X_Ascend_Call_Attempt_Limit  X-Ascend-Call-Attempt-Limit
    Unsigned 32-bit integer
```

```
radius.X_Ascend_Call_Attempt_Limit.len  Length
    Unsigned 8-bit integer
    X-Ascend-Call-Attempt-Limit Length

radius.X_Ascend_Call_Block_Duration  X-Ascend-Call-Block-Duration
    Unsigned 32-bit integer

radius.X_Ascend_Call_Block_Duration.len  Length
    Unsigned 8-bit integer
    X-Ascend-Call-Block-Duration Length

radius.X_Ascend_Call_By_Call  X-Ascend-Call-By-Call
    Unsigned 32-bit integer

radius.X_Ascend_Call_By_Call.len  Length
    Unsigned 8-bit integer
    X-Ascend-Call-By-Call Length

radius.X_Ascend_Call_Filter  X-Ascend-Call-Filter
    String

radius.X_Ascend_Call_Filter.len  Length
    Unsigned 8-bit integer
    X-Ascend-Call-Filter Length

radius.X_Ascend_Call_Type  X-Ascend-Call-Type
    Unsigned 32-bit integer

radius.X_Ascend_Call_Type.len  Length
    Unsigned 8-bit integer
    X-Ascend-Call-Type Length

radius.X_Ascend_Callback  X-Ascend-Callback
    Unsigned 32-bit integer

radius.X_Ascend_Callback.len  Length
    Unsigned 8-bit integer
    X-Ascend-Callback Length

radius.X_Ascend_Client_Assign_DNS  X-Ascend-Client-Assign-DNS
    Unsigned 32-bit integer

radius.X_Ascend_Client_Assign_DNS.len  Length
    Unsigned 8-bit integer
    X-Ascend-Client-Assign-DNS Length

radius.X_Ascend_Client_Gateway  X-Ascend-Client-Gateway
    IPv4 address

radius.X_Ascend_Client_Gateway.len  Length
    Unsigned 8-bit integer
    X-Ascend-Client-Gateway Length

radius.X_Ascend_Client_Primary_DNS  X-Ascend-Client-Primary-DNS
    IPv4 address

radius.X_Ascend_Client_Primary_DNS.len  Length
    Unsigned 8-bit integer
    X-Ascend-Client-Primary-DNS Length

radius.X_Ascend_Client_Secondary_DNS  X-Ascend-Client-Secondary-DNS
    IPv4 address
```

```
radius.X_Ascend_Client_Secondary_DNS.len  Length
      Unsigned 8-bit integer
      X-Ascend-Client-Secondary-DNS Length

radius.X_Ascend_Connect_Progress  X-Ascend-Connect-Progress
      Unsigned 32-bit integer

radius.X_Ascend_Connect_Progress.len  Length
      Unsigned 8-bit integer
      X-Ascend-Connect-Progress Length

radius.X_Ascend_DBA_Monitor  X-Ascend-DBA-Monitor
      Unsigned 32-bit integer

radius.X_Ascend_DBA_Monitor.len  Length
      Unsigned 8-bit integer
      X-Ascend-DBA-Monitor Length

radius.X_Ascend_DHCP_Maximum_Leases  X-Ascend-DHCP-Maximum-Leases
      Unsigned 32-bit integer

radius.X_Ascend_DHCP_Maximum_Leases.len  Length
      Unsigned 8-bit integer
      X-Ascend-DHCP-Maximum-Leases Length

radius.X_Ascend_DHCP_Pool_Number  X-Ascend-DHCP-Pool-Number
      Unsigned 32-bit integer

radius.X_Ascend_DHCP_Pool_Number.len  Length
      Unsigned 8-bit integer
      X-Ascend-DHCP-Pool-Number Length

radius.X_Ascend_DHCP_Reply  X-Ascend-DHCP-Reply
      Unsigned 32-bit integer

radius.X_Ascend_DHCP_Reply.len  Length
      Unsigned 8-bit integer
      X-Ascend-DHCP-Reply Length

radius.X_Ascend_Data_Filter  X-Ascend-Data-Filter
      String

radius.X_Ascend_Data_Filter.len  Length
      Unsigned 8-bit integer
      X-Ascend-Data-Filter Length

radius.X_Ascend_Data_Rate  X-Ascend-Data-Rate
      Unsigned 32-bit integer

radius.X_Ascend_Data_Rate.len  Length
      Unsigned 8-bit integer
      X-Ascend-Data-Rate Length

radius.X_Ascend_Data_Svc  X-Ascend-Data-Svc
      Unsigned 32-bit integer

radius.X_Ascend_Data_Svc.len  Length
      Unsigned 8-bit integer
      X-Ascend-Data-Svc Length

radius.X_Ascend_Dec_Channel_Count  X-Ascend-Dec-Channel-Count
      Unsigned 32-bit integer
```

```
radius.X_Ascend_Dec_Channel_Count.len  Length
    Unsigned 8-bit integer
    X-Ascend-Dec-Channel-Count Length

radius.X_Ascend_Dial_Number  X-Ascend-Dial-Number
    String

radius.X_Ascend_Dial_Number.len  Length
    Unsigned 8-bit integer
    X-Ascend-Dial-Number Length

radius.X_Ascend_Dialout_Allowed  X-Ascend-Dialout-Allowed
    Unsigned 32-bit integer

radius.X_Ascend_Dialout_Allowed.len  Length
    Unsigned 8-bit integer
    X-Ascend-Dialout-Allowed Length

radius.X_Ascend_Disconnect_Cause  X-Ascend-Disconnect-Cause
    Unsigned 32-bit integer

radius.X_Ascend_Disconnect_Cause.len  Length
    Unsigned 8-bit integer
    X-Ascend-Disconnect-Cause Length

radius.X_Ascend_Event_Type  X-Ascend-Event-Type
    Unsigned 32-bit integer

radius.X_Ascend_Event_Type.len  Length
    Unsigned 8-bit integer
    X-Ascend-Event-Type Length

radius.X_Ascend_Expect_Callback  X-Ascend-Expect-Callback
    Unsigned 32-bit integer

radius.X_Ascend_Expect_Callback.len  Length
    Unsigned 8-bit integer
    X-Ascend-Expect-Callback Length

radius.X_Ascend_FR_Circuit_Name  X-Ascend-FR-Circuit-Name
    String

radius.X_Ascend_FR_Circuit_Name.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Circuit-Name Length

radius.X_Ascend_FR_DCE_N392  X-Ascend-FR-DCE-N392
    Unsigned 32-bit integer

radius.X_Ascend_FR_DCE_N392.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-DCE-N392 Length

radius.X_Ascend_FR_DCE_N393  X-Ascend-FR-DCE-N393
    Unsigned 32-bit integer

radius.X_Ascend_FR_DCE_N393.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-DCE-N393 Length

radius.X_Ascend_FR_DLCI  X-Ascend-FR-DLCI
    Unsigned 32-bit integer
```

```
radius.X_Ascend_FR_DLCI.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-DLCI Length
radius.X_Ascend_FR_DTE_N392  X-Ascend-FR-DTE-N392
    Unsigned 32-bit integer
radius.X_Ascend_FR_DTE_N392.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-DTE-N392 Length
radius.X_Ascend_FR_DTE_N393  X-Ascend-FR-DTE-N393
    Unsigned 32-bit integer
radius.X_Ascend_FR_DTE_N393.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-DTE-N393 Length
radius.X_Ascend_FR_Direct  X-Ascend-FR-Direct
    Unsigned 32-bit integer
radius.X_Ascend_FR_Direct.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Direct Length
radius.X_Ascend_FR_Direct_DLCI  X-Ascend-FR-Direct-DLCI
    Unsigned 32-bit integer
radius.X_Ascend_FR_Direct_DLCI.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Direct-DLCI Length
radius.X_Ascend_FR_Direct_Profile  X-Ascend-FR-Direct-Profile
    String
radius.X_Ascend_FR_Direct_Profile.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Direct-Profile Length
radius.X_Ascend_FR_LinkUp  X-Ascend-FR-LinkUp
    Unsigned 32-bit integer
radius.X_Ascend_FR_LinkUp.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-LinkUp Length
radius.X_Ascend_FR_Link_Mgt  X-Ascend-FR-Link-Mgt
    Unsigned 32-bit integer
radius.X_Ascend_FR_Link_Mgt.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Link-Mgt Length
radius.X_Ascend_FR_N391  X-Ascend-FR-N391
    Unsigned 32-bit integer
radius.X_Ascend_FR_N391.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-N391 Length
radius.X_Ascend_FR_Nailed_Grp  X-Ascend-FR-Nailed-Grp
    Unsigned 32-bit integer
```

```
radius.X_Ascend_FR_Nailed_Grp.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Nailed-Grp Length

radius.X_Ascend_FR_Profile_Name  X-Ascend-FR-Profile-Name
    String

radius.X_Ascend_FR_Profile_Name.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Profile-Name Length

radius.X_Ascend_FR_T391  X-Ascend-FR-T391
    Unsigned 32-bit integer

radius.X_Ascend_FR_T391.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-T391 Length

radius.X_Ascend_FR_T392  X-Ascend-FR-T392
    Unsigned 32-bit integer

radius.X_Ascend_FR_T392.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-T392 Length

radius.X_Ascend_FR_Type  X-Ascend-FR-Type
    Unsigned 32-bit integer

radius.X_Ascend_FR_Type.len  Length
    Unsigned 8-bit integer
    X-Ascend-FR-Type Length

radius.X_Ascend_FT1_Caller  X-Ascend-FT1-Caller
    Unsigned 32-bit integer

radius.X_Ascend_FT1_Caller.len  Length
    Unsigned 8-bit integer
    X-Ascend-FT1-Caller Length

radius.X_Ascend_First_Dest  X-Ascend-First-Dest
    IPv4 address

radius.X_Ascend_First_Dest.len  Length
    Unsigned 8-bit integer
    X-Ascend-First-Dest Length

radius.X_Ascend_Force_56  X-Ascend-Force-56
    Unsigned 32-bit integer

radius.X_Ascend_Force_56.len  Length
    Unsigned 8-bit integer
    X-Ascend-Force-56 Length

radius.X_Ascend_Group  X-Ascend-Group
    String

radius.X_Ascend_Group.len  Length
    Unsigned 8-bit integer
    X-Ascend-Group Length

radius.X_Ascend_Handle_IPX  X-Ascend-Handle-IPX
    Unsigned 32-bit integer
```



```
radius.X_Ascend_Handle_IPX.len  Length
    Unsigned 8-bit integer
    X-Ascend-Handle-IPX Length

radius.X_Ascend_History_Weigh_Type  X-Ascend-History-Weigh-Type
    Unsigned 32-bit integer

radius.X_Ascend_History_Weigh_Type.len  Length
    Unsigned 8-bit integer
    X-Ascend-History-Weigh-Type Length

radius.X_Ascend_Home_Agent_IP_Addr  X-Ascend-Home-Agent-IP-Addr
    IPv4 address

radius.X_Ascend_Home_Agent_IP_Addr.len  Length
    Unsigned 8-bit integer
    X-Ascend-Home-Agent-IP-Addr Length

radius.X_Ascend_Home_Agent_Password  X-Ascend-Home-Agent-Password
    String

radius.X_Ascend_Home_Agent_Password.len  Length
    Unsigned 8-bit integer
    X-Ascend-Home-Agent-Password Length

radius.X_Ascend_Home_Agent_UDP_Port  X-Ascend-Home-Agent-UDP-Port
    Unsigned 32-bit integer

radius.X_Ascend_Home_Agent_UDP_Port.len  Length
    Unsigned 8-bit integer
    X-Ascend-Home-Agent-UDP-Port Length

radius.X_Ascend_Home_Network_Name  X-Ascend-Home-Network-Name
    String

radius.X_Ascend_Home_Network_Name.len  Length
    Unsigned 8-bit integer
    X-Ascend-Home-Network-Name Length

radius.X_Ascend_Host_Info  X-Ascend-Host-Info
    String

radius.X_Ascend_Host_Info.len  Length
    Unsigned 8-bit integer
    X-Ascend-Host-Info Length

radius.X_Ascend_IF_Netmask  X-Ascend-IF-Netmask
    IPv4 address

radius.X_Ascend_IF_Netmask.len  Length
    Unsigned 8-bit integer
    X-Ascend-IF-Netmask Length

radius.X_Ascend_IPX_Alias  X-Ascend-IPX-Alias
    Unsigned 32-bit integer

radius.X_Ascend_IPX_Alias.len  Length
    Unsigned 8-bit integer
    X-Ascend-IPX-Alias Length

radius.X_Ascend_IPX_Node_Addr  X-Ascend-IPX-Node-Addr
    String
```

```
radius.X_Ascend_IPX_Node_Addr.len  Length
    Unsigned 8-bit integer
    X-Ascend-IPX-Node-Addr Length

radius.X_Ascend_IPX_Peer_Mode  X-Ascend-IPX-Peer-Mode
    Unsigned 32-bit integer

radius.X_Ascend_IPX_Peer_Mode.len  Length
    Unsigned 8-bit integer
    X-Ascend-IPX-Peer-Mode Length

radius.X_Ascend_IPX_Route  X-Ascend-IPX-Route
    String

radius.X_Ascend_IPX_Route.len  Length
    Unsigned 8-bit integer
    X-Ascend-IPX-Route Length

radius.X_Ascend_IP_Direct  X-Ascend-IP-Direct
    IPv4 address

radius.X_Ascend_IP_Direct.len  Length
    Unsigned 8-bit integer
    X-Ascend-IP-Direct Length

radius.X_Ascend_IP_Pool_Definition  X-Ascend-IP-Pool-Definition
    String

radius.X_Ascend_IP_Pool_Definition.len  Length
    Unsigned 8-bit integer
    X-Ascend-IP-Pool-Definition Length

radius.X_Ascend_Idle_Limit  X-Ascend-Idle-Limit
    Unsigned 32-bit integer

radius.X_Ascend_Idle_Limit.len  Length
    Unsigned 8-bit integer
    X-Ascend-Idle-Limit Length

radius.X_Ascend_Inc_Channel_Count  X-Ascend-Inc-Channel-Count
    Unsigned 32-bit integer

radius.X_Ascend_Inc_Channel_Count.len  Length
    Unsigned 8-bit integer
    X-Ascend-Inc-Channel-Count Length

radius.X_Ascend_Link_Compression  X-Ascend-Link-Compression
    Unsigned 32-bit integer

radius.X_Ascend_Link_Compression.len  Length
    Unsigned 8-bit integer
    X-Ascend-Link-Compression Length

radius.X_Ascend_MPP_Idle_Percent  X-Ascend-MPP-Idle-Percent
    Unsigned 32-bit integer

radius.X_Ascend_MPP_Idle_Percent.len  Length
    Unsigned 8-bit integer
    X-Ascend-MPP-Idle-Percent Length

radius.X_Ascend_Maximum_Call_Duration  X-Ascend-Maximum-Call-Duration
    Unsigned 32-bit integer
```

```
radius.X_Ascend_Maximum_Call_Duration.len  Length
      Unsigned 8-bit integer
      X-Ascend-Maximum-Call-Duration Length

radius.X_Ascend_Maximum_Channels  X-Ascend-Maximum-Channels
      Unsigned 32-bit integer

radius.X_Ascend_Maximum_Channels.len  Length
      Unsigned 8-bit integer
      X-Ascend-Maximum-Channels Length

radius.X_Ascend_Maximum_Time  X-Ascend-Maximum-Time
      Unsigned 32-bit integer

radius.X_Ascend_Maximum_Time.len  Length
      Unsigned 8-bit integer
      X-Ascend-Maximum-Time Length

radius.X_Ascend_Menu_Selector  X-Ascend-Menu-Selector
      String

radius.X_Ascend_Menu_Selector.len  Length
      Unsigned 8-bit integer
      X-Ascend-Menu-Selector Length

radius.X_Ascend_Metric  X-Ascend-Metric
      Unsigned 32-bit integer

radius.X_Ascend_Metric.len  Length
      Unsigned 8-bit integer
      X-Ascend-Metric Length

radius.X_Ascend_Minimum_Channels  X-Ascend-Minimum-Channels
      Unsigned 32-bit integer

radius.X_Ascend_Minimum_Channels.len  Length
      Unsigned 8-bit integer
      X-Ascend-Minimum-Channels Length

radius.X_Ascend_Multicast_Client  X-Ascend-Multicast-Client
      Unsigned 32-bit integer

radius.X_Ascend_Multicast_Client.len  Length
      Unsigned 8-bit integer
      X-Ascend-Multicast-Client Length

radius.X_Ascend_Multicast_Rate_Limit  X-Ascend-Multicast-Rate-Limit
      Unsigned 32-bit integer

radius.X_Ascend_Multicast_Rate_Limit.len  Length
      Unsigned 8-bit integer
      X-Ascend-Multicast-Rate-Limit Length

radius.X_Ascend_Multilink_ID  X-Ascend-Multilink-ID
      Unsigned 32-bit integer

radius.X_Ascend_Multilink_ID.len  Length
      Unsigned 8-bit integer
      X-Ascend-Multilink-ID Length

radius.X_Ascend_Netware_timeout  X-Ascend-Netware-timeout
      Unsigned 32-bit integer
```

```
radius.X_Ascend_Netware_timeout.len  Length
    Unsigned 8-bit integer
    X-Ascend-Netware-timeout Length
radius.X_Ascend_Num_In_Multilink  X-Ascend-Num-In-Multilink
    Unsigned 32-bit integer
radius.X_Ascend_Num_In_Multilink.len  Length
    Unsigned 8-bit integer
    X-Ascend-Num-In-Multilink Length
radius.X_Ascend_Number_Sessions  X-Ascend-Number-Sessions
    String
radius.X_Ascend_Number_Sessions.len  Length
    Unsigned 8-bit integer
    X-Ascend-Number-Sessions Length
radius.X_Ascend_PPP_Address  X-Ascend-PPP-Address
    IPv4 address
radius.X_Ascend_PPP_Address.len  Length
    Unsigned 8-bit integer
    X-Ascend-PPP-Address Length
radius.X_Ascend_PPP_Async_Map  X-Ascend-PPP-Async-Map
    Unsigned 32-bit integer
radius.X_Ascend_PPP_Async_Map.len  Length
    Unsigned 8-bit integer
    X-Ascend-PPP-Async-Map Length
radius.X_Ascend_PPP_VJ_1172  X-Ascend-PPP-VJ-1172
    Unsigned 32-bit integer
radius.X_Ascend_PPP_VJ_1172.len  Length
    Unsigned 8-bit integer
    X-Ascend-PPP-VJ-1172 Length
radius.X_Ascend_PPP_VJ_Slot_Comp  X-Ascend-PPP-VJ-Slot-Comp
    Unsigned 32-bit integer
radius.X_Ascend_PPP_VJ_Slot_Comp.len  Length
    Unsigned 8-bit integer
    X-Ascend-PPP-VJ-Slot-Comp Length
radius.X_Ascend_PRI_Number_Type  X-Ascend-PRI-Number-Type
    Unsigned 32-bit integer
radius.X_Ascend_PRI_Number_Type.len  Length
    Unsigned 8-bit integer
    X-Ascend-PRI-Number-Type Length
radius.X_Ascend_PW_Lifetime  X-Ascend-PW-Lifetime
    Unsigned 32-bit integer
radius.X_Ascend_PW_Lifetime.len  Length
    Unsigned 8-bit integer
    X-Ascend-PW-Lifetime Length
radius.X_Ascend_PreSession_Time  X-Ascend-PreSession-Time
    Unsigned 32-bit integer
```

```
radius.X_Ascend_PreSession_Time.len  Length
    Unsigned 8-bit integer
    X-Ascend-PreSession-Time Length

radius.X_Ascend_Pre_Input_Octets  X-Ascend-Pre-Input-Octets
    Unsigned 32-bit integer

radius.X_Ascend_Pre_Input_Octets.len  Length
    Unsigned 8-bit integer
    X-Ascend-Pre-Input-Octets Length

radius.X_Ascend_Pre_Input_Packets  X-Ascend-Pre-Input-Packets
    Unsigned 32-bit integer

radius.X_Ascend_Pre_Input_Packets.len  Length
    Unsigned 8-bit integer
    X-Ascend-Pre-Input-Packets Length

radius.X_Ascend_Pre_Output_Octets  X-Ascend-Pre-Output-Octets
    Unsigned 32-bit integer

radius.X_Ascend_Pre_Output_Octets.len  Length
    Unsigned 8-bit integer
    X-Ascend-Pre-Output-Octets Length

radius.X_Ascend_Pre_Output_Packets  X-Ascend-Pre-Output-Packets
    Unsigned 32-bit integer

radius.X_Ascend_Pre_Output_Packets.len  Length
    Unsigned 8-bit integer
    X-Ascend-Pre-Output-Packets Length

radius.X_Ascend_Preempt_Limit  X-Ascend-Preempt-Limit
    Unsigned 32-bit integer

radius.X_Ascend_Preempt_Limit.len  Length
    Unsigned 8-bit integer
    X-Ascend-Preempt-Limit Length

radius.X_Ascend_Primary_Home_Agent  X-Ascend-Primary-Home-Agent
    String

radius.X_Ascend_Primary_Home_Agent.len  Length
    Unsigned 8-bit integer
    X-Ascend-Primary-Home-Agent Length

radius.X_Ascend_Receive_Secret  X-Ascend-Receive-Secret
    String

radius.X_Ascend_Receive_Secret.len  Length
    Unsigned 8-bit integer
    X-Ascend-Receive-Secret Length

radius.X_Ascend_Remote_Addr  X-Ascend-Remote-Addr
    IPv4 address

radius.X_Ascend_Remote_Addr.len  Length
    Unsigned 8-bit integer
    X-Ascend-Remote-Addr Length

radius.X_Ascend_Remove_Seconds  X-Ascend-Remove-Seconds
    Unsigned 32-bit integer
```

```
radius.X_Ascend_Remove_Seconds.len  Length
    Unsigned 8-bit integer
    X-Ascend-Remove-Seconds Length

radius.X_Ascend_Require_Auth  X-Ascend-Require-Auth
    Unsigned 32-bit integer

radius.X_Ascend_Require_Auth.len  Length
    Unsigned 8-bit integer
    X-Ascend-Require-Auth Length

radius.X_Ascend_Route_IP  X-Ascend-Route-IP
    Unsigned 32-bit integer

radius.X_Ascend_Route_IP.len  Length
    Unsigned 8-bit integer
    X-Ascend-Route-IP Length

radius.X_Ascend_Route_IPX  X-Ascend-Route-IPX
    Unsigned 32-bit integer

radius.X_Ascend_Route_IPX.len  Length
    Unsigned 8-bit integer
    X-Ascend-Route-IPX Length

radius.X_Ascend_Secondary_Home_Agent  X-Ascend-Secondary-Home-Agent
    String

radius.X_Ascend_Secondary_Home_Agent.len  Length
    Unsigned 8-bit integer
    X-Ascend-Secondary-Home-Agent Length

radius.X_Ascend_Seconds_Of_History  X-Ascend-Seconds-Of-History
    Unsigned 32-bit integer

radius.X_Ascend_Seconds_Of_History.len  Length
    Unsigned 8-bit integer
    X-Ascend-Seconds-Of-History Length

radius.X_Ascend_Send_Auth  X-Ascend-Send-Auth
    Unsigned 32-bit integer

radius.X_Ascend_Send_Auth.len  Length
    Unsigned 8-bit integer
    X-Ascend-Send-Auth Length

radius.X_Ascend_Send_Passwd  X-Ascend-Send-Passwd
    String

radius.X_Ascend_Send_Passwd.len  Length
    Unsigned 8-bit integer
    X-Ascend-Send-Passwd Length

radius.X_Ascend_Send_Secret  X-Ascend-Send-Secret
    String

radius.X_Ascend_Send_Secret.len  Length
    Unsigned 8-bit integer
    X-Ascend-Send-Secret Length

radius.X_Ascend_Session_Svr_Key  X-Ascend-Session-Svr-Key
    String
```

```
radius.X_Ascend_Session_Svr_Key.len  Length
    Unsigned 8-bit integer
    X-Ascend-Session-Svr-Key Length

radius.X_Ascend_Shared_Profile_Enable  X-Ascend-Shared-Profile-Enable
    Unsigned 32-bit integer

radius.X_Ascend_Shared_Profile_Enable.len  Length
    Unsigned 8-bit integer
    X-Ascend-Shared-Profile-Enable Length

radius.X_Ascend_TS_Idle_Limit  X-Ascend-TS-Idle-Limit
    Unsigned 32-bit integer

radius.X_Ascend_TS_Idle_Limit.len  Length
    Unsigned 8-bit integer
    X-Ascend-TS-Idle-Limit Length

radius.X_Ascend_TS_Idle_Mode  X-Ascend-TS-Idle-Mode
    Unsigned 32-bit integer

radius.X_Ascend_TS_Idle_Mode.len  Length
    Unsigned 8-bit integer
    X-Ascend-TS-Idle-Mode Length

radius.X_Ascend_Target_Util  X-Ascend-Target-Util
    Unsigned 32-bit integer

radius.X_Ascend_Target_Util.len  Length
    Unsigned 8-bit integer
    X-Ascend-Target-Util Length

radius.X_Ascend_Temporary_Rtes  X-Ascend-Temporary-Rtes
    Unsigned 32-bit integer

radius.X_Ascend_Temporary_Rtes.len  Length
    Unsigned 8-bit integer
    X-Ascend-Temporary-Rtes Length

radius.X_Ascend_Third_Prompt  X-Ascend-Third-Prompt
    String

radius.X_Ascend_Third_Prompt.len  Length
    Unsigned 8-bit integer
    X-Ascend-Third-Prompt Length

radius.X_Ascend-Token_Expiry  X-Ascend-Token-Expiry
    Unsigned 32-bit integer

radius.X_Ascend-Token_Expiry.len  Length
    Unsigned 8-bit integer
    X-Ascend-Token-Expiry Length

radius.X_Ascend-Token_Idle  X-Ascend-Token-Idle
    Unsigned 32-bit integer

radius.X_Ascend-Token_Idle.len  Length
    Unsigned 8-bit integer
    X-Ascend-Token-Idle Length

radius.X_Ascend-Token_Immediate  X-Ascend-Token-Immediate
    Unsigned 32-bit integer
```

```
radius.X_Ascend-Token-Immediate.len  Length
    Unsigned 8-bit integer
    X-Ascend-Token-Immediate Length

radius.X_Ascend-Transit-Number  X-Ascend-Transit-Number
    String

radius.X_Ascend-Transit-Number.len  Length
    Unsigned 8-bit integer
    X-Ascend-Transit-Number Length

radius.X_Ascend-Tunneling-Protocol  X-Ascend-Tunneling-Protocol
    Unsigned 32-bit integer

radius.X_Ascend-Tunneling-Protocol.len  Length
    Unsigned 8-bit integer
    X-Ascend-Tunneling-Protocol Length

radius.X_Ascend-User-Acct-Base  X-Ascend-User-Acct-Base
    Unsigned 32-bit integer

radius.X_Ascend-User-Acct-Base.len  Length
    Unsigned 8-bit integer
    X-Ascend-User-Acct-Base Length

radius.X_Ascend-User-Acct-Host  X-Ascend-User-Acct-Host
    IPv4 address

radius.X_Ascend-User-Acct-Host.len  Length
    Unsigned 8-bit integer
    X-Ascend-User-Acct-Host Length

radius.X_Ascend-User-Acct-Key  X-Ascend-User-Acct-Key
    String

radius.X_Ascend-User-Acct-Key.len  Length
    Unsigned 8-bit integer
    X-Ascend-User-Acct-Key Length

radius.X_Ascend-User-Acct-Port  X-Ascend-User-Acct-Port
    Unsigned 32-bit integer

radius.X_Ascend-User-Acct-Port.len  Length
    Unsigned 8-bit integer
    X-Ascend-User-Acct-Port Length

radius.X_Ascend-User-Acct-Time  X-Ascend-User-Acct-Time
    Unsigned 32-bit integer

radius.X_Ascend-User-Acct-Time.len  Length
    Unsigned 8-bit integer
    X-Ascend-User-Acct-Time Length

radius.X_Ascend-User-Acct-Type  X-Ascend-User-Acct-Type
    Unsigned 32-bit integer

radius.X_Ascend-User-Acct-Type.len  Length
    Unsigned 8-bit integer
    X-Ascend-User-Acct-Type Length

radius.X_Ascend-Xmit-Rate  X-Ascend-Xmit-Rate
    Unsigned 32-bit integer
```



```
radius.X_Ascend_Xmit_Rate.len  Length
    Unsigned 8-bit integer
    X-Ascend-Xmit-Rate Length

radius.Xedia_Address_Pool  Xedia-Address-Pool
    String

radius.Xedia_Address_Pool.len  Length
    Unsigned 8-bit integer
    Xedia-Address-Pool Length

radius.Xedia_Client_Access_Network  Xedia-Client-Access-Network
    String

radius.Xedia_Client_Access_Network.len  Length
    Unsigned 8-bit integer
    Xedia-Client-Access-Network Length

radius.Xedia_DNS_Server  Xedia-DNS-Server
    IPv4 address

radius.Xedia_DNS_Server.len  Length
    Unsigned 8-bit integer
    Xedia-DNS-Server Length

radius.Xedia_NetBios_Server  Xedia-NetBios-Server
    IPv4 address

radius.Xedia_NetBios_Server.len  Length
    Unsigned 8-bit integer
    Xedia-NetBios-Server Length

radius.Xedia_PPP_Echo_Interval  Xedia-PPP-Echo-Interval
    Unsigned 32-bit integer

radius.Xedia_PPP_Echo_Interval.len  Length
    Unsigned 8-bit integer
    Xedia-PPP-Echo-Interval Length

radius.Xedia_SSH_Privileges  Xedia-SSH-Privileges
    Unsigned 32-bit integer

radius.Xedia_SSH_Privileges.len  Length
    Unsigned 8-bit integer
    Xedia-SSH-Privileges Length

radius.authenticator  Authenticator
    Byte array

radius.call_id  call-id
    String

radius.call_id.len  Length
    Unsigned 8-bit integer
    call-id Length

radius.code  Code
    Unsigned 8-bit integer

radius.dup  Duplicate Message
    Unsigned 32-bit integer
    Duplicate Message
```

```
radius.gw_final_xlated_cdn  gw-final-xlated-cdn
    String
radius.gw_final_xlated_cdn.len  Length
    Unsigned 8-bit integer
    gw-final-xlated-cdn Length
radius.gw_rxd_cdn  gw-rxd-cdn
    String
radius.gw_rxd_cdn.len  Length
    Unsigned 8-bit integer
    gw-rxd-cdn Length
radius.h323_billing_model  h323-billing-model
    String
radius.h323_billing_model.len  Length
    Unsigned 8-bit integer
    h323-billing-model Length
radius.h323_call_origin  h323-call-origin
    String
radius.h323_call_origin.len  Length
    Unsigned 8-bit integer
    h323-call-origin Length
radius.h323_call_type  h323-call-type
    String
radius.h323_call_type.len  Length
    Unsigned 8-bit integer
    h323-call-type Length
radius.h323_conf_id  h323-conf-id
    String
radius.h323_conf_id.len  Length
    Unsigned 8-bit integer
    h323-conf-id Length
radius.h323_connect_time  h323-connect-time
    String
radius.h323_connect_time.len  Length
    Unsigned 8-bit integer
    h323-connect-time Length
radius.h323_credit_amount  h323-credit-amount
    String
radius.h323_credit_amount.len  Length
    Unsigned 8-bit integer
    h323-credit-amount Length
radius.h323_credit_time  h323-credit-time
    String
radius.h323_credit_time.len  Length
    Unsigned 8-bit integer
    h323-credit-time Length
```

```
radius.h323_currency  h323-currency
    String
radius.h323_currency.len  Length
    Unsigned 8-bit integer
    h323-currency Length
radius.h323_disconnect_cause  h323-disconnect-cause
    String
radius.h323_disconnect_cause.len  Length
    Unsigned 8-bit integer
    h323-disconnect-cause Length
radius.h323_disconnect_time  h323-disconnect-time
    String
radius.h323_disconnect_time.len  Length
    Unsigned 8-bit integer
    h323-disconnect-time Length
radius.h323_gw_id  h323-gw-id
    String
radius.h323_gw_id.len  Length
    Unsigned 8-bit integer
    h323-gw-id Length
radius.h323_incoming_conf_id  h323-incoming-conf-id
    String
radius.h323_incoming_conf_id.len  Length
    Unsigned 8-bit integer
    h323-incoming-conf-id Length
radius.h323_preferred_lang  h323-preferred-lang
    String
radius.h323_preferred_lang.len  Length
    Unsigned 8-bit integer
    h323-preferred-lang Length
radius.h323_prompt_id  h323-prompt-id
    String
radius.h323_prompt_id.len  Length
    Unsigned 8-bit integer
    h323-prompt-id Length
radius.h323_redirect_ip_address  h323-redirect-ip-address
    String
radius.h323_redirect_ip_address.len  Length
    Unsigned 8-bit integer
    h323-redirect-ip-address Length
radius.h323_redirect_number  h323-redirect-number
    String
radius.h323_redirect_number.len  Length
    Unsigned 8-bit integer
    h323-redirect-number Length
```

```
radius.h323_remote_address  h323-remote-address
    String
radius.h323_remote_address.len  Length
    Unsigned 8-bit integer
    h323-remote-address Length
radius.h323_return_code  h323-return-code
    String
radius.h323_return_code.len  Length
    Unsigned 8-bit integer
    h323-return-code Length
radius.h323_setup_time  h323-setup-time
    String
radius.h323_setup_time.len  Length
    Unsigned 8-bit integer
    h323-setup-time Length
radius.h323_time_and_day  h323-time-and-day
    String
radius.h323_time_and_day.len  Length
    Unsigned 8-bit integer
    h323-time-and-day Length
radius.h323_voice_quality  h323-voice-quality
    String
radius.h323_voice_quality.len  Length
    Unsigned 8-bit integer
    h323-voice-quality Length
radius.id  Identifier
    Unsigned 8-bit integer
radius.incoming_req_uri  incoming-req-uri
    String
radius.incoming_req_uri.len  Length
    Unsigned 8-bit integer
    incoming-req-uri Length
radius.length  Length
    Unsigned 16-bit integer
radius.method  method
    String
radius.method.len  Length
    Unsigned 8-bit integer
    method Length
radius.next_hop_dn  next-hop-dn
    String
radius.next_hop_dn.len  Length
    Unsigned 8-bit integer
    next-hop-dn Length
radius.next_hop_ip  next-hop-ip
    String
```

```
radius.next_hop_ip.len  Length
    Unsigned 8-bit integer
    next-hop-ip Length

radius.outgoing_req_uri  outgoing-req-uri
    String

radius.outgoing_req_uri.len  Length
    Unsigned 8-bit integer
    outgoing-req-uri Length

radius.prev_hop_ip  prev-hop-ip
    String

radius.prev_hop_ip.len  Length
    Unsigned 8-bit integer
    prev-hop-ip Length

radius.prev_hop_via  prev-hop-via
    String

radius.prev_hop_via.len  Length
    Unsigned 8-bit integer
    prev-hop-via Length

radius.req  Request
    Boolean
    TRUE if RADIUS request

radius.req.dup  Duplicate Request
    Unsigned 32-bit integer
    Duplicate Request

radius.reqframe  Request Frame
    Frame number
    Request Frame

radius.rsp  Response
    Boolean
    TRUE if RADIUS response

radius.rsp.dup  Duplicate Response
    Unsigned 32-bit integer
    Duplicate Response

radius.rspframe  Response Frame
    Frame number
    Response Frame

radius.session_protocol  session-protocol
    String

radius.session_protocol.len  Length
    Unsigned 8-bit integer
    session-protocol Length

radius.sip_hdr  sip-hdr
    String

radius.sip_hdr.len  Length
    Unsigned 8-bit integer
    sip-hdr Length
```

```
radius.subscriber subscriber
    String
radius.subscriber.len Length
    Unsigned 8-bit integer
    subscriber Length
radius.time Time from request
    Time duration
    Timedelta between Request and Response
```

**Raw packet data (raw)****Real Data Transport (rdt)**

```
rdt.aact-flags RDT asm-action flags 1
    String
    RDT aact flags
rdt.ack-flags RDT ack flags
    String
    RDT ack flags
rdt.asm-rule asm rule
    Unsigned 8-bit integer
rdt.asm-rule-expansion Asm rule expansion
    Unsigned 16-bit integer
    Asm rule expansion
rdt.back-to-back Back-to-back
    Unsigned 8-bit integer
rdt.bandwidth-report-flags RDT bandwidth report flags
    String
    RDT bandwidth report flags
rdt.bw-probing-flags RDT bw probing flags
    String
    RDT bw probing flags
rdt.bwid-report-bandwidth Bandwidth report bandwidth
    Unsigned 32-bit integer
rdt.bwid-report-interval Bandwidth report interval
    Unsigned 16-bit integer
rdt.bwid-report-sequence Bandwidth report sequence
    Unsigned 16-bit integer
rdt.bwpp-seqno Bandwidth probing packet seqno
    Unsigned 8-bit integer
rdt.cong-recv-mult Congestion receive multiplier
    Unsigned 32-bit integer
rdt.cong-xmit-mult Congestion transmit multiplier
    Unsigned 32-bit integer
rdt.congestion-flags RDT congestion flags
    String
    RDT congestion flags
```

```
rdt.data      Data
              No value

rdt.data-flags1  RDT data flags 1
                String
                RDT data flags 1

rdt.data-flags2  RDT data flags 2
                String
                RDT data flags2

rdt.feature-level  RDT feature level
                  Signed 32-bit integer

rdt.is-reliable  Is reliable
                 Unsigned 8-bit integer

rdt.latency-report-flags  RDT latency report flags
                          String
                          RDT latency report flags

rdt.length-included  Length included
                     Unsigned 8-bit integer

rdt.lost-high  Lost high
               Unsigned 8-bit integer
               Lost high

rdt.lrpt-server-out-time  Latency report server out time
                          Unsigned 32-bit integer

rdt.need-reliable  Need reliable
                   Unsigned 8-bit integer

rdt.packet  RDT packet
            String
            RDT packet

rdt.packet-length  Packet length
                  Unsigned 16-bit integer

rdt.packet-type  Packet type
                 Unsigned 16-bit integer
                 Packet type

rdt.reliable-seq-no  Reliable sequence number
                    Unsigned 16-bit integer

rdt.report-flags  RDT report flags
                  String
                  RDT report flags

rdt.rtrp-ts-sec  Round trip response timestamp seconds
                 Unsigned 32-bit integer

rdt.rtrp-ts-usec  Round trip response timestamp microseconds
                  Unsigned 32-bit integer

rdt.rtt-request-flags  RDT rtt request flags
                       String
                       RDT RTT request flags
```

```
rdt.rtt-response-flags  RDT rtt response flags
    String
    RDT RTT response flags
rdt.sequence-number    Sequence number
    Unsigned 16-bit integer
rdt.setup              Stream setup
    String
    Stream setup, method and frame number
rdt.setup-frame        Setup frame
    Frame number
    Frame that set up this stream
rdt.setup-method       Setup Method
    String
    Method used to set up this stream
rdt.slow-data          Slow data
    Unsigned 8-bit integer
rdt.stre-ext-flag      Ext flag
    Unsigned 8-bit integer
rdt.stre-need-reliable Need reliable
    Unsigned 8-bit integer
rdt.stre-packet-sent   Packet sent
    Unsigned 8-bit integer
rdt.stre-reason-code   Stream end reason code
    Unsigned 32-bit integer
rdt.stre-reason-dummy-flags1 Stream end reason dummy flags1
    Unsigned 8-bit integer
rdt.stre-reason-dummy-type Stream end reason dummy type
    Unsigned 16-bit integer
rdt.stre-seqno         Stream end sequence number
    Unsigned 16-bit integer
rdt.stre-stream-id     Stream id
    Unsigned 8-bit integer
rdt.stream-end-flags  RDT stream end flags
    String
    RDT stream end flags
rdt.stream-id          Stream ID
    Unsigned 8-bit integer
rdt.stream-id-expansion Stream-id expansion
    Unsigned 16-bit integer
    Stream-id expansion
rdt.timestamp          Timestamp
    Unsigned 32-bit integer
    Timestamp
rdt.tirp-buffer-info   RDT buffer info
    String
    RDT buffer info
```



```
rdt.tirp-buffer-info-bytes-buffered  Bytes buffered
    Unsigned 32-bit integer
rdt.tirp-buffer-info-count  Transport info buffer into count
    Unsigned 16-bit integer
rdt.tirp-buffer-info-highest-timestamp  Highest timestamp
    Unsigned 32-bit integer
rdt.tirp-buffer-info-lowest-timestamp  Lowest timestamp
    Unsigned 32-bit integer
rdt.tirp-buffer-info-stream-id  Buffer info stream-id
    Unsigned 16-bit integer
rdt.tirp-has-buffer-info  Transport info response has buffer info
    Unsigned 8-bit integer
rdt.tirp-has-rtt-info  Transport info response has rtt info flag
    Unsigned 8-bit integer
rdt.tirp-is-delayed  Transport info response is delayed
    Unsigned 8-bit integer
rdt.tirp-request-time-msec  Transport info request time msec
    Unsigned 32-bit integer
rdt.tirp-response-time-msec  Transport info response time msec
    Unsigned 32-bit integer
rdt.tirq-request-buffer-info  Transport info request buffer info flag
    Unsigned 8-bit integer
rdt.tirq-request-rtt-info  Transport info request rtt info flag
    Unsigned 8-bit integer
rdt.tirq-request-time-msec  Transport info request time msec
    Unsigned 32-bit integer
rdt.total-reliable  Total reliable
    Unsigned 16-bit integer
    Total reliable
rdt.transport-info-request-flags  RDT transport info request flags
    String
    RDT transport info request flags
rdt.transport-info-response-flags  RDT transport info response flags
    String
    RDT transport info response flags
rdt.unk-flags1  Unknown packet flags
    Unsigned 8-bit integer
```

#### **Real Time Messaging Protocol (rtmpt)**

```
rtmpt.amf.boolean  AMF boolean
    Boolean
    RTMPT AMF boolean
rtmpt.amf.number  AMF number
    Double-precision floating point
    RTMPT AMF number
```

```
rtmpt.amf.string  AMF string
  String
  RTMPT AMF string
rtmpt.amf.type    AMF type
  Unsigned 8-bit integer
  RTMPT AMF type
rtmpt.header.bodysize  Body size
  Unsigned 24-bit integer
  RTMPT Header body size
rtmpt.header.caller  Caller source
  Unsigned 32-bit integer
  RTMPT Header caller source
rtmpt.header.function  Function call
  Unsigned 8-bit integer
  RTMPT Header function call
rtmpt.header.handshake  Handshake data
  Byte array
  RTMPT Header handshake data
rtmpt.header.objid  ObjectID
  Unsigned 8-bit integer
  RTMPT Header object ID
rtmpt.header.timestamp  Timestamp
  Unsigned 24-bit integer
  RTMPT Header timestamp
```

### **Real Time Streaming Protocol (rtsp)**

```
X_Vig_Msisdn  X-Vig-Msisdn
  String
rtsp.content-length  Content-length
  Unsigned 32-bit integer
rtsp.content-type    Content-type
  String
rtsp.method          Method
  String
rtsp.rdt-feature-level  RDTFeatureLevel
  Unsigned 32-bit integer
rtsp.request         Request
  String
rtsp.response        Response
  String
rtsp.session         Session
  String
rtsp.status          Status
  Unsigned 32-bit integer
rtsp.transport       Transport
  String
```

rtsp.url URL  
String

### Real-Time Media Access Control (rtmac)

rtmac.header.flags Flags  
Unsigned 8-bit integer  
RTmac Flags

rtmac.header.flags.res Reserved Flags  
Unsigned 8-bit integer  
RTmac Reserved Flags

rtmac.header.flags.tunnel Tunnelling Flag  
Boolean  
RTmac Tunnelling Flag

rtmac.header.res Reserved  
Unsigned 8-bit integer  
RTmac Reserved

rtmac.header.type Type  
String  
RTmac Type

rtmac.header.ver Version  
Unsigned 16-bit integer  
RTmac Version

tdma-v1.msg Message  
Unsigned 32-bit integer  
TDMA-V1 Message

tdma-v1.msg.ack\_ack\_conf.padding Padding  
Byte array  
TDMA Padding

tdma-v1.msg.ack\_ack\_conf.station Station  
Unsigned 8-bit integer  
TDMA Station

tdma-v1.msg.ack\_conf.cycle Cycle  
Unsigned 8-bit integer  
TDMA Cycle

tdma-v1.msg.ack\_conf.mtu MTU  
Unsigned 8-bit integer  
TDMA MTU

tdma-v1.msg.ack\_conf.padding Padding  
Unsigned 8-bit integer  
TDMA PAdding

tdma-v1.msg.ack\_conf.station Station  
Unsigned 8-bit integer  
TDMA Station

tdma-v1.msg.ack\_test.counter Counter  
Unsigned 32-bit integer  
TDMA Counter

```
tdma-v1.msg.ack_test.tx TX
    Unsigned 64-bit integer
    TDMA TX

tdma-v1.msg.request_change_offset.offset Offset
    Unsigned 32-bit integer
    TDMA Offset

tdma-v1.msg.request_conf.cycle Cycle
    Unsigned 8-bit integer
    TDMA Cycle

tdma-v1.msg.request_conf.mtu MTU
    Unsigned 8-bit integer
    TDMA MTU

tdma-v1.msg.request_conf.padding Padding
    Unsigned 8-bit integer
    TDMA Padding

tdma-v1.msg.request_conf.station Station
    Unsigned 8-bit integer
    TDMA Station

tdma-v1.msg.request_test.counter Counter
    Unsigned 32-bit integer
    TDMA Counter

tdma-v1.msg.request_test.tx TX
    Unsigned 64-bit integer
    TDMA TX

tdma-v1.msg.start_of_frame.timestamp Timestamp
    Unsigned 64-bit integer
    TDMA Timestamp

tdma-v1.msg.station_list.ip IP
    IPv4 address
    TDMA Station IP

tdma-v1.msg.station_list.nr Nr.
    Unsigned 8-bit integer
    TDMA Station Number

tdma-v1.msg.station_list.nr_stations Nr. Stations
    Unsigned 8-bit integer
    TDMA Nr. Stations

tdma-v1.msg.station_list.padding Padding
    Byte array
    TDMA Padding

tdma.id Message ID
    Unsigned 16-bit integer
    TDMA Message ID

tdma.req_cal.rpl_cycle Reply Cycle Number
    Unsigned 32-bit integer
    TDMA Request Calibration Reply Cycle Number

tdma.req_cal.rpl_slot Reply Slot Offset
    Unsigned 64-bit integer
    TDMA Request Calibration Reply Slot Offset
```

```
tdma.req_cal.xmit_stamp  Transmission Time Stamp
    Unsigned 64-bit integer
    TDMA Request Calibration Transmission Time Stamp
tdma.rpl_cal.rcv_stamp   Reception Time Stamp
    Unsigned 64-bit integer
    TDMA Reply Calibration Reception Time Stamp
tdma.rpl_cal.req_stamp   Request Transmission Time
    Unsigned 64-bit integer
    TDMA Reply Calibration Request Transmission Time
tdma.rpl_cal.xmit_stamp  Transmission Time Stamp
    Unsigned 64-bit integer
    TDMA Reply Calibration Transmission Time Stamp
tdma.sync.cycle         Cycle Number
    Unsigned 32-bit integer
    TDMA Sync Cycle Number
tdma.sync.sched_xmit    Scheduled Transmission Time
    Unsigned 64-bit integer
    TDMA Sync Scheduled Transmission Time
tdma.sync.xmit_stamp    Transmission Time Stamp
    Unsigned 64-bit integer
    TDMA Sync Transmission Time Stamp
tdma.ver               Version
    Unsigned 16-bit integer
    TDMA Version
```

#### **Real-Time Publish-Subscribe Wire Protocol (rtps)**

```
rtps.issue_data        User Data
    Byte array
    Issue Data
rtps.octets_to_next_header  Octets to next header
    Unsigned 16-bit integer
    Octets to next header
rtps.parameter_id       Parameter Id
    Unsigned 16-bit integer
    Parameter Id
rtps.parameter_length    Parameter Length
    Unsigned 16-bit integer
    Parameter Length
rtps.submessage_flags    Submessage flags
    Unsigned 8-bit integer
    Submessage flags
rtps.submessage_id      Submessage Id
    Unsigned 8-bit integer
    Submessage flags
```

**Real-Time Transport Protocol (rtp)**

```
rtp.block-length  Block length
  Unsigned 16-bit integer
  Block Length

rtp.cc  Contributing source identifiers count
  Unsigned 8-bit integer

rtp.csrc.item  CSRC item
  Unsigned 32-bit integer

rtp.csrc.items  Contributing Source identifiers
  No value

rtp.ext  Extension
  Boolean

rtp.ext.len  Extension length
  Unsigned 16-bit integer

rtp.ext.profile  Defined by profile
  Unsigned 16-bit integer

rtp.extseq  Extended sequence number
  Unsigned 32-bit integer

rtp.follow  Follow
  Boolean
  Next header follows

rtp.fragment  RTP Fragment data
  Frame number
  RTP Fragment data

rtp.fragment.error  Defragmentation error
  Frame number
  Defragmentation error due to illegal fragments

rtp.fragment.multipletails  Multiple tail fragments found
  Boolean
  Several tails were found when defragmenting the packet

rtp.fragment.overlap  Fragment overlap
  Boolean
  Fragment overlaps with other fragments

rtp.fragment.overlap.conflict  Conflicting data in fragment overlap
  Boolean
  Overlapping fragments contained conflicting data

rtp.fragment.toolongfragment  Fragment too long
  Boolean
  Fragment contained data past end of packet

rtp.fragments  RTP Fragments
  No value
  RTP Fragments

rtp.hdr_ext  Header extension
  Unsigned 32-bit integer

rtp.hdr_exts  Header extensions
  No value
```

```
rtp.marker  Marker
            Boolean

rtp.p_type  Payload type
            Unsigned 8-bit integer

rtp.padding  Padding
            Boolean

rtp.padding.count  Padding count
            Unsigned 8-bit integer

rtp.padding.data  Padding data
            Byte array

rtp.payload  Payload
            Byte array

rtp.reassembled_in  RTP fragment, reassembled in frame
                   Frame number
                   This RTP packet is reassembled in this frame

rtp.seq  Sequence number
        Unsigned 16-bit integer

rtp.setup  Stream setup
          String
          Stream setup, method and frame number

rtp.setup-frame  Setup frame
                Frame number
                Frame that set up this stream

rtp.setup-method  Setup Method
                 String
                 Method used to set up this stream

rtp.ssrc  Synchronization Source identifier
         Unsigned 32-bit integer

rtp.timestamp  Timestamp
              Unsigned 32-bit integer

rtp.timestamp-offset  Timestamp offset
                    Unsigned 16-bit integer
                    Timestamp Offset

rtp.version  Version
            Unsigned 8-bit integer

srtp.auth_tag  SRTP Auth Tag
              Byte array
              SRTP Authentication Tag

srtp.enc_payload  SRTP Encrypted Payload
                Byte array
                SRTP Encrypted Payload

srtp.mki  SRTP MKI
        Byte array
        SRTP Master Key Index
```

**Real-time Transport Control Protocol (rtcp)**

```
rtcp.app.PoC1.subtype  Subtype
                       Unsigned 8-bit integer
rtcp.app.data          Application specific data
                       Byte array
rtcp.app.name          Name (ASCII)
                       String
rtcp.app.poc1          PoC1 Application specific data
                       No value
rtcp.app.poc1.ack.reason.code  Reason code
                               Unsigned 16-bit integer
rtcp.app.poc1.ack.subtype  Subtype
                               Unsigned 8-bit integer
rtcp.app.poc1.conn.add.ind.mao  Manual answer override
                               Boolean
rtcp.app.poc1.conn.content.a.dn  Nick name of inviting client
                               Boolean
rtcp.app.poc1.conn.content.a.id  Identity of inviting client
                               Boolean
rtcp.app.poc1.conn.content.grp.dn  Group name
                               Boolean
rtcp.app.poc1.conn.content.grp.id  Group identity
                               Boolean
rtcp.app.poc1.conn.content.sess.id  Session identity
                               Boolean
rtcp.app.poc1.conn.sdes.a.dn  Nick name of inviting client
                               String
rtcp.app.poc1.conn.sdes.a.id  Identity of inviting client
                               String
rtcp.app.poc1.conn.sdes.grp.dn  Group Name
                               String
rtcp.app.poc1.conn.sdes.grp.id  Group identity
                               String
rtcp.app.poc1.conn.sdes.sess.id  Session identity
                               String
rtcp.app.poc1.conn.session.type  Session type
                               Unsigned 8-bit integer
rtcp.app.poc1.disp.name  Display Name
                               String
rtcp.app.poc1.ignore.seq.no  Ignore sequence number field
                               Unsigned 16-bit integer
rtcp.app.poc1.last.pkt.seq.no  Sequence number of last RTP packet
                               Unsigned 16-bit integer
```



```
rtcp.app.pocl.new.time.request  New time client can request (seconds)
    Unsigned 16-bit integer
    Time in seconds client can request for
rtcp.app.pocl.participants      Number of participants
    Unsigned 16-bit integer
rtcp.app.pocl.priority          Priority
    Unsigned 8-bit integer
rtcp.app.pocl.qsresp.position    Position (number of clients ahead)
    Unsigned 16-bit integer
rtcp.app.pocl.qsresp.priority    Priority
    Unsigned 8-bit integer
rtcp.app.pocl.reason.code       Reason code
    Unsigned 8-bit integer
rtcp.app.pocl.reason.phrase     Reason Phrase
    String
rtcp.app.pocl.request.ts        Talk Burst Requist Timestamp
    String
rtcp.app.pocl.sip.uri           SIP URI
    String
rtcp.app.pocl.ssrc.granted       SSRC of client granted permission to talk
    Unsigned 32-bit integer
rtcp.app.pocl.stt               Stop talking timer
    Unsigned 16-bit integer
rtcp.app.subtype                Subtype
    Unsigned 8-bit integer
rtcp.bye_reason_not_padded      BYE reason string not NULL padded
    No value
    RTCP BYE reason string not padded
rtcp.fci                        Feedback Control Information (FCI)
    Byte array
    Feedback Control Information (FCI)
rtcp.length                     Length
    Unsigned 16-bit integer
    32-bit words (-1) in packet
rtcp.length_check               RTCP frame length check
    Boolean
    RTCP frame length check
rtcp.lsr-frame                  Frame matching Last SR timestamp
    Frame number
    Frame matching LSR field (used to calculate roundtrip delay)
rtcp.lsr-frame-captured         Time since Last SR captured
    Unsigned 32-bit integer
    Time since frame matching LSR field was captured
rtcp.nack.blp                   Bitmask of following lost packets
    Unsigned 16-bit integer
```

```
rtcp.nack.fsn  First sequence number
               Unsigned 16-bit integer

rtcp.padding  Padding
              Boolean

rtcp.padding.count  Padding count
                   Unsigned 8-bit integer

rtcp.padding.data  Padding data
                  Byte array

rtcp.profile-specific-extension  Profile-specific extension
                                  Byte array
                                  Profile-specific extension

rtcp.psfb.fmt  RTCP Feedback message type (FMT)
               Unsigned 8-bit integer
               RTCP Feedback message type (FMT)

rtcp.pt  Packet type
         Unsigned 8-bit integer

rtcp.rc  Reception report count
         Unsigned 8-bit integer

rtcp.roundtrip-delay  Roundtrip Delay(ms)
                     Signed 32-bit integer
                     Calculated roundtrip delay in ms

rtcp.rtpfb.fmt  RTCP Feedback message type (FMT)
               Unsigned 8-bit integer
               RTCP Feedback message type (FMT)

rtcp.rtpfb.nack  RTCP Transport Feedback NACK
                Unsigned 16-bit integer
                RTCP Transport Feedback NACK

rtcp.rtpfb.nack.blp  RTCP Transport Feedback NACK BLP
                    Unsigned 16-bit integer
                    RTCP Transport Feedback NACK BLP

rtcp.sc  Source count
        Unsigned 8-bit integer

rtcp.sdes.length  Length
                 Unsigned 32-bit integer

rtcp.sdes.prefix.length  Prefix length
                        Unsigned 8-bit integer

rtcp.sdes.prefix.string  Prefix string
                        String

rtcp.sdes.ssrc_csrc  SSRC / CSRC identifier
                    Unsigned 32-bit integer

rtcp.sdes.text  Text
               String

rtcp.sdes.type  Type
               Unsigned 8-bit integer

rtcp.sender.octetcount  Sender's octet count
                       Unsigned 32-bit integer
```

```
rtcp.sender.packetcount  Sender's packet count
    Unsigned 32-bit integer
rtcp.senderssrc  Sender SSRC
    Unsigned 32-bit integer
rtcp.setup  Stream setup
    String
    Stream setup, method and frame number
rtcp.setup-frame  Setup frame
    Frame number
    Frame that set up this stream
rtcp.setup-method  Setup Method
    String
    Method used to set up this stream
rtcp.ssrc.cum_nr  Cumulative number of packets lost
    Unsigned 32-bit integer
rtcp.ssrc.discarded  Fraction discarded
    Unsigned 8-bit integer
    Discard Rate
rtcp.ssrc.dlsr  Delay since last SR timestamp
    Unsigned 32-bit integer
rtcp.ssrc.ext_high  Extended highest sequence number received
    Unsigned 32-bit integer
rtcp.ssrc.fraction  Fraction lost
    Unsigned 8-bit integer
rtcp.ssrc.high_cycles  Sequence number cycles count
    Unsigned 16-bit integer
rtcp.ssrc.high_seq  Highest sequence number received
    Unsigned 16-bit integer
rtcp.ssrc.identifier  Identifier
    Unsigned 32-bit integer
rtcp.ssrc.jitter  Interarrival jitter
    Unsigned 32-bit integer
rtcp.ssrc.lsr  Last SR timestamp
    Unsigned 32-bit integer
rtcp.timestamp.ntp  NTP timestamp
    String
rtcp.timestamp.ntp.lsw  Timestamp, LSW
    Unsigned 32-bit integer
rtcp.timestamp.ntp.msw  Timestamp, MSW
    Unsigned 32-bit integer
rtcp.timestamp.rtp  RTP timestamp
    Unsigned 32-bit integer
rtcp.version  Version
    Unsigned 8-bit integer
rtcp.xr.beginseq  Begin Sequence Number
    Unsigned 16-bit integer
```

```
rtcp.xr.bl  Length
            Unsigned 16-bit integer
            Block Length

rtcp.xr.bs  Type Specific
            Unsigned 8-bit integer
            Reserved

rtcp.xr.bt  Type
            Unsigned 8-bit integer
            Block Type

rtcp.xr.dlrr Delay since last RR timestamp
            Unsigned 32-bit integer

rtcp.xr.endseq  End Sequence Number
            Unsigned 16-bit integer

rtcp.xr.lrr  Last RR timestamp
            Unsigned 32-bit integer

rtcp.xr.stats.devjitter  Standard Deviation of Jitter
            Unsigned 32-bit integer

rtcp.xr.stats.devttl  Standard Deviation of TTL
            Unsigned 8-bit integer

rtcp.xr.stats.dupflag  Duplicates Report Flag
            Boolean

rtcp.xr.stats.dups  Duplicate Packets
            Unsigned 32-bit integer

rtcp.xr.stats.jitterflag  Jitter Report Flag
            Boolean

rtcp.xr.stats.lost  Lost Packets
            Unsigned 32-bit integer

rtcp.xr.stats.lrflag  Loss Report Flag
            Boolean

rtcp.xr.stats.maxjitter  Maximum Jitter
            Unsigned 32-bit integer

rtcp.xr.stats.maxttl  Maximum TTL or Hop Limit
            Unsigned 8-bit integer

rtcp.xr.stats.meanjitter  Mean Jitter
            Unsigned 32-bit integer

rtcp.xr.stats.meanttl  Mean TTL or Hop Limit
            Unsigned 8-bit integer

rtcp.xr.stats.minjitter  Minimum Jitter
            Unsigned 32-bit integer

rtcp.xr.stats.minttl  Minimum TTL or Hop Limit
            Unsigned 8-bit integer

rtcp.xr.stats.ttl  TTL or Hop Limit Flag
            Unsigned 8-bit integer

rtcp.xr.tf  Thinning factor
            Unsigned 8-bit integer
```

```
rtcp.xr.voipmetrics.burstdensity  Burst Density
    Unsigned 8-bit integer
rtcp.xr.voipmetrics.burstduration  Burst Duration(ms)
    Unsigned 16-bit integer
rtcp.xr.voipmetrics.esdelay  End System Delay(ms)
    Unsigned 16-bit integer
rtcp.xr.voipmetrics.extrfactor  External R Factor
    Unsigned 8-bit integer
    R Factor is in the range of 0 to 100; 127 indicates this parameter is unavail
rtcp.xr.voipmetrics.gapdensity  Gap Density
    Unsigned 8-bit integer
rtcp.xr.voipmetrics.gapduration  Gap Duration(ms)
    Unsigned 16-bit integer
rtcp.xr.voipmetrics.gmin  Gmin
    Unsigned 8-bit integer
rtcp.xr.voipmetrics.jba  Adaptive Jitter Buffer Algorithm
    Unsigned 8-bit integer
rtcp.xr.voipmetrics.jbabsmax  Absolute Maximum Jitter Buffer Size
    Unsigned 16-bit integer
rtcp.xr.voipmetrics.jbmax  Maximum Jitter Buffer Size
    Unsigned 16-bit integer
rtcp.xr.voipmetrics.jbnominal  Nominal Jitter Buffer Size
    Unsigned 16-bit integer
rtcp.xr.voipmetrics.jbrate  Jitter Buffer Rate
    Unsigned 8-bit integer
rtcp.xr.voipmetrics.mosqc  MOS - Conversational Quality
    MOS is in the range of 1 to 5; 127 indicates this parameter is unavailable
rtcp.xr.voipmetrics.moslq  MOS - Listening Quality
    MOS is in the range of 1 to 5; 127 indicates this parameter is unavailable
rtcp.xr.voipmetrics.noiselevel  Noise Level
    Signed 8-bit integer
    Noise level of 127 indicates this parameter is unavailable
rtcp.xr.voipmetrics.plc  Packet Loss Concealment Algorithm
    Unsigned 8-bit integer
rtcp.xr.voipmetrics.rerl  Residual Echo Return Loss
    Unsigned 8-bit integer
rtcp.xr.voipmetrics.rfactor  R Factor
    Unsigned 8-bit integer
    R Factor is in the range of 0 to 100; 127 indicates this parameter is unavail
rtcp.xr.voipmetrics.rtdelay  Round Trip Delay(ms)
    Unsigned 16-bit integer
rtcp.xr.voipmetrics.signallevel  Signal Level
    Signed 8-bit integer
    Signal level of 127 indicates this parameter is unavailable
```

```
srtcp.auth_tag  SRTCP Auth Tag
  Byte array
  SRTCP Authentication Tag

srtcp.e  SRTCP E flag
  Boolean
  SRTCP Encryption Flag

srtcp.index  SRTCP Index
  Unsigned 32-bit integer
  SRTCP Index

srtcp.mki  SRTCP MKI
  Byte array
  SRTCP Master Key Index
```

### **Redback (redback)**

#### **Redback Lawful Intercept (redbackli)**

```
redbackli.eohpad  End of Header Padding
  Byte array

redbackli.label  Label
  String
  Label

redbackli.liid  Lawful Intercept Id
  Unsigned 32-bit integer
  LI Identifier

redbackli.seqno  Sequence No
  Unsigned 32-bit integer
  Sequence No

redbackli.sessid  Session Id
  Unsigned 32-bit integer
  Session Identifier

redbackli.unknownavp  Unknown AVP
  Byte array
```

#### **Redundant Link Management Protocol (rlm)**

```
rlm.tid  Transaction ID
  Unsigned 16-bit integer

rlm.type  Type
  Unsigned 8-bit integer

rlm.unknown  Unknown
  Unsigned 16-bit integer

rlm.unknown2  Unknown
  Unsigned 16-bit integer

rlm.version  Version
  Unsigned 8-bit integer
```

**Reginfo XML doc (RFC 3680) (reginfo)**

```
reginfo.contact contact
  String
reginfo.contact.callid callid
  String
reginfo.contact.cseq cseq
  String
reginfo.contact.display-name display-name
  String
reginfo.contact.display-name.lang lang
  String
reginfo.contact.duration-registered duration-registered
  String
reginfo.contact.event event
  String
reginfo.contact.expires expires
  String
reginfo.contact.id id
  String
reginfo.contact.q q
  String
reginfo.contact.retry-after retry-after
  String
reginfo.contact.state state
  String
reginfo.contact.unknown-param unknown-param
  String
reginfo.contact.unknown-param.name name
  String
reginfo.contact.uri uri
  String
reginfo.display-name display-name
  String
reginfo.display-name.lang lang
  String
reginfo.registration registration
  String
reginfo.registration.aor aor
  String
reginfo.registration.contact contact
  String
reginfo.registration.contact.callid callid
  String
reginfo.registration.contact.cseq cseq
  String
```

```
reginfo.registration.contact.display-name  display-name
String
reginfo.registration.contact.display-name.lang  lang
String
reginfo.registration.contact.duration-registered  duration-registered
String
reginfo.registration.contact.event  event
String
reginfo.registration.contact.expires  expires
String
reginfo.registration.contact.id  id
String
reginfo.registration.contact.q  q
String
reginfo.registration.contact.retry-after  retry-after
String
reginfo.registration.contact.state  state
String
reginfo.registration.contact.unknown-param  unknown-param
String
reginfo.registration.contact.unknown-param.name  name
String
reginfo.registration.contact.uri  uri
String
reginfo.registration.id  id
String
reginfo.registration.state  state
String
reginfo.state  state
String
reginfo.unknown-param  unknown-param
String
reginfo.unknown-param.name  name
String
reginfo.uri  uri
String
reginfo.version  version
String
reginfo.xmlns  xmlns
String
```

**Registry Server Attributes Manipulation Interface (rs\_attr)**

```
rs_attr.opnum  Operation
Unsigned 16-bit integer
Operation
```



**Registry server administration operations. (rs\_repadm)**

```
rs_repadmin.opnum  Operation
                   Unsigned 16-bit integer
                   Operation
```

**Reliable UDP (rudp)**

```
rudp.ack  Ack
          Unsigned 8-bit integer
          Acknowledgement Number

rudp.flags  RUDP Header flags
           Unsigned 8-bit integer

rudp.flags.0  0
             Boolean

rudp.flags.ack  Ack
              Boolean

rudp.flags.chk  CHK
              Boolean
              Checksum is on header or body

rudp.flags.eak  Eak
              Boolean
              Extended Ack

rudp.flags.nul  NULL
              Boolean
              Null flag

rudp.flags.rst  RST
              Boolean
              Reset flag

rudp.flags.syn  Syn
              Boolean

rudp.flags.tcs  TCS
              Boolean
              Transfer Connection System

rudp.hlen  Header Length
          Unsigned 8-bit integer

rudp.seq  Seq
         Unsigned 8-bit integer
         Sequence Number
```

**Remote Device Management (rdm)**

```
rdm.cc  Command class
        Unsigned 8-bit integer

rdm.checksum  Checksum
             Unsigned 16-bit integer

rdm.dst  Destination UID
        Byte array

rdm.intron  Intron
          Byte array
```

rdm.len Message length  
Unsigned 8-bit integer

rdm.mc Message count  
Unsigned 8-bit integer

rdm.pd Parameter data  
Byte array

rdm.pdl Parameter data length  
Unsigned 8-bit integer

rdm.pid Parameter ID  
Unsigned 16-bit integer

rdm.rt Response type  
Unsigned 8-bit integer

rdm.sc Start code  
Unsigned 8-bit integer

rdm.sd Sub-device  
Unsigned 16-bit integer

rdm.src Source UID  
Byte array

rdm.ssc Sub-start code  
Unsigned 8-bit integer

rdm.tn Transaction number  
Unsigned 8-bit integer

rdm.trailer Trailer  
Byte array

#### **Remote Management Control Protocol (rmcp)**

rmcp.class Class  
Unsigned 8-bit integer  
RMCP Class

rmcp.sequence Sequence  
Unsigned 8-bit integer  
RMCP Sequence

rmcp.type Message Type  
Unsigned 8-bit integer  
RMCP Message Type

rmcp.version Version  
Unsigned 8-bit integer  
RMCP Version

#### **Remote Override interface (roverride)**

roverride.opnum Operation  
Unsigned 16-bit integer  
Operation

**Remote Procedure Call (rpc)**

```
rpc.array.len    num
  Unsigned 32-bit integer
  Length of RPC array

rpc.auth.flavor  Flavor
  Unsigned 32-bit integer
  Flavor

rpc.auth.gid     GID
  Unsigned 32-bit integer
  GID

rpc.auth.length  Length
  Unsigned 32-bit integer
  Length

rpc.auth.machinename  Machine Name
  String
  Machine Name

rpc.auth.stamp   Stamp
  Unsigned 32-bit integer
  Stamp

rpc.auth.uid     UID
  Unsigned 32-bit integer
  UID

rpc.authdes.convkey  Conversation Key (encrypted)
  Unsigned 32-bit integer
  Conversation Key (encrypted)

rpc.authdes.namekind  Namekind
  Unsigned 32-bit integer
  Namekind

rpc.authdes.netname  Netname
  String
  Netname

rpc.authdes.nickname  Nickname
  Unsigned 32-bit integer
  Nickname

rpc.authdes.timestamp  Timestamp (encrypted)
  Unsigned 32-bit integer
  Timestamp (encrypted)

rpc.authdes.timeverf  Timestamp verifier (encrypted)
  Unsigned 32-bit integer
  Timestamp verifier (encrypted)

rpc.authdes.window  Window (encrypted)
  Unsigned 32-bit integer
  Windows (encrypted)

rpc.authdes.windowverf  Window verifier (encrypted)
  Unsigned 32-bit integer
  Window verifier (encrypted)
```

```
rpc.authgss.checksum  GSS Checksum
    Byte array
    GSS Checksum

rpc.authgss.context  GSS Context
    Byte array
    GSS Context

rpc.authgss.data     GSS Data
    Byte array
    GSS Data

rpc.authgss.data.length  Length
    Unsigned 32-bit integer
    Length

rpc.authgss.major    GSS Major Status
    Unsigned 32-bit integer
    GSS Major Status

rpc.authgss.minor    GSS Minor Status
    Unsigned 32-bit integer
    GSS Minor Status

rpc.authgss.procedure  GSS Procedure
    Unsigned 32-bit integer
    GSS Procedure

rpc.authgss.seqnum    GSS Sequence Number
    Unsigned 32-bit integer
    GSS Sequence Number

rpc.authgss.service   GSS Service
    Unsigned 32-bit integer
    GSS Service

rpc.authgss.token     GSS Token
    Byte array
    GSS Token

rpc.authgss.token_length  GSS Token Length
    Unsigned 32-bit integer
    GSS Token Length

rpc.authgss.version   GSS Version
    Unsigned 32-bit integer
    GSS Version

rpc.authgss.window    GSS Sequence Window
    Unsigned 32-bit integer
    GSS Sequence Window

rpc.authgssapi.handle  Client Handle
    Byte array
    Client Handle

rpc.authgssapi.isn    Signed ISN
    Byte array
    Signed ISN

rpc.authgssapi.message  AUTH_GSSAPI Message
    Boolean
    AUTH_GSSAPI Message
```

```
rpc.authgssapi.msgversion  Msg Version
    Unsigned 32-bit integer
    Msg Version

rpc.authgssapi.version  AUTH_GSSAPI Version
    Unsigned 32-bit integer
    AUTH_GSSAPI Version

rpc.call.dup  Duplicate to the call in
    Frame number
    This is a duplicate to the call in frame

rpc.dup  Duplicate Call/Reply
    No value
    Duplicate Call/Reply

rpc.fraglen  Fragment Length
    Unsigned 32-bit integer
    Fragment Length

rpc.fragment  RPC Fragment
    Frame number
    RPC Fragment

rpc.fragment.error  Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments

rpc.fragment.multipletails  Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet

rpc.fragment.overlap  Fragment overlap
    Boolean
    Fragment overlaps with other fragments

rpc.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data

rpc.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet

rpc.fragments  RPC Fragments
    No value
    RPC Fragments

rpc.lastfrag  Last Fragment
    Boolean
    Last Fragment

rpc.msgtyp  Message Type
    Unsigned 32-bit integer
    Message Type

rpc.procedure  Procedure
    Unsigned 32-bit integer
    Procedure

rpc.program  Program
    Unsigned 32-bit integer
    Program
```

```
rpc.programversion  Program Version
    Unsigned 32-bit integer
    Program Version

rpc.programversion.max  Program Version (Maximum)
    Unsigned 32-bit integer
    Program Version (Maximum)

rpc.programversion.min  Program Version (Minimum)
    Unsigned 32-bit integer
    Program Version (Minimum)

rpc.repframe  Reply Frame
    Frame number
    Reply Frame

rpc.reply.dup  Duplicate to the reply in
    Frame number
    This is a duplicate to the reply in frame

rpc.replystat  Reply State
    Unsigned 32-bit integer
    Reply State

rpc.reqframe  Request Frame
    Frame number
    Request Frame

rpc.state_accept  Accept State
    Unsigned 32-bit integer
    Accept State

rpc.state_auth  Auth State
    Unsigned 32-bit integer
    Auth State

rpc.state_reject  Reject State
    Unsigned 32-bit integer
    Reject State

rpc.time  Time from request
    Time duration
    Time between Request and Reply for ONC-RPC calls

rpc.value_follows  Value Follows
    Boolean
    Value Follows

rpc.version  RPC Version
    Unsigned 32-bit integer
    RPC Version

rpc.version.max  RPC Version (Maximum)
    Unsigned 32-bit integer
    RPC Version (Maximum)

rpc.version.min  RPC Version (Minimum)
    Unsigned 32-bit integer
    Program Version (Minimum)

rpc.xid  XID
    Unsigned 32-bit integer
    XID
```

**Remote Process Execution (exec)**

exec.command Command to execute  
String  
Command client is requesting the server to run.

exec.password Client password  
String  
Password client uses to log in to the server.

exec.stderr\_port Stderr port (optional)  
String  
Client port that is listening for stderr stream from server

exec.username Client username  
String  
Username client uses to log in to the server.

**Remote Program Load (rpl)**

rpl.adapterid Adapter ID  
Unsigned 16-bit integer  
RPL Adapter ID

rpl.bsmversion BSM Version  
Unsigned 16-bit integer  
RPL Version of BSM.obj

rpl.config Configuration  
Byte array  
RPL Configuration

rpl.connclass Connection Class  
Unsigned 16-bit integer  
RPL Connection Class

rpl.corrval Correlator Value  
Unsigned 32-bit integer  
RPL Correlator Value

rpl.data Data  
Byte array  
RPL Binary File Data

rpl.ec EC  
Byte array  
RPL EC

rpl.equipment Equipment  
Unsigned 16-bit integer  
RPL Equipment - AX from INT 11h

rpl.flags Flags  
Unsigned 8-bit integer  
RPL Bit Significant Option Flags

rpl.laddress Locate Address  
Unsigned 32-bit integer  
RPL Locate Address

rpl.lmac Loader MAC Address  
6-byte Hardware (MAC) Address  
RPL Loader MAC Address

rpl.maxframe Maximum Frame Size  
Unsigned 16-bit integer  
RPL Maximum Frame Size

rpl.memsize Memory Size  
Unsigned 16-bit integer  
RPL Memory Size - AX from INT 12h MINUS 32k MINUS the Boot ROM Size

rpl.respval Response Code  
Unsigned 8-bit integer  
RPL Response Code

rpl.sap SAP  
Unsigned 8-bit integer  
RPL SAP

rpl.sequence Sequence Number  
Unsigned 32-bit integer  
RPL Sequence Number

rpl.shortname Short Name  
Byte array  
RPL BSM Short Name

rpl.smac Set MAC Address  
6-byte Hardware (MAC) Address  
RPL Set MAC Address

rpl.type Type  
Unsigned 16-bit integer  
RPL Packet Type

rpl.xaddress XFER Address  
Unsigned 32-bit integer  
RPL Transfer Control Address

**Remote Quota (rquota)**

rquota.active active  
Boolean  
Indicates whether quota is active

rquota.bhardlimit bhardlimit  
Unsigned 32-bit integer  
Hard limit for blocks

rquota.bsize bsize  
Unsigned 32-bit integer  
Block size

rquota.bsoftlimit bsoftlimit  
Unsigned 32-bit integer  
Soft limit for blocks

rquota.btimeleft btimeleft  
Unsigned 32-bit integer  
Time left for excessive disk use

rquota.curblocks curblocks  
Unsigned 32-bit integer  
Current block count



```

rquota.curfiles  curfiles
    Unsigned 32-bit integer
    Current # allocated files

rquota.fhardlimit  fhardlimit
    Unsigned 32-bit integer
    Hard limit on allocated files

rquota.fsoftlimit  fsoftlimit
    Unsigned 32-bit integer
    Soft limit of allocated files

rquota.ftimeleft  ftimeleft
    Unsigned 32-bit integer
    Time left for excessive files

rquota.pathp  pathp
    String
    Filesystem of interest

rquota.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

rquota.rquota  rquota
    No value
    Rquota structure

rquota.status  status
    Unsigned 32-bit integer
    Status code

rquota.uid  uid
    Unsigned 32-bit integer
    User ID

```

#### **Remote Registry Service (winreg)**

```

winreg.KeySecurityAttribute.data_size  Data Size
    Unsigned 32-bit integer

winreg.KeySecurityAttribute.inherit  Inherit
    Unsigned 8-bit integer

winreg.KeySecurityAttribute.sec_data  Sec Data
    No value

winreg.KeySecurityData.data  Data
    Unsigned 8-bit integer

winreg.KeySecurityData.len  Len
    Unsigned 32-bit integer

winreg.KeySecurityData.size  Size
    Unsigned 32-bit integer

winreg.QueryMultipleValue.length  Length
    Unsigned 32-bit integer

winreg.QueryMultipleValue.name  Name
    String

winreg.QueryMultipleValue.offset  Offset
    Unsigned 32-bit integer

```

```
winreg.QueryMultipleValue.type  Type
    Unsigned 32-bit integer
winreg.access_mask  Access Mask
    Unsigned 32-bit integer
winreg.handle  Handle
    Byte array
winreg.opnum  Operation
    Unsigned 16-bit integer
winreg.sd  KeySecurityData
    No value
winreg.sd.actual_size  Actual Size
    Unsigned 32-bit integer
winreg.sd.max_size  Max Size
    Unsigned 32-bit integer
winreg.sd.offset  Offset
    Unsigned 32-bit integer
winreg.system_name  System Name
    Unsigned 16-bit integer
winreg.werror  Windows Error
    Unsigned 32-bit integer
winreg.winreg_AbortSystemShutdown.server  Server
    Unsigned 16-bit integer
winreg.winreg_AccessMask.KEY_CREATE_LINK  Key Create Link
    Boolean
winreg.winreg_AccessMask.KEY_CREATE_SUB_KEY  Key Create Sub Key
    Boolean
winreg.winreg_AccessMask.KEY_ENUMERATE_SUB_KEYS  Key Enumerate Sub Keys
    Boolean
winreg.winreg_AccessMask.KEY_NOTIFY  Key Notify
    Boolean
winreg.winreg_AccessMask.KEY_QUERY_VALUE  Key Query Value
    Boolean
winreg.winreg_AccessMask.KEY_SET_VALUE  Key Set Value
    Boolean
winreg.winreg_AccessMask.KEY_WOW64_32KEY  Key Wow64 32key
    Boolean
winreg.winreg_AccessMask.KEY_WOW64_64KEY  Key Wow64 64key
    Boolean
winreg.winreg_CreateKey.action_taken  Action Taken
    Unsigned 32-bit integer
winreg.winreg_CreateKey.keyclass  Keyclass
    String
winreg.winreg_CreateKey.name  Name
    String
```

```
winreg.winreg_CreateKey.new_handle  New Handle
    Byte array
winreg.winreg_CreateKey.options  Options
    Unsigned 32-bit integer
winreg.winreg_CreateKey.secdesc  Secdesc
    No value
winreg.winreg_DeleteKey.key  Key
    String
winreg.winreg_DeleteValue.value  Value
    String
winreg.winreg_EnumKey.enum_index  Enum Index
    Unsigned 32-bit integer
winreg.winreg_EnumKey.keyclass  Keyclass
    No value
winreg.winreg_EnumKey.last_changed_time  Last Changed Time
    Date/Time stamp
winreg.winreg_EnumKey.name  Name
    No value
winreg.winreg_EnumValue.enum_index  Enum Index
    Unsigned 32-bit integer
winreg.winreg_EnumValue.length  Length
    Unsigned 32-bit integer
winreg.winreg_EnumValue.name  Name
    No value
winreg.winreg_EnumValue.size  Size
    Unsigned 32-bit integer
winreg.winreg_EnumValue.type  Type
    Unsigned 32-bit integer
winreg.winreg_EnumValue.value  Value
    Unsigned 8-bit integer
winreg.winreg_GetKeySecurity.sec_info  Sec Info
    No value
winreg.winreg_GetVersion.version  Version
    Unsigned 32-bit integer
winreg.winreg_InitiateSystemShutdown.force_apps  Force Apps
    Unsigned 8-bit integer
winreg.winreg_InitiateSystemShutdown.hostname  Hostname
    Unsigned 16-bit integer
winreg.winreg_InitiateSystemShutdown.message  Message
    No value
winreg.winreg_InitiateSystemShutdown.reboot  Reboot
    Unsigned 8-bit integer
winreg.winreg_InitiateSystemShutdown.timeout  Timeout
    Unsigned 32-bit integer
```

```
winreg.winreg_InitiateSystemShutdownEx.force_apps  Force Apps
    Unsigned 8-bit integer
winreg.winreg_InitiateSystemShutdownEx.hostname  Hostname
    Unsigned 16-bit integer
winreg.winreg_InitiateSystemShutdownEx.message  Message
    No value
winreg.winreg_InitiateSystemShutdownEx.reason  Reason
    Unsigned 32-bit integer
winreg.winreg_InitiateSystemShutdownEx.reboot  Reboot
    Unsigned 8-bit integer
winreg.winreg_InitiateSystemShutdownEx.timeout  Timeout
    Unsigned 32-bit integer
winreg.winreg_LoadKey.filename  Filename
    String
winreg.winreg_LoadKey.keyname  Keyname
    String
winreg.winreg_NotifyChangeKeyValue.notify_filter  Notify Filter
    Unsigned 32-bit integer
winreg.winreg_NotifyChangeKeyValue.string1  String1
    String
winreg.winreg_NotifyChangeKeyValue.string2  String2
    String
winreg.winreg_NotifyChangeKeyValue.unknown  Unknown
    Unsigned 32-bit integer
winreg.winreg_NotifyChangeKeyValue.unknown2  Unknown2
    Unsigned 32-bit integer
winreg.winreg_NotifyChangeKeyValue.watch_subtree  Watch Subtree
    Unsigned 8-bit integer
winreg.winreg_OpenHKCU.access_mask  Access Mask
    Unsigned 32-bit integer
winreg.winreg_OpenHKPD.access_mask  Access Mask
    Unsigned 32-bit integer
winreg.winreg_OpenKey.access_mask  Access Mask
    Unsigned 32-bit integer
winreg.winreg_OpenKey.keyname  Keyname
    String
winreg.winreg_OpenKey.parent_handle  Parent Handle
    Byte array
winreg.winreg_OpenKey.unknown  Unknown
    Unsigned 32-bit integer
winreg.winreg_QueryInfoKey.classname  Classname
    String
winreg.winreg_QueryInfoKey.last_changed_time  Last Changed Time
    Date/Time stamp
```

```

winreg.winreg_QueryInfoKey.max_subkeylen  Max Subkeylen
    Unsigned 32-bit integer
winreg.winreg_QueryInfoKey.max_subkeysize  Max Subkeysize
    Unsigned 32-bit integer
winreg.winreg_QueryInfoKey.max_valbufsize  Max Valbufsize
    Unsigned 32-bit integer
winreg.winreg_QueryInfoKey.max_valnamelen  Max Valnamelen
    Unsigned 32-bit integer
winreg.winreg_QueryInfoKey.num_subkeys    Num Subkeys
    Unsigned 32-bit integer
winreg.winreg_QueryInfoKey.num_values     Num Values
    Unsigned 32-bit integer
winreg.winreg_QueryInfoKey.secdescsize    Secdescsize
    Unsigned 32-bit integer
winreg.winreg_QueryMultipleValues.buffer   Buffer
    Unsigned 8-bit integer
winreg.winreg_QueryMultipleValues.buffer_size  Buffer Size
    Unsigned 32-bit integer
winreg.winreg_QueryMultipleValues.key_handle  Key Handle
    Byte array
winreg.winreg_QueryMultipleValues.num_values  Num Values
    Unsigned 32-bit integer
winreg.winreg_QueryMultipleValues.values     Values
    No value
winreg.winreg_QueryValue.data              Data
    Unsigned 8-bit integer
winreg.winreg_QueryValue.length            Length
    Unsigned 32-bit integer
winreg.winreg_QueryValue.size              Size
    Unsigned 32-bit integer
winreg.winreg_QueryValue.type              Type
    Unsigned 32-bit integer
winreg.winreg_QueryValue.value_name        Value Name
    String
winreg.winreg_RestoreKey.filename           Filename
    String
winreg.winreg_RestoreKey.flags              Flags
    Unsigned 32-bit integer
winreg.winreg_RestoreKey.handle            Handle
    Byte array
winreg.winreg_SaveKey.filename              Filename
    String
winreg.winreg_SaveKey.handle                Handle
    Byte array

```

```

winreg.winreg_SaveKey.sec_attrib  Sec Attrib
    No value
winreg.winreg_SecBuf.inherit  Inherit
    Unsigned 8-bit integer
winreg.winreg_SecBuf.length  Length
    Unsigned 32-bit integer
winreg.winreg_SecBuf.sd  Sd
    No value
winreg.winreg_SetKeySecurity.access_mask  Access Mask
    Unsigned 32-bit integer
winreg.winreg_SetValue.data  Data
    Unsigned 8-bit integer
winreg.winreg_SetValue.name  Name
    String
winreg.winreg_SetValue.size  Size
    Unsigned 32-bit integer
winreg.winreg_SetValue.type  Type
    Unsigned 32-bit integer
winreg.winreg_String.name  Name
    String
winreg.winreg_String.name_len  Name Len
    Unsigned 16-bit integer
winreg.winreg_String.name_size  Name Size
    Unsigned 16-bit integer
winreg.winreg_StringBuf.length  Length
    Unsigned 16-bit integer
winreg.winreg_StringBuf.name  Name
    Unsigned 16-bit integer
winreg.winreg_StringBuf.size  Size
    Unsigned 16-bit integer

```

**Remote Shell (rsh)**

```

rsh.request  Request
    Boolean
    TRUE if rsh request
rsh.response  Response
    Boolean
    TRUE if rsh response

```

**Remote Wall protocol (rwall)**

```

rwall.message  Message
    String
    Message
rwall.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

```

**Remote sec\_login preauth interface. (rsec\_login)**

rsec\_login.opnum Operation  
Unsigned 16-bit integer  
Operation

**Resource ReserVation Protocol (RSVP) (rsvp)**

rsvp.acceptable\_label\_set ACCEPTABLE LABEL SET  
No value

rsvp.ack Ack Message  
Boolean

rsvp.admin\_status ADMIN STATUS  
No value

rsvp.adspec ADSPEC  
No value

rsvp.association ASSOCIATION  
No value

rsvp.bundle Bundle Message  
Boolean

rsvp.call\_id CALL ID  
No value

rsvp.confirm CONFIRM  
No value

rsvp.dclass DCLASS  
No value

rsvp.diffserv DIFFSERV  
No value

rsvp.diffserv.map MAP  
No value  
MAP entry

rsvp.diffserv.map.exp EXP  
Unsigned 8-bit integer  
EXP bit code

rsvp.diffserv.mapnb MAPnb  
Unsigned 8-bit integer  
Number of MAP entries

rsvp.diffserv.phbid PHBID  
No value  
PHBID

rsvp.diffserv.phbid.bit14 Bit 14  
Unsigned 16-bit integer  
Bit 14

rsvp.diffserv.phbid.bit15 Bit 15  
Unsigned 16-bit integer  
Bit 15

```
rsvp.diffserv.phbid.code  PHB id code
    Unsigned 16-bit integer
    PHB id code

rsvp.diffserv.phbid.dscp  DSCP
    Unsigned 16-bit integer
    DSCP

rsvp.dste  CLASSTYPE
    No value

rsvp.dste.classtype  CT
    Unsigned 8-bit integer

rsvp.error  ERROR
    No value

rsvp.explicit_route  EXPLICIT ROUTE
    No value

rsvp.filter  FILTERSPEC
    No value

rsvp.flowspec  FLOWSPEC
    No value

rsvp.generalized_uni  GENERALIZED UNI
    No value

rsvp.hello  HELLO Message
    Boolean

rsvp.hello_obj  HELLO Request/Ack
    No value

rsvp.hop  HOP
    No value

rsvp.integrity  INTEGRITY
    No value

rsvp.label  LABEL
    No value

rsvp.label_request  LABEL REQUEST
    No value

rsvp.label_set  LABEL SET
    No value

rsvp.lsp_tunnel_if_id  LSP INTERFACE-ID
    No value

rsvp.msg  Message Type
    Unsigned 8-bit integer

rsvp.msgid  MESSAGE-ID
    No value

rsvp.msgid_list  MESSAGE-ID LIST
    No value

rsvp.notify  Notify Message
    Boolean
```



```
rsvp.notify_request NOTIFY REQUEST
    No value
rsvp.obj_unknown Unknown object
    No value
rsvp.object Object class
    Unsigned 8-bit integer
rsvp.path Path Message
    Boolean
rsvp.perr Path Error Message
    Boolean
rsvp.policy POLICY
    No value
rsvp.protection PROTECTION
    No value
rsvp.ptear Path Tear Message
    Boolean
rsvp.record_route RECORD ROUTE
    No value
rsvp.recovery_label RECOVERY LABEL
    No value
rsvp.rerr Resv Error Message
    Boolean
rsvp.restart RESTART CAPABILITY
    No value
rsvp.resv Resv Message
    Boolean
rsvp.resvconf Resv Confirm Message
    Boolean
rsvp.rtear Resv Tear Message
    Boolean
rsvp.rtearconf Resv Tear Confirm Message
    Boolean
rsvp.scope SCOPE
    No value
rsvp.sender SENDER TEMPLATE
    No value
rsvp.sender.ip Sender IPv4 address
    IPv4 address
rsvp.sender.lsp_id Sender LSP ID
    Unsigned 16-bit integer
rsvp.sender.port Sender port number
    Unsigned 16-bit integer
rsvp.session SESSION
    No value
```

```
rsvp.session.ext_tunnel_id  Extended tunnel ID
    Unsigned 32-bit integer
rsvp.session.ip             Destination address
    IPv4 address
rsvp.session.port           Port number
    Unsigned 16-bit integer
rsvp.session.proto          Protocol
    Unsigned 8-bit integer
rsvp.session.tunnel_id      Tunnel ID
    Unsigned 16-bit integer
rsvp.session_attribute      SESSION ATTRIBUTE
    No value
rsvp.srefresh               Srefresh Message
    Boolean
rsvp.style                   STYLE
    No value
rsvp.suggested_label        SUGGESTED LABEL
    No value
rsvp.time                    TIME VALUES
    No value
rsvp.tspec                   SENDER TSPEC
    No value
rsvp.upstream_label         UPSTREAM LABEL
    No value
```

#### **Retix Spanning Tree Protocol (r-stp)**

```
rstp.bridge.hw             Bridge MAC
    6-byte Hardware (MAC) Address
rstp.forward                Forward Delay
    Unsigned 16-bit integer
rstp.hello                   Hello Time
    Unsigned 16-bit integer
rstp.maxage                  Max Age
    Unsigned 16-bit integer
rstp.root.hw                 Root MAC
    6-byte Hardware (MAC) Address
```

#### **Rlogin Protocol (rlogin)**

```
rlogin.client_startup_flag  Client startup flag
    Unsigned 8-bit integer
rlogin.client_user_name      Client-user-name
    String
rlogin.control_message        Control message
    Unsigned 8-bit integer
rlogin.data                   Data
    String
```

```
rlogin.server_user_name  Server-user-name
    String
rlogin.startup_info_received_flag  Startup info received flag
    Unsigned 8-bit integer
rlogin.terminal_speed  Terminal-speed
    Unsigned 32-bit integer
rlogin.terminal_type  Terminal-type
    String
rlogin.user_info  User Info
    String
rlogin.window_size  Window Info
    No value
rlogin.window_size.cols  Columns
    Unsigned 16-bit integer
rlogin.window_size.rows  Rows
    Unsigned 16-bit integer
rlogin.window_size.ss  Window size marker
    String
rlogin.window_size.x_pixels  X Pixels
    Unsigned 16-bit integer
rlogin.window_size.y_pixels  Y Pixels
    Unsigned 16-bit integer
```

**Roofnet Protocol (roofnet)**

```
roofnet.cksum  Checksum
    Unsigned 16-bit integer
    Roofnet Header Checksum
roofnet.datalength  Data Length
    Unsigned 16-bit integer
    Data Payload Length
roofnet.flags  Flags
    Unsigned 16-bit integer
    Roofnet Flags
roofnet.link.age  Age
    Unsigned 32-bit integer
    Information Age
roofnet.link.dst  Dst IP
    IPv4 address
    Roofnet Message Destination
roofnet.link.forward  Forward
    Unsigned 32-bit integer
    Forward
roofnet.link.rev  Rev
    Unsigned 32-bit integer
    Revision Number
```

```
roofnet.link.seq  Seq
    Unsigned 32-bit integer
    Link Sequential Number
roofnet.link.src  Source IP
    IPv4 address
    Roofnet Message Source
roofnet.links     Links
    No value
roofnet.next      Next Link
    Unsigned 8-bit integer
    Roofnet Next Link to Use
roofnet.nlinks   Number of Links
    Unsigned 8-bit integer
    Roofnet Number of Links
roofnet.querydst  Query Dst
    IPv4 address
    Roofnet Query Destination
roofnet.seq       Seq
    Unsigned 32-bit integer
    Roofnet Sequential Number
roofnet.ttl       Time To Live
    Unsigned 16-bit integer
    Roofnet Time to Live
roofnet.type      Type
    Unsigned 8-bit integer
    Roofnet Message Type
roofnet.version   Version
    Unsigned 8-bit integer
    Roofnet Version
```

#### **Router-port Group Management Protocol (rgmp)**

```
rgmp.checksum     Checksum
    Unsigned 16-bit integer
    Checksum
rgmp.checksum_bad Bad Checksum
    Boolean
    Bad Checksum
rgmp.maddr        Multicast group address
    IPv4 address
    Multicast group address
rgmp.type         Type
    Unsigned 8-bit integer
    RGMP Packet Type
```

#### **Routing Information Protocol (rip)**

```
rip.auth.passwd  Password
    String
    Authentication password
```

```
rip.auth.type  Authentication type
               Unsigned 16-bit integer
               Type of authentication

rip.command    Command
               Unsigned 8-bit integer
               What type of RIP Command is this

rip.family     Address Family
               Unsigned 16-bit integer
               Address family

rip.ip         IP Address
               IPv4 address
               IP Address

rip.metric     Metric
               Unsigned 16-bit integer
               Metric for this route

rip.netmask    Netmask
               IPv4 address
               Netmask

rip.next_hop   Next Hop
               IPv4 address
               Next Hop router for this route

rip.route_tag  Route Tag
               Unsigned 16-bit integer
               Route Tag

rip.routing_domain Routing Domain
               Unsigned 16-bit integer
               RIPv2 Routing Domain

rip.version    Version
               Unsigned 8-bit integer
               Version of the RIP protocol
```

#### **Routing Table Maintenance Protocol (rtmp)**

```
nbp.nodeid    Node
               Unsigned 8-bit integer
               Node

nbp.nodeid.length Node Length
               Unsigned 8-bit integer
               Node Length

rtmp.function  Function
               Unsigned 8-bit integer
               Request Function

rtmp.net       Net
               Unsigned 16-bit integer
               Net

rtmp.tuple.dist Distance
               Unsigned 16-bit integer
               Distance
```

```
rtmp.tuple.net Net
  Unsigned 16-bit integer
  Net

rtmp.tuple.range_end Range End
  Unsigned 16-bit integer
  Range End

rtmp.tuple.range_start Range Start
  Unsigned 16-bit integer
  Range Start
```

### **S1 Application Protocol (slap)**

```
slap.AggregateMaximumBitrate AggregateMaximumBitrate
  No value
  slap.AggregateMaximumBitrate

slap.BPLMNs_item Item
  Byte array
  slap.PLMNidentity

slap.Cause Cause
  Unsigned 32-bit integer
  slap.Cause

slap.CriticalityDiagnostics CriticalityDiagnostics
  No value
  slap.CriticalityDiagnostics

slap.CriticalityDiagnostics_IE_List_item Item
  No value
  slap.CriticalityDiagnostics_IE_List_item

slap.DownlinkNASTransport DownlinkNASTransport
  No value
  slap.DownlinkNASTransport

slap.ENB_ID ENB-ID
  Unsigned 32-bit integer
  slap.ENB_ID

slap.ENB_UE_SlAP_ID ENB-UE-SlAP-ID
  Byte array
  slap.ENB_UE_SlAP_ID

slap.ENBname ENBname
  Byte array
  slap.ENBname

slap.EPLMNs_item Item
  Byte array
  slap.PLMNidentity

slap.ErrorIndication ErrorIndication
  No value
  slap.ErrorIndication

slap.ForbiddenLACs_item Item
  Byte array
  slap.LAC
```

```
slap.ForbiddenLAs_item  Item
    No value
    slap.ForbiddenLAs_Item
slap.ForbiddenTAIs_item  Item
    Byte array
    slap.TAI
slap.ForbiddenTAs_item  Item
    No value
    slap.ForbiddenTAs_Item
slap.GERANToLTEHOInformationReq  GERANToLTEHOInformationReq
    No value
    slap.GERANToLTEHOInformationReq
slap.GERANToLTEHOInformationRes  GERANToLTEHOInformationRes
    No value
    slap.GERANToLTEHOInformationRes
slap.HandoverCancel  HandoverCancel
    No value
    slap.HandoverCancel
slap.HandoverCancelAcknowledge  HandoverCancelAcknowledge
    No value
    slap.HandoverCancelAcknowledge
slap.HandoverCommand  HandoverCommand
    No value
    slap.HandoverCommand
slap.HandoverFailure  HandoverFailure
    No value
    slap.HandoverFailure
slap.HandoverNotify  HandoverNotify
    No value
    slap.HandoverNotify
slap.HandoverPreparationFailure  HandoverPreparationFailure
    No value
    slap.HandoverPreparationFailure
slap.HandoverRequest  HandoverRequest
    No value
    slap.HandoverRequest
slap.HandoverRequestAcknowledge  HandoverRequestAcknowledge
    No value
    slap.HandoverRequestAcknowledge
slap.HandoverRequired  HandoverRequired
    No value
    slap.HandoverRequired
slap.HandoverRestrictionList  HandoverRestrictionList
    No value
    slap.HandoverRestrictionList
slap.HandoverType  HandoverType
    Unsigned 32-bit integer
    slap.HandoverType
```

```
slap.InitialContextSetupFailure  InitialContextSetupFailure
    No value
    slap.InitialContextSetupFailure
slap.InitialContextSetupRequest  InitialContextSetupRequest
    No value
    slap.InitialContextSetupRequest
slap.InitialContextSetupResponse  InitialContextSetupResponse
    No value
    slap.InitialContextSetupResponse
slap.InitialUEMessage  InitialUEMessage
    No value
    slap.InitialUEMessage
slap.InterfacesToTraceList_item  Item
    No value
    slap.InterfacesToTraceItem
slap.Intra_LTEHOInformationReq  Intra-LTEHOInformationReq
    No value
    slap.Intra_LTEHOInformationReq
slap.Intra_LTEHOInformationRes  Intra-LTEHOInformationRes
    No value
    slap.Intra_LTEHOInformationRes
slap.LTEtoGERANHOInformationReq  LTEtoGERANHOInformationReq
    No value
    slap.LTEtoGERANHOInformationReq
slap.LTEtoGERANHOInformationRes  LTEtoGERANHOInformationRes
    No value
    slap.LTEtoGERANHOInformationRes
slap.LTEtoUTRANHOInformationReq  LTEtoUTRANHOInformationReq
    No value
    slap.LTEtoUTRANHOInformationReq
slap.LTEtoUTRANHOInformationRes  LTEtoUTRANHOInformationRes
    No value
    slap.LTEtoUTRANHOInformationRes
slap.MME_UE_SlAP_ID  MME-UE-SlAP-ID
    Byte array
    slap.MME_UE_SlAP_ID
slap.MMEname  MMEname
    Byte array
    slap.MMEname
slap.NASNonDeliveryIndication  NASNonDeliveryIndication
    No value
    slap.NASNonDeliveryIndication
slap.NAS_PDU  NAS-PDU
    Byte array
    slap.NAS_PDU
slap.NRIs  NRIs
    Unsigned 32-bit integer
    slap.NRIs
```



```
slap.NRIs_item Item
  Byte array
  slap.NRI

slap.PLMNidentity PLMNidentity
  Byte array
  slap.PLMNidentity

slap.Paging Paging
  No value
  slap.Paging

slap.PagingCause PagingCause
  Unsigned 32-bit integer
  slap.PagingCause

slap.PagingDRX PagingDRX
  Unsigned 32-bit integer
  slap.PagingDRX

slap.PathSwitchRequest PathSwitchRequest
  No value
  slap.PathSwitchRequest

slap.PathSwitchRequestAcknowledge PathSwitchRequestAcknowledge
  No value
  slap.PathSwitchRequestAcknowledge

slap.PathSwitchRequestFailure PathSwitchRequestFailure
  No value
  slap.PathSwitchRequestFailure

slap.PrivateIE_Container_item Item
  No value
  slap.PrivateIE_Field

slap.ProtocolExtensionContainer_item Item
  No value
  slap.ProtocolExtensionField

slap.ProtocolIE_ContainerList_item Item
  No value
  slap.ProtocolIE_SingleContainer

slap.ProtocolIE_ContainerPairList_item Item
  Unsigned 32-bit integer
  slap.ProtocolIE_ContainerPair

slap.ProtocolIE_ContainerPair_item Item
  No value
  slap.ProtocolIE_FieldPair

slap.ProtocolIE_Container_item Item
  No value
  slap.ProtocolIE_Field

slap.Reset Reset
  No value
  slap.Reset

slap.ResetAcknowledge ResetAcknowledge
  No value
  slap.ResetAcknowledge
```

```
slap.S1AP_PDU    S1AP-PDU
  Unsigned 32-bit integer
  slap.S1AP_PDU

slap.S1SetupFailure  S1SetupFailure
  No value
  slap.S1SetupFailure

slap.S1SetupRequest  S1SetupRequest
  No value
  slap.S1SetupRequest

slap.S1SetupResponse S1SetupResponse
  No value
  slap.S1SetupResponse

slap.SAEBearerAdmittedItem  SAEBearerAdmittedItem
  No value
  slap.SAEBearerAdmittedItem

slap.SAEBearerAdmittedList  SAEBearerAdmittedList
  Unsigned 32-bit integer
  slap.SAEBearerAdmittedList

slap.SAEBearerDataForwardingItem  SAEBearerDataForwardingItem
  No value
  slap.SAEBearerDataForwardingItem

slap.SAEBearerFailedToSetupItemHOREqAck  SAEBearerFailedToSetupItemHOREqAck
  No value
  slap.SAEBearerFailedToSetupItemHOREqAck

slap.SAEBearerFailedtoSetupListHOREqAck  SAEBearerFailedtoSetupListHOREqAck
  Unsigned 32-bit integer
  slap.SAEBearerFailedtoSetupListHOREqAck

slap.SAEBearerItem  SAEBearerItem
  No value
  slap.SAEBearerItem

slap.SAEBearerList  SAEBearerList
  Unsigned 32-bit integer
  slap.SAEBearerList

slap.SAEBearerList_item  Item
  No value
  slap.ProtocolIE_SingleContainer

slap.SAEBearerModifyItemBearerModRes  SAEBearerModifyItemBearerModRes
  No value
  slap.SAEBearerModifyItemBearerModRes

slap.SAEBearerModifyListBearerModRes  SAEBearerModifyListBearerModRes
  Unsigned 32-bit integer
  slap.SAEBearerModifyListBearerModRes

slap.SAEBearerModifyListBearerModRes_item  Item
  No value
  slap.ProtocolIE_SingleContainer

slap.SAEBearerModifyRequest  SAEBearerModifyRequest
  No value
  slap.SAEBearerModifyRequest
```

```
slap.SAEBearerModifyResponse  SAEBearerModifyResponse
    No value
    slap.SAEBearerModifyResponse

slap.SAEBearerReleaseCommand  SAEBearerReleaseCommand
    No value
    slap.SAEBearerReleaseCommand

slap.SAEBearerReleaseComplete  SAEBearerReleaseComplete
    No value
    slap.SAEBearerReleaseComplete

slap.SAEBearerReleaseItemBearerRelComp  SAEBearerReleaseItemBearerRelComp
    No value
    slap.SAEBearerReleaseItemBearerRelComp

slap.SAEBearerReleaseItemHOCmd  SAEBearerReleaseItemHOCmd
    No value
    slap.SAEBearerReleaseItemHOCmd

slap.SAEBearerReleaseListBearerRelComp  SAEBearerReleaseListBearerRelComp
    Unsigned 32-bit integer
    slap.SAEBearerReleaseListBearerRelComp

slap.SAEBearerReleaseListBearerRelComp_item  Item
    No value
    slap.ProtocolIE_SingleContainer

slap.SAEBearerReleaseRequest  SAEBearerReleaseRequest
    No value
    slap.SAEBearerReleaseRequest

slap.SAEBearerSetupItemBearerSURES  SAEBearerSetupItemBearerSURES
    No value
    slap.SAEBearerSetupItemBearerSURES

slap.SAEBearerSetupItemCtxtSURES  SAEBearerSetupItemCtxtSURES
    No value
    slap.SAEBearerSetupItemCtxtSURES

slap.SAEBearerSetupListBearerSURES  SAEBearerSetupListBearerSURES
    Unsigned 32-bit integer
    slap.SAEBearerSetupListBearerSURES

slap.SAEBearerSetupListBearerSURES_item  Item
    No value
    slap.ProtocolIE_SingleContainer

slap.SAEBearerSetupListCtxtSURES  SAEBearerSetupListCtxtSURES
    Unsigned 32-bit integer
    slap.SAEBearerSetupListCtxtSURES

slap.SAEBearerSetupListCtxtSURES_item  Item
    No value
    slap.ProtocolIE_SingleContainer

slap.SAEBearerSetupRequest  SAEBearerSetupRequest
    No value
    slap.SAEBearerSetupRequest

slap.SAEBearerSetupResponse  SAEBearerSetupResponse
    No value
    slap.SAEBearerSetupResponse
```

```

slap.SAEBearerSubjecttoDataForwardingList  SAEBearerSubjecttoDataForwardingList
    Unsigned 32-bit integer
    slap.SAEBearerSubjecttoDataForwardingList
slap.SAEBearerToBeModifiedItemBearerModReq  SAEBearerToBeModifiedItemBearerModReq
    No value
    slap.SAEBearerToBeModifiedItemBearerModReq
slap.SAEBearerToBeModifiedListBearerModReq  SAEBearerToBeModifiedListBearerModReq
    Unsigned 32-bit integer
    slap.SAEBearerToBeModifiedListBearerModReq
slap.SAEBearerToBeModifiedListBearerModReq_item  Item
    No value
    slap.ProtocolIE_SingleContainer
slap.SAEBearerToBeSetupItemBearerSUIReq  SAEBearerToBeSetupItemBearerSUIReq
    No value
    slap.SAEBearerToBeSetupItemBearerSUIReq
slap.SAEBearerToBeSetupItemCtxtSUIReq  SAEBearerToBeSetupItemCtxtSUIReq
    No value
    slap.SAEBearerToBeSetupItemCtxtSUIReq
slap.SAEBearerToBeSetupItemHOReq  SAEBearerToBeSetupItemHOReq
    No value
    slap.SAEBearerToBeSetupItemHOReq
slap.SAEBearerToBeSetupListBearerSUIReq  SAEBearerToBeSetupListBearerSUIReq
    Unsigned 32-bit integer
    slap.SAEBearerToBeSetupListBearerSUIReq
slap.SAEBearerToBeSetupListBearerSUIReq_item  Item
    No value
    slap.ProtocolIE_SingleContainer
slap.SAEBearerToBeSetupListCtxtSUIReq  SAEBearerToBeSetupListCtxtSUIReq
    Unsigned 32-bit integer
    slap.SAEBearerToBeSetupListCtxtSUIReq
slap.SAEBearerToBeSetupListCtxtSUIReq_item  Item
    No value
    slap.ProtocolIE_SingleContainer
slap.SAEBearerToBeSetupListHOReq  SAEBearerToBeSetupListHOReq
    Unsigned 32-bit integer
    slap.SAEBearerToBeSetupListHOReq
slap.SAEBearerToBeSwitchedDLItem  SAEBearerToBeSwitchedDLItem
    No value
    slap.SAEBearerToBeSwitchedDLItem
slap.SAEBearerToBeSwitchedDLList  SAEBearerToBeSwitchedDLList
    Unsigned 32-bit integer
    slap.SAEBearerToBeSwitchedDLList
slap.SAEBearerToReleaseListHOCmd  SAEBearerToReleaseListHOCmd
    Unsigned 32-bit integer
    slap.SAEBearerToReleaseListHOCmd
slap.S_TMSI  S-TMSI
    Byte array
    slap.S_TMSI

```

```
slap.SecurityInformation SecurityInformation
  No value
  slap.SecurityInformation
slap.ServedPLMNs ServedPLMNs
  Unsigned 32-bit integer
  slap.ServedPLMNs
slap.ServedPLMNs_item Item
  Byte array
  slap.PLMNidentity
slap.SourceID SourceID
  No value
  slap.SourceID
slap.SupportedTAIs SupportedTAIs
  Unsigned 32-bit integer
  slap.SupportedTAIs
slap.SupportedTAIs_item Item
  No value
  slap.SupportedTAs_Item
slap.TAId TAId
  Byte array
  slap.TAId
slap.TAIdItem TAIdItem
  No value
  slap.TAIdItem
slap.TAIdList TAIdList
  Unsigned 32-bit integer
  slap.TAIdList
slap.TAIdList_item Item
  No value
  slap.ProtocolIE_SingleContainer
slap.TargetID TargetID
  Unsigned 32-bit integer
  slap.TargetID
slap.TimeToWait TimeToWait
  Byte array
  slap.TimeToWait
slap.TraceActivation TraceActivation
  No value
  slap.TraceActivation
slap.UContextReleaseRequest UEContextReleaseRequest
  No value
  slap.UContextReleaseRequest
slap.UTRANToLTEHOInformationReq UTRANToLTEHOInformationReq
  No value
  slap.UTRANToLTEHOInformationReq
slap.UTRANToLTEHOInformationRes UTRANToLTEHOInformationRes
  No value
  slap.UTRANToLTEHOInformationRes
```

```
slap.UplinkNASTransport  UplinkNASTransport
    No value
    slap.UplinkNASTransport
slap.aggregateMaximumBitRateDL  aggregateMaximumBitRateDL
    Unsigned 32-bit integer
    slap.SAE_Bearer_BitRate
slap.aggregateMaximumBitRateUL  aggregateMaximumBitRateUL
    Unsigned 32-bit integer
    slap.SAE_Bearer_BitRate
slap.allocationRetentionPriority  allocationRetentionPriority
    No value
    slap.AllocationRetentionPriority
slap.broadcastPLMNs  broadcastPLMNs
    Unsigned 32-bit integer
    slap.BPLMNs
slap.cGI  cGI
    No value
    slap.CGI
slap.cI  cI
    Byte array
    slap.CI
slap.cause  cause
    Unsigned 32-bit integer
    slap.Cause
slap.criticality  criticality
    Unsigned 32-bit integer
    slap.Criticality
slap.eNB_ID  eNB-ID
    Unsigned 32-bit integer
    slap.ENB_ID
slap.equivalentPLMNs  equivalentPLMNs
    Unsigned 32-bit integer
    slap.EPLMNs
slap.extensionValue  extensionValue
    No value
    slap.T_extensionValue
slap.firstCriticality  firstCriticality
    Unsigned 32-bit integer
    slap.Criticality
slap.firstValue  firstValue
    No value
    slap.T_firstValue
slap.forbiddenInterRATs  forbiddenInterRATs
    Unsigned 32-bit integer
    slap.ForbiddenInterRATs
slap.forbiddenLACs  forbiddenLACs
    Unsigned 32-bit integer
    slap.ForbiddenLACs
```

```
slap.forbiddenLAs  forbiddenLAs
    Unsigned 32-bit integer
    slap.ForbiddenLAs

slap.forbiddenTAIs  forbiddenTAIs
    Unsigned 32-bit integer
    slap.ForbiddenTAIs

slap.forbiddenTAS  forbiddenTAS
    Unsigned 32-bit integer
    slap.ForbiddenTAS

slap.gTP_TEID  gTP-TEID
    Byte array
    slap.GTP_TEID

slap.global  global
    slap.OBJECT_IDENTIFIER

slap.iECriticality  iECriticality
    Unsigned 32-bit integer
    slap.Criticality

slap.iE_Extensions  iE-Extensions
    Unsigned 32-bit integer
    slap.ProtocolExtensionContainer

slap.iE_ID  iE-ID
    Unsigned 32-bit integer
    slap.ProtocolIE_ID

slap.iEsCriticalityDiagnostics  iEsCriticalityDiagnostics
    Unsigned 32-bit integer
    slap.CriticalityDiagnostics_IE_List

slap.id  id
    Unsigned 32-bit integer
    slap.ProtocolIE_ID

slap.initiatingMessage  initiatingMessage
    No value
    slap.InitiatingMessage

slap.interfaceType  interfaceType
    Unsigned 32-bit integer
    slap.InterfaceType

slap.interfacesToTraceList  interfacesToTraceList
    Unsigned 32-bit integer
    slap.InterfacesToTraceList

slap.lAC  lAC
    Byte array
    slap.LAC

slap.lAI  lAI
    No value
    slap.LAI

slap.label  label
    Unsigned 32-bit integer
    slap.Label
```

```
slap.local local
    Unsigned 32-bit integer
    slap.INTEGER_0_65535

slap.misc misc
    Unsigned 32-bit integer
    slap.CauseMisc

slap.pLMN_Identity pLMN-Identity
    Byte array
    slap.PLMNidentity

slap.pLMNidentity pLMNidentity
    Byte array
    slap.PLMNidentity

slap.priorityLevel priorityLevel
    Unsigned 32-bit integer
    slap.PriorityLevel

slap.procedureCode procedureCode
    Unsigned 32-bit integer
    slap.ProcedureCode

slap.procedureCriticality procedureCriticality
    Unsigned 32-bit integer
    slap.Criticality

slap.protocol protocol
    Unsigned 32-bit integer
    slap.CauseProtocol

slap.protocolIEs protocolIEs
    Unsigned 32-bit integer
    slap.ProtocolIE_Container

slap.rAC rAC
    Byte array
    slap.RAC

slap.rNC_ID rNC-ID
    Unsigned 32-bit integer
    slap.RNC_ID

slap.radioNetwork radioNetwork
    Unsigned 32-bit integer
    slap.CauseRadioNetwork

slap.sAE_BearerLevelQoSParameters sAE-BearerLevelQoSParameters
    No value
    slap.SAE_BearerLevelQoSParameters

slap.sAE_BearerType sAE-BearerType
    Unsigned 32-bit integer
    slap.SAE_Bearer_Type

slap.sAE_Bearer_GuaranteedBitrateDL sAE-Bearer-GuaranteedBitrateDL
    Unsigned 32-bit integer
    slap.SAE_Bearer_BitRate

slap.sAE_Bearer_GuaranteedBitrateUL sAE-Bearer-GuaranteedBitrateUL
    Unsigned 32-bit integer
    slap.SAE_Bearer_BitRate
```



```

slap.sAE_Bearer_ID    sAE-Bearer-ID
    Byte array
    slap.SAE_Bearer_ID

slap.sAE_Bearer_MaximumBitrateDL  sAE-Bearer-MaximumBitrateDL
    Unsigned 32-bit integer
    slap.SAE_Bearer_BitRate

slap.sAE_Bearer_MaximumBitrateUL  sAE-Bearer-MaximumBitrateUL
    Unsigned 32-bit integer
    slap.SAE_Bearer_BitRate

slap.sAE_BearerlevelQoSParameters  sAE-BearerlevelQoSParameters
    No value
    slap.SAE_BearerLevelQoSParameters

slap.sAE_BearerlevelQosParameters  sAE-BearerlevelQosParameters
    No value
    slap.SAE_BearerLevelQoSParameters

slap.sAE_GBR_Bearer    sAE-GBR-Bearer
    No value
    slap.SAE_GBR_Bearer

slap.sAE_non_GBR_Bearer  sAE-non-GBR-Bearer
    No value
    slap.SAE_non_GBR_Bearer

slap.sAE_non_GBR_Bearer_Type  sAE-non-GBR-Bearer-Type
    Unsigned 32-bit integer
    slap.T_sAE_non_GBR_Bearer_Type

slap.secondCriticality  secondCriticality
    Unsigned 32-bit integer
    slap.Criticality

slap.secondValue  secondValue
    No value
    slap.T_secondValue

slap.securityPlaceHolder  securityPlaceHolder
    Unsigned 32-bit integer
    slap.T_securityPlaceHolder

slap.sourceBSS_ToTargetBSS_TransparentContainer  sourceBSS-ToTargetBSS-TransparentContainer
    Byte array
    slap.SourceBSS_ToTargetBSS_TransparentContainer

slap.sourceRNC_ToTargetRNC_TransparentContainer  sourceRNC-ToTargetRNC-TransparentContainer
    Byte array
    slap.SourceRNC_ToTargetRNC_TransparentContainer

slap.sourceeNB_ID  sourceeNB-ID
    No value
    slap.SourceeNB_ID

slap.sourceeNodeB_ToTargeteNodeB_TransparentContainer  sourceeNodeB-ToTargeteNodeB-TransparentContainer
    Byte array
    slap.SourceeNodeB_ToTargeteNodeB_TransparentContainer

slap.successfulOutcome  successfulOutcome
    No value
    slap.SuccessfulOutcome

```

```

slap.tAI    tAI
            Byte array
            slap.TAId

slap.tAId   tAId
            Byte array
            slap.TAId

slap.targetBSS_ToSourceBSS_TransparentContainer  targetBSS-ToSourceBSS-Transpare
            Byte array
            slap.TargetBSS_ToSourceBSS_TransparentContainer

slap.targetRNC_ID  targetRNC-ID
            No value
            slap.TargetRNC_ID

slap.targetRNC_ToSourceRNC_TransparentContainer  targetRNC-ToSourceRNC-Transpare
            Byte array
            slap.TargetRNC_ToSourceRNC_TransparentContainer

slap.targeteNB_ID  targeteNB-ID
            No value
            slap.TargeteNB_ID

slap.targeteNodeB_ToSourceeNodeB_TransparentContainer  targeteNodeB-ToSourceeNodeB-Transpare
            Byte array
            slap.TargeteNodeB_ToSourceeNodeB_TransparentContainer

slap.traceDepth  traceDepth
            Unsigned 32-bit integer
            slap.TraceDepth

slap.traceReference  traceReference
            Byte array
            slap.TraceReference

slap.transport  transport
            Unsigned 32-bit integer
            slap.CauseTransport

slap.transportLayerAddress  transportLayerAddress
            Byte array
            slap.TransportLayerAddress

slap.triggeringMessage  triggeringMessage
            Unsigned 32-bit integer
            slap.TriggeringMessage

slap.typeOfError  typeOfError
            Unsigned 32-bit integer
            slap.TypeOfError

slap.unsuccessfulOutcome  unsuccessfulOutcome
            No value
            slap.UnsuccessfulOutcome

slap.userDataType  userDataType
            Signed 32-bit integer
            slap.UserDataType

slap.value  value
            No value
            slap.T_ie_field_value

```

**SADMIND (sadmind)**

```
sadmind.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

sadmind.procedure_v2  V2 Procedure
    Unsigned 32-bit integer
    V2 Procedure

sadmind.procedure_v3  V3 Procedure
    Unsigned 32-bit integer
    V3 Procedure
```

**SAIA S-Bus (sbus)**

```
sbus.CPU_status  CPU status
    Unsigned 8-bit integer
    SAIA PCD CPU status

sbus.addr_EEPROM  Base address of EEPROM register
    Unsigned 16-bit integer
    Base address of 32 bit EEPROM register to read or write

sbus.addr_IOF  Base address IOF
    Unsigned 16-bit integer
    Base address of binary elements to read

sbus.addr_RTC  Base address RTC
    Unsigned 16-bit integer
    Base address of 32 bit elements to read

sbus.addr_prog  Base address of user memory or program lines
    Unsigned 24-bit integer
    Base address of the user memory or program lines (read or write)

sbus.address  S-Bus address
    Unsigned 8-bit integer
    SAIA S-Bus station address

sbus.att  Telegram attribute
    Unsigned 8-bit integer
    SAIA Ether-S-Bus telegram attribute, indicating type of telegram

sbus.block_nr  Block/Element nr
    Unsigned 16-bit integer
    Program block / DataBlock number

sbus.block_type  Block type
    Unsigned 8-bit integer
    Program block type read

sbus.cmd  Command
    Unsigned 8-bit integer
    SAIA S-Bus command

sbus.cmd_extn  Command extension
    Unsigned 8-bit integer
    SAIA S-Bus command extension

sbus.crc  Checksum
    Unsigned 16-bit integer
    CRC 16
```

```
sbus.crc_bad    Bad Checksum
                Boolean
                A bad checksum in the telegram

sbus.data_byte  Data bytes
                Unsigned 8-bit integer
                One byte from PCD

sbus.data_byte_hex  Data bytes (hex)
                Unsigned 8-bit integer
                One byte from PCD (hexadecimal)

sbus.data_display_register  PCD Display register
                Unsigned 32-bit integer
                The PCD display register (32 bit value)

sbus.data_iof    S-Bus binary data
                Unsigned 32-bit integer
                8 binaries

sbus.data_rtc    S-Bus 32-bit data
                Unsigned 32-bit integer
                One register/timer of counter (32 bit value)

sbus.destination  Destination
                Unsigned 8-bit integer
                SAIA S-Bus destination address

sbus.fio_count    FIO Count (amount of bits)
                Unsigned 8-bit integer
                Number of binary elements to be written

sbus.flags.accu    ACCU
                Boolean
                PCD Accumulator

sbus.flags.error  Error flag
                Boolean
                PCD error flag

sbus.flags.nflag  N-flag
                Boolean
                Negative status flag

sbus.flags.zflag  Z-flag
                Boolean
                Zero status flag

sbus.fmodule_type  F-module type
                String
                Module type mounted on B1/2 slot

sbus.fw_version    Firmware version
                String
                Firmware version of the PCD or module

sbus.hw_modification  Hardware modification
                Unsigned 8-bit integer
                Hardware modification of the PCD or module

sbus.hw_version    Hardware version
                String
                Hardware version of the PCD or the module
```

```
sbus.len Length (bytes)
    Unsigned 32-bit integer
    SAIA Ether-S-Bus telegram length

sbus.nakcode ACK/NAK code
    Unsigned 16-bit integer
    SAIA S-Bus ACK/NAK response

sbus.nbr_elements Number of elements
    Unsigned 16-bit integer
    Number of elements or characters

sbus.pcd_type PCD type
    String
    PCD type (short form)

sbus.proto Protocol type
    Unsigned 8-bit integer
    SAIA Ether-S-Bus protocol type

sbus.rcount R-count
    Unsigned 8-bit integer
    Number of elements expected in response

sbus.rtc.date RTC date (YYMMDD)
    Unsigned 24-bit integer
    Year, month and day of the real time clock

sbus.rtc.time RTC time (HHMMSS)
    Unsigned 24-bit integer
    Time of the real time clock

sbus.rtc.week_day RTC calendar week and week day
    Unsigned 16-bit integer
    Calendar week and week day number of the real time clock

sbus.seq Sequence
    Unsigned 16-bit integer
    SAIA Ether-S-Bus sequence number

sbus.sysinfo System information number
    Unsigned 8-bit integer
    System information number (extension to command code)

sbus.sysinfo0.b1 Slot B1
    Boolean
    Presence of EEPROM information on slot B1

sbus.sysinfo0.b2 Slot B2
    Boolean
    Presence of EEPROM information on slot B2

sbus.sysinfo0.mem Mem size info
    Boolean
    Availability of memory size information

sbus.sysinfo0.pgubaud PGU baud
    Boolean
    Availability of PGU baud switch feature

sbus.sysinfo0.trace Trace buffer
    Boolean
    Availability of trace buffer feature
```

```
sbus.sysinfo_length  System information length
    Unsigned 8-bit integer
    System information length in response

sbus.various  Varous data
    No value
    Various data contained in telegrams but nobody will search for it

sbus.vers  Version
    Unsigned 8-bit integer
    SAIA Ether-S-Bus version

sbus.wcount  W-count (raw)
    Unsigned 8-bit integer
    Number of bytes to be written

sbus.wcount_calc  W-count (32 bit values)
    Unsigned 8-bit integer
    Number of elements to be written

sbus.web.aid  AID
    Unsigned 8-bit integer
    Web server command/status code (AID)

sbus.web.seq  Sequence
    Unsigned 8-bit integer
    Web server sequence nr (PACK_N)

sbus.web.size  Web server packet size
    Unsigned 8-bit integer
    Web server packet size
```

**SAMR (pidl) (samr)**

```
samr.alias.access_mask  Access Mask
    Unsigned 32-bit integer

samr.alias_handle  Alias Handle
    Byte array

samr.connect.access_mask  Access Mask
    Unsigned 32-bit integer

samr.connect_handle  Connect Handle
    Byte array

samr.domain.access_mask  Access Mask
    Unsigned 32-bit integer

samr.domain_handle  Domain Handle
    Byte array

samr.group.access_mask  Access Mask
    Unsigned 32-bit integer

samr.group_handle  Group Handle
    Byte array

samr.handle  Handle
    Byte array

samr.lsa_String.name  Name
    String
```

```
samr.lsa_String.name_len  Name Len
    Unsigned 16-bit integer
samr.lsa_String.name_size  Name Size
    Unsigned 16-bit integer
samr.lsa_Strings.count  Count
    Unsigned 32-bit integer
samr.lsa_Strings.names  Names
    String
samr.opnum  Operation
    Unsigned 16-bit integer
samr.rid  RID
    Unsigned 32-bit integer
samr.samr_AcctFlags.ACB_AUTOLOCK  Acb Autolock
    Boolean
samr.samr_AcctFlags.ACB_DISABLED  Acb Disabled
    Boolean
samr.samr_AcctFlags.ACB_DOMTRUST  Acb Domtrust
    Boolean
samr.samr_AcctFlags.ACB_DONT_REQUIRE_PREAUTH  Acb Dont Require Preauth
    Boolean
samr.samr_AcctFlags.ACB_ENC_TXT_PWD_ALLOWED  Acb Enc Txt Pwd Allowed
    Boolean
samr.samr_AcctFlags.ACB_HOMDIRREQ  Acb Homdirreq
    Boolean
samr.samr_AcctFlags.ACB_MNS  Acb Mns
    Boolean
samr.samr_AcctFlags.ACB_NORMAL  Acb Normal
    Boolean
samr.samr_AcctFlags.ACB_NOT_DELEGATED  Acb Not Delegated
    Boolean
samr.samr_AcctFlags.ACB_NO_AUTH_DATA_REQD  Acb No Auth Data Reqd
    Boolean
samr.samr_AcctFlags.ACB_PWNOEXP  Acb Pwnoexp
    Boolean
samr.samr_AcctFlags.ACB_PWNOTREQ  Acb Pwnotreq
    Boolean
samr.samr_AcctFlags.ACB_PW_EXPIRED  Acb Pw Expired
    Boolean
samr.samr_AcctFlags.ACB_SMARTCARD_REQUIRED  Acb Smartcard Required
    Boolean
samr.samr_AcctFlags.ACB_SVRTRUST  Acb Svrtrust
    Boolean
samr.samr_AcctFlags.ACB_TEMPDUPLICATE  Acb Tempdup
    Boolean
```

```
samr.samr_AcctFlags.ACB_TRUSTED_FOR_DELEGATION  Acb Trusted For Delegation
Boolean

samr.samr_AcctFlags.ACB_USE_DES_KEY_ONLY  Acb Use Des Key Only
Boolean

samr.samr_AcctFlags.ACB_WSTRUST  Acb Wstrust
Boolean

samr.samr_AddAliasMember.sid  Sid
No value

samr.samr_AddGroupMember.flags  Flags
Unsigned 32-bit integer

samr.samr_AddMultipleMembersToAlias.sids  Sids
No value

samr.samr_AliasAccessMask.ALIAS_ACCESS_ADD_MEMBER  Alias Access Add Member
Boolean

samr.samr_AliasAccessMask.ALIAS_ACCESS_GET_MEMBERS  Alias Access Get Members
Boolean

samr.samr_AliasAccessMask.ALIAS_ACCESS_LOOKUP_INFO  Alias Access Lookup Info
Boolean

samr.samr_AliasAccessMask.ALIAS_ACCESS_REMOVE_MEMBER  Alias Access Remove Member
Boolean

samr.samr_AliasAccessMask.ALIAS_ACCESS_SET_INFO  Alias Access Set Info
Boolean

samr.samr_AliasInfo.all  All
No value

samr.samr_AliasInfo.description  Description
String

samr.samr_AliasInfo.name  Name
String

samr.samr_AliasInfoAll.description  Description
String

samr.samr_AliasInfoAll.name  Name
String

samr.samr_AliasInfoAll.num_members  Num Members
Unsigned 32-bit integer

samr.samr_ChangePasswordUser.cross1_present  Cross1 Present
Unsigned 8-bit integer

samr.samr_ChangePasswordUser.cross2_present  Cross2 Present
Unsigned 8-bit integer

samr.samr_ChangePasswordUser.lm_cross  Lm Cross
No value

samr.samr_ChangePasswordUser.lm_present  Lm Present
Unsigned 8-bit integer

samr.samr_ChangePasswordUser.new_lm_crypted  New Lm Crypted
No value
```



```
samr.samr_ChangePasswordUser.new_nt_crypted  New Nt Crypted
No value
samr.samr_ChangePasswordUser.nt_cross  Nt Cross
No value
samr.samr_ChangePasswordUser.nt_present  Nt Present
Unsigned 8-bit integer
samr.samr_ChangePasswordUser.old_lm_crypted  Old Lm Crypted
No value
samr.samr_ChangePasswordUser.old_nt_crypted  Old Nt Crypted
No value
samr.samr_ChangePasswordUser2.account  Account
String
samr.samr_ChangePasswordUser2.lm_change  Lm Change
Unsigned 8-bit integer
samr.samr_ChangePasswordUser2.lm_password  Lm Password
No value
samr.samr_ChangePasswordUser2.lm_verifier  Lm Verifier
No value
samr.samr_ChangePasswordUser2.nt_password  Nt Password
No value
samr.samr_ChangePasswordUser2.nt_verifier  Nt Verifier
No value
samr.samr_ChangePasswordUser2.server  Server
String
samr.samr_ChangePasswordUser3.account  Account
String
samr.samr_ChangePasswordUser3.dominio  Dominfo
No value
samr.samr_ChangePasswordUser3.lm_change  Lm Change
Unsigned 8-bit integer
samr.samr_ChangePasswordUser3.lm_password  Lm Password
No value
samr.samr_ChangePasswordUser3.lm_verifier  Lm Verifier
No value
samr.samr_ChangePasswordUser3.nt_password  Nt Password
No value
samr.samr_ChangePasswordUser3.nt_verifier  Nt Verifier
No value
samr.samr_ChangePasswordUser3.password3  Password3
No value
samr.samr_ChangePasswordUser3.reject  Reject
No value
samr.samr_ChangePasswordUser3.server  Server
String
```

```

samr.samr_ChangeReject.reason Reason
    Unsigned 16-bit integer
samr.samr_ChangeReject.unknown1 Unknown1
    Unsigned 32-bit integer
samr.samr_ChangeReject.unknown2 Unknown2
    Unsigned 32-bit integer
samr.samr_Connect.system_name System Name
    Unsigned 16-bit integer
samr.samr_Connect2.system_name System Name
    String
samr.samr_Connect3.system_name System Name
    String
samr.samr_Connect3.unknown Unknown
    Unsigned 32-bit integer
samr.samr_Connect4.system_name System Name
    String
samr.samr_Connect4.unknown Unknown
    Unsigned 32-bit integer
samr.samr_Connect5.info Info
    No value
samr.samr_Connect5.level Level
    Unsigned 32-bit integer
samr.samr_Connect5.system_name System Name
    String
samr.samr_ConnectAccessMask.SAMR_ACCESS_CONNECT_TO_SERVER Samr Access Connect T
    Boolean
samr.samr_ConnectAccessMask.SAMR_ACCESS_CREATE_DOMAIN Samr Access Create Domain
    Boolean
samr.samr_ConnectAccessMask.SAMR_ACCESS_ENUM_DOMAINS Samr Access Enum Domains
    Boolean
samr.samr_ConnectAccessMask.SAMR_ACCESS_INITIALIZE_SERVER Samr Access Initializ
    Boolean
samr.samr_ConnectAccessMask.SAMR_ACCESS_OPEN_DOMAIN Samr Access Open Domain
    Boolean
samr.samr_ConnectAccessMask.SAMR_ACCESS_SHUTDOWN_SERVER Samr Access Shutdown Se
    Boolean
samr.samr_ConnectInfo.infol1 Infol1
    No value
samr.samr_ConnectInfo1.unknown1 Unknown1
    Unsigned 32-bit integer
samr.samr_ConnectInfo1.unknown2 Unknown2
    Unsigned 32-bit integer
samr.samr_CreateDomAlias.alias_name Alias Name
    String

```

```
samr.samr_CreateDomainGroup.name    Name
String

samr.samr_CreateUser.account_name   Account Name
String

samr.samr_CreateUser2.access_granted Access Granted
Unsigned 32-bit integer

samr.samr_CreateUser2.account_name   Account Name
String

samr.samr_CreateUser2.acct_flags     Acct Flags
Unsigned 32-bit integer

samr.samr_CryptPassword.data         Data
Unsigned 8-bit integer

samr.samr_CryptPasswordEx.data       Data
Unsigned 8-bit integer

samr.samr_DeleteAliasMember.sid      Sid
No value

samr.samr_DispEntryAscii.account_name Account Name
String

samr.samr_DispEntryAscii.idx         Idx
Unsigned 32-bit integer

samr.samr_DispEntryFull.account_name Account Name
String

samr.samr_DispEntryFull.acct_flags   Acct Flags
Unsigned 32-bit integer

samr.samr_DispEntryFull.description  Description
String

samr.samr_DispEntryFull.idx         Idx
Unsigned 32-bit integer

samr.samr_DispEntryFullGroup.account_name Account Name
String

samr.samr_DispEntryFullGroup.acct_flags Acct Flags
Unsigned 32-bit integer

samr.samr_DispEntryFullGroup.description Description
String

samr.samr_DispEntryFullGroup.idx     Idx
Unsigned 32-bit integer

samr.samr_DispEntryGeneral.account_name Account Name
String

samr.samr_DispEntryGeneral.acct_flags Acct Flags
Unsigned 32-bit integer

samr.samr_DispEntryGeneral.description Description
String

samr.samr_DispEntryGeneral.full_name Full Name
String
```

```
samr.samr_DispEntryGeneral.idx  Idx
    Unsigned 32-bit integer
samr.samr_DispInfo.info1  Info1
    No value
samr.samr_DispInfo.info2  Info2
    No value
samr.samr_DispInfo.info3  Info3
    No value
samr.samr_DispInfo.info4  Info4
    No value
samr.samr_DispInfo.info5  Info5
    No value
samr.samr_DispInfoAscii.count  Count
    Unsigned 32-bit integer
samr.samr_DispInfoAscii.entries  Entries
    No value
samr.samr_DispInfoFull.count  Count
    Unsigned 32-bit integer
samr.samr_DispInfoFull.entries  Entries
    No value
samr.samr_DispInfoFullGroups.count  Count
    Unsigned 32-bit integer
samr.samr_DispInfoFullGroups.entries  Entries
    No value
samr.samr_DispInfoGeneral.count  Count
    Unsigned 32-bit integer
samr.samr_DispInfoGeneral.entries  Entries
    No value
samr.samr_DomInfo1.max_password_age  Max Password Age
    Signed 64-bit integer
samr.samr_DomInfo1.min_password_age  Min Password Age
    Signed 64-bit integer
samr.samr_DomInfo1.min_password_length  Min Password Length
    Unsigned 16-bit integer
samr.samr_DomInfo1.password_history_length  Password History Length
    Unsigned 16-bit integer
samr.samr_DomInfo1.password_properties  Password Properties
    Unsigned 32-bit integer
samr.samr_DomInfo11.info2  Info2
    No value
samr.samr_DomInfo11.lockout_duration  Lockout Duration
    Unsigned 64-bit integer
samr.samr_DomInfo11.lockout_threshold  Lockout Threshold
    Unsigned 16-bit integer
```

```
samr.samr_DomInfo11.lockout_window  Lockout Window
    Unsigned 64-bit integer
samr.samr_DomInfo12.lockout_duration  Lockout Duration
    Unsigned 64-bit integer
samr.samr_DomInfo12.lockout_threshold  Lockout Threshold
    Unsigned 16-bit integer
samr.samr_DomInfo12.lockout_window  Lockout Window
    Unsigned 64-bit integer
samr.samr_DomInfo13.domain_create_time  Domain Create Time
    Date/Time stamp
samr.samr_DomInfo13.sequence_num  Sequence Num
    Unsigned 64-bit integer
samr.samr_DomInfo13.unknown1  Unknown1
    Unsigned 32-bit integer
samr.samr_DomInfo13.unknown2  Unknown2
    Unsigned 32-bit integer
samr.samr_DomInfo2.comment  Comment
    String
samr.samr_DomInfo2.domain_name  Domain Name
    String
samr.samr_DomInfo2.force_logoff_time  Force Logoff Time
    Date/Time stamp
samr.samr_DomInfo2.num_aliases  Num Aliases
    Unsigned 32-bit integer
samr.samr_DomInfo2.num_groups  Num Groups
    Unsigned 32-bit integer
samr.samr_DomInfo2.num_users  Num Users
    Unsigned 32-bit integer
samr.samr_DomInfo2.primary  Primary
    String
samr.samr_DomInfo2.role  Role
    Unsigned 32-bit integer
samr.samr_DomInfo2.sequence_num  Sequence Num
    Unsigned 64-bit integer
samr.samr_DomInfo2.unknown2  Unknown2
    Unsigned 32-bit integer
samr.samr_DomInfo2.unknown3  Unknown3
    Unsigned 32-bit integer
samr.samr_DomInfo3.force_logoff_time  Force Logoff Time
    Date/Time stamp
samr.samr_DomInfo4.comment  Comment
    String
samr.samr_DomInfo5.domain_name  Domain Name
    String
```

```

samr.samr_DomInfo6.primary Primary
String

samr.samr_DomInfo7.role Role
Unsigned 32-bit integer

samr.samr_DomInfo8.domain_create_time Domain Create Time
Date/Time stamp

samr.samr_DomInfo8.sequence_num Sequence Num
Unsigned 64-bit integer

samr.samr_DomInfo9.unknown Unknown
Unsigned 32-bit integer

samr.samr_DomainAccessMask.DOMAIN_ACCESS_CREATE_ALIAS Domain Access Create Alia
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_CREATE_GROUP Domain Access Create Grou
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_CREATE_USER Domain Access Create User
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_ENUM_ACCOUNTS Domain Access Enum Accou
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_LOOKUP_ALIAS Domain Access Lookup Alia
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_LOOKUP_INFO_1 Domain Access Lookup Inf
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_LOOKUP_INFO_2 Domain Access Lookup Inf
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_OPEN_ACCOUNT Domain Access Open Accoun
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_SET_INFO_1 Domain Access Set Info 1
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_SET_INFO_2 Domain Access Set Info 2
Boolean

samr.samr_DomainAccessMask.DOMAIN_ACCESS_SET_INFO_3 Domain Access Set Info 3
Boolean

samr.samr_DomainInfo.info1 Info1
No value

samr.samr_DomainInfo.info11 Info11
No value

samr.samr_DomainInfo.info12 Info12
No value

samr.samr_DomainInfo.info13 Info13
No value

samr.samr_DomainInfo.info2 Info2
No value

samr.samr_DomainInfo.info3 Info3
No value

```

```
samr.samr_DomainInfo.info4  Info4
    No value
samr.samr_DomainInfo.info5  Info5
    No value
samr.samr_DomainInfo.info6  Info6
    No value
samr.samr_DomainInfo.info7  Info7
    No value
samr.samr_DomainInfo.info8  Info8
    No value
samr.samr_DomainInfo.info9  Info9
    No value
samr.samr_EnumDomainAliases.acct_flags  Acct Flags
    Unsigned 32-bit integer
samr.samr_EnumDomainAliases.num_entries  Num Entries
    Unsigned 32-bit integer
samr.samr_EnumDomainAliases.resume_handle  Resume Handle
    Unsigned 32-bit integer
samr.samr_EnumDomainAliases.sam  Sam
    No value
samr.samr_EnumDomainGroups.max_size  Max Size
    Unsigned 32-bit integer
samr.samr_EnumDomainGroups.num_entries  Num Entries
    Unsigned 32-bit integer
samr.samr_EnumDomainGroups.resume_handle  Resume Handle
    Unsigned 32-bit integer
samr.samr_EnumDomainGroups.sam  Sam
    No value
samr.samr_EnumDomainUsers.acct_flags  Acct Flags
    Unsigned 32-bit integer
samr.samr_EnumDomainUsers.max_size  Max Size
    Unsigned 32-bit integer
samr.samr_EnumDomainUsers.num_entries  Num Entries
    Unsigned 32-bit integer
samr.samr_EnumDomainUsers.resume_handle  Resume Handle
    Unsigned 32-bit integer
samr.samr_EnumDomainUsers.sam  Sam
    No value
samr.samr_EnumDomains.buf_size  Buf Size
    Unsigned 32-bit integer
samr.samr_EnumDomains.connect_handle  Connect Handle
    Byte array
samr.samr_EnumDomains.num_entries  Num Entries
    Unsigned 32-bit integer
```

```
samr.samr_EnumDomains.resume_handle  Resume Handle
    Unsigned 32-bit integer
samr.samr_EnumDomains.sam  Sam
    No value
samr.samr_FieldsPresent.SAMR_FIELD_ACCOUNT_NAME  Samr Field Account Name
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_ACCT_FLAGS  Samr Field Acct Flags
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_CODE_PAGE  Samr Field Code Page
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_COMMENT  Samr Field Comment
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_COUNTRY_CODE  Samr Field Country Code
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_DESCRIPTION  Samr Field Description
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_FULL_NAME  Samr Field Full Name
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_HOME_DIRECTORY  Samr Field Home Directory
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_HOME_DRIVE  Samr Field Home Drive
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_LOGON_HOURS  Samr Field Logon Hours
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_LOGON_SCRIPT  Samr Field Logon Script
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_PARAMETERS  Samr Field Parameters
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_PASSWORD  Samr Field Password
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_PASSWORD2  Samr Field Password2
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_PRIMARY_GID  Samr Field Primary Gid
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_PROFILE_PATH  Samr Field Profile Path
    Boolean
samr.samr_FieldsPresent.SAMR_FIELD_WORKSTATIONS  Samr Field Workstations
    Boolean
samr.samr_GetAliasMembership.rids  Rids
    No value
samr.samr_GetAliasMembership.sids  Sids
    No value
samr.samr_GetBootKeyInformation.domain_handle  Domain Handle
    Byte array
```



```

samr.samr_GetBootKeyInformation.unknown    Unknown
      Unsigned 32-bit integer
samr.samr_GetDisplayEnumerationIndex.idx   Idx
      Unsigned 32-bit integer
samr.samr_GetDisplayEnumerationIndex.level Level
      Unsigned 16-bit integer
samr.samr_GetDisplayEnumerationIndex.name  Name
      String
samr.samr_GetDisplayEnumerationIndex2.idx  Idx
      Unsigned 32-bit integer
samr.samr_GetDisplayEnumerationIndex2.level Level
      Unsigned 16-bit integer
samr.samr_GetDisplayEnumerationIndex2.name Name
      String
samr.samr_GetDomPwInfo.domain_name        Domain Name
      String
samr.samr_GetDomPwInfo.info               Info
      No value
samr.samr_GetGroupsForUser.rids           Rids
      No value
samr.samr_GetMembersInAlias.sids          Sids
      No value
samr.samr_GetUserPwInfo.info              Info
      No value
samr.samr_GroupAccessMask.GROUP_ACCESS_ADD_MEMBER    Group Access Add Member
      Boolean
samr.samr_GroupAccessMask.GROUP_ACCESS_GET_MEMBERS  Group Access Get Members
      Boolean
samr.samr_GroupAccessMask.GROUP_ACCESS_LOOKUP_INFO  Group Access Lookup Info
      Boolean
samr.samr_GroupAccessMask.GROUP_ACCESS_REMOVE_MEMBER Group Access Remove Member
      Boolean
samr.samr_GroupAccessMask.GROUP_ACCESS_SET_INFO     Group Access Set Info
      Boolean
samr.samr_GroupAttrs.SE_GROUP_ENABLED              Se Group Enabled
      Boolean
samr.samr_GroupAttrs.SE_GROUP_ENABLED_BY_DEFAULT   Se Group Enabled By Default
      Boolean
samr.samr_GroupAttrs.SE_GROUP_LOGON_ID             Se Group Logon Id
      Boolean
samr.samr_GroupAttrs.SE_GROUP_MANDATORY            Se Group Mandatory
      Boolean
samr.samr_GroupAttrs.SE_GROUP_OWNER                Se Group Owner
      Boolean

```

```
samr.samr_GroupAttrs.SE_GROUP_RESOURCE  Se Group Resource
Boolean

samr.samr_GroupAttrs.SE_GROUP_USE_FOR_DENY_ONLY  Se Group Use For Deny Only
Boolean

samr.samr_GroupInfo.all  All
No value

samr.samr_GroupInfo.all2  All2
No value

samr.samr_GroupInfo.attributes  Attributes
No value

samr.samr_GroupInfo.description  Description
String

samr.samr_GroupInfo.name  Name
String

samr.samr_GroupInfoAll.attributes  Attributes
Unsigned 32-bit integer

samr.samr_GroupInfoAll.description  Description
String

samr.samr_GroupInfoAll.name  Name
String

samr.samr_GroupInfoAll.num_members  Num Members
Unsigned 32-bit integer

samr.samr_GroupInfoAttributes.attributes  Attributes
Unsigned 32-bit integer

samr.samr_GroupInfoDescription.description  Description
String

samr.samr_Ids.count  Count
Unsigned 32-bit integer

samr.samr_LogonHours.bits  Bits
Unsigned 8-bit integer

samr.samr_LogonHours.units_per_week  Units Per Week
Unsigned 16-bit integer

samr.samr_LookupDomain.domain_name  Domain Name
String

samr.samr_LookupDomain.sid  Sid
No value

samr.samr_LookupNames.names  Names
String

samr.samr_LookupNames.num_names  Num Names
Unsigned 32-bit integer

samr.samr_LookupNames.rids  Rids
No value

samr.samr_LookupNames.types  Types
No value
```

```
samr.samr_LookupRids.names  Names
    No value
samr.samr_LookupRids.num_rids  Num Rids
    Unsigned 32-bit integer
samr.samr_LookupRids.types  Types
    No value
samr.samr_OemChangePasswordUser2.account  Account
    String
samr.samr_OemChangePasswordUser2.hash  Hash
    No value
samr.samr_OemChangePasswordUser2.password  Password
    No value
samr.samr_OemChangePasswordUser2.server  Server
    String
samr.samr_OpenDomain.sid  Sid
    No value
samr.samr_Password.hash  Hash
    Unsigned 8-bit integer
samr.samr_PasswordProperties.DOMAIN_PASSWORD_COMPLEX  Domain Password Complex
    Boolean
samr.samr_PasswordProperties.DOMAIN_PASSWORD_LOCKOUT_ADMINS  Domain Password Loc
    Boolean
samr.samr_PasswordProperties.DOMAIN_PASSWORD_NO_ANON_CHANGE  Domain Password No
    Boolean
samr.samr_PasswordProperties.DOMAIN_PASSWORD_NO_CLEAR_CHANGE  Domain Password No
    Boolean
samr.samr_PasswordProperties.DOMAIN_PASSWORD_STORE_CLEARTTEXT  Domain Password St
    Boolean
samr.samr_PasswordProperties.DOMAIN_REFUSE_PASSWORD_CHANGE  Domain Refuse Passwo
    Boolean
samr.samr_PwInfo.min_password_length  Min Password Length
    Unsigned 16-bit integer
samr.samr_PwInfo.password_properties  Password Properties
    Unsigned 32-bit integer
samr.samr_QueryAliasInfo.info  Info
    No value
samr.samr_QueryAliasInfo.level  Level
    Unsigned 16-bit integer
samr.samr_QueryDisplayInfo.buf_size  Buf Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo.info  Info
    No value
samr.samr_QueryDisplayInfo.level  Level
    Unsigned 16-bit integer
```

```
samr.samr_QueryDisplayInfo.max_entries  Max Entries
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo.returned_size  Returned Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo.start_idx  Start Idx
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo.total_size  Total Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo2.buf_size  Buf Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo2.info  Info
    No value
samr.samr_QueryDisplayInfo2.level  Level
    Unsigned 16-bit integer
samr.samr_QueryDisplayInfo2.max_entries  Max Entries
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo2.returned_size  Returned Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo2.start_idx  Start Idx
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo2.total_size  Total Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo3.buf_size  Buf Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo3.info  Info
    No value
samr.samr_QueryDisplayInfo3.level  Level
    Unsigned 16-bit integer
samr.samr_QueryDisplayInfo3.max_entries  Max Entries
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo3.returned_size  Returned Size
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo3.start_idx  Start Idx
    Unsigned 32-bit integer
samr.samr_QueryDisplayInfo3.total_size  Total Size
    Unsigned 32-bit integer
samr.samr_QueryDomainInfo.info  Info
    No value
samr.samr_QueryDomainInfo.level  Level
    Unsigned 16-bit integer
samr.samr_QueryDomainInfo2.info  Info
    No value
samr.samr_QueryDomainInfo2.level  Level
    Unsigned 16-bit integer
```

```
samr.samr_QueryGroupInfo.info  Info
    No value
samr.samr_QueryGroupInfo.level  Level
    Unsigned 16-bit integer
samr.samr_QueryGroupMember.rids  Rids
    No value
samr.samr_QuerySecurity.sdbuf  Sdbuf
    No value
samr.samr_QuerySecurity.sec_info  Sec Info
    No value
samr.samr_QueryUserInfo.info  Info
    No value
samr.samr_QueryUserInfo.level  Level
    Unsigned 16-bit integer
samr.samr_QueryUserInfo2.info  Info
    No value
samr.samr_QueryUserInfo2.level  Level
    Unsigned 16-bit integer
samr.samr_RemoveMemberFromForeignDomain.sid  Sid
    No value
samr.samr_RemoveMultipleMembersFromAlias.sids  Sids
    No value
samr.samr_RidToSid.sid  Sid
    No value
samr.samr_RidTypeArray.count  Count
    Unsigned 32-bit integer
samr.samr_RidTypeArray.types  Types
    Unsigned 32-bit integer
samr.samr_RidWithAttribute.attributes  Attributes
    Unsigned 32-bit integer
samr.samr_RidWithAttributeArray.count  Count
    Unsigned 32-bit integer
samr.samr_SamArray.count  Count
    Unsigned 32-bit integer
samr.samr_SamArray.entries  Entries
    No value
samr.samr_SamEntry.idx  Idx
    Unsigned 32-bit integer
samr.samr_SamEntry.name  Name
    String
samr.samr_SetAliasInfo.info  Info
    No value
samr.samr_SetAliasInfo.level  Level
    Unsigned 16-bit integer
```

```

samr.samr_SetBootKeyInformation.unknown1  Unknown1
    Unsigned 32-bit integer
samr.samr_SetBootKeyInformation.unknown2  Unknown2
    Unsigned 32-bit integer
samr.samr_SetBootKeyInformation.unknown3  Unknown3
    Unsigned 32-bit integer
samr.samr_SetDomainInfo.info  Info
    No value
samr.samr_SetDomainInfo.level  Level
    Unsigned 16-bit integer
samr.samr_SetDsrpPassword.hash  Hash
    No value
samr.samr_SetDsrpPassword.name  Name
    String
samr.samr_SetDsrpPassword.unknown  Unknown
    Unsigned 32-bit integer
samr.samr_SetGroupInfo.info  Info
    No value
samr.samr_SetGroupInfo.level  Level
    Unsigned 16-bit integer
samr.samr_SetMemberAttributesOfGroup.unknown1  Unknown1
    Unsigned 32-bit integer
samr.samr_SetMemberAttributesOfGroup.unknown2  Unknown2
    Unsigned 32-bit integer
samr.samr_SetSecurity.sdbuf  Sdbuf
    No value
samr.samr_SetSecurity.sec_info  Sec Info
    No value
samr.samr_SetUserInfo.info  Info
    No value
samr.samr_SetUserInfo.level  Level
    Unsigned 16-bit integer
samr.samr_SetUserInfo2.info  Info
    No value
samr.samr_SetUserInfo2.level  Level
    Unsigned 16-bit integer
samr.samr_Shutdown.connect_handle  Connect Handle
    Byte array
samr.samr_Types.count  Count
    Unsigned 32-bit integer
samr.samr_Types.types  Types
    Unsigned 32-bit integer
samr.samr_UserAccessMask.USER_ACCESS_CHANGE_GROUP_MEMBERSHIP  User Access Change
    Boolean

```

```
samr.samr_UserAccessMask.USER_ACCESS_CHANGE_PASSWORD  User Access Change Passwor
Boolean
samr.samr_UserAccessMask.USER_ACCESS_GET_ATTRIBUTES  User Access Get Attributes
Boolean
samr.samr_UserAccessMask.USER_ACCESS_GET_GROUPS  User Access Get Groups
Boolean
samr.samr_UserAccessMask.USER_ACCESS_GET_GROUP_MEMBERSHIP  User Access Get Group
Boolean
samr.samr_UserAccessMask.USER_ACCESS_GET_LOCALE  User Access Get Locale
Boolean
samr.samr_UserAccessMask.USER_ACCESS_GET_LOGONINFO  User Access Get Logoninfo
Boolean
samr.samr_UserAccessMask.USER_ACCESS_GET_NAME_ETC  User Access Get Name Etc
Boolean
samr.samr_UserAccessMask.USER_ACCESS_SET_ATTRIBUTES  User Access Set Attributes
Boolean
samr.samr_UserAccessMask.USER_ACCESS_SET_LOC_COM  User Access Set Loc Com
Boolean
samr.samr_UserAccessMask.USER_ACCESS_SET_PASSWORD  User Access Set Password
Boolean
samr.samr_UserInfo.info1  Info1
No value
samr.samr_UserInfo.info10  Info10
No value
samr.samr_UserInfo.info11  Info11
No value
samr.samr_UserInfo.info12  Info12
No value
samr.samr_UserInfo.info13  Info13
No value
samr.samr_UserInfo.info14  Info14
No value
samr.samr_UserInfo.info16  Info16
No value
samr.samr_UserInfo.info17  Info17
No value
samr.samr_UserInfo.info2  Info2
No value
samr.samr_UserInfo.info20  Info20
No value
samr.samr_UserInfo.info21  Info21
No value
samr.samr_UserInfo.info23  Info23
No value
```

```
samr.samr_UserInfo.info24  Info24
    No value
samr.samr_UserInfo.info25  Info25
    No value
samr.samr_UserInfo.info26  Info26
    No value
samr.samr_UserInfo.info3   Info3
    No value
samr.samr_UserInfo.info4   Info4
    No value
samr.samr_UserInfo.info5   Info5
    No value
samr.samr_UserInfo.info6   Info6
    No value
samr.samr_UserInfo.info7   Info7
    No value
samr.samr_UserInfo.info8   Info8
    No value
samr.samr_UserInfo.info9   Info9
    No value
samr.samr_UserInfo1.account_name  Account Name
    String
samr.samr_UserInfo1.comment  Comment
    String
samr.samr_UserInfo1.description  Description
    String
samr.samr_UserInfo1.full_name  Full Name
    String
samr.samr_UserInfo1.primary_gid  Primary Gid
    Unsigned 32-bit integer
samr.samr_UserInfo10.home_directory  Home Directory
    String
samr.samr_UserInfo10.home_drive  Home Drive
    String
samr.samr_UserInfo11.logon_script  Logon Script
    String
samr.samr_UserInfo12.profile_path  Profile Path
    String
samr.samr_UserInfo13.description  Description
    String
samr.samr_UserInfo14.workstations  Workstations
    String
samr.samr_UserInfo16.acct_flags  Acct Flags
    Unsigned 32-bit integer
```



```
samr.samr_UserInfo17.acct_expiry  Acct Expiry
    Date/Time stamp
samr.samr_UserInfo2.code_page  Code Page
    Unsigned 16-bit integer
samr.samr_UserInfo2.comment  Comment
    String
samr.samr_UserInfo2.country_code  Country Code
    Unsigned 16-bit integer
samr.samr_UserInfo2.unknown  Unknown
    String
samr.samr_UserInfo20.parameters  Parameters
    String
samr.samr_UserInfo21.account_name  Account Name
    String
samr.samr_UserInfo21.acct_expiry  Acct Expiry
    Date/Time stamp
samr.samr_UserInfo21.acct_flags  Acct Flags
    Unsigned 32-bit integer
samr.samr_UserInfo21.allow_password_change  Allow Password Change
    Date/Time stamp
samr.samr_UserInfo21.bad_password_count  Bad Password Count
    Unsigned 16-bit integer
samr.samr_UserInfo21.buf_count  Buf Count
    Unsigned 32-bit integer
samr.samr_UserInfo21.buffer  Buffer
    Unsigned 8-bit integer
samr.samr_UserInfo21.code_page  Code Page
    Unsigned 16-bit integer
samr.samr_UserInfo21.comment  Comment
    String
samr.samr_UserInfo21.country_code  Country Code
    Unsigned 16-bit integer
samr.samr_UserInfo21.description  Description
    String
samr.samr_UserInfo21.fields_present  Fields Present
    Unsigned 32-bit integer
samr.samr_UserInfo21.force_password_change  Force Password Change
    Date/Time stamp
samr.samr_UserInfo21.full_name  Full Name
    String
samr.samr_UserInfo21.home_directory  Home Directory
    String
samr.samr_UserInfo21.home_drive  Home Drive
    String
```

```
samr.samr_UserInfo21.last_logoff  Last Logoff
    Date/Time stamp
samr.samr_UserInfo21.last_logon   Last Logon
    Date/Time stamp
samr.samr_UserInfo21.last_password_change  Last Password Change
    Date/Time stamp
samr.samr_UserInfo21.lm_password_set  Lm Password Set
    Unsigned 8-bit integer
samr.samr_UserInfo21.logon_count  Logon Count
    Unsigned 16-bit integer
samr.samr_UserInfo21.logon_hours  Logon Hours
    No value
samr.samr_UserInfo21.logon_script  Logon Script
    String
samr.samr_UserInfo21.nt_password_set  Nt Password Set
    Unsigned 8-bit integer
samr.samr_UserInfo21.parameters  Parameters
    String
samr.samr_UserInfo21.password_expired  Password Expired
    Unsigned 8-bit integer
samr.samr_UserInfo21.primary_gid  Primary Gid
    Unsigned 32-bit integer
samr.samr_UserInfo21.profile_path  Profile Path
    String
samr.samr_UserInfo21.unknown1  Unknown1
    String
samr.samr_UserInfo21.unknown2  Unknown2
    String
samr.samr_UserInfo21.unknown3  Unknown3
    String
samr.samr_UserInfo21.unknown4  Unknown4
    Unsigned 8-bit integer
samr.samr_UserInfo21.workstations  Workstations
    String
samr.samr_UserInfo23.info  Info
    No value
samr.samr_UserInfo23.password  Password
    No value
samr.samr_UserInfo24.password  Password
    No value
samr.samr_UserInfo24.pw_len  Pw Len
    Unsigned 8-bit integer
samr.samr_UserInfo25.info  Info
    No value
```

```
samr.samr_UserInfo25.password Password
    No value
samr.samr_UserInfo26.password Password
    No value
samr.samr_UserInfo26.pw_len Pw Len
    Unsigned 8-bit integer
samr.samr_UserInfo3.account_name Account Name
    String
samr.samr_UserInfo3.acct_flags Acct Flags
    Unsigned 32-bit integer
samr.samr_UserInfo3.allow_password_change Allow Password Change
    Date/Time stamp
samr.samr_UserInfo3.bad_password_count Bad Password Count
    Unsigned 16-bit integer
samr.samr_UserInfo3.force_password_change Force Password Change
    Date/Time stamp
samr.samr_UserInfo3.full_name Full Name
    String
samr.samr_UserInfo3.home_directory Home Directory
    String
samr.samr_UserInfo3.home_drive Home Drive
    String
samr.samr_UserInfo3.last_logoff Last Logoff
    Date/Time stamp
samr.samr_UserInfo3.last_logon Last Logon
    Date/Time stamp
samr.samr_UserInfo3.last_password_change Last Password Change
    Date/Time stamp
samr.samr_UserInfo3.logon_count Logon Count
    Unsigned 16-bit integer
samr.samr_UserInfo3.logon_hours Logon Hours
    No value
samr.samr_UserInfo3.logon_script Logon Script
    String
samr.samr_UserInfo3.primary_gid Primary Gid
    Unsigned 32-bit integer
samr.samr_UserInfo3.profile_path Profile Path
    String
samr.samr_UserInfo3.workstations Workstations
    String
samr.samr_UserInfo4.logon_hours Logon Hours
    No value
samr.samr_UserInfo5.account_name Account Name
    String
```

```
samr.samr_UserInfo5.acct_expiry  Acct Expiry
    Date/Time stamp
samr.samr_UserInfo5.acct_flags  Acct Flags
    Unsigned 32-bit integer
samr.samr_UserInfo5.bad_password_count  Bad Password Count
    Unsigned 16-bit integer
samr.samr_UserInfo5.description  Description
    String
samr.samr_UserInfo5.full_name  Full Name
    String
samr.samr_UserInfo5.home_directory  Home Directory
    String
samr.samr_UserInfo5.home_drive  Home Drive
    String
samr.samr_UserInfo5.last_logoff  Last Logoff
    Date/Time stamp
samr.samr_UserInfo5.last_logon  Last Logon
    Date/Time stamp
samr.samr_UserInfo5.last_password_change  Last Password Change
    Date/Time stamp
samr.samr_UserInfo5.logon_count  Logon Count
    Unsigned 16-bit integer
samr.samr_UserInfo5.logon_hours  Logon Hours
    No value
samr.samr_UserInfo5.logon_script  Logon Script
    String
samr.samr_UserInfo5.primary_gid  Primary Gid
    Unsigned 32-bit integer
samr.samr_UserInfo5.profile_path  Profile Path
    String
samr.samr_UserInfo5.workstations  Workstations
    String
samr.samr_UserInfo6.account_name  Account Name
    String
samr.samr_UserInfo6.full_name  Full Name
    String
samr.samr_UserInfo7.account_name  Account Name
    String
samr.samr_UserInfo8.full_name  Full Name
    String
samr.samr_UserInfo9.primary_gid  Primary Gid
    Unsigned 32-bit integer
samr.sec_desc_buf_len  Sec Desc Buf Len
    Unsigned 32-bit integer
```

```
samr.sec_info  SecInfo
    Unsigned 32-bit integer
samr.status    NT Error
    Unsigned 32-bit integer
samr.user.access_mask  Access Mask
    Unsigned 32-bit integer
samr.user_handle  User Handle
    Byte array
```

**SCSI (scsi)**

```
scsi.cdb.alloclen  Allocation Length
    Unsigned 8-bit integer
scsi.cdb.alloclen16  Allocation Length
    Unsigned 16-bit integer
scsi.cdb.alloclen32  Allocation Length
    Unsigned 32-bit integer
scsi.cdb.control  Control
    Unsigned 8-bit integer
scsi.cdb.mode.flags  Mode Sense/Select Flags
    Unsigned 8-bit integer
scsi.cdb.paramlen  Parameter Length
    Unsigned 8-bit integer
scsi.cdb.paramlen16  Parameter Length
    Unsigned 16-bit integer
scsi.cdb.paramlen24  Parameter List Length
    Unsigned 24-bit integer
scsi.fragment  SCSI DATA Fragment
    Frame number
    SCSI DATA Fragment
scsi.fragment.error  Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments
scsi.fragment.multipletails  Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet
scsi.fragment.overlap  Fragment overlap
    Boolean
    Fragment overlaps with other fragments
scsi.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
scsi.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet
```

```
scsi.fragments  SCSI Fragments
    No value
    SCSI Fragments
scsi.inquiry.acaflags  Flags
    Unsigned 8-bit integer
scsi.inquiry.acc  ACC
    Boolean
scsi.inquiry.add_len  Additional Length
    Unsigned 8-bit integer
scsi.inquiry.aerc  AERC
    Boolean
    AERC is obsolete from SPC-3 and forward
scsi.inquiry.bque  BQue
    Boolean
scsi.inquiry.bqueflags  Flags
    Unsigned 8-bit integer
scsi.inquiry.cmdque  CmdQue
    Boolean
scsi.inquiry.cmdt.pagecode  CMDT Page Code
    Unsigned 8-bit integer
scsi.inquiry.devtype  Device Type
    Unsigned 8-bit integer
scsi.inquiry.encserv  EncServ
    Boolean
scsi.inquiry.evpd.pagecode  EVPD Page Code
    Unsigned 8-bit integer
scsi.inquiry.flags  Flags
    Unsigned 8-bit integer
scsi.inquiry.hisup  HiSup
    Boolean
scsi.inquiry.linked  Linked
    Boolean
scsi.inquiry.mchngr  MChngr
    Boolean
scsi.inquiry.multip  MultiP
    Boolean
scsi.inquiry.normaca  NormACA
    Boolean
scsi.inquiry.preipheral  Peripheral
    Unsigned 8-bit integer
scsi.inquiry.product_id  Product Id
    String
scsi.inquiry.product_rev  Product Revision Level
    String
```

```
scsi.inquiry.protect  Protect
    Boolean

scsi.inquiry.qualifier  Qualifier
    Unsigned 8-bit integer

scsi.inquiry.rdf  Response Data Format
    Unsigned 8-bit integer

scsi.inquiry.reladr  RelAdr
    Boolean

scsi.inquiry.reladrflags  Flags
    Unsigned 8-bit integer

scsi.inquiry.removable  Removable
    Boolean

scsi.inquiry.reserved  Reserved
    Byte array

scsi.inquiry.rmbflags  Flags
    Unsigned 8-bit integer

scsi.inquiry.sccs  SCCS
    Boolean

scsi.inquiry.sccsflags  Flags
    Unsigned 8-bit integer

scsi.inquiry.sync  Sync
    Boolean

scsi.inquiry.tpc  3PC
    Boolean

scsi.inquiry.tpgs  TPGS
    Unsigned 8-bit integer

scsi.inquiry.trmtsk  TrmTsk
    Boolean
    TRMTSK is obsolete from SPC-2 and forward

scsi.inquiry.vendor_id  Vendor Id
    String

scsi.inquiry.vendor_specific  Vendor Specific
    Byte array

scsi.inquiry.version  Version
    Unsigned 8-bit integer

scsi.inquiry.version_desc  Version Description
    Unsigned 16-bit integer

scsi.log.page_length  Page Length
    Unsigned 16-bit integer

scsi.log.pagecode  Page Code
    Unsigned 8-bit integer

scsi.log.param.flags  Param Flags
    Unsigned 8-bit integer

scsi.log.param_data  Parameter Data
    Byte array
```

```
scsi.log.param_len  Parameter Len
    Unsigned 8-bit integer
scsi.log.parameter_code  Parameter Code
    Unsigned 16-bit integer
scsi.log.pc  Page Control
    Unsigned 8-bit integer
scsi.log.pc.flags  PC Flags
    Unsigned 8-bit integer
scsi.log.pcr  PCR
    Boolean
scsi.log.pf.ds  DS
    Boolean
scsi.log.pf.du  DU
    Boolean
scsi.log.pf.etc  ETC
    Boolean
scsi.log.pf.lbin  LBIN
    Boolean
scsi.log.pf.lp  LP
    Boolean
scsi.log.pf.tmc  TMC
    Unsigned 8-bit integer
scsi.log.pf.tsd  TSD
    Boolean
scsi.log.ppc  PPC
    Boolean
scsi.log.ppc.flags  PPC Flags
    Unsigned 8-bit integer
scsi.log.sp  SP
    Boolean
scsi.log.ta.aif  automatic interface failure
    Boolean
scsi.log.ta.cff  cooling fan failure
    Boolean
scsi.log.ta.cm  cleaning media
    Boolean
scsi.log.ta.cn  clean now
    Boolean
scsi.log.ta.cp  clean periodic
    Boolean
scsi.log.ta.dire  diagnostics required
    Boolean
scsi.log.ta.dm  drive maintenance
    Boolean
```



```
scsi.log.ta.dpie  dual port interface error
                  Boolean
scsi.log.ta.drhu  drive humidity
                  Boolean
scsi.log.ta.drtm  drive temperature
                  Boolean
scsi.log.ta.drvo  drive voltage
                  Boolean
scsi.log.ta.dwf   download failed
                  Boolean
scsi.log.ta.ecm   expired cleaning media
                  Boolean
scsi.log.ta.em    eject media
                  Boolean
scsi.log.ta.fe    forced eject
                  Boolean
scsi.log.ta.fwf   firmware failure
                  Boolean
scsi.log.ta.he    hard error
                  Boolean
scsi.log.ta.hwa   hardware a
                  Boolean
scsi.log.ta.hwb   hardware b
                  Boolean
scsi.log.ta.ict   invalid cleaning tape
                  Boolean
scsi.log.ta.if    interface
                  Boolean
scsi.log.ta.lofa  loading failure
                  Boolean
scsi.log.ta.lost  lost statistics
                  Boolean
scsi.log.ta.mcicf memory chip in cartridge failure
                  Boolean
scsi.log.ta.media media
                  Boolean
scsi.log.ta.ml    media life
                  Boolean
scsi.log.ta.ndg   not data grade
                  Boolean
scsi.log.ta.nml   nearing media life
                  Boolean
scsi.log.ta.nr    no removal
                  Boolean
```

```
scsi.log.ta.nsod  no start of data
  Boolean
scsi.log.ta.pc   power consumption
  Boolean
scsi.log.ta.pefa  periodic failure
  Boolean
scsi.log.ta.psf   power supply failure
  Boolean
scsi.log.ta.rf    read failure
  Boolean
scsi.log.ta.rmcf  removable mechanical cartridge failure
  Boolean
scsi.log.ta.rof   read only format
  Boolean
scsi.log.ta.rr    retention requested
  Boolean
scsi.log.ta.rw    Read Warning
  Boolean
scsi.log.ta.tdcol  tape directory corrupted on load
  Boolean
scsi.log.ta.tduau  tape directory invalid at unload
  Boolean
scsi.log.ta.tsarf  tape system area read failure
  Boolean
scsi.log.ta.tsawf  tape system area write failure
  Boolean
scsi.log.ta.uf    unsupported format
  Boolean
scsi.log.ta.umcf  unrecoverable mechanical cartridge failure
  Boolean
scsi.log.ta.uuf   unrecoverable unload failure
  Boolean
scsi.log.ta.wf    write failure
  Boolean
scsi.log.ta.wmicf  worm medium integrity check failed
  Boolean
scsi.log.ta.wmoa  worm medium overwrite attempted
  Boolean
scsi.log.ta.wp    write protect
  Boolean
scsi.log.ta.ww    write warning
  Boolean
scsi.lun  LUN
  Unsigned 16-bit integer
  LUN
```

```
scsi.mode.flags  Flags
    Unsigned 8-bit integer
scsi.mode.mmc.pagecode  MMC-5 Page Code
    Unsigned 8-bit integer
scsi.mode.mrie  MRIE
    Unsigned 8-bit integer
scsi.mode.pc  Page Control
    Unsigned 8-bit integer
scsi.mode.qerr  Queue Error Management
    Boolean
scsi.mode.qmod  Queue Algorithm Modifier
    Unsigned 8-bit integer
scsi.mode.sbc.pagecode  SBC-2 Page Code
    Unsigned 8-bit integer
scsi.mode.smc.pagecode  SMC-2 Page Code
    Unsigned 8-bit integer
scsi.mode.spc.pagecode  SPC-2 Page Code
    Unsigned 8-bit integer
scsi.mode.ssc.pagecode  SSC-2 Page Code
    Unsigned 8-bit integer
scsi.mode.tac  Task Aborted Status
    Boolean
scsi.mode.tst  Task Set Type
    Unsigned 8-bit integer
scsi.persresv.scope  Reservation Scope
    Unsigned 8-bit integer
scsi.persresv.type  Reservation Type
    Unsigned 8-bit integer
scsi.persresvin.svcaction  Service Action
    Unsigned 8-bit integer
scsi.persresvout.svcaction  Service Action
    Unsigned 8-bit integer
scsi.proto  Protocol
    Unsigned 8-bit integer
scsi.reassembled_in  Reassembled SCSI DATA in frame
    Frame number
    This SCSI DATA packet is reassembled in this frame
scsi.release.flags  Release Flags
    Unsigned 8-bit integer
scsi.release.thirdpartyid  Third-Party ID
    Byte array
scsi.reportluns.lun  LUN
    Unsigned 8-bit integer
scsi.reportluns.mlun  Multi-level LUN
    Byte array
```

scsi.request\_frame Request in  
Frame number  
The request to this transaction is in this frame

scsi.response\_frame Response in  
Frame number  
The response to this transaction is in this frame

scsi.sns.addlen Additional Sense Length  
Unsigned 8-bit integer

scsi.sns.asc Additional Sense Code  
Unsigned 8-bit integer

scsi.sns.ascascq Additional Sense Code+Qualifier  
Unsigned 16-bit integer

scsi.sns.ascq Additional Sense Code Qualifier  
Unsigned 8-bit integer

scsi.sns.errtype SNS Error Type  
Unsigned 8-bit integer

scsi.sns.fru Field Replaceable Unit Code  
Unsigned 8-bit integer

scsi.sns.info Sense Info  
Unsigned 32-bit integer

scsi.sns.key Sense Key  
Unsigned 8-bit integer

scsi.sns.sksv SKSV  
Boolean

scsi.spc.addcdblen Additional CDB Length  
Unsigned 8-bit integer

scsi.spc.opcode SPC-2 Opcode  
Unsigned 8-bit integer

scsi.spc.resv.key Reservation Key  
Byte array

scsi.spc.resv.scopeaddr Scope Address  
Byte array

scsi.spc.sb.bufid Buffer ID  
Unsigned 8-bit integer

scsi.spc.select\_report Select Report  
Unsigned 8-bit integer

scsi.spc.senddiag.code Self-Test Code  
Unsigned 8-bit integer

scsi.spc.senddiag.devoff Device Offline  
Boolean

scsi.spc.senddiag.pf PF  
Boolean

scsi.spc.senddiag.st Self Test  
Boolean

```
scsi.spc.senddiag.unitoff  Unit Offline
    Boolean
scsi.spc.svcaction  Service Action
    Unsigned 16-bit integer
scsi.spc.wb.bufoff  Buffer Offset
    Unsigned 24-bit integer
scsi.spc.wb.mode  Mode
    Unsigned 8-bit integer
scsi.status  Status
    Unsigned 8-bit integer
    SCSI command status value
scsi.time  Time from request
    Time duration
    Time between the Command and the Response
ssci.mode.rac  Report a Check
    Boolean
```

**SCSI\_MMC (scsi\_mmc)**

```
scsi.mmc.agid  AGID
    Unsigned 8-bit integer
scsi.mmc.data_length  Data Length
    Unsigned 32-bit integer
scsi.mmc.disc_info.bgfs  BG Format Status
    Unsigned 8-bit integer
scsi.mmc.disc_info.dac_v  DAC_V
    Boolean
scsi.mmc.disc_info.dbc_v  DBC_V
    Boolean
scsi.mmc.disc_info.dbit  Dbit
    Boolean
scsi.mmc.disc_info.did_v  DID_V
    Boolean
scsi.mmc.disc_info.disc_bar_code  Disc Bar Code
    Unsigned 64-bit integer
scsi.mmc.disc_info.disc_identification  Disc Identification
    Unsigned 32-bit integer
scsi.mmc.disc_info.disc_type  Disc Type
    Unsigned 8-bit integer
scsi.mmc.disc_info.disk_status  Disk Status
    Unsigned 8-bit integer
scsi.mmc.disc_info.erasable  Erasable
    Boolean
scsi.mmc.disc_info.first_track_in_last_session  First Track In Last Session
    Unsigned 16-bit integer
scsi.mmc.disc_info.last_possible_lead_out_start_address  Last Possible Lead-Out
    Unsigned 32-bit integer
```

```
scsi.mmc.disc_info.last_session_lead_in_start_address  Last Session Lead-In Start  
    Unsigned 32-bit integer  
scsi.mmc.disc_info.last_track_in_last_session  Last Track In Last Session  
    Unsigned 16-bit integer  
scsi.mmc.disc_info.number_of_sessions  Number Of Sessions  
    Unsigned 16-bit integer  
scsi.mmc.disc_info.state_of_last_session  State Of Last Session  
    Unsigned 8-bit integer  
scsi.mmc.disc_info.uru  URU  
    Boolean  
scsi.mmc.feature  Feature  
    Unsigned 16-bit integer  
scsi.mmc.feature.additional_length  Additional Length  
    Unsigned 8-bit integer  
scsi.mmc.feature.cdread.c2flag  C2 Flag  
    Boolean  
scsi.mmc.feature.cdread.cdtext  CD-Text  
    Boolean  
scsi.mmc.feature.cdread.dap  DAP  
    Boolean  
scsi.mmc.feature.current  Current  
    Unsigned 8-bit integer  
scsi.mmc.feature.dts  Data Type Supported  
    Unsigned 16-bit integer  
scsi.mmc.feature.dvdr.buf  BUF  
    Boolean  
scsi.mmc.feature.dvdr.dvdrw  DVD-RW  
    Boolean  
scsi.mmc.feature.dvdr.testwrite  Test Write  
    Boolean  
scsi.mmc.feature.dvdr.write  Write  
    Boolean  
scsi.mmc.feature.dvdrw.closeonly  Close Only  
    Boolean  
scsi.mmc.feature.dvdrw.quickstart  Quick Start  
    Boolean  
scsi.mmc.feature.dvdrw.write  Write  
    Boolean  
scsi.mmc.feature.isw.buf  BUF  
    Boolean  
scsi.mmc.feature.isw.linksize  Link Size  
    Unsigned 8-bit integer  
scsi.mmc.feature.isw.num_linksize  Number of Link Sizes  
    Unsigned 8-bit integer
```

```
scsi.mmc.feature.lun_sn  LUN Serial Number
                          String
scsi.mmc.feature.persistent Persistent
                          Unsigned 8-bit integer
scsi.mmc.feature.profile Profile
                          Unsigned 16-bit integer
scsi.mmc.feature.profile.current Current
                          Boolean
scsi.mmc.feature.sao.buf  BUF
                          Boolean
scsi.mmc.feature.sao.cdrw  CD-RW
                          Boolean
scsi.mmc.feature.sao.mcs1  Maximum Cue Sheet Length
                          Unsigned 24-bit integer
scsi.mmc.feature.sao.raw  Raw
                          Boolean
scsi.mmc.feature.sao.rawms  Raw MS
                          Boolean
scsi.mmc.feature.sao.rw  R-W
                          Boolean
scsi.mmc.feature.sao.sao  SAO
                          Boolean
scsi.mmc.feature.sao.testwrite Test Write
                          Boolean
scsi.mmc.feature.tao.buf  BUF
                          Boolean
scsi.mmc.feature.tao.cdrw  CD-RW
                          Boolean
scsi.mmc.feature.tao.rwpack R-W Pack
                          Boolean
scsi.mmc.feature.tao.rwraw  R-W Raw
                          Boolean
scsi.mmc.feature.tao.rwsbcode R-W Subcode
                          Boolean
scsi.mmc.feature.tao.testwrite Test Write
                          Boolean
scsi.mmc.feature.version  Version
                          Unsigned 8-bit integer
scsi.mmc.first_track  First Track
                          Unsigned 8-bit integer
scsi.mmc.fixed_packet_size Fixed Packet Size
                          Unsigned 32-bit integer
scsi.mmc.free_blocks  Free Blocks
                          Unsigned 32-bit integer
```

```
scsi.mmc.getconf.current_profile  Current Profile
    Unsigned 16-bit integer
scsi.mmc.getconf.rt  RT
    Unsigned 8-bit integer
scsi.mmc.getconf.starting_feature  Starting Feature
    Unsigned 16-bit integer
scsi.mmc.key_class  Key Class
    Unsigned 8-bit integer
scsi.mmc.key_format  Key Format
    Unsigned 8-bit integer
scsi.mmc.last_recorded_address  Last Recorded Address
    Unsigned 32-bit integer
scsi.mmc.lba  Logical Block Address
    Unsigned 32-bit integer
scsi.mmc.next_writable_address  Next Writable Address
    Unsigned 32-bit integer
scsi.mmc.num_blocks  Number of Blocks
    Unsigned 32-bit integer
scsi.mmc.opcode  MMC Opcode
    Unsigned 8-bit integer
scsi.mmc.q.subchannel.adr  Q Subchannel ADR
    Unsigned 8-bit integer
scsi.mmc.q.subchannel.control  Q Subchannel Control
    Unsigned 8-bit integer
scsi.mmc.rbc.alob_blocks  Available Buffer Len (blocks)
    Unsigned 32-bit integer
scsi.mmc.rbc.alob_bytes  Available Buffer Len (bytes)
    Unsigned 32-bit integer
scsi.mmc.rbc.block  BLOCK
    Boolean
scsi.mmc.rbc.lob_blocks  Buffer Len (blocks)
    Unsigned 32-bit integer
scsi.mmc.rbc.lob_bytes  Buffer Len (bytes)
    Unsigned 32-bit integer
scsi.mmc.read_compatibility_lba  Read Compatibility LBA
    Unsigned 32-bit integer
scsi.mmc.readtoc.first_session  First Session
    Unsigned 8-bit integer
scsi.mmc.readtoc.format  Format
    Unsigned 8-bit integer
scsi.mmc.readtoc.last_session  Last Session
    Unsigned 8-bit integer
scsi.mmc.readtoc.last_track  Last Track
    Unsigned 8-bit integer
```



```
scsi.mmc.readtoc.time    Time
                          Boolean

scsi.mmc.report_key.region_mask  Region Mask
                          Unsigned 8-bit integer

scsi.mmc.report_key.rpc_scheme  RPC Scheme
                          Unsigned 8-bit integer

scsi.mmc.report_key.type_code   Type Code
                          Unsigned 8-bit integer

scsi.mmc.report_key.user_changes User Changes
                          Unsigned 8-bit integer

scsi.mmc.report_key.vendor_resets Vendor Resets
                          Unsigned 8-bit integer

scsi.mmc.reservation_size  Reservation Size
                          Unsigned 32-bit integer

scsi.mmc.rti.address_type  Address Type
                          Unsigned 8-bit integer

scsi.mmc.rti.blank        Blank
                          Boolean

scsi.mmc.rti.copy         Copy
                          Boolean

scsi.mmc.rti.damage       Damage
                          Boolean

scsi.mmc.rti.data_mode    Data Mode
                          Unsigned 8-bit integer

scsi.mmc.rti.fp          FP
                          Boolean

scsi.mmc.rti.lra_v        LRA_V
                          Boolean

scsi.mmc.rti.nwa_v        NWA_V
                          Boolean

scsi.mmc.rti.packet       Packet/Inc
                          Boolean

scsi.mmc.rti.rt          RT
                          Boolean

scsi.mmc.rti.track_mode   Track Mode
                          Unsigned 8-bit integer

scsi.mmc.session         Session
                          Unsigned 32-bit integer

scsi.mmc.setcdspeed.rc    Rotational Control
                          Unsigned 8-bit integer

scsi.mmc.setstreaming.end_lba End LBA
                          Unsigned 32-bit integer

scsi.mmc.setstreaming.exact Exact
                          Boolean
```

```
scsi.mmc.setstreaming.param_len  Parameter Length
    Unsigned 16-bit integer
scsi.mmc.setstreaming.ra  RA
    Boolean
scsi.mmc.setstreaming.rdd  RDD
    Boolean
scsi.mmc.setstreaming.read_size  Read Size
    Unsigned 32-bit integer
scsi.mmc.setstreaming.read_time  Read Time
    Unsigned 32-bit integer
scsi.mmc.setstreaming.start_lbs  Start LBA
    Unsigned 32-bit integer
scsi.mmc.setstreaming.type  Type
    Unsigned 8-bit integer
scsi.mmc.setstreaming.wrc  WRC
    Unsigned 8-bit integer
scsi.mmc.setstreaming.write_size  Write Size
    Unsigned 32-bit integer
scsi.mmc.setstreaming.write_time  Write Time
    Unsigned 32-bit integer
scsi.mmc.synccache.immed  IMMED
    Boolean
scsi.mmc.synccache.reladr  RelAdr
    Boolean
scsi.mmc.track  Track
    Unsigned 32-bit integer
scsi.mmc.track_size  Track Size
    Unsigned 32-bit integer
scsi.mmc.track_start_address  Track Start Address
    Unsigned 32-bit integer
scsi.mmc.track_start_time  Track Start Time
    Unsigned 32-bit integer
```

**SCSI OSD (scsi\_osd)**

```
scsi.osd.addcdblen  Additional CDB Length
    Unsigned 8-bit integer
scsi.osd.additional_length  Additional Length
    Unsigned 64-bit integer
scsi.osd.allocation_length  Allocation Length
    Unsigned 64-bit integer
scsi.osd.attribute.length  Attribute Length
    Unsigned 16-bit integer
scsi.osd.attribute.number  Attribute Number
    Unsigned 32-bit integer
```

```
scsi.osd.attributes.page  Attributes Page
    Unsigned 32-bit integer
scsi.osd.attributes_list.length  Attributes List Length
    Unsigned 16-bit integer
scsi.osd.attributes_list.type  Attributes List Type
    Unsigned 8-bit integer
scsi.osd.audit  Audit
    Byte array
scsi.osd.capability_discriminator  Capability Discriminator
    Byte array
scsi.osd.capability_expiration_time  Capability Expiration Time
    Byte array
scsi.osd.capability_format  Capability Format
    Unsigned 8-bit integer
scsi.osd.collection.fcr  FCR
    Boolean
scsi.osd.collection_object_id  Collection Object Id
    Byte array
scsi.osd.continuation_object_id  Continuation Object Id
    Byte array
scsi.osd.diicvo  Data-In Integrity Check Value Offset
    Unsigned 32-bit integer
scsi.osd.doicvo  Data-Out Integrity Check Value Offset
    Unsigned 32-bit integer
scsi.osd.flush.scope  Flush Scope
    Unsigned 8-bit integer
scsi.osd.flush_collection.scope  Flush Collection Scope
    Unsigned 8-bit integer
scsi.osd.flush_osd.scope  Flush OSD Scope
    Unsigned 8-bit integer
scsi.osd.flush_partition.scope  Flush Partition Scope
    Unsigned 8-bit integer
scsi.osd.formatted_capacity  Formatted Capacity
    Unsigned 64-bit integer
scsi.osd.get_attributes_allocation_length  Get Attributes Allocation Length
    Unsigned 32-bit integer
scsi.osd.get_attributes_list_length  Get Attributes List Length
    Unsigned 32-bit integer
scsi.osd.get_attributes_list_offset  Get Attributes List Offset
    Unsigned 32-bit integer
scsi.osd.get_attributes_page  Get Attributes Page
    Unsigned 32-bit integer
scsi.osd.getset  GET/SET CDBFMT
    Unsigned 8-bit integer
```

```
scsi.osd.icva Integrity Check Value Algorithm
    Unsigned 8-bit integer
scsi.osd.initial_object_id Initial Object Id
    Byte array
scsi.osd.key_identifier Key Identifier
    Byte array
scsi.osd.key_to_set Key to Set
    Unsigned 8-bit integer
scsi.osd.key_version Key Version
    Unsigned 8-bit integer
scsi.osd.length Length
    Unsigned 64-bit integer
scsi.osd.list.lstchg LSTCHG
    Boolean
scsi.osd.list.root ROOT
    Boolean
scsi.osd.list_identifier List Identifier
    Unsigned 32-bit integer
scsi.osd.number_of_user_objects Number Of User Objects
    Unsigned 16-bit integer
scsi.osd.object_created_time Object Created Time
    Byte array
scsi.osd.object_descriptor Object Descriptor
    Byte array
scsi.osd.object_descriptor_type Object Descriptor Type
    Unsigned 8-bit integer
scsi.osd.object_type Object Type
    Unsigned 8-bit integer
scsi.osd.opcode OSD Opcode
    Unsigned 8-bit integer
scsi.osd.option Options Byte
    Unsigned 8-bit integer
scsi.osd.option.dpo DPO
    Boolean
scsi.osd.option.fua FUA
    Boolean
scsi.osd.partition.created_in Created In
    Frame number
    The frame this partition was created
scsi.osd.partition.removed_in Removed In
    Frame number
    The frame this partition was removed
scsi.osd.partition_id Partition Id
    Unsigned 64-bit integer
```

```
scsi.osd.permissions  Permissions
    Unsigned 16-bit integer
scsi.osd.permissions.append  APPEND
    Boolean
scsi.osd.permissions.create  CREATE
    Boolean
scsi.osd.permissions.dev_mgmt  DEV_MGMT
    Boolean
scsi.osd.permissions.get_attr  GET_ATTR
    Boolean
scsi.osd.permissions.global  GLOBAL
    Boolean
scsi.osd.permissions.obj_mgmt  OBJ_MGMT
    Boolean
scsi.osd.permissions.pol_sec  POL/SEC
    Boolean
scsi.osd.permissions.read  READ
    Boolean
scsi.osd.permissions.remove  REMOVE
    Boolean
scsi.osd.permissions.set_attr  SET_ATTR
    Boolean
scsi.osd.permissions.write  WRITE
    Boolean
scsi.osd.request_nonce  Request Nonce
    Byte array
scsi.osd.requested_collection_object_id  Requested Collection Object Id
    Byte array
scsi.osd.requested_partition_id  Requested Partition Id
    Unsigned 64-bit integer
scsi.osd.requested_user_object_id  Requested User Object Id
    Byte array
scsi.osd.retreived_attributes_offset  Retreived Attributes Offset
    Unsigned 32-bit integer
scsi.osd.ricv  Request Integrity Check value
    Byte array
scsi.osd.security_method  Security Method
    Unsigned 8-bit integer
scsi.osd.seed  Seed
    Byte array
scsi.osd.set_attribute_length  Set Attribute Length
    Unsigned 32-bit integer
scsi.osd.set_attribute_number  Set Attribute Number
    Unsigned 32-bit integer
```

```
scsi.osd.set_attributes_list_length  Set Attributes List Length
    Unsigned 32-bit integer
scsi.osd.set_attributes_list_offset  Set Attributes List Offset
    Unsigned 32-bit integer
scsi.osd.set_attributes_offset      Set Attributes Offset
    Unsigned 32-bit integer
scsi.osd.set_attributes_page        Set Attributes Page
    Unsigned 32-bit integer
scsi.osd.set_key_version            Key Version
    Unsigned 8-bit integer
scsi.osd.sort_order                Sort Order
    Unsigned 8-bit integer
scsi.osd.starting_byte_address      Starting Byte Address
    Unsigned 64-bit integer
scsi.osd.svcaction                 Service Action
    Unsigned 16-bit integer
scsi.osd.timestamps_control         Timestamps Control
    Unsigned 8-bit integer
scsi.osd.user_object.logical_length  User Object Logical Length
    Unsigned 64-bit integer
scsi.osd.user_object_id             User Object Id
    Byte array
```

**SCSI\_SBC (scsi\_sbc)**

```
scsi.sbc.alloclen16                Allocation Length
    Unsigned 16-bit integer
scsi.sbc.alloclen32                Allocation Length
    Unsigned 32-bit integer
scsi.sbc.blocksize                 Block size in bytes
    Unsigned 32-bit integer
scsi.sbc.byetchk                   BYTCHK
    Boolean
scsi.sbc.corrct                    CORRCT
    Boolean
scsi.sbc.corrct_flags              Flags
    Unsigned 8-bit integer
scsi.sbc.defect_list_format         Defect List Format
    Unsigned 8-bit integer
scsi.sbc.disable_write             DISABLE_WRITE
    Boolean
scsi.sbc.dpo                       DPO
    Boolean
    DisablePageOut: Whether the device should cache the data or not
scsi.sbc.format_unit.cmplist       CMPLIST
    Boolean
```

```
scsi.sbc.format_unit.fmtdata  FMTDATA
    Boolean
scsi.sbc.format_unit.fmtpinfo  FMTPINFO
    Boolean
scsi.sbc.format_unit.longlist  LONGLIST
    Boolean
scsi.sbc.format_unit.rto_req   RTO_REQ
    Boolean
scsi.sbc.formatunit.flags     Flags
    Unsigned 8-bit integer
scsi.sbc.formatunit.interleave Interleave
    Unsigned 16-bit integer
scsi.sbc.formatunit.vendor    Vendor Unique
    Unsigned 8-bit integer
scsi.sbc.fua                  FUA
    Boolean
    ForceUnitAccess: Whether to allow reading from the cache or not
scsi.sbc.fua_nv               FUA_NV
    Boolean
    ForceUnitAccess_NonVolatile: Whether to allow reading from non-volatile cache
scsi.sbc.group                Group
    Unsigned 8-bit integer
scsi.sbc.lbdata               LBDATA
    Boolean
scsi.sbc.opcode               SBC Opcode
    Unsigned 8-bit integer
scsi.sbc.pbdata               PBDATA
    Boolean
scsi.sbc.pmi                  PMI
    Boolean
    Partial Medium Indicator
scsi.sbc.pmi_flags            PMI Flags
    Unsigned 8-bit integer
scsi.sbc.prefetch.flags       Flags
    Unsigned 8-bit integer
scsi.sbc.prefetch.immediate   Immediate
    Boolean
scsi.sbc.rdprotect            RDPROTECT
    Unsigned 8-bit integer
scsi.sbc.rdwrl0.lba           Logical Block Address (LBA)
    Unsigned 32-bit integer
scsi.sbc.rdwrl0.xferlen       Transfer Length
    Unsigned 16-bit integer
scsi.sbc.rdwrl2.xferlen       Transfer Length
    Unsigned 32-bit integer
```

```
scsi.sbc.rdwr16.lba Logical Block Address (LBA)
    Byte array
scsi.sbc.rdwr6.lba Logical Block Address (LBA)
    Unsigned 24-bit integer
scsi.sbc.rdwr6.xferlen Transfer Length
    Unsigned 24-bit integer
scsi.sbc.read.flags Flags
    Unsigned 8-bit integer
scsi.sbc.readcapacity.flags Flags
    Unsigned 8-bit integer
scsi.sbc.readcapacity.lba Logical Block Address
    Unsigned 32-bit integer
scsi.sbc.readdefdata.flags Flags
    Unsigned 8-bit integer
scsi.sbc.reassignblks.flags Flags
    Unsigned 8-bit integer
scsi.sbc.reassignblocks.longlba LongLBA
    Boolean
scsi.sbc.reassignblocks.longlist LongList
    Boolean
scsi.sbc.req_glist REQ_GLIST
    Boolean
scsi.sbc.req_plist REQ_PLIST
    Boolean
scsi.sbc.returned_lba Returned LBA
    Unsigned 32-bit integer
scsi.sbc.ssu.immed_flags Immed flags
    Unsigned 8-bit integer
scsi.sbc.ssu.immediate Immediate
    Boolean
scsi.sbc.ssu.loej LOEJ
    Boolean
scsi.sbc.ssu.pwr Power Conditions
    Unsigned 8-bit integer
scsi.sbc.ssu.pwr_flags Pwr flags
    Unsigned 8-bit integer
scsi.sbc.ssu.start Start
    Boolean
scsi.sbc.synccache.flags Flags
    Unsigned 8-bit integer
scsi.sbc.synccache.immediate Immediate
    Boolean
scsi.sbc.synccache.sync_nv SYNC_NV
    Boolean
```



```
scsi.sbc.verify.lba  LBA
    Unsigned 32-bit integer
scsi.sbc.verify.lba64  LBA
    Unsigned 64-bit integer
scsi.sbc.verify.reladdr  RELADDR
    Boolean
scsi.sbc.verify.vlen  Verification Length
    Unsigned 16-bit integer
scsi.sbc.verify.vlen32  Verification Length
    Unsigned 32-bit integer
scsi.sbc.verify_flags  Flags
    Unsigned 8-bit integer
scsi.sbc.vrprotect  VRPROTECT
    Unsigned 8-bit integer
scsi.sbc.writesame_flags  Flags
    Unsigned 8-bit integer
scsi.sbc.wrprotect  WRPROTECT
    Unsigned 8-bit integer
scsi.sbc.wrverify.lba  LBA
    Unsigned 32-bit integer
scsi.sbc.wrverify.lba64  LBA
    Unsigned 64-bit integer
scsi.sbc.wrverify.xferlen  Transfer Length
    Unsigned 16-bit integer
scsi.sbc.wrverify.xferlen32  Transfer Length
    Unsigned 32-bit integer
scsi.sbc.wrverify_flags  Flags
    Unsigned 8-bit integer
scsi.sbc.xdread.flags  Flags
    Unsigned 8-bit integer
scsi.sbc.xdwrite.flags  Flags
    Unsigned 8-bit integer
scsi.sbc.xdwriteread.flags  Flags
    Unsigned 8-bit integer
scsi.sbc.xorpinfo  XORPINFO
    Boolean
scsi.sbc.xpwrite.flags  Flags
    Unsigned 8-bit integer
```

**SCSI\_SMC (scsi\_smc)**

```
scsi.smc.action_code  Action Code
    Unsigned 8-bit integer
scsi.smc.da  Destination Address
    Unsigned 16-bit integer
```

```
scsi.smc.ea    Element Address
               Unsigned 16-bit integer

scsi.smc.fast  FAST
               Boolean

scsi.smc.fda   First Destination Address
               Unsigned 16-bit integer

scsi.smc.invl  INV1
               Boolean

scsi.smc.inv2  INV2
               Boolean

scsi.smc.invert  INVERT
               Boolean

scsi.smc.medium_flags  Flags
               Unsigned 8-bit integer

scsi.smc.mta   Medium Transport Address
               Unsigned 16-bit integer

scsi.smc.num_elements  Number of Elements
               Unsigned 16-bit integer

scsi.smc.opcode  SMC Opcode
               Unsigned 8-bit integer

scsi.smc.range  RANGE
               Boolean

scsi.smc.range_flags  Flags
               Unsigned 8-bit integer

scsi.smc.sa     Source Address
               Unsigned 16-bit integer

scsi.smc.sda   Second Destination Address
               Unsigned 16-bit integer

scsi.smc.sea   Starting Element Address
               Unsigned 16-bit integer
```

**SCSI\_SSC (scsi\_ssc)**

```
scsi.ssc.bam   BAM
               Boolean

scsi.ssc.bam_flags  Flags
               Unsigned 8-bit integer

scsi.ssc.bt    BT
               Boolean

scsi.ssc.bytcmp  BYTCMP
               Boolean

scsi.ssc.bytorc  BYTORD
               Boolean

scsi.ssc.cp     CP
               Boolean
```

```
scsi.ssc.cpv Capacity Proportion Value
    Unsigned 16-bit integer
scsi.ssc.dest_type Dest Type
    Unsigned 8-bit integer
scsi.ssc.eot EOT
    Boolean
scsi.ssc.erase_flags Flags
    Unsigned 8-bit integer
scsi.ssc.erase_immed IMMED
    Boolean
scsi.ssc.fcs FCS
    Boolean
scsi.ssc.fixed FIXED
    Boolean
scsi.ssc.format Format
    Unsigned 8-bit integer
scsi.ssc.formatmedium_flags Flags
    Unsigned 8-bit integer
scsi.ssc.hold HOLD
    Boolean
scsi.ssc.immed IMMED
    Boolean
scsi.ssc.lbi Logical Block Identifier
    Unsigned 64-bit integer
scsi.ssc.lcs LCS
    Boolean
scsi.ssc.load LOAD
    Boolean
scsi.ssc.loadunload_flags Flags
    Unsigned 8-bit integer
scsi.ssc.loadunload_immed_flags Immed
    Unsigned 8-bit integer
scsi.ssc.locate10.loid Logical Object Identifier
    Unsigned 32-bit integer
scsi.ssc.locate16.loid Logical Identifier
    Unsigned 64-bit integer
scsi.ssc.locate_flags Flags
    Unsigned 8-bit integer
scsi.ssc.long LONG
    Boolean
scsi.ssc.media Media
    Boolean
scsi.ssc.medium_type Medium Type
    Boolean
```

```
scsi.ssc.opcode  SSC Opcode
    Unsigned 8-bit integer
scsi.ssc.partition  Partition
    Unsigned 8-bit integer
scsi.ssc.rdwrl0.xferlen  Transfer Length
    Unsigned 16-bit integer
scsi.ssc.rdwrl6.xferlen  Transfer Length
    Unsigned 24-bit integer
scsi.ssc.read6_flags  Flags
    Unsigned 8-bit integer
scsi.ssc.reten  RETEN
    Boolean
scsi.ssc.sili  SILI
    Boolean
scsi.ssc.space16.count  Count
    Unsigned 64-bit integer
scsi.ssc.space6.code  Code
    Unsigned 8-bit integer
scsi.ssc.space6.count  Count
    Signed 24-bit integer
scsi.ssc.verify  VERIFY
    Boolean
scsi.ssc.verify16.verify_len  Verification Length
    Unsigned 24-bit integer
scsi.ssc.verify16.immed  IMMED
    Boolean
```

**SEBEK – Kernel Data Capture (sebek)**

```
sebek.cmd  Command Name
    String
    Command Name
sebek.counter  Counter
    Unsigned 32-bit integer
    Counter
sebek.data  Data
    String
    Data
sebek.fd  File Descriptor
    Unsigned 32-bit integer
    File Descriptor Number
sebek.inode  Inode ID
    Unsigned 32-bit integer
    Process ID
sebek.len  Data Length
    Unsigned 32-bit integer
    Data Length
```

```
sebek.magic  Magic
             Unsigned 32-bit integer
             Magic Number

sebek.pid    Process ID
             Unsigned 32-bit integer
             Process ID

sebek.ppid   Parent Process ID
             Unsigned 32-bit integer
             Process ID

sebek.socket.call  Socket.Call_id
                  Unsigned 16-bit integer
                  Socket.call

sebek.socket.dst_ip  Socket.remote_ip
                    IPv4 address
                    Socket.dst_ip

sebek.socket.dst_port  Socket.remote_port
                       Unsigned 16-bit integer
                       Socket.dst_port

sebek.socket.ip_proto  Socket.ip_proto
                       Unsigned 8-bit integer
                       Socket.ip_proto

sebek.socket.src_ip  Socket.local_ip
                    IPv4 address
                    Socket.src_ip

sebek.socket.src_port  Socket.local_port
                       Unsigned 16-bit integer
                       Socket.src_port

sebek.time.sec  Time
                Date/Time stamp
                Time

sebek.type  Type
            Unsigned 16-bit integer
            Type

sebek.uid  User ID
           Unsigned 32-bit integer
           User ID

sebek.version  Version
               Unsigned 16-bit integer
               Version Number
```

#### **SGI Mount Service (sgimount)**

#### **SMB (Server Message Block Protocol) (smb)**

```
nt.access_mask  Access required
                Unsigned 32-bit integer
                Access mask
```

```
nt.access_mask.access_sacl  Access SACL
    Boolean
    Access SACL
nt.access_mask.delete      Delete
    Boolean
    Delete
nt.access_mask.generic_all  Generic all
    Boolean
    Generic all
nt.access_mask.generic_execute  Generic execute
    Boolean
    Generic execute
nt.access_mask.generic_read  Generic read
    Boolean
    Generic read
nt.access_mask.generic_write  Generic write
    Boolean
    Generic write
nt.access_mask.maximum_allowed  Maximum allowed
    Boolean
    Maximum allowed
nt.access_mask.read_control  Read control
    Boolean
    Read control
nt.access_mask.specific_0    Specific access, bit 0
    Boolean
    Specific access, bit 0
nt.access_mask.specific_1    Specific access, bit 1
    Boolean
    Specific access, bit 1
nt.access_mask.specific_10   Specific access, bit 10
    Boolean
    Specific access, bit 10
nt.access_mask.specific_11   Specific access, bit 11
    Boolean
    Specific access, bit 11
nt.access_mask.specific_12   Specific access, bit 12
    Boolean
    Specific access, bit 12
nt.access_mask.specific_13   Specific access, bit 13
    Boolean
    Specific access, bit 13
nt.access_mask.specific_14   Specific access, bit 14
    Boolean
    Specific access, bit 14
nt.access_mask.specific_15   Specific access, bit 15
    Boolean
    Specific access, bit 15
```

```
nt.access_mask.specific_2  Specific access, bit 2
    Boolean
    Specific access, bit 2
nt.access_mask.specific_3  Specific access, bit 3
    Boolean
    Specific access, bit 3
nt.access_mask.specific_4  Specific access, bit 4
    Boolean
    Specific access, bit 4
nt.access_mask.specific_5  Specific access, bit 5
    Boolean
    Specific access, bit 5
nt.access_mask.specific_6  Specific access, bit 6
    Boolean
    Specific access, bit 6
nt.access_mask.specific_7  Specific access, bit 7
    Boolean
    Specific access, bit 7
nt.access_mask.specific_8  Specific access, bit 8
    Boolean
    Specific access, bit 8
nt.access_mask.specific_9  Specific access, bit 9
    Boolean
    Specific access, bit 9
nt.access_mask.synchronise  Synchronise
    Boolean
    Synchronise
nt.access_mask.write_dac   Write DAC
    Boolean
    Write DAC
nt.access_mask.write_owner  Write owner
    Boolean
    Write owner
nt.ace.flags.container_inherit  Container Inherit
    Boolean
    Will subordinate containers inherit this ACE?
nt.ace.flags.failed_access  Audit Failed Accesses
    Boolean
    Should failed accesses be audited?
nt.ace.flags.inherit_only  Inherit Only
    Boolean
    Does this ACE apply to the current object?
nt.ace.flags.inherited_ace  Inherited ACE
    Boolean
    Was this ACE inherited from its parent object?
nt.ace.flags.non_propagate_inherit  Non-Propagate Inherit
    Boolean
    Will subordinate object propagate this ACE further?
```

```
nt.ace.flags.object_inherit  Object Inherit
    Boolean
    Will subordinate files inherit this ACE?
nt.ace.flags.successful_access  Audit Successful Accesses
    Boolean
    Should successful accesses be audited?
nt.ace.object.flags.inherited_object_type_present  Inherited Object Type Present
    Boolean
nt.ace.object.flags.object_type_present  Object Type Present
    Boolean
nt.ace.object.guid  GUID
nt.ace.object.inherited_guid  Inherited GUID
nt.ace.size  Size
    Unsigned 16-bit integer
    Size of this ACE
nt.ace.type  Type
    Unsigned 8-bit integer
    Type of ACE
nt.acl.num_aces  Num ACEs
    Unsigned 32-bit integer
    Number of ACE structures for this ACL
nt.acl.revision  Revision
    Unsigned 16-bit integer
    Version of NT ACL structure
nt.acl.size  Size
    Unsigned 16-bit integer
    Size of NT ACL structure
nt.sec_desc.revision  Revision
    Unsigned 16-bit integer
    Version of NT Security Descriptor structure
nt.sec_desc.type.dacl_auto_inherit_req  DACL Auto Inherit Required
    Boolean
    Does this SecDesc have DACL Auto Inherit Required set?
nt.sec_desc.type.dacl_auto_inherited  DACL Auto Inherited
    Boolean
    Is this DACL auto inherited
nt.sec_desc.type.dacl_defaulted  DACL Defaulted
    Boolean
    Does this SecDesc have DACL Defaulted?
nt.sec_desc.type.dacl_present  DACL Present
    Boolean
    Does this SecDesc have DACL present?
nt.sec_desc.type.dacl_protected  DACL Protected
    Boolean
    Is the DACL structure protected?
```



```
nt.sec_desc.type.dacl_trusted  DACL Trusted
  Boolean
  Does this SecDesc have DACL TRUSTED set?
nt.sec_desc.type.group_defaulted  Group Defaulted
  Boolean
  Is Group Defaulted?
nt.sec_desc.type.owner_defaulted  Owner Defaulted
  Boolean
  Is Owner Defaulted set?
nt.sec_desc.type.rm_control_valid  RM Control Valid
  Boolean
  Is RM Control Valid set?
nt.sec_desc.type.sacl_auto_inherit_req  SACL Auto Inherit Required
  Boolean
  Does this SecDesc have SACL Auto Inherit Required set?
nt.sec_desc.type.sacl_auto_inherited  SACL Auto Inherited
  Boolean
  Is this SACL auto inherited
nt.sec_desc.type.sacl_defaulted  SACL Defaulted
  Boolean
  Does this SecDesc have SACL Defaulted?
nt.sec_desc.type.sacl_present  SACL Present
  Boolean
  Is the SACL present?
nt.sec_desc.type.sacl_protected  SACL Protected
  Boolean
  Is the SACL structure protected?
nt.sec_desc.type.self_relative  Self Relative
  Boolean
  Is this SecDesc self relative?
nt.sec_desc.type.server_security  Server Security
  Boolean
  Does this SecDesc have SERVER SECURITY set?
nt.sid  SID
  String
  SID: Security Identifier
nt.sid.num_auth  Num Auth
  Unsigned 8-bit integer
  Number of authorities for this SID
nt.sid.revision  Revision
  Unsigned 8-bit integer
  Version of SID structure
smb.access.append  Append
  Boolean
  Can object's contents be appended to
smb.access.caching  Caching
  Boolean
  Caching mode?
```

```
smb.access.delete Delete
  Boolean
  Can object be deleted

smb.access.delete_child Delete Child
  Boolean
  Can object's subdirectories be deleted

smb.access.execute Execute
  Boolean
  Can object be executed (if file) or traversed (if directory)

smb.access.generic_all Generic All
  Boolean
  Is generic all allowed for this attribute

smb.access.generic_execute Generic Execute
  Boolean
  Is generic execute allowed for this object?

smb.access.generic_read Generic Read
  Boolean
  Is generic read allowed for this object?

smb.access.generic_write Generic Write
  Boolean
  Is generic write allowed for this object?

smb.access.locality Locality
  Unsigned 16-bit integer
  Locality of reference

smb.access.maximum_allowed Maximum Allowed
  Boolean
  ?

smb.access.mode Access Mode
  Unsigned 16-bit integer
  Access Mode

smb.access.read Read
  Boolean
  Can object's contents be read

smb.access.read_attributes Read Attributes
  Boolean
  Can object's attributes be read

smb.access.read_control Read Control
  Boolean
  Are reads allowed of owner, group and ACL data of the SID?

smb.access.read_ea Read EA
  Boolean
  Can object's extended attributes be read

smb.access.sharing Sharing Mode
  Unsigned 16-bit integer
  Sharing Mode

smb.access.smb.date Last Access Date
  Unsigned 16-bit integer
  Last Access Date, SMB_DATE format
```

```
smb.access.smb.time    Last Access Time
    Unsigned 16-bit integer
    Last Access Time, SMB_TIME format

smb.access.synchronize Synchronize
    Boolean
    Windows NT: synchronize access

smb.access.system_security System Security
    Boolean
    Access to a system ACL?

smb.access.time        Last Access
    Date/Time stamp
    Last Access Time

smb.access.write       Write
    Boolean
    Can object's contents be written

smb.access.write_attributes Write Attributes
    Boolean
    Can object's attributes be written

smb.access.write_dac   Write DAC
    Boolean
    Is write allowed to the owner group or ACLs?

smb.access.write_ea    Write EA
    Boolean
    Can object's extended attributes be written

smb.access.write_owner Write Owner
    Boolean
    Can owner write to the object?

smb.access.writethrough Writethrough
    Boolean
    Writethrough mode?

smb.access_mask        Access Mask
    Unsigned 32-bit integer

smb.account            Account
    String
    Account, username

smb.actual_free_alloc_units Actual Free Units
    Unsigned 64-bit integer
    Number of actual free allocation units

smb.alignment          Alignment
    Unsigned 32-bit integer
    What alignment do we require for buffers

smb.alloc.count        Allocation Block Count
    Unsigned 32-bit integer
    Allocation Block Count

smb.alloc.size         Allocation Block Count
    Unsigned 32-bit integer
    Allocation Block Size
```

smb.alloc\_size Allocation Size  
Unsigned 32-bit integer  
Number of bytes to reserve on create or truncate

smb.andxoffset AndXOffset  
Unsigned 16-bit integer  
Offset to next command in this SMB packet

smb.ansi\_password ANSI Password  
Byte array  
ANSI Password

smb.ansi\_pwlen ANSI Password Length  
Unsigned 16-bit integer  
Length of ANSI password

smb.attribute Attribute  
Unsigned 32-bit integer

smb.avail.units Available Units  
Unsigned 32-bit integer  
Total number of available units on this filesystem

smb.backup.time Backed-up  
Date/Time stamp  
Backup time

smb.bcc Byte Count (BCC)  
Unsigned 16-bit integer  
Byte Count, count of data bytes

smb.blocksize Block Size  
Unsigned 16-bit integer  
Block size (in bytes) at server

smb.bpu Blocks Per Unit  
Unsigned 16-bit integer  
Blocks per unit at server

smb.buffer\_format Buffer Format  
Unsigned 8-bit integer  
Buffer Format, type of buffer

smb.caller\_free\_alloc\_units Caller Free Units  
Unsigned 64-bit integer  
Number of caller free allocation units

smb.cancel\_to Cancel to  
Frame number  
This packet is a cancellation of the packet in this frame

smb.change.time Change  
Date/Time stamp  
Last Change Time

smb.change\_count Change Count  
Unsigned 16-bit integer  
Number of changes to wait for

smb.cmd SMB Command  
Unsigned 8-bit integer  
SMB Command

```
smb.compressed.chunk_shift  Chunk Shift
    Unsigned 8-bit integer
    Allocated size of the stream in number of bytes

smb.compressed.cluster_shift  Cluster Shift
    Unsigned 8-bit integer
    Allocated size of the stream in number of bytes

smb.compressed.file_size  Compressed Size
    Unsigned 64-bit integer
    Size of the compressed file

smb.compressed.format  Compression Format
    Unsigned 16-bit integer
    Compression algorithm used

smb.compressed.unit_shift  Unit Shift
    Unsigned 8-bit integer
    Size of the stream in number of bytes

smb.connect.flags.dtid  Disconnect TID
    Boolean
    Disconnect TID?

smb.connect.support.dfs  In Dfs
    Boolean
    Is this in a Dfs tree?

smb.connect.support.search  Search Bits
    Boolean
    Exclusive Search Bits supported?

smb.continuation_to  Continuation to
    Frame number
    This packet is a continuation to the packet in this frame

smb.copy.flags.dest_mode  Destination mode
    Boolean
    Is destination in ASCII?

smb.copy.flags.dir  Must be directory
    Boolean
    Must target be a directory?

smb.copy.flags.ea_action  EA action if EAs not supported on dest
    Boolean
    Fail copy if source file has EAs and dest doesn't support EAs?

smb.copy.flags.file  Must be file
    Boolean
    Must target be a file?

smb.copy.flags.source_mode  Source mode
    Boolean
    Is source in ASCII?

smb.copy.flags.tree_copy  Tree copy
    Boolean
    Is copy a tree copy?

smb.copy.flags.verify  Verify writes
    Boolean
    Verify all writes?
```

smb.count Count  
Unsigned 32-bit integer  
Count number of items/bytes

smb.count\_high Count High (multiply with 64K)  
Unsigned 16-bit integer  
Count number of items/bytes, High 16 bits

smb.count\_low Count Low  
Unsigned 16-bit integer  
Count number of items/bytes, Low 16 bits

smb.create.action Create action  
Unsigned 32-bit integer  
Type of action taken

smb.create.disposition Disposition  
Unsigned 32-bit integer  
Create disposition, what to do if the file does/does not exist

smb.create.file\_id Server unique file ID  
Unsigned 32-bit integer  
Server unique file ID

smb.create.smb.date Create Date  
Unsigned 16-bit integer  
Create Date, SMB\_DATE format

smb.create.smb.time Create Time  
Unsigned 16-bit integer  
Create Time, SMB\_TIME format

smb.create.time Created  
Date/Time stamp  
Creation Time

smb.create\_flags Create Flags  
Unsigned 32-bit integer

smb.create\_options Create Options  
Unsigned 32-bit integer

smb.data\_disp Data Displacement  
Unsigned 16-bit integer  
Data Displacement

smb.data\_len Data Length  
Unsigned 16-bit integer  
Length of data

smb.data\_len\_high Data Length High (multiply with 64K)  
Unsigned 16-bit integer  
Length of data, High 16 bits

smb.data\_len\_low Data Length Low  
Unsigned 16-bit integer  
Length of data, Low 16 bits

smb.data\_offset Data Offset  
Unsigned 16-bit integer  
Data Offset

```
smb.data_size  Data Size
  Unsigned 32-bit integer
  Data Size

smb.dc  Data Count
  Unsigned 16-bit integer
  Number of data bytes in this buffer

smb.dcm  Data Compaction Mode
  Unsigned 16-bit integer
  Data Compaction Mode

smb.delete_pending  Delete Pending
  Unsigned 16-bit integer
  Is this object about to be deleted?

smb.destination_name  Destination Name
  String
  Name of recipient of message

smb.device.floppy  Floppy
  Boolean
  Is this a floppy disk

smb.device.mounted  Mounted
  Boolean
  Is this a mounted device

smb.device.read_only  Read Only
  Boolean
  Is this a read-only device

smb.device.remote  Remote
  Boolean
  Is this a remote device

smb.device.removable  Removable
  Boolean
  Is this a removable device

smb.device.type  Device Type
  Unsigned 32-bit integer
  Type of device

smb.device.virtual  Virtual
  Boolean
  Is this a virtual device

smb.device.write_once  Write Once
  Boolean
  Is this a write-once device

smb.dfs.flags.fielding  Fielding
  Boolean
  The servers in referrals are capable of fielding

smb.dfs.flags.server_hold_storage  Hold Storage
  Boolean
  The servers in referrals should hold storage for the file

smb.dfs.num_referrals  Num Referrals
  Unsigned 16-bit integer
  Number of referrals in this pdu
```

```
smb.dfs.path_consumed  Path Consumed
    Unsigned 16-bit integer
    Number of RequestFilename bytes client

smb.dfs.referral.alt_path  Alt Path
    String
    Alternative(8.3) Path that matched pathconsumed

smb.dfs.referral.alt_path_offset  Alt Path Offset
    Unsigned 16-bit integer
    Offset of alternative(8.3) Path that matched pathconsumed

smb.dfs.referral.flags.strip  Strip
    Boolean
    Should we strip off pathconsumed characters before submitting?

smb.dfs.referral.node  Node
    String
    Name of entity to visit next

smb.dfs.referral.node_offset  Node Offset
    Unsigned 16-bit integer
    Offset of name of entity to visit next

smb.dfs.referral.path  Path
    String
    Dfs Path that matched pathconsumed

smb.dfs.referral.path_offset  Path Offset
    Unsigned 16-bit integer
    Offset of Dfs Path that matched pathconsumed

smb.dfs.referral.proximity  Proximity
    Unsigned 16-bit integer
    Hint describing proximity of this server to the client

smb.dfs.referral.server.type  Server Type
    Unsigned 16-bit integer
    Type of referral server

smb.dfs.referral.size  Size
    Unsigned 16-bit integer
    Size of referral element

smb.dfs.referral.ttl  TTL
    Unsigned 16-bit integer
    Number of seconds the client can cache this referral

smb.dfs.referral.version  Version
    Unsigned 16-bit integer
    Version of referral element

smb.dialect.index  Selected Index
    Unsigned 16-bit integer
    Index of selected dialect

smb.dialect.name  Name
    String
    Name of dialect

smb.dir.accessmask.add_file  Add File
    Boolean
```



```
smb.dir.accessmask.add_subdir  Add Subdir
    Boolean

smb.dir.accessmask.delete_child  Delete Child
    Boolean

smb.dir.accessmask.list  List
    Boolean

smb.dir.accessmask.read_attribute  Read Attribute
    Boolean

smb.dir.accessmask.read_ea  Read EA
    Boolean

smb.dir.accessmask.traverse  Traverse
    Boolean

smb.dir.accessmask.write_attribute  Write Attribute
    Boolean

smb.dir.accessmask.write_ea  Write EA
    Boolean

smb.dir.count  Root Directory Count
    Unsigned 32-bit integer
    Directory Count

smb.dir_name  Directory
    String
    SMB Directory Name

smb.disposition.delete_on_close  Delete on close
    Boolean

smb.ea.data  EA Data
    Byte array
    EA Data

smb.ea.data_length  EA Data Length
    Unsigned 16-bit integer
    EA Data Length

smb.ea.error_offset  EA Error offset
    Unsigned 32-bit integer
    Offset into EA list if EA error

smb.ea.flags  EA Flags
    Unsigned 8-bit integer
    EA Flags

smb.ea.list_length  EA List Length
    Unsigned 32-bit integer
    Total length of extended attributes

smb.ea.name  EA Name
    String
    EA Name

smb.ea.name_length  EA Name Length
    Unsigned 8-bit integer
    EA Name Length
```

```
smb.echo.count  Echo Count
    Unsigned 16-bit integer
    Number of times to echo data back

smb.echo.data  Echo Data
    Byte array
    Data for SMB Echo Request/Response

smb.echo.seq_num  Echo Seq Num
    Unsigned 16-bit integer
    Sequence number for this echo response

smb.encryption_key  Encryption Key
    Byte array
    Challenge/Response Encryption Key (for LM2.1 dialect)

smb.encryption_key_length  Key Length
    Unsigned 16-bit integer
    Encryption key length (must be 0 if not LM2.1 dialect)

smb.end_of_file  End Of File
    Unsigned 64-bit integer
    Offset to the first free byte in the file

smb.end_of_search  End Of Search
    Unsigned 16-bit integer
    Was last entry returned?

smb.error_class  Error Class
    Unsigned 8-bit integer
    DOS Error Class

smb.error_code  Error Code
    Unsigned 16-bit integer
    DOS Error Code

smb.ext_attr  Extended Attributes
    Byte array
    Extended Attributes

smb.ff2_loi  Level of Interest
    Unsigned 16-bit integer
    Level of interest for FIND_FIRST2 command

smb.fid  FID
    Unsigned 16-bit integer
    FID: File ID

smb.fid.closed_in  Closed in
    Frame number
    The frame this fid was closed

smb.fid.mapped_in  Mapped in
    Frame number
    The frame this share was mapped

smb.fid.opened_in  Opened in
    Frame number
    The frame this fid was opened

smb.fid.unmapped_in  Unmapped in
    Frame number
    The frame this share was unmapped
```

```
smb.file File Name
  String
  File Name
smb.file.accessmask.append_data Append Data
  Boolean
smb.file.accessmask.execute Execute
  Boolean
smb.file.accessmask.read_attribute Read Attribute
  Boolean
smb.file.accessmask.read_data Read Data
  Boolean
smb.file.accessmask.read_ea Read EA
  Boolean
smb.file.accessmask.write_attribute Write Attribute
  Boolean
smb.file.accessmask.write_data Write Data
  Boolean
smb.file.accessmask.write_ea Write EA
  Boolean
smb.file.count Root File Count
  Unsigned 32-bit integer
  File Count
smb.file.rw.length File RW Length
  Unsigned 32-bit integer
smb.file.rw.offset File Offset
  Unsigned 32-bit integer
smb.file_attribute.archive Archive
  Boolean
  ARCHIVE file attribute
smb.file_attribute.compressed Compressed
  Boolean
  Is this file compressed?
smb.file_attribute.device Device
  Boolean
  Is this file a device?
smb.file_attribute.directory Directory
  Boolean
  DIRECTORY file attribute
smb.file_attribute.encrypted Encrypted
  Boolean
  Is this file encrypted?
smb.file_attribute.hidden Hidden
  Boolean
  HIDDEN file attribute
```

```
smb.file_attribute.normal Normal
  Boolean
  Is this a normal file?
smb.file_attribute.not_content_indexed Content Indexed
  Boolean
  May this file be indexed by the content indexing service
smb.file_attribute.offline Offline
  Boolean
  Is this file offline?
smb.file_attribute.read_only Read Only
  Boolean
  READ ONLY file attribute
smb.file_attribute.reparse Reparse Point
  Boolean
  Does this file have an associated reparse point?
smb.file_attribute.sparse Sparse
  Boolean
  Is this a sparse file?
smb.file_attribute.system System
  Boolean
  SYSTEM file attribute
smb.file_attribute.temporary Temporary
  Boolean
  Is this a temporary file?
smb.file_attribute.volume Volume ID
  Boolean
  VOLUME file attribute
smb.file_data File Data
  Byte array
  Data read/written to the file
smb.file_index File Index
  Unsigned 32-bit integer
  File index
smb.file_name_len File Name Len
  Unsigned 32-bit integer
  Length of File Name
smb.file_size File Size
  Unsigned 32-bit integer
  File Size
smb.file_type File Type
  Unsigned 16-bit integer
  Type of file
smb.files_moved Files Moved
  Unsigned 16-bit integer
  Number of files moved
smb.find_first2.flags.backup Backup Intent
  Boolean
  Find with backup intent
```

```
smb.find_first2.flags.close  Close
    Boolean
    Close search after this request

smb.find_first2.flags.continue  Continue
    Boolean
    Continue search from previous ending place

smb.find_first2.flags.eos  Close on EOS
    Boolean
    Close search if end of search reached

smb.find_first2.flags.resume  Resume
    Boolean
    Return resume keys for each entry found

smb.flags.canon  Canonicalized Pathnames
    Boolean
    Are pathnames canonicalized?

smb.flags.caseless  Case Sensitivity
    Boolean
    Are pathnames caseless or casesensitive?

smb.flags.lock  Lock and Read
    Boolean
    Are Lock&Read and Write&Unlock operations supported?

smb.flags.notify  Notify
    Boolean
    Notify on open or all?

smb.flags.oplock  Oplocks
    Boolean
    Is an oplock requested/granted?

smb.flags.receive_buffer  Receive Buffer Posted
    Boolean
    Have receive buffers been reported?

smb.flags.response  Request/Response
    Boolean
    Is this a request or a response?

smb.flags2.dfs  Dfs
    Boolean
    Can pathnames be resolved using Dfs?

smb.flags2.ea  Extended Attributes
    Boolean
    Are extended attributes supported?

smb.flags2.esn  Extended Security Negotiation
    Boolean
    Is extended security negotiation supported?

smb.flags2.long_names_allowed  Long Names Allowed
    Boolean
    Are long file names allowed in the response?

smb.flags2.long_names_used  Long Names Used
    Boolean
    Are pathnames in this request long file names?
```

smb.flags2.nt\_error Error Code Type  
Boolean  
Are error codes NT or DOS format?

smb.flags2.roe Execute-only Reads  
Boolean  
Will reads be allowed for execute-only files?

smb.flags2.sec\_sig Security Signatures  
Boolean  
Are security signatures supported?

smb.flags2.string Unicode Strings  
Boolean  
Are strings ASCII or Unicode?

smb.fn\_loi Level of Interest  
Unsigned 16-bit integer  
Level of interest for FIND\_NOTIFY command

smb.forwarded\_name Forwarded Name  
String  
Recipient name being forwarded

smb.free\_alloc\_units Free Units  
Unsigned 64-bit integer  
Number of free allocation units

smb.free\_block.count Free Block Count  
Unsigned 32-bit integer  
Free Block Count

smb.free\_units Free Units  
Unsigned 16-bit integer  
Number of free units at server

smb.fs\_attr.cpn Case Preserving  
Boolean  
Will this FS Preserve Name Case?

smb.fs\_attr.css Case Sensitive Search  
Boolean  
Does this FS support Case Sensitive Search?

smb.fs\_attr.fc Compression  
Boolean  
Does this FS support File Compression?

smb.fs\_attr.ns Named Streams  
Boolean  
Does this FS support named streams?

smb.fs\_attr.pacls Persistent ACLs  
Boolean  
Does this FS support Persistent ACLs?

smb.fs\_attr.rov Read Only Volume  
Boolean  
Is this FS on a read only volume?

smb.fs\_attr.se Supports Encryption  
Boolean  
Does this FS support encryption?

```
smb.fs_attr.sla  LFN APIs
  Boolean
  Does this FS support LFN APIs?
smb.fs_attr.soids Supports OIDs
  Boolean
  Does this FS support OIDs?
smb.fs_attr.srp  Reparse Points
  Boolean
  Does this FS support REPARSE POINTS?
smb.fs_attr.srs  Remote Storage
  Boolean
  Does this FS support REMOTE STORAGE?
smb.fs_attr.ssf  Sparse Files
  Boolean
  Does this FS support SPARSE FILES?
smb.fs_attr.uod  Unicode On Disk
  Boolean
  Does this FS support Unicode On Disk?
smb.fs_attr.vis  Volume Is Compressed
  Boolean
  Is this FS on a compressed volume?
smb.fs_attr.vq   Volume Quotas
  Boolean
  Does this FS support Volume Quotas?
smb.fs_bytes_per_sector Bytes per Sector
  Unsigned 32-bit integer
  Bytes per sector
smb.fs_id  FS Id
  Unsigned 32-bit integer
  File System ID (NT Server always returns 0)
smb.fs_max_name_len Max name length
  Unsigned 32-bit integer
  Maximum length of each file name component in number of bytes
smb.fs_name  FS Name
  String
  Name of filesystem
smb.fs_name.len Label Length
  Unsigned 32-bit integer
  Length of filesystem name in bytes
smb.fs_sector_per_unit Sectors/Unit
  Unsigned 32-bit integer
  Sectors per allocation unit
smb.fs_units  Total Units
  Unsigned 32-bit integer
  Total number of units on this filesystem
smb.group_id  Group ID
  Unsigned 16-bit integer
  SMB-over-IPX Group ID
```

```
smb.impersonation.level  Impersonation
    Unsigned 32-bit integer
    Impersonation level

smb.index_number  Index Number
    Unsigned 64-bit integer
    File system unique identifier

smb.ipc_state.endpoint  Endpoint
    Unsigned 16-bit integer
    Which end of the pipe this is

smb.ipc_state.icount  Icount
    Unsigned 16-bit integer
    Count to control pipe instancing

smb.ipc_state.nonblocking  Nonblocking
    Boolean
    Is I/O to this pipe nonblocking?

smb.ipc_state.pipe_type  Pipe Type
    Unsigned 16-bit integer
    What type of pipe this is

smb.ipc_state.read_mode  Read Mode
    Unsigned 16-bit integer
    How this pipe should be read

smb.is_directory  Is Directory
    Unsigned 8-bit integer
    Is this object a directory?

smb.key  Key
    Unsigned 32-bit integer
    SMB-over-IPX Key

smb.last_name_offset  Last Name Offset
    Unsigned 16-bit integer
    If non-0 this is the offset into the datablock for the file name of the last

smb.last_write.smb.date  Last Write Date
    Unsigned 16-bit integer
    Last Write Date, SMB_DATE format

smb.last_write.smb.time  Last Write Time
    Unsigned 16-bit integer
    Last Write Time, SMB_TIME format

smb.last_write.time  Last Write
    Date/Time stamp
    Time this file was last written to

smb.link_count  Link Count
    Unsigned 32-bit integer
    Number of hard links to the file

smb.lock.length  Length
    Unsigned 64-bit integer
    Length of lock/unlock region

smb.lock.offset  Offset
    Unsigned 64-bit integer
    Offset in the file of lock/unlock region
```



```
smb.lock.type.cancel  Cancel
  Boolean
  Cancel outstanding lock requests?

smb.lock.type.change  Change
  Boolean
  Change type of lock?

smb.lock.type.large  Large Files
  Boolean
  Large file locking requested?

smb.lock.type.oplock_release  Oplock Break
  Boolean
  Is this a notification of, or a response to, an oplock break?

smb.lock.type.shared  Shared
  Boolean
  Shared or exclusive lock requested?

smb.locking.num_locks  Number of Locks
  Unsigned 16-bit integer
  Number of lock requests in this request

smb.locking.num_unlocks  Number of Unlocks
  Unsigned 16-bit integer
  Number of unlock requests in this request

smb.locking.oplock.level  Oplock Level
  Unsigned 8-bit integer
  Level of existing oplock at client (if any)

smb.logged_in  Logged In
  Frame number

smb.logged_out  Logged Out
  Frame number

smb.mac.access_control  Mac Access Control
  Boolean
  Are Mac Access Control Supported

smb.mac.desktop_db_calls  Desktop DB Calls
  Boolean
  Are Macintosh Desktop DB Calls Supported?

smb.mac.finderinfo  Finder Info
  Byte array
  Finder Info

smb.mac.get_set_comments  Get Set Comments
  Boolean
  Are Mac Get Set Comments supported?

smb.mac.streams_support  Mac Streams
  Boolean
  Are Mac Extensions and streams supported?

smb.mac.support.flags  Mac Support Flags
  Unsigned 32-bit integer
  Mac Support Flags
```

smb.mac.uids Macintosh Unique IDs  
Boolean  
Are Unique IDs supported

smb.machine\_name Machine Name  
String  
Name of target machine

smb.marked\_for\_deletion Marked for Deletion  
Boolean  
Marked for deletion?

smb.max\_buf Max Buffer  
Unsigned 16-bit integer  
Max client buffer size

smb.max\_bufsize Max Buffer Size  
Unsigned 32-bit integer  
Maximum transmit buffer size

smb.max\_mpx\_count Max Mpx Count  
Unsigned 16-bit integer  
Maximum pending multiplexed requests

smb.max\_raw Max Raw Buffer  
Unsigned 32-bit integer  
Maximum raw buffer size

smb.max\_referral\_level Max Referral Level  
Unsigned 16-bit integer  
Latest referral version number understood

smb.max\_vcs Max VCs  
Unsigned 16-bit integer  
Maximum VCs between client and server

smb.maxcount Max Count  
Unsigned 16-bit integer  
Maximum Count

smb.maxcount\_high Max Count High (multiply with 64K)  
Unsigned 16-bit integer  
Maximum Count, High 16 bits

smb.maxcount\_low Max Count Low  
Unsigned 16-bit integer  
Maximum Count, Low 16 bits

smb.mdc Max Data Count  
Unsigned 32-bit integer  
Maximum number of data bytes to return

smb.message Message  
String  
Message text

smb.message.len Message Len  
Unsigned 16-bit integer  
Length of message

smb.mgid Message Group ID  
Unsigned 16-bit integer  
Message group ID for multi-block messages

```
smb.mid      Multiplex ID
             Unsigned 16-bit integer
             Multiplex ID

smb.mincount  Min Count
             Unsigned 16-bit integer
             Minimum Count

smb.mode     Mode
             Unsigned 32-bit integer

smb.modify.time  Modified
             Date/Time stamp
             Modification Time

smb.monitor_handle  Monitor Handle
             Unsigned 16-bit integer
             Handle for Find Notify operations

smb.move.flags.dir  Must be directory
             Boolean
             Must target be a directory?

smb.move.flags.file  Must be file
             Boolean
             Must target be a file?

smb.move.flags.verify  Verify writes
             Boolean
             Verify all writes?

smb.mpc      Max Parameter Count
             Unsigned 32-bit integer
             Maximum number of parameter bytes to return

smb.msc      Max Setup Count
             Unsigned 8-bit integer
             Maximum number of setup words to return

smb.native_fs  Native File System
             String
             Native File System

smb.native_lanman  Native LAN Manager
             String
             Which LANMAN protocol we are running

smb.native_os  Native OS
             String
             Which OS we are running

smb.next_entry_offset  Next Entry Offset
             Unsigned 32-bit integer
             Offset to next entry

smb.nt.create.batch_oplock  Batch Oplock
             Boolean
             Is a batch oplock requested?

smb.nt.create.dir  Create Directory
             Boolean
             Must target of open be a directory?
```

```
smb.nt.create.ext    Extended Response
  Boolean
  Extended response required?

smb.nt.create.oplock Exclusive Oplock
  Boolean
  Is an oplock requested

smb.nt.create_options.backup_intent  Backup Intent
  Boolean
  Is this opened by BACKUP ADMIN for backup intent?

smb.nt.create_options.complete_if_oplocked Complete If Oplocked
  Boolean
  Complete if oplocked flag

smb.nt.create_options.create_tree_connection Create Tree Connection
  Boolean
  Create Tree Connection flag

smb.nt.create_options.delete_on_close Delete On Close
  Boolean
  Should the file be deleted when closed?

smb.nt.create_options.directory Directory
  Boolean
  Should file being opened/created be a directory?

smb.nt.create_options.eight_dot_three_only 8.3 Only
  Boolean
  Does the client understand only 8.3 filenames?

smb.nt.create_options.intermediate_buffering Intermediate Buffering
  Boolean
  Is intermediate buffering allowed?

smb.nt.create_options.no_compression No Compression
  Boolean
  Is compression allowed?

smb.nt.create_options.no_ea_knowledge No EA Knowledge
  Boolean
  Does the client not understand extended attributes?

smb.nt.create_options.non_directory Non-Directory
  Boolean
  Should file being opened/created be a non-directory?

smb.nt.create_options.open_by_fileid Open By FileID
  Boolean
  Open file by inode

smb.nt.create_options.open_for_free_space_query Open For Free Space query
  Boolean
  Open For Free Space Query flag

smb.nt.create_options.open_no_recall Open No Recall
  Boolean
  Open no recall flag

smb.nt.create_options.open_reparse_point Open Reparse Point
  Boolean
  Is this an open of a reparse point or of the normal file?
```

```
smb.nt.create_options.random_access  Random Access
  Boolean
  Will the client be accessing the file randomly?
smb.nt.create_options.reserve_opfilter  Reserve Opfilter
  Boolean
  Reserve Opfilter flag
smb.nt.create_options.sequential_only  Sequential Only
  Boolean
  Will accesses to this file only be sequential?
smb.nt.create_options.sync_io_alert  Sync I/O Alert
  Boolean
  All operations are performed synchronous
smb.nt.create_options.sync_io_nonalert  Sync I/O Nonalert
  Boolean
  All operations are synchronous and may block
smb.nt.create_options.write_through  Write Through
  Boolean
  Should writes to the file write buffered data out before completing?
smb.nt.function  Function
  Unsigned 16-bit integer
  Function for NT Transaction
smb.nt.ioctl.flags.root_handle  Root Handle
  Boolean
  Apply to this share or root Dfs share
smb.nt.ioctl.isfsctl  IsFSctl
  Unsigned 8-bit integer
  Is this a device IOCTL (FALSE) or FS Control (TRUE)
smb.nt.notify.action  Action
  Unsigned 32-bit integer
  Which action caused this notify response
smb.nt.notify.attributes  Attribute Change
  Boolean
  Notify on changes to attributes
smb.nt.notify.creation  Created Change
  Boolean
  Notify on changes to creation time
smb.nt.notify.dir_name  Directory Name Change
  Boolean
  Notify on changes to directory name
smb.nt.notify.ea  EA Change
  Boolean
  Notify on changes to Extended Attributes
smb.nt.notify.file_name  File Name Change
  Boolean
  Notify on changes to file name
smb.nt.notify.last_access  Last Access Change
  Boolean
  Notify on changes to last access
```

```
smb.nt.notify.last_write  Last Write Change
    Boolean
    Notify on changes to last write
smb.nt.notify.security    Security Change
    Boolean
    Notify on changes to security settings
smb.nt.notify.size        Size Change
    Boolean
    Notify on changes to size
smb.nt.notify.stream_name Stream Name Change
    Boolean
    Notify on changes to stream name?
smb.nt.notify.stream_size Stream Size Change
    Boolean
    Notify on changes of stream size
smb.nt.notify.stream_write Stream Write
    Boolean
    Notify on stream write?
smb.nt.notify.watch_tree  Watch Tree
    Unsigned 8-bit integer
    Should Notify watch subdirectories also?
smb.nt_qsd.dacl           DACL
    Boolean
    Is DACL security informaton being queried?
smb.nt_qsd.group          Group
    Boolean
    Is group security informaton being queried?
smb.nt_qsd.owner          Owner
    Boolean
    Is owner security informaton being queried?
smb.nt_qsd.sacl           SACL
    Boolean
    Is SACL security informaton being queried?
smb.nt_status             NT Status
    Unsigned 32-bit integer
    NT Status code
smb.ntr_clu               Cluster count
    Unsigned 32-bit integer
    Number of clusters
smb.ntr_loi               Level of Interest
    Unsigned 16-bit integer
    NT Rename level
smb.offset                Offset
    Unsigned 32-bit integer
    Offset in file
smb.offset_high           High Offset
    Unsigned 32-bit integer
    High 32 Bits Of File Offset
```

smb.old\_file Old File Name  
String  
Old File Name (When renaming a file)

smb.open.action.lock Exclusive Open  
Boolean  
Is this file opened by another user?

smb.open.action.open Open Action  
Unsigned 16-bit integer  
Open Action, how the file was opened

smb.open.flags.add\_info Additional Info  
Boolean  
Additional Information Requested?

smb.open.flags.batch\_oplock Batch Oplock  
Boolean  
Batch Oplock Requested?

smb.open.flags.ealen Total EA Len  
Boolean  
Total EA Len Requested?

smb.open.flags.ex\_oplock Exclusive Oplock  
Boolean  
Exclusive Oplock Requested?

smb.open.function.create Create  
Boolean  
Create file if it doesn't exist?

smb.open.function.open Open  
Unsigned 16-bit integer  
Action to be taken on open if file exists

smb.oplock.level Oplock level  
Unsigned 8-bit integer  
Level of oplock granted

smb.originator\_name Originator Name  
String  
Name of sender of message

smb.padding Padding  
Byte array  
Padding or unknown data

smb.password Password  
Byte array  
Password

smb.path Path  
String  
Path. Server name and share name

smb.pc Parameter Count  
Unsigned 16-bit integer  
Number of parameter bytes in this buffer

smb.pd Parameter Displacement  
Unsigned 16-bit integer  
Displacement of these parameter bytes

```
smb.pid      Process ID
             Unsigned 16-bit integer
             Process ID

smb.pid.high Process ID High
             Unsigned 16-bit integer
             Process ID High Bytes

smb.pipe.write_len Pipe Write Len
             Unsigned 16-bit integer
             Number of bytes written to pipe

smb.pipe_info_flag Pipe Info
             Boolean

smb.po       Parameter Offset
             Unsigned 16-bit integer
             Offset (from header start) to parameters

smb.position Position
             Unsigned 64-bit integer
             File position

smb.posix_acl.ace_perms Permissions
             Unsigned 8-bit integer

smb.posix_acl.ace_perms.execute EXECUTE
             Boolean

smb.posix_acl.ace_perms.gid  GID
             Unsigned 32-bit integer

smb.posix_acl.ace_perms.owner_gid  Owner GID
             Unsigned 32-bit integer

smb.posix_acl.ace_perms.owner_uid  Owner UID
             Unsigned 32-bit integer

smb.posix_acl.ace_perms.read  READ
             Boolean

smb.posix_acl.ace_perms.uid  UID
             Unsigned 32-bit integer

smb.posix_acl.ace_perms.write  WRITE
             Boolean

smb.posix_acl.ace_type  ACE Type
             Unsigned 8-bit integer

smb.posix_acl.num_def_aces  Number of default ACEs
             Unsigned 16-bit integer

smb.posix_acl.num_file_aces  Number of file ACEs
             Unsigned 16-bit integer

smb.posix_acl.version  Posix ACL version
             Unsigned 16-bit integer

smb.primary_domain  Primary Domain
             String
             The server's primary domain
```



```
smb.print.identifier  Identifier
    String
    Identifier string for this print job

smb.print.mode  Mode
    Unsigned 16-bit integer
    Text or Graphics mode

smb.print.queued.date  Queued
    Date/Time stamp
    Date when this entry was queued

smb.print.queued.smb.date  Queued Date
    Unsigned 16-bit integer
    Date when this print job was queued, SMB_DATE format

smb.print.queued.smb.time  Queued Time
    Unsigned 16-bit integer
    Time when this print job was queued, SMB_TIME format

smb.print.restart_index  Restart Index
    Unsigned 16-bit integer
    Index of entry after last returned

smb.print.setup.len  Setup Len
    Unsigned 16-bit integer
    Length of printer setup data

smb.print.spool.file_number  Spool File Number
    Unsigned 16-bit integer
    Spool File Number, assigned by the spooler

smb.print.spool.file_size  Spool File Size
    Unsigned 32-bit integer
    Number of bytes in spool file

smb.print.spool.name  Name
    String
    Name of client that submitted this job

smb.print.start_index  Start Index
    Unsigned 16-bit integer
    First queue entry to return

smb.print.status  Status
    Unsigned 8-bit integer
    Status of this entry

smb.pwlen  Password Length
    Unsigned 16-bit integer
    Length of password

smb.qfsi_loi  Level of Interest
    Unsigned 16-bit integer
    Level of interest for QUERY_FS_INFORMATION2 command

smb.qpi_loi  Level of Interest
    Unsigned 16-bit integer
    Level of interest for TRANSACTION[2] QUERY_{FILE,PATH}_INFO commands

smb.quota.flags.deny_disk  Deny Disk
    Boolean
    Is the default quota limit enforced?
```

```
smb.quota.flags.enabled  Enabled
  Boolean
  Is quotas enabled of this FS?

smb.quota.flags.log_limit  Log Limit
  Boolean
  Should the server log an event when the limit is exceeded?

smb.quota.flags.log_warning  Log Warning
  Boolean
  Should the server log an event when the warning level is exceeded?

smb.quota.hard.default  (Hard) Quota Limit
  Unsigned 64-bit integer
  Hard Quota limit

smb.quota.soft.default  (Soft) Quota Treshold
  Unsigned 64-bit integer
  Soft Quota treshold

smb.quota.used  Quota Used
  Unsigned 64-bit integer
  How much Quota is used by this user

smb.quota.user.offset  Next Offset
  Unsigned 32-bit integer
  Relative offset to next user quota structure

smb.remaining  Remaining
  Unsigned 32-bit integer
  Remaining number of bytes

smb.reparse_tag  Reparse Tag
  Unsigned 32-bit integer

smb.replace  Replace
  Boolean
  Remove target if it exists?

smb.request.mask  Request Mask
  Unsigned 32-bit integer
  Connectionless mode mask

smb.reserved  Reserved
  Byte array
  Reserved bytes, must be zero

smb.response.mask  Response Mask
  Unsigned 32-bit integer
  Connectionless mode mask

smb.response_in  Response in
  Frame number
  The response to this packet is in this packet

smb.response_to  Response to
  Frame number
  This packet is a response to the packet in this frame

smb.resume  Resume Key
  Unsigned 32-bit integer
  Resume Key
```

```
smb.resume.client.cookie  Client Cookie
    Byte array
    Cookie, must not be modified by the server

smb.resume.find_id  Find ID
    Unsigned 8-bit integer
    Handle for Find operation

smb.resume.key_len  Resume Key Length
    Unsigned 16-bit integer
    Resume Key length

smb.resume.server.cookie  Server Cookie
    Byte array
    Cookie, must not be modified by the client

smb.rfid  Root FID
    Unsigned 32-bit integer
    Open is relative to this FID (if nonzero)

smb.rm.read  Read Raw
    Boolean
    Is Read Raw supported?

smb.rm.write  Write Raw
    Boolean
    Is Write Raw supported?

smb.root.dir.count  Root Directory Count
    Unsigned 32-bit integer
    Root Directory Count

smb.root.file.count  Root File Count
    Unsigned 32-bit integer
    Root File Count

smb.root_dir_handle  Root Directory Handle
    Unsigned 32-bit integer
    Root directory handle

smb.sc  Setup Count
    Unsigned 8-bit integer
    Number of setup words in this buffer

smb.sd.length  SD Length
    Unsigned 32-bit integer
    Total length of security descriptor

smb.search.attribute.archive  Archive
    Boolean
    ARCHIVE search attribute

smb.search.attribute.directory  Directory
    Boolean
    DIRECTORY search attribute

smb.search.attribute.hidden  Hidden
    Boolean
    HIDDEN search attribute

smb.search.attribute.read_only  Read Only
    Boolean
    READ ONLY search attribute
```

```
smb.search.attribute.system  System
    Boolean
    SYSTEM search attribute

smb.search.attribute.volume  Volume ID
    Boolean
    VOLUME ID search attribute

smb.search_count  Search Count
    Unsigned 16-bit integer
    Maximum number of search entries to return

smb.search_id  Search ID
    Unsigned 16-bit integer
    Search ID, handle for find operations

smb.search_pattern  Search Pattern
    String
    Search Pattern

smb.sec_desc_len  NT Security Descriptor Length
    Unsigned 32-bit integer
    Security Descriptor Length

smb.security.flags.context_tracking  Context Tracking
    Boolean
    Is security tracking static or dynamic?

smb.security.flags.effective_only  Effective Only
    Boolean
    Are only enabled or all aspects of the users SID available?

smb.security_blob  Security Blob
    Byte array
    Security blob

smb.security_blob_len  Security Blob Length
    Unsigned 16-bit integer
    Security blob length

smb.seek_mode  Seek Mode
    Unsigned 16-bit integer
    Seek Mode, what type of seek

smb.segment  SMB Segment
    Frame number
    SMB Segment

smb.segment.error  Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments

smb.segment.multipletails  Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet

smb.segment.overlap  Fragment overlap
    Boolean
    Fragment overlaps with other fragments

smb.segment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
```

smb.segment.segments SMB Segments  
No value  
SMB Segments

smb.segment.toolongfragment Fragment too long  
Boolean  
Fragment contained data past end of packet

smb.sequence\_num Sequence Number  
Unsigned 16-bit integer  
SMB-over-IPX Sequence Number

smb.server Server  
String  
The name of the DC/server

smb.server\_cap.bulk\_transfer Bulk Transfer  
Boolean  
Are Bulk Read and Bulk Write supported?

smb.server\_cap.compressed\_data Compressed Data  
Boolean  
Is compressed data transfer supported?

smb.server\_cap.dfs Dfs  
Boolean  
Is Dfs supported?

smb.server\_cap.extended\_security Extended Security  
Boolean  
Are Extended security exchanges supported?

smb.server\_cap.infolevel\_passthru Infolevel Passthru  
Boolean  
Is NT information level request passthrough supported?

smb.server\_cap.large\_files Large Files  
Boolean  
Are large files (>4GB) supported?

smb.server\_cap.large\_readx Large ReadX  
Boolean  
Is Large Read andX supported?

smb.server\_cap.large\_writex Large WriteX  
Boolean  
Is Large Write andX supported?

smb.server\_cap.level\_2\_oplocks Level 2 Oplocks  
Boolean  
Are Level 2 oplocks supported?

smb.server\_cap.lock\_and\_read Lock and Read  
Boolean  
Is Lock and Read supported?

smb.server\_cap.mpx\_mode MPX Mode  
Boolean  
Are Read Mpx and Write Mpx supported?

smb.server\_cap.nt\_find NT Find  
Boolean  
Is NT Find supported?

```
smb.server_cap.nt_smbfs  NT SMBs
  Boolean
  Are NT SMBs supported?

smb.server_cap.nt_status  NT Status Codes
  Boolean
  Are NT Status Codes supported?

smb.server_cap.raw_mode  Raw Mode
  Boolean
  Are Raw Read and Raw Write supported?

smb.server_cap.reserved  Reserved
  Boolean
  RESERVED

smb.server_cap.rpc_remote_apis  RPC Remote APIs
  Boolean
  Are RPC Remote APIs supported?

smb.server_cap.unicode  Unicode
  Boolean
  Are Unicode strings supported?

smb.server_cap.unix  UNIX
  Boolean
  Are UNIX extensions supported?

smb.server_date_time  Server Date and Time
  Date/Time stamp
  Current date and time at server

smb.server_date_time.smb_date  Server Date
  Unsigned 16-bit integer
  Current date at server, SMB_DATE format

smb.server_date_time.smb_time  Server Time
  Unsigned 16-bit integer
  Current time at server, SMB_TIME format

smb.server_fid  Server FID
  Unsigned 32-bit integer
  Server unique File ID

smb.server_guid  Server GUID
  Byte array
  Globally unique identifier for this server

smb.server_timezone  Time Zone
  Signed 16-bit integer
  Current timezone at server.

smb.service  Service
  String
  Service name

smb.sessid  Session ID
  Unsigned 16-bit integer
  SMB-over-IPX Session ID

smb.session_key  Session Key
  Unsigned 32-bit integer
  Unique token identifying this session
```

```
smb.setup.action.guest  Guest
    Boolean
    Client logged in as GUEST?

smb.share.access.delete  Delete
    Boolean

smb.share.access.read  Read
    Boolean
    Can the object be shared for reading?

smb.share.access.write  Write
    Boolean
    Can the object be shared for write?

smb.share_access  Share Access
    Unsigned 32-bit integer

smb.short_file  Short File Name
    String
    Short (8.3) File Name

smb.short_file_name_len  Short File Name Len
    Unsigned 32-bit integer
    Length of Short (8.3) File Name

smb.signature  Signature
    Byte array
    Signature bytes

smb.sm.mode  Mode
    Boolean
    User or Share security mode?

smb.sm.password  Password
    Boolean
    Encrypted or plaintext passwords?

smb.sm.sig_required  Sig Req
    Boolean
    Are security signatures required?

smb.sm.signatures  Signatures
    Boolean
    Are security signatures enabled?

smb.spi_loi  Level of Interest
    Unsigned 16-bit integer
    Level of interest for TRANSACTION[2] SET_{FILE,PATH}_INFO commands

smb.storage_type  Storage Type
    Unsigned 32-bit integer
    Type of storage

smb.stream_name  Stream Name
    String
    Name of the stream

smb.stream_name_len  Stream Name Length
    Unsigned 32-bit integer
    Length of stream name
```

```
smb.stream_size  Stream Size
    Unsigned 64-bit integer
    Size of the stream in number of bytes

smb.system.time  System Time
    Date/Time stamp
    System Time

smb.target_name  Target name
    String
    Target file name

smb.target_name_len  Target name length
    Unsigned 32-bit integer
    Length of target file name

smb.tdc  Total Data Count
    Unsigned 32-bit integer
    Total number of data bytes

smb.tid  Tree ID
    Unsigned 16-bit integer
    Tree ID

smb.time  Time from request
    Time duration
    Time between Request and Response for SMB cmds

smb.timeout  Timeout
    Unsigned 32-bit integer
    Timeout in milliseconds

smb.total_data_len  Total Data Length
    Unsigned 16-bit integer
    Total length of data

smb.tpc  Total Parameter Count
    Unsigned 32-bit integer
    Total number of parameter bytes

smb.trans2.cmd  Subcommand
    Unsigned 16-bit integer
    Subcommand for TRANSACTION2

smb.trans_name  Transaction Name
    String
    Name of transaction

smb.transaction.flags.dtid  Disconnect TID
    Boolean
    Disconnect TID?

smb.transaction.flags.owt  One Way Transaction
    Boolean
    One Way Transaction (no response)?

smb.uid  User ID
    Unsigned 16-bit integer
    User ID

smb.unicode_password  Unicode Password
    Byte array
    Unicode Password
```



```
smb.unicode_pwlen  Unicode Password Length
    Unsigned 16-bit integer
    Length of Unicode password

smb.units  Total Units
    Unsigned 16-bit integer
    Total number of units at server

smb.unix.capability.fcntl  FCNTL Capability
    Boolean

smb.unix.capability.posix_acl  POSIX ACL Capability
    Boolean

smb.unix.file.atime  Last access
    Date/Time stamp

smb.unix.file.dev_major  Major device
    Unsigned 64-bit integer

smb.unix.file.dev_minor  Minor device
    Unsigned 64-bit integer

smb.unix.file.file_type  File type
    Unsigned 32-bit integer

smb.unix.file.gid  GID
    Unsigned 64-bit integer

smb.unix.file.link_dest  Link destination
    String

smb.unix.file.mtime  Last modification
    Date/Time stamp

smb.unix.file.num_bytes  Number of bytes
    Unsigned 64-bit integer
    Number of bytes used to store the file

smb.unix.file.num_links  Num links
    Unsigned 64-bit integer

smb.unix.file.perms  File permissions
    Unsigned 64-bit integer

smb.unix.file.size  File size
    Unsigned 64-bit integer

smb.unix.file.stime  Last status change
    Date/Time stamp

smb.unix.file.uid  UID
    Unsigned 64-bit integer

smb.unix.file.unique_id  Unique ID
    Unsigned 64-bit integer

smb.unix.find_file.next_offset  Next entry offset
    Unsigned 32-bit integer

smb.unix.find_file.resume_key  Resume key
    Unsigned 32-bit integer

smb.unix.major_version  Major Version
    Unsigned 16-bit integer
    UNIX Major Version
```

```
smb.unix.minor_version  Minor Version
    Unsigned 16-bit integer
    UNIX Minor Version

smb.unknown  Unknown Data
    Byte array
    Unknown Data. Should be implemented by someone

smb.vc  VC Number
    Unsigned 16-bit integer
    VC Number

smb.volume.label  Label
    String
    Volume label

smb.volume.label.len  Label Length
    Unsigned 32-bit integer
    Length of volume label

smb.volume.serial  Volume Serial Number
    Unsigned 32-bit integer
    Volume serial number

smb.wct  Word Count (WCT)
    Unsigned 8-bit integer
    Word Count, count of parameter words

smb.write.mode.connectionless  Connectionless
    Boolean
    Connectionless mode requested?

smb.write.mode.message_start  Message Start
    Boolean
    Is this the start of a message?

smb.write.mode.raw  Write Raw
    Boolean
    Use WriteRawNamedPipe?

smb.write.mode.return_remaining  Return Remaining
    Boolean
    Return remaining data responses?

smb.write.mode.write_through  Write Through
    Boolean
    Write through mode requested?
```

#### **SMB MailSlot Protocol (mailslot)**

```
mailslot.class  Class
    Unsigned 16-bit integer
    MAILSLLOT Class of transaction

mailslot.name  Mailslot Name
    String
    MAILSLLOT Name of mailslot

mailslot.opcode  Opcode
    Unsigned 16-bit integer
    MAILSLLOT OpCode
```

mailslot.priority Priority  
Unsigned 16-bit integer  
MAILSLOT Priority of transaction

mailslot.size Size  
Unsigned 16-bit integer  
MAILSLOT Total size of mail data

**SMB Pipe Protocol (pipe)**

pipe.fragment Fragment  
Frame number  
Pipe Fragment

pipe.fragment.error Defragmentation error  
Frame number  
Defragmentation error due to illegal fragments

pipe.fragment.multipletails Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

pipe.fragment.overlap Fragment overlap  
Boolean  
Fragment overlaps with other fragments

pipe.fragment.overlap.conflict Conflicting data in fragment overlap  
Boolean  
Overlapping fragments contained conflicting data

pipe.fragment.toolongfragment Fragment too long  
Boolean  
Fragment contained data past end of packet

pipe.fragments Fragments  
No value  
Pipe Fragments

pipe.function Function  
Unsigned 16-bit integer  
SMB Pipe Function Code

pipe.getinfo.current\_instances Current Instances  
Unsigned 8-bit integer  
Current number of instances

pipe.getinfo.info\_level Information Level  
Unsigned 16-bit integer  
Information level of information to return

pipe.getinfo.input\_buffer\_size Input Buffer Size  
Unsigned 16-bit integer  
Actual size of buffer for incoming (client) I/O

pipe.getinfo.maximum\_instances Maximum Instances  
Unsigned 8-bit integer  
Maximum allowed number of instances

pipe.getinfo.output\_buffer\_size Output Buffer Size  
Unsigned 16-bit integer  
Actual size of buffer for outgoing (server) I/O

pipe.getinfo.pipe\_name Pipe Name  
String  
Name of pipe

pipe.getinfo.pipe\_name\_length Pipe Name Length  
Unsigned 8-bit integer  
Length of pipe name

pipe.peek.available\_bytes Available Bytes  
Unsigned 16-bit integer  
Total number of bytes available to be read from the pipe

pipe.peek.remaining\_bytes Bytes Remaining  
Unsigned 16-bit integer  
Total number of bytes remaining in the message at the head of the pipe

pipe.peek.status Pipe Status  
Unsigned 16-bit integer  
Pipe status

pipe.priority Priority  
Unsigned 16-bit integer  
SMB Pipe Priority

pipe.reassembled\_in This PDU is reassembled in  
Frame number  
The DCE/RPC PDU is completely reassembled in this frame

pipe.write\_raw.bytes\_written Bytes Written  
Unsigned 16-bit integer  
Number of bytes written to the pipe

**SMB2 (Server Message Block Protocol version 2) (smb2)**

smb2.FILE\_OBJECTID\_BUFFER FILE\_OBJECTID\_BUFFER  
No value  
A FILE\_OBJECTID\_BUFFER structure

smb2.acct Account  
String  
Account Name

smb2.aid Async Id  
Unsigned 64-bit integer  
SMB2 Async Id

smb2.allocation\_size Allocation Size  
Unsigned 64-bit integer  
SMB2 Allocation Size for this object

smb2.auth\_frame Authenticated in Frame  
Unsigned 32-bit integer  
Which frame this user was authenticated in

smb2.birth\_object\_id BirthObjectId  
ObjectID for this FID when it was originally created

smb2.birth\_volume\_id BirthVolumeId  
ObjectID for the volume where this FID was originally created

```
smb2.boot_time  Boot Time
    Date/Time stamp
    Boot Time at server

smb2.buffer_code.dynamic  Dynamic Part
    Boolean
    Whether a dynamic length blob follows

smb2.buffer_code.length  Length
    Unsigned 16-bit integer
    Length of fixed portion of PDU

smb2.capabilities  Capabilities
    Unsigned 32-bit integer

smb2.capabilities.dfs  DFS
    Boolean
    If the host supports dfs

smb2.chain_offset  Chain Offset
    Unsigned 32-bit integer
    SMB2 Chain Offset

smb2.channel  Channel
    Unsigned 32-bit integer
    Channel

smb2.class  Class
    Unsigned 8-bit integer
    Info class

smb2.client_guid  Client Guid
    Client GUID

smb2.close.flags  Close Flags
    Unsigned 16-bit integer
    close flags

smb2.cmd  Command
    Unsigned 16-bit integer
    SMB2 Command Opcode

smb2.compression_format  Compression Format
    Unsigned 16-bit integer
    Compression to use

smb2.create.action  Create Action
    Unsigned 32-bit integer
    Create Action

smb2.create.chain_data  Data
    No value
    Chain Data

smb2.create.chain_offset  Chain Offset
    Unsigned 32-bit integer
    Offset to next entry in chain or 0

smb2.create.data_length  Data Length
    Unsigned 32-bit integer
    Length Data or 0
```

```
smb2.create.disposition  Disposition
    Unsigned 32-bit integer
    Create disposition, what to do if the file does/does not exist
smb2.create.extrainfo  ExtraInfo
    No value
    Create ExtraInfo
smb2.create.oplock  Oplock
    Unsigned 8-bit integer
    Oplock type
smb2.create.time  Create
    Date/Time stamp
    Time when this object was created
smb2.create_flags  Create Flags
    Unsigned 64-bit integer
smb2.credits.granted  Credits granted
    Unsigned 16-bit integer
smb2.credits.requested  Credits requested
    Unsigned 16-bit integer
smb2.current_time  Current Time
    Date/Time stamp
    Current Time at server
smb2.data_offset  Data Offset
    Unsigned 16-bit integer
    Offset to data
smb2.delete_pending  Delete Pending
    Unsigned 8-bit integer
    Delete Pending
smb2.dialect  Dialect
    Unsigned 16-bit integer
smb2.dialect_count  Dialect count
    Unsigned 16-bit integer
smb2.disposition.delete_on_close  Delete on close
    Boolean
smb2.domain  Domain
    String
    Domain Name
smb2.domain_id  DomainId
smb2.ea.data  EA Data
    String
    EA Data
smb2.ea.data_len  EA Data Length
    Unsigned 8-bit integer
    EA Data Length
smb2.ea.flags  EA Flags
    Unsigned 8-bit integer
    EA Flags
```

```
smb2.ea.name  EA Name
  String
  EA Name

smb2.ea.name_len  EA Name Length
  Unsigned 8-bit integer
  EA Name Length

smb2.ea_size  EA Size
  Unsigned 32-bit integer
  Size of EA data

smb2.eof  End Of File
  Unsigned 64-bit integer
  SMB2 End Of File/File size

smb2.epoch  Epoch
  Unsigned 16-bit integer

smb2.fid  File Id
  SMB2 File Id

smb2.file_id  File Id
  Unsigned 64-bit integer
  SMB2 File Id

smb2.file_info.infolevel  InfoLevel
  Unsigned 8-bit integer
  File_Info Infolevel

smb2.filename  Filename
  String
  Name of the file

smb2.filename.len  Filename Length
  Unsigned 16-bit integer
  Length of the file name

smb2.find.continue_flags  Continue Flags
  Unsigned 32-bit integer
  Find Continue Flags

smb2.find.infolevel  Info Level
  Unsigned 32-bit integer
  Find_Info Infolevel

smb2.find.pattern  Search Pattern
  String
  Find pattern

smb2.flags.async  Async command
  Boolean

smb2.flags.chained  Chained
  Boolean
  Whether the pdu continues a chain or not

smb2.flags.dfs  DFS operation
  Boolean

smb2.flags.response  Response
  Boolean
  Whether this is an SMB2 Request or Response
```

```
smb2.flags.signature  Signing
  Boolean
  Whether the pdu is signed or not

smb2.fs_info.infolevel  InfoLevel
  Unsigned 8-bit integer
  Fs_Info Infolevel

smb2.header_len  Header Length
  Unsigned 16-bit integer
  SMB2 Size of Header

smb2.host  Host
  String
  Host Name

smb2.impersonation.level  Impersonation
  Unsigned 32-bit integer
  Impersonation level

smb2.infolevel  InfoLevel
  Unsigned 8-bit integer
  Infolevel

smb2.ioctl.function  Function
  Unsigned 32-bit integer
  Ioctl function

smb2.ioctl.function.access  Access
  Unsigned 32-bit integer
  Access for Ioctl

smb2.ioctl.function.device  Device
  Unsigned 32-bit integer
  Device for Ioctl

smb2.ioctl.function.function  Function
  Unsigned 32-bit integer
  Function for Ioctl

smb2.ioctl.function.method  Method
  Unsigned 32-bit integer
  Method for Ioctl

smb2.ioctl.in  In Data
  No value
  Ioctl In

smb2.ioctl.out  Out Data
  No value
  Ioctl Out

smb2.ioctl.shadow_copy.count  Count
  Unsigned 32-bit integer
  Number of bytes for shadow copy label strings

smb2.ioctl.shadow_copy.label  Label
  String
  Shadow copy label

smb2.ioctl.shadow_copy.num_labels  Num Labels
  Unsigned 32-bit integer
  Number of shadow copy labels
```



```
smb2.ioctl.shadow_copy.num_volumes  Num Volumes
    Unsigned 32-bit integer
    Number of shadow copy volumes

smb2.is_directory  Is Directory
    Unsigned 8-bit integer
    Is this a directory?

smb2.last_access.time  Last Access
    Date/Time stamp
    Time when this object was last accessed

smb2.last_change.time  Last Change
    Date/Time stamp
    Time when this object was last changed

smb2.last_write.time  Last Write
    Date/Time stamp
    Time when this object was last written to

smb2.max_ioctl_out_size  Max Ioctl Out Size
    Unsigned 32-bit integer
    SMB2 Maximum ioctl out size

smb2.max_read_size  Max Read Size
    Unsigned 32-bit integer
    Maximum size of a read

smb2.max_response_size  Max Response Size
    Unsigned 32-bit integer
    SMB2 Maximum response size

smb2.max_trans_size  Max Transaction Size
    Unsigned 32-bit integer
    Maximum size of a transaction

smb2.max_write_size  Max Write Size
    Unsigned 32-bit integer
    Maximum size of a write

smb2.next_offset  Next Offset
    Unsigned 32-bit integer
    Offset to next buffer or 0

smb2.nlinks  Number of Links
    Unsigned 32-bit integer
    Number of links to this object

smb2.nt_status  NT Status
    Unsigned 32-bit integer
    NT Status code

smb2.num_vc  VC Num
    Unsigned 8-bit integer
    Number of VCs

smb2.object_id  ObjectID
    ObjectID for this FID

smb2.olb.length  Length
    Unsigned 32-bit integer
    Length of the buffer
```

```
smb2.olb.offset  Offset
  Unsigned 32-bit integer
  Offset to the buffer

smb2.pid  Process Id
  Unsigned 32-bit integer
  SMB2 Process Id

smb2.previous_sesid  Previous Session Id
  Unsigned 64-bit integer
  SMB2 Previous Session Id

smb2.read_data  Read Data
  Byte array
  SMB2 Data that is read

smb2.read_length  Read Length
  Unsigned 32-bit integer
  Amount of data to read

smb2.read_offset  Read Offset
  Unsigned 64-bit integer
  At which offset to read the data

smb2.required_size  Required Buffer Size
  Unsigned 32-bit integer
  SMB2 required buffer size

smb2.response_buffer_offset  Response Buffer Offset
  Unsigned 16-bit integer
  Offset of the response buffer

smb2.response_in  Response in
  Frame number
  The response to this packet is in this packet

smb2.response_size  Response Size
  Unsigned 32-bit integer
  SMB2 response size

smb2.response_to  Response to
  Frame number
  This packet is a response to the packet in this frame

smb2.sec_info.infolevel  InfoLevel
  Unsigned 8-bit integer
  Sec_Info Infolevel

smb2.sec_mode  Security mode
  Unsigned 8-bit integer

smb2.sec_mode.sign_enabled  Signing enabled
  Boolean
  Is signing enabled

smb2.sec_mode.sign_required  Signing required
  Boolean
  Is signing required

smb2.security_blob  Info
  Byte array
  Find Info
```

```
smb2.security_blob_len  Security Blob Length
    Unsigned 16-bit integer
    Security blob length

smb2.security_blob_offset  Security Blob Offset
    Unsigned 16-bit integer
    Offset into the SMB2 PDU of the blob

smb2.seq_num  Command Sequence Number
    Signed 64-bit integer
    SMB2 Command Sequence Number

smb2.server_guid  Server Guid
    Server GUID

smb2.ses_flags.guest  Guest
    Boolean

smb2.ses_flags.null  Null
    Boolean

smb2.sesid  Session Id
    Unsigned 64-bit integer
    SMB2 Session Id

smb2.session_flags  Session Flags
    Unsigned 16-bit integer

smb2.setinfo_offset  Setinfo Offset
    Unsigned 16-bit integer
    SMB2 setinfo offset

smb2.setinfo_size  Setinfo Size
    Unsigned 32-bit integer
    SMB2 setinfo size

smb2.share.caching  Caching policy
    Unsigned 32-bit integer

smb2.share_caps  Share Capabilities
    Unsigned 32-bit integer

smb2.share_caps.dfs  dfs
    Boolean

smb2.share_flags  Share flags
    Unsigned 32-bit integer
    share flags

smb2.share_flags.access_based_dir_enum  access_based_dir_enum
    Boolean

smb2.share_flags.allow_namespace_caching  allow_namespace_caching
    Boolean

smb2.share_flags.dfs  dfs
    Boolean

smb2.share_flags.dfs_root  dfs_root
    Boolean

smb2.share_flags.force_shared_delete  force_shared_delete
    Boolean
```

```
smb2.share_flags.restrict_exclusive_opens  restrict_exclusive_opens
Boolean

smb2.share_type  Share Type
Unsigned 16-bit integer
Type of share

smb2.signature  Signature
Byte array
Signature

smb2.smb2_file_access_info  SMB2_FILE_ACCESS_INFO
No value
SMB2_FILE_ACCESS_INFO structure

smb2.smb2_file_alignment_info  SMB2_FILE_ALIGNMENT_INFO
No value
SMB2_FILE_ALIGNMENT_INFO structure

smb2.smb2_file_all_info  SMB2_FILE_ALL_INFO
No value
SMB2_FILE_ALL_INFO structure

smb2.smb2_file_allocation_info  SMB2_FILE_ALLOCATION_INFO
No value
SMB2_FILE_ALLOCATION_INFO structure

smb2.smb2_file_alternate_name_info  SMB2_FILE_ALTERNATE_NAME_INFO
No value
SMB2_FILE_ALTERNATE_NAME_INFO structure

smb2.smb2_file_attribute_tag_info  SMB2_FILE_ATTRIBUTE_TAG_INFO
No value
SMB2_FILE_ATTRIBUTE_TAG_INFO structure

smb2.smb2_file_basic_info  SMB2_FILE_BASIC_INFO
No value
SMB2_FILE_BASIC_INFO structure

smb2.smb2_file_compression_info  SMB2_FILE_COMPRESSION_INFO
No value
SMB2_FILE_COMPRESSION_INFO structure

smb2.smb2_file_disposition_info  SMB2_FILE_DISPOSITION_INFO
No value
SMB2_FILE_DISPOSITION_INFO structure

smb2.smb2_file_ea_info  SMB2_FILE_EA_INFO
No value
SMB2_FILE_EA_INFO structure

smb2.smb2_file_endoffile_info  SMB2_FILE_ENDOFFILE_INFO
No value
SMB2_FILE_ENDOFFILE_INFO structure

smb2.smb2_file_info_of  SMB2_FILE_INFO_of
No value
SMB2_FILE_INFO_of structure

smb2.smb2_file_internal_info  SMB2_FILE_INTERNAL_INFO
No value
SMB2_FILE_INTERNAL_INFO structure
```

```
smb2.smb2_file_mode_info  SMB2_FILE_MODE_INFO
    No value
    SMB2_FILE_MODE_INFO structure

smb2.smb2_file_network_open_info  SMB2_FILE_NETWORK_OPEN_INFO
    No value
    SMB2_FILE_NETWORK_OPEN_INFO structure

smb2.smb2_file_pipe_info  SMB2_FILE_PIPE_INFO
    No value
    SMB2_FILE_PIPE_INFO structure

smb2.smb2_file_position_info  SMB2_FILE_POSITION_INFO
    No value
    SMB2_FILE_POSITION_INFO structure

smb2.smb2_file_rename_info  SMB2_FILE_RENAME_INFO
    No value
    SMB2_FILE_RENAME_INFO structure

smb2.smb2_file_standard_info  SMB2_FILE_STANDARD_INFO
    No value
    SMB2_FILE_STANDARD_INFO structure

smb2.smb2_file_stream_info  SMB2_FILE_STREAM_INFO
    No value
    SMB2_FILE_STREAM_INFO structure

smb2.smb2_fs_info_01  SMB2_FS_INFO_01
    No value
    SMB2_FS_INFO_01 structure

smb2.smb2_fs_info_03  SMB2_FS_INFO_03
    No value
    SMB2_FS_INFO_03 structure

smb2.smb2_fs_info_04  SMB2_FS_INFO_04
    No value
    SMB2_FS_INFO_04 structure

smb2.smb2_fs_info_05  SMB2_FS_INFO_05
    No value
    SMB2_FS_INFO_05 structure

smb2.smb2_fs_info_06  SMB2_FS_INFO_06
    No value
    SMB2_FS_INFO_06 structure

smb2.smb2_fs_info_07  SMB2_FS_INFO_07
    No value
    SMB2_FS_INFO_07 structure

smb2.smb2_fs_objectid_info  SMB2_FS_OBJECTID_INFO
    No value
    SMB2_FS_OBJECTID_INFO structure

smb2.smb2_sec_info_00  SMB2_SEC_INFO_00
    No value
    SMB2_SEC_INFO_00 structure

smb2.tag  Tag
    String
    Tag of chain entry
```

smb2.tcon\_frame Connected in Frame  
Unsigned 32-bit integer  
Which frame this share was connected in

smb2.tid Tree Id  
Unsigned 32-bit integer  
SMB2 Tree Id

smb2.time Time from request  
Time duration  
Time between Request and Response for SMB2 cmds

smb2.tree Tree  
String  
Name of the Tree/Share

smb2.unknown unknown  
Byte array  
Unknown bytes

smb2.unknown.timestamp Timestamp  
Date/Time stamp  
Unknown timestamp

smb2.write\_data Write Data  
Byte array  
SMB2 Data to be written

smb2.write\_length Write Length  
Unsigned 32-bit integer  
Amount of data to write

smb2.write\_offset Write Offset  
Unsigned 64-bit integer  
At which offset to write the data

**SNA-over-Ethernet (snaeth)**

snaeth\_len Length  
Unsigned 16-bit integer  
Length of LLC payload

**SNMP Multiplex Protocol (smux)**

smux.pdutype PDU type  
Unsigned 8-bit integer

smux.version Version  
Unsigned 8-bit integer

**SPNEGO-KRB5 (spnego-krb5)****SPRAY (spray)**

spray.clock clock  
No value  
Clock

spray.counter counter  
Unsigned 32-bit integer  
Counter

```
spray.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

spray.sec  sec
    Unsigned 32-bit integer
    Seconds

spray.sprayarr  Data
    Byte array
    Sprayarr data

spray.usec  usec
    Unsigned 32-bit integer
    Microseconds
```

### SS7 SCCP-User Adaptation Layer (sua)

```
sua.affected_point_code_mask  Mask
    Unsigned 8-bit integer

sua.affected_pointcode_dpc  Affected DPC
    Unsigned 24-bit integer

sua.asp_capabilities_a_bit  Protocol Class 3
    Boolean

sua.asp_capabilities_b_bit  Protocol Class 2
    Boolean

sua.asp_capabilities_c_bit  Protocol Class 1
    Boolean

sua.asp_capabilities_d_bit  Protocol Class 0
    Boolean

sua.asp_capabilities_interworking  Interworking
    Unsigned 8-bit integer

sua.asp_capabilities_reserved  Reserved
    Byte array

sua.asp_capabilities_reserved_bits  Reserved Bits
    Unsigned 8-bit integer

sua.asp_identifier  ASP Identifier
    Unsigned 32-bit integer

sua.cause_user_cause  Cause
    Unsigned 16-bit integer

sua.cause_user_user  User
    Unsigned 16-bit integer

sua.congestion_level  Congestion Level
    Unsigned 32-bit integer

sua.correlation_id  Correlation ID
    Unsigned 32-bit integer

sua.credit  Credit
    Unsigned 32-bit integer

sua.data  Data
    Byte array
```

```
sua.deregistration_status  Deregistration status
    Unsigned 32-bit integer
sua.destination_address_gt_bit  Include GT
    Boolean
sua.destination_address_pc_bit  Include PC
    Boolean
sua.destination_address_reserved_bits  Reserved Bits
    Unsigned 16-bit integer
sua.destination_address_routing_indicator  Routing Indicator
    Unsigned 16-bit integer
sua.destination_address_ssn_bit  Include SSN
    Boolean
sua.destination_reference_number  Destination Reference Number
    Unsigned 32-bit integer
sua.diagnostic_information  Diagnostic Information
    Byte array
sua.drn_label_end  End
    Unsigned 8-bit integer
sua.drn_label_start  Start
    Unsigned 8-bit integer
sua.drn_label_value  Label Value
    Unsigned 16-bit integer
sua.error_code  Error code
    Unsigned 32-bit integer
sua.global_title_nature_of_address  Nature of Address
    Unsigned 8-bit integer
sua.global_title_number_of_digits  Number of Digits
    Unsigned 8-bit integer
sua.global_title_numbering_plan  Numbering Plan
    Unsigned 8-bit integer
sua.global_title_signals  Global Title
    Byte array
sua.global_title_translation_type  Translation Type
    Unsigned 8-bit integer
sua.gt_reserved  Reserved
    Byte array
sua.gti  GTI
    Unsigned 8-bit integer
sua.heartbeat_data  Heartbeat Data
    Byte array
sua.hostname.name  Hostname
    String
sua.importance_inportance  Importance
    Unsigned 8-bit integer
```



```
sua.importance_reserved  Reserved
    Byte array
sua.info_string  Info string
    String
sua.ipv4_address  IP Version 4 address
    IPv4 address
sua.ipv6_address  IP Version 6 address
    IPv6 address
sua.local_routing_key_identifier  Local routing key identifier
    Unsigned 32-bit integer
sua.message_class  Message Class
    Unsigned 8-bit integer
sua.message_length  Message Length
    Unsigned 32-bit integer
sua.message_priority_priority  Message Priority
    Unsigned 8-bit integer
sua.message_priority_reserved  Reserved
    Byte array
sua.message_type  Message Type
    Unsigned 8-bit integer
sua.network_appearance  Network Appearance
    Unsigned 32-bit integer
sua.parameter_length  Parameter Length
    Unsigned 16-bit integer
sua.parameter_padding  Padding
    Byte array
sua.parameter_tag  Parameter Tag
    Unsigned 16-bit integer
sua.parameter_value  Parameter Value
    Byte array
sua.point_code  Point Code
    Unsigned 32-bit integer
sua.protocol_class_reserved  Reserved
    Byte array
sua.protocol_class_class  Protocol Class
    Unsigned 8-bit integer
sua.protocol_class_return_on_error_bit  Return On Error Bit
    Boolean
sua.receive_sequence_number_number  Receive Sequence Number P(R)
    Unsigned 8-bit integer
sua.receive_sequence_number_reserved  Reserved
    Byte array
sua.receive_sequence_number_spare_bit  Spare Bit
    Boolean
```

```
sua.registration_status  Registration status
    Unsigned 32-bit integer
sua.reserved  Reserved
    Byte array
sua.routing_context  Routing context
    Unsigned 32-bit integer
sua.routing_key_identifier  Local Routing Key Identifier
    Unsigned 32-bit integer
sua.sccp_cause_reserved  Reserved
    Byte array
sua.sccp_cause_type  Cause Type
    Unsigned 8-bit integer
sua.sccp_cause_value  Cause Value
    Unsigned 8-bit integer
sua.segmentation_first_bit  First Segment Bit
    Boolean
sua.segmentation_number_of_remaining_segments  Number of Remaining Segments
    Unsigned 8-bit integer
sua.segmentation_reference  Segmentation Reference
    Unsigned 24-bit integer
sua.sequence_control_sequence_control  Sequence Control
    Unsigned 32-bit integer
sua.sequence_number_more_data_bit  More Data Bit
    Boolean
sua.sequence_number_receive_sequence_number  Receive Sequence Number P(R)
    Unsigned 8-bit integer
sua.sequence_number_reserved  Reserved
    Byte array
sua.sequence_number_sent_sequence_number  Sent Sequence Number P(S)
    Unsigned 8-bit integer
sua.sequence_number_spare_bit  Spare Bit
    Boolean
sua.smi_reserved  Reserved
    Byte array
sua.smi_smi  SMI
    Unsigned 8-bit integer
sua.source_address_gt_bit  Include GT
    Boolean
sua.source_address_pc_bit  Include PC
    Boolean
sua.source_address_reserved_bits  Reserved Bits
    Unsigned 16-bit integer
sua.source_address_routing_indicator  Routing Indicator
    Unsigned 16-bit integer
```

```
sua.source_address_ssn_bit  Include SSN
    Boolean
sua.source_reference_number  Source Reference Number
    Unsigned 32-bit integer
sua.ss7_hop_counter_counter  SS7 Hop Counter
    Unsigned 8-bit integer
sua.ss7_hop_counter_reserved  Reserved
    Byte array
sua.ssn  Subsystem Number
    Unsigned 8-bit integer
sua.ssn_reserved  Reserved
    Byte array
sua.status_info  Status info
    Unsigned 16-bit integer
sua.status_type  Status type
    Unsigned 16-bit integer
sua.tid_label_end  End
    Unsigned 8-bit integer
sua.tid_label_start  Start
    Unsigned 8-bit integer
sua.tid_label_value  Label Value
    Unsigned 16-bit integer
sua.traffic_mode_type  Traffic mode Type
    Unsigned 32-bit integer
sua.version  Version
    Unsigned 8-bit integer
```

**SSCF-NNI (sscf-nni)**

```
sscf-nni.spare  Spare
    Unsigned 24-bit integer
sscf-nni.status  Status
    Unsigned 8-bit integer
```

**SSCOP (sscop)**

```
sscop.mr  N(MR)
    Unsigned 24-bit integer
sscop.ps  N(PS)
    Unsigned 24-bit integer
sscop.r  N(R)
    Unsigned 24-bit integer
sscop.s  N(S)
    Unsigned 24-bit integer
sscop.sq  N(SQ)
    Unsigned 8-bit integer
sscop.stat.count  Number of NACKed pdus
    Unsigned 32-bit integer
```

sscop.stat.s N(S)  
 Unsigned 24-bit integer

sscop.type PDU Type  
 Unsigned 8-bit integer

### SSH Protocol (ssh)

ssh.compression\_algorithms\_client\_to\_server compression\_algorithms\_client\_to\_server  
 String  
 SSH compression\_algorithms\_client\_to\_server string

ssh.compression\_algorithms\_client\_to\_server\_length compression\_algorithms\_client\_to\_server\_length  
 Unsigned 32-bit integer  
 SSH compression\_algorithms\_client\_to\_server length

ssh.compression\_algorithms\_server\_to\_client compression\_algorithms\_server\_to\_client  
 String  
 SSH compression\_algorithms\_server\_to\_client string

ssh.compression\_algorithms\_server\_to\_client\_length compression\_algorithms\_server\_to\_client\_length  
 Unsigned 32-bit integer  
 SSH compression\_algorithms\_server\_to\_client length

ssh.cookie Cookie  
 Byte array  
 SSH Cookie

ssh.encrypted\_packet Encrypted Packet  
 Byte array  
 SSH Protocol Packet

ssh.encryption\_algorithms\_client\_to\_server encryption\_algorithms\_client\_to\_server  
 String  
 SSH encryption\_algorithms\_client\_to\_server string

ssh.encryption\_algorithms\_client\_to\_server\_length encryption\_algorithms\_client\_to\_server\_length  
 Unsigned 32-bit integer  
 SSH encryption\_algorithms\_client\_to\_server length

ssh.encryption\_algorithms\_server\_to\_client encryption\_algorithms\_server\_to\_client  
 String  
 SSH encryption\_algorithms\_server\_to\_client string

ssh.encryption\_algorithms\_server\_to\_client\_length encryption\_algorithms\_server\_to\_client\_length  
 Unsigned 32-bit integer  
 SSH encryption\_algorithms\_server\_to\_client length

ssh.kex\_algorithms kex\_algorithms string  
 String  
 SSH kex\_algorithms string

ssh.kex\_algorithms\_length kex\_algorithms length  
 Unsigned 32-bit integer  
 SSH kex\_algorithms length

ssh.languages\_client\_to\_server languages\_client\_to\_server string  
 String  
 SSH languages\_client\_to\_server string

ssh.languages\_client\_to\_server\_length languages\_client\_to\_server length  
 Unsigned 32-bit integer  
 SSH languages\_client\_to\_server length

```
ssh.languages_server_to_client  languages_server_to_client string
    String
    SSH languages_server_to_client string
ssh.languages_server_to_client_length  languages_server_to_client length
    Unsigned 32-bit integer
    SSH languages_server_to_client length
ssh.mac_algorithms_client_to_server  mac_algorithms_client_to_server string
    String
    SSH mac_algorithms_client_to_server string
ssh.mac_algorithms_client_to_server_length  mac_algorithms_client_to_server leng
    Unsigned 32-bit integer
    SSH mac_algorithms_client_to_server length
ssh.mac_algorithms_server_to_client  mac_algorithms_server_to_client string
    String
    SSH mac_algorithms_server_to_client string
ssh.mac_algorithms_server_to_client_length  mac_algorithms_server_to_client leng
    Unsigned 32-bit integer
    SSH mac_algorithms_server_to_client length
ssh.mac_string  MAC String
    String
    SSH MAC String
ssh.message_code  Message Code
    Unsigned 8-bit integer
    SSH Message Code
ssh.packet_length  Packet Length
    Unsigned 32-bit integer
    SSH packet length
ssh.padding_length  Padding Length
    Unsigned 8-bit integer
    SSH Packet Number
ssh.padding_string  Padding String
    String
    SSH Padding String
ssh.payload  Payload
    Byte array
    SSH Payload
ssh.protocol  Protocol
    String
    SSH Protocol
ssh.server_host_key_algorithms  server_host_key_algorithms string
    String
    SSH server_host_key_algorithms string
ssh.server_host_key_algorithms_length  server_host_key_algorithms length
    Unsigned 32-bit integer
    SSH server_host_key_algorithms length
```

**STANAG 4406 Military Message (s4406)**

```
s4406.Acpl27MessageIdentifier  Acpl27MessageIdentifier
    String
    s4406.Acpl27MessageIdentifier

s4406.Acpl27NotificationType  Acpl27NotificationType
    Byte array
    s4406.Acpl27NotificationType

s4406.AddressListDesignator  AddressListDesignator
    No value
    s4406.AddressListDesignator

s4406.AddressListDesignatorSeq  AddressListDesignatorSeq
    Unsigned 32-bit integer
    s4406.AddressListDesignatorSeq

s4406.AddressListDesignatorSeq_item  Item
    No value
    s4406.AddressListDesignator

s4406.CodressMessage  CodressMessage
    Signed 32-bit integer
    s4406.CodressMessage

s4406.CopyPrecedence  CopyPrecedence
    Signed 32-bit integer
    s4406.CopyPrecedence

s4406.DistributionCodes  DistributionCodes
    No value
    s4406.DistributionCodes

s4406.ExemptedAddress  ExemptedAddress
    No value
    s4406.ExemptedAddress

s4406.ExemptedAddressSeq  ExemptedAddressSeq
    Unsigned 32-bit integer
    s4406.ExemptedAddressSeq

s4406.ExemptedAddressSeq_item  Item
    No value
    s4406.ExemptedAddress

s4406.ExtendedAuthorisationInfo  ExtendedAuthorisationInfo
    String
    s4406.ExtendedAuthorisationInfo

s4406.HandlingInstructions  HandlingInstructions
    Unsigned 32-bit integer
    s4406.HandlingInstructions

s4406.HandlingInstructions_item  Item
    String
    s4406.MilitaryString

s4406.InformationObject  InformationObject
    Unsigned 32-bit integer
    s4406.InformationObject
```

```
s4406.MMMMessageData  MMMMessageData
    No value
    s4406.MMMMessageData

s4406.MMMMessageParameters  MMMMessageParameters
    No value
    s4406.MMMMessageParameters

s4406.MessageInstructions  MessageInstructions
    Unsigned 32-bit integer
    s4406.MessageInstructions

s4406.MessageInstructions_item  Item
    String
    s4406.MilitaryString

s4406.MessageType  MessageType
    No value
    s4406.MessageType

s4406.OriginatorPlad  OriginatorPlad
    String
    s4406.OriginatorPlad

s4406.OriginatorReference  OriginatorReference
    String
    s4406.OriginatorReference

s4406.OtherRecipientDesignator  OtherRecipientDesignator
    No value
    s4406.OtherRecipientDesignator

s4406.OtherRecipientDesignatorSeq  OtherRecipientDesignatorSeq
    Unsigned 32-bit integer
    s4406.OtherRecipientDesignatorSeq

s4406.OtherRecipientDesignatorSeq_item  Item
    No value
    s4406.OtherRecipientDesignator

s4406.PilotInformation  PilotInformation
    No value
    s4406.PilotInformation

s4406.PilotInformationSeq  PilotInformationSeq
    Unsigned 32-bit integer
    s4406.PilotInformationSeq

s4406.PilotInformationSeq_item  Item
    No value
    s4406.PilotInformation

s4406.PrimaryPrecedence  PrimaryPrecedence
    Signed 32-bit integer
    s4406.PrimaryPrecedence

s4406.PriorityLevelQualifier  PriorityLevelQualifier
    Unsigned 32-bit integer
    s4406.PriorityLevelQualifier

s4406.SecurityInformationLabels  SecurityInformationLabels
    No value
    s4406.SecurityInformationLabels
```

```
s4406.body_part_security_label  body-part-security-label
    No value
    x411.SecurityLabel

s4406.body_part_security_labels  body-part-security-labels
    Unsigned 32-bit integer
    s4406.SEQUENCE_OF_BodyPartSecurityLabel

s4406.body_part_security_labels_item  Item
    No value
    s4406.BodyPartSecurityLabel

s4406.body_part_sequence_number  body-part-sequence-number
    Signed 32-bit integer
    s4406.BodyPartSequenceNumber

s4406.content_security_label  content-security-label
    No value
    x411.SecurityLabel

s4406.designator  designator
    String
    s4406.MilitaryString

s4406.dist_Extensions  dist-Extensions
    Unsigned 32-bit integer
    s4406.SEQUENCE_OF_DistributionExtensionField

s4406.dist_Extensions_item  Item
    No value
    s4406.DistributionExtensionField

s4406.dist_type  dist-type
    s4406.OBJECT_IDENTIFIER

s4406.dist_value  dist-value
    No value
    s4406.T_dist_value

s4406.heading_security_label  heading-security-label
    No value
    x411.SecurityLabel

s4406.identifier  identifier
    String
    s4406.MessageIdentifier

s4406.listName  listName
    No value
    x420.ORDescriptor

s4406.mm  mm
    No value
    x420.IPM

s4406.mn  mn
    No value
    x420.IPN

s4406.negative  negative
    Boolean
```



```

s4406.notificationRequest notificationRequest
    Signed 32-bit integer
    s4406.AddressListRequest

s4406.pilotHandling pilotHandling
    Unsigned 32-bit integer
    s4406.SEQUENCE_OF_MilitaryString

s4406.pilotHandling_item Item
    String
    s4406.MilitaryString

s4406.pilotPrecedence pilotPrecedence
    Signed 32-bit integer
    s4406.PilotPrecedence

s4406.pilotRecipient pilotRecipient
    Unsigned 32-bit integer
    s4406.SEQUENCE_OF_ORDescriptor

s4406.pilotRecipient_item Item
    No value
    x420.ORDescriptor

s4406.pilotSecurity pilotSecurity
    No value
    x411.SecurityLabel

s4406.positive positive
    Boolean

s4406.replyRequest replyRequest
    Signed 32-bit integer
    s4406.AddressListRequest

s4406.sics sics
    Unsigned 32-bit integer
    s4406.SEQUENCE_OF_Sic

s4406.sics_item Item
    String
    s4406.Sic

s4406.transfer transfer
    Boolean

s4406.type type
    Signed 32-bit integer
    s4406.TypeMessage

```

**STANAG 5066 (SIS layer) (s5066)**

```

s5066.01.rank Rank
    Unsigned 8-bit integer

s5066.01.sapid Sap ID
    Unsigned 8-bit integer

s5066.01.unused (Unused)
    Unsigned 8-bit integer

s5066.03.mtu MTU
    Unsigned 16-bit integer

```

```
s5066.03.sapid Sap ID
    Unsigned 8-bit integer
s5066.03.unused (Unused)
    Unsigned 8-bit integer
s5066.04.reason Reason
    Unsigned 8-bit integer
s5066.05.reason Reason
    Unsigned 8-bit integer
s5066.06.priority Priority
    Unsigned 8-bit integer
s5066.06.sapid Remote Sap ID
    Unsigned 8-bit integer
s5066.06.type Hardlink type
    Unsigned 8-bit integer
s5066.08.priority Priority
    Unsigned 8-bit integer
s5066.08.sapid Remote Sap ID
    Unsigned 8-bit integer
s5066.08.status Remote node status
    Unsigned 8-bit integer
s5066.08.type Hardlink type
    Unsigned 8-bit integer
s5066.09.priority Priority
    Unsigned 8-bit integer
s5066.09.reason Reason
    Unsigned 8-bit integer
s5066.09.sapid Remote Sap ID
    Unsigned 8-bit integer
s5066.09.type Hardlink type
    Unsigned 8-bit integer
s5066.10.priority Priority
    Unsigned 8-bit integer
s5066.10.reason Reason
    Unsigned 8-bit integer
s5066.10.sapid Remote Sap ID
    Unsigned 8-bit integer
s5066.10.type Hardlink type
    Unsigned 8-bit integer
s5066.11.priority Priority
    Unsigned 8-bit integer
s5066.11.sapid Remote Sap ID
    Unsigned 8-bit integer
s5066.11.status Remote node status
    Unsigned 8-bit integer
```

```
s5066.11.type Hardlink type
    Unsigned 8-bit integer
s5066.12.priority Priority
    Unsigned 8-bit integer
s5066.12.sapid Remote Sap ID
    Unsigned 8-bit integer
s5066.12.type Hardlink type
    Unsigned 8-bit integer
s5066.13.priority Priority
    Unsigned 8-bit integer
s5066.13.reason Reason
    Unsigned 8-bit integer
s5066.13.sapid Remote Sap ID
    Unsigned 8-bit integer
s5066.13.type Hardlink type
    Unsigned 8-bit integer
s5066.14.reason Reason
    Unsigned 8-bit integer
s5066.14.status Status
    Unsigned 8-bit integer
s5066.18.body Message Body
    Byte array
s5066.18.type Message Type
    Unsigned 8-bit integer
s5066.19.body Message Body
    Byte array
s5066.19.type Message Type
    Unsigned 8-bit integer
s5066.20.priority Priority
    Unsigned 8-bit integer
s5066.20.sapid Destination Sap ID
    Unsigned 8-bit integer
s5066.20.size U_PDU Size
    Unsigned 16-bit integer
s5066.20.ttl Time-To-Live (x2 seconds)
    Unsigned 24-bit integer
s5066.21.dest_sapid Destination Sap ID
    Unsigned 8-bit integer
s5066.21.err_blocks Number of errored blocks
    Unsigned 16-bit integer
s5066.21.err_ptr Pointer to error block
    Unsigned 16-bit integer
s5066.21.err_size Size of error block
    Unsigned 16-bit integer
```

s5066.21.nrx\_blocks Number of non-received blocks  
Unsigned 16-bit integer

s5066.21.nrx\_ptr Pointer to non-received block  
Unsigned 16-bit integer

s5066.21.nrx\_size Size of non-received block  
Unsigned 16-bit integer

s5066.21.priority Priority  
Unsigned 8-bit integer

s5066.21.size U\_PDU Size  
Unsigned 16-bit integer

s5066.21.src\_sapid Source Sap ID  
Unsigned 8-bit integer

s5066.21.txmode Transmission Mode  
Unsigned 8-bit integer

s5066.22.data (Part of) Confirmed data  
Byte array

s5066.22.sapid Destination Sap ID  
Unsigned 8-bit integer

s5066.22.size U\_PDU Size  
Unsigned 16-bit integer

s5066.22.unused (Unused)  
Unsigned 8-bit integer

s5066.23.data (Part of) Rejected data  
Byte array

s5066.23.reason Reason  
Unsigned 8-bit integer

s5066.23.sapid Destination Sap ID  
Unsigned 8-bit integer

s5066.23.size U\_PDU Size  
Unsigned 16-bit integer

s5066.24.sapid Destination Sap ID  
Unsigned 8-bit integer

s5066.24.size U\_PDU Size  
Unsigned 16-bit integer

s5066.24.ttl Time-To-Live (x2 seconds)  
Unsigned 24-bit integer

s5066.24.unused (Unused)  
Unsigned 8-bit integer

s5066.25.dest\_sapid Destination Sap ID  
Unsigned 8-bit integer

s5066.25.err\_blocks Number of errored blocks  
Unsigned 16-bit integer

s5066.25.err\_ptr Pointer to error block  
Unsigned 16-bit integer

s5066.25.err\_size Size of error block  
Unsigned 16-bit integer

s5066.25.nrx\_blocks Number of non-received blocks  
Unsigned 16-bit integer

s5066.25.nrx\_ptr Pointer to non-received block  
Unsigned 16-bit integer

s5066.25.nrx\_size Size of non-received block  
Unsigned 16-bit integer

s5066.25.size U\_PDU Size  
Unsigned 16-bit integer

s5066.25.src\_sapid Source Sap ID  
Unsigned 8-bit integer

s5066.25.txmode Transmission Mode  
Unsigned 8-bit integer

s5066.25.unused (Unused)  
Unsigned 8-bit integer

s5066.26.data (Part of) Confirmed data  
Byte array

s5066.26.sapid Destination Sap ID  
Unsigned 8-bit integer

s5066.26.size U\_PDU Size  
Unsigned 16-bit integer

s5066.26.unused (Unused)  
Unsigned 8-bit integer

s5066.27.data (Part of) Rejected data  
Byte array

s5066.27.reason Reason  
Unsigned 8-bit integer

s5066.27.sapid Destination Sap ID  
Unsigned 8-bit integer

s5066.27.size U\_PDU Size  
Unsigned 16-bit integer

s5066.address.address Address  
IPv4 address

s5066.address.group Group address  
Unsigned 8-bit integer

s5066.address.size Address size (1/2 Bytes)  
Unsigned 8-bit integer

s5066.size S\_Primitive size  
Unsigned 16-bit integer

s5066.st.confirm Delivery confirmation  
Unsigned 8-bit integer

s5066.st.extended Extended field  
Unsigned 8-bit integer

```
s5066.st.order  Delivery order
                Unsigned 8-bit integer
s5066.st.retries  Minimum number of retransmissions
                Unsigned 8-bit integer
s5066.st.txmode  Transmission mode
                Unsigned 8-bit integer
s5066.sync  Sync preamble
            Unsigned 16-bit integer
s5066.type  PDU Type
            Unsigned 8-bit integer
s5066.version  S5066 version
            Unsigned 8-bit integer
```

### Scripting Service Protocol (ssp)

```
ssprotocol.message_data  Data
                        Byte array
ssprotocol.message_flags  Flags
                        Unsigned 8-bit integer
ssprotocol.message_length  Length
                        Unsigned 16-bit integer
ssprotocol.message_status  Status
                        Unsigned 32-bit integer
ssprotocol.message_type  Type
                        Unsigned 8-bit integer
```

### Secure Socket Layer (ssl)

```
pct.handshake.cert  Cert
                    Unsigned 16-bit integer
                    PCT Certificate
pct.handshake.certspec  Cert Spec
                    No value
                    PCT Certificate specification
pct.handshake.cipher  Cipher
                    Unsigned 16-bit integer
                    PCT Cipher
pct.handshake.cipherspec  Cipher Spec
                    No value
                    PCT Cipher specification
pct.handshake.exch  Exchange
                    Unsigned 16-bit integer
                    PCT Exchange
pct.handshake.exhspec  Exchange Spec
                    No value
                    PCT Exchange specification
pct.handshake.hash  Hash
                    Unsigned 16-bit integer
                    PCT Hash
```

```
pct.handshake.hashspec  Hash Spec
    No value
    PCT Hash specification

pct.handshake.server_cert  Server Cert
    No value
    PCT Server Certificate

pct.handshake.sig  Sig Spec
    Unsigned 16-bit integer
    PCT Signature

pct.msg_error_code  PCT Error Code
    Unsigned 16-bit integer
    PCT Error Code

ssl.alert_message  Alert Message
    No value
    Alert message

ssl.alert_message.desc  Description
    Unsigned 8-bit integer
    Alert message description

ssl.alert_message.level  Level
    Unsigned 8-bit integer
    Alert message level

ssl.app_data  Encrypted Application Data
    Byte array
    Payload is encrypted application data

ssl.change_cipher_spec  Change Cipher Spec Message
    No value
    Signals a change in cipher specifications

ssl.handshake  Handshake Protocol
    No value
    Handshake protocol message

ssl.handshake.cert_type  Certificate type
    Unsigned 8-bit integer
    Certificate type

ssl.handshake.cert_types  Certificate types
    No value
    List of certificate types

ssl.handshake.cert_types_count  Certificate types count
    Unsigned 8-bit integer
    Count of certificate types

ssl.handshake.certificate  Certificate
    No value
    Certificate

ssl.handshake.certificate_length  Certificate Length
    Unsigned 24-bit integer
    Length of certificate

ssl.handshake.certificates  Certificates
    No value
    List of certificates
```

ssl.handshake.certificates\_length Certificates Length  
Unsigned 24-bit integer  
Length of certificates field

ssl.handshake.challenge Challenge  
No value  
Challenge data used to authenticate server

ssl.handshake.challenge\_length Challenge Length  
Unsigned 16-bit integer  
Length of challenge field

ssl.handshake.cipher\_spec\_len Cipher Spec Length  
Unsigned 16-bit integer  
Length of cipher specs field

ssl.handshake.cipher\_suites\_length Cipher Suites Length  
Unsigned 16-bit integer  
Length of cipher suites field

ssl.handshake.cipherspec Cipher Spec  
Unsigned 24-bit integer  
Cipher specification

ssl.handshake.ciphersuite Cipher Suite  
Unsigned 16-bit integer  
Cipher suite

ssl.handshake.ciphersuites Cipher Suites  
No value  
List of cipher suites supported by client

ssl.handshake.clear\_key\_data Clear Key Data  
No value  
Clear portion of MASTER-KEY

ssl.handshake.clear\_key\_length Clear Key Data Length  
Unsigned 16-bit integer  
Length of clear key data

ssl.handshake.comp\_method Compression Method  
Unsigned 8-bit integer  
Compression Method

ssl.handshake.comp\_methods Compression Methods  
No value  
List of compression methods supported by client

ssl.handshake.comp\_methods\_length Compression Methods Length  
Unsigned 8-bit integer  
Length of compression methods field

ssl.handshake.connection\_id Connection ID  
No value  
Server's challenge to client

ssl.handshake.connection\_id\_length Connection ID Length  
Unsigned 16-bit integer  
Length of connection ID

ssl.handshake.dname Distinguished Name  
No value  
Distinguished name of a CA that server trusts



ssl.handshake.dname\_len Distinguished Name Length  
Unsigned 16-bit integer  
Length of distinguished name

ssl.handshake.dnames Distinguished Names  
No value  
List of CAs that server trusts

ssl.handshake.dnames\_len Distinguished Names Length  
Unsigned 16-bit integer  
Length of list of CAs that server trusts

ssl.handshake.encrypted\_key Encrypted Key  
No value  
Secret portion of MASTER-KEY encrypted to server

ssl.handshake.encrypted\_key\_length Encrypted Key Data Length  
Unsigned 16-bit integer  
Length of encrypted key data

ssl.handshake.extension.data Data  
Byte array  
Hello Extension data

ssl.handshake.extension.len Length  
Unsigned 16-bit integer  
Length of a hello extension

ssl.handshake.extension.type Type  
Unsigned 16-bit integer  
Hello extension type

ssl.handshake.extensions\_length Extensions Length  
Unsigned 16-bit integer  
Length of hello extensions

ssl.handshake.key\_arg Key Argument  
No value  
Key Argument (e.g., Initialization Vector)

ssl.handshake.key\_arg\_length Key Argument Length  
Unsigned 16-bit integer  
Length of key argument

ssl.handshake.length Length  
Unsigned 24-bit integer  
Length of handshake message

ssl.handshake.md5\_hash MD5 Hash  
No value  
Hash of messages, master\_secret, etc.

ssl.handshake.random\_bytes random\_bytes  
Byte array  
Random challenge used to authenticate server

ssl.handshake.random\_time gmt\_unix\_time  
Date/Time stamp  
Unix time field of random structure

ssl.handshake.session\_id Session ID  
Byte array  
Identifies the SSL session, allowing later resumption

```
ssl.handshake.session_id_hit  Session ID Hit
    Boolean
    Did the server find the client's Session ID?
ssl.handshake.session_id_length  Session ID Length
    Unsigned 8-bit integer
    Length of session ID field
ssl.handshake.sha_hash  SHA-1 Hash
    No value
    Hash of messages, master_secret, etc.
ssl.handshake.type  Handshake Message Type
    Unsigned 8-bit integer
    SSLv2 handshake message type
ssl.handshake.verify_data  Verify Data
    No value
    Opaque verification data
ssl.handshake.version  Version
    Unsigned 16-bit integer
    Maximum version supported by client
ssl.pct_handshake.type  Handshake Message Type
    Unsigned 8-bit integer
    PCT handshake message type
ssl.reassembled_in  Reassembled PDU in frame
    Frame number
    The PDU that doesn't end in this segment is reassembled in this frame
ssl.record  Record Layer
    No value
    Record layer
ssl.record.content_type  Content Type
    Unsigned 8-bit integer
    Content type
ssl.record.is_escape  Is Escape
    Boolean
    Indicates a security escape
ssl.record.length  Length
    Unsigned 16-bit integer
    Length of SSL record data
ssl.record.padding_length  Padding Length
    Unsigned 8-bit integer
    Length of padding at end of record
ssl.record.version  Version
    Unsigned 16-bit integer
    Record layer version.
ssl.segment  SSL Segment
    Frame number
    SSL Segment
ssl.segment.error  Reassembling error
    Frame number
    Reassembling error due to illegal segments
```

ssl.segment.multipletails Multiple tail segments found  
Boolean  
Several tails were found when reassembling the pdu

ssl.segment.overlap Segment overlap  
Boolean  
Segment overlaps with other segments

ssl.segment.overlap.conflict Conflicting data in segment overlap  
Boolean  
Overlapping segments contained conflicting data

ssl.segment.toolongfragment Segment too long  
Boolean  
Segment contained data past end of the pdu

ssl.segments Reassembled SSL Segments  
No value  
SSL Segments

### Sequenced Packet Protocol (spp)

spp.ack Acknowledgment Number  
Unsigned 16-bit integer

spp.alloc Allocation Number  
Unsigned 16-bit integer

spp.ctl Connection Control  
Unsigned 8-bit integer

spp.ctl.attn Attention  
Boolean

spp.ctl.eom End of Message  
Boolean

spp.ctl.send\_ack Send Ack  
Boolean

spp.ctl.sys System Packet  
Boolean

spp.dst Destination Connection ID  
Unsigned 16-bit integer

spp.rexmt\_frame Retransmitted Frame Number  
Frame number

spp.seq Sequence Number  
Unsigned 16-bit integer

spp.src Source Connection ID  
Unsigned 16-bit integer

spp.type Datastream type  
Unsigned 8-bit integer

### Sequenced Packet eXchange (spx)

spx.ack Acknowledgment Number  
Unsigned 16-bit integer

spx.alloc Allocation Number  
Unsigned 16-bit integer

```
spxctl Connection Control
    Unsigned 8-bit integer
spxctl.attn Attention
    Boolean
spxctl.eom End of Message
    Boolean
spxctl.send_ack Send Ack
    Boolean
spxctl.sys System Packet
    Boolean
spx.dst Destination Connection ID
    Unsigned 16-bit integer
spx.rexmt_frame Retransmitted Frame Number
    Frame number
spx.seq Sequence Number
    Unsigned 16-bit integer
spx.src Source Connection ID
    Unsigned 16-bit integer
spx.type Datastream type
    Unsigned 8-bit integer
```

**Serial Infrared (sir)**

```
sir.bof Beginning of frame
    Unsigned 8-bit integer
sir.ce Command escape
    Unsigned 8-bit integer
sir.eof End of frame
    Unsigned 8-bit integer
sir.fcs Frame check sequence
    Unsigned 16-bit integer
sir.fcs_bad Bad frame check sequence
    Boolean
sir.length Length
    Unsigned 16-bit integer
sir.preamble Preamble
    Byte array
```

**Server Service (srvsvc)**

```
srvsvc.opnum Operation
    Unsigned 16-bit integer
srvsvc.sec_desc_buf_len Sec Desc Buf Len
    Unsigned 32-bit integer
srvsvc.srvsvc_DFSFlags.CSC_CACHE_AUTO_REINT Csc Cache Auto Reint
    Boolean
srvsvc.srvsvc_DFSFlags.CSC_CACHE_VDO Csc Cache Vdo
    Boolean
```

```

srvsvc.srvsvc_DFSFlags.FLAGS_ACCESS_BASED_DIRECTORY_ENUM  Flags Access Based Dir
    Boolean
srvsvc.srvsvc_DFSFlags.FLAGS_ALLOW_NAMESPACE_CACHING  Flags Allow Namespace Cach
    Boolean
srvsvc.srvsvc_DFSFlags.FLAGS_FORCE_SHARED_DELETE  Flags Force Shared Delete
    Boolean
srvsvc.srvsvc_DFSFlags.FLAGS_RESTRICT_EXCLUSIVE_OPENS  Flags Restrict Exclusive
    Boolean
srvsvc.srvsvc_DFSFlags.SHARE_1005_FLAGS_DFS_ROOT  Share 1005 Flags Dfs Root
    Boolean
srvsvc.srvsvc_DFSFlags.SHARE_1005_FLAGS_IN_DFS  Share 1005 Flags In Dfs
    Boolean
srvsvc.srvsvc_NetCharDevControl.device_name  Device Name
    String
srvsvc.srvsvc_NetCharDevControl.opcode  Opcode
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevControl.server_unc  Server Unc
    String
srvsvc.srvsvc_NetCharDevCtr.ctr0  Ctr0
    No value
srvsvc.srvsvc_NetCharDevCtr.ctr1  Ctr1
    No value
srvsvc.srvsvc_NetCharDevCtr0.array  Array
    No value
srvsvc.srvsvc_NetCharDevCtr0.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevCtr1.array  Array
    No value
srvsvc.srvsvc_NetCharDevCtr1.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevEnum.ctr  Ctr
    No value
srvsvc.srvsvc_NetCharDevEnum.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevEnum.max_buffer  Max Buffer
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevEnum.resume_handle  Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevEnum.server_unc  Server Unc
    String
srvsvc.srvsvc_NetCharDevEnum.totalentries  Totalentries
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevGetInfo.device_name  Device Name
    String

```

```
srvsvc.srvsvc_NetCharDevGetInfo.info  Info
    No value
srvsvc.srvsvc_NetCharDevGetInfo.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevGetInfo.server_unc  Server Unc
    String
srvsvc.srvsvc_NetCharDevInfo.info0  Info0
    No value
srvsvc.srvsvc_NetCharDevInfo.info1  Info1
    No value
srvsvc.srvsvc_NetCharDevInfo0.device  Device
    String
srvsvc.srvsvc_NetCharDevInfo1.device  Device
    String
srvsvc.srvsvc_NetCharDevInfo1.status  Status
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevInfo1.time  Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevInfo1.user  User
    String
srvsvc.srvsvc_NetCharDevQCtr.ctr0  Ctr0
    No value
srvsvc.srvsvc_NetCharDevQCtr.ctr1  Ctr1
    No value
srvsvc.srvsvc_NetCharDevQCtr0.array  Array
    No value
srvsvc.srvsvc_NetCharDevQCtr0.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQCtr1.array  Array
    No value
srvsvc.srvsvc_NetCharDevQCtr1.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQEnum.ctr  Ctr
    No value
srvsvc.srvsvc_NetCharDevQEnum.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQEnum.max_buffer  Max Buffer
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQEnum.resume_handle  Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQEnum.server_unc  Server Unc
    String
srvsvc.srvsvc_NetCharDevQEnum.totalentries  Totalentries
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetCharDevQEnum.user    User
    String
srvsvc.srvsvc_NetCharDevQGetInfo.info  Info
    No value
srvsvc.srvsvc_NetCharDevQGetInfo.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQGetInfo.queue_name  Queue Name
    String
srvsvc.srvsvc_NetCharDevQGetInfo.server_unc  Server Unc
    String
srvsvc.srvsvc_NetCharDevQGetInfo.user    User
    String
srvsvc.srvsvc_NetCharDevQInfo.info0     Info0
    No value
srvsvc.srvsvc_NetCharDevQInfo.info1     Info1
    No value
srvsvc.srvsvc_NetCharDevQInfo0.device   Device
    String
srvsvc.srvsvc_NetCharDevQInfo1.device   Device
    String
srvsvc.srvsvc_NetCharDevQInfo1.devices  Devices
    String
srvsvc.srvsvc_NetCharDevQInfo1.num_ahead  Num Ahead
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQInfo1.priority  Priority
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQInfo1.users    Users
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQPurge.queue_name  Queue Name
    String
srvsvc.srvsvc_NetCharDevQPurge.server_unc  Server Unc
    String
srvsvc.srvsvc_NetCharDevQPurgeSelf.computer_name  Computer Name
    String
srvsvc.srvsvc_NetCharDevQPurgeSelf.queue_name  Queue Name
    String
srvsvc.srvsvc_NetCharDevQPurgeSelf.server_unc  Server Unc
    String
srvsvc.srvsvc_NetCharDevQSetInfo.info     Info
    No value
srvsvc.srvsvc_NetCharDevQSetInfo.level   Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetCharDevQSetInfo.parm_error  Parm Error
    Unsigned 32-bit integer
```

```

srvsvc.srvsvc_NetCharDevQSetInfo.queue_name  Queue Name
String
srvsvc.srvsvc_NetCharDevQSetInfo.server_unc  Server Unc
String
srvsvc.srvsvc_NetConnCtr.ctr0  Ctr0
No value
srvsvc.srvsvc_NetConnCtr.ctr1  Ctr1
No value
srvsvc.srvsvc_NetConnCtr0.array  Array
No value
srvsvc.srvsvc_NetConnCtr0.count  Count
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnCtr1.array  Array
No value
srvsvc.srvsvc_NetConnCtr1.count  Count
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnEnum.ctr  Ctr
No value
srvsvc.srvsvc_NetConnEnum.level  Level
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnEnum.max_buffer  Max Buffer
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnEnum.path  Path
String
srvsvc.srvsvc_NetConnEnum.resume_handle  Resume Handle
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnEnum.server_unc  Server Unc
String
srvsvc.srvsvc_NetConnEnum.totalentries  Totalentries
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnInfo0.conn_id  Conn Id
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnInfo1.conn_id  Conn Id
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnInfo1.conn_time  Conn Time
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnInfo1.conn_type  Conn Type
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnInfo1.num_open  Num Open
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnInfo1.num_users  Num Users
Unsigned 32-bit integer
srvsvc.srvsvc_NetConnInfo1.share  Share
String

```



```
srvsvc.srvsvc_NetConnInfo1.user  User
    String
srvsvc.srvsvc_NetDiskEnum.info  Info
    No value
srvsvc.srvsvc_NetDiskEnum.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetDiskEnum.maxlen  Maxlen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetDiskEnum.resume_handle  Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetDiskEnum.server_unc  Server Unc
    String
srvsvc.srvsvc_NetDiskEnum.totalentries  Totalentries
    Unsigned 32-bit integer
srvsvc.srvsvc_NetDiskInfo.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetDiskInfo.disks  Disks
    No value
srvsvc.srvsvc_NetDiskInfo0.disk  Disk
    No value
srvsvc.srvsvc_NetFileClose.fid  Fid
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileClose.server_unc  Server Unc
    String
srvsvc.srvsvc_NetFileCtr.ctr2  Ctr2
    No value
srvsvc.srvsvc_NetFileCtr.ctr3  Ctr3
    No value
srvsvc.srvsvc_NetFileCtr2.array  Array
    No value
srvsvc.srvsvc_NetFileCtr2.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileCtr3.array  Array
    No value
srvsvc.srvsvc_NetFileCtr3.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileEnum.ctr  Ctr
    No value
srvsvc.srvsvc_NetFileEnum.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileEnum.max_buffer  Max Buffer
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileEnum.path  Path
    String
```

```
srvsvc.srvsvc_NetFileEnum.resume_handle  Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileEnum.server_unc  Server Unc
    String
srvsvc.srvsvc_NetFileEnum.totalentries  Totalentries
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileEnum.user  User
    String
srvsvc.srvsvc_NetFileGetInfo.fid  Fid
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileGetInfo.info  Info
    No value
srvsvc.srvsvc_NetFileGetInfo.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileGetInfo.server_unc  Server Unc
    String
srvsvc.srvsvc_NetFileInfo.info2  Info2
    No value
srvsvc.srvsvc_NetFileInfo.info3  Info3
    No value
srvsvc.srvsvc_NetFileInfo2.fid  Fid
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileInfo3.fid  Fid
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileInfo3.num_locks  Num Locks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileInfo3.path  Path
    String
srvsvc.srvsvc_NetFileInfo3.permissions  Permissions
    Unsigned 32-bit integer
srvsvc.srvsvc_NetFileInfo3.user  User
    String
srvsvc.srvsvc_NetGetFileSecurity.file  File
    String
srvsvc.srvsvc_NetGetFileSecurity.sd_buf  Sd Buf
    No value
srvsvc.srvsvc_NetGetFileSecurity.securityinformation  Securityinformation
    No value
srvsvc.srvsvc_NetGetFileSecurity.server_unc  Server Unc
    String
srvsvc.srvsvc_NetGetFileSecurity.share  Share
    String
srvsvc.srvsvc_NetNameValidate.flags  Flags
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetNameValidate.name    Name
String
srvsvc.srvsvc_NetNameValidate.name_type  Name Type
Unsigned 32-bit integer
srvsvc.srvsvc_NetNameValidate.server_unc  Server Unc
String
srvsvc.srvsvc_NetPRNameCompare.flags    Flags
Unsigned 32-bit integer
srvsvc.srvsvc_NetPRNameCompare.name1    Name1
String
srvsvc.srvsvc_NetPRNameCompare.name2    Name2
String
srvsvc.srvsvc_NetPRNameCompare.name_type  Name Type
Unsigned 32-bit integer
srvsvc.srvsvc_NetPRNameCompare.server_unc  Server Unc
String
srvsvc.srvsvc_NetPathCanonicalize.can_path  Can Path
Unsigned 8-bit integer
srvsvc.srvsvc_NetPathCanonicalize.maxbuf    Maxbuf
Unsigned 32-bit integer
srvsvc.srvsvc_NetPathCanonicalize.path    Path
String
srvsvc.srvsvc_NetPathCanonicalize.pathflags  Pathflags
Unsigned 32-bit integer
srvsvc.srvsvc_NetPathCanonicalize.pathtype  Pathtype
Unsigned 32-bit integer
srvsvc.srvsvc_NetPathCanonicalize.prefix    Prefix
String
srvsvc.srvsvc_NetPathCanonicalize.server_unc  Server Unc
String
srvsvc.srvsvc_NetPathCompare.path1    Path1
String
srvsvc.srvsvc_NetPathCompare.path2    Path2
String
srvsvc.srvsvc_NetPathCompare.pathflags    Pathflags
Unsigned 32-bit integer
srvsvc.srvsvc_NetPathCompare.pathtype    Pathtype
Unsigned 32-bit integer
srvsvc.srvsvc_NetPathCompare.server_unc    Server Unc
String
srvsvc.srvsvc_NetPathType.path    Path
String
srvsvc.srvsvc_NetPathType.pathflags    Pathflags
Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetPathType.pathtype  Pathtype
    Unsigned 32-bit integer
srvsvc.srvsvc_NetPathType.server_unc  Server Unc
    String
srvsvc.srvsvc_NetRemoteTOD.info  Info
    No value
srvsvc.srvsvc_NetRemoteTOD.server_unc  Server Unc
    String
srvsvc.srvsvc_NetRemoteTODInfo.day  Day
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.elapsed  Elapsed
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.hours  Hours
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.hunds  Hunds
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.mins  Mins
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.month  Month
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.msecs  Msecs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.secs  Secs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.timezone  Timezone
    Signed 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.tinterval  Tinterval
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.weekday  Weekday
    Unsigned 32-bit integer
srvsvc.srvsvc_NetRemoteTODInfo.year  Year
    Unsigned 32-bit integer
srvsvc.srvsvc_NetServerSetServiceBitsEx.emulated_server_unc  Emulated Server Unc
    String
srvsvc.srvsvc_NetServerSetServiceBitsEx.server_unc  Server Unc
    String
srvsvc.srvsvc_NetServerSetServiceBitsEx.servicebits  Servicebits
    Unsigned 32-bit integer
srvsvc.srvsvc_NetServerSetServiceBitsEx.servicebitsofinterest  Servicebitsofinte
    Unsigned 32-bit integer
srvsvc.srvsvc_NetServerSetServiceBitsEx.transport  Transport
    String
srvsvc.srvsvc_NetServerSetServiceBitsEx.updateimmediately  Updateimmediately
    Unsigned 32-bit integer
```

```

srvsvc.srvsvc_NetServerStatisticsGet.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetServerStatisticsGet.options  Options
    Unsigned 32-bit integer
srvsvc.srvsvc_NetServerStatisticsGet.server_unc  Server Unc
    String
srvsvc.srvsvc_NetServerStatisticsGet.service  Service
    String
srvsvc.srvsvc_NetServerStatisticsGet.stat  Stat
    No value
srvsvc.srvsvc_NetServerTransportAddEx.info  Info
    No value
srvsvc.srvsvc_NetServerTransportAddEx.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetServerTransportAddEx.server_unc  Server Unc
    String
srvsvc.srvsvc_NetSessCtr.ctr0  Ctr0
    No value
srvsvc.srvsvc_NetSessCtr.ctr1  Ctr1
    No value
srvsvc.srvsvc_NetSessCtr.ctr10  Ctr10
    No value
srvsvc.srvsvc_NetSessCtr.ctr2  Ctr2
    No value
srvsvc.srvsvc_NetSessCtr.ctr502  Ctr502
    No value
srvsvc.srvsvc_NetSessCtr0.array  Array
    No value
srvsvc.srvsvc_NetSessCtr0.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessCtr1.array  Array
    No value
srvsvc.srvsvc_NetSessCtr1.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessCtr10.array  Array
    No value
srvsvc.srvsvc_NetSessCtr10.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessCtr2.array  Array
    No value
srvsvc.srvsvc_NetSessCtr2.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessCtr502.array  Array
    No value

```

```
srvsvc.srvsvc_NetSessCtr502.count    Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessDel.client      Client
    String
srvsvc.srvsvc_NetSessDel.server_unc  Server Unc
    String
srvsvc.srvsvc_NetSessDel.user        User
    String
srvsvc.srvsvc_NetSessEnum.client     Client
    String
srvsvc.srvsvc_NetSessEnum.ctr        Ctr
    No value
srvsvc.srvsvc_NetSessEnum.level      Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessEnum.max_buffer Max Buffer
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessEnum.resume_handle Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessEnum.server_unc Server Unc
    String
srvsvc.srvsvc_NetSessEnum.totalentries Totalentries
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessEnum.user       User
    String
srvsvc.srvsvc_NetSessInfo0.client    Client
    String
srvsvc.srvsvc_NetSessInfo1.client    Client
    String
srvsvc.srvsvc_NetSessInfo1.idle_time Idle Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo1.num_open  Num Open
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo1.time      Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo1.user      User
    String
srvsvc.srvsvc_NetSessInfo1.user_flags User Flags
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo10.client   Client
    String
srvsvc.srvsvc_NetSessInfo10.idle_time Idle Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo10.time     Time
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSessInfo10.user    User
    String
srvsvc.srvsvc_NetSessInfo2.client   Client
    String
srvsvc.srvsvc_NetSessInfo2.client_type Client Type
    String
srvsvc.srvsvc_NetSessInfo2.idle_time Idle Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo2.num_open Num Open
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo2.time     Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo2.user     User
    String
srvsvc.srvsvc_NetSessInfo2.user_flags User Flags
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo502.client Client
    String
srvsvc.srvsvc_NetSessInfo502.client_type Client Type
    String
srvsvc.srvsvc_NetSessInfo502.idle_time Idle Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo502.num_open Num Open
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo502.time    Time
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSessInfo502.transport Transport
    String
srvsvc.srvsvc_NetSessInfo502.user    User
    String
srvsvc.srvsvc_NetSessInfo502.user_flags User Flags
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSetFileSecurity.file File
    String
srvsvc.srvsvc_NetSetFileSecurity.sd_buf Sd Buf
    No value
srvsvc.srvsvc_NetSetFileSecurity.securityinformation Securityinformation
    No value
srvsvc.srvsvc_NetSetFileSecurity.server_unc Server Unc
    String
srvsvc.srvsvc_NetSetFileSecurity.share Share
    String
srvsvc.srvsvc_NetSetServiceBits.server_unc Server Unc
    String
```

```
srvsvc.srvsvc_NetSetServiceBits.servicebits  Servicebits
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSetServiceBits.transport  Transport
    String
srvsvc.srvsvc_NetSetServiceBits.updateimmediately  Updateimmediately
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareAdd.info  Info
    No value
srvsvc.srvsvc_NetShareAdd.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareAdd.parm_error  Parm Error
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareAdd.server_unc  Server Unc
    String
srvsvc.srvsvc_NetShareCheck.device_name  Device Name
    String
srvsvc.srvsvc_NetShareCheck.server_unc  Server Unc
    String
srvsvc.srvsvc_NetShareCheck.type  Type
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtr.ctr0  Ctr0
    No value
srvsvc.srvsvc_NetShareCtr.ctr1  Ctr1
    No value
srvsvc.srvsvc_NetShareCtr.ctr1004  Ctr1004
    No value
srvsvc.srvsvc_NetShareCtr.ctr1005  Ctr1005
    No value
srvsvc.srvsvc_NetShareCtr.ctr1006  Ctr1006
    No value
srvsvc.srvsvc_NetShareCtr.ctr1007  Ctr1007
    No value
srvsvc.srvsvc_NetShareCtr.ctr1501  Ctr1501
    No value
srvsvc.srvsvc_NetShareCtr.ctr2  Ctr2
    No value
srvsvc.srvsvc_NetShareCtr.ctr501  Ctr501
    No value
srvsvc.srvsvc_NetShareCtr.ctr502  Ctr502
    No value
srvsvc.srvsvc_NetShareCtr0.array  Array
    No value
srvsvc.srvsvc_NetShareCtr0.count  Count
    Unsigned 32-bit integer
```



```

srvsvc.srvsvc_NetShareCtrl1.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl1.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl1004.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl1004.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl1005.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl1005.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl1006.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl1006.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl1007.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl1007.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl1501.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl1501.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl2.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl2.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl501.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl501.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareCtrl502.array  Array
    No value
srvsvc.srvsvc_NetShareCtrl502.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareDel.reserved  Reserved
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareDel.server_unc  Server Unc
    String
srvsvc.srvsvc_NetShareDel.share_name  Share Name
    String
srvsvc.srvsvc_NetShareDelCommit.hnd  Hnd
    Byte array

```

```
srvsvc.srvsvc_NetShareDelStart.hnd  Hnd
    Byte array
srvsvc.srvsvc_NetShareDelStart.reserved  Reserved
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareDelStart.server_unc  Server Unc
    String
srvsvc.srvsvc_NetShareDelStart.share  Share
    String
srvsvc.srvsvc_NetShareDelSticky.reserved  Reserved
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareDelSticky.server_unc  Server Unc
    String
srvsvc.srvsvc_NetShareDelSticky.share_name  Share Name
    String
srvsvc.srvsvc_NetShareEnum.ctr  Ctr
    No value
srvsvc.srvsvc_NetShareEnum.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareEnum.max_buffer  Max Buffer
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareEnum.resume_handle  Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareEnum.server_unc  Server Unc
    String
srvsvc.srvsvc_NetShareEnum.totalentries  Totalentries
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareEnumAll.ctr  Ctr
    No value
srvsvc.srvsvc_NetShareEnumAll.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareEnumAll.max_buffer  Max Buffer
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareEnumAll.resume_handle  Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareEnumAll.server_unc  Server Unc
    String
srvsvc.srvsvc_NetShareEnumAll.totalentries  Totalentries
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareGetInfo.info  Info
    No value
srvsvc.srvsvc_NetShareGetInfo.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareGetInfo.server_unc  Server Unc
    String
```

```
srvsvc.srvsvc_NetShareGetInfo.share_name  Share Name
String
srvsvc.srvsvc_NetShareInfo.info0  Info0
No value
srvsvc.srvsvc_NetShareInfo.info1  Info1
No value
srvsvc.srvsvc_NetShareInfo.info1004  Info1004
No value
srvsvc.srvsvc_NetShareInfo.info1005  Info1005
No value
srvsvc.srvsvc_NetShareInfo.info1006  Info1006
No value
srvsvc.srvsvc_NetShareInfo.info1007  Info1007
No value
srvsvc.srvsvc_NetShareInfo.info1501  Info1501
No value
srvsvc.srvsvc_NetShareInfo.info2  Info2
No value
srvsvc.srvsvc_NetShareInfo.info501  Info501
No value
srvsvc.srvsvc_NetShareInfo.info502  Info502
No value
srvsvc.srvsvc_NetShareInfo0.name  Name
String
srvsvc.srvsvc_NetShareInfo1.comment  Comment
String
srvsvc.srvsvc_NetShareInfo1.name  Name
String
srvsvc.srvsvc_NetShareInfo1.type  Type
Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo1004.comment  Comment
String
srvsvc.srvsvc_NetShareInfo1005.dfs_flags  Dfs Flags
Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo1006.max_users  Max Users
Signed 32-bit integer
srvsvc.srvsvc_NetShareInfo1007.alternate_directory_name  Alternate Directory Name
String
srvsvc.srvsvc_NetShareInfo1007.flags  Flags
Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo2.comment  Comment
String
srvsvc.srvsvc_NetShareInfo2.current_users  Current Users
Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetShareInfo2.max_users  Max Users
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo2.name  Name
    String
srvsvc.srvsvc_NetShareInfo2.password  Password
    String
srvsvc.srvsvc_NetShareInfo2.path  Path
    String
srvsvc.srvsvc_NetShareInfo2.permissions  Permissions
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo2.type  Type
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo501.comment  Comment
    String
srvsvc.srvsvc_NetShareInfo501.csc_policy  Csc Policy
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo501.name  Name
    String
srvsvc.srvsvc_NetShareInfo501.type  Type
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo502.comment  Comment
    String
srvsvc.srvsvc_NetShareInfo502.current_users  Current Users
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo502.max_users  Max Users
    Signed 32-bit integer
srvsvc.srvsvc_NetShareInfo502.name  Name
    String
srvsvc.srvsvc_NetShareInfo502.password  Password
    String
srvsvc.srvsvc_NetShareInfo502.path  Path
    String
srvsvc.srvsvc_NetShareInfo502.permissions  Permissions
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo502.sd  Sd
    No value
srvsvc.srvsvc_NetShareInfo502.type  Type
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareInfo502.unknown  Unknown
    Unsigned 32-bit integer
srvsvc.srvsvc_NetShareSetInfo.info  Info
    No value
srvsvc.srvsvc_NetShareSetInfo.level  Level
    Unsigned 32-bit integer
```

srvsvc.srvsvc_NetShareSetInfo.parm_error	Parm Error
Unsigned 32-bit integer	
srvsvc.srvsvc_NetShareSetInfo.server_unc	Server Unc
String	
srvsvc.srvsvc_NetShareSetInfo.share_name	Share Name
String	
srvsvc.srvsvc_NetSrvGetInfo.info	Info
No value	
srvsvc.srvsvc_NetSrvGetInfo.level	Level
Unsigned 32-bit integer	
srvsvc.srvsvc_NetSrvGetInfo.server_unc	Server Unc
String	
srvsvc.srvsvc_NetSrvInfo.info100	Info100
No value	
srvsvc.srvsvc_NetSrvInfo.info1005	Info1005
No value	
srvsvc.srvsvc_NetSrvInfo.info101	Info101
No value	
srvsvc.srvsvc_NetSrvInfo.info1010	Info1010
No value	
srvsvc.srvsvc_NetSrvInfo.info1016	Info1016
No value	
srvsvc.srvsvc_NetSrvInfo.info1017	Info1017
No value	
srvsvc.srvsvc_NetSrvInfo.info1018	Info1018
No value	
srvsvc.srvsvc_NetSrvInfo.info102	Info102
No value	
srvsvc.srvsvc_NetSrvInfo.info1107	Info1107
No value	
srvsvc.srvsvc_NetSrvInfo.info1501	Info1501
No value	
srvsvc.srvsvc_NetSrvInfo.info1502	Info1502
No value	
srvsvc.srvsvc_NetSrvInfo.info1503	Info1503
No value	
srvsvc.srvsvc_NetSrvInfo.info1506	Info1506
No value	
srvsvc.srvsvc_NetSrvInfo.info1509	Info1509
No value	
srvsvc.srvsvc_NetSrvInfo.info1510	Info1510
No value	
srvsvc.srvsvc_NetSrvInfo.info1511	Info1511
No value	

srvsvc.srvsvc_NetSrvInfo.info1512	Info1512
No value	
srvsvc.srvsvc_NetSrvInfo.info1513	Info1513
No value	
srvsvc.srvsvc_NetSrvInfo.info1514	Info1514
No value	
srvsvc.srvsvc_NetSrvInfo.info1515	Info1515
No value	
srvsvc.srvsvc_NetSrvInfo.info1516	Info1516
No value	
srvsvc.srvsvc_NetSrvInfo.info1518	Info1518
No value	
srvsvc.srvsvc_NetSrvInfo.info1520	Info1520
No value	
srvsvc.srvsvc_NetSrvInfo.info1521	Info1521
No value	
srvsvc.srvsvc_NetSrvInfo.info1522	Info1522
No value	
srvsvc.srvsvc_NetSrvInfo.info1523	Info1523
No value	
srvsvc.srvsvc_NetSrvInfo.info1524	Info1524
No value	
srvsvc.srvsvc_NetSrvInfo.info1525	Info1525
No value	
srvsvc.srvsvc_NetSrvInfo.info1528	Info1528
No value	
srvsvc.srvsvc_NetSrvInfo.info1529	Info1529
No value	
srvsvc.srvsvc_NetSrvInfo.info1530	Info1530
No value	
srvsvc.srvsvc_NetSrvInfo.info1533	Info1533
No value	
srvsvc.srvsvc_NetSrvInfo.info1534	Info1534
No value	
srvsvc.srvsvc_NetSrvInfo.info1535	Info1535
No value	
srvsvc.srvsvc_NetSrvInfo.info1536	Info1536
No value	
srvsvc.srvsvc_NetSrvInfo.info1537	Info1537
No value	
srvsvc.srvsvc_NetSrvInfo.info1538	Info1538
No value	
srvsvc.srvsvc_NetSrvInfo.info1539	Info1539
No value	

```
srsvvc.srvsvc_NetSrvInfo.info1540  Info1540
  No value
srsvvc.srvsvc_NetSrvInfo.info1541  Info1541
  No value
srsvvc.srvsvc_NetSrvInfo.info1542  Info1542
  No value
srsvvc.srvsvc_NetSrvInfo.info1543  Info1543
  No value
srsvvc.srvsvc_NetSrvInfo.info1544  Info1544
  No value
srsvvc.srvsvc_NetSrvInfo.info1545  Info1545
  No value
srsvvc.srvsvc_NetSrvInfo.info1546  Info1546
  No value
srsvvc.srvsvc_NetSrvInfo.info1547  Info1547
  No value
srsvvc.srvsvc_NetSrvInfo.info1548  Info1548
  No value
srsvvc.srvsvc_NetSrvInfo.info1549  Info1549
  No value
srsvvc.srvsvc_NetSrvInfo.info1550  Info1550
  No value
srsvvc.srvsvc_NetSrvInfo.info1552  Info1552
  No value
srsvvc.srvsvc_NetSrvInfo.info1553  Info1553
  No value
srsvvc.srvsvc_NetSrvInfo.info1554  Info1554
  No value
srsvvc.srvsvc_NetSrvInfo.info1555  Info1555
  No value
srsvvc.srvsvc_NetSrvInfo.info1556  Info1556
  No value
srsvvc.srvsvc_NetSrvInfo.info402   Info402
  No value
srsvvc.srvsvc_NetSrvInfo.info403   Info403
  No value
srsvvc.srvsvc_NetSrvInfo.info502   Info502
  No value
srsvvc.srvsvc_NetSrvInfo.info503   Info503
  No value
srsvvc.srvsvc_NetSrvInfo.info599   Info599
  No value
srsvvc.srvsvc_NetSrvInfo100.platform_id  Platform Id
  Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo100.server_name  Server Name
String
srvsvc.srvsvc_NetSrvInfo1005.comment    Comment
String
srvsvc.srvsvc_NetSrvInfo101.comment     Comment
String
srvsvc.srvsvc_NetSrvInfo101.platform_id Platform Id
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo101.server_name  Server Name
String
srvsvc.srvsvc_NetSrvInfo101.server_type  Server Type
No value
srvsvc.srvsvc_NetSrvInfo101.version_major Version Major
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo101.version_minor Version Minor
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1010.disc       Disc
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1016.hidden     Hidden
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1017.announce   Announce
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1018.anndelta   Anndelta
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.anndelta    Anndelta
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.announce    Announce
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.comment     Comment
String
srvsvc.srvsvc_NetSrvInfo102.disc        Disc
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.hidden       Hidden
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.licenses    Licenses
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.platform_id Platform Id
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.server_name  Server Name
String
srvsvc.srvsvc_NetSrvInfo102.server_type  Server Type
No value
srvsvc.srvsvc_NetSrvInfo102.userpath    Userpath
String
```



```
srvsvc.srvsvc_NetSrvInfo102.users    Users
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.version_major  Version Major
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo102.version_minor  Version Minor
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1107.users    Users
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1501.sessopens  Sessopens
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1502.sessvcs  Sessvcs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1503.opensearch  Opensearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1506.maxworkitems  Maxworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1509.maxrawbuflen  Maxrawbuflen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1510.sessusers  Sessusers
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1511.sesscons  Sesscons
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1512.maxnonpagedmemoryusage  Maxnonpagedmemoryusage
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1513.maxpagedmemoryusage  Maxpagedmemoryusage
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1514.enablesoftcompat  Enablesoftcompat
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1515.enableforcedlogoff  Enableforcedlogoff
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1516.timesource  Timesource
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1518.lmannounce  Lmannounce
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1520.maxcopyreadlen  Maxcopyreadlen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1521.maxcopywritelen  Maxcopywritelen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1522.minkeepsearch  Minkeepsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1523.maxkeepsearch  Maxkeepsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1524.minkeepcomplsearch  Minkeepcomplsearch
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo1525.maxkeepcomplsearch  Maxkeepcomplsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1528.scavtimeout  Scavtimeout
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1529.minrcvqueue  Minrcvqueue
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1530.minfreeworkitems  Minfreeworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1533.maxmpxct  Maxmpxct
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1534.oplockbreakwait  Oplockbreakwait
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1535.oplockbreakresponsewait  Oplockbreakresponsewait
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1536.enableoplocks  Enableoplocks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1537.enableoplockforceclose  Enableoplockforceclose
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1538.enablefcbopens  Enablefcbopens
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1539.enableraw  Enableraw
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1540.enablesharednetdrives  Enablesharednetdrives
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1541.minfreeconnections  Minfreeconnections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1542.maxfreeconnections  Maxfreeconnections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1543.initsesstable  Initsesstable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1544.initconntable  Initconntable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1545.initfiletable  Initfiletable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1546.initsearchtable  Initsearchtable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1547.alertsched  Alertsched
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1548.errorthreshold  Errorthreshold
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1549.networkerrorthreshold  Networkerrorthreshold
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1550.diskspacethreshold  Diskspacethreshold
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo1552.maxlinkdelay  Maxlinkdelay
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1553.minlinkthroughput  Minlinkthroughput
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1554.linkinfovalidtime  Linkinfovalidtime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1555.scavqosinfoupdatetime  Scavqosinfoupdatetime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo1556.maxworkitemidletime  Maxworkitemidletime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.accessalert  Accessalert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.activelocks  Activelocks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.alerts  Alerts
    String
srvsvc.srvsvc_NetSrvInfo402.alertsched  Alertsched
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.alist_mtime  Alist Mtime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.chdevjobs  Chdevjobs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.chdevqs  Chdevqs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.chdevs  Chdevs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.connections  Connections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.diskalert  Diskalert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.erroralert  Erroralert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.glist_mtime  Glist Mtime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.guestaccount  Guestaccount
    String
srvsvc.srvsvc_NetSrvInfo402.lanmask  Lanmask
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.logonalert  Logonalert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.maxaudits  Maxaudits
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.netioalert  Netioalert
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo402.numadmin  Numadmin
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.numbigbufs  Numbigbufs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.numfiletasks  Numfiletasks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.openfiles  Openfiles
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.opensearch  Opensearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.security  Security
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.sessopen  Sessopen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.sessreqs  Sessreqs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.sesssvc  Sesssvc
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.shares  Shares
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.sizereqbufs  Sizereqbufs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo402.srvheuristics  Srvheuristics
    String
srvsvc.srvsvc_NetSrvInfo402.ulist_mtime  Ulist Mtime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.accessalert  Accessalert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.activelocks  Activelocks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.alerts  Alerts
    String
srvsvc.srvsvc_NetSrvInfo403.alertsched  Alertsched
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.alist_mtime  Alist Mtime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.auditedevents  Auditedevents
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.auditprofile  Auditprofile
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.autopath  Autopath
    String
srvsvc.srvsvc_NetSrvInfo403.chdevjobs  Chdevjobs
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo403.chdevqs  Chdevqs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.chdevs  Chdevs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.connections  Connections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.diskalert  Diskalert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.eroralert  Eroralert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.glist_mtime  Glist Mtime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.guestaccount  Guestaccount
    String
srvsvc.srvsvc_NetSrvInfo403.lanmask  Lanmask
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.logonalert  Logonalert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.maxaudits  Maxaudits
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.netioalert  Netioalert
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.numadmin  Numadmin
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.numbigbufs  Numbigbufs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.numfiletasks  Numfiletasks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.openfiles  Openfiles
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.opensearch  Opensearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.security  Security
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.sessopen  Sessopen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.sessreqs  Sessreqs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.sesssvc  Sesssvc
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.shares  Shares
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo403.sizereqbufs  Sizereqbufs
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo403.srvheuristics  Srvheuristics
String
srvsvc.srvsvc_NetSrvInfo403.ulist_mtime  Ulist Mtime
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.acceptdownlevelapis  Acceptdownlevelapis
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.enableforcedlogoff  Enableforcedlogoff
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.enablesoftcompat  Enablesoftcompat
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.initworkitems  Initworkitems
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.irpstacksize  Irpstacksize
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.lmannounce  Lmannounce
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.maxnonpagedmemoryusage  Maxnonpagedmemoryusage
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.maxpagedmemoryusage  Maxpagedmemoryusage
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.maxrawbuflen  Maxrawbuflen
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.maxworkitems  Maxworkitems
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.opensearch  Opensearch
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.rawworkitems  Rawworkitems
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.sessconns  Sessconns
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.sessopen  Sessopen
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.sesssvc  Sesssvc
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.sessusers  Sessusers
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.sizereqbufs  Sizereqbufs
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo502.timesource  Timesource
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.acceptdownlevelapis  Acceptdownlevelapis
Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.domain  Domain
String
```

```
srvsvc.srvsvc_NetSrvInfo503.enablefcbopens  Enablefcbopens
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.enableforcedlogoff  Enableforcedlogoff
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.enableoplockforceclose  Enableoplockforceclose
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.enableoplocks  Enableoplocks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.enableraw  Enableraw
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.enablesharednetdrives  Enablesharednetdrives
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.enablesoftcompat  Enablesoftcompat
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.initworkitems  Initworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.irpstacksize  Irpstacksize
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.lmannounce  Lmannounce
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxcopyreadlen  Maxcopyreadlen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxcopywritelen  Maxcopywritelen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxfreeconnections  Maxfreeconnections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxkeepcomplsearch  Maxkeepcomplsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxkeepsearch  Maxkeepsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxmpxct  Maxmpxct
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxnonpagedmemoryusage  Maxnonpagedmemoryusage
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxpagedmemoryusage  Maxpagedmemoryusage
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxrawbuflen  Maxrawbuflen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.maxworkitems  Maxworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.minfreeconnections  Minfreeconnections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.minfreeworkitems  Minfreeworkitems
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo503.minkeepcomplsearch  Minkeepcomplsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.minkeepsearch  Minkeepsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.minrcvqueue  Minrcvqueue
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.numlockthreads  Numlockthreads
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.opensearch  Opensearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.oplockbreakresponsewait  Oplockbreakresponsewait
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.oplockbreakwait  Oplockbreakwait
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.rawworkitems  Rawworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.scavtimeout  Scavtimeout
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.sessconns  Sessconns
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.sessopen  Sessopen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.sesssvc  Sesssvc
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.sessusers  Sessusers
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.sizereqbufs  Sizereqbufs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.threadcountadd  Threadcountadd
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.threadpriority  Threadpriority
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.timesource  Timesource
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo503.xactmemsize  Xactmemsize
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.acceptdownlevelapis  Acceptdownlevelapis
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.alertsched  Alertsched
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.diskspacetreshold  Diskspacetreshold
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.domain  Domain
    String
```



```
srvsvc.srvsvc_NetSrvInfo599.enablefcbopens  Enablefcbopens
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.enableforcedlogoff  Enableforcedlogoff
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.enableoplockforceclose  Enableoplockforceclose
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.enableoplocks  Enableoplocks
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.enableraw  Enableraw
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.enablesharednetdrives  Enablesharednetdrives
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.enablesftcompat  Enablesftcompat
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.errortreshold  Errortreshold
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.initconntable  Initconntable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.initfiletable  Initfiletable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.initsearchtable  Initsearchtable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.initsesstable  Initsesstable
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.initworkitems  Initworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.irpstacksize  Irpstacksize
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.linkinfovalidtime  Linkinfovalidtime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.lmannounce  Lmannounce
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxcopyreadlen  Maxcopyreadlen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxcopywritelen  Maxcopywritelen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxfreeconnections  Maxfreeconnections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxkeepcomplsearch  Maxkeepcomplsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxlinkdelay  Maxlinkdelay
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxmpxct  Maxmpxct
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo599.maxnonpagedmemoryusage  Maxnonpagedmemoryusage
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxpagedmemoryusage  Maxpagedmemoryusage
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxrawbuflen  Maxrawbuflen
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxworkitemidletime  Maxworkitemidletime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.maxworkitems  Maxworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.minfreeconnections  Minfreeconnections
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.minfreeworkitems  Minfreeworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.minkeepcomplsearch  Minkeepcomplsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.minkeepsearch  Minkeepsearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.minlinkthroughput  Minlinkthroughput
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.minrcvqueue  Minrcvqueue
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.networkerrortreshold  Networkerrortreshold
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.numlockthreads  Numlockthreads
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.opensearch  Opensearch
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.oplockbreakresponsewait  Oplockbreakresponsewait
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.oplockbreakwait  Oplockbreakwait
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.rawworkitems  Rawworkitems
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.reserved  Reserved
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.scavqosinfoupdatetime  Scavqosinfoupdatetime
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.scavtimeout  Scavtimeout
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.sessconns  Sessconns
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.sessopen  Sessopen
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_NetSrvInfo599.sesssvc  Sesssvc
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.sessusers  Sessusers
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.sizereqbufs  Sizereqbufs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.threadcountadd  Threadcountadd
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.threadpriority  Threadpriority
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.timesource  Timesource
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvInfo599.xactmemsize  Xactmemsize
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvSetInfo.info  Info
    No value
srvsvc.srvsvc_NetSrvSetInfo.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvSetInfo.parm_error  Parm Error
    Unsigned 32-bit integer
srvsvc.srvsvc_NetSrvSetInfo.server_unc  Server Unc
    String
srvsvc.srvsvc_NetTransportAdd.info  Info
    No value
srvsvc.srvsvc_NetTransportAdd.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportAdd.server_unc  Server Unc
    String
srvsvc.srvsvc_NetTransportCtr.ctr0  Ctr0
    No value
srvsvc.srvsvc_NetTransportCtr.ctr1  Ctr1
    No value
srvsvc.srvsvc_NetTransportCtr.ctr2  Ctr2
    No value
srvsvc.srvsvc_NetTransportCtr.ctr3  Ctr3
    No value
srvsvc.srvsvc_NetTransportCtr0.array  Array
    No value
srvsvc.srvsvc_NetTransportCtr0.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportCtr1.array  Array
    No value
srvsvc.srvsvc_NetTransportCtr1.count  Count
    Unsigned 32-bit integer
```

```

srvsvc.srvsvc_NetTransportCtr2.array  Array
    No value
srvsvc.srvsvc_NetTransportCtr2.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportCtr3.array  Array
    No value
srvsvc.srvsvc_NetTransportCtr3.count  Count
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportDel.server_unc  Server Unc
    String
srvsvc.srvsvc_NetTransportDel.transport  Transport
    No value
srvsvc.srvsvc_NetTransportDel.unknown  Unknown
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportEnum.level  Level
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportEnum.max_buffer  Max Buffer
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportEnum.resume_handle  Resume Handle
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportEnum.server_unc  Server Unc
    String
srvsvc.srvsvc_NetTransportEnum.totalentries  Totalentries
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportEnum.transports  Transports
    No value
srvsvc.srvsvc_NetTransportInfo.info0  Info0
    No value
srvsvc.srvsvc_NetTransportInfo.info1  Info1
    No value
srvsvc.srvsvc_NetTransportInfo.info2  Info2
    No value
srvsvc.srvsvc_NetTransportInfo.info3  Info3
    No value
srvsvc.srvsvc_NetTransportInfo0.addr  Addr
    Unsigned 8-bit integer
srvsvc.srvsvc_NetTransportInfo0.addr_len  Addr Len
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo0.name  Name
    String
srvsvc.srvsvc_NetTransportInfo0.net_addr  Net Addr
    String
srvsvc.srvsvc_NetTransportInfo0.vcs  Vcs
    Unsigned 32-bit integer

```

```
srvsvc.srvsvc_NetTransportInfo1.addr  Addr
    Unsigned 8-bit integer
srvsvc.srvsvc_NetTransportInfo1.addr_len  Addr Len
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo1.domain  Domain
    String
srvsvc.srvsvc_NetTransportInfo1.name  Name
    String
srvsvc.srvsvc_NetTransportInfo1.net_addr  Net Addr
    String
srvsvc.srvsvc_NetTransportInfo1.vcs  Vcs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo2.addr  Addr
    Unsigned 8-bit integer
srvsvc.srvsvc_NetTransportInfo2.addr_len  Addr Len
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo2.domain  Domain
    String
srvsvc.srvsvc_NetTransportInfo2.name  Name
    String
srvsvc.srvsvc_NetTransportInfo2.net_addr  Net Addr
    String
srvsvc.srvsvc_NetTransportInfo2.transport_flags  Transport Flags
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo2.vcs  Vcs
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo3.addr  Addr
    Unsigned 8-bit integer
srvsvc.srvsvc_NetTransportInfo3.addr_len  Addr Len
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo3.domain  Domain
    String
srvsvc.srvsvc_NetTransportInfo3.name  Name
    String
srvsvc.srvsvc_NetTransportInfo3.net_addr  Net Addr
    String
srvsvc.srvsvc_NetTransportInfo3.password  Password
    Unsigned 8-bit integer
srvsvc.srvsvc_NetTransportInfo3.password_len  Password Len
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo3.transport_flags  Transport Flags
    Unsigned 32-bit integer
srvsvc.srvsvc_NetTransportInfo3.vcs  Vcs
    Unsigned 32-bit integer
```

```
srvsvc.srvsvc_SessionUserFlags.SESS_GUEST    Sess Guest
        Boolean
srvsvc.srvsvc_SessionUserFlags.SESS_NOENCRYPTION  Sess Noencryption
        Boolean
srvsvc.srvsvc_Statistics.avresponse    Avresponse
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.bigbufneed    Bigbufneed
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.bytesrcvd_high  Bytesrcvd High
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.bytesrcvd_low  Bytesrcvd Low
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.bytestent_high  Bytestent High
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.bytestent_low  Bytestent Low
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.devopens    Devopens
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.fopens    Fopens
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.jobsqueued    Jobsqueued
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.permerrors    Permerrors
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.pwerrors    Pwerrors
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.reqbufneed    Reqbufneed
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.serrorout    Serrorout
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.sopens    Sopens
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.start    Start
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.stimeouts    Stimeouts
        Unsigned 32-bit integer
srvsvc.srvsvc_Statistics.syserrors    Syserrors
        Unsigned 32-bit integer
srvsvc.srvsvc_TransportFlags.SVTI2_REMAP_PIPE_NAMES  Svti2 Remap Pipe Names
        Boolean
srvsvc.werror    Windows Error
        Unsigned 32-bit integer
```

**Service Advertisement Protocol (ipxsap)**

```
ipxsap.request Request
  Boolean
  TRUE if SAP request

ipxsap.response Response
  Boolean
  TRUE if SAP response
```

**Service Location Protocol (srvloc)**

```
srvloc.attrreq.attrlist Attribute List
  String

srvloc.attrreq.attrlistlen Attribute List Length
  Unsigned 16-bit integer

srvloc.attrreq.prlist Previous Response List
  String
  Previous Response List

srvloc.attrreq.prlistlen Previous Response List Length
  Unsigned 16-bit integer
  Length of Previous Response List

srvloc.attrreq.scopelist Scope List
  String

srvloc.attrreq.scopelistlen Scope List Length
  Unsigned 16-bit integer
  Length of the Scope List

srvloc.attrreq.slpspi SLP SPI
  String

srvloc.attrreq.slpspilen SLP SPI Length
  Unsigned 16-bit integer
  Length of the SLP SPI

srvloc.attrreq.taglist Tag List
  String

srvloc.attrreq.taglistlen Tag List Length
  Unsigned 16-bit integer

srvloc.attrreq.url Service URL
  String
  URL of service

srvloc.attrreq.urlen URL Length
  Unsigned 16-bit integer

srvloc.attrrply.attrlist Attribute List
  String

srvloc.attrrply.attrlistlen Attribute List Length
  Unsigned 16-bit integer
  Length of Attribute List

srvloc.authblkv2.slpspi SLP SPI
  String
```

```
srvloc.authblkv2.slpspilen  SLP SPI Length
    Unsigned 16-bit integer
    Length of the SLP SPI
srvloc.authblkv2.timestamp  Timestamp
    Date/Time stamp
    Timestamp on Authentication Block
srvloc.authblkv2_bsd  BSD
    Unsigned 16-bit integer
    Block Structure Descriptor
srvloc.authblkv2_len  Length
    Unsigned 16-bit integer
    Length of Authentication Block
srvloc.daadvert.attrlist  Attribute List
    String
srvloc.daadvert.attrlistlen  Attribute List Length
    Unsigned 16-bit integer
srvloc.daadvert.authcount  Auths
    Unsigned 8-bit integer
    Number of Authentication Blocks
srvloc.daadvert.scopelist  Scope List
    String
srvloc.daadvert.scopelistlen  Scope List Length
    Unsigned 16-bit integer
    Length of the Scope List
srvloc.daadvert.slpspi  SLP SPI
    String
srvloc.daadvert.slpspilen  SLP SPI Length
    Unsigned 16-bit integer
    Length of the SLP SPI
srvloc.daadvert.timestamp  DAADVERT Timestamp
    Date/Time stamp
    Timestamp on DA Advert
srvloc.daadvert.url  URL
    String
srvloc.daadvert.urllen  URL Length
    Unsigned 16-bit integer
srvloc.err  Error Code
    Unsigned 16-bit integer
srvloc.errv2  Error Code
    Unsigned 16-bit integer
srvloc.flags_v1  Flags
    Unsigned 8-bit integer
srvloc.flags_v1.attribute_auth  Attribute Authentication
    Boolean
    Can whole packet fit into a datagram?
```



```
srvloc.flags_v1.fresh  Fresh Registration
    Boolean
    Is this a new registration?
srvloc.flags_v1.monolingual  Monolingual
    Boolean
    Can whole packet fit into a datagram?
srvloc.flags_v1.overflow.  Overflow
    Boolean
    Can whole packet fit into a datagram?
srvloc.flags_v1.url_auth  URL Authentication
    Boolean
    Can whole packet fit into a datagram?
srvloc.flags_v2  Flags
    Unsigned 16-bit integer
srvloc.flags_v2.fresh  Fresh Registration
    Boolean
    Is this a new registration?
srvloc.flags_v2.overflow  Overflow
    Boolean
    Can whole packet fit into a datagram?
srvloc.flags_v2.reqmulti  Multicast requested
    Boolean
    Do we want multicast?
srvloc.function  Function
    Unsigned 8-bit integer
srvloc.langtag  Lang Tag
    String
srvloc.langtaglen  Lang Tag Len
    Unsigned 16-bit integer
srvloc.list.ipaddr  IP Address
    IPv4 address
    IP Address of SLP server
srvloc.nextextoff  Next Extension Offset
    Unsigned 24-bit integer
srvloc.pktlen  Packet Length
    Unsigned 24-bit integer
srvloc.saadvert.attrlist  Attribute List
    String
srvloc.saadvert.attrlistlen  Attribute List Length
    Unsigned 16-bit integer
srvloc.saadvert.authcount  Auths
    Unsigned 8-bit integer
    Number of Authentication Blocks
srvloc.saadvert.scopelist  Scope List
    String
```

```
srvloc.saadvert.scopelistlen  Scope List Length
    Unsigned 16-bit integer
    Length of the Scope List
srvloc.saadvert.url           URL
    String
srvloc.saadvert.urllen       URL Length
    Unsigned 16-bit integer
srvloc.srvdereq.scopelist    Scope List
    String
srvloc.srvdereq.scopelistlen  Scope List Length
    Unsigned 16-bit integer
srvloc.srvdereq.taglist      Tag List
    String
srvloc.srvdereq.taglistlen    Tag List Length
    Unsigned 16-bit integer
srvloc.srvreq.attrauthcount   Attr Auths
    Unsigned 8-bit integer
    Number of Attribute Authentication Blocks
srvloc.srvreq.attrlist        Attribute List
    String
srvloc.srvreq.attrlistlen     Attribute List Length
    Unsigned 16-bit integer
srvloc.srvreq.predicate       Predicate
    String
srvloc.srvreq.predicatelen    Predicate Length
    Unsigned 16-bit integer
    Length of the Predicate
srvloc.srvreq.prlist          Previous Response List
    String
    Previous Response List
srvloc.srvreq.prlistlen       Previous Response List Length
    Unsigned 16-bit integer
    Length of Previous Response List
srvloc.srvreq.scopelist       Scope List
    String
srvloc.srvreq.scopelistlen    Scope List Length
    Unsigned 16-bit integer
    Length of the Scope List
srvloc.srvreq.slpspi          SLP SPI
    String
srvloc.srvreq.slpspilen       SLP SPI Length
    Unsigned 16-bit integer
    Length of the SLP SPI
srvloc.srvreq.srvtype         Service Type
    String
```

```
srvloc.srvreq.srvtypelen  Service Type Length
    Unsigned 16-bit integer
    Length of Service Type List
srvloc.srvreq.srvtypelist  Service Type List
    String
srvloc.srvreq.urlcount    Number of URLs
    Unsigned 16-bit integer
srvloc.srvrply.svcname    Service Name Value
    String
srvloc.srvtypereq.nameauthlist  Naming Authority List
    String
srvloc.srvtypereq.nameauthlistlen  Naming Authority List Length
    Unsigned 16-bit integer
    Length of the Naming Authority List
srvloc.srvtypereq.prlist  Previous Response List
    String
    Previous Response List
srvloc.srvtypereq.prlistlen  Previous Response List Length
    Unsigned 16-bit integer
    Length of Previous Response List
srvloc.srvtypereq.scopelist  Scope List
    String
srvloc.srvtypereq.scopelistlen  Scope List Length
    Unsigned 16-bit integer
    Length of the Scope List
srvloc.srvtypereq.srvtypelen  Service Type Length
    Unsigned 16-bit integer
    Length of the Service Type
srvloc.srvtypereq.srvtypelistlen  Service Type List Length
    Unsigned 16-bit integer
    Length of the Service Type List
srvloc.srvtyperply.srvtype  Service Type
    String
srvloc.srvtyperply.srvtypelist  Service Type List
    String
srvloc.url.lifetime      URL lifetime
    Unsigned 16-bit integer
srvloc.url.numauths      Num Auths
    Unsigned 8-bit integer
srvloc.url.reserved      Reserved
    Unsigned 8-bit integer
srvloc.url.url           URL
    String
srvloc.url.urllen        URL Length
    Unsigned 16-bit integer
```

```
srvloc.version  Version
                Unsigned 8-bit integer
srvloc.xid      XID
                Unsigned 24-bit integer
                Transaction ID
```

### **Session Announcement Protocol (sap)**

```
sap.auth        Authentication data
                No value
                Auth data
sap.auth.flags  Authentication data flags
                Unsigned 8-bit integer
                Auth flags
sap.auth.flags.p  Padding Bit
                Boolean
                Compression
sap.auth.flags.t  Authentication Type
                Unsigned 8-bit integer
                Auth type
sap.auth.flags.v  Version Number
                Unsigned 8-bit integer
                Version
sap.flags       Flags
                Unsigned 8-bit integer
                Bits in the beginning of the SAP header
sap.flags.a     Address Type
                Boolean
                Originating source address type
sap.flags.c     Compression Bit
                Boolean
                Compression
sap.flags.e     Encryption Bit
                Boolean
                Encryption
sap.flags.r     Reserved
                Boolean
                Reserved
sap.flags.t     Message Type
                Boolean
                Announcement type
sap.flags.v     Version Number
                Unsigned 8-bit integer
                3 bit version field in the SAP header
```

### **Session Description Protocol (sdp)**

```
ipbcpc.command  IPBCP Command Type
                String
                IPBCP Command Type
```

```
ipbcpc.version  IPBCP Protocol Version
String
IPBCP Protocol Version

sdp.bandwidth  Bandwidth Information (b)
String
Bandwidth Information

sdp.bandwidth.modifier  Bandwidth Modifier
String
Bandwidth Modifier

sdp.bandwidth.value  Bandwidth Value
String
Bandwidth Value (in kbits/s)

sdp.connection_info  Connection Information (c)
String
Connection Information

sdp.connection_info.address  Connection Address
String
Connection Address

sdp.connection_info.address_type  Connection Address Type
String
Connection Address Type

sdp.connection_info.network_type  Connection Network Type
String
Connection Network Type

sdp.connection_info.num_addr  Connection Number of Addresses
String
Connection Number of Addresses

sdp.connection_info.ttl  Connection TTL
String
Connection TTL

sdp.email  E-mail Address (e)
String
E-mail Address

sdp.encryption_key  Encryption Key (k)
String
Encryption Key

sdp.encryption_key.data  Key Data
String
Data

sdp.encryption_key.type  Key Type
String
Type

sdp.fmtph263profile  Profile
Unsigned 32-bit integer
Profile

sdp.fmtph264_packetization_mode  Packetization mode
Unsigned 32-bit integer
Packetization mode
```

```
sdp.fmtmp.parameter  Media format specific parameters
    String
    Format specific parameter(fmtmp)
sdp.fmtmp.profile_level_id  Level Code
    Unsigned 32-bit integer
    Level Code
sdp.h223LogicalChannelParameters  h223LogicalChannelParameters
    No value
    sdp.h223LogicalChannelParameters
sdp.h264.sprop_parameter_sets  Sprop_parameter_sets
    Byte array
    Sprop_parameter_sets
sdp.invalid  Invalid line
    String
    Invalid line
sdp.key_mgmt  Key Management
    String
    Key Management
sdp.key_mgmt.data  Key Management Data
    Byte array
    Key Management Data
sdp.key_mgmt.kmpid  Key Management Protocol (kmpid)
    String
    Key Management Protocol
sdp.media  Media Description, name and address (m)
    String
    Media Description, name and address
sdp.media.format  Media Format
    String
    Media Format
sdp.media.media  Media Type
    String
    Media Type
sdp.media.port  Media Port
    Unsigned 16-bit integer
    Media Port
sdp.media.portcount  Media Port Count
    String
    Media Port Count
sdp.media.proto  Media Proto
    String
    Media Protocol
sdp.media_attr  Media Attribute (a)
    String
    Media Attribute
sdp.media_attribute.field  Media Attribute Fieldname
    String
    Media Attribute Fieldname
```

```
sdp.media_attribute.value  Media Attribute Value
    String
    Media Attribute Value
sdp.media_title  Media Title (i)
    String
    Media Title
sdp.mime.type  MIME Type
    String
    SDP MIME Type
sdp.owner  Owner/Creator, Session Id (o)
    String
    Owner/Creator, Session Id
sdp.owner.address  Owner Address
    String
    Owner Address
sdp.owner.address_type  Owner Address Type
    String
    Owner Address Type
sdp.owner.network_type  Owner Network Type
    String
    Owner Network Type
sdp.owner.sessionid  Session ID
    String
    Session ID
sdp.owner.username  Owner Username
    String
    Owner Username
sdp.owner.version  Session Version
    String
    Session Version
sdp.phone  Phone Number (p)
    String
    Phone Number
sdp.repeat_time  Repeat Time (r)
    String
    Repeat Time
sdp.repeat_time.duration  Repeat Duration
    String
    Repeat Duration
sdp.repeat_time.interval  Repeat Interval
    String
    Repeat Interval
sdp.repeat_time.offset  Repeat Offset
    String
    Repeat Offset
sdp.session_attr  Session Attribute (a)
    String
    Session Attribute
```

```
sdp.session_attr.field  Session Attribute Fieldname
    String
    Session Attribute Fieldname
sdp.session_attr.value  Session Attribute Value
    String
    Session Attribute Value
sdp.session_info        Session Information (i)
    String
    Session Information
sdp.session_name        Session Name (s)
    String
    Session Name
sdp.time                 Time Description, active time (t)
    String
    Time Description, active time
sdp.time.start          Session Start Time
    String
    Session Start Time
sdp.time.stop           Session Stop Time
    String
    Session Stop Time
sdp.timezone            Time Zone Adjustments (z)
    String
    Time Zone Adjustments
sdp.timezone.offset     Timezone Offset
    String
    Timezone Offset
sdp.timezone.time       Timezone Time
    String
    Timezone Time
sdp.unknown             Unknown
    String
    Unknown
sdp.uri                 URI of Description (u)
    String
    URI of Description
sdp.version             Session Description Protocol Version (v)
    String
    Session Description Protocol Version
```

**Session Initiation Protocol (sip)**

```
raw_sip.line           Raw SIP Line
    String
    Raw SIP Line
sip.Accept              Accept
    String
    RFC 3261: Accept Header
```



```
sip.Accept-Contact  Accept-Contact
    String
    RFC 3841: Accept-Contact Header
sip.Accept-Encoding  Accept-Encoding
    String
    RFC 3841: Accept-Encoding Header
sip.Accept-Language  Accept-Language
    String
    RFC 3261: Accept-Language Header
sip.Accept-Resource-Priority  Accept-Resource-Priority
    String
    Draft: Accept-Resource-Priority Header
sip.Alert-Info  Alert-Info
    String
    RFC 3261: Alert-Info Header
sip.Allow  Allow
    String
    RFC 3261: Allow Header
sip.Allow-Events  Allow-Events
    String
    RFC 3265: Allow-Events Header
sip.Authentication-Info  Authentication-Info
    String
    RFC 3261: Authentication-Info Header
sip.Authorization  Authorization
    String
    RFC 3261: Authorization Header
sip.CSeq  CSeq
    String
    RFC 3261: CSeq Header
sip.CSeq.method  Method
    String
    CSeq header method
sip.CSeq.seq  Sequence Number
    Unsigned 32-bit integer
    CSeq header sequence number
sip.Call-ID  Call-ID
    String
    RFC 3261: Call-ID Header
sip.Call-Info  Call-Info
    String
    RFC 3261: Call-Info Header
sip.Contact  Contact
    String
    RFC 3261: Contact Header
sip.Content-Disposition  Content-Disposition
    String
    RFC 3261: Content-Disposition Header
```

```
sip.Content-Encoding  Content-Encoding
    String
    RFC 3261: Content-Encoding Header

sip.Content-Language  Content-Language
    String
    RFC 3261: Content-Language Header

sip.Content-Length    Content-Length
    Unsigned 32-bit integer
    RFC 3261: Content-Length Header

sip.Content-Type      Content-Type
    String
    RFC 3261: Content-Type Header

sip.Date              Date
    String
    RFC 3261: Date Header

sip.ETag              ETag
    String
    RFC 3903: SIP-ETag Header

sip.Error-Info        Error-Info
    String
    RFC 3261: Error-Info Header

sip.Event              Event
    String
    RFC 3265: Event Header

sip.Expires            Expires
    Unsigned 32-bit integer
    RFC 3261: Expires Header

sip.From              From
    String
    RFC 3261: From Header

sip.History-Info      History-Info
    String
    RFC 4244: Request History Information

sip.Identity           Identity
    String
    RFC 4474: Request Identity

sip.Identity-info     Identity-info
    String
    RFC 4474: Request Identity-info

sip.If_Match          If_Match
    String
    RFC 3903: SIP-If-Match Header

sip.In-Reply-To       In-Reply-To
    String
    RFC 3261: In-Reply-To Header

sip.Join              Join
    String
    Draft: Join Header
```

```
sip.MIME-Version  MIME-Version
    String
    RFC 3261: MIME-Version Header

sip.Max-Forwards  Max-Forwards
    Unsigned 32-bit integer
    RFC 3261: Max-Forwards Header

sip.Method        Method
    String
    SIP Method

sip.Min-Expires   Min-Expires
    String
    RFC 3261: Min-Expires Header

sip.Min-SE        Min-SE
    String
    Draft: Min-SE Header

sip.Organization  Organization
    String
    RFC 3261: Organization Header

sip.P-Access-Network-Info  P-Access-Network-Info
    String
    P-Access-Network-Info Header

sip.P-Answer-State  P-Answer-State
    String
    P-Answer-State Header

sip.P-Asserted-Identity  P-Asserted-Identity
    String
    RFC 3325: P-Asserted-Identity Header

sip.P-Associated-URI  P-Associated-URI
    String
    RFC 3455: P-Associated-URI Header

sip.P-Called-Party-ID  P-Called-Party-ID
    String
    RFC 3455: P-Called-Party-ID Header

sip.P-Charging-Function-Addresses  P-Charging-Function-Addresses
    String
    P-Charging-Function-Addresses

sip.P-Charging-Vector  P-Charging-Vector
    String
    P-Charging-Vector Header

sip.P-DCS-Billing-Info  P-DCS-Billing-Info
    String
    P-DCS-Billing-Info Header

sip.P-DCS-LAES  P-DCS-LAES
    String
    P-DCS-LAES Header

sip.P-DCS-OSPS  P-DCS-OSPS
    String
    P-DCS-OSPS Header
```

```
sip.P-DCS-Redirect P-DCS-Redirect
String
P-DCS-Redirect Header

sip.P-DCS-Trace-Party-ID P-DCS-Trace-Party-ID
String
P-DCS-Trace-Party-ID Header

sip.P-Early-Media P-Early-Media
String
P-Early-Media Header

sip.P-Media-Authorization P-Media-Authorization
String
RFC 3313: P-Media-Authorization Header

sip.P-Preferred-Identity P-Preferred-Identity
String
RFC 3325: P-Preferred-Identity Header

sip.P-Profile-Key P-Profile-Key
String
P-Profile-Key Header

sip.P-User-Database P-User-Database
String
P-User-Database Header

sip.P-Visited-Network-ID P-Visited-Network-ID
String
RFC 3455: P-Visited-Network-ID Header

sip.Path Path
String
RFC 3327: Path Header

sip.Priority Priority
String
RFC 3261: Priority Header

sip.Privacy Privacy
String
Privacy Header

sip.Proxy-Authenticate Proxy-Authenticate
String
RFC 3261: Proxy-Authenticate Header

sip.Proxy-Authorization Proxy-Authorization
String
RFC 3261: Proxy-Authorization Header

sip.Proxy-Require Proxy-Require
String
RFC 3261: Proxy-Require Header

sip.RAck RACK
String
RFC 3262: RACK Header

sip.RAck.CSeq.method CSeq Method
String
RACK CSeq header method (from prov response)
```

```
sip.RAck.CSeq.seq  CSeq Sequence Number
    Unsigned 32-bit integer
    RAck CSeq header sequence number (from prov response)
sip.RAck.RSeq.seq  RSeq Sequence Number
    Unsigned 32-bit integer
    RAck RSeq header sequence number (from prov response)
sip.RSeq  RSeq
    Unsigned 32-bit integer
    RFC 3262: RSeq Header
sip.Reason  Reason
    String
    RFC 3326 Reason Header
sip.Record-Route  Record-Route
    String
    RFC 3261: Record-Route Header
sip.Refer-Sub  Refer-Sub
    String
    RFC 4488: Refer-Sub Header
sip.Refer-To  Refer-To
    String
    RFC 3515: Refer-To Header
sip.Refered-by  Refered By
    String
    RFC 3892: Refered-by Header
sip.Reject-Contact  Reject-Contact
    String
    RFC 3841: Reject-Contact Header
sip.Replaces  Replaces
    String
    RFC 3891: Replaces Header
sip.Reply-To  Reply-To
    String
    RFC 3261: Reply-To Header
sip.Request-Disposition  Request-Disposition
    String
    RFC 3841: Request-Disposition Header
sip.Request-Line  Request-Line
    String
    SIP Request-Line
sip.Require  Require
    String
    RFC 3261: Require Header
sip.Resource-Priority  Resource-Priority
    String
    Draft: Resource-Priority Header
sip.Retry-After  Retry-After
    String
    RFC 3261: Retry-After Header
```

```
sip.Route Route
  String
  RFC 3261: Route Header

sip.Security-Client Security-Client
  String
  RFC 3329 Security-Client Header

sip.Security-Server Security-Server
  String
  RFC 3329 Security-Server Header

sip.Security-Verify Security-Verify
  String
  RFC 3329 Security-Verify Header

sip.Server Server
  String
  RFC 3261: Server Header

sip.Service-Route Service-Route
  String
  RFC 3608: Service-Route Header

sip.Session-Expires Session-Expires
  String
  RFC 4028: Session-Expires Header

sip.Status-Code Status-Code
  Unsigned 32-bit integer
  SIP Status Code

sip.Status-Line Status-Line
  String
  SIP Status-Line

sip.Subject Subject
  String
  RFC 3261: Subject Header

sip.Subscription-State Subscription-State
  String
  RFC 3265: Subscription-State Header

sip.Supported Supported
  String
  RFC 3261: Supported Header

sip.Target-Dialog Target-Dialog
  String
  RFC 4538: Target-Dialog Header

sip.Timestamp Timestamp
  String
  RFC 3261: Timestamp Header

sip.To To
  String
  RFC 3261: To Header

sip.Unsupported Unsupported
  String
  RFC 3261: Unsupported Header
```

```
sip.User-Agent  User-Agent
  String
  RFC 3261: User-Agent Header

sip.Via  Via
  String
  RFC 3261: Via Header

sip.Via.branch  Branch
  String
  SIP Via Branch

sip.Via.comp  Comp
  String
  SIP Via comp

sip.Via.maddr  Maddr
  String
  SIP Via Maddr

sip.Via.received  Received
  String
  SIP Via Received

sip.Via.rport  RPort
  String
  SIP Via RPort

sip.Via.sent-by.address  Sent-by Address
  String
  Via header Sent-by Address

sip.Via.sent-by.port  Sent-by port
  Unsigned 16-bit integer
  Via header Sent-by Port

sip.Via.sigcomp-id  Sigcomp identifier
  String
  SIP Via sigcomp identifier

sip.Via.transport  Transport
  String
  Via header Transport

sip.Via.ttl  TTL
  String
  SIP Via TTL

sip.WWW-Authenticate  WWW-Authenticate
  String
  RFC 3261: WWW-Authenticate Header

sip.Warning  Warning
  String
  RFC 3261: Warning Header

sip.auth  Authentication
  String
  SIP Authentication

sip.auth.algorithm  Algorithm
  String
  SIP Authentication Algorithm
```

```
sip.auth.auts  Authentication Token
               String
               SIP Authentication Token
sip.auth.ck    Cyphering Key
               String
               SIP Authentication Cyphering Key
sip.auth.cnonce  CNonce Value
               String
               SIP Authentication Client Nonce
sip.auth.digest.response  Digest Authentication Response
               String
               SIP Digest Authentication Response Value
sip.auth.domain  Authentication Domain
               String
               SIP Authentication Domain
sip.auth.ik     Integrity Key
               String
               SIP Authentication Integrity Key
sip.auth.nc     Nonce Count
               String
               SIP Authentication Nonce count
sip.auth.nextnonce  Next Nonce
               String
               SIP Authentication Next Nonce
sip.auth.nonce  Nonce Value
               String
               SIP Authentication Nonce
sip.auth.opaque  Opaque Value
               String
               SIP Authentication Opaque value
sip.auth.qop    QOP
               String
               SIP Authentication QOP
sip.auth.realm  Realm
               String
               SIP Authentication Realm
sip.auth.rspauth  Response auth
               String
               SIP Authentication Response auth
sip.auth.scheme  Authentication Scheme
               String
               SIP Authentication Scheme
sip.auth.stale  Stale Flag
               String
               SIP Authentication Stale Flag
sip.auth.uri    Authentication URI
               String
               SIP Authentication URI
```



```
sip.auth.username  Username
                   String
                   SIP Authentication Username

sip.contact.addr   SIP contact address
                   String
                   RFC 3261: contact addr

sip.contact.binding Contact Binding
                   String
                   RFC 3261: one contact binding

sip.display.info   SIP Display info
                   String
                   RFC 3261: Display info

sip.from.addr      SIP from address
                   String
                   RFC 3261: from addr

sip.msg_body       Message Body
                   No value
                   Message Body in SIP message

sip.msg_hdr        Message Header
                   No value
                   Message Header in SIP message

sip.resend         Resent Packet
                   Boolean

sip.resend-original Suspected resend of frame
                   Frame number
                   Original transmission of frame

sip.tag            SIP tag
                   String
                   RFC 3261: tag

sip.to.addr        SIP to address
                   String
                   RFC 3261: to addr

sip.uri            URI
                   String
                   RFC 3261: SIP Uri
```

### **Session Initiation Protocol (SIP as raw text) (raw\_sip)**

#### **Session Traversal Utilities for NAT (stun2)**

```
stun2.att          Attributes
                   No value

stun2.att.crc32    CRC-32
                   Unsigned 32-bit integer

stun2.att.error    Error Code
                   Unsigned 8-bit integer

stun2.att.error.class Error Class
                   Unsigned 8-bit integer
```

```
stun2.att.error.reason  Error Reason Phrase
                        String
stun2.att.family        Protocol Family
                        Unsigned 16-bit integer
stun2.att.hmac          HMAC-SHA1
                        Byte array
stun2.att.ipv4          IP
                        IPv4 address
stun2.att.ipv4-xord     IP (XOR-d)
                        IPv4 address
stun2.att.ipv6          IP
                        IPv6 address
stun2.att.ipv6-xord     IP (XOR-d)
                        IPv6 address
stun2.att.length        Attribute Length
                        Unsigned 16-bit integer
stun2.att.nonce         Nonce
                        String
stun2.att.padding       Padding
                        Unsigned 16-bit integer
stun2.att.port          Port
                        Unsigned 16-bit integer
stun2.att.port-xord     Port (XOR-d)
                        Unsigned 16-bit integer
stun2.att.realm         Realm
                        String
stun2.att.server        Server software
                        String
stun2.att.type          Attribute Type
                        Unsigned 16-bit integer
stun2.att.unknown       Unknown Attribute
                        Unsigned 16-bit integer
stun2.att.username      Username
                        String
stun2.class             Message Class
                        Unsigned 16-bit integer
stun2.cookie            Message Cookie
                        Byte array
stun2.id                Message Transaction ID
                        Byte array
stun2.length            Message Length
                        Unsigned 16-bit integer
stun2.method            Message Method
                        Unsigned 16-bit integer
```

stun2.value Value  
Byte array

#### Settings for Microsoft Distributed File System (netdfs)

netdfs.dfs\_Add.comment Comment  
String

netdfs.dfs\_Add.flags Flags  
Unsigned 32-bit integer

netdfs.dfs\_Add.path Path  
String

netdfs.dfs\_Add.server Server  
String

netdfs.dfs\_Add.share Share  
String

netdfs.dfs\_AddFtRoot.comment Comment  
String

netdfs.dfs\_AddFtRoot.dfs\_config\_dn Dfs Config Dn  
String

netdfs.dfs\_AddFtRoot.dfsname Dfsname  
String

netdfs.dfs\_AddFtRoot.dns\_servername Dns Servername  
String

netdfs.dfs\_AddFtRoot.flags Flags  
Unsigned 32-bit integer

netdfs.dfs\_AddFtRoot.rootshare Rootshare  
String

netdfs.dfs\_AddFtRoot.servername Servername  
String

netdfs.dfs\_AddFtRoot.unknown1 Unknown1  
Unsigned 8-bit integer

netdfs.dfs\_AddFtRoot.unknown2 Unknown2  
No value

netdfs.dfs\_AddStdRoot.comment Comment  
String

netdfs.dfs\_AddStdRoot.flags Flags  
Unsigned 32-bit integer

netdfs.dfs\_AddStdRoot.rootshare Rootshare  
String

netdfs.dfs\_AddStdRoot.servername Servername  
String

netdfs.dfs\_AddStdRootForced.comment Comment  
String

netdfs.dfs\_AddStdRootForced.rootshare Rootshare  
String

```
netdfs.dfs_AddStdRootForced.servername  Servername
String
netdfs.dfs_AddStdRootForced.store  Store
String
netdfs.dfs_Enum.bufsize  Bufsize
Unsigned 32-bit integer
netdfs.dfs_Enum.info  Info
No value
netdfs.dfs_Enum.level  Level
Unsigned 32-bit integer
netdfs.dfs_Enum.total  Total
Unsigned 32-bit integer
netdfs.dfs_EnumArray1.count  Count
Unsigned 32-bit integer
netdfs.dfs_EnumArray1.s  S
No value
netdfs.dfs_EnumArray2.count  Count
Unsigned 32-bit integer
netdfs.dfs_EnumArray2.s  S
No value
netdfs.dfs_EnumArray200.count  Count
Unsigned 32-bit integer
netdfs.dfs_EnumArray200.s  S
No value
netdfs.dfs_EnumArray3.count  Count
Unsigned 32-bit integer
netdfs.dfs_EnumArray3.s  S
No value
netdfs.dfs_EnumArray300.count  Count
Unsigned 32-bit integer
netdfs.dfs_EnumArray300.s  S
No value
netdfs.dfs_EnumArray4.count  Count
Unsigned 32-bit integer
netdfs.dfs_EnumArray4.s  S
No value
netdfs.dfs_EnumEx.bufsize  Bufsize
Unsigned 32-bit integer
netdfs.dfs_EnumEx.dfs_name  Dfs Name
String
netdfs.dfs_EnumEx.info  Info
No value
netdfs.dfs_EnumEx.level  Level
Unsigned 32-bit integer
```

```
netdfs.dfs_EnumEx.total    Total
    Unsigned 32-bit integer
netdfs.dfs_EnumInfo.info1  Info1
    No value
netdfs.dfs_EnumInfo.info2  Info2
    No value
netdfs.dfs_EnumInfo.info200 Info200
    No value
netdfs.dfs_EnumInfo.info3  Info3
    No value
netdfs.dfs_EnumInfo.info300 Info300
    No value
netdfs.dfs_EnumInfo.info4  Info4
    No value
netdfs.dfs_EnumStruct.e    E
    No value
netdfs.dfs_EnumStruct.level Level
    Unsigned 32-bit integer
netdfs.dfs_FlushFtTable.rootshare Rootshare
    String
netdfs.dfs_FlushFtTable.servername Servername
    String
netdfs.dfs_GetInfo.dfs_entry_path Dfs Entry Path
    String
netdfs.dfs_GetInfo.info    Info
    No value
netdfs.dfs_GetInfo.level   Level
    Unsigned 32-bit integer
netdfs.dfs_GetInfo.servername Servername
    String
netdfs.dfs_GetInfo.sharename Sharename
    String
netdfs.dfs_GetManagerVersion.version Version
    Unsigned 32-bit integer
netdfs.dfs_Info.info0      Info0
    No value
netdfs.dfs_Info.info1      Info1
    No value
netdfs.dfs_Info.info100    Info100
    No value
netdfs.dfs_Info.info101    Info101
    No value
netdfs.dfs_Info.info102    Info102
    No value
```

```
netdfs.dfs_Info.info103  Info103
    No value
netdfs.dfs_Info.info104  Info104
    No value
netdfs.dfs_Info.info105  Info105
    No value
netdfs.dfs_Info.info106  Info106
    No value
netdfs.dfs_Info.info2    Info2
    No value
netdfs.dfs_Info.info3    Info3
    No value
netdfs.dfs_Info.info4    Info4
    No value
netdfs.dfs_Info.info5    Info5
    No value
netdfs.dfs_Info.info6    Info6
    No value
netdfs.dfs_Info.info7    Info7
    No value
netdfs.dfs_Info1.path    Path
    String
netdfs.dfs_Info100.comment  Comment
    String
netdfs.dfs_Info101.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info102.timeout  Timeout
    Unsigned 32-bit integer
netdfs.dfs_Info103.flags  Flags
    Unsigned 32-bit integer
netdfs.dfs_Info104.priority  Priority
    No value
netdfs.dfs_Info105.comment  Comment
    String
netdfs.dfs_Info105.property_flag_mask  Property Flag Mask
    Unsigned 32-bit integer
netdfs.dfs_Info105.property_flags  Property Flags
    Unsigned 32-bit integer
netdfs.dfs_Info105.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info105.timeout  Timeout
    Unsigned 32-bit integer
netdfs.dfs_Info106.priority  Priority
    No value
```

```
netdfs.dfs_Info106.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info2.comment  Comment
    String
netdfs.dfs_Info2.num_stores  Num Stores
    Unsigned 32-bit integer
netdfs.dfs_Info2.path  Path
    String
netdfs.dfs_Info2.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info200.dom_root  Dom Root
    String
netdfs.dfs_Info3.comment  Comment
    String
netdfs.dfs_Info3.num_stores  Num Stores
    Unsigned 32-bit integer
netdfs.dfs_Info3.path  Path
    String
netdfs.dfs_Info3.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info3.stores  Stores
    No value
netdfs.dfs_Info300.dom_root  Dom Root
    String
netdfs.dfs_Info300.flavor  Flavor
    Unsigned 16-bit integer
netdfs.dfs_Info4.comment  Comment
    String
netdfs.dfs_Info4.guid  Guid
netdfs.dfs_Info4.num_stores  Num Stores
    Unsigned 32-bit integer
netdfs.dfs_Info4.path  Path
    String
netdfs.dfs_Info4.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info4.stores  Stores
    No value
netdfs.dfs_Info4.timeout  Timeout
    Unsigned 32-bit integer
netdfs.dfs_Info5.comment  Comment
    String
netdfs.dfs_Info5.flags  Flags
    Unsigned 32-bit integer
netdfs.dfs_Info5.guid  Guid
```

```

netdfs.dfs_Info5.num_stores  Num Stores
    Unsigned 32-bit integer
netdfs.dfs_Info5.path  Path
    String
netdfs.dfs_Info5.pktsize  Pktsize
    Unsigned 32-bit integer
netdfs.dfs_Info5.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info5.timeout  Timeout
    Unsigned 32-bit integer
netdfs.dfs_Info6.comment  Comment
    String
netdfs.dfs_Info6.entry_path  Entry Path
    String
netdfs.dfs_Info6.flags  Flags
    Unsigned 32-bit integer
netdfs.dfs_Info6.guid  Guid
netdfs.dfs_Info6.num_stores  Num Stores
    Unsigned 16-bit integer
netdfs.dfs_Info6.pktsize  Pktsize
    Unsigned 32-bit integer
netdfs.dfs_Info6.state  State
    Unsigned 32-bit integer
netdfs.dfs_Info6.stores  Stores
    No value
netdfs.dfs_Info6.timeout  Timeout
    Unsigned 32-bit integer
netdfs.dfs_Info7.generation_guid  Generation Guid
netdfs.dfs_ManagerInitialize.flags  Flags
    Unsigned 32-bit integer
netdfs.dfs_ManagerInitialize.servername  Servername
    String
netdfs.dfs_PropertyFlags.DFS_PROPERTY_FLAG_CLUSTER_ENABLED  Dfs Property Flag Cl
    Boolean
netdfs.dfs_PropertyFlags.DFS_PROPERTY_FLAG_INSITE_REFERRALS  Dfs Property Flag I
    Boolean
netdfs.dfs_PropertyFlags.DFS_PROPERTY_FLAG_ROOT_SCALABILITY  Dfs Property Flag R
    Boolean
netdfs.dfs_PropertyFlags.DFS_PROPERTY_FLAG_SITE_COSTING  Dfs Property Flag Site
    Boolean
netdfs.dfs_PropertyFlags.DFS_PROPERTY_FLAG_TARGET_FAILBACK  Dfs Property Flag Ta
    Boolean
netdfs.dfs_Remove.dfs_entry_path  Dfs Entry Path
    String

```



```
netdfs.dfs_Remove.servername  Servername
    String
netdfs.dfs_Remove.sharename  Sharename
    String
netdfs.dfs_RemoveFtRoot.dfsname  Dfsname
    String
netdfs.dfs_RemoveFtRoot.dns_servername  Dns Servername
    String
netdfs.dfs_RemoveFtRoot.flags  Flags
    Unsigned 32-bit integer
netdfs.dfs_RemoveFtRoot.rootshare  Rootshare
    String
netdfs.dfs_RemoveFtRoot.servername  Servername
    String
netdfs.dfs_RemoveFtRoot.unknown  Unknown
    No value
netdfs.dfs_RemoveStdRoot.flags  Flags
    Unsigned 32-bit integer
netdfs.dfs_RemoveStdRoot.rootshare  Rootshare
    String
netdfs.dfs_RemoveStdRoot.servername  Servername
    String
netdfs.dfs_SetInfo.dfs_entry_path  Dfs Entry Path
    String
netdfs.dfs_SetInfo.info  Info
    No value
netdfs.dfs_SetInfo.level  Level
    Unsigned 32-bit integer
netdfs.dfs_SetInfo.servername  Servername
    String
netdfs.dfs_SetInfo.sharename  Sharename
    String
netdfs.dfs_StorageInfo.server  Server
    String
netdfs.dfs_StorageInfo.share  Share
    String
netdfs.dfs_StorageInfo.state  State
    Unsigned 32-bit integer
netdfs.dfs_StorageInfo2.info  Info
    No value
netdfs.dfs_StorageInfo2.target_priority  Target Priority
    No value
netdfs.dfs_StorageState.DFS_STORAGE_STATE_ACTIVE  Dfs Storage State Active
    Boolean
```

```

netdfs.dfs_StorageState.DFS_STORAGE_STATE_OFFLINE  Dfs Storage State Offline
Boolean

netdfs.dfs_StorageState.DFS_STORAGE_STATE_ONLINE  Dfs Storage State Online
Boolean

netdfs.dfs_Target_Priority.reserved  Reserved
Unsigned 16-bit integer

netdfs.dfs_Target_Priority.target_priority_class  Target Priority Class
Unsigned 32-bit integer

netdfs.dfs_Target_Priority.target_priority_rank  Target Priority Rank
Unsigned 16-bit integer

netdfs.dfs_UnknownStruct.unknown1  Unknown1
Unsigned 32-bit integer

netdfs.dfs_UnknownStruct.unknown2  Unknown2
String

netdfs.dfs_VolumeState.DFS_VOLUME_STATE_AD_BLOB  Dfs Volume State Ad Blob
Boolean

netdfs.dfs_VolumeState.DFS_VOLUME_STATE_INCONSISTENT  Dfs Volume State Inconsistent
Boolean

netdfs.dfs_VolumeState.DFS_VOLUME_STATE_OFFLINE  Dfs Volume State Offline
Boolean

netdfs.dfs_VolumeState.DFS_VOLUME_STATE_OK  Dfs Volume State Ok
Boolean

netdfs.dfs_VolumeState.DFS_VOLUME_STATE_ONLINE  Dfs Volume State Online
Boolean

netdfs.dfs_VolumeState.DFS_VOLUME_STATE_STANDALONE  Dfs Volume State Standalone
Boolean

netdfs.opnum  Operation
Unsigned 16-bit integer

netdfs.werror  Windows Error
Unsigned 32-bit integer

```

**Short Frame (short)****Short Message Peer to Peer (smpp)**

```

smpp.SC_interface_version  SMSC-supported version
String
Version of SMPP interface supported by the SMSC.

smpp.additional_status_info_text  Information
String
Description of the meaning of a response PDU.

smpp.addr_npi  Numbering plan indicator
Unsigned 8-bit integer
Gives the numbering plan this address belongs to.

smpp.addr_ton  Type of number
Unsigned 8-bit integer
Indicates the type of number, given in the address.

```

smpp.address\_range Address  
String  
Given address or address range.

smpp.alert\_on\_message\_delivery Alert on delivery  
No value  
Instructs the handset to alert user on message delivery.

smpp.callback\_num Callback number  
No value  
Associates a call back number with the message.

smpp.callback\_num.pres Presentation  
Unsigned 8-bit integer  
Controls the presentation indication.

smpp.callback\_num.scrn Screening  
Unsigned 8-bit integer  
Controls screening of the callback-number.

smpp.callback\_num\_atag Callback number - alphanumeric display tag  
No value  
Associates an alphanumeric display with call back number.

smpp.command\_id Operation  
Unsigned 32-bit integer  
Defines the SMPP PDU.

smpp.command\_length Length  
Unsigned 32-bit integer  
Total length of the SMPP PDU.

smpp.command\_status Result  
Unsigned 32-bit integer  
Indicates success or failure of the SMPP request.

smpp.data\_coding Data coding  
Unsigned 8-bit integer  
Defines the encoding scheme of the message.

smpp.dcs SMPP Data Coding Scheme  
Unsigned 8-bit integer  
Data Coding Scheme according to SMPP.

smpp.dcs.cbs\_class DCS CBS Message class  
Unsigned 8-bit integer  
Specifies the message class for GSM Cell Broadcast Service, for the Data cod

smpp.dcs.cbs\_coding\_group DCS Coding Group for CBS  
Unsigned 8-bit integer  
Data Coding Scheme coding group for GSM Cell Broadcast Service.

smpp.dcs.cbs\_language DCS CBS Message language  
Unsigned 8-bit integer  
Language of the GSM Cell Broadcast Service message.

smpp.dcs.charset DCS Character set  
Unsigned 8-bit integer  
Specifies the character set used in the message.

smpp.dcs.class DCS Message class  
Unsigned 8-bit integer  
Specifies the message class.

smpp.dcs.class\_present DCS Class present  
Boolean  
Indicates if the message class is present (defined).

smpp.dcs.sms\_coding\_group DCS Coding Group for SMS  
Unsigned 8-bit integer  
Data Coding Scheme coding group for GSM Short Message Service.

smpp.dcs.text\_compression DCS Text compression  
Boolean  
Indicates if text compression is used.

smpp.dcs.wap\_class DCS CBS Message class  
Unsigned 8-bit integer  
Specifies the message class for GSM Cell Broadcast Service, as specified by

smpp.dcs.wap\_coding DCS Message coding  
Unsigned 8-bit integer  
Specifies the used message encoding, as specified by the WAP Forum (WAP over

smpp.delivery\_failure\_reason Delivery failure reason  
Unsigned 8-bit integer  
Indicates the reason for a failed delivery attempt.

smpp.dest\_addr\_npi Numbering plan indicator (recipient)  
Unsigned 8-bit integer  
Gives recipient numbering plan this address belongs to.

smpp.dest\_addr\_subunit Subunit destination  
Unsigned 8-bit integer  
Subunit address within mobile to route message to.

smpp.dest\_addr\_ton Type of number (recipient)  
Unsigned 8-bit integer  
Indicates recipient type of number, given in the address.

smpp.dest\_bearer\_type Destination bearer  
Unsigned 8-bit integer  
Desired bearer for delivery of message.

smpp.dest\_network\_type Destination network  
Unsigned 8-bit integer  
Network associated with the destination address.

smpp.dest\_subaddress Destination Subaddress  
Byte array  
Destination Subaddress

smpp.dest\_telematics\_id Telematic interworking (dest)  
Unsigned 16-bit integer  
Telematic interworking to be used for message delivery.

smpp.destination\_addr Recipient address  
String  
Address of SME receiving this message.

smpp.destination\_port Destination port  
Unsigned 16-bit integer  
Application port associated with the destination of the message.

smpp.display\_time Display time  
Unsigned 8-bit integer  
Associates a display time with the message on the handset.

smpp.dl\_name Distr. list name  
String  
The name of the distribution list.

smpp.dlist Destination list  
No value  
The list of destinations for a short message.

smpp.dlist\_resp Unsuccessful delivery list  
No value  
The list of unsuccessful deliveries to destinations.

smpp.dpf\_result Delivery pending set?  
Unsigned 8-bit integer  
Indicates whether Delivery Pending Flag was set.

smpp.error\_code Error code  
Unsigned 8-bit integer  
Network specific error code defining reason for failure.

smpp.error\_status\_code Status  
Unsigned 32-bit integer  
Indicates success/failure of request for this address.

smpp.esm.submit.features GSM features  
Unsigned 8-bit integer  
GSM network specific features.

smpp.esm.submit.msg\_mode Messaging mode  
Unsigned 8-bit integer  
Mode attribute for this message.

smpp.esm.submit.msg\_type Message type  
Unsigned 8-bit integer  
Type attribute for this message.

smpp.esme\_addr ESME address  
String  
Address of ESME originating this message.

smpp.esme\_addr\_npi Numbering plan indicator (ESME)  
Unsigned 8-bit integer  
Gives the numbering plan this address belongs to.

smpp.esme\_addr\_ton Type of number (ESME)  
Unsigned 8-bit integer  
Indicates recipient type of number, given in the address.

smpp.final\_date Final date  
Date/Time stamp  
Date-time when the queried message reached a final state.

smpp.final\_date\_r Final date  
Time duration  
Date-time when the queried message reached a final state.

smpp.interface\_version Version (if)  
String  
Version of SMPP interface supported.

smpp.its\_reply\_type Reply method  
Unsigned 8-bit integer  
Indicates the handset reply method on message receipt.

smpp.its\_session.ind Session indicator  
Unsigned 8-bit integer  
Indicates whether this message is end of conversation.

smpp.its\_session.number Session number  
Unsigned 8-bit integer  
Session number of interactive teleservice.

smpp.its\_session.sequence Sequence number  
Unsigned 8-bit integer  
Sequence number of the dialogue unit.

smpp.language\_indicator Language  
Unsigned 8-bit integer  
Indicates the language of the short message.

smpp.message Message  
No value  
The actual message or data.

smpp.message\_id Message id.  
String  
Identifier of the submitted short message.

smpp.message\_payload Payload  
No value  
Short message user data.

smpp.message\_state Message state  
Unsigned 8-bit integer  
Specifies the status of the queried short message.

smpp.more\_messages\_to\_send More messages?  
Unsigned 8-bit integer  
Indicates more messages pending for the same destination.

smpp.ms\_availability\_status Availability status  
Unsigned 8-bit integer  
Indicates the availability state of the handset.

smpp.ms\_validity Validity info  
Unsigned 8-bit integer  
Associates validity info with the message on the handset.

smpp.msg\_wait.ind Indication  
Unsigned 8-bit integer  
Indicates to the handset that a message is waiting.

smpp.msg\_wait.type Type  
Unsigned 8-bit integer  
Indicates type of message that is waiting.

smpp.network\_error.code Error code  
Unsigned 16-bit integer  
Gives the actual network error code.

smpp.network\_error.type Error type  
Unsigned 8-bit integer  
Indicates the network type.

smpp.number\_of\_messages Number of messages  
Unsigned 8-bit integer  
Indicates number of messages stored in a mailbox.

smpp.opt\_param Optional parameters  
No value  
The list of optional parameters in this operation.

smpp.password Password  
String  
Password used for authentication.

smpp.payload\_type Payload  
Unsigned 8-bit integer  
PDU type contained in the message payload.

smpp.priority\_flag Priority level  
Unsigned 8-bit integer  
The priority level of the short message.

smpp.privacy\_indicator Privacy indicator  
Unsigned 8-bit integer  
Indicates the privacy level of the message.

smpp.protocol\_id Protocol id.  
Unsigned 8-bit integer  
Protocol identifier according GSM 03.40.

smpp.qos\_time\_to\_live Validity period  
Unsigned 32-bit integer  
Number of seconds to retain message before expiry.

smpp.receipted\_message\_id SMSC identifier  
String  
SMSC handle of the message being received.

smpp.regdel.acks Message type  
Unsigned 8-bit integer  
SME acknowledgement request.

smpp.regdel.notif Intermediate notif  
Unsigned 8-bit integer  
Intermediate notification request.

smpp.regdel.receipt Delivery receipt  
Unsigned 8-bit integer  
SMSC delivery receipt request.

smpp.replace\_if\_present\_flag Replace  
Unsigned 8-bit integer  
Replace the short message with this one or not.

smpp.reserved\_op Optional parameter - Reserved  
No value  
An optional parameter that is reserved in this version.

smpp.sar\_msg\_ref\_num SAR reference number  
Unsigned 16-bit integer  
Reference number for a concatenated short message.

smpp.sar\_segment\_seqnum SAR sequence number  
Unsigned 8-bit integer  
Segment number within a concatenated short message.

smpp.sar\_total\_segments SAR size  
Unsigned 16-bit integer  
Number of segments of a concatenated short message.

smpp.schedule\_delivery\_time Scheduled delivery time  
Date/Time stamp  
Scheduled time for delivery of short message.

smpp.schedule\_delivery\_time\_r Scheduled delivery time  
Time duration  
Scheduled time for delivery of short message.

smpp.sequence\_number Sequence #  
Unsigned 32-bit integer  
A number to correlate requests with responses.

smpp.service\_type Service type  
String  
SMS application service associated with the message.

smpp.set\_dpf Request DPF set  
Unsigned 8-bit integer  
Request to set the DPF for certain failure scenario's.

smpp.sm\_default\_msg\_id Predefined message  
Unsigned 8-bit integer  
Index of a predefined ('canned') short message.

smpp.sm\_length Message length  
Unsigned 8-bit integer  
Length of the message content.

smpp.sms\_signal SMS signal  
Unsigned 16-bit integer  
Alert the user according to the information contained within this information

smpp.source\_addr Originator address  
String  
Address of SME originating this message.

smpp.source\_addr\_npi Numbering plan indicator (originator)  
Unsigned 8-bit integer  
Gives originator numbering plan this address belongs to.

smpp.source\_addr\_subunit Subunit origin  
Unsigned 8-bit integer  
Subunit address within mobile that generated the message.

smpp.source\_addr\_ton Type of number (originator)  
Unsigned 8-bit integer  
Indicates originator type of number, given in the address.

smpp.source\_bearer\_type Originator bearer  
Unsigned 8-bit integer  
Bearer over which the message originated.

smpp.source\_network\_type Originator network  
Unsigned 8-bit integer  
Network associated with the originator address.

smpp.source\_port Source port  
Unsigned 16-bit integer  
Application port associated with the source of the message.

smpp.source\_subaddress Source Subaddress  
Byte array  
Source Subaddress



smpp.source\_telematics\_id Telematic interworking (orig)  
Unsigned 16-bit integer  
Telematic interworking used for message submission.

smpp.system\_id System ID  
String  
Identifies a system.

smpp.system\_type System type  
String  
Categorises the system.

smpp.user\_message\_reference Message reference  
Unsigned 16-bit integer  
Reference to the message, assigned by the user.

smpp.user\_response\_code Application response code  
Unsigned 8-bit integer  
A response code set by the user.

smpp.usssd\_service\_op USSD service operation  
Unsigned 8-bit integer  
Indicates the USSD service operation.

smpp.validity\_period Validity period  
Date/Time stamp  
Validity period of this message.

smpp.validity\_period\_r Validity period  
Time duration  
Validity period of this message.

smpp.vendor\_op Optional parameter - Vendor-specific  
No value  
A supplied optional parameter specific to an SMSC-vendor.

#### **Short Message Relaying Service (smrse)**

smrse.address\_type address-type  
Signed 32-bit integer  
smrse.T\_address\_type

smrse.address\_value address-value  
Unsigned 32-bit integer  
smrse.T\_address\_value

smrse.alerting\_MS\_ISDN alerting-MS-ISDN  
No value  
smrse.SMS\_Address

smrse.connect\_fail\_reason connect-fail-reason  
Signed 32-bit integer  
smrse.Connect\_fail

smrse.error\_reason error-reason  
Signed 32-bit integer  
smrse.Error\_reason

smrse.length Length  
Unsigned 16-bit integer  
Length of SMRSE PDU

```
smrse.message_reference  message-reference
    Unsigned 32-bit integer
    smrse.RP_MR

smrse.mo_message_reference  mo-message-reference
    Unsigned 32-bit integer
    smrse.RP_MR

smrse.mo_originating_address  mo-originating-address
    No value
    smrse.SMS_Address

smrse.mo_user_data  mo-user-data
    Byte array
    smrse.RP_UD

smrse.moimsi  moimsi
    Byte array
    smrse.IMSI_Address

smrse.ms_address  ms-address
    No value
    smrse.SMS_Address

smrse.msg_waiting_set  msg-waiting-set
    Boolean
    smrse.BOOLEAN

smrse.mt_destination_address  mt-destination-address
    No value
    smrse.SMS_Address

smrse.mt_message_reference  mt-message-reference
    Unsigned 32-bit integer
    smrse.RP_MR

smrse.mt_mms  mt-mms
    Boolean
    smrse.BOOLEAN

smrse.mt_origVMSCAddr  mt-origVMSCAddr
    No value
    smrse.SMS_Address

smrse.mt_originating_address  mt-originating-address
    No value
    smrse.SMS_Address

smrse.mt_priority_request  mt-priority-request
    Boolean
    smrse.BOOLEAN

smrse.mt_tariffClass  mt-tariffClass
    Unsigned 32-bit integer
    smrse.SM_TC

smrse.mt_user_data  mt-user-data
    Byte array
    smrse.RP_UD

smrse.numbering_plan  numbering-plan
    Signed 32-bit integer
    smrse.T_numbering_plan
```

```

smrse.octet_Format  octet-Format
    String
    SMS-Address/address-value/octet-format

smrse.octet_format  octet-format
    Byte array
    smrse.T_octet_format

smrse.origVMSCAddr  origVMSCAddr
    No value
    smrse.SMS_Address

smrse.password      password
    String
    smrse.Password

smrse.reserved      Reserved
    Unsigned 8-bit integer
    Reserved byte, must be 126

smrse.sc_address    sc-address
    No value
    smrse.SMS_Address

smrse.sm_diag_info  sm-diag-info
    Byte array
    smrse.RP_UD

smrse.tag            Tag
    Unsigned 8-bit integer
    Tag

```

### Signaling Compression (sigcomp)

```

sigcomp.addr.output.start  %Output_start[memory address]
    Unsigned 16-bit integer
    Output start

sigcomp.code.len          Code length
    Unsigned 16-bit integer
    Code length

sigcomp.compression-ratio  Compression ratio (%)
    Unsigned 32-bit integer
    Compression ratio (decompressed / compressed) %

sigcomp.destination       Destination
    Unsigned 8-bit integer
    Destination

sigcomp.length            Partial state id length
    Unsigned 8-bit integer
    Sigcomp length

sigcomp.memory_size       Memory size
    Unsigned 16-bit integer
    Memory size

sigcomp.min.acc.len       %Minimum access length
    Unsigned 16-bit integer
    Minimum access length

```

```
sigcomp.nack.cycles_per_bit  Cycles Per Bit
    Unsigned 8-bit integer
    NACK Cycles Per Bit

sigcomp.nack.failed_op_code  OPCODE of failed instruction
    Unsigned 8-bit integer
    NACK OPCODE of failed instruction

sigcomp.nack.pc              PC of failed instruction
    Unsigned 16-bit integer
    NACK PC of failed instruction

sigcomp.nack.reason          Reason Code
    Unsigned 8-bit integer
    NACK Reason Code

sigcomp.nack.shal            SHA-1 Hash of failed message
    Byte array
    NACK SHA-1 Hash of failed message

sigcomp.nack.state_id        State ID (6 - 20 bytes)
    Byte array
    NACK State ID (6 - 20 bytes)

sigcomp.nack.ver             NACK Version
    Unsigned 8-bit integer
    NACK Version

sigcomp.output.length        %Output_length
    Unsigned 16-bit integer
    Output length

sigcomp.output.length.addr    %Output_length[memory address]
    Unsigned 16-bit integer
    Output length

sigcomp.output.start         %Output_start
    Unsigned 16-bit integer
    Output start

sigcomp.partial.state.identifier  Partial state identifier
    String
    Partial state identifier

sigcomp.remaining-bytes      Remaining SigComp message bytes
    Unsigned 32-bit integer
    Number of bytes remaining in message

sigcomp.req.feedback.loc     %Requested feedback location
    Unsigned 16-bit integer
    Requested feedback location

sigcomp.ret.param.loc        %Returned parameters location
    Unsigned 16-bit integer
    Returned parameters location

sigcomp.returned.feedback.item  Returned_feedback item
    Byte array
    Returned feedback item

sigcomp.returned.feedback.item.len  Returned feedback item length
    Unsigned 8-bit integer
    Returned feedback item length
```

```
sigcomp.t.bit    T bit
                Unsigned 8-bit integer
                Sigcomp T bit

sigcomp.udvm.addr.destination  %Destination[memory address]
                Unsigned 16-bit integer
                Destination

sigcomp.udvm.addr.j    %j[memory address]
                Unsigned 16-bit integer
                j

sigcomp.udvm.addr.length  %Length[memory address]
                Unsigned 16-bit integer
                Length

sigcomp.udvm.addr.offset  %Offset[memory address]
                Unsigned 16-bit integer
                Offset

sigcomp.udvm.at.address  @Address(mem_add_of_inst + D) mod 2^16)
                Unsigned 16-bit integer
                Address

sigcomp.udvm.bits    %Bits
                Unsigned 16-bit integer
                Bits

sigcomp.udvm.byte-code  Uploaded UDVM bytecode
                No value
                Uploaded UDVM bytecode

sigcomp.udvm.destination  %Destination
                Unsigned 16-bit integer
                Destination

sigcomp.udvm.execution-trace  UDVM execution trace
                No value
                UDVM execution trace

sigcomp.udvm.instr  UDVM instruction code
                Unsigned 8-bit integer
                UDVM instruction code

sigcomp.udvm.j    %j
                Unsigned 16-bit integer
                j

sigcomp.udvm.length  %Length
                Unsigned 16-bit integer
                Length

sigcomp.udvm.lit.bytecode  UDVM bytecode
                Unsigned 8-bit integer
                UDVM bytecode

sigcomp.udvm.literal-num  #n
                Unsigned 16-bit integer
                Literal number

sigcomp.udvm.lower.bound  %Lower bound
                Unsigned 16-bit integer
                Lower_bound
```

```

sigcomp.udvm.multyt.bytecode  UDVM bytecode
    Unsigned 8-bit integer
    UDVM bytecode

sigcomp.udvm.offset    %Offset
    Unsigned 16-bit integer
    Offset

sigcomp.udvm.operand  UDVM operand
    Unsigned 16-bit integer
    UDVM operand

sigcomp.udvm.operand.1  $Operand 1[memory address]
    Unsigned 16-bit integer
    Reference $ Operand 1

sigcomp.udvm.operand.2  %Operand 2
    Unsigned 16-bit integer
    Operand 2

sigcomp.udvm.operand.2.addr  %Operand 2[memory address]
    Unsigned 16-bit integer
    Operand 2

sigcomp.udvm.partial.identifier.length  %Partial identifier length
    Unsigned 16-bit integer
    Partial identifier length

sigcomp.udvm.partial.identifier.start  %Partial identifier start
    Unsigned 16-bit integer
    Partial identifier start

sigcomp.udvm.position  %Position
    Unsigned 16-bit integer
    Position

sigcomp.udvm.ref.bytecode  UDVM bytecode
    Unsigned 8-bit integer
    UDVM bytecode

sigcomp.udvm.ref.destination  $Destination[memory address]
    Unsigned 16-bit integer
    (reference)Destination

sigcomp.udvm.start.address  %State address
    Unsigned 16-bit integer
    State address

sigcomp.udvm.start.address.addr  %State address[memory address]
    Unsigned 16-bit integer
    State address

sigcomp.udvm.start.instr  %State instruction
    Unsigned 16-bit integer
    State instruction

sigcomp.udvm.start.value  %Start value
    Unsigned 16-bit integer
    Start value

sigcomp.udvm.state.begin  %State begin
    Unsigned 16-bit integer
    State begin

```

```

sigcomp.udvm.state.length    %State length
    Unsigned 16-bit integer
    State length

sigcomp.udvm.state.length.addr    %State length[memory address]
    Unsigned 16-bit integer
    State length

sigcomp.udvm.state.ret.pri    %State retention priority
    Unsigned 16-bit integer
    State retention priority

sigcomp.udvm.uncompressed    %Uncompressed
    Unsigned 16-bit integer
    Uncompressed

sigcomp.udvm.upper.bound    %Upper bound
    Unsigned 16-bit integer
    Upper bound

sigcomp.udvm.value    %Value
    Unsigned 16-bit integer
    Value

```

#### **Signalling Connection Control Part (sccp)**

```

sccp.assoc.id    Association ID
    Unsigned 32-bit integer

sccp.assoc.msg    Message in frame
    Frame number

sccp.called.ansi_pc    PC
    String

sccp.called.chinese_pc    PC
    String

sccp.called.cluster    PC Cluster
    Unsigned 24-bit integer

sccp.called.digits    GT Digits
    String

sccp.called.es    Encoding Scheme
    Unsigned 8-bit integer

sccp.called.gti    Global Title Indicator
    Unsigned 8-bit integer

sccp.called.member    PC Member
    Unsigned 24-bit integer

sccp.called.nai    Nature of Address Indicator
    Unsigned 8-bit integer

sccp.called.network    PC Network
    Unsigned 24-bit integer

sccp.called.ni    National Indicator
    Unsigned 8-bit integer

sccp.called.np    Numbering Plan
    Unsigned 8-bit integer

```

```
sccp.called.oe  Odd/Even Indicator
                Unsigned 8-bit integer
sccp.called.pc  PC
                Unsigned 16-bit integer
sccp.called.pci Point Code Indicator
                Unsigned 8-bit integer
sccp.called.ri  Routing Indicator
                Unsigned 8-bit integer
sccp.called.ssn SubSystem Number
                Unsigned 8-bit integer
sccp.called.ssn SubSystem Number Indicator
                Unsigned 8-bit integer
sccp.called.tt  Translation Type
                Unsigned 8-bit integer
sccp.calling.ansi_pc  PC
                String
sccp.calling.chinese_pc  PC
                String
sccp.calling.cluster  PC Cluster
                Unsigned 24-bit integer
sccp.calling.digits  GT Digits
                String
sccp.calling.es  Encoding Scheme
                Unsigned 8-bit integer
sccp.calling.gti  Global Title Indicator
                Unsigned 8-bit integer
sccp.calling.member  PC Member
                Unsigned 24-bit integer
sccp.calling.nai  Nature of Address Indicator
                Unsigned 8-bit integer
sccp.calling.network  PC Network
                Unsigned 24-bit integer
sccp.calling.ni  National Indicator
                Unsigned 8-bit integer
sccp.calling.np  Numbering Plan
                Unsigned 8-bit integer
sccp.calling.oe  Odd/Even Indicator
                Unsigned 8-bit integer
sccp.calling.pc  PC
                Unsigned 16-bit integer
sccp.calling.pci  Point Code Indicator
                Unsigned 8-bit integer
sccp.calling.ri  Routing Indicator
                Unsigned 8-bit integer
```



```
sccp.calling.ssn  SubSystem Number
    Unsigned 8-bit integer
sccp.calling.ssni  SubSystem Number Indicator
    Unsigned 8-bit integer
sccp.calling.tt  Translation Type
    Unsigned 8-bit integer
sccp.class  Class
    Unsigned 8-bit integer
sccp.credit  Credit
    Unsigned 8-bit integer
sccp.digits  Called or Calling GT Digits
    String
sccp.dlr  Destination Local Reference
    Unsigned 24-bit integer
sccp.error_cause  Error Cause
    Unsigned 8-bit integer
sccp.handling  Message handling
    Unsigned 8-bit integer
sccp.hops  Hop Counter
    Unsigned 8-bit integer
sccp.importance  Importance
    Unsigned 8-bit integer
sccp.isni.counter  ISNI Counter
    Unsigned 8-bit integer
sccp.isni.iri  ISNI Routing Indicator
    Unsigned 8-bit integer
sccp.isni.mi  ISNI Mark for Identification Indicator
    Unsigned 8-bit integer
sccp.isni.netspec  ISNI Network Specific (Type 1)
    Unsigned 8-bit integer
sccp.isni.ti  ISNI Type Indicator
    Unsigned 8-bit integer
sccp.lr  Local Reference
    Unsigned 24-bit integer
sccp.message_type  Message Type
    Unsigned 8-bit integer
sccp.more  More data
    Unsigned 8-bit integer
sccp.msg.fragment  Message fragment
    Frame number
sccp.msg.fragment.error  Message defragmentation error
    Frame number
sccp.msg.fragment.multiple_tails  Message has multiple tail fragments
    Boolean
```

```
sccp.msg.fragment.overlap  Message fragment overlap
    Boolean
sccp.msg.fragment.overlap.conflicts  Message fragment overlapping with conflicts
    Boolean
sccp.msg.fragment.too_long_fragment  Message fragment too long
    Boolean
sccp.msg.fragments  Message fragments
    No value
sccp.msg.reassembled.in  Reassembled in
    Frame number
sccp.optional_pointer  Pointer to Optional parameter
    Unsigned 16-bit integer
sccp.refusal_cause  Refusal Cause
    Unsigned 8-bit integer
sccp.release_cause  Release Cause
    Unsigned 8-bit integer
sccp.reset_cause  Reset Cause
    Unsigned 8-bit integer
sccp.return_cause  Return Cause
    Unsigned 8-bit integer
sccp.rsn  Receive Sequence Number
    Unsigned 8-bit integer
sccp.segmentation.class  Segmentation: Class
    Unsigned 8-bit integer
sccp.segmentation.first  Segmentation: First
    Unsigned 8-bit integer
sccp.segmentation.remaining  Segmentation: Remaining
    Unsigned 8-bit integer
sccp.segmentation.slr  Segmentation: Source Local Reference
    Unsigned 24-bit integer
sccp.sequencing_segmenting.more  Sequencing Segmenting: More
    Unsigned 8-bit integer
sccp.sequencing_segmenting.rsn  Sequencing Segmenting: Receive Sequence Number
    Unsigned 8-bit integer
sccp.sequencing_segmenting.ssn  Sequencing Segmenting: Send Sequence Number
    Unsigned 8-bit integer
sccp.slr  Source Local Reference
    Unsigned 24-bit integer
sccp.ssn  Called or Calling SubSystem Number
    Unsigned 8-bit integer
sccp.variable_pointer1  Pointer to first Mandatory Variable parameter
    Unsigned 16-bit integer
sccp.variable_pointer2  Pointer to second Mandatory Variable parameter
    Unsigned 16-bit integer
```

sccp.variable\_pointer3 Pointer to third Mandatory Variable parameter  
Unsigned 16-bit integer

#### Signalling Connection Control Part Management (sccpmg)

sccpmg.ansi\_pc Affected Point Code  
String

sccpmg.chinese\_pc Affected Point Code  
String

sccpmg.cluster Affected PC Cluster  
Unsigned 24-bit integer

sccpmg.congestion SCCP Congestion Level (ITU)  
Unsigned 8-bit integer

sccpmg.member Affected PC Member  
Unsigned 24-bit integer

sccpmg.message\_type Message Type  
Unsigned 8-bit integer

sccpmg.network Affected PC Network  
Unsigned 24-bit integer

sccpmg.pc Affected Point Code  
Unsigned 16-bit integer

sccpmg.smi Subsystem Multiplicity Indicator  
Unsigned 8-bit integer

sccpmg.ssn Affected SubSystem Number  
Unsigned 8-bit integer

#### Simple Mail Transfer Protocol (smtp)

smtp.data.fragment DATA fragment  
Frame number  
Message fragment

smtp.data.fragment.error DATA defragmentation error  
Frame number  
Message defragmentation error

smtp.data.fragment.multiple\_tails DATA has multiple tail fragments  
Boolean  
Message has multiple tail fragments

smtp.data.fragment.overlap DATA fragment overlap  
Boolean  
Message fragment overlap

smtp.data.fragment.overlap.conflicts DATA fragment overlapping with conflicting  
Boolean  
Message fragment overlapping with conflicting data

smtp.data.fragment.too\_long\_fragment DATA fragment too long  
Boolean  
Message fragment too long

smtp.data.fragments DATA fragments  
No value  
Message fragments

```

smtp.data.reassembled.in  Reassembled DATA in frame
                          Frame number
                          This DATA fragment is reassembled in this frame

smtp.req  Request
          Boolean

smtp.req.command  Command
                 String

smtp.req.parameter  Request parameter
                   String

smtp.response.code  Response code
                   Unsigned 32-bit integer

smtp.rsp  Response
          Boolean

smtp.rsp.parameter  Response parameter
                   String

```

### Simple Network Management Protocol (snmp)

```

snmp.SMUX_PDUs  SMUX-PDUs
                Unsigned 32-bit integer
                snmp.SMUX_PDUs

snmp.VarBindList_item  Item
                       No value
                       snmp.VarBind

snmp.agent_addr  agent-addr
                 IPv4 address
                 snmp.NetworkAddress

snmp.close  close
            Signed 32-bit integer
            snmp.ClosePDU

snmp.commitOrRollback  commitOrRollback
                       Signed 32-bit integer
                       snmp.SOutPDU

snmp.community  community
                String
                snmp.OCTET_STRING

snmp.contextEngineID  contextEngineID
                      Byte array
                      snmp.SnmpEngineID

snmp.contextName  contextName
                  Byte array
                  snmp.OCTET_STRING

snmp.data  data
           Unsigned 32-bit integer
           snmp.PDUs

snmp.datav2u  datav2u
              Unsigned 32-bit integer
              snmp.T_datav2u

```

```
snmp.decrypted_pdu  Decrypted ScopedPDU
    Byte array
    Decrypted PDU

snmp.description  description
    Byte array
    snmp.DisplayString

snmp.encrypted  encrypted
    Byte array
    snmp.OCTET_STRING

snmp.encryptedPDU  encryptedPDU
    Byte array
    snmp.T_encryptedPDU

snmp.endOfMibView  endOfMibView
    No value

snmp.engineid.conform  Engine ID Conformance
    Boolean
    Engine ID RFC3411 Conformance

snmp.engineid.data  Engine ID Data
    Byte array
    Engine ID Data

snmp.engineid.enterprise  Engine Enterprise ID
    Unsigned 32-bit integer
    Engine Enterprise ID

snmp.engineid.format  Engine ID Format
    Unsigned 8-bit integer
    Engine ID Format

snmp.engineid.ipv4  Engine ID Data: IPv4 address
    IPv4 address
    Engine ID Data: IPv4 address

snmp.engineid.ipv6  Engine ID Data: IPv6 address
    IPv6 address
    Engine ID Data: IPv6 address

snmp.engineid.mac  Engine ID Data: MAC address
    6-byte Hardware (MAC) Address
    Engine ID Data: MAC address

snmp.engineid.text  Engine ID Data: Text
    String
    Engine ID Data: Text

snmp.engineid.time  Engine ID Data: Time
    Date/Time stamp
    Engine ID Data: Time

snmp.enterprise  enterprise
    snmp.EnterpriseOID

snmp.error_index  error-index
    Signed 32-bit integer
    snmp.INTEGER
```

```
snmp.error_status  error-status
    Signed 32-bit integer
    snmp.T_error_status

snmp.generic_trap  generic-trap
    Signed 32-bit integer
    snmp.T_generic_trap

snmp.getBulkRequest  getBulkRequest
    No value
    snmp.GetBulkRequest_PDU

snmp.get_next_request  get-next-request
    No value
    snmp.GetNextRequest_PDU

snmp.get_request  get-request
    No value
    snmp.GetRequest_PDU

snmp.get_response  get-response
    No value
    snmp.GetResponse_PDU

snmp.identity  identity
    snmp.OBJECT_IDENTIFIER

snmp.informRequest  informRequest
    No value
    snmp.InformRequest_PDU

snmp.max_repetitions  max-repetitions
    Unsigned 32-bit integer
    snmp.INTEGER_0_2147483647

snmp.msgAuthenticationParameters  msgAuthenticationParameters
    Byte array
    snmp.T_msgAuthenticationParameters

snmp.msgAuthoritativeEngineBoots  msgAuthoritativeEngineBoots
    Unsigned 32-bit integer
    snmp.T_msgAuthoritativeEngineBoots

snmp.msgAuthoritativeEngineID  msgAuthoritativeEngineID
    Byte array
    snmp.T_msgAuthoritativeEngineID

snmp.msgAuthoritativeEngineTime  msgAuthoritativeEngineTime
    Unsigned 32-bit integer
    snmp.T_msgAuthoritativeEngineTime

snmp.msgData  msgData
    Unsigned 32-bit integer
    snmp.ScopedPduData

snmp.msgFlags  msgFlags
    Byte array
    snmp.T_msgFlags

snmp.msgGlobalData  msgGlobalData
    No value
    snmp.HeaderData
```

```
snmp.msgID msgID
  Unsigned 32-bit integer
  snmp.INTEGER_0_2147483647

snmp.msgMaxSize msgMaxSize
  Unsigned 32-bit integer
  snmp.INTEGER_484_2147483647

snmp.msgPrivacyParameters msgPrivacyParameters
  Byte array
  snmp.T_msgPrivacyParameters

snmp.msgSecurityModel msgSecurityModel
  Unsigned 32-bit integer
  snmp.T_msgSecurityModel

snmp.msgSecurityParameters msgSecurityParameters
  Byte array
  snmp.T_msgSecurityParameters

snmp.msgUserName msgUserName
  String
  snmp.T_msgUserName

snmp.msgVersion msgVersion
  Signed 32-bit integer
  snmp.Version

snmp.name Object Name

snmp.name.index Scalar Instance Index
  Unsigned 64-bit integer

snmp.noSuchInstance noSuchInstance
  No value

snmp.noSuchObject noSuchObject
  No value

snmp.non_repeaters non-repeaters
  Unsigned 32-bit integer
  snmp.INTEGER_0_2147483647

snmp.open open
  Unsigned 32-bit integer
  snmp.OpenPDU

snmp.operation operation
  Signed 32-bit integer
  snmp.T_operation

snmp.pDUs pDUs
  Unsigned 32-bit integer
  snmp.PDUs

snmp.parameters parameters
  Byte array
  snmp.OCTET_STRING

snmp.password password
  Byte array
  snmp.OCTET_STRING
```

```
snmp.plaintext  plaintext
    Unsigned 32-bit integer
    snmp.PDUs

snmp.priority  priority
    Signed 32-bit integer
    snmp.INTEGER_M1_2147483647

snmp.rRspPDU   rRspPDU
    Signed 32-bit integer
    snmp.RRspPDU

snmp.registerRequest  registerRequest
    No value
    snmp.RReqPDU

snmp.registerResponse  registerResponse
    Unsigned 32-bit integer
    snmp.RegisterResponse

snmp.report  report
    No value
    snmp.Report_PDU

snmp.request_id  request-id
    Signed 32-bit integer
    snmp.INTEGER

snmp.sNMPv2_Trap  sNMPv2-Trap
    No value
    snmp.SNMPv2_Trap_PDU

snmp.set_request  set-request
    No value
    snmp.SetRequest_PDU

snmp.smux_simple  smux-simple
    No value
    snmp.SimpleOpen

snmp.smux_version  smux-version
    Signed 32-bit integer
    snmp.T_smux_version

snmp.specific_trap  specific-trap
    Signed 32-bit integer
    snmp.INTEGER

snmp.subtree  subtree
    snmp.ObjectName

snmp.time_stamp  time-stamp
    Unsigned 32-bit integer
    snmp.TimeTicks

snmp.trap  trap
    No value
    snmp.Trap_PDU

snmp.unSpecified  unSpecified
    No value
```



```
snmp.v3.auth Authentication
  Boolean
snmp.v3.flags.auth Authenticated
  Boolean
snmp.v3.flags.crypt Encrypted
  Boolean
snmp.v3.flags.report Reportable
  Boolean
snmp.value.addr Value (IpAddress)
  Byte array
snmp.value.counter Value (Counter32)
  Unsigned 64-bit integer
snmp.value.g32 Value (Gauge32)
  Signed 64-bit integer
snmp.value.int Value (Integer32)
  Signed 64-bit integer
snmp.value.ipv4 Value (IpAddress)
  IPv4 address
snmp.value.ipv6 Value (IpAddress)
  IPv6 address
snmp.value.nsap Value (NSAP)
  Unsigned 64-bit integer
snmp.value.null Value (Null)
  No value
snmp.value.octets Value (OctetString)
  Byte array
snmp.value.oid Value (OID)
snmp.value.opaque Value (Opaque)
  Byte array
snmp.value.timeticks Value (Timeticks)
  Unsigned 64-bit integer
snmp.value.u32 Value (Unsigned32)
  Signed 64-bit integer
snmp.value.unk Value (Unknown)
  Byte array
snmp.valueType valueType
  No value
  snmp.NULL
snmp.variable_bindings variable-bindings
  Unsigned 32-bit integer
  snmp.VarBindList
snmp.version version
  Signed 32-bit integer
  snmp.Version
```

**Simple Protected Negotiation (spnego)**

```
spnego.MechTypeList_item  Item
    spnego.MechType
spnego.anonFlag  anonFlag
    Boolean
spnego.confFlag  confFlag
    Boolean
spnego.delegFlag  delegFlag
    Boolean
spnego.innerContextToken  innerContextToken
    No value
    spnego.InnerContextToken
spnego.integFlag  integFlag
    Boolean
spnego.krb5.blob  krb5_blob
    Byte array
    krb5_blob
spnego.krb5.confounder  krb5_confounder
    Byte array
    KRB5 Confounder
spnego.krb5.seal_alg  krb5_seal_alg
    Unsigned 16-bit integer
    KRB5 Sealing Algorithm
spnego.krb5.sgn_alg  krb5_sgn_alg
    Unsigned 16-bit integer
    KRB5 Signing Algorithm
spnego.krb5.sgn_cksum  krb5_sgn_cksum
    Byte array
    KRB5 Data Checksum
spnego.krb5.snd_seq  krb5_snd_seq
    Byte array
    KRB5 Encrypted Sequence Number
spnego.krb5.tok_id  krb5_tok_id
    Unsigned 16-bit integer
    KRB5 Token Id
spnego.krb5_oid  KRB5 OID
    String
    KRB5 OID
spnego.mechListMIC  mechListMIC
    Byte array
    spnego.T_NegTokenInit_mechListMIC
spnego.mechToken  mechToken
    Byte array
    spnego.T_mechToken
```

```

spnego.mechTypes  mechTypes
    Unsigned 32-bit integer
    spnego.MechTypeList

spnego.mutualFlag  mutualFlag
    Boolean

spnego.negResult  negResult
    Unsigned 32-bit integer
    spnego.T_negResult

spnego.negTokenInit  negTokenInit
    No value
    spnego.NegTokenInit

spnego.negTokenTarg  negTokenTarg
    No value
    spnego.NegTokenTarg

spnego.principal  principal
    String
    spnego.GeneralString

spnego.replayFlag  replayFlag
    Boolean

spnego.reqFlags  reqFlags
    Byte array
    spnego.ContextFlags

spnego.responseToken  responseToken
    Byte array
    spnego.T_responseToken

spnego.sequenceFlag  sequenceFlag
    Boolean

spnego.supportedMech  supportedMech
    spnego.T_supportedMech

spnego.thisMech  thisMech
    spnego.MechType

spnego.wraptoken  wrapToken
    No value
    SPNEGO wrapToken

```

#### **Simple Traversal of UDP Through NAT (stun)**

```

stun.att  Attributes
    No value

stun.att.bandwidth  Bandwidth
    Unsigned 32-bit integer

stun.att.change.ip  Change IP
    Boolean

stun.att.change.port  Change Port
    Boolean

stun.att.connection_request_binding  Connection Request Binding
    String

```

```
stun.att.data Data
  Byte array
stun.att.error Error Code
  Unsigned 8-bit integer
stun.att.error.class Error Class
  Unsigned 8-bit integer
stun.att.error.reason Error Reason Phase
  String
stun.att.family Protocol Family
  Unsigned 16-bit integer
stun.att.ipv4 IP
  IPv4 address
stun.att.ipv4-xord IP (XOR-d)
  IPv4 address
stun.att.ipv6 IP
  IPv6 address
stun.att.ipv6-xord IP (XOR-d)
  IPv6 address
stun.att.length Attribute Length
  Unsigned 16-bit integer
stun.att.lifetime Lifetime
  Unsigned 32-bit integer
stun.att.magic.cookie Magic Cookie
  Unsigned 32-bit integer
stun.att.port Port
  Unsigned 16-bit integer
stun.att.port-xord Port (XOR-d)
  Unsigned 16-bit integer
stun.att.server Server version
  String
stun.att.type Attribute Type
  Unsigned 16-bit integer
stun.att.unknown Unknown Attribute
  Unsigned 16-bit integer
stun.att.value Value
  Byte array
stun.id Message Transaction ID
  Byte array
stun.length Message Length
  Unsigned 16-bit integer
stun.type Message Type
  Unsigned 16-bit integer
```

**Sinec H1 Protocol (h1)**

h1.dbnr Memory block number  
Unsigned 8-bit integer

h1.dlen Length in words  
Signed 16-bit integer

h1.dwnr Address within memory block  
Unsigned 16-bit integer

h1.empty Empty field  
Unsigned 8-bit integer

h1.empty\_len Empty field length  
Unsigned 8-bit integer

h1.header H1-Header  
Unsigned 16-bit integer

h1.len Length indicator  
Unsigned 16-bit integer

h1.opcode Opcode  
Unsigned 8-bit integer

h1.opfield Operation identifier  
Unsigned 8-bit integer

h1.oplen Operation length  
Unsigned 8-bit integer

h1.org Memory type  
Unsigned 8-bit integer

h1.reqlen Request length  
Unsigned 8-bit integer

h1.request Request identifier  
Unsigned 8-bit integer

h1.reslen Response length  
Unsigned 8-bit integer

h1.response Response identifier  
Unsigned 8-bit integer

h1.resvalue Response value  
Unsigned 8-bit integer

**Sipfrag (sipfrag)**

sipfrag.line Line  
String  
Line

**Skinny Client Control Protocol (skinny)**

skinny.DSCPValue DSCPValue  
Unsigned 32-bit integer  
DSCPValue.

skinny.MPI MPI  
Unsigned 32-bit integer  
MPI.

```
skinny.RTPPayloadFormat RTPPayloadFormat
    Unsigned 32-bit integer
    RTPPayloadFormat.

skinny.activeConferenceOnRegistration ActiveConferenceOnRegistration
    Unsigned 32-bit integer
    ActiveConferenceOnRegistration.

skinny.activeForward Active Forward
    Unsigned 32-bit integer
    This is non zero to indicate that a forward is active on the line

skinny.activeStreamsOnRegistration ActiveStreamsOnRegistration
    Unsigned 32-bit integer
    ActiveStreamsOnRegistration.

skinny.addParticipantResults AddParticipantResults
    Unsigned 32-bit integer
    The add conference participant results

skinny.alarmParam1 AlarmParam1
    Unsigned 32-bit integer
    An as yet undecoded param1 value from the alarm message

skinny.alarmParam2 AlarmParam2
    IPv4 address
    This is the second alarm parameter i think it's an ip address

skinny.alarmSeverity AlarmSeverity
    Unsigned 32-bit integer
    The severity of the reported alarm.

skinny.annPlayMode annPlayMode
    Unsigned 32-bit integer
    AnnPlayMode

skinny.annPlayStatus AnnPlayStatus
    Unsigned 32-bit integer
    AnnPlayStatus

skinny.annexNandWFutureUse AnnexNandWFutureUse
    Unsigned 32-bit integer
    AnnexNandWFutureUse.

skinny.appConfID AppConfID
    Unsigned 8-bit integer
    App Conf ID Data.

skinny.appData AppData
    Unsigned 8-bit integer
    App data.

skinny.appID AppID
    Unsigned 32-bit integer
    AppID.

skinny.appInstanceID AppInstanceID
    Unsigned 32-bit integer
    appInstanceID.

skinny.applicationID ApplicationID
    Unsigned 32-bit integer
    Application ID.
```

skinny.audioCapCount AudioCapCount  
Unsigned 32-bit integer  
AudioCapCount.

skinny.auditParticipantResults AuditParticipantResults  
Unsigned 32-bit integer  
The audit participant results

skinny.bandwidth Bandwidth  
Unsigned 32-bit integer  
Bandwidth.

skinny.bitRate BitRate  
Unsigned 32-bit integer  
BitRate.

skinny.buttonCount ButtonCount  
Unsigned 32-bit integer  
Number of (VALID) button definitions in this message.

skinny.buttonDefinition ButtonDefinition  
Unsigned 8-bit integer  
The button type for this instance (ie line, speed dial, ....

skinny.buttonInstanceNumber InstanceNumber  
Unsigned 8-bit integer  
The button instance number for a button or the StationKeyPad value, repeats

skinny.buttonOffset ButtonOffset  
Unsigned 32-bit integer  
Offset is the number of the first button referenced by this message.

skinny.callIdentifier Call Identifier  
Unsigned 32-bit integer  
Call identifier for this call.

skinny.callSelectStat CallSelectStat  
Unsigned 32-bit integer  
CallSelectStat.

skinny.callState CallState  
Unsigned 32-bit integer  
The D channel call state of the call

skinny.callType Call Type  
Unsigned 32-bit integer  
What type of call, in/out/etc

skinny.calledParty CalledParty  
String  
The number called.

skinny.calledPartyName Called Party Name  
String  
The name of the party we are calling.

skinny.callingPartyName Calling Party Name  
String  
The passed name of the calling party.

skinny.capCount CapCount  
Unsigned 32-bit integer  
How many capabilities

```
skinny.clockConversionCode  ClockConversionCode
    Unsigned 32-bit integer
    ClockConversionCode.

skinny.clockDivisor  ClockDivisor
    Unsigned 32-bit integer
    Clock Divisor.

skinny.confServiceNum  ConfServiceNum
    Unsigned 32-bit integer
    ConfServiceNum.

skinny.conferenceID  Conference ID
    Unsigned 32-bit integer
    The conference ID

skinny.country  Country
    Unsigned 32-bit integer
    Country ID (Network locale).

skinny.createConfResults  CreateConfResults
    Unsigned 32-bit integer
    The create conference results

skinny.customPictureFormatCount  CustomPictureFormatCount
    Unsigned 32-bit integer
    CustomPictureFormatCount.

skinny.data  Data
    Unsigned 8-bit integer
    dataPlace holder for unknown data.

skinny.dataCapCount  DataCapCount
    Unsigned 32-bit integer
    DataCapCount.

skinny.data_length  Data Length
    Unsigned 32-bit integer
    Number of bytes in the data portion.

skinny.dateMilliseconds  Milliseconds
    Unsigned 32-bit integer
    Milliseconds

skinny.dateSeconds  Seconds
    Unsigned 32-bit integer
    Seconds

skinny.dateTemplate  DateTemplate
    String
    The display format for the date/time on the phone.

skinny.day  Day
    Unsigned 32-bit integer
    The day of the current month

skinny.dayOfWeek  DayOfWeek
    Unsigned 32-bit integer
    The day of the week

skinny.deleteConfResults  DeleteConfResults
    Unsigned 32-bit integer
    The delete conference results
```



```
skinny.detectInterval  HF Detect Interval
    Unsigned 32-bit integer
    The number of milliseconds that determines a hook flash has occurred

skinny.deviceName      DeviceName
    String
    The device name of the phone.

skinny.deviceResetType Reset Type
    Unsigned 32-bit integer
    How the devices it to be reset (reset/restart)

skinny.deviceTone      Tone
    Unsigned 32-bit integer
    Which tone to play

skinny.deviceType      DeviceType
    Unsigned 32-bit integer
    DeviceType of the station.

skinny.deviceUnregisterStatus  Unregister Status
    Unsigned 32-bit integer
    The status of the device unregister request (*CAN* be refused)

skinny.directoryNumber  Directory Number
    String
    The number we are reporting statistics for.

skinny.displayMessage   DisplayMessage
    String
    The message displayed on the phone.

skinny.displayPriority  DisplayPriority
    Unsigned 32-bit integer
    Display Priority.

skinny.echoCancelType  Echo Cancel Type
    Unsigned 32-bit integer
    Is echo cancelling enabled or not

skinny.endOfAnnAck     EndOfAnnAck
    Unsigned 32-bit integer
    EndOfAnnAck

skinny.featureID       FeatureID
    Unsigned 32-bit integer
    FeatureID.

skinny.featureIndex    FeatureIndex
    Unsigned 32-bit integer
    FeatureIndex.

skinny.featureStatus   FeatureStatus
    Unsigned 32-bit integer
    FeatureStatus.

skinny.featureTextLabel  FeatureTextLabel
    String
    The feature lable text that is displayed on the phone.

skinny.firstGOB        FirstGOB
    Unsigned 32-bit integer
    FirstGOB.
```

```
skinny.firstMB  FirstMB
    Unsigned 32-bit integer
    FirstMB.

skinny.format  Format
    Unsigned 32-bit integer
    Format.

skinny.forwardAllActive  Forward All
    Unsigned 32-bit integer
    Forward all calls

skinny.forwardBusyActive  Forward Busy
    Unsigned 32-bit integer
    Forward calls when busy

skinny.forwardNoAnswerActive  Forward NoAns
    Unsigned 32-bit integer
    Forward only when no answer

skinny.forwardNumber  Forward Number
    String
    The number to forward calls to.

skinny.fqdn  DisplayName
    String
    The full display name for this line.

skinny.g723BitRate  G723 BitRate
    Unsigned 32-bit integer
    The G723 bit rate for this stream/JUNK if not g723 stream

skinny.h263_capability_bitfield  H263_capability_bitfield
    Unsigned 32-bit integer
    H263_capability_bitfield.

skinny.headsetMode  Headset Mode
    Unsigned 32-bit integer
    Turns on and off the headset on the set

skinny.hearingConfPartyMask  HearingConfPartyMask
    Unsigned 32-bit integer
    Bit mask of conference parties to hear media received on this stream.  Bit0

skinny.hookFlashDetectMode  Hook Flash Mode
    Unsigned 32-bit integer
    Which method to use to detect that a hook flash has occurred

skinny.hour  Hour
    Unsigned 32-bit integer
    Hour of the day

skinny.ipAddress  IP Address
    IPv4 address
    An IP address

skinny.isConferenceCreator  IsConferenceCreator
    Unsigned 32-bit integer
    IsConferenceCreator.

skinny.jitter  Jitter
    Unsigned 32-bit integer
    Average jitter during the call.
```

skinny.keepAliveInterval KeepAliveInterval  
Unsigned 32-bit integer  
How often are keep alives exchanges between the client and the call manager.

skinny.lampMode LampMode  
Unsigned 32-bit integer  
The lamp mode

skinny.last Last  
Unsigned 32-bit integer  
Last.

skinny.latency Latency(ms)  
Unsigned 32-bit integer  
Average packet latency during the call.

skinny.layout Layout  
Unsigned 32-bit integer  
Layout

skinny.layoutCount LayoutCount  
Unsigned 32-bit integer  
LayoutCount.

skinny.levelPreferenceCount LevelPreferenceCount  
Unsigned 32-bit integer  
LevelPreferenceCount.

skinny.lineDirNumber Line Dir Number  
String  
The directory number for this line.

skinny.lineInstance Line Instance  
Unsigned 32-bit integer  
The display call plane associated with this call.

skinny.lineNumber LineNumber  
Unsigned 32-bit integer  
Line Number

skinny.locale Locale  
Unsigned 32-bit integer  
User locale ID.

skinny.longTermPictureIndex LongTermPictureIndex  
Unsigned 32-bit integer  
LongTermPictureIndex.

skinny.matrixConfPartyID MatrixConfPartyID  
Unsigned 32-bit integer  
existing conference parties.

skinny.maxBW MaxBW  
Unsigned 32-bit integer  
MaxBW.

skinny.maxBitRate MaxBitRate  
Unsigned 32-bit integer  
MaxBitRate.

skinny.maxConferences MaxConferences  
Unsigned 32-bit integer  
MaxConferences.

skinny.maxFramesPerPacket MaxFramesPerPacket  
Unsigned 16-bit integer  
Max frames per packet

skinny.maxStreams MaxStreams  
Unsigned 32-bit integer  
32 bit unsigned integer indicating the maximum number of simultaneous RTP du

skinny.maxStreamsPerConf MaxStreamsPerConf  
Unsigned 32-bit integer  
Maximum number of streams per conference.

skinny.mediaEnunciationType Enunciation Type  
Unsigned 32-bit integer  
No clue.

skinny.messageTimeoutValue Message Timeout  
Unsigned 32-bit integer  
The timeout in seconds for this message

skinny.messageid Message ID  
Unsigned 32-bit integer  
The function requested/done with this message.

skinny.microphoneMode Microphone Mode  
Unsigned 32-bit integer  
Turns on and off the microphone on the set

skinny.millisecondPacketSize MS/Packet  
Unsigned 32-bit integer  
The number of milliseconds of conversation in each packet

skinny.minBitRate MinBitRate  
Unsigned 32-bit integer  
MinBitRate.

skinny.minute Minute  
Unsigned 32-bit integer  
Minute

skinny.miscCommandType MiscCommandType  
Unsigned 32-bit integer  
MiscCommandType

skinny.modelNumber ModelNumber  
Unsigned 32-bit integer  
ModelNumber.

skinny.modifyConfResults ModifyConfResults  
Unsigned 32-bit integer  
The modify conference results

skinny.month Month  
Unsigned 32-bit integer  
The current month

skinny.multicastIpAddress Multicast Ip Address  
IPv4 address  
The multicast address for this conference

skinny.multicastPort Multicast Port  
Unsigned 32-bit integer  
The multicast port the to listens on.

skinny.notify Notify  
String  
The message notify text that is displayed on the phone.

skinny.numberLines Number of Lines  
Unsigned 32-bit integer  
How many lines this device has

skinny.numberOfActiveParticipants NumberOfActiveParticipants  
Unsigned 32-bit integer  
numberOfActiveParticipants.

skinny.numberOfEntries NumberOfEntries  
Unsigned 32-bit integer  
Number of entries in list.

skinny.numberOfGOBs NumberOfGOBs  
Unsigned 32-bit integer  
NumberOfGOBs.

skinny.numberOfInServiceStreams NumberOfInServiceStreams  
Unsigned 32-bit integer  
Number of in service streams.

skinny.numberOfMBS NumberOfMBS  
Unsigned 32-bit integer  
NumberOfMBS.

skinny.numberOfOutOfServiceStreams NumberOfOutOfServiceStreams  
Unsigned 32-bit integer  
Number of out of service streams.

skinny.numberOfReservedParticipants NumberOfReservedParticipants  
Unsigned 32-bit integer  
numberOfReservedParticipants.

skinny.numberSpeedDials Number of SpeedDials  
Unsigned 32-bit integer  
The number of speed dials this device has

skinny.octetsRecv Octets Received  
Unsigned 32-bit integer  
Octets received during the call.

skinny.octetsSent Octets Sent  
Unsigned 32-bit integer  
Octets sent during the call.

skinny.openReceiveChannelStatus OpenReceiveChannelStatus  
Unsigned 32-bit integer  
The status of the opened receive channel.

skinny.originalCalledParty Original Called Party  
String  
The number of the original calling party.

skinny.originalCalledPartyName Original Called Party Name  
String  
name of the original person who placed the call.

skinny.packetsLost Packets Lost  
Unsigned 32-bit integer  
Packets lost during the call.

skinny.packetsRecv Packets Received  
Unsigned 32-bit integer  
Packets received during the call.

skinny.packetsSent Packets Sent  
Unsigned 32-bit integer  
Packets Sent during the call.

skinny.participantEntry ParticipantEntry  
Unsigned 32-bit integer  
Participant Entry.

skinny.passThruData PassThruData  
Unsigned 8-bit integer  
Pass Through data.

skinny.passThruPartyID PassThruPartyID  
Unsigned 32-bit integer  
The pass thru party id

skinny.payloadCapability PayloadCapability  
Unsigned 32-bit integer  
The payload capability for this media capability structure.

skinny.payloadDtmf PayloadDtmf  
Unsigned 32-bit integer  
RTP payload type.

skinny.payloadType PayloadType  
Unsigned 32-bit integer  
PayloadType.

skinny.payload\_rfc\_number Payload\_rfc\_number  
Unsigned 32-bit integer  
Payload\_rfc\_number.

skinny.pictureFormatCount PictureFormatCount  
Unsigned 32-bit integer  
PictureFormatCount.

skinny.pictureHeight PictureHeight  
Unsigned 32-bit integer  
PictureHeight.

skinny.pictureNumber PictureNumber  
Unsigned 32-bit integer  
PictureNumber.

skinny.pictureWidth PictureWidth  
Unsigned 32-bit integer  
PictureWidth.

skinny.pixelAspectRatio PixelAspectRatio  
Unsigned 32-bit integer  
PixelAspectRatio.

skinny.portNumber Port Number  
Unsigned 32-bit integer  
A port number

skinny.precedenceValue Precedence  
Unsigned 32-bit integer  
Precedence value

skinny.priority Priority  
Unsigned 32-bit integer  
Priority.

skinny.protocolDependentData ProtocolDependentData  
Unsigned 32-bit integer  
ProtocolDependentData.

skinny.receptionStatus ReceptionStatus  
Unsigned 32-bit integer  
The current status of the multicast media.

skinny.recoveryReferencePictureCount RecoveryReferencePictureCount  
Unsigned 32-bit integer  
RecoveryReferencePictureCount.

skinny.remoteIpAddr Remote Ip Address  
IPv4 address  
The remote end ip address for this stream

skinny.remotePortNumber Remote Port  
Unsigned 32-bit integer  
The remote port number listening for this stream

skinny.reserved Reserved  
Unsigned 32-bit integer  
Reserved for future(?) use.

skinny.resourceTypes ResourceType  
Unsigned 32-bit integer  
Resource Type

skinny.ringType Ring Type  
Unsigned 32-bit integer  
What type of ring to play

skinny.routingID routingID  
Unsigned 32-bit integer  
routingID.

skinny.secondaryKeepAliveInterval SecondaryKeepAliveInterval  
Unsigned 32-bit integer  
How often are keep alives exchanges between the client and the secondary cal

skinny.sequenceFlag SequenceFlag  
Unsigned 32-bit integer  
Sequence Flag

skinny.serverIdentifier Server Identifier  
String  
Server Identifier.

skinny.serverIpAddress Server Ip Address  
IPv4 address  
The IP address for this server

skinny.serverListenPort Server Port  
Unsigned 32-bit integer  
The port the server listens on.

skinny.serverName Server Name  
String  
The server name for this device.

```
skinny.serviceNum ServiceNum
    Unsigned 32-bit integer
    ServiceNum.

skinny.serviceNumber ServiceNumber
    Unsigned 32-bit integer
    ServiceNumber.

skinny.serviceResourceCount ServiceResourceCount
    Unsigned 32-bit integer
    ServiceResourceCount.

skinny.serviceURL ServiceURL
    String
    ServiceURL.

skinny.serviceURLDisplayName ServiceURLDisplayName
    String
    ServiceURLDisplayName.

skinny.serviceURLIndex serviceURLIndex
    Unsigned 32-bit integer
    serviceURLIndex.

skinny.sessionType Session Type
    Unsigned 32-bit integer
    The type of this session.

skinny.silenceSuppression Silence Suppression
    Unsigned 32-bit integer
    Mode for silence suppression

skinny.softKeyCount SoftKeyCount
    Unsigned 32-bit integer
    The number of valid softkeys in this message.

skinny.softKeyEvent SoftKeyEvent
    Unsigned 32-bit integer
    Which softkey event is being reported.

skinny.softKeyInfoIndex SoftKeyInfoIndex
    Unsigned 16-bit integer
    Array of size 16 16-bit unsigned integers containing an index into the soft

skinny.softKeyLabel SoftKeyLabel
    String
    The text label for this soft key.

skinny.softKeyMap SoftKeyMap
    Unsigned 16-bit integer

skinny.softKeyMap.0 SoftKey0
    Boolean

skinny.softKeyMap.1 SoftKey1
    Boolean

skinny.softKeyMap.10 SoftKey10
    Boolean

skinny.softKeyMap.11 SoftKey11
    Boolean
```



```

skinny.softKeyMap.12  SoftKey12
    Boolean
skinny.softKeyMap.13  SoftKey13
    Boolean
skinny.softKeyMap.14  SoftKey14
    Boolean
skinny.softKeyMap.15  SoftKey15
    Boolean
skinny.softKeyMap.2   SoftKey2
    Boolean
skinny.softKeyMap.3   SoftKey3
    Boolean
skinny.softKeyMap.4   SoftKey4
    Boolean
skinny.softKeyMap.5   SoftKey5
    Boolean
skinny.softKeyMap.6   SoftKey6
    Boolean
skinny.softKeyMap.7   SoftKey7
    Boolean
skinny.softKeyMap.8   SoftKey8
    Boolean
skinny.softKeyMap.9   SoftKey9
    Boolean
skinny.softKeyOffset  SoftKeyOffset
    Unsigned 32-bit integer
    The offset for the first soft key in this message.
skinny.softKeySetCount SoftKeySetCount
    Unsigned 32-bit integer
    The number of valid softkey sets in this message.
skinny.softKeySetDescription SoftKeySet
    Unsigned 8-bit integer
    A text description of what this softkey when this softkey set is displayed
skinny.softKeySetOffset SoftKeySetOffset
    Unsigned 32-bit integer
    The offset for the first soft key set in this message.
skinny.softKeyTemplateIndex SoftKeyTemplateIndex
    Unsigned 8-bit integer
    Array of size 16 8-bit unsigned ints containing an index into the softKeyTem
skinny.speakerMode  Speaker
    Unsigned 32-bit integer
    This message sets the speaker mode on/off
skinny.speedDialDirNum SpeedDial Number
    String
    the number to dial for this speed dial.

```

skinny.speedDialDisplay SpeedDial Display  
String  
The text to display for this speed dial.

skinny.speedDialNumber SpeedDialNumber  
Unsigned 32-bit integer  
Which speed dial number

skinny.stationInstance StationInstance  
Unsigned 32-bit integer  
The stations instance.

skinny.stationIpPort StationIpPort  
Unsigned 16-bit integer  
The station IP port

skinny.stationKeypadButton KeypadButton  
Unsigned 32-bit integer  
The button pressed on the phone.

skinny.stationUserId StationUserId  
Unsigned 32-bit integer  
The station user id.

skinny.statsProcessingType StatsProcessingType  
Unsigned 32-bit integer  
What do do after you send the stats.

skinny.stillImageTransmission StillImageTransmission  
Unsigned 32-bit integer  
StillImageTransmission.

skinny.stimulus Stimulus  
Unsigned 32-bit integer  
Reason for the device stimulus message.

skinny.stimulusInstance StimulusInstance  
Unsigned 32-bit integer  
The instance of the stimulus

skinny.temporalSpatialTradeOff TemporalSpatialTradeOff  
Unsigned 32-bit integer  
TemporalSpatialTradeOff.

skinny.temporalSpatialTradeOffCapability TemporalSpatialTradeOffCapability  
Unsigned 32-bit integer  
TemporalSpatialTradeOffCapability.

skinny.timeStamp Timestamp  
Unsigned 32-bit integer  
Time stamp for the call reference

skinny.tokenRejWaitTime Retry Wait Time  
Unsigned 32-bit integer  
The time to wait before retrying this token request.

skinny.totalButtonCount TotalButtonCount  
Unsigned 32-bit integer  
The total number of buttons defined for this phone.

skinny.totalSoftKeyCount TotalSoftKeyCount  
Unsigned 32-bit integer  
The total number of softkeys for this device.

skinny.totalSoftKeySetCount TotalSoftKeySetCount  
Unsigned 32-bit integer  
The total number of softkey sets for this device.

skinny.transactionID TransactionID  
Unsigned 32-bit integer  
Transaction ID.

skinny.transmitOrReceive TransmitOrReceive  
Unsigned 32-bit integer  
TransmitOrReceive

skinny.transmitPreference TransmitPreference  
Unsigned 32-bit integer  
TransmitPreference.

skinny.unknown Data  
Unsigned 32-bit integer  
Place holder for unknown data.

skinny.userName Username  
String  
Username for this device.

skinny.version Version  
String  
Version.

skinny.videoCapCount VideoCapCount  
Unsigned 32-bit integer  
VideoCapCount.

skinny.year Year  
Unsigned 32-bit integer  
The current year

### **SLIMP3 Communication Protocol (slimp3)**

slimp3.control Control Packet  
Boolean  
SLIMP3 control

slimp3.data Data  
Boolean  
SLIMP3 Data

slimp3.data\_ack Data Ack  
Boolean  
SLIMP3 Data Ack

slimp3.data\_req Data Request  
Boolean  
SLIMP3 Data Request

slimp3.discovery\_req Discovery Request  
Boolean  
SLIMP3 Discovery Request

slimp3.discovery\_response Discovery Response  
Boolean  
SLIMP3 Discovery Response

```

slimp3.display  Display
    Boolean
    SLIMP3 display
slimp3.hello  Hello
    Boolean
    SLIMP3 hello
slimp3.i2c  I2C
    Boolean
    SLIMP3 I2C
slimp3.ir  Infrared
    Unsigned 32-bit integer
    SLIMP3 Infrared command
slimp3.opcode  Opcode
    Unsigned 8-bit integer
    SLIMP3 message type

```

### Slow Protocols (slow)

```

slow.lacp.actorInfo  Actor Information
    Unsigned 8-bit integer
    TLV type = Actor
slow.lacp.actorInfoLen  Actor Information Length
    Unsigned 8-bit integer
    The length of the Actor TLV
slow.lacp.actorKey  Actor Key
    Unsigned 16-bit integer
    The operational Key value assigned to the port by the Actor
slow.lacp.actorPort  Actor Port
    Unsigned 16-bit integer
    The port number assigned to the port by the Actor (via Management or Admin)
slow.lacp.actorPortPriority  Actor Port Priority
    Unsigned 16-bit integer
    The priority assigned to the port by the Actor (via Management or Admin)
slow.lacp.actorState  Actor State
    Unsigned 8-bit integer
    The Actor's state variables for the port, encoded as bits within a single octet
slow.lacp.actorState.activity  LACP Activity
    Boolean
    Activity control value for this link. Active = 1, Passive = 0
slow.lacp.actorState.aggregation  Aggregation
    Boolean
    Aggregatable = 1, Individual = 0
slow.lacp.actorState.collecting  Collecting
    Boolean
    Collection of incoming frames is: Enabled = 1, Disabled = 0
slow.lacp.actorState.defaulted  Defaulted
    Boolean
    1 = Actor Rx machine is using DEFAULT Partner info, 0 = using info in Rx'd L

```

```
slow.lacp.actorState.distributing  Distributing
    Boolean
    Distribution of outgoing frames is: Enabled = 1, Disabled = 0
slow.lacp.actorState.expired      Expired
    Boolean
    1 = Actor Rx machine is EXPIRED, 0 = is NOT EXPIRED
slow.lacp.actorState.synchronization  Synchronization
    Boolean
    In Sync = 1, Out of Sync = 0
slow.lacp.actorState.timeout      LACP Timeout
    Boolean
    Timeout control value for this link. Short Timeout = 1, Long Timeout = 0
slow.lacp.actorSysPriority        Actor System Priority
    Unsigned 16-bit integer
    The priority assigned to this System by management or admin
slow.lacp.actorSystem            Actor System
    6-byte Hardware (MAC) Address
    The Actor's System ID encoded as a MAC address
slow.lacp.coll_reserved          Reserved
    Byte array
slow.lacp.collectorInfo          Collector Information
    Unsigned 8-bit integer
    TLV type = Collector
slow.lacp.collectorInfoLen       Collector Information Length
    Unsigned 8-bit integer
    The length of the Collector TLV
slow.lacp.collectorMaxDelay       Collector Max Delay
    Unsigned 16-bit integer
    The max delay of the station tx'ing the LACPDU (in tens of usecs)
slow.lacp.partnerInfo            Partner Information
    Unsigned 8-bit integer
    TLV type = Partner
slow.lacp.partnerInfoLen         Partner Information Length
    Unsigned 8-bit integer
    The length of the Partner TLV
slow.lacp.partnerKey             Partner Key
    Unsigned 16-bit integer
    The operational Key value assigned to the port associated with this link by
slow.lacp.partnerPort            Partner Port
    Unsigned 16-bit integer
    The port number associated with this link assigned to the port by the Partne
slow.lacp.partnerPortPriority     Partner Port Priority
    Unsigned 16-bit integer
    The priority assigned to the port by the Partner (via Management or Admin)
slow.lacp.partnerState           Partner State
    Unsigned 8-bit integer
    The Partner's state variables for the port, encoded as bits within a single
```

```
slow.lacp.partnerState.activity  LACP Activity
    Boolean
    Activity control value for this link. Active = 1, Passive = 0
slow.lacp.partnerState.aggregation  Aggregation
    Boolean
    Aggregatable = 1, Individual = 0
slow.lacp.partnerState.collecting  Collecting
    Boolean
    Collection of incoming frames is: Enabled = 1, Disabled = 0
slow.lacp.partnerState.defaulted  Defaulted
    Boolean
    1 = Actor Rx machine is using DEFAULT Partner info, 0 = using info in Rx'd L
slow.lacp.partnerState.distributing  Distributing
    Boolean
    Distribution of outgoing frames is: Enabled = 1, Disabled = 0
slow.lacp.partnerState.expired  Expired
    Boolean
    1 = Actor Rx machine is EXPIRED, 0 = is NOT EXPIRED
slow.lacp.partnerState.synchronization  Synchronization
    Boolean
    In Sync = 1, Out of Sync = 0
slow.lacp.partnerState.timeout  LACP Timeout
    Boolean
    Timeout control value for this link. Short Timeout = 1, Long Timeout = 0
slow.lacp.partnerSysPriority  Partner System Priority
    Unsigned 16-bit integer
    The priority assigned to the Partner System by management or admin
slow.lacp.partnerSystem  Partner System
    6-byte Hardware (MAC) Address
    The Partner's System ID encoded as a MAC address
slow.lacp.reserved  Reserved
    Byte array
slow.lacp.termInfo  Terminator Information
    Unsigned 8-bit integer
    TLV type = Terminator
slow.lacp.termLen  Terminator Length
    Unsigned 8-bit integer
    The length of the Terminator TLV
slow.lacp.term_reserved  Reserved
    Byte array
slow.lacp.version  LACP Version Number
    Unsigned 8-bit integer
    Identifies the LACP version
slow.marker.requesterPort  Requester Port
    Unsigned 16-bit integer
    The Requester Port
```

slow.marker.requesterSystem Requester System  
6-byte Hardware (MAC) Address  
The Requester System ID encoded as a MAC address

slow.marker.requesterTransId Requester Transaction ID  
Unsigned 32-bit integer  
The Requester Transaction ID

slow.marker.tlvLen TLV Length  
Unsigned 8-bit integer  
The length of the Actor TLV

slow.marker.tlvType TLV Type  
Unsigned 8-bit integer  
Marker TLV type

slow.marker.version Version Number  
Unsigned 8-bit integer  
Identifies the Marker version

slow.oam.code OAMPDU code  
Unsigned 8-bit integer  
Identifies the TLVs code

slow.oam.event.efeErrors Errored Frames  
Unsigned 32-bit integer  
Number of symbols in error

slow.oam.event.efeThreshold Errored Frame Threshold  
Unsigned 32-bit integer  
Number of frames required to generate the Event

slow.oam.event.efeTotalErrors Error Running Total  
Unsigned 64-bit integer  
Number of frames in error since reset of the sublayer

slow.oam.event.efeTotalEvents Event Running Total  
Unsigned 32-bit integer  
Total Event generated since reset of the sublayer

slow.oam.event.efeWindow Errored Frame Window  
Unsigned 16-bit integer  
Number of symbols in the period

slow.oam.event.efpeThreshold Errored Frame Threshold  
Unsigned 32-bit integer  
Number of frames required to generate the Event

slow.oam.event.efpeTotalErrors Error Running Total  
Unsigned 64-bit integer  
Number of frames in error since reset of the sublayer

slow.oam.event.efpeTotalEvents Event Running Total  
Unsigned 32-bit integer  
Total Event generated since reset of the sublayer

slow.oam.event.efpeWindow Errored Frame Window  
Unsigned 32-bit integer  
Number of frame in error during the period

slow.oam.event.efsseThreshold Errored Frame Threshold  
Unsigned 16-bit integer  
Number of frames required to generate the Event

slow.oam.event.efsseTotalErrors Error Running Total  
Unsigned 32-bit integer  
Number of frames in error since reset of the sublayer

slow.oam.event.efsseTotalEvents Event Running Total  
Unsigned 32-bit integer  
Total Event generated since reset of the sublayer

slow.oam.event.efsseWindow Errored Frame Window  
Unsigned 16-bit integer  
Number of frame in error during the period

slow.oam.event.espeErrors Errored Symbols  
Unsigned 64-bit integer  
Number of symbols in error

slow.oam.event.espeThreshold Errored Symbol Threshold  
Unsigned 64-bit integer  
Number of symbols required to generate the Event

slow.oam.event.espeTotalErrors Error Running Total  
Unsigned 64-bit integer  
Number of symbols in error since reset of the sublayer

slow.oam.event.espeTotalEvents Event Running Total  
Unsigned 32-bit integer  
Total Event generated since reset of the sublayer

slow.oam.event.espeWindow Errored Symbol Window  
Unsigned 64-bit integer  
Number of symbols in the period

slow.oam.event.length Event Length  
Unsigned 8-bit integer  
This field indicates the length in octets of the TLV-tuple

slow.oam.event.sequence Sequence Number  
Unsigned 16-bit integer  
Identifies the Event Notification TLVs

slow.oam.event.timestamp Event Timestamp (100ms)  
Unsigned 16-bit integer  
Event Time Stamp in term of 100 ms intervals

slow.oam.event.type Event Type  
Unsigned 8-bit integer  
Identifies the TLV type

slow.oam.flags Flags  
Unsigned 16-bit integer  
The Flags Field

slow.oam.flags.criticalEvent Critical Event  
Boolean  
A critical event has occurred. True = 1, False = 0

slow.oam.flags.dyingGasp Dying Gasp  
Boolean  
An unrecoverable local failure occurred. True = 1, False = 0

slow.oam.flags.linkFault Link Fault  
Boolean  
The PHY detected a fault in the receive direction. True = 1, False = 0



```
slow.oam.flags.localEvaluating  Local Evaluating
    Boolean
    Local DTE Discovery process in progress. True = 1, False = 0
slow.oam.flags.localStable      Local Stable
    Boolean
    Local DTE is Stable. True = 1, False = 0
slow.oam.flags.remoteEvaluating Remote Evaluating
    Boolean
    Remote DTE Discovery process in progress. True = 1, False = 0
slow.oam.flags.remoteStable     Remote Stable
    Boolean
    Remote DTE is Stable. True = 1, False = 0
slow.oam.info.length            TLV Length
    Unsigned 8-bit integer
    Identifies the TLVs type
slow.oam.info.oamConfig         OAM Configuration
    Unsigned 8-bit integer
    OAM Configuration
slow.oam.info.oamConfig.mode     OAM Mode
    Boolean
slow.oam.info.oampduConfig       Max OAMPDU Size
    Unsigned 16-bit integer
    OAMPDU Configuration
slow.oam.info.oui               Organizationally Unique Identifier
    Byte array
slow.oam.info.revision          TLV Revision
    Unsigned 16-bit integer
    Identifies the TLVs revision
slow.oam.info.state             OAM DTE States
    Unsigned 8-bit integer
    OAM DTE State of the Mux and the Parser
slow.oam.info.state.muxiplexer  Muxiplexer Action
    Boolean
    Muxiplexer Action
slow.oam.info.state.parser       Parser Action
    Unsigned 8-bit integer
    Parser Action
slow.oam.info.type              Type
    Unsigned 8-bit integer
    Identifies the TLV type
slow.oam.info.vendor            Vendor Specific Information
    Byte array
slow.oam.info.version           TLV Version
    Unsigned 8-bit integer
    Identifies the TLVs version
```

slow.oam.lpbk.commands Commands  
Unsigned 8-bit integer  
The List of Loopback Commands

slow.oam.lpbk.commands.disable Disable Remote Loopback  
Boolean  
Disable Remote Loopback Command

slow.oam.lpbk.commands.enable Enable Remote Loopback  
Boolean  
Enable Remote Loopback Command

slow.oam.variable.attribute Leaf  
Unsigned 16-bit integer  
Attribute, derived from the CMIP protocol in Annex 30A

slow.oam.variable.binding Leaf  
Unsigned 16-bit integer  
Binding, derived from the CMIP protocol in Annex 30A

slow.oam.variable.branch Branch  
Unsigned 8-bit integer  
Variable Branch, derived from the CMIP protocol in Annex 30A

slow.oam.variable.indication Variable indication  
Unsigned 8-bit integer  
Variable indication

slow.oam.variable.object Leaf  
Unsigned 16-bit integer  
Object, derived from the CMIP protocol in Annex 30A

slow.oam.variable.package Leaf  
Unsigned 16-bit integer  
Package, derived from the CMIP protocol in Annex 30A

slow.oam.variable.value Variable Value  
Byte array  
Value

slow.oam.variable.width Variable Width  
Unsigned 8-bit integer  
Width

slow.subtype Slow Protocols subtype  
Unsigned 8-bit integer  
Identifies the LACP version

#### **Societe Internationale de Telecommunications Aeronautiques (sita)**

sita.errors.abort Abort  
Boolean  
TRUE if Abort Received

sita.errors.break Break  
Boolean  
TRUE if Break Received

sita.errors.collission Collision  
Boolean  
TRUE if Collision

```
sita.errors.crc    CRC
  Boolean
  TRUE if CRC Error

sita.errors.framing Framing
  Boolean
  TRUE if Framing Error

sita.errors.length Length
  Boolean
  TRUE if Length Violation

sita.errors.longframe Long Frame
  Boolean
  TRUE if Long Frame Received

sita.errors.lostcd Carrier
  Boolean
  TRUE if Carrier Lost

sita.errors.lostcts Clear To Send
  Boolean
  TRUE if Clear To Send Lost

sita.errors.nonaligned NonAligned
  Boolean
  TRUE if NonAligned Frame

sita.errors.overrun Overrun
  Boolean
  TRUE if Overrun Error

sita.errors.parity Parity
  Boolean
  TRUE if Parity Error

sita.errors.protocol Protocol
  Unsigned 8-bit integer
  Protocol value

sita.errors.rtxlimit Retx Limit
  Boolean
  TRUE if Retransmit Limit reached

sita.errors.rxdpll DPLL
  Boolean
  TRUE if DPLL Error

sita.errors.shortframe Short Frame
  Boolean
  TRUE if Short Frame

sita.errors.uarterror UART
  Boolean
  TRUE if UART Error

sita.errors.underrun Underrun
  Boolean
  TRUE if Tx Underrun

sita.flags.droppedframe No Buffers
  Boolean
  TRUE if Buffer Failure
```

```
sita.flags.flags  Direction
  Boolean
  TRUE 'from Remote', FALSE 'from Local'
sita.signals.cts  CTS
  Boolean
  TRUE if Clear To Send
sita.signals.dcd  DCD
  Boolean
  TRUE if Data Carrier Detect
sita.signals.dsr  DSR
  Boolean
  TRUE if Data Set Ready
sita.signals.dtr  DTR
  Boolean
  TRUE if Data Terminal Ready
sita.signals.rts  RTS
  Boolean
  TRUE if Request To Send
```

**Socks Protocol (socks)**

```
socks.command  Command
  Unsigned 8-bit integer
socks.dst  Remote Address
  IPv4 address
socks.dstV6  Remote Address(ipv6)
  IPv6 address
socks.dstport  Remote Port
  Unsigned 16-bit integer
socks.results  Results(V5)
  Unsigned 8-bit integer
socks.results_v4  Results(V4)
  Unsigned 8-bit integer
socks.results_v5  Results(V5)
  Unsigned 8-bit integer
socks.username  User Name
  String
socks.v4a_dns_name  SOCKS v4a Remote Domain Name
  String
socks.version  Version
  Unsigned 8-bit integer
```

**SoulSeek Protocol (slsk)**

```
slsk.average.speed  Average Speed
  Unsigned 32-bit integer
  Average Speed
```

```
slsk.byte Byte
    Unsigned 8-bit integer
    Byte

slsk.chat.message Chat Message
    String
    Chat Message

slsk.chat.message.id Chat Message ID
    Unsigned 32-bit integer
    Chat Message ID

slsk.checksum Checksum
    Unsigned 32-bit integer
    Checksum

slsk.code Code
    Unsigned 32-bit integer
    Code

slsk.compr.packet [zlib compressed packet]
    No value
    zlib compressed packet

slsk.connection.type Connection Type
    String
    Connection Type

slsk.day.count Number of Days
    Unsigned 32-bit integer
    Number of Days

slsk.directories Directories
    Unsigned 32-bit integer
    Directories

slsk.directory Directory
    String
    Directory

slsk.download.number Download Number
    Unsigned 32-bit integer
    Download Number

slsk.file.count File Count
    Unsigned 32-bit integer
    File Count

slsk.filename Filename
    String
    Filename

slsk.files Files
    Unsigned 32-bit integer
    Files

slsk.folder.count Folder Count
    Unsigned 32-bit integer
    Folder Count

slsk.integer Integer
    Unsigned 32-bit integer
    Integer
```

```
slsk.ip.address  IP Address
  IPv4 address
  IP Address

slsk.login.message  Login Message
  String
  Login Message

slsk.login.successful  Login successful
  Unsigned 8-bit integer
  Login Successful

slsk.message.code  Message Code
  Unsigned 32-bit integer
  Message Code

slsk.message.length  Message Length
  Unsigned 32-bit integer
  Message Length

slsk.nodes.in.cache.before.disconnect  Nodes In Cache Before Disconnect
  Unsigned 32-bit integer
  Nodes In Cache Before Disconnect

slsk.parent.min.speed  Parent Min Speed
  Unsigned 32-bit integer
  Parent Min Speed

slsk.parent.speed.connection.ratio  Parent Speed Connection Ratio
  Unsigned 32-bit integer
  Parent Speed Connection Ratio

slsk.password  Password
  String
  Password

slsk.port.number  Port Number
  Unsigned 32-bit integer
  Port Number

slsk.queue.place  Place in Queue
  Unsigned 32-bit integer
  Place in Queue

slsk.ranking  Ranking
  Unsigned 32-bit integer
  Ranking

slsk.recommendation  Recommendation
  String
  Recommendation

slsk.room  Room
  String
  Room

slsk.room.count  Number of Rooms
  Unsigned 32-bit integer
  Number of Rooms

slsk.room.users  Users in Room
  Unsigned 32-bit integer
  Number of Users in Room
```

```
slsk.search.text  Search Text
  String
  Search Text

slsk.seconds.before.ping.children  Seconds Before Ping Children
  Unsigned 32-bit integer
  Seconds Before Ping Children

slsk.seconds.parent.inactivity.before.disconnect  Seconds Parent Inactivity Before Disconnect
  Unsigned 32-bit integer
  Seconds Parent Inactivity Before Disconnect

slsk.seconds.server.inactivity.before.disconnect  Seconds Server Inactivity Before Disconnect
  Unsigned 32-bit integer
  Seconds Server Inactivity Before Disconnect

slsk.server.ip  Client IP
  IPv4 address
  Client IP Address

slsk.size  Size
  Unsigned 32-bit integer
  File Size

slsk.slots.full  Slots full
  Unsigned 32-bit integer
  Upload Slots Full

slsk.status.code  Status Code
  Unsigned 32-bit integer
  Status Code

slsk.string  String
  String
  String

slsk.string.length  String Length
  Unsigned 32-bit integer
  String Length

slsk.timestamp  Timestamp
  Unsigned 32-bit integer
  Timestamp

slsk.token  Token
  Unsigned 32-bit integer
  Token

slsk.transfer.direction  Transfer Direction
  Unsigned 32-bit integer
  Transfer Direction

slsk.uploads.available  Upload Slots available
  Unsigned 8-bit integer
  Upload Slots available

slsk.uploads.queued  Queued uploads
  Unsigned 32-bit integer
  Queued uploads

slsk.uploads.total  Total uploads allowed
  Unsigned 32-bit integer
  Total uploads allowed
```

```
slsk.uploads.user  User uploads
  Unsigned 32-bit integer
  User uploads

slsk.user.allowed  Download allowed
  Unsigned 8-bit integer
  allowed

slsk.user.count    Number of Users
  Unsigned 32-bit integer
  Number of Users

slsk.user.description  User Description
  String
  User Description

slsk.user.exists   user exists
  Unsigned 8-bit integer
  User exists

slsk.user.picture  Picture
  String
  User Picture

slsk.user.picture.exists  Picture exists
  Unsigned 8-bit integer
  User has a picture

slsk.username      Username
  String
  Username

slsk.version        Version
  Unsigned 32-bit integer
  Version
```

### **Spanning Tree Protocol (stp)**

```
mstp.cist_bridge.hw  CIST Bridge Identifier
  6-byte Hardware (MAC) Address

mstp.cist_internal_root_path_cost  CIST Internal Root Path Cost
  Unsigned 32-bit integer

mstp.cist_remaining_hops  CIST Remaining hops
  Unsigned 8-bit integer

mstp.config_digest  MST Config digest
  Byte array

mstp.config_format_selector  MST Config ID format selector
  Unsigned 8-bit integer

mstp.config_name  MST Config name
  String

mstp.config_revision_level  MST Config revision
  Unsigned 16-bit integer

mstp.msti_bridge_priority  Bridge Identifier Priority
  Unsigned 8-bit integer

mstp.msti_flags  MSTI flags
  Unsigned 8-bit integer
```



```
mstp.msti.port  Port identifier
    Unsigned 16-bit integer
mstp.msti.port_priority  Port identifier priority
    Unsigned 8-bit integer
mstp.msti.remaining_hops  Remaining hops
    Unsigned 8-bit integer
mstp.msti.root.hw  Regional Root
    6-byte Hardware (MAC) Address
mstp.msti.root_cost  Internal root path cost
    Unsigned 32-bit integer
mstp.version_3_length  Version 3 Length
    Unsigned 16-bit integer
stp.bridge.hw  Bridge Identifier
    6-byte Hardware (MAC) Address
stp.flags  BPDU flags
    Unsigned 8-bit integer
stp.flags.agreement  Agreement
    Boolean
stp.flags.forwarding  Forwarding
    Boolean
stp.flags.learning  Learning
    Boolean
stp.flags.port_role  Port Role
    Unsigned 8-bit integer
stp.flags.proposal  Proposal
    Boolean
stp.flags.tc  Topology Change
    Boolean
stp.flags.tcack  Topology Change Acknowledgment
    Boolean
stp.forward  Forward Delay
    Double-precision floating point
stp.hello  Hello Time
    Double-precision floating point
stp.max_age  Max Age
    Double-precision floating point
stp.msg_age  Message Age
    Double-precision floating point
stp.port  Port identifier
    Unsigned 16-bit integer
stp.protocol  Protocol Identifier
    Unsigned 16-bit integer
stp.root.cost  Root Path Cost
    Unsigned 32-bit integer
```

```
stp.root.hw    Root Identifier
               6-byte Hardware (MAC) Address

stp.type       BPDU Type
               Unsigned 8-bit integer

stp.version    Protocol Version Identifier
               Unsigned 8-bit integer

stp.version_1_length  Version 1 Length
               Unsigned 8-bit integer
```

**StarTeam (starteam)**

```
starteam.data  Data
               String
               Data

starteam.id.client  Client ID
                  String
                  ID client ID

starteam.id.command  Command ID
                    Unsigned 32-bit integer
                    ID command ID

starteam.id.commandtime  Command time
                        Unsigned 32-bit integer
                        ID command time

starteam.id.commanduserid  Command user ID
                           Unsigned 32-bit integer
                           ID command user ID

starteam.id.component  Component ID
                      Unsigned 32-bit integer
                      ID component ID

starteam.id.connect  Connect ID
                    Unsigned 32-bit integer
                    ID connect ID

starteam.id.level  Revision level
                  Unsigned 16-bit integer
                  ID revision level

starteam.mdh.ctimestamp  Client timestamp
                        Unsigned 32-bit integer
                        MDH client timestamp

starteam.mdh.flags  Flags
                   Unsigned 32-bit integer
                   MDH flags

starteam.mdh.keyid  Key ID
                   Unsigned 32-bit integer
                   MDH key ID

starteam.mdh.reserved  Reserved
                      Unsigned 32-bit integer
                      MDH reserved
```

```
starteam.mdh.stag  Session tag
                   Unsigned 32-bit integer
                   MDH session tag

starteam.ph.dsize  Data size
                   Unsigned 32-bit integer
                   PH data size

starteam.ph.flags  Flags
                   Unsigned 32-bit integer
                   PH flags

starteam.ph.psize  Packet size
                   Unsigned 32-bit integer
                   PH packet size

starteam.ph.signature  Signature
                       String
                       PH signature
```

### **Stream Control Transmission Protocol (sctp)**

```
sctp.abort_t_bit  T-Bit
                  Boolean

sctp.ack  Acknowledges TSN
          Unsigned 32-bit integer

sctp.ack_frame  Chunk acknowledged in frame
                Frame number

sctp.acked  This chunk is acked in frame
            Frame number

sctp.adapation_layer_indication  Indication
                                  Unsigned 32-bit integer

sctp.asconf_ack_serial_number  Serial number
                                Unsigned 32-bit integer

sctp.asconf_serial_number  Serial number
                            Unsigned 32-bit integer

sctp.cause_code  Cause code
                 Unsigned 16-bit integer

sctp.cause_information  Cause information
                        Byte array

sctp.cause_length  Cause length
                   Unsigned 16-bit integer

sctp.cause_measure_of_staleness  Measure of staleness in usec
                                  Unsigned 32-bit integer

sctp.cause_missing_parameter_type  Missing parameter type
                                    Unsigned 16-bit integer

sctp.cause_nr_of_missing_parameters  Number of missing parameters
                                      Unsigned 32-bit integer

sctp.cause_padding  Cause padding
                    Byte array
```

```
sctp.cause_reserved  Reserved
    Unsigned 16-bit integer
sctp.cause_stream_identifier  Stream identifier
    Unsigned 16-bit integer
sctp.cause_tsn  TSN
    Unsigned 32-bit integer
sctp.checksum  Checksum
    Unsigned 32-bit integer
sctp.checksum_bad  Bad checksum
    Boolean
sctp.chunk_bit_1  Bit
    Boolean
sctp.chunk_bit_2  Bit
    Boolean
sctp.chunk_flags  Chunk flags
    Unsigned 8-bit integer
sctp.chunk_length  Chunk length
    Unsigned 16-bit integer
sctp.chunk_padding  Chunk padding
    Byte array
sctp.chunk_type  Chunk type
    Unsigned 8-bit integer
sctp.chunk_type_to_auth  Chunk type
    Unsigned 8-bit integer
sctp.chunk_value  Chunk value
    Byte array
sctp.cookie  Cookie
    Byte array
sctp.correlation_id  Correlation_id
    Unsigned 32-bit integer
sctp.cumulative_tsn_ack  Cumulative TSN Ack
    Unsigned 32-bit integer
sctp.cwr_lowest_tsn  Lowest TSN
    Unsigned 32-bit integer
sctp.data_b_bit  B-Bit
    Boolean
sctp.data_e_bit  E-Bit
    Boolean
sctp.data_payload_proto_id  Payload protocol identifier
    Unsigned 32-bit integer
sctp.data_sid  Stream Identifier
    Unsigned 16-bit integer
sctp.data_ssn  Stream sequence number
    Unsigned 16-bit integer
```

```
sctp.data_tsn    TSN
                 Unsigned 32-bit integer
sctp.data_u_bit  U-Bit
                 Boolean
sctp.dstport     Destination port
                 Unsigned 16-bit integer
sctp.duplicate   Fragment already seen in frame
                 Frame number
sctp.ecne_lowest_tsn  Lowest TSN
                 Unsigned 32-bit integer
sctp.forward_tsn_sid  Stream identifier
                 Unsigned 16-bit integer
sctp.forward_tsn_ssn  Stream sequence number
                 Unsigned 16-bit integer
sctp.forward_tsn_tsn  New cumulative TSN
                 Unsigned 32-bit integer
sctp.fragment    SCTP Fragment
                 Frame number
sctp.fragments   Reassembled SCTP Fragments
                 No value
sctp.hmac        HMAC
                 Byte array
sctp.hmac_id     HMAC identifier
                 Unsigned 16-bit integer
sctp.init_credit  Advertised receiver window credit (a_rwnd)
                 Unsigned 32-bit integer
sctp.init_initial_tsn  Initial TSN
                 Unsigned 32-bit integer
sctp.init_initiate_tag  Initiate tag
                 Unsigned 32-bit integer
sctp.init_nr_in_streams  Number of inbound streams
                 Unsigned 16-bit integer
sctp.init_nr_out_streams  Number of outbound streams
                 Unsigned 16-bit integer
sctp.initack_credit  Advertised receiver window credit (a_rwnd)
                 Unsigned 32-bit integer
sctp.initack_initial_tsn  Initial TSN
                 Unsigned 32-bit integer
sctp.initack_initiate_tag  Initiate tag
                 Unsigned 32-bit integer
sctp.initack_nr_in_streams  Number of inbound streams
                 Unsigned 16-bit integer
sctp.initack_nr_out_streams  Number of outbound streams
                 Unsigned 16-bit integer
```

```
sctp.initiate_tag  Initiate tag
    Unsigned 32-bit integer
sctp.parameter_bit_1  Bit
    Boolean
sctp.parameter_bit_2  Bit
    Boolean
sctp.parameter_cookie_preservative_incr  Suggested Cookie life-span increment (m
    Unsigned 32-bit integer
sctp.parameter_heartbeat_information  Heartbeat information
    Byte array
sctp.parameter_hostname  Hostname
    String
sctp.parameter_ipv4_address  IP Version 4 address
    IPv4 address
sctp.parameter_ipv6_address  IP Version 6 address
    IPv6 address
sctp.parameter_length  Parameter length
    Unsigned 16-bit integer
sctp.parameter_padding  Parameter padding
    Byte array
sctp.parameter_receivers_next_tsn  Receivers next TSN
    Unsigned 32-bit integer
sctp.parameter_senders_last_assigned_tsn  Senders last assigned TSN
    Unsigned 32-bit integer
sctp.parameter_senders_next_tsn  Senders next TSN
    Unsigned 32-bit integer
sctp.parameter_state_cookie  State cookie
    Byte array
sctp.parameter_stream_reset_request_sequence_number  Stream reset request sequen
    Unsigned 32-bit integer
sctp.parameter_stream_reset_response_result  Result
    Unsigned 32-bit integer
sctp.parameter_stream_reset_response_sequence_number  Stream reset response sequ
    Unsigned 32-bit integer
sctp.parameter_stream_reset_sid  Stream Identifier
    Unsigned 16-bit integer
sctp.parameter_supported_address_type  Supported address type
    Unsigned 16-bit integer
sctp.parameter_type  Parameter type
    Unsigned 16-bit integer
sctp.parameter_value  Parameter value
    Byte array
sctp.pckdrop_b_bit  B-Bit
    Boolean
```

```
sctp.pckdrop_m_bit  M-Bit
  Boolean
sctp.pckdrop_t_bit  T-Bit
  Boolean
sctp.pktdrop_bandwidth  Bandwidth
  Unsigned 32-bit integer
sctp.pktdrop_datafield  Data field
  Byte array
sctp.pktdrop_queuesize  Queuesize
  Unsigned 32-bit integer
sctp.pktdrop_reserved  Reserved
  Unsigned 16-bit integer
sctp.pktdrop_truncated_length  Truncated length
  Unsigned 16-bit integer
sctp.port  Port
  Unsigned 16-bit integer
sctp.random_number  Random number
  Byte array
sctp.reassembled_in  Reassembled Message in frame
  Frame number
sctp.retransmission  This TSN is a retransmission of one in frame
  Frame number
sctp.retransmission_time  Retransmitted after
  Time duration
sctp.retransmitted  This TSN is retransmitted in frame
  Frame number
sctp.retransmitted_after_ack  Chunk was acked prior to retransmission
  Frame number
sctp.retransmitted_count  TSN was retransmitted this many times
  Unsigned 32-bit integer
sctp.rtt  The RTT to ACK the chunk was
  Time duration
sctp.sack_a_rwnd  Advertised receiver window credit (a_rwnd)
  Unsigned 32-bit integer
sctp.sack_cumulative_tsn_ack  Cumulative TSN ACK
  Unsigned 32-bit integer
sctp.sack_duplicate_tsn  Duplicate TSN
  Unsigned 16-bit integer
sctp.sack_gap_block_end  End
  Unsigned 16-bit integer
sctp.sack_gap_block_end_tsn  End TSN
  Unsigned 32-bit integer
sctp.sack_gap_block_start  Start
  Unsigned 16-bit integer
```

```

sctp.sack_gap_block_start_tsn  Start TSN
    Unsigned 32-bit integer
sctp.sack_nounce_sum  Nounce sum
    Unsigned 8-bit integer
sctp.sack_number_of_duplicated_tsns  Number of duplicated TSNs
    Unsigned 16-bit integer
sctp.sack_number_of_gap_blocks  Number of gap acknowledgement blocks
    Unsigned 16-bit integer
sctp.sack_number_of_tsns_gap_acked  Number of TSNs in gap acknowledgement blocks
    Unsigned 32-bit integer
sctp.shared_key_id  Shared key identifier
    Unsigned 16-bit integer
sctp.shutdown_complete_t_bit  T-Bit
    Boolean
sctp.shutdown_cumulative_tsn_ack  Cumulative TSN Ack
    Unsigned 32-bit integer
sctp.srcport  Source port
    Unsigned 16-bit integer
sctp.supported_chunk_type  Supported chunk type
    Unsigned 8-bit integer
sctp.verification_tag  Verification tag
    Unsigned 32-bit integer

```

#### Subnetwork Dependent Convergence Protocol (sndcp)

```

npdu.fragment  N-PDU Fragment
    Frame number
    N-PDU Fragment
npdu.fragment.error  Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments
npdu.fragment.multipletails  Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet
npdu.fragment.overlap  Fragment overlap
    Boolean
    Fragment overlaps with other fragments
npdu.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
npdu.fragment.toolongfragment  Fragment too long
    Boolean
    Fragment contained data past end of packet
npdu.fragments  N-PDU Fragments
    No value
    N-PDU Fragments

```



npdu.reassembled.in Reassembled in  
Frame number  
N-PDU fragments are reassembled in the given packet

sndcp.dcomp DCOMP  
Unsigned 8-bit integer  
Data compression coding

sndcp.f First segment indicator bit  
Boolean  
First segment indicator bit

sndcp.m More bit  
Boolean  
More bit

sndcp.npdu N-PDU  
Unsigned 8-bit integer  
N-PDU

sndcp.nsapi NSAPI  
Unsigned 8-bit integer  
Network Layer Service Access Point Identifier

sndcp.nsapib NSAPI  
Unsigned 8-bit integer  
Network Layer Service Access Point Identifier

sndcp.pcomp PCOMP  
Unsigned 8-bit integer  
Protocol compression coding

sndcp.segment Segment  
Unsigned 16-bit integer  
Segment number

sndcp.t Type  
Boolean  
SN-PDU Type

sndcp.x Spare bit  
Boolean  
Spare bit (should be 0)

**Symantec Enterprise Firewall (symantec)**

symantec.if Interface  
IPv4 address  
Interface

symantec.type Type  
Unsigned 16-bit integer

**Synchronized Multimedia Integration Language (smil)**

smil.a a  
String

smil.a.href href  
String

smil.a.id id  
String

```
smil.a.show show
    String
smil.a.title title
    String
smil.anchor anchor
    String
smil.anchor.begin begin
    String
smil.anchor.coords coords
    String
smil.anchor.end end
    String
smil.anchor.href href
    String
smil.anchor.id id
    String
smil.anchor.show show
    String
smil.anchor.skip-content skip-content
    String
smil.anchor.title title
    String
smil.animation animation
    String
smil.animation.abstract abstract
    String
smil.animation.alt alt
    String
smil.animation.author author
    String
smil.animation.begin begin
    String
smil.animation.clip-begin clip-begin
    String
smil.animation.clip-end clip-end
    String
smil.animation.copyright copyright
    String
smil.animation.dur dur
    String
smil.animation.end end
    String
smil.animation.fill fill
    String
```

```
smil.animation.id id
    String
smil.animation.longdesc longdesc
    String
smil.animation.region region
    String
smil.animation.repeat repeat
    String
smil.animation.src src
    String
smil.animation.system-bitrate system-bitrate
    String
smil.animation.system-captions system-captions
    String
smil.animation.system-language system-language
    String
smil.animation.system-overdub-or-caption system-overdub-or-caption
    String
smil.animation.system-required system-required
    String
smil.animation.system-screen-depth system-screen-depth
    String
smil.animation.system-screen-size system-screen-size
    String
smil.animation.title title
    String
smil.animation.type type
    String
smil.audio audio
    String
smil.audio.abstract abstract
    String
smil.audio.alt alt
    String
smil.audio.author author
    String
smil.audio.begin begin
    String
smil.audio.clip-begin clip-begin
    String
smil.audio.clip-end clip-end
    String
smil.audio.copyright copyright
    String
```

```
smil.audio.dur dur
    String
smil.audio.end end
    String
smil.audio.fill fill
    String
smil.audio.id id
    String
smil.audio.longdesc longdesc
    String
smil.audio.region region
    String
smil.audio.repeat repeat
    String
smil.audio.src src
    String
smil.audio.system-bitrate system-bitrate
    String
smil.audio.system-captions system-captions
    String
smil.audio.system-language system-language
    String
smil.audio.system-overdub-or-caption system-overdub-or-caption
    String
smil.audio.system-required system-required
    String
smil.audio.system-screen-depth system-screen-depth
    String
smil.audio.system-screen-size system-screen-size
    String
smil.audio.title title
    String
smil.audio.type type
    String
smil.body body
    String
smil.body.id id
    String
smil.head head
    String
smil.head.id id
    String
smil.img img
    String
```

```
smil.img.abstract abstract
    String
smil.img.alt alt
    String
smil.img.author author
    String
smil.img.begin begin
    String
smil.img.copyright copyright
    String
smil.img.dur dur
    String
smil.img.end end
    String
smil.img.fill fill
    String
smil.img.id id
    String
smil.img.longdesc longdesc
    String
smil.img.region region
    String
smil.img.repeat repeat
    String
smil.img.src src
    String
smil.img.system-bitrate system-bitrate
    String
smil.img.system-captions system-captions
    String
smil.img.system-language system-language
    String
smil.img.system-overdub-or-caption system-overdub-or-caption
    String
smil.img.system-required system-required
    String
smil.img.system-screen-depth system-screen-depth
    String
smil.img.system-screen-size system-screen-size
    String
smil.img.title title
    String
smil.img.type type
    String
```

```
smil.layout layout
    String
smil.layout.id id
    String
smil.layout.type type
    String
smil.meta meta
    String
smil.meta.content content
    String
smil.meta.name name
    String
smil.meta.skip-content skip-content
    String
smil.par par
    String
smil.par.abstract abstract
    String
smil.par.author author
    String
smil.par.begin begin
    String
smil.par.copyright copyright
    String
smil.par.dur dur
    String
smil.par.end end
    String
smil.par.endsync endsync
    String
smil.par.id id
    String
smil.par.region region
    String
smil.par.repeat repeat
    String
smil.par.system-bitrate system-bitrate
    String
smil.par.system-captions system-captions
    String
smil.par.system-language system-language
    String
smil.par.system-overdub-or-caption system-overdub-or-caption
    String
```

```
smil.par.system-required  system-required
    String
smil.par.system-screen-depth  system-screen-depth
    String
smil.par.system-screen-size  system-screen-size
    String
smil.par.title  title
    String
smil.ref  ref
    String
smil.ref.abstract  abstract
    String
smil.ref.alt  alt
    String
smil.ref.author  author
    String
smil.ref.begin  begin
    String
smil.ref.clip-begin  clip-begin
    String
smil.ref.clip-end  clip-end
    String
smil.ref.copyright  copyright
    String
smil.ref.dur  dur
    String
smil.ref.end  end
    String
smil.ref.fill  fill
    String
smil.ref.id  id
    String
smil.ref.longdesc  longdesc
    String
smil.ref.region  region
    String
smil.ref.repeat  repeat
    String
smil.ref.src  src
    String
smil.ref.system-bitrate  system-bitrate
    String
smil.ref.system-captions  system-captions
    String
```

```
smil.ref.system-language  system-language
    String
smil.ref.system-overdub-or-caption  system-overdub-or-caption
    String
smil.ref.system-required  system-required
    String
smil.ref.system-screen-depth  system-screen-depth
    String
smil.ref.system-screen-size  system-screen-size
    String
smil.ref.title  title
    String
smil.ref.type  type
    String
smil.region  region
    String
smil.region.background-color  background-color
    String
smil.region.fit  fit
    String
smil.region.height  height
    String
smil.region.id  id
    String
smil.region.left  left
    String
smil.region.skip-content  skip-content
    String
smil.region.title  title
    String
smil.region.top  top
    String
smil.region.width  width
    String
smil.region.z-index  z-index
    String
smil.root-layout  root-layout
    String
smil.root-layout.background-color  background-color
    String
smil.root-layout.height  height
    String
smil.root-layout.id  id
    String
```



```
smil.root-layout.skip-content  skip-content
    String
smil.root-layout.title  title
    String
smil.root-layout.width  width
    String
smil.seq  seq
    String
smil.seq.abstract  abstract
    String
smil.seq.author  author
    String
smil.seq.begin  begin
    String
smil.seq.copyright  copyright
    String
smil.seq.dur  dur
    String
smil.seq.end  end
    String
smil.seq.id  id
    String
smil.seq.region  region
    String
smil.seq.repeat  repeat
    String
smil.seq.system-bitrate  system-bitrate
    String
smil.seq.system-captions  system-captions
    String
smil.seq.system-language  system-language
    String
smil.seq.system-overdub-or-caption  system-overdub-or-caption
    String
smil.seq.system-required  system-required
    String
smil.seq.system-screen-depth  system-screen-depth
    String
smil.seq.system-screen-size  system-screen-size
    String
smil.seq.title  title
    String
smil.smil  smil
    String
```

```
smil.smil.id id
    String
smil.switch switch
    String
smil.switch.id id
    String
smil.switch.title title
    String
smil.text text
    String
smil.text.abstract abstract
    String
smil.text.alt alt
    String
smil.text.author author
    String
smil.text.begin begin
    String
smil.text.copyright copyright
    String
smil.text.dur dur
    String
smil.text.end end
    String
smil.text.fill fill
    String
smil.text.id id
    String
smil.text.longdesc longdesc
    String
smil.text.region region
    String
smil.text.repeat repeat
    String
smil.text.src src
    String
smil.text.system-bitrate system-bitrate
    String
smil.text.system-captions system-captions
    String
smil.text.system-language system-language
    String
smil.text.system-overdub-or-caption system-overdub-or-caption
    String
```

```
smil.text.system-required  system-required
    String
smil.text.system-screen-depth  system-screen-depth
    String
smil.text.system-screen-size  system-screen-size
    String
smil.text.title  title
    String
smil.text.type  type
    String
smil.textstream  textstream
    String
smil.textstream.abstract  abstract
    String
smil.textstream.alt  alt
    String
smil.textstream.author  author
    String
smil.textstream.begin  begin
    String
smil.textstream.clip-begin  clip-begin
    String
smil.textstream.clip-end  clip-end
    String
smil.textstream.copyright  copyright
    String
smil.textstream.dur  dur
    String
smil.textstream.end  end
    String
smil.textstream.fill  fill
    String
smil.textstream.id  id
    String
smil.textstream.longdesc  longdesc
    String
smil.textstream.region  region
    String
smil.textstream.repeat  repeat
    String
smil.textstream.src  src
    String
smil.textstream.system-bitrate  system-bitrate
    String
```

```
smil.textstream.system-captions  system-captions
    String
smil.textstream.system-language  system-language
    String
smil.textstream.system-overdub-or-caption  system-overdub-or-caption
    String
smil.textstream.system-required  system-required
    String
smil.textstream.system-screen-depth  system-screen-depth
    String
smil.textstream.system-screen-size  system-screen-size
    String
smil.textstream.title  title
    String
smil.textstream.type  type
    String
smil.video  video
    String
smil.video.abstract  abstract
    String
smil.video.alt  alt
    String
smil.video.author  author
    String
smil.video.begin  begin
    String
smil.video.clip-begin  clip-begin
    String
smil.video.clip-end  clip-end
    String
smil.video.copyright  copyright
    String
smil.video.dur  dur
    String
smil.video.end  end
    String
smil.video.fill  fill
    String
smil.video.id  id
    String
smil.video.longdesc  longdesc
    String
smil.video.region  region
    String
```

```

smil.video.repeat  repeat
    String
smil.video.src  src
    String
smil.video.system-bitrate  system-bitrate
    String
smil.video.system-captions  system-captions
    String
smil.video.system-language  system-language
    String
smil.video.system-overdub-or-caption  system-overdub-or-caption
    String
smil.video.system-required  system-required
    String
smil.video.system-screen-depth  system-screen-depth
    String
smil.video.system-screen-size  system-screen-size
    String
smil.video.title  title
    String
smil.video.type  type
    String

```

#### **Synchronous Data Link Control (SDLC) (sdlc)**

```

sdlc.address  Address Field
    Unsigned 8-bit integer
    Address
sdlc.control  Control Field
    Unsigned 16-bit integer
    Control field
sdlc.control.f  Final
    Boolean
sdlc.control.ftype  Frame type
    Unsigned 8-bit integer
sdlc.control.n_r  N(R)
    Unsigned 8-bit integer
sdlc.control.n_s  N(S)
    Unsigned 8-bit integer
sdlc.control.p  Poll
    Boolean
sdlc.control.s_ftype  Supervisory frame type
    Unsigned 8-bit integer
sdlc.control.u_modifier_cmd  Command
    Unsigned 8-bit integer
sdlc.control.u_modifier_resp  Response
    Unsigned 8-bit integer

```

**Synergy (synergy)**

```
synergy.ack    resolution change acknowledgment
               No value

synergy.cbye   Close Connection
               No value

synergy.cinn   Enter Screen
               No value

synergy.cinn.mask  Modifier Key Mask
                 Unsigned 16-bit integer

synergy.cinn.sequence  Sequence Number
                       Unsigned 32-bit integer

synergy.cinn.x  Screen X
                Unsigned 16-bit integer

synergy.cinn.y  Screen Y
                Unsigned 16-bit integer

synergy.clientdata  Client Data
                   No value

synergy.clipboard  Grab Clipboard
                   No value

synergy.clipboard.identifier  Identifier
                              Unsigned 8-bit integer

synergy.clipboard.sequence  Sequence Number
                             Unsigned 32-bit integer

synergy.clipboarddata  Clipboard Data
                       No value

synergy.clipboarddata.data  Clipboard Data
                             String

synergy.clipboarddata.identifier  Clipboard Identifier
                                   Unsigned 8-bit integer

synergy.clipboarddata.sequence  Sequence Number
                                 Unsigned 32-bit integer

synergy.clps  coordinate of leftmost pixel on secondary screen
              Unsigned 16-bit integer

synergy.clps.ctp  coordinate of topmost pixel on secondary screen
                  Unsigned 16-bit integer

synergy.clps.hsp  height of secondary screen in pixels
                  Unsigned 16-bit integer

synergy.clps.swz  size of warp zone
                  Unsigned 16-bit integer

synergy.clps.wsp  width of secondary screen in pixels
                  Unsigned 16-bit integer

synergy.clps.x  x position of the mouse on the secondary screen
                Unsigned 16-bit integer

synergy.clps.y  y position of the mouse on the secondary screen
                Unsigned 16-bit integer
```

```
synergy.cnop      No Operation
                  No value
synergy.cout      Leave Screen
                  No value
synergy.ebsy      Connection Already in Use
                  No value
synergy.eicv      incompatible versions
                  No value
synergy.eicv.major Major Version Number
                  Unsigned 16-bit integer
synergy.eicv.minor Minor Version Number
                  Unsigned 16-bit integer
synergy.handshake Handshake
                  No value
synergy.handshake.client Client Name
                  String
synergy.handshake.majorversion Major Version
                  Unsigned 16-bit integer
synergy.handshake.minorversion Minor Version
                  Unsigned 16-bit integer
synergy.keyautorepeat key auto-repeat
                  No value
synergy.keyautorepeat.key Key Button
                  Unsigned 16-bit integer
synergy.keyautorepeat.keyid Key ID
                  Unsigned 16-bit integer
synergy.keyautorepeat.mask Key modifier Mask
                  Unsigned 16-bit integer
synergy.keyautorepeat.repeat Number of Repeats
                  Unsigned 16-bit integer
synergy.keypressed Key Pressed
                  No value
synergy.keypressed.key Key Button
                  Unsigned 16-bit integer
synergy.keypressed.keyid Key Id
                  Unsigned 16-bit integer
synergy.keypressed.mask Key Modifier Mask
                  Unsigned 16-bit integer
synergy.keyreleased key released
                  No value
synergy.keyreleased.key Key Button
                  Unsigned 16-bit integer
synergy.keyreleased.keyid Key Id
                  Unsigned 16-bit integer
```

```
synergy.mousebuttonpressed  Mouse Button Pressed
    Unsigned 8-bit integer
synergy.mousebuttonreleased  Mouse Button Released
    Unsigned 8-bit integer
synergy.mousemoved  Mouse Moved
    No value
synergy.mousemoved.x  X Axis
    Unsigned 16-bit integer
synergy.mousemoved.y  Y Axis
    Unsigned 16-bit integer
synergy.qinf  Query Screen Info
    No value
synergy.relativemousemove  Relative Mouse Move
    No value
synergy.relativemousemove.x  X Axis
    Unsigned 16-bit integer
synergy.relativemousemove.y  Y Axis
    Unsigned 16-bit integer
synergy.resetoptions  Reset Options
    No value
synergy.screensaver  Screen Saver Change
    Boolean
synergy.setoptions  Set Options
    Unsigned 32-bit integer
synergy.unknown  unknown
    No value
synergy.violation  protocol violation
    No value
synergykeyreleased.mask  Key Modifier Mask
    Unsigned 16-bit integer
```

**Syslog message (syslog)**

```
syslog.facility  Facility
    Unsigned 8-bit integer
    Message facility
syslog.level  Level
    Unsigned 8-bit integer
    Message level
syslog.msg  Message
    String
    Message Text
syslog.msu_present  SS7 MSU present
    Boolean
    True if an SS7 MSU was detected in the syslog message
```



**Systems Network Architecture (sna)**

```
sna.control.05.delay  Channel Delay
    Unsigned 16-bit integer
sna.control.05.ptp    Point-to-point
    Boolean
sna.control.05.type   Network Address Type
    Unsigned 8-bit integer
sna.control.0e.type   Type
    Unsigned 8-bit integer
sna.control.0e.value  Value
    String
sna.control.hprkey   Control Vector HPR Key
    Unsigned 8-bit integer
sna.control.key      Control Vector Key
    Unsigned 8-bit integer
sna.control.len      Control Vector Length
    Unsigned 8-bit integer
sna.gds              GDS Variable
    No value
sna.gds.cont         Continuation Flag
    Boolean
sna.gds.len          GDS Variable Length
    Unsigned 16-bit integer
sna.gds.type         Type of Variable
    Unsigned 16-bit integer
sna.nlp.frh         Transmission Priority Field
    Unsigned 8-bit integer
sna.nlp.nhdr        Network Layer Packet Header
    No value
    NHDR
sna.nlp.nhdr.0      Network Layer Packet Header Byte 0
    Unsigned 8-bit integer
sna.nlp.nhdr.1      Network Layer Packet Header Byte 1
    Unsigned 8-bit integer
sna.nlp.nhdr.anr    Automatic Network Routing Entry
    Byte array
sna.nlp.nhdr.fra    Function Routing Address Entry
    Byte array
sna.nlp.nhdr.ft     Function Type
    Unsigned 8-bit integer
sna.nlp.nhdr.slowdn1 Slowdown 1
    Boolean
sna.nlp.nhdr.slowdn2 Slowdown 2
    Boolean
```

```
sna.nlp.nhdr.sm    Switching Mode Field
                  Unsigned 8-bit integer

sna.nlp.nhdr.tpf   Transmission Priority Field
                  Unsigned 8-bit integer

sna.nlp.nhdr.tspi  Time Sensitive Packet Indicator
                  Boolean

sna.nlp.thdr       RTP Transport Header
                  No value
                  THDR

sna.nlp.thdr.8     RTP Transport Packet Header Byte 8
                  Unsigned 8-bit integer

sna.nlp.thdr.9     RTP Transport Packet Header Byte 9
                  Unsigned 8-bit integer

sna.nlp.thdr.bsn   Byte Sequence Number
                  Unsigned 32-bit integer

sna.nlp.thdr.cqfi  Connection Qualifyer Field Indicator
                  Boolean

sna.nlp.thdr.dlf   Data Length Field
                  Unsigned 32-bit integer

sna.nlp.thdr.eomi  End Of Message Indicator
                  Boolean

sna.nlp.thdr.lmi   Last Message Indicator
                  Boolean

sna.nlp.thdr.offset Data Offset/4
                  Unsigned 16-bit integer
                  Data Offset in Words

sna.nlp.thdr.optional.0d.arb  ARB Flow Control
                  Boolean

sna.nlp.thdr.optional.0d.dedicated  Dedicated RTP Connection
                  Boolean

sna.nlp.thdr.optional.0d.reliable  Reliable Connection
                  Boolean

sna.nlp.thdr.optional.0d.target  Target Resource ID Present
                  Boolean

sna.nlp.thdr.optional.0d.version  Version
                  Unsigned 16-bit integer

sna.nlp.thdr.optional.0e.4  Connection Setup Byte 4
                  Unsigned 8-bit integer

sna.nlp.thdr.optional.0e.abspbeg  ABSP Begin
                  Unsigned 32-bit integer

sna.nlp.thdr.optional.0e.abspend  ABSP End
                  Unsigned 32-bit integer

sna.nlp.thdr.optional.0e.echo  Status Acknowledge Number
                  Unsigned 16-bit integer
```

```
sna.nlp.thdr.optional.0e.gap  Gap Detected
    Boolean
sna.nlp.thdr.optional.0e.idle  RTP Idle Packet
    Boolean
sna.nlp.thdr.optional.0e.nabsp  Number Of ABSP
    Unsigned 8-bit integer
sna.nlp.thdr.optional.0e.rseq  Received Sequence Number
    Unsigned 32-bit integer
sna.nlp.thdr.optional.0e.stat  Status
    Unsigned 8-bit integer
sna.nlp.thdr.optional.0e.sync  Status Report Number
    Unsigned 16-bit integer
sna.nlp.thdr.optional.0f.bits  Client Bits
    Unsigned 8-bit integer
sna.nlp.thdr.optional.10.tcid  Transport Connection Identifier
    Byte array
    TCID
sna.nlp.thdr.optional.12.sense  Sense Data
    Byte array
sna.nlp.thdr.optional.14.rr.2  Return Route TG Descriptor Byte 2
    Unsigned 8-bit integer
sna.nlp.thdr.optional.14.rr.bfe  BF Entry Indicator
    Boolean
sna.nlp.thdr.optional.14.rr.key  Key
    Unsigned 8-bit integer
sna.nlp.thdr.optional.14.rr.len  Length
    Unsigned 8-bit integer
sna.nlp.thdr.optional.14.rr.num  Number Of TG Control Vectors
    Unsigned 8-bit integer
sna.nlp.thdr.optional.14.si.2  Switching Information Byte 2
    Unsigned 8-bit integer
sna.nlp.thdr.optional.14.si.alive  RTP Alive Timer
    Unsigned 32-bit integer
sna.nlp.thdr.optional.14.si.dirsearch  Directory Search Required on Path Switch
    Boolean
sna.nlp.thdr.optional.14.si.key  Key
    Unsigned 8-bit integer
sna.nlp.thdr.optional.14.si.len  Length
    Unsigned 8-bit integer
sna.nlp.thdr.optional.14.si.limitres  Limited Resource Link Indicator
    Boolean
sna.nlp.thdr.optional.14.si.maxpsize  Maximum Packet Size On Return Path
    Unsigned 32-bit integer
sna.nlp.thdr.optional.14.si.mnpsrscv  MNPS RSCV Retention Indicator
    Boolean
```

```
sna.nlp.thdr.optional.14.si.mobility  Mobility Indicator
Boolean

sna.nlp.thdr.optional.14.si.ncescope  NCE Scope Indicator
Boolean

sna.nlp.thdr.optional.14.si.refifo    Resequencing (REFIFO) Indicator
Boolean

sna.nlp.thdr.optional.14.si.switch   Path Switch Time
Unsigned 32-bit integer

sna.nlp.thdr.optional.22.2          Adaptive Rate Based Segment Byte 2
Unsigned 8-bit integer

sna.nlp.thdr.optional.22.3          Adaptive Rate Based Segment Byte 3
Unsigned 8-bit integer

sna.nlp.thdr.optional.22.arb        ARB Mode
Unsigned 8-bit integer

sna.nlp.thdr.optional.22.field1     Field 1
Unsigned 32-bit integer

sna.nlp.thdr.optional.22.field2     Field 2
Unsigned 32-bit integer

sna.nlp.thdr.optional.22.field3     Field 3
Unsigned 32-bit integer

sna.nlp.thdr.optional.22.field4     Field 4
Unsigned 32-bit integer

sna.nlp.thdr.optional.22.parity     Parity Indicator
Boolean

sna.nlp.thdr.optional.22.raa        Rate Adjustment Action
Unsigned 8-bit integer

sna.nlp.thdr.optional.22.raterep    Rate Reply Correlator
Unsigned 8-bit integer

sna.nlp.thdr.optional.22.ratereq    Rate Request Correlator
Unsigned 8-bit integer

sna.nlp.thdr.optional.22.type       Message Type
Unsigned 8-bit integer

sna.nlp.thdr.optional.len           Optional Segment Length/4
Unsigned 8-bit integer

sna.nlp.thdr.optional.type          Optional Segment Type
Unsigned 8-bit integer

sna.nlp.thdr.osi                    Optional Segments Present Indicator
Boolean

sna.nlp.thdr.rasapi                 Reply ASAP Indicator
Boolean

sna.nlp.thdr.retryi                 Retry Indicator
Boolean

sna.nlp.thdr.setupi                 Setup Indicator
Boolean
```

sna.nlp.thdr.somi Start Of Message Indicator  
Boolean

sna.nlp.thdr.sri Session Request Indicator  
Boolean

sna.nlp.thdr.tcid Transport Connection Identifier  
Byte array  
TCID

sna.rh Request/Response Header  
No value

sna.rh.0 Request/Response Header Byte 0  
Unsigned 8-bit integer

sna.rh.1 Request/Response Header Byte 1  
Unsigned 8-bit integer

sna.rh.2 Request/Response Header Byte 2  
Unsigned 8-bit integer

sna.rh.bbi Begin Bracket Indicator  
Boolean

sna.rh.bci Begin Chain Indicator  
Boolean

sna.rh.cdi Change Direction Indicator  
Boolean

sna.rh.cebi Conditional End Bracket Indicator  
Boolean

sna.rh.csi Code Selection Indicator  
Unsigned 8-bit integer

sna.rh.dr1 Definite Response 1 Indicator  
Boolean

sna.rh.dr2 Definite Response 2 Indicator  
Boolean

sna.rh.ebi End Bracket Indicator  
Boolean

sna.rh.eci End Chain Indicator  
Boolean

sna.rh.edi Enciphered Data Indicator  
Boolean

sna.rh.eri Exception Response Indicator  
Boolean

sna.rh.fi Format Indicator  
Boolean

sna.rh.lcci Length-Checked Compression Indicator  
Boolean

sna.rh.pdi Padded Data Indicator  
Boolean

sna.rh.pi Pacing Indicator  
Boolean

sna.rh.qri Queued Response Indicator  
Boolean

sna.rh.rlwi Request Larger Window Indicator  
Boolean

sna.rh.rri Request/Response Indicator  
Unsigned 8-bit integer

sna.rh.rti Response Type Indicator  
Boolean

sna.rh.ru\_category Request/Response Unit Category  
Unsigned 8-bit integer

sna.rh.sdi Sense Data Included  
Boolean

sna.th Transmission Header  
No value

sna.th.0 Transmission Header Byte 0  
Unsigned 8-bit integer  
TH Byte 0

sna.th.cmd\_fmt Command Format  
Unsigned 8-bit integer

sna.th.cmd\_sn Command Sequence Number  
Unsigned 16-bit integer

sna.th.cmd\_type Command Type  
Unsigned 8-bit integer

sna.th.daf Destination Address Field  
Unsigned 16-bit integer

sna.th.dcf Data Count Field  
Unsigned 16-bit integer

sna.th.def Destination Element Field  
Unsigned 16-bit integer

sna.th.dsaf Destination Subarea Address Field  
Unsigned 32-bit integer

sna.th.efi Expedited Flow Indicator  
Unsigned 8-bit integer

sna.th.er\_vr\_supp\_ind ER and VR Support Indicator  
Unsigned 8-bit integer

sna.th.ern Explicit Route Number  
Unsigned 8-bit integer

sna.th.fid Format Identifier  
Unsigned 8-bit integer

sna.th.iern Initial Explicit Route Number  
Unsigned 8-bit integer

sna.th.lsid Local Session Identification  
Unsigned 8-bit integer

sna.th.mft MPR FID4 Type  
Boolean

```
sna.th.mpf Mapping Field
    Unsigned 8-bit integer
sna.th.nlp_cp NLP Count or Padding
    Unsigned 8-bit integer
sna.th.nlpoi NLP Offset Indicator
    Unsigned 8-bit integer
sna.th.ntwk_prty Network Priority
    Unsigned 8-bit integer
sna.th.oaf Origin Address Field
    Unsigned 16-bit integer
sna.th.odai ODAI Assignment Indicator
    Unsigned 8-bit integer
sna.th.oef Origin Element Field
    Unsigned 16-bit integer
sna.th.osaf Origin Subarea Address Field
    Unsigned 32-bit integer
sna.th.piubf PIU Blocking Field
    Unsigned 8-bit integer
sna.th.sa Session Address
    Byte array
sna.th.snai SNA Indicator
    Boolean
    Used to identify whether the PIU originated or is destined for an SNA or non
sna.th.snf Sequence Number Field
    Unsigned 16-bit integer
sna.th.tg_nonfifo_ind Transmission Group Non-FIFO Indicator
    Boolean
sna.th.tg_snf Transmission Group Sequence Number Field
    Unsigned 16-bit integer
sna.th.tg_sweep Transmission Group Sweep
    Unsigned 8-bit integer
sna.th.tgsf Transmission Group Segmenting Field
    Unsigned 8-bit integer
sna.th.tpf Transmission Priority Field
    Unsigned 8-bit integer
sna.th.vr_cwi Virtual Route Change Window Indicator
    Unsigned 16-bit integer
    Change Window Indicator
sna.th.vr_cwri Virtual Route Change Window Reply Indicator
    Unsigned 16-bit integer
sna.th.vr_pac_cnt_ind Virtual Route Pacing Count Indicator
    Unsigned 8-bit integer
sna.th.vr_rwi Virtual Route Reset Window Indicator
    Boolean
```

sna.th.vr\_snf\_send Virtual Route Send Sequence Number Field  
Unsigned 16-bit integer  
Send Sequence Number Field

sna.th.vr\_sqti Virtual Route Sequence and Type Indicator  
Unsigned 16-bit integer  
Route Sequence and Type

sna.th.vrn Virtual Route Number  
Unsigned 8-bit integer

sna.th.vrprq Virtual Route Pacing Request  
Boolean

sna.th.vrprs Virtual Route Pacing Response  
Boolean

sna.xid XID  
No value  
XID Frame

sna.xid.0 XID Byte 0  
Unsigned 8-bit integer

sna.xid.format XID Format  
Unsigned 8-bit integer

sna.xid.id Node Identification  
Unsigned 32-bit integer

sna.xid.idblock ID Block  
Unsigned 32-bit integer

sna.xid.idnum ID Number  
Unsigned 32-bit integer

sna.xid.len XID Length  
Unsigned 8-bit integer

sna.xid.type XID Type  
Unsigned 8-bit integer

sna.xid.type3.10 XID Type 3 Byte 10  
Unsigned 8-bit integer

sna.xid.type3.11 XID Type 3 Byte 11  
Unsigned 8-bit integer

sna.xid.type3.12 XID Type 3 Byte 12  
Unsigned 8-bit integer

sna.xid.type3.15 XID Type 3 Byte 15  
Unsigned 8-bit integer

sna.xid.type3.8 Characteristics of XID sender  
Unsigned 16-bit integer

sna.xid.type3.actpu ACTPU suppression indicator  
Boolean

sna.xid.type3.asend\_bind Adaptive BIND pacing support as sender  
Boolean  
Pacing support as sender



```
sna.xid.type3.asend_recv  Adaptive BIND pacing support as receiver
  Boolean
  Pacing support as receive
sna.xid.type3.branch  Branch Indicator
  Unsigned 8-bit integer
sna.xid.type3.brnn  Option Set 1123 Indicator
  Boolean
sna.xid.type3.cp  Control Point Services
  Boolean
sna.xid.type3.cpchange  CP name change support
  Boolean
sna.xid.type3.cpcp  CP-CP session support
  Boolean
sna.xid.type3.dedsvc  Dedicated SVC Indicator
  Boolean
sna.xid.type3.dlc  XID DLC
  Unsigned 8-bit integer
sna.xid.type3.dlen  DLC Dependent Section Length
  Unsigned 8-bit integer
sna.xid.type3.dlur  Dependent LU Requester Indicator
  Boolean
sna.xid.type3.dlus  DLUS Served LU Registration Indicator
  Boolean
sna.xid.type3.exbn  Extended HPR Border Node
  Boolean
sna.xid.type3.gener_bind  Whole BIND PIU generated indicator
  Boolean
  Whole BIND PIU generated
sna.xid.type3.genodai  Generalized ODAI Usage Option
  Boolean
sna.xid.type3.initself  INIT-SELF support
  Boolean
sna.xid.type3.negcomp  Negotiation Complete
  Boolean
sna.xid.type3.negcsup  Negotiation Complete Supported
  Boolean
sna.xid.type3.nonact  Nonactivation Exchange
  Boolean
sna.xid.type3.nwnode  Sender is network node
  Boolean
sna.xid.type3.pacing  Qualifier for adaptive BIND pacing support
  Unsigned 8-bit integer
sna.xid.type3.partg  Parallel TG Support
  Boolean
```

sna.xid.type3.pbn Peripheral Border Node  
Boolean

sna.xid.type3.pucap PU Capabilities  
Boolean

sna.xid.type3.quiesce Quiesce TG Request  
Boolean

sna.xid.type3.recve\_bind Whole BIND PIU required indicator  
Boolean  
Whole BIND PIU required

sna.xid.type3.stand\_bind Stand-Alone BIND Support  
Boolean

sna.xid.type3.state XID exchange state indicator  
Unsigned 16-bit integer

sna.xid.type3.tg XID TG  
Unsigned 8-bit integer

sna.xid.type3.tgshare TG Sharing Prohibited Indicator  
Boolean

### Systems Network Architecture XID (sna\_xid)

#### T.30 (t30)

t30.Address Address  
Unsigned 8-bit integer  
Address Field

t30.Control Control  
Unsigned 8-bit integer  
Address Field

t30.FacsimileControl Facsimile Control  
Unsigned 8-bit integer  
Facsimile Control

t30.fif.100x100cg 100 pels/25.4 mm x 100 lines/25.4 mm for colour/gray scale  
Boolean

t30.fif.1200x1200 1200 pels/25.4 mm x 1200 lines/25.4 mm  
Boolean

t30.fif.12c 12 bits/pel component  
Boolean

t30.fif.300x300 300x300 pels/25.4 mm  
Boolean

t30.fif.300x600 300 pels/25.4 mm x 600 lines/25.4 mm  
Boolean

t30.fif.3gmn 3rd Generation Mobile Network  
Boolean

t30.fif.400x800 400 pels/25.4 mm x 800 lines/25.4 mm  
Boolean

t30.fif.600x1200 600 pels/25.4 mm x 1200 lines/25.4 mm  
Boolean

t30.fif.600x600 600 pels/25.4 mm x 600 lines/25.4 mm  
Boolean

t30.fif.acn2c Alternative cipher number 2 capability  
Boolean

t30.fif.acn3c Alternative cipher number 3 capability  
Boolean

t30.fif.ahsn2 Alternative hashing system number 2 capability  
Boolean

t30.fif.ahsn3 Alternative hashing system number 3 capability  
Boolean

t30.fif.bft Binary File Transfer (BFT)  
Boolean

t30.fif.btm Basic Transfer Mode (BTM)  
Boolean

t30.fif.bwmrcp Black and white mixed raster content profile (MRCbw)  
Boolean

t30.fif.cg1200x1200 Colour/gray scale 1200 pels/25.4 mm x 1200 lines/25.4 mm re  
Boolean

t30.fif.cg300 Colour/gray-scale 300 pels/25.4 mm x 300 lines/25.4 mm or 400 pel  
Boolean

t30.fif.cg600x600 Colour/gray scale 600 pels/25.4 mm x 600 lines/25.4 mm resolu  
Boolean

t30.fif.cgr Custom gamut range  
Boolean

t30.fif.ci Custom illuminant  
Boolean

t30.fif.cm Compress/Uncompress mode  
Boolean

t30.fif.country\_code ITU-T Country code  
Unsigned 8-bit integer  
ITU-T Country code

t30.fif.dnc Digital network capability  
Boolean

t30.fif.do Duplex operation  
Boolean

t30.fif.dspscam Double sided printing capability (alternate mode)  
Boolean

t30.fif.dsppcm Double sided printing capability (continuous mode)  
Boolean

t30.fif.dsr Data signalling rate  
Unsigned 8-bit integer

t30.fif.dsr\_dcs Data signalling rate  
Unsigned 8-bit integer

t30.fif.dtm Document Transfer Mode (DTM)  
Boolean

t30.fif.ebft Extended BFT Negotiations capability  
Boolean

t30.fif.ecm Error correction mode  
Boolean

t30.fif.edi Electronic Data Interchange (EDI)  
Boolean

t30.fif.ext Extension indicator  
Boolean

t30.fif.fcm Full colour mode  
Boolean

t30.fif.fs\_dcm Frame size  
Boolean

t30.fif.fvc Field valid capability  
Boolean

t30.fif.hfx40 HFX40 cipher capability  
Boolean

t30.fif.hfx40i HFX40-I hashing capability  
Boolean

t30.fif.hkm HKM key management capability  
Boolean

t30.fif.ibrp Inch based resolution preferred  
Boolean

t30.fif.ira Internet Routing Address (IRA)  
Boolean

t30.fif.isp Internet Selective Polling Address (ISP)  
Boolean

t30.fif.jpeg JPEG coding  
Boolean

t30.fif.mbrp Metric based resolution preferred  
Boolean

t30.fif.mm Mixed mode (Annex E/T.4)  
Boolean

t30.fif.mslt\_dcs Minimum scan line time  
Unsigned 8-bit integer

t30.fif.msltchr Minimum scan line time capability for higher resolutions  
Boolean

t30.fif.msltcr Minimum scan line time capability at the receiver  
Unsigned 8-bit integer

t30.fif.mspc Multiple selective polling capability  
Boolean

t30.fif.naleg North American Legal (215.9 x 355.6 mm) capability  
Boolean

t30.fif.nalet North American Letter (215.9 x 279.4 mm) capability  
Boolean

```
t30.fif.non_standard_cap  Non-standard capabilities
    Byte array
    Non-standard capabilities
t30.fif.ns  No subsampling (1:1:1)
    Boolean
t30.fif.number  Number
    String
t30.fif.oc  Override capability
    Boolean
t30.fif.op  Octets preferred
    Boolean
t30.fif.passw  Password
    Boolean
t30.fif.pht  Preferred Huffman tables
    Boolean
t30.fif.pi  Plane interleave
    Boolean
t30.fif.plmss  Page length maximum strip size for T.44 (Mixed Raster Content)
    Boolean
t30.fif.pm26  Processable mode 26 (ITU T T.505)
    Boolean
t30.fif.ps  Polled Subaddress
    Boolean
t30.fif.r16x15  R16x15.4 lines/mm and/or 400x400 pels/25.4 mm
    Boolean
t30.fif.r8x15  R8x15.4 lines/mm
    Boolean
t30.fif.res  R8x7.7 lines/mm and/or 200x200 pels/25.4 mm
    Boolean
t30.fif.rfo  Receiver fax operation
    Boolean
t30.fif.rl_dcs  Recording length capability
    Unsigned 8-bit integer
t30.fif.rlc  Recording length capability
    Unsigned 8-bit integer
t30.fif.rsa  RSA key management capability
    Boolean
t30.fif.rtfc  Ready to transmit a facsimile document (polling)
    Boolean
t30.fif.rtif  Real-time Internet fax (ITU T T.38)
    Boolean
t30.fif.rts  Resolution type selection
    Boolean
t30.fif.rttcmmmd  Ready to transmit a character or mixed mode document (polling)
    Boolean
```

```
t30.fif.rtttd Ready to transmit a data file (polling)
  Boolean
t30.fif.rw_dcs Recording width
  Unsigned 8-bit integer
t30.fif.rwc Recording width capabilities
  Unsigned 8-bit integer
t30.fif.sc Subaddressing capability
  Boolean
t30.fif.sdmc SharedDataMemory capacity
  Unsigned 8-bit integer
t30.fif.sit Sender Identification transmission
  Boolean
t30.fif.sm Store and forward Internet fax- Simple mode (ITU-T T.37)
  Boolean
t30.fif.sp Selective polling
  Boolean
t30.fif.spcbft Simple Phase C BFT Negotiations capability
  Boolean
t30.fif.spscb Single-progression sequential coding (ITU-T T.85) basic capability
  Boolean
t30.fif.spsco Single-progression sequential coding (ITU-T T.85) optional L0 capability
  Boolean
t30.fif.t43 T.43 coding
  Boolean
t30.fif.t441 T.44 (Mixed Raster Content)
  Boolean
t30.fif.t442 T.44 (Mixed Raster Content)
  Boolean
t30.fif.t443 T.44 (Mixed Raster Content)
  Boolean
t30.fif.t45 T.45 (run length colour encoding)
  Boolean
t30.fif.t6 T.6 coding capability
  Boolean
t30.fif.tdcc Two dimensional coding capability
  Boolean
t30.fif.v8c V.8 capabilities
  Boolean
t30.fif.vc32k Voice coding with 32k ADPCM (ITU T G.726)
  Boolean
t30.pps.fcf2 Post-message command
  Unsigned 8-bit integer
  Post-message command
```

```

t30.t4.block_count  Block counter
                    Unsigned 8-bit integer
                    Block counter

t30.t4.data         T.4 Facsimile data field
                    Byte array
                    T.4 Facsimile data field

t30.t4.frame_count  Frame counter
                    Unsigned 8-bit integer
                    Frame counter

t30.t4.frame_num    T.4 Frame number
                    Unsigned 8-bit integer
                    T.4 Frame number

t30.t4.page_count   Page counter
                    Unsigned 8-bit integer
                    Page counter

```

**T.38 (t38)**

```

data.fragment       Message fragment
                    Frame number

data.fragment.error  Message defragmentation error
                    Frame number

data.fragment.multiple_tails  Message has multiple tail fragments
                    Boolean

data.fragment.overlap  Message fragment overlap
                    Boolean

data.fragment.overlap.conflicts  Message fragment overlapping with conflicting d
                    Boolean

data.fragment.too_long_fragment  Message fragment too long
                    Boolean

data.fragments       Message fragments
                    No value

data.reassembled.in  Reassembled in
                    Frame number

t38.Data_Field_item  Item
                    No value
                    t38.Data_Field_item

t38.IFPPacket        IFPPacket
                    No value
                    t38.IFPPacket

t38.UDPTLPacket      UDPTLPacket
                    No value
                    t38.UDPTLPacket

t38.data_field       data-field
                    Unsigned 32-bit integer
                    t38.Data_Field

```

```
t38.error_recovery error-recovery
    Unsigned 32-bit integer
    t38.T_error_recovery

t38.fec_data fec-data
    Unsigned 32-bit integer
    t38.T_fec_data

t38.fec_data_item Item
    Byte array
    t38.OCTET_STRING

t38.fec_info fec-info
    No value
    t38.T_fec_info

t38.fec_npackets fec-npackets
    Signed 32-bit integer
    t38.INTEGER

t38.field_data field-data
    Byte array
    t38.T_field_data

t38.field_type field-type
    Unsigned 32-bit integer
    t38.T_field_type

t38.primary_ifp_packet primary-ifp-packet
    No value
    t38.T_primary_ifp_packet

t38.secondary_ifp_packets secondary-ifp-packets
    Unsigned 32-bit integer
    t38.T_secondary_ifp_packets

t38.secondary_ifp_packets_item Item
    No value
    t38.OpenType_IFPPacket

t38.seq_number seq-number
    Unsigned 32-bit integer
    t38.T_seq_number

t38.setup Stream setup
    String
    Stream setup, method and frame number

t38.setup-frame Stream frame
    Frame number
    Frame that set up this stream

t38.setup-method Stream Method
    String
    Method used to set up this stream

t38.t30_data t30-data
    Unsigned 32-bit integer
    t38.T30_data

t38.t30_indicator t30-indicator
    Unsigned 32-bit integer
    t38.T30_indicator
```



```
t38.type_of_msg  type-of-msg
                 Unsigned 32-bit integer
                 t38.Type_of_msg
```

**TACACS (tacacs)**

```
tacacs.destaddr  Destination address
                 IPv4 address
                 Destination address

tacacs.destport  Destination port
                 Unsigned 16-bit integer
                 Destination port

tacacs.line      Line
                 Unsigned 16-bit integer
                 Line

tacacs.nonce     Nonce
                 Unsigned 16-bit integer
                 Nonce

tacacs.passlen   Password length
                 Unsigned 8-bit integer
                 Password length

tacacs.reason    Reason
                 Unsigned 8-bit integer
                 Reason

tacacs.response  Response
                 Unsigned 8-bit integer
                 Response

tacacs.result1   Result 1
                 Unsigned 32-bit integer
                 Result 1

tacacs.result2   Result 2
                 Unsigned 32-bit integer
                 Result 2

tacacs.result3   Result 3
                 Unsigned 16-bit integer
                 Result 3

tacacs.type      Type
                 Unsigned 8-bit integer
                 Type

tacacs.userlen   Username length
                 Unsigned 8-bit integer
                 Username length

tacacs.version   Version
                 Unsigned 8-bit integer
                 Version
```

**TACACS+ (tacplus)**

```
tacplus.acct.flags  Flags
    Unsigned 8-bit integer
    Flags

tacplus.flags  Flags
    Unsigned 8-bit integer
    Flags

tacplus.flags.singleconn  Single Connection
    Boolean
    Is this a single connection?

tacplus.flags.unencrypted  Unencrypted
    Boolean
    Is payload unencrypted?

tacplus.majvers  Major version
    Unsigned 8-bit integer
    Major version number

tacplus.minvers  Minor version
    Unsigned 8-bit integer
    Minor version number

tacplus.packet_len  Packet length
    Unsigned 32-bit integer
    Packet length

tacplus.request  Request
    Boolean
    TRUE if TACACS+ request

tacplus.response  Response
    Boolean
    TRUE if TACACS+ response

tacplus.seqno  Sequence number
    Unsigned 8-bit integer
    Sequence number

tacplus.session_id  Session ID
    Unsigned 32-bit integer
    Session ID

tacplus.type  Type
    Unsigned 8-bit integer
    Type
```

**TCP Encapsulation of IPsec Packets (tcpencap)**

```
tcpencap.espzero  ESP zero
    Unsigned 16-bit integer

tcpencap.ikedirection  ISAKMP traffic direction
    Unsigned 16-bit integer

tcpencap.magic  Magic number
    Byte array

tcpencap.magic2  Magic 2
    Byte array
```

```
tcpencap.proto Protocol
    Unsigned 8-bit integer
tcpencap.seq Sequence number
    Unsigned 16-bit integer
tcpencap.unknown Unknown trailer
    Byte array
tcpencap.zero All zero
    Byte array
```

#### **TDMA RTmac Discipline (tdma)**

#### **TEI Management Procedure, Channel D (LAPD) (tei\_management)**

```
tei.action Action
    Unsigned 8-bit integer
    Action Indicator
tei.entity Entity
    Unsigned 8-bit integer
    Layer Management Entity Identifier
tei.extend Extend
    Unsigned 8-bit integer
    Extension Indicator
tei.msg Msg
    Unsigned 8-bit integer
    Message Type
tei.reference Reference
    Unsigned 16-bit integer
    Reference Number
```

#### **TPKT – ISO on TCP – RFC1006 (tpkt)**

```
tpkt.length Length
    Unsigned 16-bit integer
    Length of data unit, including this header
tpkt.reserved Reserved
    Unsigned 8-bit integer
    Reserved, should be 0
tpkt.version Version
    Unsigned 8-bit integer
    Version, only version 3 is defined
```

#### **Tabular Data Stream (tds)**

```
tds.channel Channel
    Unsigned 16-bit integer
    Channel Number
tds.fragment TDS Fragment
    Frame number
    TDS Fragment
```

```
tds.fragment.error    Defragmentation error
    Frame number
    Defragmentation error due to illegal fragments
tds.fragment.multipletails  Multiple tail fragments found
    Boolean
    Several tails were found when defragmenting the packet
tds.fragment.overlap  Segment overlap
    Boolean
    Fragment overlaps with other fragments
tds.fragment.overlap.conflict  Conflicting data in fragment overlap
    Boolean
    Overlapping fragments contained conflicting data
tds.fragment.toolongfragment  Segment too long
    Boolean
    Segment contained data past end of packet
tds.fragments        TDS Fragments
    No value
    TDS Fragments
tds.packet_number    Packet Number
    Unsigned 8-bit integer
    Packet Number
tds.reassembled_in  Reassembled TDS in frame
    Frame number
    This TDS packet is reassembled in this frame
tds.size            Size
    Unsigned 16-bit integer
    Packet Size
tds.status          Status
    Unsigned 8-bit integer
    Frame status
tds.type            Type
    Unsigned 8-bit integer
    Packet Type
tds.window          Window
    Unsigned 8-bit integer
    Window
tds7.message        Message
    String
tds7login.client_pid  Client PID
    Unsigned 32-bit integer
    Client PID
tds7login.client_version  Client version
    Unsigned 32-bit integer
    Client version
tds7login.collation  Collation
    Unsigned 32-bit integer
    Collation
```

```
tds7login.connection_id  Connection ID
    Unsigned 32-bit integer
    Connection ID

tds7login.option_flags1  Option Flags 1
    Unsigned 8-bit integer
    Option Flags 1

tds7login.option_flags2  Option Flags 2
    Unsigned 8-bit integer
    Option Flags 2

tds7login.packet_size    Packet Size
    Unsigned 32-bit integer
    Packet size

tds7login.reserved_flags  Reserved Flags
    Unsigned 8-bit integer
    reserved flags

tds7login.sql_type_flags  SQL Type Flags
    Unsigned 8-bit integer
    SQL Type Flags

tds7login.time_zone      Time Zone
    Unsigned 32-bit integer
    Time Zone

tds7login.total_len      Total Packet Length
    Unsigned 32-bit integer
    TDS7 Login Packet total packet length

tds7login.version        TDS version
    Unsigned 32-bit integer
    TDS version
```

#### **Tango Dissector Using GIOP API (giop-tango)**

#### **Tazmen Sniffer Protocol (tzsp)**

```
tzsp.encap  Encapsulation
    Unsigned 16-bit integer
    Encapsulation

tzsp.original_length  Original Length
    Signed 16-bit integer
    OrigLength

tzsp.sensormac  Sensor Address
    6-byte Hardware (MAC) Address
    Sensor MAC

tzsp.type  Type
    Unsigned 8-bit integer
    Type

tzsp.unknown  Unknown tag
    Byte array
    Unknown
```

```
tzsp.version  Version
  Unsigned 8-bit integer
  Version

tzsp.wlan.channel  Channel
  Unsigned 8-bit integer
  Channel

tzsp.wlan.rate  Rate
  Unsigned 8-bit integer
  Rate

tzsp.wlan.signal  Signal
  Signed 8-bit integer
  Signal

tzsp.wlan.silence  Silence
  Signed 8-bit integer
  Silence

tzsp.wlan.status  Status
  Unsigned 16-bit integer
  Status

tzsp.wlan.status.fcs_err  FCS
  Boolean
  Frame check sequence

tzsp.wlan.status.mac_port  Port
  Unsigned 8-bit integer
  MAC port

tzsp.wlan.status.msg_type  Type
  Unsigned 8-bit integer
  Message type

tzsp.wlan.status.pcf  PCF
  Boolean
  Point Coordination Function

tzsp.wlan.status.undecrypted  Undecrypted
  Boolean
  Undecrypted

tzsp.wlan.time  Time
  Unsigned 32-bit integer
  Time
```

**Telkonet powerline (telkonet)**

```
telkonet.type  Type
  Byte array
  TELKONET type
```

**Telnet (telnet)**

```
telnet.auth.cmd  Auth Cmd
  Unsigned 8-bit integer
  Authentication Command
```

```
telnet.auth.krb5.cmd  Command
    Unsigned 8-bit integer
    Krb5 Authentication sub-command
telnet.auth.mod.cred_fwd  Cred Fwd
    Boolean
    Modifier: Whether client will forward creds or not
telnet.auth.mod.enc  Encrypt
    Unsigned 8-bit integer
    Modifier: How to enable Encryption
telnet.auth.mod.how  How
    Boolean
    Modifier: How to mask
telnet.auth.mod.who  Who
    Boolean
    Modifier: Who to mask
telnet.auth.name  Name
    String
    Name of user being authenticated
telnet.auth.type  Auth Type
    Unsigned 8-bit integer
    Authentication Type
telnet.enc.cmd  Enc Cmd
    Unsigned 8-bit integer
    Encryption command
telnet.enc.type  Enc Type
    Unsigned 8-bit integer
    Encryption type
```

#### **Teredo IPv6 over UDP tunneling (teredo)**

```
teredo.auth  Teredo Authentication header
    No value
    Teredo Authentication header
teredo.auth.aulen  Authentication value length
    Unsigned 8-bit integer
    Authentication value length (AU-len)
teredo.auth.conf  Confirmation byte
    Byte array
    Confirmation byte is zero upon successful authentication.
teredo.auth.id  Client identifier
    Byte array
    Client identifier (ID)
teredo.auth.idlen  Client identifier length
    Unsigned 8-bit integer
    Client identifier length (ID-len)
teredo.auth.nonce  Nonce value
    Byte array
    Nonce value prevents spoofing Teredo server.
```

```

teredo.auth.value  Authentication value
    Byte array
    Authentication value (hash)

teredo.orig  Teredo Origin Indication header
    No value
    Teredo Origin Indication

teredo.orig.addr  Origin IPv4 address
    IPv4 address
    Origin IPv4 address

teredo.orig.port  Origin UDP port
    Unsigned 16-bit integer
    Origin UDP port

```

### **The Armagetron Advanced OpenGL Tron clone (armagetronad)**

```

armagetronad.data  Data
    String
    The actual data (array of shorts in network order)

armagetronad.data_len  DataLen
    Unsigned 16-bit integer
    The length of the data (in shorts)

armagetronad.descriptor_id  Descriptor
    Unsigned 16-bit integer
    The ID of the descriptor (the command)

armagetronad.message  Message
    No value
    A message

armagetronad.message_id  MessageID
    Unsigned 16-bit integer
    The ID of the message (to ack it)

armagetronad.sender_id  SenderID
    Unsigned 16-bit integer
    The ID of the sender (0x0000 for the server)

```

### **TiVoConnect Discovery Protocol (tivoconnect)**

```

tivoconnect.flavor  Flavor
    String
    Protocol Flavor supported by the originator

tivoconnect.identity  Identity
    String
    Unique serial number for the system

tivoconnect.machine  Machine
    String
    Human-readable system name

tivoconnect.method  Method
    String
    Packet was delivered via UDP(broadcast) or TCP(connected)

```



```
tivoconnect.platform Platform
    String
    System platform, either tcd(TiVo) or pc(Computer)
tivoconnect.services Services
    String
    List of available services on the system
tivoconnect.version Version
    String
    System software version
```

**Time Protocol (time)**

```
time.time Time
    Unsigned 32-bit integer
    Seconds since 00:00 (midnight) 1 January 1900 GMT
```

**Time Synchronization Protocol (tsp)**

```
tsp.hopcnt Hop Count
    Unsigned 8-bit integer
    Hop Count
tsp.name Machine Name
    String
    Sender Machine Name
tsp.sec Seconds
    Unsigned 32-bit integer
    Seconds
tsp.sequence Sequence
    Unsigned 16-bit integer
    Sequence Number
tsp.type Type
    Unsigned 8-bit integer
    Packet Type
tsp.usec Microseconds
    Unsigned 32-bit integer
    Microseconds
tsp.version Version
    Unsigned 8-bit integer
    Protocol Version Number
```

**Tiny Transport Protocol (ttp)**

```
ttp.dcredit Delta Credit
    Unsigned 8-bit integer
ttp.icredit Initial Credit
    Unsigned 8-bit integer
ttp.m More Bit
    Boolean
ttp.p Parameter Bit
    Boolean
```

**Token-Ring (tr)**

```
tr.ac Access Control
    Unsigned 8-bit integer

tr.addr Source or Destination Address
    6-byte Hardware (MAC) Address
    Source or Destination Hardware Address

tr.broadcast Broadcast Type
    Unsigned 8-bit integer
    Type of Token-Ring Broadcast

tr.direction Direction
    Unsigned 8-bit integer
    Direction of RIF

tr.dst Destination
    6-byte Hardware (MAC) Address
    Destination Hardware Address

tr.fc Frame Control
    Unsigned 8-bit integer

tr.frame Frame
    Boolean

tr.frame_pcf Frame PCF
    Unsigned 8-bit integer

tr.frame_type Frame Type
    Unsigned 8-bit integer

tr.max_frame_size Maximum Frame Size
    Unsigned 8-bit integer

tr.monitor_cnt Monitor Count
    Unsigned 8-bit integer

tr.priority Priority
    Unsigned 8-bit integer

tr.priority_reservation Priority Reservation
    Unsigned 8-bit integer

tr.rif Ring-Bridge Pairs
    String
    String representing Ring-Bridge Pairs

tr.rif.bridge RIF Bridge
    Unsigned 8-bit integer

tr.rif.ring RIF Ring
    Unsigned 16-bit integer

tr.rif_bytes RIF Bytes
    Unsigned 8-bit integer
    Number of bytes in Routing Information Fields, including the two bytes of Ro

tr.sr Source Routed
    Boolean
    Source Routed
```

tr.src Source  
6-byte Hardware (MAC) Address  
Source Hardware Address

#### **Token-Ring Media Access Control (trmac)**

trmac.dstclass Destination Class  
Unsigned 8-bit integer

trmac.errors.abort Abort Delimiter Transmitted Errors  
Unsigned 8-bit integer

trmac.errors.ac A/C Errors  
Unsigned 8-bit integer

trmac.errors.burst Burst Errors  
Unsigned 8-bit integer

trmac.errors.congestion Receiver Congestion Errors  
Unsigned 8-bit integer

trmac.errors.fc Frame-Copied Errors  
Unsigned 8-bit integer

trmac.errors.freq Frequency Errors  
Unsigned 8-bit integer

trmac.errors.internal Internal Errors  
Unsigned 8-bit integer

trmac.errors.iso Isolating Errors  
Unsigned 16-bit integer

trmac.errors.line Line Errors  
Unsigned 8-bit integer

trmac.errors.lost Lost Frame Errors  
Unsigned 8-bit integer

trmac.errors.noniso Non-Isolating Errors  
Unsigned 16-bit integer

trmac.errors.token Token Errors  
Unsigned 8-bit integer

trmac.length Total Length  
Unsigned 8-bit integer

trmac.mvec Major Vector  
Unsigned 8-bit integer

trmac.naun NAUN  
6-byte Hardware (MAC) Address

trmac.srcclass Source Class  
Unsigned 8-bit integer

trmac.svec Sub-Vector  
Unsigned 8-bit integer

#### **Transaction Capabilities Application Part (tcap)**

tcap.DialoguePDU DialoguePDU  
Unsigned 32-bit integer  
tcap.DialoguePDU

```
tcap.UniDialoguePDU  UniDialoguePDU
    Unsigned 32-bit integer
    tcap.UniDialoguePDU

tcap.__untag_item  Item
    Unsigned 32-bit integer
    tcap.Component

tcap.abort  abort
    No value
    tcap.Abort

tcap.abortCause  abortCause
    Signed 32-bit integer
    tcap.P_Abort_cause

tcap.abort_source  abort-source
    Signed 32-bit integer
    tcap.ABRT_source

tcap.ansiabort  ansiabort
    No value
    tcap.AbortPDU

tcap.ansiconversationWithPerm  ansiconversationWithPerm
    No value
    tcap.T_ansiconversationWithPerm

tcap.ansiconversationWithoutPerm  ansiconversationWithoutPerm
    No value
    tcap.T_ansiconversationWithoutPerm

tcap.ansiparams  ansiparams
    No value
    tcap.ANSIParameters

tcap.ansiparams1  ansiparams1
    No value
    tcap.ANSIParameters

tcap.ansiparams10  ansiparams10
    No value
    tcap.ANSIParameters

tcap.ansiparams11  ansiparams11
    No value
    tcap.ANSIParameters

tcap.ansiparams12  ansiparams12
    No value
    tcap.ANSIParameters

tcap.ansiparams13  ansiparams13
    No value
    tcap.ANSIParameters

tcap.ansiparams14  ansiparams14
    No value
    tcap.ANSIParameters

tcap.ansiparams15  ansiparams15
    No value
    tcap.ANSIParameters
```

```
tcap.ansiparams16  ansiparams16
    No value
    tcap.ANSIParameters
tcap.ansiparams17  ansiparams17
    No value
    tcap.ANSIParameters
tcap.ansiparams18  ansiparams18
    No value
    tcap.ANSIParameters
tcap.ansiparams19  ansiparams19
    No value
    tcap.ANSIParameters
tcap.ansiparams2   ansiparams2
    No value
    tcap.ANSIParameters
tcap.ansiparams20  ansiparams20
    No value
    tcap.ANSIParameters
tcap.ansiparams21  ansiparams21
    No value
    tcap.ANSIParameters
tcap.ansiparams3   ansiparams3
    No value
    tcap.ANSIParameters
tcap.ansiparams4   ansiparams4
    No value
    tcap.ANSIParameters
tcap.ansiparams5   ansiparams5
    No value
    tcap.ANSIParameters
tcap.ansiparams6   ansiparams6
    No value
    tcap.ANSIParameters
tcap.ansiparams7   ansiparams7
    No value
    tcap.ANSIParameters
tcap.ansiparams8   ansiparams8
    No value
    tcap.ANSIParameters
tcap.ansiparams9   ansiparams9
    No value
    tcap.ANSIParameters
tcap.ansiqueryWithPerm  ansiqueryWithPerm
    No value
    tcap.T_ansiqueryWithPerm
tcap.ansiqueryWithoutPerm  ansiqueryWithoutPerm
    No value
    tcap.T_ansiqueryWithoutPerm
```

```
tcap.ansiresponse  ansiresponse
    No value
    tcap.T_ansiresponse

tcap.ansiunidirectional  ansiunidirectional
    No value
    tcap.UniTransactionPDU

tcap.applicationContext  applicationContext
    Unsigned 32-bit integer
    tcap.T_applicationContext

tcap.application_context_name  application-context-name
    tcap.Applicationcontext

tcap.begin  begin
    No value
    tcap.Begin

tcap.causeInformation  causeInformation
    Unsigned 32-bit integer
    tcap.T_causeInformation

tcap.componentID  componentID
    Byte array
    tcap.ComponentID

tcap.componentIDs  componentIDs
    Byte array
    tcap.OCTET_STRING_SIZE_0_2

tcap.componentPortion  componentPortion
    Unsigned 32-bit integer
    tcap.ComponentSequence

tcap.components  components
    Unsigned 32-bit integer
    tcap.ComponentPortion

tcap.confidentiality  confidentiality
    No value
    tcap.Confidentiality

tcap.confidentialityId  confidentialityId
    Unsigned 32-bit integer
    tcap.T_confidentialityId

tcap.continue  continue
    No value
    tcap.Continue

tcap.data  Data
    Byte array

tcap.derivable  derivable
    Signed 32-bit integer
    tcap.InvokeIdType

tcap.dialog  dialog
    Byte array
    tcap.Dialog1
```

```
tcap.dialogueAbort dialogueAbort
    No value
    tcap.ABRT_apdu

tcap.dialoguePortion dialoguePortion
    Byte array
    tcap.DialoguePortion

tcap.dialoguePortionansi dialoguePortionansi
    No value
    tcap.DialoguePortionANSI

tcap.dialogueRequest dialogueRequest
    No value
    tcap.AARQ_apdu

tcap.dialogueResponse dialogueResponse
    No value
    tcap.AARE_apdu

tcap.dialogue_service_provider dialogue-service-provider
    Signed 32-bit integer
    tcap.T_dialogue_service_provider

tcap.dialogue_service_user dialogue-service-user
    Signed 32-bit integer
    tcap.T_dialogue_service_user

tcap.dtid dtid
    Byte array
    tcap.DestTransactionID

tcap.end end
    No value
    tcap.End

tcap.errorCode errorCode
    Unsigned 32-bit integer
    tcap.ErrorCode

tcap.externuserinfo externuserinfo
    Byte array
    tcap.ExternUserInfo

tcap.generalProblem generalProblem
    Signed 32-bit integer
    tcap.GeneralProblem

tcap.globalValue globalValue
    tcap.OBJECT_IDENTIFIER

tcap.identifier identifier
    Byte array
    tcap.TransactionID

tcap.integerApplicationId integerApplicationId
    Signed 32-bit integer
    tcap.IntegerApplicationContext

tcap.integerConfidentialityId integerConfidentialityId
    Signed 32-bit integer
    tcap.INTEGER
```

```
tcap.integerSecurityId  integerSecurityId
    Signed 32-bit integer
    tcap.INTEGER

tcap.invoke  invoke
    No value
    tcap.Invoke

tcap.invokeID  invokeID
    Signed 32-bit integer
    tcap.InvokeIdType

tcap.invokeIDRej  invokeIDRej
    Unsigned 32-bit integer
    tcap.T_invokeIDRej

tcap.invokeLastansi  invokeLastansi
    No value
    tcap.InvokePDU

tcap.invokeNotLastansi  invokeNotLastansi
    No value
    tcap.InvokePDU

tcap.invokeProblem  invokeProblem
    Signed 32-bit integer
    tcap.InvokeProblem

tcap.len  Length
    Unsigned 8-bit integer

tcap.linkedID  linkedID
    Signed 32-bit integer
    tcap.InvokeIdType

tcap.localValue  localValue
    Signed 32-bit integer
    tcap.INTEGER

tcap.msgtype  Tag
    Unsigned 8-bit integer

tcap.national  national
    Signed 32-bit integer
    tcap.INTEGER_M32768_32767

tcap.nationaler  nationaler
    Signed 32-bit integer
    tcap.INTEGER_M32768_32767

tcap.not_derivable  not-derivable
    No value
    tcap.NULL

tcap.objectApplicationId  objectApplicationId
    tcap.ObjectIDApplicationContext

tcap.objectConfidentialityId  objectConfidentialityId
    tcap.OBJECT_IDENTIFIER

tcap.objectSecurityId  objectSecurityId
    tcap.OBJECT_IDENTIFIER
```



```
tcap.oid oid
    tcap.OBJECT_IDENTIFIER
tcap.opCode opCode
    Unsigned 32-bit integer
    tcap.OPERATION
tcap.operationCode operationCode
    Unsigned 32-bit integer
    tcap.OperationCode
tcap.otid otid
    Byte array
    tcap.OrigTransactionID
tcap.p_abortCause p-abortCause
    Unsigned 32-bit integer
    tcap.P_AbortCause
tcap.parameter parameter
    No value
    tcap.Parameter
tcap.parameterinv parameterinv
    No value
    tcap.ANSIparamch
tcap.parameterre parameterre
    No value
    tcap.ANSIparamch
tcap.parameterrj parameterrj
    No value
    tcap.ANSIparamch
tcap.parameterrr parameterrr
    No value
    tcap.ANSIparamch
tcap.private private
    Signed 32-bit integer
    tcap.INTEGER
tcap.privateer privateer
    Signed 32-bit integer
    tcap.INTEGER
tcap.problem problem
    Unsigned 32-bit integer
    tcap.T_problem
tcap.protocol_version3 protocol-version3
    Byte array
    tcap.T_protocol_version3
tcap.protocol_versionre protocol-versionre
    Byte array
    tcap.T_protocol_versionre
tcap.protocol_versionrq protocol-versionrq
    Byte array
    tcap.T_protocol_versionrq
```

```
tcap.reason reason
    Unsigned 32-bit integer
    tcap.Reason

tcap.reasonre reasonre
    Signed 32-bit integer
    tcap.Release_response_reason

tcap.reasonrq reasonrq
    Signed 32-bit integer
    tcap.Release_request_reason

tcap.reject reject
    No value
    tcap.Reject

tcap.rejectProblem rejectProblem
    Signed 32-bit integer
    tcap.ProblemPDU

tcap.rejectansi rejectansi
    No value
    tcap.RejectPDU

tcap.result result
    Signed 32-bit integer
    tcap.Associate_result

tcap.result_source_diagnostic result-source-diagnostic
    Unsigned 32-bit integer
    tcap.Associate_source_diagnostic

tcap.resultretres resultretres
    No value
    tcap.T_resultretres

tcap.returnError returnError
    No value
    tcap.ReturnError

tcap.returnErrorProblem returnErrorProblem
    Signed 32-bit integer
    tcap.ReturnErrorProblem

tcap.returnErroransi returnErroransi
    No value
    tcap.ReturnErrorPDU

tcap.returnResultLast returnResultLast
    No value
    tcap.ReturnResult

tcap.returnResultLastansi returnResultLastansi
    No value
    tcap.ReturnResultPDU

tcap.returnResultNotLast returnResultNotLast
    No value
    tcap.ReturnResult

tcap.returnResultNotLastansi returnResultNotLastansi
    No value
    tcap.ReturnResultPDU
```

```
tcap.returnResultProblem  returnResultProblem
    Signed 32-bit integer
    tcap.ReturnResultProblem

tcap.securityContext  securityContext
    Unsigned 32-bit integer
    tcap.T_securityContext

tcap.srt.begin  Begin Session
    Frame number
    SRT Begin of Session

tcap.srt.duplicate  Session Duplicate
    Frame number
    SRT Duplicated with Session

tcap.srt.end  End Session
    Frame number
    SRT End of Session

tcap.srt.session_id  Session Id
    Unsigned 32-bit integer

tcap.srt.sessiontime  Session duration
    Time duration
    Duration of the TCAP session

tcap.tid  Transaction Id
    Byte array

tcap.u_abortCause  u-abortCause
    Byte array
    tcap.DialoguePortion

tcap.unidialoguePDU  unidialoguePDU
    No value
    tcap.AUDDT_apdu

tcap.unidirectional  unidirectional
    No value
    tcap.Unidirectional

tcap.userInfo  userInformation
    No value
    tcap.UserInformation

tcap.user_information  user-information
    Byte array
    tcap.User_information

tcap.useroid  useroid
    tcap.UserInfoOID

tcap.version  version
    Byte array
    tcap.ProtocolVersion

tcap.version1  version1
    Boolean
```

**Transmission Control Protocol (tcp)**

tcp.ack Acknowledgement number  
Unsigned 32-bit integer

tcp.analysis.ack\_lost\_segment ACKed Lost Packet  
No value  
This frame ACKs a lost segment

tcp.analysis.ack\_rtt The RTT to ACK the segment was  
Time duration  
How long time it took to ACK the segment (RTT)

tcp.analysis.acks\_frame This is an ACK to the segment in frame  
Frame number  
Which previous segment is this an ACK for

tcp.analysis.duplicate\_ack Duplicate ACK  
No value  
This is a duplicate ACK

tcp.analysis.duplicate\_ack\_frame Duplicate to the ACK in frame  
Frame number  
This is a duplicate to the ACK in frame #

tcp.analysis.duplicate\_ack\_num Duplicate ACK #  
Unsigned 32-bit integer  
This is duplicate ACK number #

tcp.analysis.fast\_retransmission Fast Retransmission  
No value  
This frame is a suspected TCP fast retransmission

tcp.analysis.flags TCP Analysis Flags  
No value  
This frame has some of the TCP analysis flags set

tcp.analysis.keep\_alive Keep Alive  
No value  
This is a keep-alive segment

tcp.analysis.keep\_alive\_ack Keep Alive ACK  
No value  
This is an ACK to a keep-alive segment

tcp.analysis.lost\_segment Previous Segment Lost  
No value  
A segment before this one was lost from the capture

tcp.analysis.out\_of\_order Out Of Order  
No value  
This frame is a suspected Out-Of-Order segment

tcp.analysis.retransmission Retransmission  
No value  
This frame is a suspected TCP retransmission

tcp.analysis.reused\_ports TCP Port numbers reused  
No value  
A new tcp session has started with previously used port numbers

tcp.analysis.rto The RTO for this segment was  
Time duration  
How long transmission was delayed before this segment was retransmitted (RTO)

tcp.analysis.rto\_frame RTO based on delta from frame  
Frame number  
This is the frame we measure the RTO from

tcp.analysis.window\_full Window full  
No value  
This segment has caused the allowed window to become 100% full

tcp.analysis.window\_update Window update  
No value  
This frame is a tcp window update

tcp.analysis.zero\_window Zero Window  
No value  
This is a zero-window

tcp.analysis.zero\_window\_probe Zero Window Probe  
No value  
This is a zero-window-probe

tcp.analysis.zero\_window\_probe\_ack Zero Window Probe Ack  
No value  
This is an ACK to a zero-window-probe

tcp.checksum Checksum  
Unsigned 16-bit integer  
Details at: [http://www.wireshark.org/docs/wsug\\_html\\_chunked/ChAdvChecksums.h](http://www.wireshark.org/docs/wsug_html_chunked/ChAdvChecksums.h)

tcp.checksum\_bad Bad Checksum  
Boolean  
True: checksum doesn't match packet content; False: matches content or not c

tcp.checksum\_good Good Checksum  
Boolean  
True: checksum matches packet content; False: doesn't match content or not c

tcp.continuation\_to This is a continuation to the PDU in frame  
Frame number  
This is a continuation to the PDU in frame #

tcp.dstport Destination Port  
Unsigned 16-bit integer

tcp.flags Flags  
Unsigned 8-bit integer

tcp.flags.ack Acknowledgment  
Boolean

tcp.flags.cwr Congestion Window Reduced (CWR)  
Boolean

tcp.flags.ecn ECN-Echo  
Boolean

tcp.flags.fin Fin  
Boolean

tcp.flags.push Push  
Boolean

```
tcp.flags.reset  Reset
                  Boolean

tcp.flags.syn    Syn
                  Boolean

tcp.flags.urg    Urgent
                  Boolean

tcp.hdr_len      Header Length
                  Unsigned 8-bit integer

tcp.len          TCP Segment Len
                  Unsigned 32-bit integer

tcp.nxtseq       Next sequence number
                  Unsigned 32-bit integer

tcp.options      TCP Options
                  Byte array
                  TCP Options

tcp.options.cc   TCP CC Option
                  Boolean
                  TCP CC Option

tcp.options.ccecho  TCP CC Echo Option
                  Boolean
                  TCP CC Echo Option

tcp.options.ccnew  TCP CC New Option
                  Boolean
                  TCP CC New Option

tcp.options.echo  TCP Echo Option
                  Boolean
                  TCP Sack Echo

tcp.options.echo_reply  TCP Echo Reply Option
                  Boolean
                  TCP Echo Reply Option

tcp.options.md5   TCP MD5 Option
                  Boolean
                  TCP MD5 Option

tcp.options.mss   TCP MSS Option
                  Boolean
                  TCP MSS Option

tcp.options.mss_val  TCP MSS Option Value
                  Unsigned 16-bit integer
                  TCP MSS Option Value

tcp.options.qs    TCP QS Option
                  Boolean
                  TCP QS Option

tcp.options.sack  TCP Sack Option
                  Boolean
                  TCP Sack Option
```

```
tcp.options.sack_le  TCP Sack Left Edge
    Unsigned 32-bit integer
    TCP Sack Left Edge

tcp.options.sack_perm  TCP Sack Perm Option
    Boolean
    TCP Sack Perm Option

tcp.options.sack_re  TCP Sack Right Edge
    Unsigned 32-bit integer
    TCP Sack Right Edge

tcp.options.time_stamp  TCP Time Stamp Option
    Boolean
    TCP Time Stamp Option

tcp.options.wscale  TCP Window Scale Option
    Boolean
    TCP Window Option

tcp.options.wscale_val  TCP Windows Scale Option Value
    Unsigned 8-bit integer
    TCP Window Scale Value

tcp.pdu.last_frame  Last frame of this PDU
    Frame number
    This is the last frame of the PDU starting in this segment

tcp.pdu.size  PDU Size
    Unsigned 32-bit integer
    The size of this PDU

tcp.pdu.time  Time until the last segment of this PDU
    Time duration
    How long time has passed until the last frame of this PDU

tcp.port  Source or Destination Port
    Unsigned 16-bit integer

tcp.reassembled_in  Reassembled PDU in frame
    Frame number
    The PDU that doesn't end in this segment is reassembled in this frame

tcp.segment  TCP Segment
    Frame number
    TCP Segment

tcp.segment.error  Reassembling error
    Frame number
    Reassembling error due to illegal segments

tcp.segment.multipletails  Multiple tail segments found
    Boolean
    Several tails were found when reassembling the pdu

tcp.segment.overlap  Segment overlap
    Boolean
    Segment overlaps with other segments

tcp.segment.overlap.conflict  Conflicting data in segment overlap
    Boolean
    Overlapping segments contained conflicting data
```

```
tcp.segment_toolongfragment  Segment too long
    Boolean
    Segment contained data past end of the pdu
tcp.segments  Reassembled TCP Segments
    No value
    TCP Segments
tcp.seq  Sequence number
    Unsigned 32-bit integer
tcp.srcport  Source Port
    Unsigned 16-bit integer
tcp.time_delta  Time since previous frame in this TCP stream
    Time duration
    Time delta from previous frame in this TCP stream
tcp.time_relative  Time since first frame in this TCP stream
    Time duration
    Time relative to first frame in this TCP stream
tcp.urgent_pointer  Urgent pointer
    Unsigned 16-bit integer
tcp.window_size  Window size
    Unsigned 32-bit integer
```

#### **Transparent Inter Process Communication(TIPC) (tipc)**

```
tipc.ack_link_lev_seq  Acknowledged link level sequence number
    Unsigned 32-bit integer
    TIPC Acknowledged link level sequence number
tipc.act_id  Activity identity
    Unsigned 32-bit integer
    TIPC Activity identity
tipc.bearer_id  Bearer identity
    Unsigned 32-bit integer
    TIPC Bearer identity
tipc.bearer_name  Bearer name
    String
    TIPC Bearer name
tipc.cng_prot_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type
tipc.data_type  Message type
    Unsigned 32-bit integer
    TIPC Message type
tipc.destdrop  Destination Droppable
    Unsigned 32-bit integer
    Destination Droppable Bit
tipc.dist_key  Key (Use for verification at withdrawal)
    Unsigned 32-bit integer
    TIPC key
```



```
tipc.dist_port  Random number part of port identity
                Unsigned 32-bit integer
                TIPC Random number part of port identity

tipc.dst_port   Destination port
                Unsigned 32-bit integer
                TIPC Destination port

tipc.dst_proc   Destination processor
                String
                TIPC Destination processor

tipc.err_code   Error code
                Unsigned 32-bit integer
                TIPC Error code

tipc.hdr_size   Header size
                Unsigned 32-bit integer
                TIPC Header size

tipc.hdr_unused Unused
                Unsigned 32-bit integer
                TIPC Unused

tipc.importance Importance
                Unsigned 32-bit integer
                TIPC Importance

tipc.imsig_cnt  Message count
                Unsigned 32-bit integer
                TIPC Message count

tipc.link_lev_seq Link level sequence number
                Unsigned 32-bit integer
                TIPC Link level sequence number

tipc.link_selector Link selector
                Unsigned 32-bit integer
                TIPC Link selector

tipc.lp_msg_type Message type
                Unsigned 32-bit integer
                TIPC Message type

tipc.msg.fragment Message fragment
                Frame number

tipc.msg.fragment.error Message defragmentation error
                Frame number

tipc.msg.fragment.multiple_tails Message has multiple tail fragments
                Boolean

tipc.msg.fragment.overlap Message fragment overlap
                Boolean

tipc.msg.fragment.overlap.conflicts Message fragment overlapping with conflicts
                Boolean

tipc.msg.fragment.too_long_fragment Message fragment too long
                Boolean

tipc.msg.fragments Message fragments
                No value
```

```
tipc.msg_reassembled.in  Reassembled in
    Frame number
tipc.msg_size  Message size
    Unsigned 32-bit integer
    TIPC Message size
tipc.msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type
tipc.name_dist_lower  Lower bound of published sequence
    Unsigned 32-bit integer
    TIPC Lower bound of published sequence
tipc.name_dist_type  Published port name type
    Unsigned 32-bit integer
    TIPC Published port name type
tipc.name_dist_upper  Upper bound of published sequence
    Unsigned 32-bit integer
    TIPC Upper bound of published sequence
tipc.nd_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type
tipc.non_sequenced  Non-sequenced
    Unsigned 32-bit integer
    Non-sequenced Bit
tipc.nxt_snt_pkg  Next sent packet
    Unsigned 32-bit integer
    TIPC Next sent packet
tipc.org_port  Originating port
    Unsigned 32-bit integer
    TIPC Originating port
tipc.org_proc  Originating processor
    String
    TIPC Originating processor
tipc.prev_proc  Previous processor
    String
    TIPC Previous processor
tipc.probe  Probe
    Unsigned 32-bit integer
    TIPC Probe
tipc.remote_addr  Remote address
    Unsigned 32-bit integer
    TIPC Remote address
tipc.rm_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type
tipc.route_cnt  Reroute counter
    Unsigned 32-bit integer
    TIPC Reroute counter
```

```
tipc.seq_gap  Sequence gap
              Unsigned 32-bit integer
              TIPC Sequence gap

tipc.sm_msg_type  Message type
                 Unsigned 32-bit integer
                 TIPC Message type

tipc.srddrop  Source Droppable
             Unsigned 32-bit integer
             Destination Droppable Bit

tipc.unknown_msg_type  Message type
                       Unsigned 32-bit integer
                       TIPC Message type

tipc.unused2  Unused
             Unsigned 32-bit integer
             TIPC Unused

tipc.unused3  Unused
             Unsigned 32-bit integer
             TIPC Unused

tipc.usr  User
         Unsigned 32-bit integer
         TIPC User

tipc.ver  Version
         Unsigned 32-bit integer
         TIPC protocol version

tipcv2.bcast_msg_type  Message type
                      Unsigned 32-bit integer
                      TIPC Message type

tipcv2.bcast_seq_gap  Broadcast Sequence Gap
                     Unsigned 32-bit integer
                     Broadcast Sequence Gap

tipcv2.bcast_seq_no  Broadcast Sequence Number
                    Unsigned 32-bit integer
                    Broadcast Sequence Number

tipcv2.bcast_tag  Broadcast Tag
                 Unsigned 32-bit integer
                 Broadcast Tag

tipcv2.bearer_id  Bearer identity
                 Unsigned 32-bit integer
                 Bearer identity

tipcv2.bearer_instance  Bearer Instance
                       String
                       Bearer instance used by the sender node for this link

tipcv2.bearer_level_orig_addr  Bearer Level Originating Address
                              Byte array
                              Bearer Level Originating Address

tipcv2.bitmap  Bitmap
              Byte array
              Bitmap, indicating to which nodes within that cluster the sending node has d
```

```
tipcv2.broadcast_ack_no  Broadcast Acknowledge Number
    Unsigned 32-bit integer
    Broadcast Acknowledge Number

tipcv2.bundler_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.changeover_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.cluster_address  Cluster Address
    String
    The remote cluster concerned by the table

tipcv2.conn_mgr_msg_ack  Number of Messages Acknowledged
    Unsigned 32-bit integer
    Number of Messages Acknowledged

tipcv2.connmgr_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.data_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.dest_node  Destination Node
    String
    TIPC Destination Node

tipcv2.destination_domain  Destination Domain
    String
    The domain to which the link request is directed

tipcv2.dist_dist  Route Distributor Dist
    Unsigned 32-bit integer
    Route Distributor Dist

tipcv2.dist_scope  Route Distributor Scope
    Unsigned 32-bit integer
    Route Distributor Scope

tipcv2.errorcode  Error code
    Unsigned 32-bit integer
    Error code

tipcv2.fragment_msg_number  Fragment Message Number
    Unsigned 32-bit integer
    Fragment Message Number

tipcv2.fragment_number  Fragment Number
    Unsigned 32-bit integer
    Fragment Number

tipcv2.fragmenter_msg_type  Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.item_size  Item Size
    Unsigned 32-bit integer
    Item Size
```

```
tipcv2.link_level_ack_no  Link Level Acknowledge Number
    Unsigned 32-bit integer
    Link Level Acknowledge Number

tipcv2.link_level_seq_no  Link Level Sequence Number
    Unsigned 32-bit integer
    Link Level Sequence Number

tipcv2.link_msg_type      Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.link_prio         Link Priority
    Unsigned 32-bit integer
    Link Priority

tipcv2.link_tolerance    Link Tolerance (ms)
    Unsigned 32-bit integer
    Link Tolerance in ms

tipcv2.local_router      Local Router
    String
    Local Router

tipcv2.lookup_scope      Lookup Scope
    Unsigned 32-bit integer
    Lookup Scope

tipcv2.max_packet        Max Packet
    Unsigned 32-bit integer
    Max Packet

tipcv2.media_id          Media Id
    Unsigned 32-bit integer
    Media Id

tipcv2.msg_count         Message Count
    Unsigned 32-bit integer
    Message Count

tipcv2.multicast_lower   Multicast lower bound
    Unsigned 32-bit integer
    Multicast port name instance lower bound

tipcv2.multicast_upper   Multicast upper bound
    Unsigned 32-bit integer
    Multicast port name instance upper bound

tipcv2.naming_msg_type   Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.network_id        Network Identity
    Unsigned 32-bit integer
    The sender node's network identity

tipcv2.network_plane     Network Plane
    Unsigned 32-bit integer
    Network Plane

tipcv2.network_region    Network Region
    String
    Network Region
```

```
tipcv2.next_sent_broadcast  Next Sent Broadcast
    Unsigned 32-bit integer
    Next Sent Broadcast

tipcv2.next_sent_packet    Next Sent Packet
    Unsigned 32-bit integer
    Next Sent Packet

tipcv2.node_address       Node Address
    String
    Which node the route addition/loss concern

tipcv2.opt_p              Options Position
    Unsigned 32-bit integer
    Options Position

tipcv2.orig_node          Originating Node
    String
    TIPC Originating Node

tipcv2.port_id_node       Port Id Node
    String
    Port Id Node

tipcv2.port_name_instance Port name instance
    Unsigned 32-bit integer
    Port name instance

tipcv2.port_name_type     Port name type
    Unsigned 32-bit integer
    Port name type

tipcv2.prev_node          Previous Node
    String
    TIPC Previous Node

tipcv2.probe              Probe
    Unsigned 32-bit integer
    probe

tipcv2.redundant_link     Redundant Link
    Unsigned 32-bit integer
    Redundant Link

tipcv2.remote_router      Remote Router
    String
    Remote Router

tipcv2.req_links          Requested Links
    Unsigned 32-bit integer
    Requested Links

tipcv2.rer_cnt            Reroute Counter
    Unsigned 32-bit integer
    Reroute Counter

tipcv2.route_msg_type     Message type
    Unsigned 32-bit integer
    TIPC Message type

tipcv2.seq_gap            Sequence Gap
    Unsigned 32-bit integer
    Sequence Gap
```

```
tipcv2.session_no  Session Number
                  Unsigned 32-bit integer
                  Session Number

tipcv2.timestamp  Timestamp
                  Unsigned 32-bit integer
                  OS-dependent Timestamp

tipcv2.tseq_no    Transport Sequence No
                  Unsigned 32-bit integer
                  Transport Level Sequence Number
```

### **Transparent Network Substrate Protocol (tns)**

```
tns.abort         Abort
                  Boolean
                  Abort

tns.abort_data    Abort Data
                  String
                  Abort Data

tns.abort_reason_system  Abort Reason (User)
                  Unsigned 8-bit integer
                  Abort Reason from System

tns.abort_reason_user    Abort Reason (User)
                  Unsigned 8-bit integer
                  Abort Reason from Application

tns.accept        Accept
                  Boolean
                  Accept

tns.accept_data   Accept Data
                  String
                  Accept Data

tns.accept_data_length  Accept Data Length
                  Unsigned 16-bit integer
                  Length of Accept Data

tns.accept_data_offset  Offset to Accept Data
                  Unsigned 16-bit integer
                  Offset to Accept Data

tns.compat_version  Version (Compatible)
                  Unsigned 16-bit integer
                  Version (Compatible)

tns.connect        Connect
                  Boolean
                  Connect

tns.connect_data   Connect Data
                  String
                  Connect Data

tns.connect_data_length  Length of Connect Data
                  Unsigned 16-bit integer
                  Length of Connect Data
```

```
tns.connect_data_max  Maximum Receivable Connect Data
    Unsigned 32-bit integer
    Maximum Receivable Connect Data

tns.connect_data_offset  Offset to Connect Data
    Unsigned 16-bit integer
    Offset to Connect Data

tns.connect_flags.enablena  NA services enabled
    Boolean
    NA services enabled

tns.connect_flags.ichg  Interchange is involved
    Boolean
    Interchange is involved

tns.connect_flags.nalink  NA services linked in
    Boolean
    NA services linked in

tns.connect_flags.nareq  NA services required
    Boolean
    NA services required

tns.connect_flags.wantna  NA services wanted
    Boolean
    NA services wanted

tns.connect_flags0  Connect Flags 0
    Unsigned 8-bit integer
    Connect Flags 0

tns.connect_flags1  Connect Flags 1
    Unsigned 8-bit integer
    Connect Flags 1

tns.control  Control
    Boolean
    Control

tns.control.cmd  Control Command
    Unsigned 16-bit integer
    Control Command

tns.control.data  Control Data
    Byte array
    Control Data

tns.data  Data
    Boolean
    Data

tns.data_flag  Data Flag
    Unsigned 16-bit integer
    Data Flag

tns.data_flag.c  Confirmation
    Boolean
    Confirmation

tns.data_flag.dic  Do Immediate Confirmation
    Boolean
    Do Immediate Confirmation
```



```
tns.data_flag.eof    End of File
    Boolean
    End of File

tns.data_flag.more  More Data to Come
    Boolean
    More Data to Come

tns.data_flag.rc    Request Confirmation
    Boolean
    Request Confirmation

tns.data_flag.reserved  Reserved
    Boolean
    Reserved

tns.data_flag.rts   Request To Send
    Boolean
    Request To Send

tns.data_flag.send  Send Token
    Boolean
    Send Token

tns.data_flag.sntt  Send NT Trailer
    Boolean
    Send NT Trailer

tns.header_checksum  Header Checksum
    Unsigned 16-bit integer
    Checksum of Header Data

tns.length           Packet Length
    Unsigned 16-bit integer
    Length of TNS packet

tns.line_turnaround  Line Turnaround Value
    Unsigned 16-bit integer
    Line Turnaround Value

tns.marker           Marker
    Boolean
    Marker

tns.marker.data      Marker Data
    Unsigned 16-bit integer
    Marker Data

tns.marker.databyte  Marker Data Byte
    Unsigned 8-bit integer
    Marker Data Byte

tns.marker.type      Marker Type
    Unsigned 8-bit integer
    Marker Type

tns.max_tdu_size     Maximum Transmission Data Unit Size
    Unsigned 16-bit integer
    Maximum Transmission Data Unit Size

tns.nt_proto_characteristics  NT Protocol Characteristics
    Unsigned 16-bit integer
    NT Protocol Characteristics
```

```
tns.ntp_flag.asio  ASync IO Supported
  Boolean
  ASync IO Supported

tns.ntp_flag.cbio  Callback IO supported
  Boolean
  Callback IO supported

tns.ntp_flag.crel  Confirmed release
  Boolean
  Confirmed release

tns.ntp_flag.dfio  Full duplex IO supported
  Boolean
  Full duplex IO supported

tns.ntp_flag.dtest Data test
  Boolean
  Data Test

tns.ntp_flag.grant Can grant connection to another
  Boolean
  Can grant connection to another

tns.ntp_flag.handoff Can handoff connection to another
  Boolean
  Can handoff connection to another

tns.ntp_flag.hangon Hangon to listener connect
  Boolean
  Hangon to listener connect

tns.ntp_flag.pio   Packet oriented IO
  Boolean
  Packet oriented IO

tns.ntp_flag.sigio Generate SIGIO signal
  Boolean
  Generate SIGIO signal

tns.ntp_flag.sigpipe Generate SIGPIPE signal
  Boolean
  Generate SIGPIPE signal

tns.ntp_flag.sigurg Generate SIGURG signal
  Boolean
  Generate SIGURG signal

tns.ntp_flag.srun  Spawner running
  Boolean
  Spawner running

tns.ntp_flag.tduio TDU based IO
  Boolean
  TDU based IO

tns.ntp_flag.testop Test operation
  Boolean
  Test operation

tns.ntp_flag.urgentio Urgent IO supported
  Boolean
  Urgent IO supported
```

```
tns.packet_checksum  Packet Checksum
    Unsigned 16-bit integer
    Checksum of Packet Data

tns.redirect  Redirect
    Boolean
    Redirect

tns.redirect_data  Redirect Data
    String
    Redirect Data

tns.redirect_data_length  Redirect Data Length
    Unsigned 16-bit integer
    Length of Redirect Data

tns.refuse  Refuse
    Boolean
    Refuse

tns.refuse_data  Refuse Data
    String
    Refuse Data

tns.refuse_data_length  Refuse Data Length
    Unsigned 16-bit integer
    Length of Refuse Data

tns.refuse_reason_system  Refuse Reason (System)
    Unsigned 8-bit integer
    Refuse Reason from System

tns.refuse_reason_user  Refuse Reason (User)
    Unsigned 8-bit integer
    Refuse Reason from Application

tns.request  Request
    Boolean
    TRUE if TNS request

tns.reserved_byte  Reserved Byte
    Byte array
    Reserved Byte

tns.response  Response
    Boolean
    TRUE if TNS response

tns.sdu_size  Session Data Unit Size
    Unsigned 16-bit integer
    Session Data Unit Size

tns.service_options  Service Options
    Unsigned 16-bit integer
    Service Options

tns.so_flag.ap  Attention Processing
    Boolean
    Attention Processing

tns.so_flag.bconn  Broken Connect Notify
    Boolean
    Broken Connect Notify
```

```
tns.so_flag.dc1 Don't Care
  Boolean
  Don't Care

tns.so_flag.dc2 Don't Care
  Boolean
  Don't Care

tns.so_flag.dio Direct IO to Transport
  Boolean
  Direct IO to Transport

tns.so_flag.fd Full Duplex
  Boolean
  Full Duplex

tns.so_flag.hc Header Checksum
  Boolean
  Header Checksum

tns.so_flag.hd Half Duplex
  Boolean
  Half Duplex

tns.so_flag.pc Packet Checksum
  Boolean
  Packet Checksum

tns.so_flag.ra Can Receive Attention
  Boolean
  Can Receive Attention

tns.so_flag.sa Can Send Attention
  Boolean
  Can Send Attention

tns.trace_cf1 Trace Cross Facility Item 1
  Unsigned 32-bit integer
  Trace Cross Facility Item 1

tns.trace_cf2 Trace Cross Facility Item 2
  Unsigned 32-bit integer
  Trace Cross Facility Item 2

tns.trace_cid Trace Unique Connection ID
  Unsigned 64-bit integer
  Trace Unique Connection ID

tns.type Packet Type
  Unsigned 8-bit integer
  Type of TNS packet

tns.value_of_one Value of 1 in Hardware
  Byte array
  Value of 1 in Hardware

tns.version Version
  Unsigned 16-bit integer
  Version
```

**Transport Adapter Layer Interface v1.0, RFC 3094 (tali)**

```

tali.msu_length Length
    Unsigned 16-bit integer
    TALI MSU Length

tali.opcode Opcode
    String
    TALI Operation Code

tali.sync Sync
    String
    TALI SYNC

```

**Transport-Neutral Encapsulation Format (tnef)**

```

tnef.PropValue.MVbin Mvbin
    No value

tnef.PropValue.MVft Mvft
    No value

tnef.PropValue.MVguid Mvguid
    No value

tnef.PropValue.MVi Mvi
    No value

tnef.PropValue.MVl Mvl
    No value

tnef.PropValue.MVsza Mvsza
    No value

tnef.PropValue.MVszw Mvszw
    No value

tnef.PropValue.b B
    Unsigned 16-bit integer

tnef.PropValue.bin Bin
    No value

tnef.PropValue.err Err
    Unsigned 32-bit integer

tnef.PropValue.ft Ft
    No value

tnef.PropValue.i I
    Unsigned 16-bit integer

tnef.PropValue.l L
    Unsigned 32-bit integer

tnef.PropValue.lpszA Lpsza
    String

tnef.PropValue.null Null
    Unsigned 32-bit integer

tnef.PropValue.object Object
    Unsigned 32-bit integer

tnef.attribute Attribute
    No value

```

```
tnef.attribute.checksum  Checksum
    Unsigned 16-bit integer
tnef.attribute.date.day  Day
    Unsigned 16-bit integer
tnef.attribute.date.day_of_week  Day Of Week
    Unsigned 16-bit integer
tnef.attribute.date.hour  Hour
    Unsigned 16-bit integer
tnef.attribute.date.minute  Minute
    Unsigned 16-bit integer
tnef.attribute.date.month  Month
    Unsigned 16-bit integer
tnef.attribute.date.second  Second
    Unsigned 16-bit integer
tnef.attribute.date.year  Year
    Unsigned 16-bit integer
tnef.attribute.display_name  Display Name
    String
tnef.attribute.email_address  Email Address
    String
tnef.attribute.length  Length
    Unsigned 32-bit integer
tnef.attribute.lvl  Type
    Unsigned 8-bit integer
tnef.attribute.string  String
    String
tnef.attribute.tag  Tag
    Unsigned 32-bit integer
tnef.attribute.tag.id  Tag
    Unsigned 16-bit integer
tnef.attribute.tag.kind  Kind
    Unsigned 32-bit integer
tnef.attribute.tag.name.id  Name
    Unsigned 32-bit integer
tnef.attribute.tag.name.length  Length
    Unsigned 32-bit integer
tnef.attribute.tag.name.string  Name
    String
tnef.attribute.tag.set  Set
tnef.attribute.tag.type  Type
    Unsigned 16-bit integer
tnef.attribute.value  Value
    No value
tnef.key  Key
    Unsigned 16-bit integer
```

```
tnef.mapi_props  MAPI Properties
    No value
tnef.mapi_props.count  Count
    Unsigned 16-bit integer
tnef.message_class  Message Class
    String
tnef.message_class.original  Original Message Class
    String
tnef.oem_codepage  OEM Codepage
    Unsigned 64-bit integer
tnef.padding  Padding
    No value
tnef.priority  Priority
    Unsigned 16-bit integer
tnef.property  Property
    No value
tnef.property.padding  Padding
    No value
tnef.property.tag  Tag
    Unsigned 32-bit integer
tnef.property.tag.id  Tag
    Unsigned 16-bit integer
tnef.property.tag.type  Type
    Unsigned 16-bit integer
tnef.signature  Signature
    Unsigned 32-bit integer
tnef.value.length  Length
    Unsigned 16-bit integer
tnef.values.count  Count
    Unsigned 16-bit integer
tnef.version  Version
    Unsigned 32-bit integer
```

#### **Trapeze Access Point Access Protocol (tapa)**

```
tapa.discover.flags  Flags
    Unsigned 8-bit integer
tapa.discover.length  Length
    Unsigned 16-bit integer
tapa.discover.newtlv.length  New tlv length
    Unsigned 16-bit integer
tapa.discover.newtlv.pad  New tlv padding
    Unsigned 8-bit integer
tapa.discover.newtlv.type  New tlv type
    Unsigned 8-bit integer
```

```
tapa.discover.newtlv.valuehex  New tlv value
    Byte array
tapa.discover.newtlv.valuetext  New tlv value
    String
tapa.discover.reply.bias  Reply bias
    Unsigned 8-bit integer
tapa.discover.reply.pad  Reply pad
    Byte array
tapa.discover.reply.switchip  Switch Ip
    IPv4 address
tapa.discover.reply.unused  Reply unused
    Unsigned 8-bit integer
tapa.discover.req.length  Req length
    Unsigned 16-bit integer
tapa.discover.req.pad  Req padding
    Unsigned 8-bit integer
tapa.discover.req.type  Req type
    Unsigned 8-bit integer
tapa.discover.req.value  Req value
    Byte array
tapa.discover.type  Type
    Unsigned 8-bit integer
tapa.discover.unknown  Tapa unknown packet
    Byte array
tapa.tunnel.0804  Tapa tunnel 0804
    Unsigned 16-bit integer
tapa.tunnel.dmac  Tapa tunnel dest mac
    6-byte Hardware (MAC) Address
tapa.tunnel.five  Tapa tunnel five
    Unsigned 8-bit integer
tapa.tunnel.length  Tapa tunnel length
    Unsigned 16-bit integer
tapa.tunnel.remaining  Tapa tunnel all data
    Byte array
tapa.tunnel.seqno  Tapa tunnel seqno
    Unsigned 16-bit integer
tapa.tunnel.smac  Tapa tunnel src mac
    6-byte Hardware (MAC) Address
tapa.tunnel.tags  Tapa tunnel tags, seqno, pad
    Byte array
tapa.tunnel.type  Tapa tunnel type
    Unsigned 8-bit integer
tapa.tunnel.version  Tapa tunnel version
    Unsigned 8-bit integer
```



tapa.tunnel.zero Tapa tunnel zeroes  
Byte array

### Trivial File Transfer Protocol (tftp)

tftp.block Block  
Unsigned 16-bit integer  
Block number

tftp.destination\_file DESTINATION File  
String  
TFTP source file name

tftp.error.code Error code  
Unsigned 16-bit integer  
Error code in case of TFTP error message

tftp.error.message Error message  
String  
Error string in case of TFTP error message

tftp.opcode Opcode  
Unsigned 16-bit integer  
TFTP message type

tftp.option.name Option name  
String

tftp.option.value Option value  
String

tftp.source\_file Source File  
String  
TFTP source file name

tftp.type Type  
String  
TFTP transfer type

### TwinCAT IO-RAW (ioraw)

ioraw.data VarData  
No value

ioraw.header Header  
No value

ioraw.summary Summary of the IoRaw Packet  
String

### TwinCAT NV (tc\_nv)

tc\_nv.count Count  
Unsigned 16-bit integer

tc\_nv.cycleindex CycleIndex  
Unsigned 16-bit integer

tc\_nv.data Data  
Byte array

tc\_nv.hash Hash  
Unsigned 16-bit integer

```
tc_nv.header  Header
              No value
tc_nv.id     Id
              Unsigned 16-bit integer
tc_nv.length Length
              Unsigned 16-bit integer
tc_nv.publisher Publisher
              Byte array
tc_nv.quality Quality
              Unsigned 16-bit integer
tc_nv.summary Summary of the Nv Packet
              Byte array
tc_nv.varheader VarHeader
              No value
tc_nv.variable Variable
              Byte array
```

#### **UDP Encapsulation of IPsec Packets (udpencap)**

##### **UNISTIM Protocol (unistim)**

```
uftp.blocksize UFTP Datablock Size
               Unsigned 32-bit integer
uftp.cmd       UFTP CMD
               Unsigned 8-bit integer
uftp.datablock UFTP Data Block
               Byte array
uftp.filename  UFTP Filename
               String
uftp.limit     UFTP Datablock Limit
               Unsigned 8-bit integer
unistim.acd.super.control ACD Supervisor Control
                  Boolean
unistim.add    UNISTIM CMD Address
               Unsigned 8-bit integer
unistim.alert.cad.sel  Alerting Cadence Select
                  Unsigned 8-bit integer
unistim.alert.warb.select Alerting Warbler Select
                  Unsigned 8-bit integer
unistim.apb.operation.data APB Operation Data
                  Byte array
unistim.apb.param.len  APB Operation Parameter Length
                  Unsigned 8-bit integer
unistim.apb.volume.rpt APB Volume Report
                  Unsigned 8-bit integer
```

```
unistim.arrow.direction  Arrow Display Direction
                          Unsigned 8-bit integer
unistim.audio.aa.vol.rpt  Audio Manager Auto Adjust Volume RPT
                          Boolean
unistim.audio.adj.volume  Query Audio Manager Adjustable Receive Volume
                          Boolean
unistim.audio.alerting    Query Audio Manager Alerting
                          Boolean
unistim.audio.apb.number  APB Number
                          Unsigned 8-bit integer
unistim.audio.apb.op.code APB Operation Code
                          Unsigned 8-bit integer
unistim.audio.attenuated.on Audio Manager Transducer Tone Attenuated
                          Boolean
unistim.audio.attr        Query Audio Manager Attributes
                          Boolean
unistim.audio.bytes.per.frame Bytes Per Frame
                          Unsigned 16-bit integer
unistim.audio.def.volume  Query Audio Manager Default Receive Volume
                          Boolean
unistim.audio.desired.jitter Desired Jitter
                          Unsigned 8-bit integer
unistim.audio.direction.codes Stream Direction Code
                          Unsigned 8-bit integer
unistim.audio.frf.11     FRF.11 Enable
                          Boolean
unistim.audio.handset    Query Audio Manager Handset
                          Boolean
unistim.audio.hd.on.air  HD On Air
                          Boolean
unistim.audio.headset    Query Audio Manager Headset
                          Boolean
unistim.audio.hs.on.air  HS On Air
                          Boolean
unistim.audio.max.tone   Audio Manager Enable Max Tone Volume
                          Boolean
unistim.audio.mute       Audio Manager Mute
                          Boolean
unistim.audio.nat.ip     NAT IP Address
                          IPv4 address
unistim.audio.nat.port   NAT Port
                          Unsigned 16-bit integer
unistim.audio.options    Query Audio Manager Options
                          Boolean
```

```
unistim.audio.opts.adj.vol  Audio Manager Adjust Volume
    Boolean
unistim.audio.phone  Audio Cmd (phone)
    Unsigned 8-bit integer
unistim.audio.precedence  Precedence
    Unsigned 8-bit integer
unistim.audio.rtcp.bucket.id  RTCP Bucket ID
    Unsigned 8-bit integer
unistim.audio.rtp.type  RTP Type
    Unsigned 8-bit integer
unistim.audio.rx.tx  Audio Manager RX or TX
    Boolean
unistim.audio.rx.vol.ceiling  RX Volume at Ceiling
    Boolean
unistim.audio.rx.vol.floor  RX Volume at Floor
    Boolean
unistim.audio.sample.rate  Sample Rate
    Unsigned 8-bit integer
unistim.audio.sidetone.disable  Disable Sidetone
    Boolean
unistim.audio.squelch  Audio Manager Noise Squelch
    Boolean
unistim.audio.stream.direction  Audio Stream Direction
    Unsigned 8-bit integer
unistim.audio.stream.id  Audio Manager Stream ID
    Unsigned 8-bit integer
unistim.audio.stream.state  Audio Stream State
    Boolean
unistim.audio.switch  Audio Cmd (switch)
    Unsigned 8-bit integer
unistim.audio.tone.level  Tone Level
    Unsigned 8-bit integer
unistim.audio.transducer.on  Audio Manager Transducer Based Tone On
    Unsigned 8-bit integer
unistim.audio.type.service  Type of Service
    Unsigned 8-bit integer
unistim.audio.volume.adj  Volume Adjustments
    Boolean
unistim.audio.volume.id  Audio Manager Default Receive Volume ID
    Unsigned 8-bit integer
unistim.audio.volume.up  Volume Up
    Boolean
unistim.auto.adj.rx.vol  Auto Adjust RX Volume
    Boolean
```

```
unistim.auto.noise.squelch  Automatic Squelch
    Boolean

unistim.basic.attrs  Query Basic Manager Attributes
    Boolean
    Basic Query Attributes

unistim.basic.code  Query Basic Manager Prod Eng Code
    Boolean
    Basic Query Production Engineering Code

unistim.basic.eeprom.data  EEPROM Data
    Byte array

unistim.basic.element.id  Basic Element ID
    Unsigned 8-bit integer

unistim.basic.eng.code  Product Engineering Code for phone
    String

unistim.basic.fw  Query Basic Switch Firmware
    Boolean
    Basic Query Firmware

unistim.basic.fw.ver  Basic Phone Firmware Version
    String

unistim.basic.gray  Query Basic Manager Gray Mkt Info
    Boolean
    Basic Query Gray Market Info

unistim.basic.hw.id  Basic Phone Hardware ID
    Byte array

unistim.basic.hwid  Query Basic Manager Hardware ID
    Boolean
    Basic Query Hardware ID

unistim.basic.opts  Query Basic Manager Options
    Boolean
    Basic Query Options

unistim.basic.phone  Basic Cmd (phone)
    Unsigned 8-bit integer

unistim.basic.query  Query Basic Manager
    Unsigned 8-bit integer
    INITIAL PHONE QUERY

unistim.basic.secure  Basic Switch Options Secure Code
    Boolean

unistim.basic.switch  Basic Cmd (switch)
    Unsigned 8-bit integer

unistim.basic.type  Query Basic Manager Phone Type
    Boolean
    Basic Query Phone Type

unistim.bit.fields  FLAGS
    Boolean

unistim.broadcast.day  Day
    Unsigned 8-bit integer
```

```
unistim.broadcast.hour    Hour
    Unsigned 8-bit integer
unistim.broadcast.minute  Minute
    Unsigned 8-bit integer
unistim.broadcast.month   Month
    Unsigned 8-bit integer
unistim.broadcast.phone   Broadcas Cmd (phone)
    Unsigned 8-bit integer
unistim.broadcast.second  Second
    Unsigned 8-bit integer
unistim.broadcast.switch  Broadcast Cmd (switch)
    Unsigned 8-bit integer
unistim.broadcast.year    Year
    Unsigned 8-bit integer
unistim.cadence.select    Cadence Select
    Unsigned 8-bit integer
unistim.clear.bucket      Clear Bucket Counter
    Boolean
unistim.config.element    Configure Network Element
    Unsigned 8-bit integer
unistim.conspic.prog.keys  Conspicuous and Programmable Keys Same
    Boolean
unistim.context.width     Phone Context Width
    Unsigned 8-bit integer
unistim.current.rx.vol.level  Current RX Volume Level
    Unsigned 8-bit integer
unistim.current.rx.vol.range  Current RX Volume Range
    Unsigned 8-bit integer
unistim.current.volume.rpt  Current APB Volume Report
    Unsigned 8-bit integer
unistim.cursor.blink      Should Cursor Blink
    Boolean
unistim.cursor.move.cmd    Cursor Movement Command
    Unsigned 8-bit integer
unistim.cursor.skey.id     Soft Key Id
    Unsigned 8-bit integer
unistim.date.width        Phone Date Width
    Unsigned 8-bit integer
unistim.diag.enabled       Diagnostic Command Enabled
    Boolean
unistim.display.char.address  Display Character Address
    Unsigned 8-bit integer
unistim.display.clear.all.sks  Clear All Soft Key Labels
    Boolean
```

```
unistim.display.clear.context  Context Field in InfoBar
  Boolean
unistim.display.clear.date     Date Field
  Boolean
unistim.display.clear.left     Clear Left
  Boolean
unistim.display.clear.line     Line Data
  Boolean
unistim.display.clear.line1    Line 1
  Boolean
unistim.display.clear.line2    Line 2
  Boolean
unistim.display.clear.line3    Line 3
  Boolean
unistim.display.clear.line4    Line 4
  Boolean
unistim.display.clear.line5    Line 5
  Boolean
unistim.display.clear.line6    Line 6
  Boolean
unistim.display.clear.line7    Line 7
  Boolean
unistim.display.clear.line8    Line 8
  Boolean
unistim.display.clear.numeric  Numeric Index Field in InfoBar
  Boolean
unistim.display.clear.right    Clear Right
  Boolean
unistim.display.clear.sbar.icon1  Status Bar Icon 1
  Boolean
unistim.display.clear.sbar.icon2  Status Bar Icon 2
  Boolean
unistim.display.clear.sbar.icon3  Status Bar Icon 3
  Boolean
unistim.display.clear.sbar.icon4  Status Bar Icon 4
  Boolean
unistim.display.clear.sbar.icon5  Status Bar Icon 5
  Boolean
unistim.display.clear.sbar.icon6  Status Bar Icon 6
  Boolean
unistim.display.clear.sbar.icon7  Status Bar Icon 7
  Boolean
unistim.display.clear.sbar.icon8  Status Bar Icon 8
  Boolean
```

```
unistim.display.clear.sk.label.id  Soft Key Label ID
    Unsigned 8-bit integer
unistim.display.clear.soft.key1    Soft Key 1
    Boolean
unistim.display.clear.soft.key2    Soft Key 2
    Boolean
unistim.display.clear.soft.key3    Soft Key 3
    Boolean
unistim.display.clear.soft.key4    Soft Key 4
    Boolean
unistim.display.clear.soft.key5    Soft Key 5
    Boolean
unistim.display.clear.soft.key6    Soft Key 6
    Boolean
unistim.display.clear.soft.key7    Soft Key 7
    Boolean
unistim.display.clear.soft.key8    Soft Key 8
    Boolean
unistim.display.clear.softkey      Soft Key
    Boolean
unistim.display.clear.softkey.label Soft Key Label
    Boolean
unistim.display.clear.time         Time Field
    Boolean
unistim.display.context.field      Context Info Bar Field
    Unsigned 8-bit integer
unistim.display.context.format     Context Info Bar Format
    Unsigned 8-bit integer
unistim.display.cursor.move        Cursor Move
    Boolean
unistim.display.date.format        Date Format
    Unsigned 8-bit integer
unistim.display.highlight          Highlight
    Boolean
unistim.display.line.number        Display Line Number
    Unsigned 8-bit integer
unistim.display.phone              Display Cmd (phone)
    Unsigned 8-bit integer
unistim.display.shift.left         Shift Left
    Boolean
unistim.display.shift.right        Shift Right
    Boolean
unistim.display.statusbar.icon     Status Bar Icon
    Boolean
```



```
unistim.display.switch  Display Cmd (switch)
                        Unsigned 8-bit integer
unistim.display.text.tag  Tag for text
                        Unsigned 8-bit integer
unistim.display.time.format  Time Format
                        Unsigned 8-bit integer
unistim.display.use.date.format  Use Date Format
                        Boolean
unistim.display.use.time.format  Use Time Format
                        Boolean
unistim.display.write.address.char.pos  Character Position or Soft-Label Key ID
                        Unsigned 8-bit integer
unistim.destructive.active  Destructive/Additive
                        Boolean
unistim.dont.force.active  Don't Force Active
                        Boolean
unistim.download.action  Download Server Action
                        Unsigned 8-bit integer
unistim.download.address  Download Server Address
                        Unsigned 32-bit integer
unistim.download.failover  Download Failover Server ID
                        Unsigned 8-bit integer
unistim.download.id  Download Server ID
                        Unsigned 8-bit integer
unistim.download.port  Download Server Port
                        Unsigned 16-bit integer
unistim.download.retry  Download Retry Count
                        Unsigned 8-bit integer
unistim.dynam.cksum  Basic Phone EEPROM Dynamic Checksum
                        Unsigned 8-bit integer
unistim.early.packet.thresh  Threshold in x/8000 sec where packets are too early
                        Unsigned 32-bit integer
unistim.eeprom.insane  EEPROM Insane
                        Boolean
unistim.eeprom.unsafe  EEPROM Unsafe
                        Boolean
unistim.enable.annexa  Enable Annex A
                        Boolean
unistim.enable.annexb  Enable Annex B
                        Boolean
unistim.enable.diag  Network Manager Enable DIAG
                        Boolean
unistim.enable.network.rel.udp  Network Manager Enable RUDP
                        Boolean
```

```
unistim.exist.copy.key  Copy Key Exists
                        Boolean
unistim.exist.hd.key   Headset Key Exists
                        Boolean
unistim.exist.mute.key  Mute Key Exists
                        Boolean
unistim.exist.mwi.key  Message Waiting Indicator Exists
                        Boolean
unistim.exist.quit.key  Quit Key Exists
                        Boolean
unistim.far.ip.address  Distant IP Address for RT[C]P
                        IPv4 address
unistim.far.rtcp.port  Distant RTCP Port
                        Unsigned 16-bit integer
unistim.far.rtp.port   Distant RTP Port
                        Unsigned 16-bit integer
unistim.field.context  Context Field
                        Boolean
unistim.field.numeric  Numeric Index Field
                        Boolean
unistim.field.text.line  Text Line
                        Boolean
unistim.generic.data   DATA
                        String
unistim.handsfree.support  Handsfree supported
                        Boolean
unistim.high.water.mark  Threshold of audio frames where jitter buffer removes f
                        Unsigned 8-bit integer
unistim.hilite.end.pos  Display Highlight End Position
                        Unsigned 8-bit integer
unistim.hilite.start.pos  Display Highlight Start Position
                        Unsigned 8-bit integer
unistim.icon.cadence   Icon Cadence
                        Unsigned 8-bit integer
unistim.icon.id        Icon ID
                        Unsigned 8-bit integer
unistim.icon.state     Icon State
                        Unsigned 8-bit integer
unistim.icon.types     Icon Types
                        Unsigned 8-bit integer
unistim.invalid.msg    Received Invalid MSG
                        Boolean
unistim.it.type        IT (Phone) Type
                        Unsigned 8-bit integer
```

```
unistim.key.action  Key Action
    Unsigned 8-bit integer
unistim.key.enable.vol  Enable Volume Control
    Boolean
unistim.key.feedback  Local Keypad Feedback
    Unsigned 8-bit integer
unistim.key.icon.admin.cmd  Admin Command
    Unsigned 8-bit integer
unistim.key.icon.id  Icon ID
    Unsigned 8-bit integer
unistim.key.led.cadence  LED Cadence
    Unsigned 8-bit integer
unistim.key.led.id  LED ID
    Unsigned 8-bit integer
unistim.key.name  Key Name
    Unsigned 8-bit integer
unistim.key.phone  Key Cmd (phone)
    Unsigned 8-bit integer
unistim.key.send.release  Send Key Release
    Boolean
unistim.key.switch  Key Cmd (switch)
    Unsigned 8-bit integer
unistim.keys.cadence.off.time  Indicator Cadence Off Time
    Unsigned 8-bit integer
unistim.keys.cadence.on.time  Indicator Cadence On Time
    Unsigned 8-bit integer
unistim.keys.led.id  Led ID
    Unsigned 8-bit integer
unistim.keys.logical.icon.id  Logical Icon ID
    Unsigned 16-bit integer
unistim.keys.phone.icon.id  Phone Icon ID
    Unsigned 8-bit integer
unistim.keys.repeat.time.one  Key Repeat Timer 1 Value
    Unsigned 8-bit integer
unistim.keys.repeat.time.two  Key Repeat Timer 2 Value
    Unsigned 8-bit integer
unistim.keys.user.timeout.value  User Activity Timeout Value
    Unsigned 8-bit integer
unistim.late.packet.thresh  Threshold in x/8000 sec where packets are too late
    Unsigned 32-bit integer
unistim.layer.all.skeys  All Softkeys
    Boolean
unistim.layer.display.duration  Display Duration (20ms steps)
    Unsigned 8-bit integer
```

```
unistim.layer.once.cyclic  Layer Softkey Once/Cyclic
                          Boolean
unistim.layer.softkey.id  Softkey ID
                          Unsigned 8-bit integer
unistim.len                UNISTIM CMD Length
                          Unsigned 8-bit integer
unistim.line.width        Phone Line Width
                          Unsigned 8-bit integer
unistim.local.rtcp.port   Phone RTCP Port
                          Unsigned 16-bit integer
unistim.local.rtp.port    Phone RTP Port
                          Unsigned 16-bit integer
unistim.max.vol           Max Volume
                          Boolean
unistim.nat.address.len   NAT Address Length
                          Unsigned 8-bit integer
unistim.nat.listen.address NAT Listen Address
                          Unsigned 8-bit integer
unistim.nat.listen.port   NAT Listen Port
                          Unsigned 16-bit integer
unistim.net.file.server.address File Server IP Address
                          IPv4 address
unistim.net.file.server.port File Server Port
                          Unsigned 16-bit integer
unistim.net.file.xfer.mode File Transfer Mode
                          Unsigned 8-bit integer
unistim.net.force.download Force Download
                          Boolean
unistim.net.local.xfer.port Local XFer Port
                          Unsigned 16-bit integer
unistim.net.phone.primary.id Phone Primary Server ID
                          Unsigned 8-bit integer
unistim.net.use.local.port Use Custom Local Port
                          Boolean
unistim.net.use.server.port Use Custom Server Port
                          Boolean
unistim.netconfig.cksum   Basic Phone EEPROM Net Config Checksum
                          Unsigned 8-bit integer
unistim.network.phone     Network Cmd (phone)
                          Unsigned 8-bit integer
unistim.network.switch    Network Cmd (switch)
                          Unsigned 8-bit integer
unistim.num               RUDP Seq Num
                          Unsigned 32-bit integer
```

unistim.num.conspic.keys Number Of Conspicuous Keys  
Unsigned 8-bit integer

unistim.num.nav.keys Number of Navigation Keys  
Unsigned 8-bit integer

unistim.num.prog.keys Number of Programable Keys  
Unsigned 8-bit integer

unistim.num.soft.keys Number of Soft Keys  
Unsigned 8-bit integer

unistim.number.dload.chars Number of Downloadable Chars  
Unsigned 8-bit integer

unistim.number.dload.icons Number of Freeform Icon Downloads  
Unsigned 8-bit integer

unistim.number.lines Number Of Lines  
Unsigned 8-bit integer

unistim.numeric.width Phone Numeric Width  
Unsigned 8-bit integer

unistim.open.audio.stream.rpt Open Stream Report  
Unsigned 8-bit integer

unistim.pay UNISTIM Payload  
Unsigned 8-bit integer

unistim.phone.address.len Phone Address Length  
Unsigned 8-bit integer

unistim.phone.char.pos Character Postition  
Unsigned 8-bit integer

unistim.phone.charsets Character Sets  
Unsigned 8-bit integer

unistim.phone.contrast.level Phone Contrast Level  
Unsigned 8-bit integer

unistim.phone.ether Phone Ethernet Address  
6-byte Hardware (MAC) Address

unistim.phone.icon.type Phone Icon Type  
Unsigned 8-bit integer

unistim.phone.listen.address Phone Listen Address  
IPv4 address

unistim.phone.listen.port Phone Listen Port  
Unsigned 16-bit integer

unistim.phone.softkeys Phone Softkeys  
Unsigned 8-bit integer

unistim.position.skey Softkey Position  
Boolean

unistim.query.attributes Query Network Manager Attributes  
Boolean

unistim.query.diagnostic Query Network Manager Diagnostic  
Boolean

```
unistim.query.managers  Query Network Manager Managers
                        Boolean
unistim.query.options   Query Network Manager Options
                        Boolean
unistim.query.sanity    Query Network Manager Sanity
                        Boolean
unistim.query.serverInfo Query Network Manager Server Info
                        Boolean
unistim.receive.empty   Receive Buffer Unexpectedly Empty
                        Boolean
unistim.receive.enable  RX Enable
                        Boolean
unistim.receive.overflow Receive Buffer Overflow
                        Boolean
unistim.recovery.high   Recovery Procedure Idle High Boundary
                        Unsigned 16-bit integer
unistim.recovery.low    Recovery Procedure Idle Low Boundary
                        Unsigned 16-bit integer
unistim.resolve.far.ip  Resolve Far End IP
                        IPv4 address
unistim.resolve.far.port Resolve Far End Port
                        Unsigned 16-bit integer
unistim.resolve.phone.port Resolve Phone Port
                        Unsigned 16-bit integer
unistim.rpt.rtcp.buk.id Report RTCP Bucket ID
                        Unsigned 8-bit integer
unistim.rpt.src.desc    Report Source Description
                        Unsigned 8-bit integer
unistim.rtcp.bucket.id  RTCP Bucket ID
                        Unsigned 16-bit integer
unistim.rudp.active     Reliable UDP Active
                        Boolean
unistim.rx.stream.id    Receive Stream Id
                        Unsigned 8-bit integer
unistim.sdes.rtcp.bucket RTCP Bucket Id
                        Unsigned 8-bit integer
unistim.server.action.byte Action
                        Unsigned 8-bit integer
unistim.server.failover.id Failover Server ID
                        Unsigned 8-bit integer
unistim.server.ip.address IP address
                        IPv4 address
unistim.server.port     Port Number
                        Unsigned 16-bit integer
```

unistim.server.retry.count Number of times to Retry  
Unsigned 8-bit integer

unistim.softkey.layer.num Softkey Layer Number  
Unsigned 8-bit integer

unistim.softkey.width Phone Softkey Width  
Unsigned 8-bit integer

unistim.softlabel.key.width Soft-Label Key width  
Unsigned 8-bit integer

unistim.source.desc.item Source Description Item  
Unsigned 8-bit integer

unistim.special.tone.select Special Tone Select  
Unsigned 8-bit integer

unistim.static.cksum Basic Phone EEPROM Static Checksum  
Unsigned 8-bit integer

unistim.stream.based.tone.rx.tx Stream Based Tone RX or TX  
Boolean

unistim.stream.tone.id Stream Based Tone ID  
Unsigned 8-bit integer

unistim.stream.tone.mute Stream Based Tone Mute  
Boolean

unistim.stream.volume.id Stream Based Volume ID  
Unsigned 8-bit integer

unistim.switch.terminal.id Terminal ID assigned by Switch  
IPv4 address

unistim.terminal.id Terminal ID  
IPv4 address

unistim.time.width Phone Time Width  
Unsigned 8-bit integer

unistim.tone.volume.range Tone Volume Range in Steps  
Unsigned 8-bit integer

unistim.trans.list.len Transducer List Length  
Unsigned 8-bit integer

unistim.trans.overflow Transmit Buffer Overflow  
Boolean

unistim.transducer.pairs Audio Transducer Pair  
Unsigned 8-bit integer

unistim.transducer.routing Transducer Routing  
Unsigned 8-bit integer

unistim.transmit.enable TX Enable  
Boolean

unistim.type RUDP Pkt type  
Unsigned 8-bit integer

unistim.visual.tones Enable Visual Tones  
Boolean

```
unistim.vocoder.config.param  Vocoder Config Param
    Unsigned 8-bit integer
unistim.vocoder.entity  Vocoder Entity
    Unsigned 8-bit integer
unistim.vocoder.frames.per.packet  Frames Per Packet
    Unsigned 8-bit integer
unistim.vocoder.id  Vocoder Protocol
    Unsigned 8-bit integer
unistim.warbler.select  Warbler Select
    Unsigned 8-bit integer
unistim.watchdog.timeout  Watchdog Timeout
    Unsigned 16-bit integer
unistim.write.address.softkey.id  Soft Key ID
    Unsigned 8-bit integer
unistim.write.address.context  Context Field in the Info Bar
    Boolean
unistim.write.address.line  Write A Line
    Boolean
unistim.write.address.line.number  Line Number
    Unsigned 8-bit integer
unistim.write.address.numeric  Is Address Numeric
    Boolean
unistim.write.address.softkey  Write a SoftKey
    Boolean
unistim.write.address.softkey.label  Write A Softkey Label
    Boolean
```

**USB (usb)**

```
usb.DescriptorIndex  Descriptor Index
    Unsigned 8-bit integer
usb.LanguageId  Language Id
    Unsigned 16-bit integer
usb.bAlternateSetting  bAlternateSetting
    Unsigned 8-bit integer
usb.bConfigurationValue  bConfigurationValue
    Unsigned 8-bit integer
usb.bDescriptorType  bDescriptorType
    Unsigned 8-bit integer
usb.bDeviceClass  bDeviceClass
    Unsigned 8-bit integer
usb.bDeviceProtocol  bDeviceProtocol
    Unsigned 8-bit integer
usb.bDeviceSubClass  bDeviceSubClass
    Unsigned 8-bit integer
```



```
usb.bEndpointAddress  bEndpointAddress
    Unsigned 8-bit integer
usb.bEndpointAddress.direction  Direction
    Boolean
usb.bEndpointAddress.number  Endpoint Number
    Unsigned 8-bit integer
usb.bInterfaceClass  bInterfaceClass
    Unsigned 8-bit integer
usb.bInterfaceNumber  bInterfaceNumber
    Unsigned 8-bit integer
usb.bInterfaceProtocol  bInterfaceProtocol
    Unsigned 8-bit integer
usb.bInterfaceSubClass  bInterfaceSubClass
    Unsigned 8-bit integer
usb.bInterval  bInterval
    Unsigned 8-bit integer
usb.bLength  bLength
    Unsigned 8-bit integer
usb.bMaxPacketSize0  bMaxPacketSize0
    Unsigned 8-bit integer
usb.bMaxPower  bMaxPower
    Unsigned 8-bit integer
usb.bNumConfigurations  bNumConfigurations
    Unsigned 8-bit integer
usb.bNumEndpoints  bNumEndpoints
    Unsigned 8-bit integer
usb.bNumInterfaces  bNumInterfaces
    Unsigned 8-bit integer
usb.bString  bString
    String
usb.bcdDevice  bcdDevice
    Unsigned 16-bit integer
usb.bcdUSB  bcdUSB
    Unsigned 16-bit integer
usb.bmAttributes  bmAttributes
    Unsigned 8-bit integer
usb.bmAttributes.behaviour  Behaviourtype
    Unsigned 8-bit integer
usb.bmAttributes.sync  Synchronisationtype
    Unsigned 8-bit integer
usb.bmAttributes.transfer  Transfertype
    Unsigned 8-bit integer
usb.bmRequestType  bmRequestType
    Unsigned 8-bit integer
```

```
usb.bmRequestType.direction  Direction
    Boolean

usb.bmRequestType.recipient  Recipient
    Unsigned 8-bit integer

usb.bmRequestType.type      Type
    Unsigned 8-bit integer

usb.bus_id                   URB bus id
    Unsigned 16-bit integer
    URB bus id

usb.configuration.bmAttributes  Configuration bmAttributes
    Unsigned 8-bit integer

usb.configuration.legacy10buspowered  Must be 1
    Boolean
    Legacy USB 1.0 bus powered

usb.configuration.remotewakeup  Remote Wakeup
    Boolean

usb.configuration.selfpowered  Self-Powered
    Boolean

usb.data                     Application Data
    Byte array
    Payload is application data

usb.data_flag                Data flag
    Unsigned 8-bit integer
    USB data flag

usb.device_address           Device
    Unsigned 8-bit integer
    USB device address

usb.dst.endpoint             Dst Endpoint
    Unsigned 8-bit integer
    Destination USB endpoint number

usb.endpoint_number          Endpoint
    Unsigned 8-bit integer
    USB endpoint number

usb.iConfiguration           iConfiguration
    Unsigned 8-bit integer

usb.iInterface               iInterface
    Unsigned 8-bit integer

usb.iManufacturer            iManufacturer
    Unsigned 8-bit integer

usb.iProduct                 iProduct
    Unsigned 8-bit integer

usb.iSerialNumber            iSerialNumber
    Unsigned 8-bit integer

usb.idProduct                idProduct
    Unsigned 16-bit integer
```

```
usb.idVendor  idVendor
    Unsigned 16-bit integer
usb.request_in  Request in
    Frame number
    The request to this packet is in this packet
usb.response_in  Response in
    Frame number
    The response to this packet is in this packet
usb.setup.bRequest  bRequest
    Unsigned 8-bit integer
usb.setup.wIndex  wIndex
    Unsigned 16-bit integer
usb.setup.wLength  wLength
    Unsigned 16-bit integer
usb.setup.wValue  wValue
    Unsigned 16-bit integer
usb.setup_flag  Setup flag
    Unsigned 8-bit integer
    USB setup flag
usb.src.endpoint  Src Endpoint
    Unsigned 8-bit integer
    Source USB endpoint number
usb.time  Time from request
    Time duration
    Time between Request and Response for USB cmds
usb.transfer_type  URB transfer type
    Unsigned 8-bit integer
    URB transfer type
usb.urb_id  URB id
    Unsigned 64-bit integer
    URB id
usb.urb_type  URB type
    Unsigned 8-bit integer
    URB type
usb.wLANGID  wLANGID
    Unsigned 16-bit integer
usb.wMaxPacketSize  wMaxPacketSize
    Unsigned 16-bit integer
usb.wTotalLength  wTotalLength
    Unsigned 16-bit integer
```

**USB Mass Storage (usbms)**

```
usbms.dCBWCBLength  CDB Length
    Unsigned 8-bit integer
usbms.dCBWDataTransferLength  DataTransferLength
    Unsigned 32-bit integer
```

```

usbms.dCBWFlags  Flags
    Unsigned 8-bit integer
usbms.dCBWLUN   LUN
    Unsigned 8-bit integer
usbms.dCBWSignature  Signature
    Unsigned 32-bit integer
usbms.dCBWTag   Tag
    Unsigned 32-bit integer
usbms.dCSWDataResidue  DataResidue
    Unsigned 32-bit integer
usbms.dCSWSignature  Signature
    Unsigned 32-bit integer
usbms.dCSWStatus  Status
    Unsigned 8-bit integer
usbms.setup.bRequest  bRequest
    Unsigned 8-bit integer
usbms.setup.maxlun  Max LUN
    Unsigned 8-bit integer
usbms.setup.wIndex  wIndex
    Unsigned 16-bit integer
usbms.setup.wLength  wLength
    Unsigned 16-bit integer
usbms.setup.wValue  wValue
    Unsigned 16-bit integer

```

#### **UTRAN Iub interface NBAP signalling (nbap)**

```

nbap.AICH_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.AICH_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.AICH_ParametersListIE_CTCH_ReconfRqstFDD  AICH-ParametersListIE-CTCH-Reconf
    Unsigned 32-bit integer
    nbap.AICH_ParametersListIE_CTCH_ReconfRqstFDD
nbap.AICH_ParametersListIE_CTCH_ReconfRqstFDD_item  Item
    No value
    nbap.AICH_ParametersItem_CTCH_ReconfRqstFDD
nbap.Active_Pattern_Sequence_Information  Active-Pattern-Sequence-Information
    No value
    nbap.Active_Pattern_Sequence_Information
nbap.Add_To_E_AGCH_Resource_Pool_768_PSCH_ReconfRqst  Add-To-E-AGCH-Resource-Poo
    No value
    nbap.Add_To_E_AGCH_Resource_Pool_768_PSCH_ReconfRqst

```

```

nbap.Add_To_E_AGCH_Resource_Pool_LCR_PSCH_ReconfRqst  Add-To-E-AGCH-Resource-Poo
  No value
  nbap.Add_To_E_AGCH_Resource_Pool_LCR_PSCH_ReconfRqst
nbap.Add_To_E_AGCH_Resource_Pool_PSCH_ReconfRqst  Add-To-E-AGCH-Resource-Pool-PS
  No value
  nbap.Add_To_E_AGCH_Resource_Pool_PSCH_ReconfRqst
nbap.Add_To_E_HICH_Resource_Pool_LCR_PSCH_ReconfRqst  Add-To-E-HICH-Resource-Poo
  No value
  nbap.Add_To_E_HICH_Resource_Pool_LCR_PSCH_ReconfRqst
nbap.Add_To_HS_SCCH_Resource_Pool_PSCH_ReconfRqst  Add-To-HS-SCCH-Resource-Pool-
  No value
  nbap.Add_To_HS_SCCH_Resource_Pool_PSCH_ReconfRqst
nbap.AdjustmentPeriod  AdjustmentPeriod
  Unsigned 32-bit integer
  nbap.AdjustmentPeriod
nbap.AllowedSlotFormatInformationList_CTCH_ReconfRqstFDD_item  Item
  No value
  nbap.AllowedSlotFormatInformationItem_CTCH_ReconfRqstFDD
nbap.AllowedSlotFormatInformationList_CTCH_SetupRqstFDD_item  Item
  No value
  nbap.AllowedSlotFormatInformationItem_CTCH_SetupRqstFDD
nbap.AlternativeFormatReportingIndicator  AlternativeFormatReportingIndicator
  Unsigned 32-bit integer
  nbap.AlternativeFormatReportingIndicator
nbap.Angle_Of_Arrival_Value_LCR  Angle-Of-Arrival-Value-LCR
  No value
  nbap.Angle_Of_Arrival_Value_LCR
nbap.AuditFailure  AuditFailure
  No value
  nbap.AuditFailure
nbap.AuditRequest  AuditRequest
  No value
  nbap.AuditRequest
nbap.AuditRequiredIndication  AuditRequiredIndication
  No value
  nbap.AuditRequiredIndication
nbap.AuditResponse  AuditResponse
  No value
  nbap.AuditResponse
nbap.BCCH_ModificationTime  BCCH-ModificationTime
  Unsigned 32-bit integer
  nbap.BCCH_ModificationTime
nbap.BearerRearrangementIndication  BearerRearrangementIndication
  No value
  nbap.BearerRearrangementIndication
nbap.Best_Cell_Portions_Value  Best-Cell-Portions-Value
  Unsigned 32-bit integer
  nbap.Best_Cell_Portions_Value

```

```
nbap.Best_Cell_Portions_Value_item  Item
    No value
    nbap.Best_Cell_Portions_Item
nbap.BindingID  BindingID
    Byte array
    nbap.BindingID
nbap.BlockResourceFailure  BlockResourceFailure
    No value
    nbap.BlockResourceFailure
nbap.BlockResourceRequest  BlockResourceRequest
    No value
    nbap.BlockResourceRequest
nbap.BlockResourceResponse  BlockResourceResponse
    No value
    nbap.BlockResourceResponse
nbap.BlockingPriorityIndicator  BlockingPriorityIndicator
    Unsigned 32-bit integer
    nbap.BlockingPriorityIndicator
nbap.BroadcastCommonTransportBearerIndication  BroadcastCommonTransportBearerInd
    No value
    nbap.BroadcastCommonTransportBearerIndication
nbap.BroadcastReference  BroadcastReference
    Byte array
    nbap.BroadcastReference
nbap.CCP_InformationItem_AuditRsp  CCP-InformationItem-AuditRsp
    No value
    nbap.CCP_InformationItem_AuditRsp
nbap.CCP_InformationItem_ResourceStatusInd  CCP-InformationItem-ResourceStatusInd
    No value
    nbap.CCP_InformationItem_ResourceStatusInd
nbap.CCP_InformationList_AuditRsp  CCP-InformationList-AuditRsp
    Unsigned 32-bit integer
    nbap.CCP_InformationList_AuditRsp
nbap.CCP_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.CCP_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.CCTrCH_InformationItem_RL_FailureInd  CCTrCH-InformationItem-RL-FailureInd
    No value
    nbap.CCTrCH_InformationItem_RL_FailureInd
nbap.CCTrCH_InformationItem_RL_RestoreInd  CCTrCH-InformationItem-RL-RestoreInd
    No value
    nbap.CCTrCH_InformationItem_RL_RestoreInd
nbap.CCTrCH_InformationList_RL_FailureInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
```

```
nbap.CCTrCH_InformationList_RL_RestoreInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container

nbap.CCTrCH_TPCAddList_RL_ReconfPrepTDD_item  Item
  No value
  nbap.CCTrCH_TPCAddItem_RL_ReconfPrepTDD

nbap.CCTrCH_TPCList_RL_SetupRqstTDD_item  Item
  No value
  nbap.CCTrCH_TPCItem_RL_SetupRqstTDD

nbap.CCTrCH_TPCModifyList_RL_ReconfPrepTDD_item  Item
  No value
  nbap.CCTrCH_TPCModifyItem_RL_ReconfPrepTDD

nbap.CFN  CFN
  Unsigned 32-bit integer
  nbap.CFN

nbap.CPC_Information  CPC-Information
  No value
  nbap.CPC_Information

nbap.CRNC_CommunicationContextID  CRNC-CommunicationContextID
  Unsigned 32-bit integer
  nbap.CRNC_CommunicationContextID

nbap.CSBMeasurementID  CSBMeasurementID
  Unsigned 32-bit integer
  nbap.CSBMeasurementID

nbap.CSBTransmissionID  CSBTransmissionID
  Unsigned 32-bit integer
  nbap.CSBTransmissionID

nbap.C_ID  C-ID
  Unsigned 32-bit integer
  nbap.C_ID

nbap.Cause  Cause
  Unsigned 32-bit integer
  nbap.Cause

nbap.CauseLevel_PSCH_ReconfFailure  CauseLevel-PSCH-ReconfFailure
  Unsigned 32-bit integer
  nbap.CauseLevel_PSCH_ReconfFailure

nbap.CauseLevel_RL_AdditionFailureFDD  CauseLevel-RL-AdditionFailureFDD
  Unsigned 32-bit integer
  nbap.CauseLevel_RL_AdditionFailureFDD

nbap.CauseLevel_RL_AdditionFailureTDD  CauseLevel-RL-AdditionFailureTDD
  Unsigned 32-bit integer
  nbap.CauseLevel_RL_AdditionFailureTDD

nbap.CauseLevel_RL_ReconfFailure  CauseLevel-RL-ReconfFailure
  Unsigned 32-bit integer
  nbap.CauseLevel_RL_ReconfFailure

nbap.CauseLevel_RL_SetupFailureFDD  CauseLevel-RL-SetupFailureFDD
  Unsigned 32-bit integer
  nbap.CauseLevel_RL_SetupFailureFDD
```

```
nbap.CauseLevel_RL_SetupFailureTDD CauseLevel-RL-SetupFailureTDD
  Unsigned 32-bit integer
  nbap.CauseLevel_RL_SetupFailureTDD
nbap.CauseLevel_SyncAdjustmntFailureTDD CauseLevel-SyncAdjustmntFailureTDD
  Unsigned 32-bit integer
  nbap.CauseLevel_SyncAdjustmntFailureTDD
nbap.CellAdjustmentInfoItem_SyncAdjustmentRqstTDD CellAdjustmentInfoItem-SyncAD
  No value
  nbap.CellAdjustmentInfoItem_SyncAdjustmentRqstTDD
nbap.CellAdjustmentInfo_SyncAdjustmentRqstTDD CellAdjustmentInfo-SyncAdjustment
  Unsigned 32-bit integer
  nbap.CellAdjustmentInfo_SyncAdjustmentRqstTDD
nbap.CellAdjustmentInfo_SyncAdjustmentRqstTDD_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.CellDeletionRequest CellDeletionRequest
  No value
  nbap.CellDeletionRequest
nbap.CellDeletionResponse CellDeletionResponse
  No value
  nbap.CellDeletionResponse
nbap.CellParameterID CellParameterID
  Unsigned 32-bit integer
  nbap.CellParameterID
nbap.CellPortion_InformationItem_Cell_ReconfRqstFDD CellPortion-InformationItem
  No value
  nbap.CellPortion_InformationItem_Cell_ReconfRqstFDD
nbap.CellPortion_InformationItem_Cell_SetupRqstFDD CellPortion-InformationItem-
  No value
  nbap.CellPortion_InformationItem_Cell_SetupRqstFDD
nbap.CellPortion_InformationList_Cell_ReconfRqstFDD CellPortion-InformationList
  Unsigned 32-bit integer
  nbap.CellPortion_InformationList_Cell_ReconfRqstFDD
nbap.CellPortion_InformationList_Cell_ReconfRqstFDD_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.CellPortion_InformationList_Cell_SetupRqstFDD CellPortion-InformationList-
  Unsigned 32-bit integer
  nbap.CellPortion_InformationList_Cell_SetupRqstFDD
nbap.CellPortion_InformationList_Cell_SetupRqstFDD_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.CellReconfigurationFailure CellReconfigurationFailure
  No value
  nbap.CellReconfigurationFailure
nbap.CellReconfigurationRequestFDD CellReconfigurationRequestFDD
  No value
  nbap.CellReconfigurationRequestFDD
```



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nbap.CellReconfigurationRequestTDD CellReconfigurationRequestTDD
    No value
    nbap.CellReconfigurationRequestTDD
nbap.CellReconfigurationResponse CellReconfigurationResponse
    No value
    nbap.CellReconfigurationResponse
nbap.CellSetupFailure CellSetupFailure
    No value
    nbap.CellSetupFailure
nbap.CellSetupRequestFDD CellSetupRequestFDD
    No value
    nbap.CellSetupRequestFDD
nbap.CellSetupRequestTDD CellSetupRequestTDD
    No value
    nbap.CellSetupRequestTDD
nbap.CellSetupResponse CellSetupResponse
    No value
    nbap.CellSetupResponse
nbap.CellSyncBurstInfoList_CellSyncReconfRqstTDD_item Item
    No value
    nbap.CellSyncBurstInfoItem_CellSyncReconfRqstTDD
nbap.CellSyncBurstMeasInfoListIE_CellSyncReconfRqstTDD CellSyncBurstMeasInfoListIE
    Unsigned 32-bit integer
    nbap.CellSyncBurstMeasInfoListIE_CellSyncReconfRqstTDD
nbap.CellSyncBurstMeasInfoListIE_CellSyncReconfRqstTDD_item Item
    No value
    nbap.CellSyncBurstMeasInfoItem_CellSyncReconfRqstTDD
nbap.CellSyncBurstMeasInfoList_CellSyncReprtTDD_item Item
    No value
    nbap.CellSyncBurstMeasInfoItem_CellSyncReprtTDD
nbap.CellSyncBurstMeasInfo_CellSyncReconfRqstTDD CellSyncBurstMeasInfo-CellSyncReconfRqstTDD
    No value
    nbap.CellSyncBurstMeasInfo_CellSyncReconfRqstTDD
nbap.CellSyncBurstMeasureInit_CellSyncInitiationRqstTDD CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD
    No value
    nbap.CellSyncBurstMeasureInit_CellSyncInitiationRqstTDD
nbap.CellSyncBurstRepetitionPeriod CellSyncBurstRepetitionPeriod
    Unsigned 32-bit integer
    nbap.CellSyncBurstRepetitionPeriod
nbap.CellSyncBurstTransInit_CellSyncInitiationRqstTDD CellSyncBurstTransInit-CellSyncInitiationRqstTDD
    No value
    nbap.CellSyncBurstTransInit_CellSyncInitiationRqstTDD
nbap.CellSyncBurstTransReconfInfo_CellSyncReconfRqstTDD CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD
    Unsigned 32-bit integer
    nbap.CellSyncBurstTransReconfInfo_CellSyncReconfRqstTDD
nbap.CellSyncBurstTransReconfInfo_CellSyncReconfRqstTDD_item Item
    No value
    nbap.CellSyncBurstTransInfoItem_CellSyncReconfRqstTDD

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nbap.CellSyncInfo_CellSyncReprtTDD  CellSyncInfo-CellSyncReprtTDD
    Unsigned 32-bit integer
    nbap.CellSyncInfo_CellSyncReprtTDD
nbap.CellSyncInfo_CellSyncReprtTDD_item  Item
    No value
    nbap.CellSyncInfoItemIE_CellSyncReprtTDD
nbap.CellSynchronisationAdjustmentFailureTDD  CellSynchronisationAdjustmentFailu
    No value
    nbap.CellSynchronisationAdjustmentFailureTDD
nbap.CellSynchronisationAdjustmentRequestTDD  CellSynchronisationAdjustmentReque
    No value
    nbap.CellSynchronisationAdjustmentRequestTDD
nbap.CellSynchronisationAdjustmentResponseTDD  CellSynchronisationAdjustmentResp
    No value
    nbap.CellSynchronisationAdjustmentResponseTDD
nbap.CellSynchronisationFailureIndicationTDD  CellSynchronisationFailureIndicati
    No value
    nbap.CellSynchronisationFailureIndicationTDD
nbap.CellSynchronisationInitiationFailureTDD  CellSynchronisationInitiationFailu
    No value
    nbap.CellSynchronisationInitiationFailureTDD
nbap.CellSynchronisationInitiationRequestTDD  CellSynchronisationInitiationReque
    No value
    nbap.CellSynchronisationInitiationRequestTDD
nbap.CellSynchronisationInitiationResponseTDD  CellSynchronisationInitiationResp
    No value
    nbap.CellSynchronisationInitiationResponseTDD
nbap.CellSynchronisationReconfigurationFailureTDD  CellSynchronisationReconfigur
    No value
    nbap.CellSynchronisationReconfigurationFailureTDD
nbap.CellSynchronisationReconfigurationRequestTDD  CellSynchronisationReconfigur
    No value
    nbap.CellSynchronisationReconfigurationRequestTDD
nbap.CellSynchronisationReconfigurationResponseTDD  CellSynchronisationReconfigu
    No value
    nbap.CellSynchronisationReconfigurationResponseTDD
nbap.CellSynchronisationReportTDD  CellSynchronisationReportTDD
    No value
    nbap.CellSynchronisationReportTDD
nbap.CellSynchronisationTerminationRequestTDD  CellSynchronisationTerminationReq
    No value
    nbap.CellSynchronisationTerminationRequestTDD
nbap.Cell_Frequency_List_InformationItem_LCR_MulFreq_AuditRsp  Cell-Frequency-Li
    No value
    nbap.Cell_Frequency_List_InformationItem_LCR_MulFreq_AuditRsp
nbap.Cell_Frequency_List_InformationItem_LCR_MulFreq_ResourceStatusInd  Cell-Fre
    No value
    nbap.Cell_Frequency_List_InformationItem_LCR_MulFreq_ResourceStatusInd

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nbap.Cell_Frequency_List_Information_LCR_MulFreq_AuditRsp  Cell-Frequency-List-Information
  Unsigned 32-bit integer
  nbap.Cell_Frequency_List_Information_LCR_MulFreq_AuditRsp
nbap.Cell_Frequency_List_Information_LCR_MulFreq_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.Cell_Frequency_List_Information_LCR_MulFreq_ResourceStatusInd  Cell-Frequency-List-Information-ResourceStatusInd
  Unsigned 32-bit integer
  nbap.Cell_Frequency_List_Information_LCR_MulFreq_ResourceStatusInd
nbap.Cell_Frequency_List_Information_LCR_MulFreq_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.Cell_Frequency_List_LCR_MulFreq_Cell_SetupRqstTDD  Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD
  Unsigned 32-bit integer
  nbap.Cell_Frequency_List_LCR_MulFreq_Cell_SetupRqstTDD
nbap.Cell_Frequency_List_LCR_MulFreq_Cell_SetupRqstTDD_item  Item
  No value
  nbap.Cell_Frequency_Item_LCR_MulFreq_Cell_SetupRqstTDD
nbap.Cell_Frequency_ModifyList_LCR_MulFreq_Cell_ReconfRqstTDD_item  Item
  No value
  nbap.Cell_Frequency_ModifyItem_LCR_MulFreq_Cell_ReconfRqstTDD
nbap.Cell_InformationItem_AuditRsp  Cell-InformationItem-AuditRsp
  No value
  nbap.Cell_InformationItem_AuditRsp
nbap.Cell_InformationItem_ResourceStatusInd  Cell-InformationItem-ResourceStatusInd
  No value
  nbap.Cell_InformationItem_ResourceStatusInd
nbap.Cell_InformationList_AuditRsp  Cell-InformationList-AuditRsp
  Unsigned 32-bit integer
  nbap.Cell_InformationList_AuditRsp
nbap.Cell_InformationList_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.Cell_InformationList_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.Closedlooptimingadjustmentmode  Closedlooptimingadjustmentmode
  Unsigned 32-bit integer
  nbap.Closedlooptimingadjustmentmode
nbap.CommonChannelsCapacityConsumptionLaw_item  Item
  No value
  nbap.CommonChannelsCapacityConsumptionLaw_item
nbap.CommonMACFlow_Specific_InfoList_Response_item  Item
  No value
  nbap.CommonMACFlow_Specific_InfoItem_Response
nbap.CommonMACFlow_Specific_InfoList_item  Item
  No value
  nbap.CommonMACFlow_Specific_InfoItem

```

```
nbap.CommonMeasurementAccuracy CommonMeasurementAccuracy
    Unsigned 32-bit integer
    nbap.CommonMeasurementAccuracy

nbap.CommonMeasurementFailureIndication CommonMeasurementFailureIndication
    No value
    nbap.CommonMeasurementFailureIndication

nbap.CommonMeasurementInitiationFailure CommonMeasurementInitiationFailure
    No value
    nbap.CommonMeasurementInitiationFailure

nbap.CommonMeasurementInitiationRequest CommonMeasurementInitiationRequest
    No value
    nbap.CommonMeasurementInitiationRequest

nbap.CommonMeasurementInitiationResponse CommonMeasurementInitiationResponse
    No value
    nbap.CommonMeasurementInitiationResponse

nbap.CommonMeasurementObjectType_CM_Rprt CommonMeasurementObjectType-CM-Rprt
    Unsigned 32-bit integer
    nbap.CommonMeasurementObjectType_CM_Rprt

nbap.CommonMeasurementObjectType_CM_Rqst CommonMeasurementObjectType-CM-Rqst
    Unsigned 32-bit integer
    nbap.CommonMeasurementObjectType_CM_Rqst

nbap.CommonMeasurementObjectType_CM_Rsp CommonMeasurementObjectType-CM-Rsp
    Unsigned 32-bit integer
    nbap.CommonMeasurementObjectType_CM_Rsp

nbap.CommonMeasurementReport CommonMeasurementReport
    No value
    nbap.CommonMeasurementReport

nbap.CommonMeasurementTerminationRequest CommonMeasurementTerminationRequest
    No value
    nbap.CommonMeasurementTerminationRequest

nbap.CommonMeasurementType CommonMeasurementType
    Unsigned 32-bit integer
    nbap.CommonMeasurementType

nbap.CommonPhysicalChannelID CommonPhysicalChannelID
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID

nbap.CommonPhysicalChannelID768 CommonPhysicalChannelID768
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID768

nbap.CommonPhysicalChannelType_CTCH_ReconfRqstFDD CommonPhysicalChannelType-CTCH
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelType_CTCH_ReconfRqstFDD

nbap.CommonPhysicalChannelType_CTCH_SetupRqstFDD CommonPhysicalChannelType-CTCH
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelType_CTCH_SetupRqstFDD

nbap.CommonPhysicalChannelType_CTCH_SetupRqstTDD CommonPhysicalChannelType-CTCH
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelType_CTCH_SetupRqstTDD
```

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nbap.CommonTransportChannelDeletionRequest  CommonTransportChannelDeletionReques
    No value
    nbap.CommonTransportChannelDeletionRequest
nbap.CommonTransportChannelDeletionResponse  CommonTransportChannelDeletionRespo
    No value
    nbap.CommonTransportChannelDeletionResponse
nbap.CommonTransportChannelReconfigurationFailure  CommonTransportChannelReconfi
    No value
    nbap.CommonTransportChannelReconfigurationFailure
nbap.CommonTransportChannelReconfigurationRequestFDD  CommonTransportChannelReco
    No value
    nbap.CommonTransportChannelReconfigurationRequestFDD
nbap.CommonTransportChannelReconfigurationRequestTDD  CommonTransportChannelReco
    No value
    nbap.CommonTransportChannelReconfigurationRequestTDD
nbap.CommonTransportChannelReconfigurationResponse  CommonTransportChannelReconf
    No value
    nbap.CommonTransportChannelReconfigurationResponse
nbap.CommonTransportChannelSetupFailure  CommonTransportChannelSetupFailure
    No value
    nbap.CommonTransportChannelSetupFailure
nbap.CommonTransportChannelSetupRequestFDD  CommonTransportChannelSetupRequestFD
    No value
    nbap.CommonTransportChannelSetupRequestFDD
nbap.CommonTransportChannelSetupRequestTDD  CommonTransportChannelSetupRequestTD
    No value
    nbap.CommonTransportChannelSetupRequestTDD
nbap.CommonTransportChannelSetupResponse  CommonTransportChannelSetupResponse
    No value
    nbap.CommonTransportChannelSetupResponse
nbap.CommonTransportChannel_InformationResponse  CommonTransportChannel-Informat
    No value
    nbap.CommonTransportChannel_InformationResponse
nbap.Common_MACFlow_PriorityQueue_Information_item  Item
    No value
    nbap.Common_MACFlow_PriorityQueue_Item
nbap.Common_MACFlows_to_DeleteFDD  Common-MACFlows-to-DeleteFDD
    Unsigned 32-bit integer
    nbap.Common_MACFlows_to_DeleteFDD
nbap.Common_MACFlows_to_DeleteFDD_item  Item
    No value
    nbap.Common_MACFlows_to_DeleteFDD_Item
nbap.Common_PhysicalChannel_Status_Information  Common-PhysicalChannel-Status-In
    No value
    nbap.Common_PhysicalChannel_Status_Information
nbap.Common_PhysicalChannel_Status_Information768  Common-PhysicalChannel-Status
    No value
    nbap.Common_PhysicalChannel_Status_Information768

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nbap.Common_TransportChannel_Status_Information  Common-TransportChannel-Status-
    No value
    nbap.Common_TransportChannel_Status_Information
nbap.CommunicationContextInfoItem_Reset  CommunicationContextInfoItem-Reset
    No value
    nbap.CommunicationContextInfoItem_Reset
nbap.CommunicationContextInfoList_Reset_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.CommunicationControlPortID  CommunicationControlPortID
    Unsigned 32-bit integer
    nbap.CommunicationControlPortID
nbap.CommunicationControlPortInfoItem_Reset  CommunicationControlPortInfoItem-Re
    No value
    nbap.CommunicationControlPortInfoItem_Reset
nbap.CommunicationControlPortInfoList_Reset_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.CompressedModeCommand  CompressedModeCommand
    No value
    nbap.CompressedModeCommand
nbap.Compressed_Mode_Deactivation_Flag  Compressed-Mode-Deactivation-Flag
    Unsigned 32-bit integer
    nbap.Compressed_Mode_Deactivation_Flag
nbap.ConfigurationGenerationID  ConfigurationGenerationID
    Unsigned 32-bit integer
    nbap.ConfigurationGenerationID
nbap.ConstantValue  ConstantValue
    Signed 32-bit integer
    nbap.ConstantValue
nbap.ContinuousPacketConnectivityDTX_DRX_Capability  ContinuousPacketConnectivity
    Unsigned 32-bit integer
    nbap.ContinuousPacketConnectivityDTX_DRX_Capability
nbap.ContinuousPacketConnectivityDTX_DRX_Information  ContinuousPacketConnectivity
    No value
    nbap.ContinuousPacketConnectivityDTX_DRX_Information
nbap.ContinuousPacketConnectivityHS_SCCH_less_Capability  ContinuousPacketConnec
    Unsigned 32-bit integer
    nbap.ContinuousPacketConnectivityHS_SCCH_less_Capability
nbap.ContinuousPacketConnectivityHS_SCCH_less_Information  ContinuousPacketConne
    Unsigned 32-bit integer
    nbap.ContinuousPacketConnectivityHS_SCCH_less_Information
nbap.ContinuousPacketConnectivityHS_SCCH_less_Information_Response  ContinuousPa
    No value
    nbap.ContinuousPacketConnectivityHS_SCCH_less_Information_Response
nbap.ContinuousPacketConnectivityHS_SCCH_less_Information_item  Item
    No value
    nbap.ContinuousPacketConnectivityHS_SCCH_less_InformationItem

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```
nbap.ControlGAP ControlGAP
    Unsigned 32-bit integer
    nbap.ControlGAP

nbap.CriticalityDiagnostics CriticalityDiagnostics
    No value
    nbap.CriticalityDiagnostics

nbap.CriticalityDiagnostics_IE_List_item Item
    No value
    nbap.CriticalityDiagnostics_IE_List_item

nbap.DCH_DeleteList_RL_ReconfPrepFDD DCH-DeleteList-RL-ReconfPrepFDD
    Unsigned 32-bit integer
    nbap.DCH_DeleteList_RL_ReconfPrepFDD

nbap.DCH_DeleteList_RL_ReconfPrepFDD_item Item
    No value
    nbap.DCH_DeleteItem_RL_ReconfPrepFDD

nbap.DCH_DeleteList_RL_ReconfPrepTDD DCH-DeleteList-RL-ReconfPrepTDD
    Unsigned 32-bit integer
    nbap.DCH_DeleteList_RL_ReconfPrepTDD

nbap.DCH_DeleteList_RL_ReconfPrepTDD_item Item
    No value
    nbap.DCH_DeleteItem_RL_ReconfPrepTDD

nbap.DCH_DeleteList_RL_ReconfRqstFDD DCH-DeleteList-RL-ReconfRqstFDD
    Unsigned 32-bit integer
    nbap.DCH_DeleteList_RL_ReconfRqstFDD

nbap.DCH_DeleteList_RL_ReconfRqstFDD_item Item
    No value
    nbap.DCH_DeleteItem_RL_ReconfRqstFDD

nbap.DCH_DeleteList_RL_ReconfRqstTDD DCH-DeleteList-RL-ReconfRqstTDD
    Unsigned 32-bit integer
    nbap.DCH_DeleteList_RL_ReconfRqstTDD

nbap.DCH_DeleteList_RL_ReconfRqstTDD_item Item
    No value
    nbap.DCH_DeleteItem_RL_ReconfRqstTDD

nbap.DCH_FDD_Information DCH-FDD-Information
    Unsigned 32-bit integer
    nbap.DCH_FDD_Information

nbap.DCH_FDD_Information_item Item
    No value
    nbap.DCH_FDD_InformationItem

nbap.DCH_Indicator_For_E_DCH_HSDPA_Operation DCH-Indicator-For-E-DCH-HSDPA-Oper
    Unsigned 32-bit integer
    nbap.DCH_Indicator_For_E_DCH_HSDPA_Operation

nbap.DCH_InformationResponse DCH-InformationResponse
    Unsigned 32-bit integer
    nbap.DCH_InformationResponse

nbap.DCH_InformationResponse_item Item
    No value
    nbap.DCH_InformationResponseItem
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nbap.DCH_ModifySpecificInformation_FDD_item  Item
    No value
    nbap.DCH_ModifySpecificItem_FDD
nbap.DCH_ModifySpecificInformation_TDD_item  Item
    No value
    nbap.DCH_ModifySpecificItem_TDD
nbap.DCH_RearrangeList_Bearer_RearrangeInd  DCH-RearrangeList-Bearer-RearrangeIn
    Unsigned 32-bit integer
    nbap.DCH_RearrangeList_Bearer_RearrangeInd
nbap.DCH_RearrangeList_Bearer_RearrangeInd_item  Item
    No value
    nbap.DCH_RearrangeItem_Bearer_RearrangeInd
nbap.DCH_Specific_FDD_InformationList_item  Item
    No value
    nbap.DCH_Specific_FDD_Item
nbap.DCH_Specific_TDD_InformationList_item  Item
    No value
    nbap.DCH_Specific_TDD_Item
nbap.DCH_TDD_Information  DCH-TDD-Information
    Unsigned 32-bit integer
    nbap.DCH_TDD_Information
nbap.DCH_TDD_Information_item  Item
    No value
    nbap.DCH_TDD_InformationItem
nbap.DGANSS_Information_item  Item
    No value
    nbap.DGANSS_InformationItem
nbap.DGANSS_SignalInformation_item  Item
    No value
    nbap.DGANSS_SignalInformationItem
nbap.DLTransmissionBranchLoadValue  DLTransmissionBranchLoadValue
    Unsigned 32-bit integer
    nbap.DLTransmissionBranchLoadValue
nbap.DL_CCTrCH_InformationAddList_RL_ReconfPrepTDD  DL-CCTrCH-InformationAddList
    Unsigned 32-bit integer
    nbap.DL_CCTrCH_InformationAddList_RL_ReconfPrepTDD
nbap.DL_CCTrCH_InformationAddList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.DL_CCTrCH_InformationAddItem_RL_ReconfPrepTDD
nbap.DL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD  DL-CCTrCH-InformationDele
    No value
    nbap.DL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD
nbap.DL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD  DL-CCTrCH-InformationDele
    Unsigned 32-bit integer
    nbap.DL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD
nbap.DL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.DL_CCTrCH_InformationDeleteItem_RL_ReconfPrepTDD

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nbap.DL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD DL-CCTrCH-InformationDele
  Unsigned 32-bit integer
  nbap.DL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD
nbap.DL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.DL_CCTrCH_InformationItem_RL_SetupRqstTDD DL-CCTrCH-InformationItem-RL-Set
  No value
  nbap.DL_CCTrCH_InformationItem_RL_SetupRqstTDD
nbap.DL_CCTrCH_InformationList_RL_AdditionRqstTDD DL-CCTrCH-InformationList-RL-
  Unsigned 32-bit integer
  nbap.DL_CCTrCH_InformationList_RL_AdditionRqstTDD
nbap.DL_CCTrCH_InformationList_RL_AdditionRqstTDD_item Item
  No value
  nbap.DL_CCTrCH_InformationItem_RL_AdditionRqstTDD
nbap.DL_CCTrCH_InformationList_RL_SetupRqstTDD DL-CCTrCH-InformationList-RL-Set
  Unsigned 32-bit integer
  nbap.DL_CCTrCH_InformationList_RL_SetupRqstTDD
nbap.DL_CCTrCH_InformationList_RL_SetupRqstTDD_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.DL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD DL-CCTrCH-InformationModi
  No value
  nbap.DL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD
nbap.DL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD DL-CCTrCH-InformationModi
  Unsigned 32-bit integer
  nbap.DL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD
nbap.DL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD_item Item
  No value
  nbap.DL_CCTrCH_InformationModifyItem_RL_ReconfPrepTDD
nbap.DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD DL-CCTrCH-InformationModi
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  nbap.DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD
nbap.DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.DL_Code_768_InformationModifyList_PSCH_ReconfRqst_item Item
  No value
  nbap.DL_Code_768_InformationModifyItem_PSCH_ReconfRqst
nbap.DL_Code_768_InformationModify_ModifyList_RL_ReconfPrepTDD_item Item
  No value
  nbap.DL_Code_768_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.DL_Code_InformationAddList_768_PSCH_ReconfRqst_item Item
  No value
  nbap.DL_Code_InformationAddItem_768_PSCH_ReconfRqst
nbap.DL_Code_InformationAddList_LCR_PSCH_ReconfRqst_item Item
  No value
  nbap.DL_Code_InformationAddItem_LCR_PSCH_ReconfRqst

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nbap.DL_Code_InformationAddList_PSCH_ReconfRqst_item  Item
    No value
    nbap.DL_Code_InformationAddItem_PSCH_ReconfRqst
nbap.DL_Code_InformationModifyList_PSCH_ReconfRqst_item  Item
    No value
    nbap.DL_Code_InformationModifyItem_PSCH_ReconfRqst
nbap.DL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.DL_Code_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.DL_Code_LCR_InformationModifyList_PSCH_ReconfRqst_item  Item
    No value
    nbap.DL_Code_LCR_InformationModifyItem_PSCH_ReconfRqst
nbap.DL_Code_LCR_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.DL_Code_LCR_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.DL_DPCH_768_InformationAddList_RL_ReconfPrepTDD  DL-DPCH-768-InformationAdd
    No value
    nbap.DL_DPCH_768_InformationAddList_RL_ReconfPrepTDD
nbap.DL_DPCH_768_InformationModify_AddList_RL_ReconfPrepTDD  DL-DPCH-768-Informa
    No value
    nbap.DL_DPCH_768_InformationModify_AddList_RL_ReconfPrepTDD
nbap.DL_DPCH_768_Information_RL_SetupRqstTDD  DL-DPCH-768-Information-RL-SetupRq
    No value
    nbap.DL_DPCH_768_Information_RL_SetupRqstTDD
nbap.DL_DPCH_InformationAddItem_RL_ReconfPrepTDD  DL-DPCH-InformationAddItem-RL-
    No value
    nbap.DL_DPCH_InformationAddItem_RL_ReconfPrepTDD
nbap.DL_DPCH_InformationItem_768_RL_AdditionRqstTDD  DL-DPCH-InformationItem-768
    No value
    nbap.DL_DPCH_InformationItem_768_RL_AdditionRqstTDD
nbap.DL_DPCH_InformationItem_LCR_RL_AdditionRqstTDD  DL-DPCH-InformationItem-LCR
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    nbap.DL_DPCH_InformationItem_LCR_RL_AdditionRqstTDD
nbap.DL_DPCH_InformationItem_RL_AdditionRqstTDD  DL-DPCH-InformationItem-RL-Addi
    No value
    nbap.DL_DPCH_InformationItem_RL_AdditionRqstTDD
nbap.DL_DPCH_InformationItem_RL_SetupRqstTDD  DL-DPCH-InformationItem-RL-SetupRq
    No value
    nbap.DL_DPCH_InformationItem_RL_SetupRqstTDD
nbap.DL_DPCH_InformationModify_AddItem_RL_ReconfPrepTDD  DL-DPCH-InformationModi
    No value
    nbap.DL_DPCH_InformationModify_AddItem_RL_ReconfPrepTDD
nbap.DL_DPCH_InformationModify_DeleteListIE_RL_ReconfPrepTDD  DL-DPCH-Informatio
    Unsigned 32-bit integer
    nbap.DL_DPCH_InformationModify_DeleteListIE_RL_ReconfPrepTDD
nbap.DL_DPCH_InformationModify_DeleteListIE_RL_ReconfPrepTDD_item  Item
    No value
    nbap.DL_DPCH_InformationModify_DeleteItem_RL_ReconfPrepTDD

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nbap.DL_DPCH_InformationModify_ModifyItem_RL_ReconfPrepTDD  DL-DPCH-InformationM
  No value
  nbap.DL_DPCH_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.DL_DPCH_Information_RL_ReconfPrepFDD  DL-DPCH-Information-RL-ReconfPrepFDD
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  nbap.DL_DPCH_Information_RL_ReconfPrepFDD
nbap.DL_DPCH_Information_RL_ReconfRqstFDD  DL-DPCH-Information-RL-ReconfRqstFDD
  No value
  nbap.DL_DPCH_Information_RL_ReconfRqstFDD
nbap.DL_DPCH_Information_RL_SetupRqstFDD  DL-DPCH-Information-RL-SetupRqstFDD
  No value
  nbap.DL_DPCH_Information_RL_SetupRqstFDD
nbap.DL_DPCH_LCR_InformationAddList_RL_ReconfPrepTDD  DL-DPCH-LCR-InformationAdd
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  nbap.DL_DPCH_LCR_InformationAddList_RL_ReconfPrepTDD
nbap.DL_DPCH_LCR_InformationModify_AddList_RL_ReconfPrepTDD  DL-DPCH-LCR-Inforna
  No value
  nbap.DL_DPCH_LCR_InformationModify_AddList_RL_ReconfPrepTDD
nbap.DL_DPCH_LCR_InformationModify_ModifyList_RL_ReconfRqstTDD  DL-DPCH-LCR-Info
  No value
  nbap.DL_DPCH_LCR_InformationModify_ModifyList_RL_ReconfRqstTDD
nbap.DL_DPCH_LCR_Information_RL_SetupRqstTDD  DL-DPCH-LCR-Information-RL-SetupRq
  No value
  nbap.DL_DPCH_LCR_Information_RL_SetupRqstTDD
nbap.DL_DPCH_Power_Information_RL_ReconfPrepFDD  DL-DPCH-Power-Information-RL-Re
  No value
  nbap.DL_DPCH_Power_Information_RL_ReconfPrepFDD
nbap.DL_DPCH_TimingAdjustment  DL-DPCH-TimingAdjustment
  Unsigned 32-bit integer
  nbap.DL_DPCH_TimingAdjustment
nbap.DL_HS_PDSCH_Codelist_768_PSCH_ReconfRqst_item  Item
  Unsigned 32-bit integer
  nbap.TDD_ChannelisationCode768
nbap.DL_HS_PDSCH_Codelist_LCR_PSCH_ReconfRqst_item  Item
  Unsigned 32-bit integer
  nbap.TDD_ChannelisationCode
nbap.DL_HS_PDSCH_Codelist_PSCH_ReconfRqst_item  Item
  Unsigned 32-bit integer
  nbap.TDD_ChannelisationCode
nbap.DL_HS_PDSCH_Timeslot_Information_768_PSCH_ReconfRqst  DL-HS-PDSCH-Timeslot-
  Unsigned 32-bit integer
  nbap.DL_HS_PDSCH_Timeslot_Information_768_PSCH_ReconfRqst
nbap.DL_HS_PDSCH_Timeslot_Information_768_PSCH_ReconfRqst_item  Item
  No value
  nbap.DL_HS_PDSCH_Timeslot_InformationItem_768_PSCH_ReconfRqst
nbap.DL_HS_PDSCH_Timeslot_Information_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.DL_HS_PDSCH_Timeslot_InformationItem_LCR_PSCH_ReconfRqst

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nbap.DL_HS_PDSCH_Timeslot_Information_PSCH_ReconfRqst_item  Item
    No value
    nbap.DL_HS_PDSCH_Timeslot_InformationItem_PSCH_ReconfRqst
nbap.DL_Power  DL-Power
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    nbap.DL_Power
nbap.DL_PowerBalancing_ActivationIndicator  DL-PowerBalancing-ActivationIndicator
    Unsigned 32-bit integer
    nbap.DL_PowerBalancing_ActivationIndicator
nbap.DL_PowerBalancing_Information  DL-PowerBalancing-Information
    No value
    nbap.DL_PowerBalancing_Information
nbap.DL_PowerBalancing_UpdatedIndicator  DL-PowerBalancing-UpdatedIndicator
    Unsigned 32-bit integer
    nbap.DL_PowerBalancing_UpdatedIndicator
nbap.DL_PowerControlRequest  DL-PowerControlRequest
    No value
    nbap.DL_PowerControlRequest
nbap.DL_PowerTimeslotControlRequest  DL-PowerTimeslotControlRequest
    No value
    nbap.DL_PowerTimeslotControlRequest
nbap.DL_ReferencePowerInformationItem_DL_PC_Rqst  DL-ReferencePowerInformationItem
    No value
    nbap.DL_ReferencePowerInformationItem_DL_PC_Rqst
nbap.DL_ReferencePowerInformationList_DL_PC_Rqst  DL-ReferencePowerInformationList
    Unsigned 32-bit integer
    nbap.DL_ReferencePowerInformationList_DL_PC_Rqst
nbap.DL_ReferencePowerInformationList_DL_PC_Rqst_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.DL_ReferencePowerInformationList_item  Item
    No value
    nbap.DL_ReferencePowerInformationItem
nbap.DL_ScramblingCode  DL-ScramblingCode
    Unsigned 32-bit integer
    nbap.DL_ScramblingCode
nbap.DL_TPC_Pattern01Count  DL-TPC-Pattern01Count
    Unsigned 32-bit integer
    nbap.DL_TPC_Pattern01Count
nbap.DL_Timeslot768_Information_item  Item
    No value
    nbap.DL_Timeslot768_InformationItem
nbap.DL_TimeslotISCPInfo  DL-TimeslotISCPInfo
    Unsigned 32-bit integer
    nbap.DL_TimeslotISCPInfo
nbap.DL_TimeslotISCPInfoLCR  DL-TimeslotISCPInfoLCR
    Unsigned 32-bit integer
    nbap.DL_TimeslotISCPInfoLCR

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nbap.DL_TimeslotISCPInfoLCR_item  Item
    No value
    nbap.DL_TimeslotISCPInfoItemLCR
nbap.DL_TimeslotISCPInfo_item  Item
    No value
    nbap.DL_TimeslotISCPInfoItem
nbap.DL_TimeslotLCR_Information_item  Item
    No value
    nbap.DL_TimeslotLCR_InformationItem
nbap.DL_Timeslot_768_InformationModifyList_PSCH_ReconfRqst_item  Item
    No value
    nbap.DL_Timeslot_768_InformationModifyItem_PSCH_ReconfRqst
nbap.DL_Timeslot_768_InformationModify_ModifyList_RL_ReconfPrepTDD  DL-Timeslot-
    Unsigned 32-bit integer
    nbap.DL_Timeslot_768_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.DL_Timeslot_768_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.DL_Timeslot_768_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.DL_Timeslot_InformationAddList_768_PSCH_ReconfRqst_item  Item
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    nbap.DL_Timeslot_InformationAddItem_768_PSCH_ReconfRqst
nbap.DL_Timeslot_InformationAddList_LCR_PSCH_ReconfRqst_item  Item
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    nbap.DL_Timeslot_InformationAddItem_LCR_PSCH_ReconfRqst
nbap.DL_Timeslot_InformationAddList_PSCH_ReconfRqst_item  Item
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    nbap.DL_Timeslot_InformationAddItem_PSCH_ReconfRqst
nbap.DL_Timeslot_InformationModifyList_PSCH_ReconfRqst_item  Item
    No value
    nbap.DL_Timeslot_InformationModifyItem_PSCH_ReconfRqst
nbap.DL_Timeslot_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
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    nbap.DL_Timeslot_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.DL_Timeslot_Information_item  Item
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    nbap.DL_Timeslot_InformationItem
nbap.DL_Timeslot_LCR_InformationModifyList_PSCH_ReconfRqst_item  Item
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    nbap.DL_Timeslot_LCR_InformationModifyItem_PSCH_ReconfRqst
nbap.DL_Timeslot_LCR_InformationModify_ModifyList_RL_ReconfPrepTDD  DL-Timeslot-
    Unsigned 32-bit integer
    nbap.DL_Timeslot_LCR_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.DL_Timeslot_LCR_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
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    nbap.DL_Timeslot_LCR_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.DL_Timeslot_LCR_InformationModify_ModifyList_RL_ReconfRqstTDD_item  Item
    No value
    nbap.DL_Timeslot_LCR_InformationModify_ModifyItem_RL_ReconfRqstTDD

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nbap.DPCH_ID768 DPCH-ID768
  Unsigned 32-bit integer
  nbap.DPCH_ID768

nbap.DPC_Mode DPC-Mode
  Unsigned 32-bit integer
  nbap.DPC_Mode

nbap.DSCH_InformationResponse DSCH-InformationResponse
  Unsigned 32-bit integer
  nbap.DSCH_InformationResponse

nbap.DSCH_InformationResponse_item Item
  No value
  nbap.DSCH_InformationResponseItem

nbap.DSCH_Information_DeleteList_RL_ReconfPrepTDD DSCH-Information-DeleteList-R
  Unsigned 32-bit integer
  nbap.DSCH_Information_DeleteList_RL_ReconfPrepTDD

nbap.DSCH_Information_DeleteList_RL_ReconfPrepTDD_item Item
  No value
  nbap.DSCH_Information_DeleteItem_RL_ReconfPrepTDD

nbap.DSCH_Information_ModifyList_RL_ReconfPrepTDD DSCH-Information-ModifyList-R
  Unsigned 32-bit integer
  nbap.DSCH_Information_ModifyList_RL_ReconfPrepTDD

nbap.DSCH_Information_ModifyList_RL_ReconfPrepTDD_item Item
  No value
  nbap.DSCH_Information_ModifyItem_RL_ReconfPrepTDD

nbap.DSCH_RearrangeList_Bearer_RearrangeInd DSCH-RearrangeList-Bearer-Rearrange
  Unsigned 32-bit integer
  nbap.DSCH_RearrangeList_Bearer_RearrangeInd

nbap.DSCH_RearrangeList_Bearer_RearrangeInd_item Item
  No value
  nbap.DSCH_RearrangeItem_Bearer_RearrangeInd

nbap.DSCH_TDD_Information DSCH-TDD-Information
  Unsigned 32-bit integer
  nbap.DSCH_TDD_Information

nbap.DSCH_TDD_Information_item Item
  No value
  nbap.DSCH_TDD_InformationItem

nbap.DedicatedChannelsCapacityConsumptionLaw_item Item
  No value
  nbap.DedicatedChannelsCapacityConsumptionLaw_item

nbap.DedicatedMeasurementFailureIndication DedicatedMeasurementFailureIndicatio
  No value
  nbap.DedicatedMeasurementFailureIndication

nbap.DedicatedMeasurementInitiationFailure DedicatedMeasurementInitiationFailur
  No value
  nbap.DedicatedMeasurementInitiationFailure

nbap.DedicatedMeasurementInitiationRequest DedicatedMeasurementInitiationReques
  No value
  nbap.DedicatedMeasurementInitiationRequest

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nbap.DedicatedMeasurementInitiationResponse  DedicatedMeasurementInitiationRespo
  No value
  nbap.DedicatedMeasurementInitiationResponse
nbap.DedicatedMeasurementObjectType_DM_Rprt  DedicatedMeasurementObjectType-DM-R
  Unsigned 32-bit integer
  nbap.DedicatedMeasurementObjectType_DM_Rprt
nbap.DedicatedMeasurementObjectType_DM_Rqst  DedicatedMeasurementObjectType-DM-R
  Unsigned 32-bit integer
  nbap.DedicatedMeasurementObjectType_DM_Rqst
nbap.DedicatedMeasurementObjectType_DM_Rsp  DedicatedMeasurementObjectType-DM-Rs
  Unsigned 32-bit integer
  nbap.DedicatedMeasurementObjectType_DM_Rsp
nbap.DedicatedMeasurementReport  DedicatedMeasurementReport
  No value
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nbap.DedicatedMeasurementTerminationRequest  DedicatedMeasurementTerminationRequ
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  nbap.DedicatedMeasurementTerminationRequest
nbap.DedicatedMeasurementType  DedicatedMeasurementType
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  nbap.DedicatedMeasurementType
nbap.DelayedActivation  DelayedActivation
  Unsigned 32-bit integer
  nbap.DelayedActivation
nbap.DelayedActivationInformationList_RL_ActivationCmdFDD  DelayedActivationInfo
  Unsigned 32-bit integer
  nbap.DelayedActivationInformationList_RL_ActivationCmdFDD
nbap.DelayedActivationInformationList_RL_ActivationCmdFDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.DelayedActivationInformationList_RL_ActivationCmdTDD  DelayedActivationInfo
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  nbap.DelayedActivationInformationList_RL_ActivationCmdTDD
nbap.DelayedActivationInformationList_RL_ActivationCmdTDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.DelayedActivationInformation_RL_ActivationCmdFDD  DelayedActivationInformat
  No value
  nbap.DelayedActivationInformation_RL_ActivationCmdFDD
nbap.DelayedActivationInformation_RL_ActivationCmdTDD  DelayedActivationInformat
  No value
  nbap.DelayedActivationInformation_RL_ActivationCmdTDD
nbap.Delete_From_E_AGCH_Resource_Pool_PSCH_ReconfRqst  Delete-From-E-AGCH-Resour
  Unsigned 32-bit integer
  nbap.Delete_From_E_AGCH_Resource_Pool_PSCH_ReconfRqst
nbap.Delete_From_E_AGCH_Resource_Pool_PSCH_ReconfRqst_item  Item
  No value
  nbap.Delete_From_E_AGCH_Resource_PoolItem_PSCH_ReconfRqst

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nbap.Delete_From_E_HICH_Resource_Pool_PSCH_ReconfRqst  Delete-From-E-HICH-Resour
  Unsigned 32-bit integer
  nbap.Delete_From_E_HICH_Resource_Pool_PSCH_ReconfRqst
nbap.Delete_From_E_HICH_Resource_Pool_PSCH_ReconfRqst_item  Item
  No value
  nbap.Delete_From_E_HICH_Resource_PoolItem_PSCH_ReconfRqst
nbap.Delete_From_HS_SCCH_Resource_PoolExt_PSCH_ReconfRqst  Delete-From-HS-SCCH-R
  Unsigned 32-bit integer
  nbap.Delete_From_HS_SCCH_Resource_PoolExt_PSCH_ReconfRqst
nbap.Delete_From_HS_SCCH_Resource_PoolExt_PSCH_ReconfRqst_item  Item
  No value
  nbap.Delete_From_HS_SCCH_Resource_PoolItem_PSCH_ReconfRqst
nbap.Delete_From_HS_SCCH_Resource_Pool_PSCH_ReconfRqst  Delete-From-HS-SCCH-Reso
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  nbap.Delete_From_HS_SCCH_Resource_Pool_PSCH_ReconfRqst
nbap.Delete_From_HS_SCCH_Resource_Pool_PSCH_ReconfRqst_item  Item
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  nbap.Delete_From_HS_SCCH_Resource_PoolItem_PSCH_ReconfRqst
nbap.DwPCH_LCR_Information_Cell_ReconfRqstTDD  DwPCH-LCR-Information-Cell-Reconf
  No value
  nbap.DwPCH_LCR_Information_Cell_ReconfRqstTDD
nbap.DwPCH_LCR_Information_Cell_SetupRqstTDD  DwPCH-LCR-Information-Cell-SetupRq
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  nbap.DwPCH_LCR_Information_Cell_SetupRqstTDD
nbap.DwPCH_LCR_Information_ResourceStatusInd  DwPCH-LCR-Information-ResourceStat
  No value
  nbap.DwPCH_LCR_Information_ResourceStatusInd
nbap.DwPCH_Power  DwPCH-Power
  Signed 32-bit integer
  nbap.DwPCH_Power
nbap.E_AGCH_FDD_Code_Information  E-AGCH-FDD-Code-Information
  Unsigned 32-bit integer
  nbap.E_AGCH_FDD_Code_Information
nbap.E_AGCH_FDD_Code_List_item  Item
  Unsigned 32-bit integer
  nbap.FDD_DL_ChannelisationCodeNumber
nbap.E_AGCH_InformationModify_768_PSCH_ReconfRqst_item  Item
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  nbap.E_AGCH_InformationModifyItem_768_PSCH_ReconfRqst
nbap.E_AGCH_InformationModify_LCR_PSCH_ReconfRqst_item  Item
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nbap.E_AGCH_InformationModify_PSCH_ReconfRqst_item  Item
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nbap.E_AGCH_Information_768_PSCH_ReconfRqst_item  Item
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nbap.E_AGCH_Information_LCR_PSCH_ReconfRqst_item  Item
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  nbap.E_AGCH_InformationItem_LCR_PSCH_ReconfRqst
nbap.E_AGCH_Information_PSCH_ReconfRqst_item  Item
  No value
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nbap.E_AGCH_Specific_InformationRespListTDD_item  Item
  No value
  nbap.E_AGCH_Specific_InformationResp_ItemTDD
nbap.E_DCHCapacityConsumptionLaw  E-DCHCapacityConsumptionLaw
  No value
  nbap.E_DCHCapacityConsumptionLaw
nbap.E_DCHProvidedBitRate  E-DCHProvidedBitRate
  Unsigned 32-bit integer
  nbap.E_DCHProvidedBitRate
nbap.E_DCHProvidedBitRate_item  Item
  No value
  nbap.E_DCHProvidedBitRate_Item
nbap.E_DCH_768_Information  E-DCH-768-Information
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  nbap.E_DCH_768_Information
nbap.E_DCH_768_Information_Reconfig  E-DCH-768-Information-Reconfig
  No value
  nbap.E_DCH_768_Information_Reconfig
nbap.E_DCH_Capability  E-DCH-Capability
  Unsigned 32-bit integer
  nbap.E_DCH_Capability
nbap.E_DCH_FDD_DL_Control_Channel_Information  E-DCH-FDD-DL-Control-Channel-Info
  No value
  nbap.E_DCH_FDD_DL_Control_Channel_Information
nbap.E_DCH_FDD_Information  E-DCH-FDD-Information
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  nbap.E_DCH_FDD_Information
nbap.E_DCH_FDD_Information_Response  E-DCH-FDD-Information-Response
  No value
  nbap.E_DCH_FDD_Information_Response
nbap.E_DCH_FDD_Information_to_Modify  E-DCH-FDD-Information-to-Modify
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  nbap.E_DCH_FDD_Information_to_Modify
nbap.E_DCH_FDD_Update_Information  E-DCH-FDD-Update-Information
  No value
  nbap.E_DCH_FDD_Update_Information
nbap.E_DCH_HARQ_Combining_Capability  E-DCH-HARQ-Combining-Capability
  Unsigned 32-bit integer
  nbap.E_DCH_HARQ_Combining_Capability
nbap.E_DCH_Information  E-DCH-Information
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  nbap.E_DCH_Information
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nbap.E_DCH_Information_Reconfig  E-DCH-Information-Reconfig
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nbap.E_DCH_Information_Response  E-DCH-Information-Response
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nbap.E_DCH_LCR_Information  E-DCH-LCR-Information
    No value
    nbap.E_DCH_LCR_Information
nbap.E_DCH_LCR_Information_Reconfig  E-DCH-LCR-Information-Reconfig
    No value
    nbap.E_DCH_LCR_Information_Reconfig
nbap.E_DCH_LogicalChannelInformation_item  Item
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nbap.E_DCH_LogicalChannelToDelete_item  Item
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    nbap.E_DCH_LogicalChannelToDeleteItem
nbap.E_DCH_LogicalChannelToModify_item  Item
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    nbap.E_DCH_LogicalChannelToModifyItem
nbap.E_DCH_MACdFlow_Specific_InfoList_item  Item
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nbap.E_DCH_MACdFlow_Specific_InfoList_to_Modify_item  Item
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nbap.E_DCH_MACdFlow_Specific_UpdateInformation_item  Item
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nbap.E_DCH_MACdFlows_Information  E-DCH-MACdFlows-Information
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nbap.E_DCH_MACdFlows_Information_TDD_item  Item
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nbap.E_DCH_MACdFlows_to_Delete  E-DCH-MACdFlows-to-Delete
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    nbap.E_DCH_MACdFlows_to_Delete
nbap.E_DCH_MACdFlows_to_Delete_item  Item
    No value
    nbap.E_DCH_MACdFlow_to_Delete_Item
nbap.E_DCH_MACdPDU_SizeList_item  Item
    No value
    nbap.E_DCH_MACdPDU_SizeListItem
```

```
nbap.E_DCH_MACdPDU_SizeToModifyList_item  Item
  No value
  nbap.E_DCH_MACdPDU_SizeListItem

nbap.E_DCH_Non_serving_Relative_Grant_Down_Commands  E-DCH-Non-serving-Relative-
  Unsigned 32-bit integer
  nbap.E_DCH_Non_serving_Relative_Grant_Down_Commands

nbap.E_DCH_PowerOffset_for_SchedulingInfo  E-DCH-PowerOffset-for-SchedulingInfo
  Unsigned 32-bit integer
  nbap.E_DCH_PowerOffset_for_SchedulingInfo

nbap.E_DCH_QPSK_RefBetaInfo_item  Item
  No value
  nbap.E_DCH_RefBeta_Item

nbap.E_DCH_RL_Indication  E-DCH-RL-Indication
  Unsigned 32-bit integer
  nbap.E_DCH_RL_Indication

nbap.E_DCH_RL_InformationList_Rsp_item  Item
  No value
  nbap.E_DCH_RL_InformationList_Rsp_Item

nbap.E_DCH_RearrangeList_Bearer_RearrangeInd  E-DCH-RearrangeList-Bearer-Rearran
  Unsigned 32-bit integer
  nbap.E_DCH_RearrangeList_Bearer_RearrangeInd

nbap.E_DCH_RearrangeList_Bearer_RearrangeInd_item  Item
  No value
  nbap.E_DCH_RearrangeItem_Bearer_RearrangeInd

nbap.E_DCH_Resources_Information_AuditRsp  E-DCH-Resources-Information-AuditRsp
  No value
  nbap.E_DCH_Resources_Information_AuditRsp

nbap.E_DCH_Resources_Information_ResourceStatusInd  E-DCH-Resources-Information-
  No value
  nbap.E_DCH_Resources_Information_ResourceStatusInd

nbap.E_DCH_SF_Capability  E-DCH-SF-Capability
  Unsigned 32-bit integer
  nbap.E_DCH_SF_Capability

nbap.E_DCH_SF_allocation_item  Item
  No value
  nbap.E_DCH_SF_allocation_item

nbap.E_DCH_Serving_Cell_Change_Info_Response  E-DCH-Serving-Cell-Change-Info-Res
  No value
  nbap.E_DCH_Serving_Cell_Change_Info_Response

nbap.E_DCH_TDD_CapacityConsumptionLaw  E-DCH-TDD-CapacityConsumptionLaw
  No value
  nbap.E_DCH_TDD_CapacityConsumptionLaw

nbap.E_DCH_TDD_Information_to_Modify_List_item  Item
  No value
  nbap.E_DCH_MACdFlow_ModifyTDDItem

nbap.E_DCH_TDD_MACdFlow_Specific_InformationResp_item  Item
  No value
  nbap.E_DCH_TDD_MACdFlow_Specific_InformationResp_Item
```

```

nbap.E_DCH_TTI2ms_Capability  E-DCH-TTI2ms-Capability
  Boolean
  nbap.E_DCH_TTI2ms_Capability
nbap.E_DCH_sixteenQAM_RefBetaInfo_item  Item
  No value
  nbap.E_DCH_RefBeta_Item
nbap.E_DPCH_Information_RL_AdditionReqFDD  E-DPCH-Information-RL-AdditionReqFDD
  No value
  nbap.E_DPCH_Information_RL_AdditionReqFDD
nbap.E_DPCH_Information_RL_ReconfPrepFDD  E-DPCH-Information-RL-ReconfPrepFDD
  No value
  nbap.E_DPCH_Information_RL_ReconfPrepFDD
nbap.E_DPCH_Information_RL_ReconfRqstFDD  E-DPCH-Information-RL-ReconfRqstFDD
  No value
  nbap.E_DPCH_Information_RL_ReconfRqstFDD
nbap.E_DPCH_Information_RL_SetupRqstFDD  E-DPCH-Information-RL-SetupRqstFDD
  No value
  nbap.E_DPCH_Information_RL_SetupRqstFDD
nbap.E_HICH_InformationModify_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.E_HICH_InformationModifyItem_LCR_PSCH_ReconfRqst
nbap.E_HICH_Information_768_PSCH_ReconfRqst  E-HICH-Information-768-PSCH-ReconfRqst
  No value
  nbap.E_HICH_Information_768_PSCH_ReconfRqst
nbap.E_HICH_Information_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.E_HICH_InformationItem_LCR_PSCH_ReconfRqst
nbap.E_HICH_Information_PSCH_ReconfRqst  E-HICH-Information-PSCH-ReconfRqst
  No value
  nbap.E_HICH_Information_PSCH_ReconfRqst
nbap.E_HICH_TimeOffset  E-HICH-TimeOffset
  Unsigned 32-bit integer
  nbap.E_HICH_TimeOffset
nbap.E_HICH_TimeOffsetLCR  E-HICH-TimeOffsetLCR
  Unsigned 32-bit integer
  nbap.E_HICH_TimeOffsetLCR
nbap.E_PUCH_Codelist_LCR_item  Item
  Unsigned 32-bit integer
  nbap.TDD_ChannelisationCode
nbap.E_PUCH_Information_768_PSCH_ReconfRqst  E-PUCH-Information-768-PSCH-ReconfRqst
  No value
  nbap.E_PUCH_Information_768_PSCH_ReconfRqst
nbap.E_PUCH_Information_LCR_PSCH_ReconfRqst  E-PUCH-Information-LCR-PSCH-ReconfRqst
  No value
  nbap.E_PUCH_Information_LCR_PSCH_ReconfRqst
nbap.E_PUCH_Information_PSCH_ReconfRqst  E-PUCH-Information-PSCH-ReconfRqst
  No value
  nbap.E_PUCH_Information_PSCH_ReconfRqst

```

```
nbap.E_PUCH_Timeslot_InfoLCR_item  Item
    No value
    nbap.E_PUCH_Timeslot_Item_InfoLCR
nbap.E_PUCH_Timeslot_Info_item  Item
    Unsigned 32-bit integer
    nbap.TimeSlot
nbap.E_RGCH_E_HICH_FDD_Code_Information  E-RGCH-E-HICH-FDD-Code-Information
    Unsigned 32-bit integer
    nbap.E_RGCH_E_HICH_FDD_Code_Information
nbap.E_RGCH_E_HICH_FDD_Code_List_item  Item
    Unsigned 32-bit integer
    nbap.FDD_DL_ChannelisationCodeNumber
nbap.E_RUCCH_768_InformationList_AuditRsp  E-RUCCH-768-InformationList-AuditRsp
    Unsigned 32-bit integer
    nbap.E_RUCCH_768_InformationList_AuditRsp
nbap.E_RUCCH_768_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.E_RUCCH_768_InformationList_ResourceStatusInd  E-RUCCH-768-InformationList-
    Unsigned 32-bit integer
    nbap.E_RUCCH_768_InformationList_ResourceStatusInd
nbap.E_RUCCH_768_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.E_RUCCH_InformationList_AuditRsp  E-RUCCH-InformationList-AuditRsp
    Unsigned 32-bit integer
    nbap.E_RUCCH_InformationList_AuditRsp
nbap.E_RUCCH_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.E_RUCCH_InformationList_ResourceStatusInd  E-RUCCH-InformationList-Resource
    Unsigned 32-bit integer
    nbap.E_RUCCH_InformationList_ResourceStatusInd
nbap.E_RUCCH_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.End_Of_Audit_Sequence_Indicator  End-Of-Audit-Sequence-Indicator
    Unsigned 32-bit integer
    nbap.End_Of_Audit_Sequence_Indicator
nbap.Enhanced_FACH_Capability  Enhanced-FACH-Capability
    Unsigned 32-bit integer
    nbap.Enhanced_FACH_Capability
nbap.Enhanced_PCH_Capability  Enhanced-PCH-Capability
    Unsigned 32-bit integer
    nbap.Enhanced_PCH_Capability
nbap.ErrorIndication  ErrorIndication
    No value
    nbap.ErrorIndication
```

```

nbap.ExtendedPropagationDelay  ExtendedPropagationDelay
    Unsigned 32-bit integer
    nbap.ExtendedPropagationDelay

nbap.Extended_HS_SCCH_ID  Extended-HS-SCCH-ID
    Unsigned 32-bit integer
    nbap.Extended_HS_SCCH_ID

nbap.Extended_HS_SICH_ID  Extended-HS-SICH-ID
    Unsigned 32-bit integer
    nbap.Extended_HS_SICH_ID

nbap.Extended_RNC_ID  Extended-RNC-ID
    Unsigned 32-bit integer
    nbap.Extended_RNC_ID

nbap.Extended_Round_Trip_Time_Value  Extended-Round-Trip-Time-Value
    Unsigned 32-bit integer
    nbap.Extended_Round_Trip_Time_Value

nbap.FACH_CommonTransportChannel_InformationResponse  FACH-CommonTransportChannel
    Unsigned 32-bit integer
    nbap.FACH_CommonTransportChannel_InformationResponse

nbap.FACH_CommonTransportChannel_InformationResponse_item  Item
    No value
    nbap.CommonTransportChannel_InformationResponse

nbap.FACH_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container

nbap.FACH_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container

nbap.FACH_ParametersListIE_CTCH_ReconfRqstFDD  FACH-ParametersListIE-CTCH-Reconf
    Unsigned 32-bit integer
    nbap.FACH_ParametersListIE_CTCH_ReconfRqstFDD

nbap.FACH_ParametersListIE_CTCH_ReconfRqstFDD_item  Item
    No value
    nbap.FACH_ParametersItem_CTCH_ReconfRqstFDD

nbap.FACH_ParametersListIE_CTCH_SetupRqstFDD  FACH-ParametersListIE-CTCH-SetupRq
    Unsigned 32-bit integer
    nbap.FACH_ParametersListIE_CTCH_SetupRqstFDD

nbap.FACH_ParametersListIE_CTCH_SetupRqstFDD_item  Item
    No value
    nbap.FACH_ParametersItem_CTCH_SetupRqstFDD

nbap.FACH_ParametersListIE_CTCH_SetupRqstTDD  FACH-ParametersListIE-CTCH-SetupRq
    Unsigned 32-bit integer
    nbap.FACH_ParametersListIE_CTCH_SetupRqstTDD

nbap.FACH_ParametersListIE_CTCH_SetupRqstTDD_item  Item
    No value
    nbap.FACH_ParametersItem_CTCH_SetupRqstTDD

nbap.FACH_ParametersList_CTCH_ReconfRqstTDD  FACH-ParametersList-CTCH-ReconfRqst
    Unsigned 32-bit integer
    nbap.FACH_ParametersList_CTCH_ReconfRqstTDD

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nbap.FACH_ParametersList_CTCH_ReconfRqstTDD_item  Item
    No value
    nbap.FACH_ParametersItem_CTCH_ReconfRqstTDD
nbap.FDD_DCHs_to_Modify  FDD-DCHs-to-Modify
    Unsigned 32-bit integer
    nbap.FDD_DCHs_to_Modify
nbap.FDD_DCHs_to_Modify_item  Item
    No value
    nbap.FDD_DCHs_to_ModifyItem
nbap.FDD_DL_CodeInformation_item  Item
    No value
    nbap.FDD_DL_CodeInformationItem
nbap.FDD_S_CCPCH_FrameOffset  FDD-S-CCPCH-FrameOffset
    Unsigned 32-bit integer
    nbap.FDD_S_CCPCH_FrameOffset
nbap.FNReportingIndicator  FNReportingIndicator
    Unsigned 32-bit integer
    nbap.FNReportingIndicator
nbap.FPACH_LCR_InformationList_AuditRsp  FPACH-LCR-InformationList-AuditRsp
    Unsigned 32-bit integer
    nbap.FPACH_LCR_InformationList_AuditRsp
nbap.FPACH_LCR_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.FPACH_LCR_InformationList_ResourceStatusInd  FPACH-LCR-InformationList-Reso
    Unsigned 32-bit integer
    nbap.FPACH_LCR_InformationList_ResourceStatusInd
nbap.FPACH_LCR_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.FPACH_LCR_Parameters_CTCH_ReconfRqstTDD  FPACH-LCR-Parameters-CTCH-ReconfRq
    No value
    nbap.FPACH_LCR_Parameters_CTCH_ReconfRqstTDD
nbap.FPACH_LCR_Parameters_CTCH_SetupRqstTDD  FPACH-LCR-Parameters-CTCH-SetupRqst
    No value
    nbap.FPACH_LCR_Parameters_CTCH_SetupRqstTDD
nbap.F_DPCH_Capability  F-DPCH-Capability
    Unsigned 32-bit integer
    nbap.F_DPCH_Capability
nbap.F_DPCH_Information_RL_ReconfPrepFDD  F-DPCH-Information-RL-ReconfPrepFDD
    No value
    nbap.F_DPCH_Information_RL_ReconfPrepFDD
nbap.F_DPCH_Information_RL_SetupRqstFDD  F-DPCH-Information-RL-SetupRqstFDD
    No value
    nbap.F_DPCH_Information_RL_SetupRqstFDD
nbap.F_DPCH_SlotFormat  F-DPCH-SlotFormat
    Unsigned 32-bit integer
    nbap.F_DPCH_SlotFormat

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nbap.F_DPCH_SlotFormatCapability  F-DPCH-SlotFormatCapability
    Unsigned 32-bit integer
    nbap.F_DPCH_SlotFormatCapability

nbap.Fast_Reconfiguration_Mode  Fast-Reconfiguration-Mode
    Unsigned 32-bit integer
    nbap.Fast_Reconfiguration_Mode

nbap.Fast_Reconfiguration_Permission  Fast-Reconfiguration-Permission
    Unsigned 32-bit integer
    nbap.Fast_Reconfiguration_Permission

nbap.GANSS_Clock_Model_item  Item
    No value
    nbap.GANSS_SatelliteClockModelItem

nbap.GANSS_Common_Data  GANSS-Common-Data
    No value
    nbap.GANSS_Common_Data

nbap.GANSS_DataBitAssistanceList_item  Item
    No value
    nbap.GANSS_DataBitAssistanceItem

nbap.GANSS_DataBitAssistanceSgnList_item  Item
    No value
    nbap.GANSS_DataBitAssistanceSgnItem

nbap.GANSS_Data_Bit_Assistance_ReqList_item  Item
    No value
    nbap.GANSS_Data_Bit_Assistance_ReqList_item

nbap.GANSS_GenericDataInfoReqList_item  Item
    No value
    nbap.GANSS_GenericDataInfoReqItem

nbap.GANSS_Generic_Data  GANSS-Generic-Data
    Unsigned 32-bit integer
    nbap.GANSS_Generic_Data

nbap.GANSS_Generic_Data_item  Item
    No value
    nbap.GANSS_Generic_DataItem

nbap.GANSS_Information  GANSS-Information
    No value
    nbap.GANSS_Information

nbap.GANSS_Real_Time_Integrity_item  Item
    No value
    nbap.GANSS_RealTimeInformationItem

nbap.GANSS_Sat_Info_Nav_item  Item
    No value
    nbap.GANSS_Sat_Info_Nav_item

nbap.GANSS_SatelliteInformationKP_item  Item
    No value
    nbap.GANSS_SatelliteInformationKPItem

nbap.GPS_Information_item  Item
    Unsigned 32-bit integer
    nbap.GPS_Information_Item
```



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nbap.GPS_NavigationModel_and_TimeRecovery_item  Item
    No value
    nbap.GPS_NavandRecovery_Item

nbap.HARQ_MemoryPartitioningInfoExtForMIMO_item  Item
    No value
    nbap.HARQ_MemoryPartitioningItem

nbap.HARQ_MemoryPartitioningList_item  Item
    No value
    nbap.HARQ_MemoryPartitioningItem

nbap.HARQ_Preamble_Mode  HARQ-Preamble-Mode
    Unsigned 32-bit integer
    nbap.HARQ_Preamble_Mode

nbap.HARQ_Preamble_Mode_Activation_Indicator  HARQ-Preamble-Mode-Activation-Indi
    Unsigned 32-bit integer
    nbap.HARQ_Preamble_Mode_Activation_Indicator

nbap.HSDPA_And_EDCH_CellPortion_InformationList_PSCH_ReconfRqst  HSDPA-And-EDCH-
    Unsigned 32-bit integer
    nbap.HSDPA_And_EDCH_CellPortion_InformationList_PSCH_ReconfRqst

nbap.HSDPA_And_EDCH_CellPortion_InformationList_PSCH_ReconfRqst_item  Item
    No value
    nbap.HSDPA_And_EDCH_CellPortion_InformationItem_PSCH_ReconfRqst

nbap.HSDPA_Capability  HSDPA-Capability
    Unsigned 32-bit integer
    nbap.HSDPA_Capability

nbap.HSDSCH_Common_System_InformationFDD  HSDSCH-Common-System-InformationFDD
    No value
    nbap.HSDSCH_Common_System_InformationFDD

nbap.HSDSCH_Common_System_Information_ResponseFDD  HSDSCH-Common-System-Informat
    No value
    nbap.HSDSCH_Common_System_Information_ResponseFDD

nbap.HSDSCH_Configured_Indicator  HSDSCH-Configured-Indicator
    Unsigned 32-bit integer
    nbap.HSDSCH_Configured_Indicator

nbap.HSDSCH_FDD_Information  HSDSCH-FDD-Information
    No value
    nbap.HSDSCH_FDD_Information

nbap.HSDSCH_FDD_Information_Response  HSDSCH-FDD-Information-Response
    No value
    nbap.HSDSCH_FDD_Information_Response

nbap.HSDSCH_FDD_Update_Information  HSDSCH-FDD-Update-Information
    No value
    nbap.HSDSCH_FDD_Update_Information

nbap.HSDSCH_Information_to_Modify  HSDSCH-Information-to-Modify
    No value
    nbap.HSDSCH_Information_to_Modify

nbap.HSDSCH_Information_to_Modify_Unsynchronised  HSDSCH-Information-to-Modify-U
    No value
    nbap.HSDSCH_Information_to_Modify_Unsynchronised

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nbap.HSDSCH_Initial_Capacity_Allocation_item  Item
    No value
    nbap.HSDSCH_Initial_Capacity_AllocationItem
nbap.HSDSCH_MACdFlow_Specific_InfoList_item  Item
    No value
    nbap.HSDSCH_MACdFlow_Specific_InfoItem
nbap.HSDSCH_MACdFlow_Specific_InfoList_to_Modify_item  Item
    No value
    nbap.HSDSCH_MACdFlow_Specific_InfoItem_to_Modify
nbap.HSDSCH_MACdFlow_Specific_InformationResp_item  Item
    No value
    nbap.HSDSCH_MACdFlow_Specific_InformationResp_Item
nbap.HSDSCH_MACdFlows_Information  HSDSCH-MACdFlows-Information
    No value
    nbap.HSDSCH_MACdFlows_Information
nbap.HSDSCH_MACdFlows_to_Delete  HSDSCH-MACdFlows-to-Delete
    Unsigned 32-bit integer
    nbap.HSDSCH_MACdFlows_to_Delete
nbap.HSDSCH_MACdFlows_to_Delete_item  Item
    No value
    nbap.HSDSCH_MACdFlows_to_Delete_Item
nbap.HSDSCH_MACdPDUSizeFormat  HSDSCH-MACdPDUSizeFormat
    Unsigned 32-bit integer
    nbap.HSDSCH_MACdPDUSizeFormat
nbap.HSDSCH_MACdPDU_SizeCapability  HSDSCH-MACdPDU-SizeCapability
    Unsigned 32-bit integer
    nbap.HSDSCH_MACdPDU_SizeCapability
nbap.HSDSCH_Paging_System_InformationFDD  HSDSCH-Paging-System-InformationFDD
    No value
    nbap.HSDSCH_Paging_System_InformationFDD
nbap.HSDSCH_Paging_System_Information_ResponseFDD  HSDSCH-Paging-System-Information
    Unsigned 32-bit integer
    nbap.HSDSCH_Paging_System_Information_ResponseFDD
nbap.HSDSCH_Paging_System_Information_ResponseFDD_item  Item
    No value
    nbap.HSDSCH_Paging_System_Information_ResponseList
nbap.HSDSCH_RNTI  HSDSCH-RNTI
    Unsigned 32-bit integer
    nbap.HSDSCH_RNTI
nbap.HSDSCH_RearrangeList_Bearer_RearrangeInd  HSDSCH-RearrangeList-Bearer-Rearr
    Unsigned 32-bit integer
    nbap.HSDSCH_RearrangeList_Bearer_RearrangeInd
nbap.HSDSCH_RearrangeList_Bearer_RearrangeInd_item  Item
    No value
    nbap.HSDSCH_RearrangeItem_Bearer_RearrangeInd
nbap.HSDSCH_TDD_Information  HSDSCH-TDD-Information
    No value
    nbap.HSDSCH_TDD_Information

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nbap.HSDSCH_TDD_Information_Response  HSDSCH-TDD-Information-Response
    No value
    nbap.HSDSCH_TDD_Information_Response
nbap.HSDSCH_TDD_Update_Information  HSDSCH-TDD-Update-Information
    No value
    nbap.HSDSCH_TDD_Update_Information
nbap.HSSCCH_Specific_InformationRespListFDD_item  Item
    No value
    nbap.HSSCCH_Codes
nbap.HSSCCH_Specific_InformationRespListTDD768  HSSCCH-Specific-InformationRespL
    Unsigned 32-bit integer
    nbap.HSSCCH_Specific_InformationRespListTDD768
nbap.HSSCCH_Specific_InformationRespListTDD768_item  Item
    No value
    nbap.HSSCCH_Specific_InformationRespItemTDD768
nbap.HSSCCH_Specific_InformationRespListTDDLCR_item  Item
    No value
    nbap.HSSCCH_Specific_InformationRespItemTDDLCR
nbap.HSSCCH_Specific_InformationRespListTDD_item  Item
    No value
    nbap.HSSCCH_Specific_InformationRespItemTDD
nbap.HSSICH_InfoExt_DM_Rqst  HSSICH-InfoExt-DM-Rqst
    Unsigned 32-bit integer
    nbap.HSSICH_InfoExt_DM_Rqst
nbap.HSSICH_InfoExt_DM_Rqst_item  Item
    Unsigned 32-bit integer
    nbap.Extended_HS_SICH_ID
nbap.HSSICH_Info_DM_Rqst  HSSICH-Info-DM-Rqst
    Unsigned 32-bit integer
    nbap.HSSICH_Info_DM_Rqst
nbap.HSSICH_Info_DM_Rqst_item  Item
    Unsigned 32-bit integer
    nbap.HS_SICH_ID
nbap.HS_DSCHProvidedBitRate  HS-DSCHProvidedBitRate
    Unsigned 32-bit integer
    nbap.HS_DSCHProvidedBitRate
nbap.HS_DSCHProvidedBitRateValueInformation_For_CellPortion  HS-DSCHProvidedBitR
    Unsigned 32-bit integer
    nbap.HS_DSCHProvidedBitRateValueInformation_For_CellPortion
nbap.HS_DSCHProvidedBitRateValueInformation_For_CellPortion_item  Item
    No value
    nbap.HS_DSCHProvidedBitRateValueInformation_For_CellPortion_Item
nbap.HS_DSCHProvidedBitRate_item  Item
    No value
    nbap.HS_DSCHProvidedBitRate_Item
nbap.HS_DSCHRequiredPower  HS-DSCHRequiredPower
    Unsigned 32-bit integer
    nbap.HS_DSCHRequiredPower
```

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nbap.HS_DSCHRequiredPowerPerUEInformation_item  Item
  No value
  nbap.HS_DSCHRequiredPowerPerUEInformation_Item
nbap.HS_DSCHRequiredPowerValue  HS-DSCHRequiredPowerValue
  Unsigned 32-bit integer
  nbap.HS_DSCHRequiredPowerValue
nbap.HS_DSCHRequiredPowerValueInformation_For_CellPortion  HS-DSCHRequiredPowerV
  Unsigned 32-bit integer
  nbap.HS_DSCHRequiredPowerValueInformation_For_CellPortion
nbap.HS_DSCHRequiredPowerValueInformation_For_CellPortion_item  Item
  No value
  nbap.HS_DSCHRequiredPowerValueInformation_For_CellPortion_Item
nbap.HS_DSCHRequiredPower_item  Item
  No value
  nbap.HS_DSCHRequiredPower_Item
nbap.HS_DSCH_Resources_Information_AuditRsp  HS-DSCH-Resources-Information-Audit
  No value
  nbap.HS_DSCH_Resources_Information_AuditRsp
nbap.HS_DSCH_Resources_Information_ResourceStatusInd  HS-DSCH-Resources-Informat
  No value
  nbap.HS_DSCH_Resources_Information_ResourceStatusInd
nbap.HS_DSCH_Serving_Cell_Change_Info  HS-DSCH-Serving-Cell-Change-Info
  No value
  nbap.HS_DSCH_Serving_Cell_Change_Info
nbap.HS_DSCH_Serving_Cell_Change_Info_Response  HS-DSCH-Serving-Cell-Change-Info
  No value
  nbap.HS_DSCH_Serving_Cell_Change_Info_Response
nbap.HS_PDSCH_Code_Change_Grant  HS-PDSCH-Code-Change-Grant
  Unsigned 32-bit integer
  nbap.HS_PDSCH_Code_Change_Grant
nbap.HS_PDSCH_Code_Change_Indicator  HS-PDSCH-Code-Change-Indicator
  Unsigned 32-bit integer
  nbap.HS_PDSCH_Code_Change_Indicator
nbap.HS_PDSCH_FDD_Code_Information  HS-PDSCH-FDD-Code-Information
  No value
  nbap.HS_PDSCH_FDD_Code_Information
nbap.HS_PDSCH_TDD_Information_PSCH_ReconfRqst  HS-PDSCH-TDD-Information-PSCH-Rec
  No value
  nbap.HS_PDSCH_TDD_Information_PSCH_ReconfRqst
nbap.HS_SCCH_FDD_Code_Information  HS-SCCH-FDD-Code-Information
  Unsigned 32-bit integer
  nbap.HS_SCCH_FDD_Code_Information
nbap.HS_SCCH_FDD_Code_List_item  Item
  Unsigned 32-bit integer
  nbap.HS_SCCH_FDD_Code_Information_Item
nbap.HS_SCCH_InformationExt_LCR_PSCH_ReconfRqst  HS-SCCH-InformationExt-LCR-PSCH
  Unsigned 32-bit integer
  nbap.HS_SCCH_InformationExt_LCR_PSCH_ReconfRqst
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nbap.HS_SCCH_InformationExt_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationItem_LCR_PSCH_ReconfRqst
nbap.HS_SCCH_InformationModifyExt_LCR_PSCH_ReconfRqst  HS-SCCH-InformationModify
  Unsigned 32-bit integer
  nbap.HS_SCCH_InformationModifyExt_LCR_PSCH_ReconfRqst
nbap.HS_SCCH_InformationModifyExt_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationModifyItem_LCR_PSCH_ReconfRqst
nbap.HS_SCCH_InformationModify_768_PSCH_ReconfRqst  HS-SCCH-InformationModify-76
  Unsigned 32-bit integer
  nbap.HS_SCCH_InformationModify_768_PSCH_ReconfRqst
nbap.HS_SCCH_InformationModify_768_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationModifyItem_768_PSCH_ReconfRqst
nbap.HS_SCCH_InformationModify_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationModifyItem_LCR_PSCH_ReconfRqst
nbap.HS_SCCH_InformationModify_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationModifyItem_PSCH_ReconfRqst
nbap.HS_SCCH_Information_768_PSCH_ReconfRqst  HS-SCCH-Information-768-PSCH-Recon
  Unsigned 32-bit integer
  nbap.HS_SCCH_Information_768_PSCH_ReconfRqst
nbap.HS_SCCH_Information_768_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationItem_768_PSCH_ReconfRqst
nbap.HS_SCCH_Information_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationItem_LCR_PSCH_ReconfRqst
nbap.HS_SCCH_Information_PSCH_ReconfRqst_item  Item
  No value
  nbap.HS_SCCH_InformationItem_PSCH_ReconfRqst
nbap.HS_SICH_ID  HS-SICH-ID
  Unsigned 32-bit integer
  nbap.HS_SICH_ID
nbap.HS_SICH_Reception_Quality_Measurement_Value  HS-SICH-Reception-Quality-Meas
  Unsigned 32-bit integer
  nbap.HS_SICH_Reception_Quality_Measurement_Value
nbap.HS_SICH_Reception_Quality_Value  HS-SICH-Reception-Quality-Value
  No value
  nbap.HS_SICH_Reception_Quality_Value
nbap.HS_SICH_failed  HS-SICH-failed
  Unsigned 32-bit integer
  nbap.HS_SICH_failed
nbap.HS_SICH_missed  HS-SICH-missed
  Unsigned 32-bit integer
  nbap.HS_SICH_missed

```

```
nbap.HS_SICH_total    HS-SICH-total
    Unsigned 32-bit integer
    nbap.HS_SICH_total

nbap.IPDLParameter_Information_Cell_ReconfRqstFDD    IPDLParameter-Information-Cel
    No value
    nbap.IPDLParameter_Information_Cell_ReconfRqstFDD

nbap.IPDLParameter_Information_Cell_ReconfRqstTDD    IPDLParameter-Information-Cel
    No value
    nbap.IPDLParameter_Information_Cell_ReconfRqstTDD

nbap.IPDLParameter_Information_Cell_SetupRqstFDD    IPDLParameter-Information-Cell
    No value
    nbap.IPDLParameter_Information_Cell_SetupRqstFDD

nbap.IPDLParameter_Information_Cell_SetupRqstTDD    IPDLParameter-Information-Cell
    No value
    nbap.IPDLParameter_Information_Cell_SetupRqstTDD

nbap.IPDLParameter_Information_LCR_Cell_ReconfRqstTDD    IPDLParameter-Information
    No value
    nbap.IPDLParameter_Information_LCR_Cell_ReconfRqstTDD

nbap.IPDLParameter_Information_LCR_Cell_SetupRqstTDD    IPDLParameter-Information-
    No value
    nbap.IPDLParameter_Information_LCR_Cell_SetupRqstTDD

nbap.IPMulticastIndication    IPMulticastIndication
    No value
    nbap.IPMulticastIndication

nbap.IndicationType_ResourceStatusInd    IndicationType-ResourceStatusInd
    Unsigned 32-bit integer
    nbap.IndicationType_ResourceStatusInd

nbap.InformationExchangeFailureIndication    InformationExchangeFailureIndication
    No value
    nbap.InformationExchangeFailureIndication

nbap.InformationExchangeID    InformationExchangeID
    Unsigned 32-bit integer
    nbap.InformationExchangeID

nbap.InformationExchangeInitiationFailure    InformationExchangeInitiationFailure
    No value
    nbap.InformationExchangeInitiationFailure

nbap.InformationExchangeInitiationRequest    InformationExchangeInitiationRequest
    No value
    nbap.InformationExchangeInitiationRequest

nbap.InformationExchangeInitiationResponse    InformationExchangeInitiationRespons
    No value
    nbap.InformationExchangeInitiationResponse

nbap.InformationExchangeObjectType_InfEx_Rprt    InformationExchangeObjectType-Inf
    Unsigned 32-bit integer
    nbap.InformationExchangeObjectType_InfEx_Rprt

nbap.InformationExchangeObjectType_InfEx_Rqst    InformationExchangeObjectType-Inf
    Unsigned 32-bit integer
    nbap.InformationExchangeObjectType_InfEx_Rqst
```

```
nbap.InformationExchangeObjectType_InfEx_Rsp  InformationExchangeObjectType-InfEx_Rsp
  Unsigned 32-bit integer
  nbap.InformationExchangeObjectType_InfEx_Rsp
nbap.InformationExchangeTerminationRequest  InformationExchangeTerminationRequest
  No value
  nbap.InformationExchangeTerminationRequest
nbap.InformationReport  InformationReport
  No value
  nbap.InformationReport
nbap.InformationReportCharacteristics  InformationReportCharacteristics
  Unsigned 32-bit integer
  nbap.InformationReportCharacteristics
nbap.InformationType  InformationType
  No value
  nbap.InformationType
nbap.Initial_DL_DPCH_TimingAdjustment_Allowed  Initial-DL-DPCH-TimingAdjustment-Allowed
  Unsigned 32-bit integer
  nbap.Initial_DL_DPCH_TimingAdjustment_Allowed
nbap.InnerLoopDLPCStatus  InnerLoopDLPCStatus
  Unsigned 32-bit integer
  nbap.InnerLoopDLPCStatus
nbap.LCRTDD_Uplink_Physical_Channel_Capability  LCRTDD-Uplink-Physical-Channel-Capability
  No value
  nbap.LCRTDD_Uplink_Physical_Channel_Capability
nbap.Limited_power_increase_information_Cell_SetupRqstFDD  Limited-power-increase-information-Cell-SetupRqstFDD
  No value
  nbap.Limited_power_increase_information_Cell_SetupRqstFDD
nbap.Local_Cell_Group_InformationItem2_ResourceStatusInd  Local-Cell-Group-InformationItem2-ResourceStatusInd
  No value
  nbap.Local_Cell_Group_InformationItem2_ResourceStatusInd
nbap.Local_Cell_Group_InformationItem_AuditRsp  Local-Cell-Group-InformationItem-AuditRsp
  No value
  nbap.Local_Cell_Group_InformationItem_AuditRsp
nbap.Local_Cell_Group_InformationItem_ResourceStatusInd  Local-Cell-Group-InformationItem-ResourceStatusInd
  No value
  nbap.Local_Cell_Group_InformationItem_ResourceStatusInd
nbap.Local_Cell_Group_InformationList2_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.Local_Cell_Group_InformationList_AuditRsp  Local-Cell-Group-InformationList-AuditRsp
  Unsigned 32-bit integer
  nbap.Local_Cell_Group_InformationList_AuditRsp
nbap.Local_Cell_Group_InformationList_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.Local_Cell_Group_InformationList_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
```

```
nbap.Local_Cell_ID    Local-Cell-ID
    Unsigned 32-bit integer
    nbap.Local_Cell_ID

nbap.Local_Cell_InformationItem2_ResourceStatusInd  Local-Cell-InformationItem2-
    No value
    nbap.Local_Cell_InformationItem2_ResourceStatusInd

nbap.Local_Cell_InformationItem_AuditRsp  Local-Cell-InformationItem-AuditRsp
    No value
    nbap.Local_Cell_InformationItem_AuditRsp

nbap.Local_Cell_InformationItem_ResourceStatusInd  Local-Cell-InformationItem-Re
    No value
    nbap.Local_Cell_InformationItem_ResourceStatusInd

nbap.Local_Cell_InformationList2_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container

nbap.Local_Cell_InformationList_AuditRsp  Local-Cell-InformationList-AuditRsp
    Unsigned 32-bit integer
    nbap.Local_Cell_InformationList_AuditRsp

nbap.Local_Cell_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container

nbap.Local_Cell_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container

nbap.MAC_PDU_SizeExtended  MAC-PDU-SizeExtended
    Unsigned 32-bit integer
    nbap.MAC_PDU_SizeExtended

nbap.MACdPDU_Size_Indexlist_item  Item
    No value
    nbap.MACdPDU_Size_IndexItem

nbap.MACdPDU_Size_Indexlist_to_Modify_item  Item
    No value
    nbap.MACdPDU_Size_IndexItem_to_Modify

nbap.MACHs_ResetIndicator  MACHs-ResetIndicator
    Unsigned 32-bit integer
    nbap.MACHs_ResetIndicator

nbap.MBMSNotificationUpdateCommand  MBMSNotificationUpdateCommand
    No value
    nbap.MBMSNotificationUpdateCommand

nbap.MBMS_Capability  MBMS-Capability
    Unsigned 32-bit integer
    nbap.MBMS_Capability

nbap.MBSFN_Only_Mode_Capability  MBSFN-Only-Mode-Capability
    Unsigned 32-bit integer
    nbap.MBSFN_Only_Mode_Capability

nbap.MBSFN_Only_Mode_Indicator  MBSFN-Only-Mode-Indicator
    Unsigned 32-bit integer
    nbap.MBSFN_Only_Mode_Indicator
```



```
nbap.MIB_SB_SIB_InformationList_SystemInfoUpdateRqst  MIB-SB-SIB-InformationList
  Unsigned 32-bit integer
  nbap.MIB_SB_SIB_InformationList_SystemInfoUpdateRqst
nbap.MIB_SB_SIB_InformationList_SystemInfoUpdateRqst_item  Item
  No value
  nbap.MIB_SB_SIB_InformationItem_SystemInfoUpdateRqst
nbap.MICH_768_Parameters_CTCH_ReconfRqstTDD  MICH-768-Parameters-CTCH-ReconfRqst
  No value
  nbap.MICH_768_Parameters_CTCH_ReconfRqstTDD
nbap.MICH_CFN  MICH-CFN
  Unsigned 32-bit integer
  nbap.MICH_CFN
nbap.MICH_Parameters_CTCH_ReconfRqstFDD  MICH-Parameters-CTCH-ReconfRqstFDD
  No value
  nbap.MICH_Parameters_CTCH_ReconfRqstFDD
nbap.MICH_Parameters_CTCH_ReconfRqstTDD  MICH-Parameters-CTCH-ReconfRqstTDD
  No value
  nbap.MICH_Parameters_CTCH_ReconfRqstTDD
nbap.MICH_Parameters_CTCH_SetupRqstFDD  MICH-Parameters-CTCH-SetupRqstFDD
  No value
  nbap.MICH_Parameters_CTCH_SetupRqstFDD
nbap.MICH_Parameters_CTCH_SetupRqstTDD  MICH-Parameters-CTCH-SetupRqstTDD
  No value
  nbap.MICH_Parameters_CTCH_SetupRqstTDD
nbap.MIMO_Capability  MIMO-Capability
  Unsigned 32-bit integer
  nbap.MIMO_Capability
nbap.MIMO_PilotConfiguration  MIMO-PilotConfiguration
  Unsigned 32-bit integer
  nbap.MIMO_PilotConfiguration
nbap.MaxAdjustmentStep  MaxAdjustmentStep
  Unsigned 32-bit integer
  nbap.MaxAdjustmentStep
nbap.Max_UE_DTX_Cycle  Max-UE-DTX-Cycle
  Unsigned 32-bit integer
  nbap.Max_UE_DTX_Cycle
nbap.MaximumTransmissionPower  MaximumTransmissionPower
  Unsigned 32-bit integer
  nbap.MaximumTransmissionPower
nbap.Maximum_Generated_ReceivedTotalWideBandPowerInOtherCells  Maximum-Generated
  Unsigned 32-bit integer
  nbap.Maximum_Generated_ReceivedTotalWideBandPowerInOtherCells
nbap.Maximum_Target_ReceivedTotalWideBandPower  Maximum-Target-ReceivedTotalWide
  Unsigned 32-bit integer
  nbap.Maximum_Target_ReceivedTotalWideBandPower
nbap.Maximum_Target_ReceivedTotalWideBandPower_LCR  Maximum-Target-ReceivedTotal
  Unsigned 32-bit integer
  nbap.Maximum_Target_ReceivedTotalWideBandPower_LCR
```

```

nbap.MeasurementFilterCoefficient MeasurementFilterCoefficient
    Unsigned 32-bit integer
    nbap.MeasurementFilterCoefficient

nbap.MeasurementID MeasurementID
    Unsigned 32-bit integer
    nbap.MeasurementID

nbap.MeasurementRecoveryBehavior MeasurementRecoveryBehavior
    No value
    nbap.MeasurementRecoveryBehavior

nbap.MeasurementRecoveryReportingIndicator MeasurementRecoveryReportingIndicator
    No value
    nbap.MeasurementRecoveryReportingIndicator

nbap.MeasurementRecoverySupportIndicator MeasurementRecoverySupportIndicator
    No value
    nbap.MeasurementRecoverySupportIndicator

nbap.MessageStructure MessageStructure
    Unsigned 32-bit integer
    nbap.MessageStructure

nbap.MessageStructure_item Item
    No value
    nbap.MessageStructure_item

nbap.Modification_Period Modification-Period
    Unsigned 32-bit integer
    nbap.Modification_Period

nbap.Modify_E_AGCH_Resource_Pool_768_PSCH_ReconfRqst Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst
    No value
    nbap.Modify_E_AGCH_Resource_Pool_768_PSCH_ReconfRqst

nbap.Modify_E_AGCH_Resource_Pool_LCR_PSCH_ReconfRqst Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst
    No value
    nbap.Modify_E_AGCH_Resource_Pool_LCR_PSCH_ReconfRqst

nbap.Modify_E_AGCH_Resource_Pool_PSCH_ReconfRqst Modify-E-AGCH-Resource-Pool-PSCH-ReconfRqst
    No value
    nbap.Modify_E_AGCH_Resource_Pool_PSCH_ReconfRqst

nbap.Modify_E_HICH_Resource_Pool_LCR_PSCH_ReconfRqst Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst
    No value
    nbap.Modify_E_HICH_Resource_Pool_LCR_PSCH_ReconfRqst

nbap.Modify_HS_SCCH_Resource_Pool_PSCH_ReconfRqst Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
    No value
    nbap.Modify_HS_SCCH_Resource_Pool_PSCH_ReconfRqst

nbap.ModulationMBSFN ModulationMBSFN
    Unsigned 32-bit integer
    nbap.ModulationMBSFN

nbap.ModulationPO_MBSFN ModulationPO-MBSFN
    Unsigned 32-bit integer
    nbap.ModulationPO_MBSFN

nbap.MultipleFreq_DL_HS_PDSCH_Timeslot_Information_LCRItem_PSCH_ReconfRqst MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst
    No value
    nbap.MultipleFreq_DL_HS_PDSCH_Timeslot_Information_LCRItem_PSCH_ReconfRqst

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nbap.MultipleFreq_DL_HS_PDSCH_Timeslot_Information_LCR_PSCH_ReconfRqst  Multiple
    Unsigned 32-bit integer
    nbap.MultipleFreq_DL_HS_PDSCH_Timeslot_Information_LCR_PSCH_ReconfRqst
nbap.MultipleFreq_DL_HS_PDSCH_Timeslot_Information_LCR_PSCH_ReconfRqst_item  Ite
    No value
    nbap.ProtocolIE_Single_Container
nbap.MultipleFreq_HSPDSCH_InformationList_ResponseTDDLCR_item  Item
    No value
    nbap.MultipleFreq_HSPDSCH_InformationItem_ResponseTDDLCR
nbap.MultipleFreq_HS_DSCH_Resources_InformationList_AuditRsp  MultipleFreq-HS-DS
    Unsigned 32-bit integer
    nbap.MultipleFreq_HS_DSCH_Resources_InformationList_AuditRsp
nbap.MultipleFreq_HS_DSCH_Resources_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.MultipleFreq_HS_DSCH_Resources_InformationList_ResourceStatusInd  MultipleF
    Unsigned 32-bit integer
    nbap.MultipleFreq_HS_DSCH_Resources_InformationList_ResourceStatusInd
nbap.MultipleFreq_HS_DSCH_Resources_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.MultipleRL_DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD  MultipleRL-DL-
    Unsigned 32-bit integer
    nbap.MultipleRL_DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD
nbap.MultipleRL_DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD_item  Item
    No value
    nbap.MultipleRL_DL_CCTrCH_InformationModifyListIE_RL_ReconfRqstTDD
nbap.MultipleRL_DL_DPCH_InformationAddList_RL_ReconfPrepTDD  MultipleRL-DL-DPCH-
    Unsigned 32-bit integer
    nbap.MultipleRL_DL_DPCH_InformationAddList_RL_ReconfPrepTDD
nbap.MultipleRL_DL_DPCH_InformationAddList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.MultipleRL_DL_DPCH_InformationAddListIE_RL_ReconfPrepTDD
nbap.MultipleRL_DL_DPCH_InformationModifyList_RL_ReconfPrepTDD  MultipleRL-DL-DP
    Unsigned 32-bit integer
    nbap.MultipleRL_DL_DPCH_InformationModifyList_RL_ReconfPrepTDD
nbap.MultipleRL_DL_DPCH_InformationModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.MultipleRL_DL_DPCH_InformationModifyListIE_RL_ReconfPrepTDD
nbap.MultipleRL_Information_RL_ReconfPrepTDD  MultipleRL-Information-RL-ReconfPr
    Unsigned 32-bit integer
    nbap.MultipleRL_Information_RL_ReconfPrepTDD
nbap.MultipleRL_Information_RL_ReconfPrepTDD_item  Item
    No value
    nbap.RL_Information_RL_ReconfPrepTDD
nbap.MultipleRL_UL_DPCH_InformationAddList_RL_ReconfPrepTDD  MultipleRL-UL-DPCH-
    Unsigned 32-bit integer
    nbap.MultipleRL_UL_DPCH_InformationAddList_RL_ReconfPrepTDD

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nbap.MultipleRL_UL_DPCH_InformationAddList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.MultipleRL_UL_DPCH_InformationAddListIE_RL_ReconfPrepTDD
nbap.MultipleRL_UL_DPCH_InformationModifyList_RL_ReconfPrepTDD  MultipleRL-UL-DP
    Unsigned 32-bit integer
    nbap.MultipleRL_UL_DPCH_InformationModifyList_RL_ReconfPrepTDD
nbap.MultipleRL_UL_DPCH_InformationModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.MultipleRL_UL_DPCH_InformationModifyListIE_RL_ReconfPrepTDD
nbap.Multiple_DedicatedMeasurementValueList_768_TDD_DM_Rsp  Multiple-DedicatedMe
    Unsigned 32-bit integer
    nbap.Multiple_DedicatedMeasurementValueList_768_TDD_DM_Rsp
nbap.Multiple_DedicatedMeasurementValueList_768_TDD_DM_Rsp_item  Item
    No value
    nbap.Multiple_DedicatedMeasurementValueItem_768_TDD_DM_Rsp
nbap.Multiple_DedicatedMeasurementValueList_LCR_TDD_DM_Rsp  Multiple-DedicatedMe
    Unsigned 32-bit integer
    nbap.Multiple_DedicatedMeasurementValueList_LCR_TDD_DM_Rsp
nbap.Multiple_DedicatedMeasurementValueList_LCR_TDD_DM_Rsp_item  Item
    No value
    nbap.Multiple_DedicatedMeasurementValueItem_LCR_TDD_DM_Rsp
nbap.Multiple_DedicatedMeasurementValueList_TDD_DM_Rsp  Multiple-DedicatedMeasur
    Unsigned 32-bit integer
    nbap.Multiple_DedicatedMeasurementValueList_TDD_DM_Rsp
nbap.Multiple_DedicatedMeasurementValueList_TDD_DM_Rsp_item  Item
    No value
    nbap.Multiple_DedicatedMeasurementValueItem_TDD_DM_Rsp
nbap.Multiple_HSSICHMeasurementValueList_TDD_DM_Rsp  Multiple-HSSICHMeasurementV
    Unsigned 32-bit integer
    nbap.Multiple_HSSICHMeasurementValueList_TDD_DM_Rsp
nbap.Multiple_HSSICHMeasurementValueList_TDD_DM_Rsp_item  Item
    No value
    nbap.Multiple_HSSICHMeasurementValueItem_TDD_DM_Rsp
nbap.Multiple_PUSCH_InfoList_DM_Rprt  Multiple-PUSCH-InfoList-DM-Rprt
    Unsigned 32-bit integer
    nbap.Multiple_PUSCH_InfoList_DM_Rprt
nbap.Multiple_PUSCH_InfoList_DM_Rprt_item  Item
    No value
    nbap.Multiple_PUSCH_InfoListIE_DM_Rprt
nbap.Multiple_PUSCH_InfoList_DM_Rsp  Multiple-PUSCH-InfoList-DM-Rsp
    Unsigned 32-bit integer
    nbap.Multiple_PUSCH_InfoList_DM_Rsp
nbap.Multiple_PUSCH_InfoList_DM_Rsp_item  Item
    No value
    nbap.Multiple_PUSCH_InfoListIE_DM_Rsp
nbap.Multiple_RL_Information_RL_ReconfRqstTDD  Multiple-RL-Information-RL-Reconf
    Unsigned 32-bit integer
    nbap.Multiple_RL_Information_RL_ReconfRqstTDD

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nbap.Multiple_RL_Information_RL_ReconfRqstTDD_item  Item
  No value
  nbap.RL_Information_RL_ReconfRqstTDD

nbap.NBAP_PDU  NBAP-PDU
  Unsigned 32-bit integer
  nbap.NBAP_PDU

nbap.NCyclesPerSFNperiod  NCyclesPerSFNperiod
  Unsigned 32-bit integer
  nbap.NCyclesPerSFNperiod

nbap.NI_Information  NI-Information
  Unsigned 32-bit integer
  nbap.NI_Information

nbap.NI_Information_item  Item
  Unsigned 32-bit integer
  nbap.Notification_Indicator

nbap.NRepetitionsPerCyclePeriod  NRepetitionsPerCyclePeriod
  Unsigned 32-bit integer
  nbap.NRepetitionsPerCyclePeriod

nbap.NSubCyclesPerCyclePeriod  NSubCyclesPerCyclePeriod
  Unsigned 32-bit integer
  nbap.NSubCyclesPerCyclePeriod

nbap.NeighbouringCellMeasurementInformation  NeighbouringCellMeasurementInformation
  Unsigned 32-bit integer
  nbap.NeighbouringCellMeasurementInformation

nbap.NeighbouringCellMeasurementInformation_item  Item
  Unsigned 32-bit integer
  nbap.NeighbouringCellMeasurementInformation_item

nbap.NeighbouringTDDCellMeasurementInformation768  NeighbouringTDDCellMeasurementInformation768
  No value
  nbap.NeighbouringTDDCellMeasurementInformation768

nbap.NeighbouringTDDCellMeasurementInformationLCR  NeighbouringTDDCellMeasurementInformationLCR
  No value
  nbap.NeighbouringTDDCellMeasurementInformationLCR

nbap.NodeB_CommunicationContextID  NodeB-CommunicationContextID
  Unsigned 32-bit integer
  nbap.NodeB_CommunicationContextID

nbap.NumberOfReportedCellPortions  NumberOfReportedCellPortions
  Unsigned 32-bit integer
  nbap.NumberOfReportedCellPortions

nbap.PCCPCH_768_Information_Cell_ReconfRqstTDD  PCCPCH-768-Information-Cell-ReconfRqstTDD
  No value
  nbap.PCCPCH_768_Information_Cell_ReconfRqstTDD

nbap.PCCPCH_768_Information_Cell_SetupRqstTDD  PCCPCH-768-Information-Cell-SetupRqstTDD
  No value
  nbap.PCCPCH_768_Information_Cell_SetupRqstTDD

nbap.PCCPCH_Information_Cell_ReconfRqstTDD  PCCPCH-Information-Cell-ReconfRqstTDD
  No value
  nbap.PCCPCH_Information_Cell_ReconfRqstTDD

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nbap.PCCPCH_Information_Cell_SetupRqstTDD  PCCPCH-Information-Cell-SetupRqstTDD
  No value
  nbap.PCCPCH_Information_Cell_SetupRqstTDD
nbap.PCCPCH_LCR_Information_Cell_SetupRqstTDD  PCCPCH-LCR-Information-Cell-Setup
  No value
  nbap.PCCPCH_LCR_Information_Cell_SetupRqstTDD
nbap.PCH_ParametersItem_CTCH_ReconfRqstFDD  PCH-ParametersItem-CTCH-ReconfRqstFD
  No value
  nbap.PCH_ParametersItem_CTCH_ReconfRqstFDD
nbap.PCH_ParametersItem_CTCH_SetupRqstFDD  PCH-ParametersItem-CTCH-SetupRqstFDD
  No value
  nbap.PCH_ParametersItem_CTCH_SetupRqstFDD
nbap.PCH_ParametersItem_CTCH_SetupRqstTDD  PCH-ParametersItem-CTCH-SetupRqstTDD
  No value
  nbap.PCH_ParametersItem_CTCH_SetupRqstTDD
nbap.PCH_Parameters_CTCH_ReconfRqstTDD  PCH-Parameters-CTCH-ReconfRqstTDD
  No value
  nbap.PCH_Parameters_CTCH_ReconfRqstTDD
nbap.PDSCHSets_AddList_PSCH_ReconfRqst  PDSCHSets-AddList-PSCH-ReconfRqst
  Unsigned 32-bit integer
  nbap.PDSCHSets_AddList_PSCH_ReconfRqst
nbap.PDSCHSets_AddList_PSCH_ReconfRqst_item  Item
  No value
  nbap.PDSCHSets_AddItem_PSCH_ReconfRqst
nbap.PDSCHSets_DeleteList_PSCH_ReconfRqst  PDSCHSets-DeleteList-PSCH-ReconfRqst
  Unsigned 32-bit integer
  nbap.PDSCHSets_DeleteList_PSCH_ReconfRqst
nbap.PDSCHSets_DeleteList_PSCH_ReconfRqst_item  Item
  No value
  nbap.PDSCHSets_DeleteItem_PSCH_ReconfRqst
nbap.PDSCHSets_ModifyList_PSCH_ReconfRqst  PDSCHSets-ModifyList-PSCH-ReconfRqst
  Unsigned 32-bit integer
  nbap.PDSCHSets_ModifyList_PSCH_ReconfRqst
nbap.PDSCHSets_ModifyList_PSCH_ReconfRqst_item  Item
  No value
  nbap.PDSCHSets_ModifyItem_PSCH_ReconfRqst
nbap.PDSCH_AddInformation_768_AddItem_PSCH_ReconfRqst  PDSCH-AddInformation-768-
  No value
  nbap.PDSCH_AddInformation_768_AddItem_PSCH_ReconfRqst
nbap.PDSCH_AddInformation_LCR_AddItem_PSCH_ReconfRqst  PDSCH-AddInformation-LCR-
  No value
  nbap.PDSCH_AddInformation_LCR_AddItem_PSCH_ReconfRqst
nbap.PDSCH_Information_AddItem_PSCH_ReconfRqst  PDSCH-Information-AddItem-PSCH-R
  No value
  nbap.PDSCH_Information_AddItem_PSCH_ReconfRqst
nbap.PDSCH_Information_ModifyItem_PSCH_ReconfRqst  PDSCH-Information-ModifyItem-
  No value
  nbap.PDSCH_Information_ModifyItem_PSCH_ReconfRqst

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nbap.PDSCH_ModifyInformation_768_ModifyItem_PSCH_ReconfRqst  PDSCH-ModifyInforma
  No value
  nbap.PDSCH_ModifyInformation_768_ModifyItem_PSCH_ReconfRqst
nbap.PDSCH_ModifyInformation_LCR_ModifyItem_PSCH_ReconfRqst  PDSCH-ModifyInforma
  No value
  nbap.PDSCH_ModifyInformation_LCR_ModifyItem_PSCH_ReconfRqst
nbap.PICH_768_ParametersItem_CTCH_SetupRqstTDD  PICH-768-ParametersItem-CTCH-Set
  No value
  nbap.PICH_768_ParametersItem_CTCH_SetupRqstTDD
nbap.PICH_768_Parameters_CTCH_ReconfRqstTDD  PICH-768-Parameters-CTCH-ReconfRqst
  No value
  nbap.PICH_768_Parameters_CTCH_ReconfRqstTDD
nbap.PICH_LCR_Parameters_CTCH_SetupRqstTDD  PICH-LCR-Parameters-CTCH-SetupRqstTD
  No value
  nbap.PICH_LCR_Parameters_CTCH_SetupRqstTDD
nbap.PICH_ParametersItem_CTCH_ReconfRqstFDD  PICH-ParametersItem-CTCH-ReconfRqst
  No value
  nbap.PICH_ParametersItem_CTCH_ReconfRqstFDD
nbap.PICH_ParametersItem_CTCH_SetupRqstTDD  PICH-ParametersItem-CTCH-SetupRqstTD
  No value
  nbap.PICH_ParametersItem_CTCH_SetupRqstTDD
nbap.PICH_Parameters_CTCH_ReconfRqstTDD  PICH-Parameters-CTCH-ReconfRqstTDD
  No value
  nbap.PICH_Parameters_CTCH_ReconfRqstTDD
nbap.PLCCH_InformationList_AuditRsp  PLCCH-InformationList-AuditRsp
  Unsigned 32-bit integer
  nbap.PLCCH_InformationList_AuditRsp
nbap.PLCCH_InformationList_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.PLCCH_InformationList_ResourceStatusInd  PLCCH-InformationList-ResourceStat
  Unsigned 32-bit integer
  nbap.PLCCH_InformationList_ResourceStatusInd
nbap.PLCCH_InformationList_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.PLCCH_Parameters_CTCH_ReconfRqstTDD  PLCCH-Parameters-CTCH-ReconfRqstTDD
  No value
  nbap.PLCCH_Parameters_CTCH_ReconfRqstTDD
nbap.PLCCHinformation  PLCCHinformation
  No value
  nbap.PLCCHinformation
nbap.PRACH_768_InformationList_AuditRsp  PRACH-768-InformationList-AuditRsp
  Unsigned 32-bit integer
  nbap.PRACH_768_InformationList_AuditRsp
nbap.PRACH_768_InformationList_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container

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nbap.PRACH_768_InformationList_ResourceStatusInd PRACH-768-InformationList-Reso
  Unsigned 32-bit integer
  nbap.PRACH_768_InformationList_ResourceStatusInd
nbap.PRACH_768_InformationList_ResourceStatusInd_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.PRACH_768_ParametersItem_CTCH_SetupRqstTDD PRACH-768-ParametersItem-CTCH-S
  No value
  nbap.PRACH_768_ParametersItem_CTCH_SetupRqstTDD
nbap.PRACH_InformationList_AuditRsp_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.PRACH_InformationList_ResourceStatusInd_item Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.PRACH_LCR_ParametersList_CTCH_SetupRqstTDD PRACH-LCR-ParametersList-CTCH-S
  Unsigned 32-bit integer
  nbap.PRACH_LCR_ParametersList_CTCH_SetupRqstTDD
nbap.PRACH_LCR_ParametersList_CTCH_SetupRqstTDD_item Item
  No value
  nbap.PRACH_LCR_ParametersItem_CTCH_SetupRqstTDD
nbap.PRACH_ParametersItem_CTCH_SetupRqstTDD PRACH-ParametersItem-CTCH-SetupRqst
  No value
  nbap.PRACH_ParametersItem_CTCH_SetupRqstTDD
nbap.PRACH_ParametersListIE_CTCH_ReconfRqstFDD PRACH-ParametersListIE-CTCH-Reco
  Unsigned 32-bit integer
  nbap.PRACH_ParametersListIE_CTCH_ReconfRqstFDD
nbap.PRACH_ParametersListIE_CTCH_ReconfRqstFDD_item Item
  No value
  nbap.PRACH_ParametersItem_CTCH_ReconfRqstFDD
nbap.PUSCHSets_AddList_PSCH_ReconfRqst PUSCHSets-AddList-PSCH-ReconfRqst
  Unsigned 32-bit integer
  nbap.PUSCHSets_AddList_PSCH_ReconfRqst
nbap.PUSCHSets_AddList_PSCH_ReconfRqst_item Item
  No value
  nbap.PUSCHSets_AddItem_PSCH_ReconfRqst
nbap.PUSCHSets_DeleteList_PSCH_ReconfRqst PUSCHSets-DeleteList-PSCH-ReconfRqst
  Unsigned 32-bit integer
  nbap.PUSCHSets_DeleteList_PSCH_ReconfRqst
nbap.PUSCHSets_DeleteList_PSCH_ReconfRqst_item Item
  No value
  nbap.PUSCHSets_DeleteItem_PSCH_ReconfRqst
nbap.PUSCHSets_ModifyList_PSCH_ReconfRqst PUSCHSets-ModifyList-PSCH-ReconfRqst
  Unsigned 32-bit integer
  nbap.PUSCHSets_ModifyList_PSCH_ReconfRqst
nbap.PUSCHSets_ModifyList_PSCH_ReconfRqst_item Item
  No value
  nbap.PUSCHSets_ModifyItem_PSCH_ReconfRqst

```



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nbap.PUSCH_AddInformation_768_AddItem_PSCH_ReconfRqst  PUSCH-AddInformation-768-  
  No value  
  nbap.PUSCH_AddInformation_768_AddItem_PSCH_ReconfRqst  
nbap.PUSCH_AddInformation_LCR_AddItem_PSCH_ReconfRqst  PUSCH-AddInformation-LCR-  
  No value  
  nbap.PUSCH_AddInformation_LCR_AddItem_PSCH_ReconfRqst  
nbap.PUSCH_Info_DM_Rprt  PUSCH-Info-DM-Rprt  
  Unsigned 32-bit integer  
  nbap.PUSCH_Info_DM_Rprt  
nbap.PUSCH_Info_DM_Rprt_item  Item  
  Unsigned 32-bit integer  
  nbap.PUSCH_ID  
nbap.PUSCH_Info_DM_Rqst  PUSCH-Info-DM-Rqst  
  Unsigned 32-bit integer  
  nbap.PUSCH_Info_DM_Rqst  
nbap.PUSCH_Info_DM_Rqst_item  Item  
  Unsigned 32-bit integer  
  nbap.PUSCH_ID  
nbap.PUSCH_Info_DM_Rsp  PUSCH-Info-DM-Rsp  
  Unsigned 32-bit integer  
  nbap.PUSCH_Info_DM_Rsp  
nbap.PUSCH_Info_DM_Rsp_item  Item  
  Unsigned 32-bit integer  
  nbap.PUSCH_ID  
nbap.PUSCH_Information_AddItem_PSCH_ReconfRqst  PUSCH-Information-AddItem-PSCH-R  
  No value  
  nbap.PUSCH_Information_AddItem_PSCH_ReconfRqst  
nbap.PUSCH_Information_ModifyItem_PSCH_ReconfRqst  PUSCH-Information-ModifyItem-  
  No value  
  nbap.PUSCH_Information_ModifyItem_PSCH_ReconfRqst  
nbap.PUSCH_ModifyInformation_768_ModifyItem_PSCH_ReconfRqst  PUSCH-ModifyInforma  
  No value  
  nbap.PUSCH_ModifyInformation_768_ModifyItem_PSCH_ReconfRqst  
nbap.PUSCH_ModifyInformation_LCR_ModifyItem_PSCH_ReconfRqst  PUSCH-ModifyInforma  
  No value  
  nbap.PUSCH_ModifyInformation_LCR_ModifyItem_PSCH_ReconfRqst  
nbap.Paging_MACFlow_PriorityQueue_Information_item  Item  
  No value  
  nbap.Paging_MACFlow_PriorityQueue_Item  
nbap.Paging_MACFlow_Specific_Information_item  Item  
  No value  
  nbap.Paging_MAC_Flow_Specific_Information_Item  
nbap.Paging_MACFlows_to_DeleteFDD  Paging-MACFlows-to-DeleteFDD  
  Unsigned 32-bit integer  
  nbap.Paging_MACFlows_to_DeleteFDD  
nbap.Paging_MACFlows_to_DeleteFDD_item  Item  
  No value  
  nbap.Paging_MACFlows_to_DeleteFDD_Item
```

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nbap.PhysicalSharedChannelReconfigurationFailure PhysicalSharedChannelReconfigu
    No value
    nbap.PhysicalSharedChannelReconfigurationFailure
nbap.PhysicalSharedChannelReconfigurationRequestFDD PhysicalSharedChannelReconf
    No value
    nbap.PhysicalSharedChannelReconfigurationRequestFDD
nbap.PhysicalSharedChannelReconfigurationRequestTDD PhysicalSharedChannelReconf
    No value
    nbap.PhysicalSharedChannelReconfigurationRequestTDD
nbap.PhysicalSharedChannelReconfigurationResponse PhysicalSharedChannelReconfig
    No value
    nbap.PhysicalSharedChannelReconfigurationResponse
nbap.PowerAdjustmentType PowerAdjustmentType
    Unsigned 32-bit integer
    nbap.PowerAdjustmentType
nbap.PowerLocalCellGroup_CM_Rprt PowerLocalCellGroup-CM-Rprt
    No value
    nbap.PowerLocalCellGroup_CM_Rprt
nbap.PowerLocalCellGroup_CM_Rqst PowerLocalCellGroup-CM-Rqst
    No value
    nbap.PowerLocalCellGroup_CM_Rqst
nbap.PowerLocalCellGroup_CM_Rsp PowerLocalCellGroup-CM-Rsp
    No value
    nbap.PowerLocalCellGroup_CM_Rsp
nbap.Power_Local_Cell_Group_InformationItem2_ResourceStatusInd Power-Local-Cell
    No value
    nbap.Power_Local_Cell_Group_InformationItem2_ResourceStatusInd
nbap.Power_Local_Cell_Group_InformationItem_AuditRsp Power-Local-Cell-Group-Inf
    No value
    nbap.Power_Local_Cell_Group_InformationItem_AuditRsp
nbap.Power_Local_Cell_Group_InformationItem_ResourceStatusInd Power-Local-Cell-
    No value
    nbap.Power_Local_Cell_Group_InformationItem_ResourceStatusInd
nbap.Power_Local_Cell_Group_InformationList2_ResourceStatusInd Power-Local-Cell
    Unsigned 32-bit integer
    nbap.Power_Local_Cell_Group_InformationList2_ResourceStatusInd
nbap.Power_Local_Cell_Group_InformationList2_ResourceStatusInd_item Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.Power_Local_Cell_Group_InformationList_AuditRsp Power-Local-Cell-Group-Inf
    Unsigned 32-bit integer
    nbap.Power_Local_Cell_Group_InformationList_AuditRsp
nbap.Power_Local_Cell_Group_InformationList_AuditRsp_item Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.Power_Local_Cell_Group_InformationList_ResourceStatusInd Power-Local-Cell-
    Unsigned 32-bit integer
    nbap.Power_Local_Cell_Group_InformationList_ResourceStatusInd

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nbap.Power_Local_Cell_Group_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.PrimaryCCPCH_Information_Cell_ReconfRqstFDD  PrimaryCCPCH-Information-Cell-
    No value
    nbap.PrimaryCCPCH_Information_Cell_ReconfRqstFDD
nbap.PrimaryCCPCH_Information_Cell_SetupRqstFDD  PrimaryCCPCH-Information-Cell-S
    No value
    nbap.PrimaryCCPCH_Information_Cell_SetupRqstFDD
nbap.PrimaryCCPCH_RSCP  PrimaryCCPCH-RSCP
    Unsigned 32-bit integer
    nbap.PrimaryCCPCH_RSCP
nbap.PrimaryCCPCH_RSCP_Delta  PrimaryCCPCH-RSCP-Delta
    Signed 32-bit integer
    nbap.PrimaryCCPCH_RSCP_Delta
nbap.PrimaryCPICH_Information_Cell_ReconfRqstFDD  PrimaryCPICH-Information-Cell-
    No value
    nbap.PrimaryCPICH_Information_Cell_ReconfRqstFDD
nbap.PrimaryCPICH_Information_Cell_SetupRqstFDD  PrimaryCPICH-Information-Cell-S
    No value
    nbap.PrimaryCPICH_Information_Cell_SetupRqstFDD
nbap.PrimarySCH_Information_Cell_ReconfRqstFDD  PrimarySCH-Information-Cell-Reco
    No value
    nbap.PrimarySCH_Information_Cell_ReconfRqstFDD
nbap.PrimarySCH_Information_Cell_SetupRqstFDD  PrimarySCH-Information-Cell-Setup
    No value
    nbap.PrimarySCH_Information_Cell_SetupRqstFDD
nbap.PrimaryScramblingCode  PrimaryScramblingCode
    Unsigned 32-bit integer
    nbap.PrimaryScramblingCode
nbap.Primary_CPICH_Usage_for_Channel_Estimation  Primary-CPICH-Usage-for-Channel
    Unsigned 32-bit integer
    nbap.Primary_CPICH_Usage_for_Channel_Estimation
nbap.PriorityQueue_InfoList_item  Item
    No value
    nbap.PriorityQueue_InfoItem
nbap.PriorityQueue_InfoList_to_Modify_Unsynchronised_item  Item
    No value
    nbap.PriorityQueue_InfoItem_to_Modify_Unsynchronised
nbap.PriorityQueue_InfoList_to_Modify_item  Item
    Unsigned 32-bit integer
    nbap.ModifyPriorityQueue
nbap.PrivateIE_Container_item  Item
    No value
    nbap.PrivateIE_Field
nbap.PrivateMessage  PrivateMessage
    No value
    nbap.PrivateMessage

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nbap.ProtocolExtensionContainer_item  Item
    No value
    nbap.ProtocolExtensionField
nbap.ProtocolIE_Container_item  Item
    No value
    nbap.ProtocolIE_Field
nbap.RACH_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.RACH_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.RACH_ParameterItem_CTCH_SetupRqstTDD  RACH-ParameterItem-CTCH-SetupRqstTDD
    No value
    nbap.RACH_ParameterItem_CTCH_SetupRqstTDD
nbap.RACH_ParametersItem_CTCH_SetupRqstFDD  RACH-ParametersItem-CTCH-SetupRqstFDD
    No value
    nbap.RACH_ParametersItem_CTCH_SetupRqstFDD
nbap.RL_ID  RL-ID
    Unsigned 32-bit integer
    nbap.RL_ID
nbap.RL_InformationItem_DM_Rprt  RL-InformationItem-DM-Rprt
    No value
    nbap.RL_InformationItem_DM_Rprt
nbap.RL_InformationItem_DM_Rqst  RL-InformationItem-DM-Rqst
    No value
    nbap.RL_InformationItem_DM_Rqst
nbap.RL_InformationItem_DM_Rsp  RL-InformationItem-DM-Rsp
    No value
    nbap.RL_InformationItem_DM_Rsp
nbap.RL_InformationItem_RL_AdditionRqstFDD  RL-InformationItem-RL-AdditionRqstFDD
    No value
    nbap.RL_InformationItem_RL_AdditionRqstFDD
nbap.RL_InformationItem_RL_FailureInd  RL-InformationItem-RL-FailureInd
    No value
    nbap.RL_InformationItem_RL_FailureInd
nbap.RL_InformationItem_RL_PreemptRequiredInd  RL-InformationItem-RL-PreemptRequiredInd
    No value
    nbap.RL_InformationItem_RL_PreemptRequiredInd
nbap.RL_InformationItem_RL_ReconfPrepFDD  RL-InformationItem-RL-ReconfPrepFDD
    No value
    nbap.RL_InformationItem_RL_ReconfPrepFDD
nbap.RL_InformationItem_RL_ReconfRqstFDD  RL-InformationItem-RL-ReconfRqstFDD
    No value
    nbap.RL_InformationItem_RL_ReconfRqstFDD
nbap.RL_InformationItem_RL_RestoreInd  RL-InformationItem-RL-RestoreInd
    No value
    nbap.RL_InformationItem_RL_RestoreInd
```

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nbap.RL_InformationItem_RL_SetupRqstFDD  RL-InformationItem-RL-SetupRqstFDD
  No value
  nbap.RL_InformationItem_RL_SetupRqstFDD
nbap.RL_InformationList_DM_Rprt_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_DM_Rqst_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_DM_Rsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_RL_AdditionRqstFDD  RL-InformationList-RL-AdditionRqstFDD
  Unsigned 32-bit integer
  nbap.RL_InformationList_RL_AdditionRqstFDD
nbap.RL_InformationList_RL_AdditionRqstFDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_RL_FailureInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_RL_PreemptRequiredInd  RL-InformationList-RL-PreemptRequiredInd
  Unsigned 32-bit integer
  nbap.RL_InformationList_RL_PreemptRequiredInd
nbap.RL_InformationList_RL_PreemptRequiredInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_RL_ReconfPrepFDD  RL-InformationList-RL-ReconfPrepFDD
  Unsigned 32-bit integer
  nbap.RL_InformationList_RL_ReconfPrepFDD
nbap.RL_InformationList_RL_ReconfPrepFDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_RL_ReconfRqstFDD  RL-InformationList-RL-ReconfRqstFDD
  Unsigned 32-bit integer
  nbap.RL_InformationList_RL_ReconfRqstFDD
nbap.RL_InformationList_RL_ReconfRqstFDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_RL_RestoreInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationList_RL_SetupRqstFDD  RL-InformationList-RL-SetupRqstFDD
  Unsigned 32-bit integer
  nbap.RL_InformationList_RL_SetupRqstFDD
nbap.RL_InformationList_RL_SetupRqstFDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
```

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nbap.RL_InformationResponseItem_RL_AdditionRspFDD  RL-InformationResponseItem-RL-
  No value
  nbap.RL_InformationResponseItem_RL_AdditionRspFDD
nbap.RL_InformationResponseItem_RL_ReconfReady  RL-InformationResponseItem-RL-Re
  No value
  nbap.RL_InformationResponseItem_RL_ReconfReady
nbap.RL_InformationResponseItem_RL_ReconfRsp  RL-InformationResponseItem-RL-Reco
  No value
  nbap.RL_InformationResponseItem_RL_ReconfRsp
nbap.RL_InformationResponseItem_RL_SetupRspFDD  RL-InformationResponseItem-RL-Se
  No value
  nbap.RL_InformationResponseItem_RL_SetupRspFDD
nbap.RL_InformationResponseList_RL_AdditionRspFDD  RL-InformationResponseList-RL-
  Unsigned 32-bit integer
  nbap.RL_InformationResponseList_RL_AdditionRspFDD
nbap.RL_InformationResponseList_RL_AdditionRspFDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationResponseList_RL_ReconfReady  RL-InformationResponseList-RL-Re
  Unsigned 32-bit integer
  nbap.RL_InformationResponseList_RL_ReconfReady
nbap.RL_InformationResponseList_RL_ReconfReady_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationResponseList_RL_ReconfRsp  RL-InformationResponseList-RL-Reco
  Unsigned 32-bit integer
  nbap.RL_InformationResponseList_RL_ReconfRsp
nbap.RL_InformationResponseList_RL_ReconfRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationResponseList_RL_SetupRspFDD  RL-InformationResponseList-RL-Se
  Unsigned 32-bit integer
  nbap.RL_InformationResponseList_RL_SetupRspFDD
nbap.RL_InformationResponseList_RL_SetupRspFDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.RL_InformationResponse_LCR_RL_AdditionRspTDD  RL-InformationResponse-LCR-RL-
  No value
  nbap.RL_InformationResponse_LCR_RL_AdditionRspTDD
nbap.RL_InformationResponse_LCR_RL_SetupRspTDD  RL-InformationResponse-LCR-RL-Se
  No value
  nbap.RL_InformationResponse_LCR_RL_SetupRspTDD
nbap.RL_InformationResponse_RL_AdditionRspTDD  RL-InformationResponse-RL-Additio
  No value
  nbap.RL_InformationResponse_RL_AdditionRspTDD
nbap.RL_InformationResponse_RL_SetupRspTDD  RL-InformationResponse-RL-SetupRspTD
  No value
  nbap.RL_InformationResponse_RL_SetupRspTDD

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nbap.RL_Information_RL_AdditionRqstTDD  RL-Information-RL-AdditionRqstTDD
    No value
    nbap.RL_Information_RL_AdditionRqstTDD
nbap.RL_Information_RL_ReconfPrepTDD  RL-Information-RL-ReconfPrepTDD
    No value
    nbap.RL_Information_RL_ReconfPrepTDD
nbap.RL_Information_RL_ReconfRqstTDD  RL-Information-RL-ReconfRqstTDD
    No value
    nbap.RL_Information_RL_ReconfRqstTDD
nbap.RL_Information_RL_SetupRqstTDD  RL-Information-RL-SetupRqstTDD
    No value
    nbap.RL_Information_RL_SetupRqstTDD
nbap.RL_ReconfigurationFailureItem_RL_ReconfFailure  RL-ReconfigurationFailureItem
    No value
    nbap.RL_ReconfigurationFailureItem_RL_ReconfFailure
nbap.RL_ReconfigurationFailureList_RL_ReconfFailure_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.RL_Set_ID  RL-Set-ID
    Unsigned 32-bit integer
    nbap.RL_Set_ID
nbap.RL_Set_InformationItem_DM_Rprt  RL-Set-InformationItem-DM-Rprt
    No value
    nbap.RL_Set_InformationItem_DM_Rprt
nbap.RL_Set_InformationItem_DM_Rsp  RL-Set-InformationItem-DM-Rsp
    No value
    nbap.RL_Set_InformationItem_DM_Rsp
nbap.RL_Set_InformationItem_RL_FailureInd  RL-Set-InformationItem-RL-FailureInd
    No value
    nbap.RL_Set_InformationItem_RL_FailureInd
nbap.RL_Set_InformationItem_RL_RestoreInd  RL-Set-InformationItem-RL-RestoreInd
    No value
    nbap.RL_Set_InformationItem_RL_RestoreInd
nbap.RL_Set_InformationList_DM_Rprt_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.RL_Set_InformationList_DM_Rqst_item  Item
    No value
    nbap.RL_Set_InformationItem_DM_Rqst
nbap.RL_Set_InformationList_DM_Rsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.RL_Set_InformationList_RL_FailureInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.RL_Set_InformationList_RL_RestoreInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container

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nbap.RL_Specific_DCH_Info    RL-Specific-DCH-Info
    Unsigned 32-bit integer
    nbap.RL_Specific_DCH_Info

nbap.RL_Specific_DCH_Info_item  Item
    No value
    nbap.RL_Specific_DCH_Info_Item

nbap.RL_Specific_E_DCH_Info    RL-Specific-E-DCH-Info
    No value
    nbap.RL_Specific_E_DCH_Info

nbap.RL_Specific_E_DCH_Information_item  Item
    No value
    nbap.RL_Specific_E_DCH_Information_Item

nbap.RL_informationItem_RL_DeletionRqst  RL-informationItem-RL-DeletionRqst
    No value
    nbap.RL_informationItem_RL_DeletionRqst

nbap.RL_informationList_RL_DeletionRqst  RL-informationList-RL-DeletionRqst
    Unsigned 32-bit integer
    nbap.RL_informationList_RL_DeletionRqst

nbap.RL_informationList_RL_DeletionRqst_item  Item
    No value
    nbap.ProtocolIE_Single_Container

nbap.RSEPS_Value_IncrDecrThres  RSEPS-Value-IncrDecrThres
    Unsigned 32-bit integer
    nbap.RSEPS_Value_IncrDecrThres

nbap.RTWP_CellPortion_ReportingIndicator  RTWP-CellPortion-ReportingIndicator
    Unsigned 32-bit integer
    nbap.RTWP_CellPortion_ReportingIndicator

nbap.RTWP_ReportingIndicator  RTWP-ReportingIndicator
    Unsigned 32-bit integer
    nbap.RTWP_ReportingIndicator

nbap.RadioLinkActivationCommandFDD  RadioLinkActivationCommandFDD
    No value
    nbap.RadioLinkActivationCommandFDD

nbap.RadioLinkActivationCommandTDD  RadioLinkActivationCommandTDD
    No value
    nbap.RadioLinkActivationCommandTDD

nbap.RadioLinkAdditionFailureFDD  RadioLinkAdditionFailureFDD
    No value
    nbap.RadioLinkAdditionFailureFDD

nbap.RadioLinkAdditionFailureTDD  RadioLinkAdditionFailureTDD
    No value
    nbap.RadioLinkAdditionFailureTDD

nbap.RadioLinkAdditionRequestFDD  RadioLinkAdditionRequestFDD
    No value
    nbap.RadioLinkAdditionRequestFDD

nbap.RadioLinkAdditionRequestTDD  RadioLinkAdditionRequestTDD
    No value
    nbap.RadioLinkAdditionRequestTDD
```



```
nbap.RadioLinkAdditionResponseFDD  RadioLinkAdditionResponseFDD
  No value
  nbap.RadioLinkAdditionResponseFDD
nbap.RadioLinkAdditionResponseTDD  RadioLinkAdditionResponseTDD
  No value
  nbap.RadioLinkAdditionResponseTDD
nbap.RadioLinkDeletionRequest  RadioLinkDeletionRequest
  No value
  nbap.RadioLinkDeletionRequest
nbap.RadioLinkDeletionResponse  RadioLinkDeletionResponse
  No value
  nbap.RadioLinkDeletionResponse
nbap.RadioLinkFailureIndication  RadioLinkFailureIndication
  No value
  nbap.RadioLinkFailureIndication
nbap.RadioLinkParameterUpdateIndicationFDD  RadioLinkParameterUpdateIndicationFD
  No value
  nbap.RadioLinkParameterUpdateIndicationFDD
nbap.RadioLinkParameterUpdateIndicationTDD  RadioLinkParameterUpdateIndicationTD
  No value
  nbap.RadioLinkParameterUpdateIndicationTDD
nbap.RadioLinkPreemptionRequiredIndication  RadioLinkPreemptionRequiredIndicatio
  No value
  nbap.RadioLinkPreemptionRequiredIndication
nbap.RadioLinkReconfigurationCancel  RadioLinkReconfigurationCancel
  No value
  nbap.RadioLinkReconfigurationCancel
nbap.RadioLinkReconfigurationCommit  RadioLinkReconfigurationCommit
  No value
  nbap.RadioLinkReconfigurationCommit
nbap.RadioLinkReconfigurationFailure  RadioLinkReconfigurationFailure
  No value
  nbap.RadioLinkReconfigurationFailure
nbap.RadioLinkReconfigurationPrepareFDD  RadioLinkReconfigurationPrepareFDD
  No value
  nbap.RadioLinkReconfigurationPrepareFDD
nbap.RadioLinkReconfigurationPrepareTDD  RadioLinkReconfigurationPrepareTDD
  No value
  nbap.RadioLinkReconfigurationPrepareTDD
nbap.RadioLinkReconfigurationReady  RadioLinkReconfigurationReady
  No value
  nbap.RadioLinkReconfigurationReady
nbap.RadioLinkReconfigurationRequestFDD  RadioLinkReconfigurationRequestFDD
  No value
  nbap.RadioLinkReconfigurationRequestFDD
nbap.RadioLinkReconfigurationRequestTDD  RadioLinkReconfigurationRequestTDD
  No value
  nbap.RadioLinkReconfigurationRequestTDD
```

```

nbap.RadioLinkReconfigurationResponse  RadioLinkReconfigurationResponse
    No value
    nbap.RadioLinkReconfigurationResponse
nbap.RadioLinkRestoreIndication  RadioLinkRestoreIndication
    No value
    nbap.RadioLinkRestoreIndication
nbap.RadioLinkSetupFailureFDD  RadioLinkSetupFailureFDD
    No value
    nbap.RadioLinkSetupFailureFDD
nbap.RadioLinkSetupFailureTDD  RadioLinkSetupFailureTDD
    No value
    nbap.RadioLinkSetupFailureTDD
nbap.RadioLinkSetupRequestFDD  RadioLinkSetupRequestFDD
    No value
    nbap.RadioLinkSetupRequestFDD
nbap.RadioLinkSetupRequestTDD  RadioLinkSetupRequestTDD
    No value
    nbap.RadioLinkSetupRequestTDD
nbap.RadioLinkSetupResponseFDD  RadioLinkSetupResponseFDD
    No value
    nbap.RadioLinkSetupResponseFDD
nbap.RadioLinkSetupResponseTDD  RadioLinkSetupResponseTDD
    No value
    nbap.RadioLinkSetupResponseTDD
nbap.Received_Scheduled_EDCH_Power_Share_For_CellPortion_Value  Received-Schedul
    Unsigned 32-bit integer
    nbap.Received_Scheduled_EDCH_Power_Share_For_CellPortion_Value
nbap.Received_Scheduled_EDCH_Power_Share_For_CellPortion_Value_item  Item
    No value
    nbap.Received_Scheduled_EDCH_Power_Share_For_CellPortion_Value_Item
nbap.Received_Scheduled_EDCH_Power_Share_Value  Received-Scheduled-EDCH-Power-Sh
    No value
    nbap.Received_Scheduled_EDCH_Power_Share_Value
nbap.Received_total_wide_band_power_For_CellPortion_Value  Received-total-wide-b
    Unsigned 32-bit integer
    nbap.Received_total_wide_band_power_For_CellPortion_Value
nbap.Received_total_wide_band_power_For_CellPortion_Value_item  Item
    No value
    nbap.Received_total_wide_band_power_For_CellPortion_Value_Item
nbap.Received_total_wide_band_power_Value_IncrDecrThres  Received-total-wide-ban
    Unsigned 32-bit integer
    nbap.Received_total_wide_band_power_Value_IncrDecrThres
nbap.ReferenceClockAvailability  ReferenceClockAvailability
    Unsigned 32-bit integer
    nbap.ReferenceClockAvailability
nbap.ReferenceSFNoffset  ReferenceSFNoffset
    Unsigned 32-bit integer
    nbap.ReferenceSFNoffset

```

```
nbap.Reference_E_TFCI_Information_item  Item
    No value
    nbap.Reference_E_TFCI_Information_Item
nbap.Reference_ReceivedTotalWideBandPower  Reference-ReceivedTotalWideBandPower
    Unsigned 32-bit integer
    nbap.Reference_ReceivedTotalWideBandPower
nbap.Reference_ReceivedTotalWideBandPowerReporting  Reference-ReceivedTotalWideB
    Unsigned 32-bit integer
    nbap.Reference_ReceivedTotalWideBandPowerReporting
nbap.Reference_ReceivedTotalWideBandPowerSupportIndicator  Reference-ReceivedTot
    Unsigned 32-bit integer
    nbap.Reference_ReceivedTotalWideBandPowerSupportIndicator
nbap.ReportCharacteristics  ReportCharacteristics
    Unsigned 32-bit integer
    nbap.ReportCharacteristics
nbap.ReportCharacteristicsType_OnModification  ReportCharacteristicsType-OnModif
    No value
    nbap.ReportCharacteristicsType_OnModification
nbap.Reporting_Object_RL_FailureInd  Reporting-Object-RL-FailureInd
    Unsigned 32-bit integer
    nbap.Reporting_Object_RL_FailureInd
nbap.Reporting_Object_RL_RestoreInd  Reporting-Object-RL-RestoreInd
    Unsigned 32-bit integer
    nbap.Reporting_Object_RL_RestoreInd
nbap.ResetIndicator  ResetIndicator
    Unsigned 32-bit integer
    nbap.ResetIndicator
nbap.ResetRequest  ResetRequest
    No value
    nbap.ResetRequest
nbap.ResetResponse  ResetResponse
    No value
    nbap.ResetResponse
nbap.ResourceStatusIndication  ResourceStatusIndication
    No value
    nbap.ResourceStatusIndication
nbap.Rx_Timing_Deviation_Value_384_ext  Rx-Timing-Deviation-Value-384-ext
    Unsigned 32-bit integer
    nbap.Rx_Timing_Deviation_Value_384_ext
nbap.Rx_Timing_Deviation_Value_768  Rx-Timing-Deviation-Value-768
    Unsigned 32-bit integer
    nbap.Rx_Timing_Deviation_Value_768
nbap.Rx_Timing_Deviation_Value_LCR  Rx-Timing-Deviation-Value-LCR
    Unsigned 32-bit integer
    nbap.Rx_Timing_Deviation_Value_LCR
nbap.SATInfo_RealTime_Integrity_item  Item
    No value
    nbap.SAT_Info_RealTime_Integrity_Item
```

```

nbap.SAT_Info_Almanac_ExtList  SAT-Info-Almanac-ExtList
    Unsigned 32-bit integer
    nbap.SAT_Info_Almanac_ExtList
nbap.SAT_Info_Almanac_ExtList_item  Item
    No value
    nbap.SAT_Info_Almanac_ExtItem
nbap.SAT_Info_Almanac_item  Item
    No value
    nbap.SAT_Info_Almanac_Item
nbap.SAT_Info_DGPSCorrections_item  Item
    No value
    nbap.SAT_Info_DGPSCorrections_Item
nbap.SCH_768_Information_Cell_ReconfRqstTDD  SCH-768-Information-Cell-ReconfRqstTDD
    No value
    nbap.SCH_768_Information_Cell_ReconfRqstTDD
nbap.SCH_768_Information_Cell_SetupRqstTDD  SCH-768-Information-Cell-SetupRqstTDD
    No value
    nbap.SCH_768_Information_Cell_SetupRqstTDD
nbap.SCH_Information_Cell_ReconfRqstTDD  SCH-Information-Cell-ReconfRqstTDD
    No value
    nbap.SCH_Information_Cell_ReconfRqstTDD
nbap.SCH_Information_Cell_SetupRqstTDD  SCH-Information-Cell-SetupRqstTDD
    No value
    nbap.SCH_Information_Cell_SetupRqstTDD
nbap.SFN  SFN
    Unsigned 32-bit integer
    nbap.SFN
nbap.SFN_SFNNMeasurementThresholdInformation  SFN_SFNNMeasurementThresholdInformation
    No value
    nbap.SFN_SFNNMeasurementThresholdInformation
nbap.SFN_SFNNMeasurementValueInformation  SFN_SFNNMeasurementValueInformation
    No value
    nbap.SFN_SFNNMeasurementValueInformation
nbap.SYNCD1CodeIdInfoListLCR_CellSyncReconfRqstTDD_item  Item
    No value
    nbap.SYNCD1CodeIdInfoItemLCR_CellSyncReconfRqstTDD
nbap.SYNCD1CodeIdMeasInfoLCR_CellSyncReconfRqstTDD  SYNCD1CodeIdMeasInfoLCR-Cell
    No value
    nbap.SYNCD1CodeIdMeasInfoLCR_CellSyncReconfRqstTDD
nbap.SYNCD1CodeIdMeasInfoList_CellSyncReconfRqstTDD_item  Item
    No value
    nbap.SYNCD1CodeIdMeasInfoItem_CellSyncReconfRqstTDD
nbap.SYNCD1CodeIdTransReconfInfoLCR_CellSyncReconfRqstTDD  SYNCD1CodeIdTransReco
    Unsigned 32-bit integer
    nbap.SYNCD1CodeIdTransReconfInfoLCR_CellSyncReconfRqstTDD
nbap.SYNCD1CodeIdTransReconfInfoLCR_CellSyncReconfRqstTDD_item  Item
    No value
    nbap.SYNCD1CodeIdTransReconfItemLCR_CellSyncReconfRqstTDD

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```
nbap.SYNCDlCodeId_MeasureInitLCR_CellSyncInitiationRqstTDD  SYNCDlCodeId-Measure
  No value
  nbap.SYNCDlCodeId_MeasureInitLCR_CellSyncInitiationRqstTDD
nbap.SYNCDlCodeId_TransInitLCR_CellSyncInitiationRqstTDD  SYNCDlCodeId-TransInit
  No value
  nbap.SYNCDlCodeId_TransInitLCR_CellSyncInitiationRqstTDD
nbap.SYNC_UL_Partition_LCR  SYNC-UL-Partition-LCR
  No value
  nbap.SYNC_UL_Partition_LCR
nbap.S_CCPCH_768_InformationList_AuditRsp  S-CCPCH-768-InformationList-AuditRsp
  Unsigned 32-bit integer
  nbap.S_CCPCH_768_InformationList_AuditRsp
nbap.S_CCPCH_768_InformationList_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.S_CCPCH_768_InformationList_ResourceStatusInd  S-CCPCH-768-InformationList-
  Unsigned 32-bit integer
  nbap.S_CCPCH_768_InformationList_ResourceStatusInd
nbap.S_CCPCH_768_InformationList_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.S_CCPCH_InformationListExt_AuditRsp  S-CCPCH-InformationListExt-AuditRsp
  Unsigned 32-bit integer
  nbap.S_CCPCH_InformationListExt_AuditRsp
nbap.S_CCPCH_InformationListExt_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.S_CCPCH_InformationListExt_ResourceStatusInd  S-CCPCH-InformationListExt-Re
  Unsigned 32-bit integer
  nbap.S_CCPCH_InformationListExt_ResourceStatusInd
nbap.S_CCPCH_InformationListExt_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.S_CCPCH_InformationList_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.S_CCPCH_InformationList_ResourceStatusInd_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.S_CCPCH_LCR_InformationListExt_AuditRsp  S-CCPCH-LCR-InformationListExt-Aud
  Unsigned 32-bit integer
  nbap.S_CCPCH_LCR_InformationListExt_AuditRsp
nbap.S_CCPCH_LCR_InformationListExt_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.S_CCPCH_LCR_InformationListExt_ResourceStatusInd  S-CCPCH-LCR-InformationLi
  Unsigned 32-bit integer
  nbap.S_CCPCH_LCR_InformationListExt_ResourceStatusInd
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nbap.S_CCPCH_LCR_InformationListExt_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.S_CPICH_InformationList_AuditRsp_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.S_CPICH_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.ScaledAdjustmentRatio  ScaledAdjustmentRatio
    Unsigned 32-bit integer
    nbap.ScaledAdjustmentRatio
nbap.Scheduled_E_HICH_Specific_Information_ResponseLCRTDD_item  Item
    No value
    nbap.Scheduled_E_HICH_Specific_InformationItem_ResponseLCRTDD
nbap.SecondaryCPICH_InformationItem_Cell_ReconfRqstFDD  SecondaryCPICH-InformationItem
    No value
    nbap.SecondaryCPICH_InformationItem_Cell_ReconfRqstFDD
nbap.SecondaryCPICH_InformationItem_Cell_SetupRqstFDD  SecondaryCPICH-InformationItem
    No value
    nbap.SecondaryCPICH_InformationItem_Cell_SetupRqstFDD
nbap.SecondaryCPICH_InformationList_Cell_ReconfRqstFDD  SecondaryCPICH-InformationList
    Unsigned 32-bit integer
    nbap.SecondaryCPICH_InformationList_Cell_ReconfRqstFDD
nbap.SecondaryCPICH_InformationList_Cell_ReconfRqstFDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.SecondaryCPICH_InformationList_Cell_SetupRqstFDD  SecondaryCPICH-InformationList
    Unsigned 32-bit integer
    nbap.SecondaryCPICH_InformationList_Cell_SetupRqstFDD
nbap.SecondaryCPICH_InformationList_Cell_SetupRqstFDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.SecondarySCH_Information_Cell_ReconfRqstFDD  SecondarySCH-Information-Cell-SetupRqstFDD
    No value
    nbap.SecondarySCH_Information_Cell_ReconfRqstFDD
nbap.SecondarySCH_Information_Cell_SetupRqstFDD  SecondarySCH-Information-Cell-SetupRqstFDD
    No value
    nbap.SecondarySCH_Information_Cell_SetupRqstFDD
nbap.Secondary_CCPCHListIE_CTCH_ReconfRqstTDD  Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
    Unsigned 32-bit integer
    nbap.Secondary_CCPCHListIE_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCHListIE_CTCH_ReconfRqstTDD_item  Item
    No value
    nbap.Secondary_CCPCHItem_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCH_768_List_CTCH_ReconfRqstTDD_item  Item
    No value
    nbap.Secondary_CCPCH_768_Item_CTCH_ReconfRqstTDD

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nbap.Secondary_CCPCH_768_Parameters_CTCH_ReconfRqstTDD  Secondary-CCPCH-768-Para
  No value
  nbap.Secondary_CCPCH_768_Parameters_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCH_768_parameterList_CTCH_SetupRqstTDD  Secondary-CCPCH-768-pa
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_768_parameterList_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_768_parameterList_CTCH_SetupRqstTDD_item  Item
  No value
  nbap.Secondary_CCPCH_768_parameterItem_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_LCR_parameterExtendedList_CTCH_ReconfRqstTDD  Secondary-CCP
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_LCR_parameterExtendedList_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCH_LCR_parameterExtendedList_CTCH_ReconfRqstTDD_item  Item
  No value
  nbap.Secondary_CCPCHItem_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCH_LCR_parameterExtendedList_CTCH_SetupRqstTDD  Secondary-CCPC
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_LCR_parameterExtendedList_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_LCR_parameterExtendedList_CTCH_SetupRqstTDD_item  Item
  No value
  nbap.Secondary_CCPCH_LCR_parameterItem_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_LCR_parameterList_CTCH_SetupRqstTDD  Secondary-CCPCH-LCR-pa
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_LCR_parameterList_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_LCR_parameterList_CTCH_SetupRqstTDD_item  Item
  No value
  nbap.Secondary_CCPCH_LCR_parameterItem_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_Parameters_CTCH_ReconfRqstTDD  Secondary-CCPCH-Parameters-C
  No value
  nbap.Secondary_CCPCH_Parameters_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCH_SlotFormat_Extended  Secondary-CCPCH-SlotFormat-Extended
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_SlotFormat_Extended
nbap.Secondary_CCPCH_parameterExtendedList_CTCH_ReconfRqstTDD  Secondary-CCPCH-p
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_parameterExtendedList_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCH_parameterExtendedList_CTCH_ReconfRqstTDD_item  Item
  No value
  nbap.Secondary_CCPCHItem_CTCH_ReconfRqstTDD
nbap.Secondary_CCPCH_parameterExtendedList_CTCH_SetupRqstTDD  Secondary-CCPCH-pa
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_parameterExtendedList_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_parameterExtendedList_CTCH_SetupRqstTDD_item  Item
  No value
  nbap.Secondary_CCPCH_parameterItem_CTCH_SetupRqstTDD
nbap.Secondary_CCPCH_parameterListIE_CTCH_SetupRqstTDD  Secondary-CCPCH-paramete
  Unsigned 32-bit integer
  nbap.Secondary_CCPCH_parameterListIE_CTCH_SetupRqstTDD

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nbap.Secondary_CCPCH_parameterListIE_CTCH_SetupRqstTDD_item  Item
    No value
    nbap.Secondary_CCPCH_parameterItem_CTCH_SetupRqstTDD
nbap.Secondary_CPICH_Information_Change  Secondary-CPICH-Information-Change
    Unsigned 32-bit integer
    nbap.Secondary_CPICH_Information_Change
nbap.SegmentInformationListIE_SystemInfoUpdate  SegmentInformationListIE-SystemI
    Unsigned 32-bit integer
    nbap.SegmentInformationListIE_SystemInfoUpdate
nbap.SegmentInformationListIE_SystemInfoUpdate_item  Item
    No value
    nbap.SegmentInformationItem_SystemInfoUpdate
nbap.Serving_E_DCH_RL_ID  Serving-E-DCH-RL-ID
    Unsigned 32-bit integer
    nbap.Serving_E_DCH_RL_ID
nbap.ShutdownTimer  ShutdownTimer
    Unsigned 32-bit integer
    nbap.ShutdownTimer
nbap.SignallingBearerRequestIndicator  SignallingBearerRequestIndicator
    Unsigned 32-bit integer
    nbap.SignallingBearerRequestIndicator
nbap.SixteenQAM_UL_Capability  SixteenQAM-UL-Capability
    Unsigned 32-bit integer
    nbap.SixteenQAM_UL_Capability
nbap.SixtyfourQAM_DL_Capability  SixtyfourQAM-DL-Capability
    Unsigned 32-bit integer
    nbap.SixtyfourQAM_DL_Capability
nbap.Start_Of_Audit_Sequence_Indicator  Start-Of-Audit-Sequence-Indicator
    Unsigned 32-bit integer
    nbap.Start_Of_Audit_Sequence_Indicator
nbap.Successful_RL_InformationRespItem_RL_AdditionFailureFDD  Successful-RL-Info
    No value
    nbap.Successful_RL_InformationRespItem_RL_AdditionFailureFDD
nbap.Successful_RL_InformationRespItem_RL_SetupFailureFDD  Successful-RL-Informa
    No value
    nbap.Successful_RL_InformationRespItem_RL_SetupFailureFDD
nbap.Successful_RL_InformationRespList_RL_AdditionFailureFDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.Successful_RL_InformationRespList_RL_SetupFailureFDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.SyncCase  SyncCase
    Unsigned 32-bit integer
    nbap.SyncCase
nbap.SyncCaseIndicatorItem_Cell_SetupRqstTDD_PSCH  SyncCaseIndicatorItem-Cell-Se
    Unsigned 32-bit integer
    nbap.SyncCaseIndicatorItem_Cell_SetupRqstTDD_PSCH

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nbap.SyncDLCodeIdInfo_CellSyncReprtTDD_item  Item
    Unsigned 32-bit integer
    nbap.SyncDLCodeIdItem_CellSyncReprtTDD

nbap.SyncDLCodeIdThreInfoLCR  SyncDLCodeIdThreInfoLCR
    Unsigned 32-bit integer
    nbap.SyncDLCodeIdThreInfoLCR

nbap.SyncDLCodeIdThreInfoLCR_item  Item
    No value
    nbap.SyncDLCodeIdThreInfoList

nbap.SyncDLCodeIdsMeasInfoList_CellSyncReprtTDD  SyncDLCodeIdsMeasInfoList-Cells
    Unsigned 32-bit integer
    nbap.SyncDLCodeIdsMeasInfoList_CellSyncReprtTDD

nbap.SyncDLCodeIdsMeasInfoList_CellSyncReprtTDD_item  Item
    No value
    nbap.SyncDLCodeIdsMeasInfoItem_CellSyncReprtTDD

nbap.SyncDLCodeInfoListLCR_item  Item
    No value
    nbap.SyncDLCodeInfoItemLCR

nbap.SyncReportType_CellSyncReprtTDD  SyncReportType-CellSyncReprtTDD
    Unsigned 32-bit integer
    nbap.SyncReportType_CellSyncReprtTDD

nbap.SynchronisationIndicator  SynchronisationIndicator
    Unsigned 32-bit integer
    nbap.SynchronisationIndicator

nbap.SynchronisationReportCharactThreExc_item  Item
    No value
    nbap.SynchronisationReportCharactThreInfoItem

nbap.SynchronisationReportCharacteristics  SynchronisationReportCharacteristics
    No value
    nbap.SynchronisationReportCharacteristics

nbap.SynchronisationReportType  SynchronisationReportType
    Unsigned 32-bit integer
    nbap.SynchronisationReportType

nbap.Synchronisation_Configuration_Cell_ReconfRqst  Synchronisation-Configuratio
    No value
    nbap.Synchronisation_Configuration_Cell_ReconfRqst

nbap.Synchronisation_Configuration_Cell_SetupRqst  Synchronisation-Configuratio
    No value
    nbap.Synchronisation_Configuration_Cell_SetupRqst

nbap.SystemInformationUpdateFailure  SystemInformationUpdateFailure
    No value
    nbap.SystemInformationUpdateFailure

nbap.SystemInformationUpdateRequest  SystemInformationUpdateRequest
    No value
    nbap.SystemInformationUpdateRequest

nbap.SystemInformationUpdateResponse  SystemInformationUpdateResponse
    No value
    nbap.SystemInformationUpdateResponse

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```
nbap.TDD_DCHs_to_Modify  TDD-DCHs-to-Modify
    Unsigned 32-bit integer
    nbap.TDD_DCHs_to_Modify

nbap.TDD_DCHs_to_Modify_item  Item
    No value
    nbap.DCH_ModifyItem_TDD

nbap.TDD_DL_Code_768_Information_item  Item
    No value
    nbap.TDD_DL_Code_768_InformationItem

nbap.TDD_DL_Code_Information_item  Item
    No value
    nbap.TDD_DL_Code_InformationItem

nbap.TDD_DL_Code_LCR_Information_item  Item
    No value
    nbap.TDD_DL_Code_LCR_InformationItem

nbap.TDD_DL_DPCH_TimeSlotFormat_LCR  TDD-DL-DPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    nbap.TDD_DL_DPCH_TimeSlotFormat_LCR

nbap.TDD_TPC_DownlinkStepSize  TDD-TPC-DownlinkStepSize
    Unsigned 32-bit integer
    nbap.TDD_TPC_DownlinkStepSize

nbap.TDD_TPC_UplinkStepSize_LCR  TDD-TPC-UplinkStepSize-LCR
    Unsigned 32-bit integer
    nbap.TDD_TPC_UplinkStepSize_LCR

nbap.TDD_UL_Code_768_Information_item  Item
    No value
    nbap.TDD_UL_Code_768_InformationItem

nbap.TDD_UL_Code_Information_item  Item
    No value
    nbap.TDD_UL_Code_InformationItem

nbap.TDD_UL_Code_LCR_Information_item  Item
    No value
    nbap.TDD_UL_Code_LCR_InformationItem

nbap.TDD_UL_DPCH_TimeSlotFormat_LCR  TDD-UL-DPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    nbap.TDD_UL_DPCH_TimeSlotFormat_LCR

nbap.TFCI_Presence  TFCI-Presence
    Unsigned 32-bit integer
    nbap.TFCI_Presence

nbap.TFCS_TFCSList_item  Item
    No value
    nbap.TFCS_TFCSList_item

nbap.TSTD_Indicator  TSTD-Indicator
    Unsigned 32-bit integer
    nbap.TSTD_Indicator

nbap.TUTRANGANSSMeasurementThresholdInformation  TUTRANGANSSMeasurementThreshold
    No value
    nbap.TUTRANGANSSMeasurementThresholdInformation
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nbap.TUTRANGANSSMeasurementValueInformation  TUTRANGANSSMeasurementValueInformat
  No value
  nbap.TUTRANGANSSMeasurementValueInformation
nbap.TUTRANGPSMeasurementThresholdInformation  TUTRANGPSMeasurementThresholdInfo
  No value
  nbap.TUTRANGPSMeasurementThresholdInformation
nbap.TUTRANGPSMeasurementValueInformation  TUTRANGPSMeasurementValueInformation
  No value
  nbap.TUTRANGPSMeasurementValueInformation
nbap.T_Cell  T-Cell
  Unsigned 32-bit integer
  nbap.T_Cell
nbap.Target_NonServing_EDCH_To_Total_EDCH_Power_Ratio  Target-NonServing-EDCH-To
  Unsigned 32-bit integer
  nbap.Target_NonServing_EDCH_To_Total_EDCH_Power_Ratio
nbap.TimeSlot  TimeSlot
  Unsigned 32-bit integer
  nbap.TimeSlot
nbap.TimeSlotConfigurationList_Cell_ReconfRqstTDD  TimeSlotConfigurationList-Cel
  Unsigned 32-bit integer
  nbap.TimeSlotConfigurationList_Cell_ReconfRqstTDD
nbap.TimeSlotConfigurationList_Cell_ReconfRqstTDD_item  Item
  No value
  nbap.TimeSlotConfigurationItem_Cell_ReconfRqstTDD
nbap.TimeSlotConfigurationList_Cell_SetupRqstTDD  TimeSlotConfigurationList-Cel
  Unsigned 32-bit integer
  nbap.TimeSlotConfigurationList_Cell_SetupRqstTDD
nbap.TimeSlotConfigurationList_Cell_SetupRqstTDD_item  Item
  No value
  nbap.TimeSlotConfigurationItem_Cell_SetupRqstTDD
nbap.TimeSlotConfigurationList_LCR_CTCH_SetupRqstTDD  TimeSlotConfigurationList-
  Unsigned 32-bit integer
  nbap.TimeSlotConfigurationList_LCR_CTCH_SetupRqstTDD
nbap.TimeSlotConfigurationList_LCR_CTCH_SetupRqstTDD_item  Item
  No value
  nbap.TimeSlotConfigurationItem_LCR_CTCH_SetupRqstTDD
nbap.TimeSlotConfigurationList_LCR_Cell_ReconfRqstTDD  TimeSlotConfigurationList
  Unsigned 32-bit integer
  nbap.TimeSlotConfigurationList_LCR_Cell_ReconfRqstTDD
nbap.TimeSlotConfigurationList_LCR_Cell_ReconfRqstTDD_item  Item
  No value
  nbap.TimeSlotConfigurationItem_LCR_Cell_ReconfRqstTDD
nbap.TimeSlotConfigurationList_LCR_Cell_SetupRqstTDD  TimeSlotConfigurationList-
  Unsigned 32-bit integer
  nbap.TimeSlotConfigurationList_LCR_Cell_SetupRqstTDD
nbap.TimeSlotConfigurationList_LCR_Cell_SetupRqstTDD_item  Item
  No value
  nbap.TimeSlotConfigurationItem_LCR_Cell_SetupRqstTDD

```

```

nbap.TimeSlotLCR    TimeSlotLCR
    Unsigned 32-bit integer
    nbap.TimeSlotLCR

nbap.TimeslotInfo_CellSyncInitiationRqstTDD    TimeslotInfo-CellSyncInitiationRqstTDD
    Unsigned 32-bit integer
    nbap.TimeslotInfo_CellSyncInitiationRqstTDD

nbap.TimeslotInfo_CellSyncInitiationRqstTDD_item    Item
    Unsigned 32-bit integer
    nbap.TimeSlot

nbap.TimeslotLCR_Extension    TimeslotLCR-Extension
    Unsigned 32-bit integer
    nbap.TimeslotLCR_Extension

nbap.TimingAdjustmentValue    TimingAdjustmentValue
    Unsigned 32-bit integer
    nbap.TimingAdjustmentValue

nbap.TimingAdjustmentValueLCR    TimingAdjustmentValueLCR
    Unsigned 32-bit integer
    nbap.TimingAdjustmentValueLCR

nbap.TimingAdvanceApplied    TimingAdvanceApplied
    Unsigned 32-bit integer
    nbap.TimingAdvanceApplied

nbap.TnlQos    TnlQos
    Unsigned 32-bit integer
    nbap.TnlQos

nbap.TransmissionDiversityApplied    TransmissionDiversityApplied
    Boolean
    nbap.TransmissionDiversityApplied

nbap.TransmissionTimeIntervalInformation_item    Item
    No value
    nbap.TransmissionTimeIntervalInformation_item

nbap.Transmission_Gap_Pattern_Sequence_Information    Transmission-Gap-Pattern-Sequence-Information
    Unsigned 32-bit integer
    nbap.Transmission_Gap_Pattern_Sequence_Information

nbap.Transmission_Gap_Pattern_Sequence_Information_item    Item
    No value
    nbap.Transmission_Gap_Pattern_Sequence_Information_item

nbap.Transmission_Gap_Pattern_Sequence_Status_List_item    Item
    No value
    nbap.Transmission_Gap_Pattern_Sequence_Status_List_item

nbap.TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue    TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue
    Unsigned 32-bit integer
    nbap.TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue

nbap.TransmittedCarrierPowerOfAllCodesNotUsedForHS_PDSCH_HS_SCCH_E_AGCH_E_RGCHOR    TransmittedCarrierPowerOfAllCodesNotUsedForHS_PDSCH_HS_SCCH_E_AGCH_E_RGCHOR
    Unsigned 32-bit integer
    nbap.TransmittedCarrierPowerOfAllCodesNotUsedForHS_PDSCH_HS_SCCH_E_AGCH_E_RGCHOR

nbap.TransmittedCarrierPowerOfAllCodesNotUsedForHS_PDSCH_HS_SCCH_E_AGCH_E_RGCHOR    TransmittedCarrierPowerOfAllCodesNotUsedForHS_PDSCH_HS_SCCH_E_AGCH_E_RGCHOR
    No value
    nbap.TransmittedCarrierPowerOfAllCodesNotUsedForHS_PDSCH_HS_SCCH_E_AGCH_E_RGCHOR

```

```

nbap.Transmitted_Carrier_Power_For_CellPortion_Value  Transmitted-Carrier-Power-
  Unsigned 32-bit integer
  nbap.Transmitted_Carrier_Power_For_CellPortion_Value
nbap.Transmitted_Carrier_Power_For_CellPortion_Value_item  Item
  No value
  nbap.Transmitted_Carrier_Power_For_CellPortion_Value_Item
nbap.Transmitted_Carrier_Power_Value  Transmitted-Carrier-Power-Value
  Unsigned 32-bit integer
  nbap.Transmitted_Carrier_Power_Value
nbap.TransportFormatSet_DynamicPartList_item  Item
  No value
  nbap.TransportFormatSet_DynamicPartList_item
nbap.TransportLayerAddress  TransportLayerAddress
  Byte array
  nbap.TransportLayerAddress
nbap.Transport_Block_Size_List_item  Item
  No value
  nbap.Transport_Block_Size_List_item
nbap.TypeOfError  TypeOfError
  Unsigned 32-bit integer
  nbap.TypeOfError
nbap.UARFCN  UARFCN
  Unsigned 32-bit integer
  nbap.UARFCN
nbap.UARFCNSpecificCauseList_PSCH_ReconfFailureTDD  UARFCNSpecificCauseList-PSCH
  Unsigned 32-bit integer
  nbap.UARFCNSpecificCauseList_PSCH_ReconfFailureTDD
nbap.UARFCNSpecificCauseList_PSCH_ReconfFailureTDD_item  Item
  No value
  nbap.ProtocolIE_Single_Container
nbap.UARFCN_Adjustment  UARFCN-Adjustment
  Unsigned 32-bit integer
  nbap.UARFCN_Adjustment
nbap.UE_Capability_Information  UE-Capability-Information
  No value
  nbap.UE_Capability_Information
nbap.UL_CCTrCH_InformationAddList_RL_ReconfPrepTDD  UL-CCTrCH-InformationAddList
  Unsigned 32-bit integer
  nbap.UL_CCTrCH_InformationAddList_RL_ReconfPrepTDD
nbap.UL_CCTrCH_InformationAddList_RL_ReconfPrepTDD_item  Item
  No value
  nbap.UL_CCTrCH_InformationAddItem_RL_ReconfPrepTDD
nbap.UL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD  UL-CCTrCH-InformationDele
  No value
  nbap.UL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD
nbap.UL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD  UL-CCTrCH-InformationDele
  Unsigned 32-bit integer
  nbap.UL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD

```

```

nbap.UL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.UL_CCTrCH_InformationDeleteItem_RL_ReconfPrepTDD
nbap.UL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD  UL-CCTrCH-InformationDele
    Unsigned 32-bit integer
    nbap.UL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD
nbap.UL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.UL_CCTrCH_InformationItem_RL_SetupRqstTDD  UL-CCTrCH-InformationItem-RL-Set
    No value
    nbap.UL_CCTrCH_InformationItem_RL_SetupRqstTDD
nbap.UL_CCTrCH_InformationList_RL_AdditionRqstTDD  UL-CCTrCH-InformationList-RL-
    Unsigned 32-bit integer
    nbap.UL_CCTrCH_InformationList_RL_AdditionRqstTDD
nbap.UL_CCTrCH_InformationList_RL_AdditionRqstTDD_item  Item
    No value
    nbap.UL_CCTrCH_InformationItem_RL_AdditionRqstTDD
nbap.UL_CCTrCH_InformationList_RL_SetupRqstTDD  UL-CCTrCH-InformationList-RL-Set
    Unsigned 32-bit integer
    nbap.UL_CCTrCH_InformationList_RL_SetupRqstTDD
nbap.UL_CCTrCH_InformationList_RL_SetupRqstTDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.UL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD  UL-CCTrCH-InformationModi
    No value
    nbap.UL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD
nbap.UL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD  UL-CCTrCH-InformationModi
    Unsigned 32-bit integer
    nbap.UL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD
nbap.UL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.UL_CCTrCH_InformationModifyItem_RL_ReconfPrepTDD
nbap.UL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD  UL-CCTrCH-InformationModi
    Unsigned 32-bit integer
    nbap.UL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD
nbap.UL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.UL_Code_768_InformationModifyList_PSCH_ReconfRqst_item  Item
    No value
    nbap.UL_Code_768_InformationModifyItem_PSCH_ReconfRqst
nbap.UL_Code_InformationAddList_768_PSCH_ReconfRqst_item  Item
    No value
    nbap.UL_Code_InformationAddItem_768_PSCH_ReconfRqst
nbap.UL_Code_InformationAddList_LCR_PSCH_ReconfRqst_item  Item
    No value
    nbap.UL_Code_InformationAddItem_LCR_PSCH_ReconfRqst

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nbap.UL_Code_InformationAddList_PSCH_ReconfRqst_item  Item
    No value
    nbap.UL_Code_InformationAddItem_PSCH_ReconfRqst
nbap.UL_Code_InformationModifyList_PSCH_ReconfRqst_item  Item
    No value
    nbap.UL_Code_InformationModifyItem_PSCH_ReconfRqst
nbap.UL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD768_item  Item
    No value
    nbap.UL_Code_InformationModify_ModifyItem_RL_ReconfPrepTDD768
nbap.UL_Code_InformationModify_ModifyList_RL_ReconfPrepTDDLRCR_item  Item
    No value
    nbap.UL_Code_InformationModify_ModifyItem_RL_ReconfPrepTDDLRCR
nbap.UL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.UL_Code_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.UL_Code_LCR_InformationModifyList_PSCH_ReconfRqst_item  Item
    No value
    nbap.UL_Code_LCR_InformationModifyItem_PSCH_ReconfRqst
nbap.UL_DPCH_768_InformationAddList_RL_ReconfPrepTDD  UL-DPCH-768-InformationAdd
    No value
    nbap.UL_DPCH_768_InformationAddList_RL_ReconfPrepTDD
nbap.UL_DPCH_768_InformationModify_AddList_RL_ReconfPrepTDD  UL-DPCH-768-Informa
    No value
    nbap.UL_DPCH_768_InformationModify_AddList_RL_ReconfPrepTDD
nbap.UL_DPCH_768_Information_RL_SetupRqstTDD  UL-DPCH-768-Information-RL-SetupRq
    No value
    nbap.UL_DPCH_768_Information_RL_SetupRqstTDD
nbap.UL_DPCH_InformationAddItem_RL_ReconfPrepTDD  UL-DPCH-InformationAddItem-RL-
    No value
    nbap.UL_DPCH_InformationAddItem_RL_ReconfPrepTDD
nbap.UL_DPCH_InformationItem_768_RL_AdditionRqstTDD  UL-DPCH-InformationItem-768
    No value
    nbap.UL_DPCH_InformationItem_768_RL_AdditionRqstTDD
nbap.UL_DPCH_InformationItem_LCR_RL_AdditionRqstTDD  UL-DPCH-InformationItem-LCR
    No value
    nbap.UL_DPCH_InformationItem_LCR_RL_AdditionRqstTDD
nbap.UL_DPCH_InformationItem_RL_AdditionRqstTDD  UL-DPCH-InformationItem-RL-Addi
    No value
    nbap.UL_DPCH_InformationItem_RL_AdditionRqstTDD
nbap.UL_DPCH_InformationItem_RL_SetupRqstTDD  UL-DPCH-InformationItem-RL-SetupRq
    No value
    nbap.UL_DPCH_InformationItem_RL_SetupRqstTDD
nbap.UL_DPCH_InformationModify_AddItem_RL_ReconfPrepTDD  UL-DPCH-InformationModi
    No value
    nbap.UL_DPCH_InformationModify_AddItem_RL_ReconfPrepTDD
nbap.UL_DPCH_InformationModify_DeleteListIE_RL_ReconfPrepTDD  UL-DPCH-Informatio
    Unsigned 32-bit integer
    nbap.UL_DPCH_InformationModify_DeleteListIE_RL_ReconfPrepTDD

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nbap.UL_DPCH_InformationModify_DeleteListIE_RL_ReconfPrepTDD_item  Item
    No value
    nbap.UL_DPCH_InformationModify_DeleteItem_RL_ReconfPrepTDD
nbap.UL_DPCH_InformationModify_ModifyItem_RL_ReconfPrepTDD  UL-DPCH-InformationM
    No value
    nbap.UL_DPCH_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.UL_DPCH_Information_RL_ReconfPrepFDD  UL-DPCH-Information-RL-ReconfPrepFDD
    No value
    nbap.UL_DPCH_Information_RL_ReconfPrepFDD
nbap.UL_DPCH_Information_RL_ReconfRqstFDD  UL-DPCH-Information-RL-ReconfRqstFDD
    No value
    nbap.UL_DPCH_Information_RL_ReconfRqstFDD
nbap.UL_DPCH_Information_RL_SetupRqstFDD  UL-DPCH-Information-RL-SetupRqstFDD
    No value
    nbap.UL_DPCH_Information_RL_SetupRqstFDD
nbap.UL_DPCH_LCR_InformationAddList_RL_ReconfPrepTDD  UL-DPCH-LCR-InformationAdd
    No value
    nbap.UL_DPCH_LCR_InformationAddList_RL_ReconfPrepTDD
nbap.UL_DPCH_LCR_InformationModify_AddList_RL_ReconfPrepTDD  UL-DPCH-LCR-Informa
    No value
    nbap.UL_DPCH_LCR_InformationModify_AddList_RL_ReconfPrepTDD
nbap.UL_DPCH_LCR_Information_RL_SetupRqstTDD  UL-DPCH-LCR-Information-RL-SetupRq
    No value
    nbap.UL_DPCH_LCR_Information_RL_SetupRqstTDD
nbap.UL_DPDCH_Indicator_For_E_DCH_Operation  UL-DPDCH-Indicator-For-E-DCH-Operat
    Unsigned 32-bit integer
    nbap.UL_DPDCH_Indicator_For_E_DCH_Operation
nbap.UL_SIR  UL-SIR
    Signed 32-bit integer
    nbap.UL_SIR
nbap.UL_Synchronisation_Parameters_LCR  UL-Synchronisation-Parameters-LCR
    No value
    nbap.UL_Synchronisation_Parameters_LCR
nbap.UL_TimeSlot_ISCP_Info_item  Item
    No value
    nbap.UL_TimeSlot_ISCP_InfoItem
nbap.UL_TimeSlot_ISCP_LCR_Info_item  Item
    No value
    nbap.UL_TimeSlot_ISCP_LCR_InfoItem
nbap.UL_Timeslot768_InformationModify_ModifyList_RL_ReconfPrepTDD  UL-Timeslot76
    Unsigned 32-bit integer
    nbap.UL_Timeslot768_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.UL_Timeslot768_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.UL_Timeslot_768_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.UL_Timeslot768_Information_item  Item
    No value
    nbap.UL_Timeslot768_InformationItem

```



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nbap.UL_TimeslotLCR_InformationModify_ModifyList_RL_ReconfPrepTDD  UL-TimeslotLC
  Unsigned 32-bit integer
  nbap.UL_TimeslotLCR_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.UL_TimeslotLCR_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
  No value
  nbap.UL_Timeslot_LCR_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.UL_TimeslotLCR_Information_item  Item
  No value
  nbap.UL_TimeslotLCR_InformationItem
nbap.UL_Timeslot_768_InformationModifyList_PSCH_ReconfRqst_item  Item
  No value
  nbap.UL_Timeslot_768_InformationModifyItem_PSCH_ReconfRqst
nbap.UL_Timeslot_InformationAddList_768_PSCH_ReconfRqst_item  Item
  No value
  nbap.UL_Timeslot_InformationAddItem_768_PSCH_ReconfRqst
nbap.UL_Timeslot_InformationAddList_LCR_PSCH_ReconfRqst_item  Item
  No value
  nbap.UL_Timeslot_InformationAddItem_LCR_PSCH_ReconfRqst
nbap.UL_Timeslot_InformationAddList_PSCH_ReconfRqst_item  Item
  No value
  nbap.UL_Timeslot_InformationAddItem_PSCH_ReconfRqst
nbap.UL_Timeslot_InformationModifyList_PSCH_ReconfRqst_item  Item
  No value
  nbap.UL_Timeslot_InformationModifyItem_PSCH_ReconfRqst
nbap.UL_Timeslot_InformationModify_ModifyList_RL_ReconfPrepTDD_item  Item
  No value
  nbap.UL_Timeslot_InformationModify_ModifyItem_RL_ReconfPrepTDD
nbap.UL_Timeslot_Information_item  Item
  No value
  nbap.UL_Timeslot_InformationItem
nbap.UL_Timeslot_LCR_InformationModifyList_PSCH_ReconfRqst_item  Item
  No value
  nbap.UL_Timeslot_LCR_InformationModifyItem_PSCH_ReconfRqst
nbap.UPPCHPositionLCR  UPPCHPositionLCR
  Unsigned 32-bit integer
  nbap.UPPCHPositionLCR
nbap.UPPCH_LCR_InformationItem_AuditRsp  UPPCH-LCR-InformationItem-AuditRsp
  No value
  nbap.UPPCH_LCR_InformationItem_AuditRsp
nbap.UPPCH_LCR_InformationItem_ResourceStatusInd  UPPCH-LCR-InformationItem-Reso
  No value
  nbap.UPPCH_LCR_InformationItem_ResourceStatusInd
nbap.UPPCH_LCR_InformationList_AuditRsp  UPPCH-LCR-InformationList-AuditRsp
  Unsigned 32-bit integer
  nbap.UPPCH_LCR_InformationList_AuditRsp
nbap.UPPCH_LCR_InformationList_AuditRsp_item  Item
  No value
  nbap.ProtocolIE_Single_Container

```

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nbap.UPPCH_LCR_InformationList_ResourceStatusInd  UPPCH-LCR-InformationList-Reso
    Unsigned 32-bit integer
    nbap.UPPCH_LCR_InformationList_ResourceStatusInd
nbap.UPPCH_LCR_InformationList_ResourceStatusInd_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.UPPCH_LCR_Parameters_CTCH_ReconfRqstTDD  UPPCH-LCR-Parameters-CTCH-ReconfRq
    No value
    nbap.UPPCH_LCR_Parameters_CTCH_ReconfRqstTDD
nbap.USCH_Information  USCH-Information
    Unsigned 32-bit integer
    nbap.USCH_Information
nbap.USCH_InformationResponse  USCH-InformationResponse
    Unsigned 32-bit integer
    nbap.USCH_InformationResponse
nbap.USCH_InformationResponse_item  Item
    No value
    nbap.USCH_InformationResponseItem
nbap.USCH_Information_DeleteList_RL_ReconfPrepTDD  USCH-Information-DeleteList-R
    Unsigned 32-bit integer
    nbap.USCH_Information_DeleteList_RL_ReconfPrepTDD
nbap.USCH_Information_DeleteList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.USCH_Information_DeleteItem_RL_ReconfPrepTDD
nbap.USCH_Information_ModifyList_RL_ReconfPrepTDD  USCH-Information-ModifyList-R
    Unsigned 32-bit integer
    nbap.USCH_Information_ModifyList_RL_ReconfPrepTDD
nbap.USCH_Information_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    nbap.USCH_Information_ModifyItem_RL_ReconfPrepTDD
nbap.USCH_Information_item  Item
    No value
    nbap.USCH_InformationItem
nbap.USCH_RearrangeList_Bearer_RearrangeInd  USCH-RearrangeList-Bearer-Rearrange
    Unsigned 32-bit integer
    nbap.USCH_RearrangeList_Bearer_RearrangeInd
nbap.USCH_RearrangeList_Bearer_RearrangeInd_item  Item
    No value
    nbap.USCH_RearrangeItem_Bearer_RearrangeInd
nbap.UnblockResourceIndication  UnblockResourceIndication
    No value
    nbap.UnblockResourceIndication
nbap.Unidirectional_DCH_Indicator  Unidirectional-DCH-Indicator
    Unsigned 32-bit integer
    nbap.Unidirectional_DCH_Indicator
nbap.Unsuccessful_PDSCHSetItem_PSCH_ReconfFailureTDD  Unsuccessful-PDSCHSetItem-
    No value
    nbap.Unsuccessful_PDSCHSetItem_PSCH_ReconfFailureTDD

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```

nbap.Unsuccessful_PDSCHSetList_PSCH_ReconfFailureTDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.Unsuccessful_PUSCHSetItem_PSCH_ReconfFailureTDD  Unsuccessful-PUSCHSetItem-
    No value
    nbap.Unsuccessful_PUSCHSetItem_PSCH_ReconfFailureTDD
nbap.Unsuccessful_PUSCHSetList_PSCH_ReconfFailureTDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.Unsuccessful_RL_InformationRespItem_RL_AdditionFailureFDD  Unsuccessful-RL-
    No value
    nbap.Unsuccessful_RL_InformationRespItem_RL_AdditionFailureFDD
nbap.Unsuccessful_RL_InformationRespItem_RL_SetupFailureFDD  Unsuccessful-RL-Inf
    No value
    nbap.Unsuccessful_RL_InformationRespItem_RL_SetupFailureFDD
nbap.Unsuccessful_RL_InformationRespList_RL_AdditionFailureFDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.Unsuccessful_RL_InformationRespList_RL_SetupFailureFDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.Unsuccessful_RL_InformationResp_RL_AdditionFailureTDD  Unsuccessful-RL-Info
    No value
    nbap.Unsuccessful_RL_InformationResp_RL_AdditionFailureTDD
nbap.Unsuccessful_RL_InformationResp_RL_SetupFailureTDD  Unsuccessful-RL-Informa
    No value
    nbap.Unsuccessful_RL_InformationResp_RL_SetupFailureTDD
nbap.Unsuccessful_UARFCNItem_PSCH_ReconfFailureTDD  Unsuccessful-UARFCNItem-PSCH
    No value
    nbap.Unsuccessful_UARFCNItem_PSCH_ReconfFailureTDD
nbap.Unsuccessful_cell_InformationRespItem_SyncAdjustmntFailureTDD  Unsuccessful
    No value
    nbap.Unsuccessful_cell_InformationRespItem_SyncAdjustmntFailureTDD
nbap.Unsuccessful_cell_InformationRespList_SyncAdjustmntFailureTDD_item  Item
    No value
    nbap.ProtocolIE_Single_Container
nbap.UpPTSInterferenceValue  UpPTSInterferenceValue
    Unsigned 32-bit integer
    nbap.UpPTSInterferenceValue
nbap.aICH_InformationList  aICH-InformationList
    Unsigned 32-bit integer
    nbap.AICH_InformationList_AuditRsp
nbap.aICH_Parameters  aICH-Parameters
    No value
    nbap.AICH_Parameters_CTCH_SetupRqstFDD
nbap.aICH_ParametersList_CTCH_ReconfRqstFDD  aICH-ParametersList-CTCH-ReconfRqst
    No value
    nbap.AICH_ParametersList_CTCH_ReconfRqstFDD

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```
nbap.aICH_Power  aICH-Power
Signed 32-bit integer
nbap.AICH_Power

nbap.aICH_TransmissionTiming  aICH-TransmissionTiming
Unsigned 32-bit integer
nbap.AICH_TransmissionTiming

nbap.aOA_LCR  aOA-LCR
Unsigned 32-bit integer
nbap.AOA_LCR

nbap.aOA_LCR_Accuracy_Class  aOA-LCR-Accuracy-Class
Unsigned 32-bit integer
nbap.AOA_LCR_Accuracy_Class

nbap.a_f_1_nav  a-f-1-nav
Byte array
nbap.BIT_STRING_SIZE_16

nbap.a_f_2_nav  a-f-2-nav
Byte array
nbap.BIT_STRING_SIZE_8

nbap.a_f_zero_nav  a-f-zero-nav
Byte array
nbap.BIT_STRING_SIZE_22

nbap.a_i0  a-i0
Byte array
nbap.BIT_STRING_SIZE_28

nbap.a_i1  a-i1
Byte array
nbap.BIT_STRING_SIZE_18

nbap.a_i2  a-i2
Byte array
nbap.BIT_STRING_SIZE_12

nbap.a_one_utc  a-one-utc
Byte array
nbap.BIT_STRING_SIZE_24

nbap.a_sqrt_lsb_nav  a-sqrt-lsb-nav
Unsigned 32-bit integer
nbap.INTEGER_0_67108863

nbap.a_sqrt_nav  a-sqrt-nav
Byte array
nbap.BIT_STRING_SIZE_32

nbap.a_zero_utc  a-zero-utc
Byte array
nbap.BIT_STRING_SIZE_32

nbap.ackNackRepetitionFactor  ackNackRepetitionFactor
Unsigned 32-bit integer
nbap.AckNack_RepetitionFactor

nbap.ackPowerOffset  ackPowerOffset
Unsigned 32-bit integer
nbap.Ack_Power_Offset
```

```
nbap.acknowledged_prach_preambles  acknowledged-prach-preambles
    Unsigned 32-bit integer
    nbap.Acknowledged_PRACH_preambles_Value

nbap.activate  activate
    No value
    nbap.Activate_Info

nbap.activation_type  activation-type
    Unsigned 32-bit integer
    nbap.Execution_Type

nbap.addPriorityQueue  addPriorityQueue
    No value
    nbap.PriorityQueue_InfoItem_to_Add

nbap.addorDeleteIndicator  addorDeleteIndicator
    Unsigned 32-bit integer
    nbap.AddorDeleteIndicator

nbap.adjustmentPeriod  adjustmentPeriod
    Unsigned 32-bit integer
    nbap.AdjustmentPeriod

nbap.adjustmentRatio  adjustmentRatio
    Unsigned 32-bit integer
    nbap.ScaledAdjustmentRatio

nbap.all_RL  all-RL
    No value
    nbap.AllRL_DM_Rqst

nbap.all_RLS  all-RLS
    No value
    nbap.AllRL_Set_DM_Rqst

nbap.allocationRetentionPriority  allocationRetentionPriority
    No value
    nbap.AllocationRetentionPriority

nbap.allowedSlotFormatInformation  allowedSlotFormatInformation
    Unsigned 32-bit integer
    nbap.AllowedSlotFormatInformationList_CTCH_SetupRqstFDD

nbap.alpha_one_ionos  alpha-one-ionos
    Byte array
    nbap.BIT_STRING_SIZE_12

nbap.alpha_three_ionos  alpha-three-ionos
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.alpha_two_ionos  alpha-two-ionos
    Byte array
    nbap.BIT_STRING_SIZE_12

nbap.alpha_zero_ionos  alpha-zero-ionos
    Byte array
    nbap.BIT_STRING_SIZE_12

nbap.altitude  altitude
    Unsigned 32-bit integer
    nbap.INTEGER_0_32767
```

```

nbap.aodo_nav aodo-nav
  Byte array
  nbap.BIT_STRING_SIZE_5

nbap.associatedCommon_MACFlow associatedCommon-MACFlow
  Unsigned 32-bit integer
  nbap.Common_MACFlow_ID

nbap.associatedHSDSCH_MACdFlow associatedHSDSCH-MACdFlow
  Unsigned 32-bit integer
  nbap.HSDSCH_MACdFlow_ID

nbap.associatedSecondaryCPICH associatedSecondaryCPICH
  Unsigned 32-bit integer
  nbap.CommonPhysicalChannelID

nbap.availabilityStatus availabilityStatus
  Unsigned 32-bit integer
  nbap.AvailabilityStatus

nbap.bCCH_Specific_HSDSCH_RNTI bCCH-Specific-HSDSCH-RNTI
  Unsigned 32-bit integer
  nbap.HSDSCH_RNTI

nbap.bCCH_Specific_HSDSCH_RNTI_Information bCCH-Specific-HSDSCH-RNTI-Information
  No value
  nbap.BCCH_Specific_HSDSCH_RNTI_Information

nbap.bCH_Information bCH-Information
  No value
  nbap.BCH_Information_AuditRsp

nbap.bCH_Power bCH-Power
  Signed 32-bit integer
  nbap.DL_Power

nbap.bCH_information bCH-information
  No value
  nbap.BCH_Information_Cell_SetupRqstFDD

nbap.bad_ganss_satId bad-ganss-satId
  Unsigned 32-bit integer
  nbap.INTEGER_0_63

nbap.bad_ganss_signalId bad-ganss-signalId
  Byte array
  nbap.BIT_STRING_SIZE_8

nbap.bad_sat_id bad-sat-id
  Unsigned 32-bit integer
  nbap.SAT_ID

nbap.bad_satellites bad-satellites
  No value
  nbap.GPSBadSat_Info_RealTime_Integrity

nbap.betaC betaC
  Unsigned 32-bit integer
  nbap.BetaCD

nbap.betaD betaD
  Unsigned 32-bit integer
  nbap.BetaCD

```

```
nbap.beta_one_ionos  beta-one-ionos
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.beta_three_ionos  beta-three-ionos
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.beta_two_ionos  beta-two-ionos
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.beta_zero_ionos  beta-zero-ionos
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.bindingID  bindingID
    Byte array
    nbap.BindingID

nbap.bundlingModeIndicator  bundlingModeIndicator
    Unsigned 32-bit integer
    nbap.BundlingModeIndicator

nbap.burstFreq  burstFreq
    Unsigned 32-bit integer
    nbap.INTEGER_1_16

nbap.burstLength  burstLength
    Unsigned 32-bit integer
    nbap.INTEGER_10_25

nbap.burstModeParams  burstModeParams
    No value
    nbap.BurstModeParams

nbap.burstStart  burstStart
    Unsigned 32-bit integer
    nbap.INTEGER_0_15

nbap.cCCH_PriorityQueue_Id  cCCH-PriorityQueue-Id
    Unsigned 32-bit integer
    nbap.PriorityQueue_Id

nbap.cCP_InformationList  cCP-InformationList
    Unsigned 32-bit integer
    nbap.CCP_InformationList_ResourceStatusInd

nbap.cCTrCH  cCTrCH
    No value
    nbap.CCTrCH_RL_FailureInd

nbap.cCTrCH_ID  cCTrCH-ID
    Unsigned 32-bit integer
    nbap.CCTrCH_ID

nbap.cCTrCH_InformationList_RL_FailureInd  cCTrCH-InformationList-RL-FailureInd
    Unsigned 32-bit integer
    nbap.CCTrCH_InformationList_RL_FailureInd

nbap.cCTrCH_InformationList_RL_RestoreInd  cCTrCH-InformationList-RL-RestoreInd
    Unsigned 32-bit integer
    nbap.CCTrCH_InformationList_RL_RestoreInd
```

```

nbap.cCTrCH_Initial_DL_Power  cCTrCH-Initial-DL-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.cCTrCH_Maximum_DL_Power_InformationAdd_RL_ReconfPrepTDD  cCTrCH-Maximum-DL-
    Signed 32-bit integer
    nbap.DL_Power

nbap.cCTrCH_Maximum_DL_Power_InformationModify_RL_ReconfPrepTDD  cCTrCH-Maximum-
    Signed 32-bit integer
    nbap.DL_Power

nbap.cCTrCH_Maximum_DL_Power_InformationModify_RL_ReconfRqstTDD  cCTrCH-Maximum-
    Signed 32-bit integer
    nbap.DL_Power

nbap.cCTrCH_Minimum_DL_Power_InformationAdd_RL_ReconfPrepTDD  cCTrCH-Minimum-DL-
    Signed 32-bit integer
    nbap.DL_Power

nbap.cCTrCH_Minimum_DL_Power_InformationModify_RL_ReconfPrepTDD  cCTrCH-Minimum-
    Signed 32-bit integer
    nbap.DL_Power

nbap.cCTrCH_Minimum_DL_Power_InformationModify_RL_ReconfRqstTDD  cCTrCH-Minimum-
    Signed 32-bit integer
    nbap.DL_Power

nbap.cCTrCH_TPCList  cCTrCH-TPCList
    Unsigned 32-bit integer
    nbap.CCTrCH_TPCList_RL_SetupRqstTDD

nbap.cFN  cFN
    Unsigned 32-bit integer
    nbap.CFN

nbap.cFNOffset  cFNOffset
    Unsigned 32-bit integer
    nbap.INTEGER_0_255

nbap.cHipRate768_TDD  cHipRate768-TDD
    No value
    nbap.MICH_768_Parameters_CTCH_SetupRqstTDD

nbap.cMConfigurationChangeCFN  cMConfigurationChangeCFN
    Unsigned 32-bit integer
    nbap.CFN

nbap.cQI_DTX_Timer  cQI-DTX-Timer
    Unsigned 32-bit integer
    nbap.CQI_DTX_Timer

nbap.cCRC_Size  cCRC-Size
    Unsigned 32-bit integer
    nbap.TransportFormatSet_CRC_Size

nbap.cRNC_CommunicationContextID  cRNC-CommunicationContextID
    Unsigned 32-bit integer
    nbap.CRNC_CommunicationContextID

nbap.cSBMeasurementID  cSBMeasurementID
    Unsigned 32-bit integer
    nbap.CSBMeasurementID

```



```
nbap.cSBTransmissionID  cSBTransmissionID
    Unsigned 32-bit integer
    nbap.CSBTransmissionID

nbap.cTFC  cTFC
    Unsigned 32-bit integer
    nbap.TFCS_CTFC

nbap.c_ID  c-ID
    Unsigned 32-bit integer
    nbap.C_ID

nbap.c_ID_CellSyncReprtTDD  c-ID-CellSyncReprtTDD
    No value
    nbap.C_ID_IE_CellSyncReprtTDD

nbap.c_ic_nav  c-ic-nav
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.c_is_nav  c-is-nav
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.c_rc_nav  c-rc-nav
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.c_rs_nav  c-rs-nav
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.c_uc_nav  c-uc-nav
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.c_us_nav  c-us-nav
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.ca_or_p_on_l2_nav  ca-or-p-on-l2-nav
    Byte array
    nbap.BIT_STRING_SIZE_2

nbap.case1  case1
    No value
    nbap.Case1_Cell_SetupRqstTDD

nbap.case2  case2
    No value
    nbap.Case2_Cell_SetupRqstTDD

nbap.cause  cause
    Unsigned 32-bit integer
    nbap.Cause

nbap.cell  cell
    No value
    nbap.Cell_CM_Rqst

nbap.cellParameterID  cellParameterID
    Unsigned 32-bit integer
    nbap.CellParameterID
```

```

nbap.cellPortionID  cellPortionID
    Unsigned 32-bit integer
    nbap.CellPortionID

nbap.cellSpecificCause  cellSpecificCause
    No value
    nbap.CellSpecificCauseList_SyncAdjustmntFailureTDD

nbap.cellSyncBurstAvailable  cellSyncBurstAvailable
    No value
    nbap.CellSyncBurstAvailable_CellSyncReprtTDD

nbap.cellSyncBurstCode  cellSyncBurstCode
    Unsigned 32-bit integer
    nbap.CellSyncBurstCode

nbap.cellSyncBurstCodeShift  cellSyncBurstCodeShift
    Unsigned 32-bit integer
    nbap.CellSyncBurstCodeShift

nbap.cellSyncBurstInfo_CellSyncReprtTDD  cellSyncBurstInfo-CellSyncReprtTDD
    Unsigned 32-bit integer
    nbap.SEQUENCE_SIZE_1_maxNrOfReceptsPerSyncFrame_OF_CellSyncBurstInfo_CellSyn

nbap.cellSyncBurstInfo_CellSyncReprtTDD_item  Item
    Unsigned 32-bit integer
    nbap.CellSyncBurstInfo_CellSyncReprtTDD

nbap.cellSyncBurstInformation  cellSyncBurstInformation
    Unsigned 32-bit integer
    nbap.SEQUENCE_SIZE_1_maxNrOfReceptsPerSyncFrame_OF_SynchronisationReportChar

nbap.cellSyncBurstInformation_item  Item
    No value
    nbap.SynchronisationReportCharactCellSyncBurstInfoItem

nbap.cellSyncBurstMeasInfoList_CellSyncReconfRqstTDD  cellSyncBurstMeasInfoList-
    No value
    nbap.CellSyncBurstMeasInfoList_CellSyncReconfRqstTDD

nbap.cellSyncBurstMeasuredInfo  cellSyncBurstMeasuredInfo
    Unsigned 32-bit integer
    nbap.CellSyncBurstMeasInfoList_CellSyncReprtTDD

nbap.cellSyncBurstNotAvailable  cellSyncBurstNotAvailable
    No value
    nbap.NULL

nbap.cellSyncBurstSIR  cellSyncBurstSIR
    Unsigned 32-bit integer
    nbap.CellSyncBurstSIR

nbap.cellSyncBurstTiming  cellSyncBurstTiming
    Unsigned 32-bit integer
    nbap.CellSyncBurstTiming

nbap.cellSyncBurstTimingThreshold  cellSyncBurstTimingThreshold
    Unsigned 32-bit integer
    nbap.CellSyncBurstTimingThreshold

nbap.cell_Frequency_Add_LCR_MulFreq_Cell_ReconfRqstTDD  cell-Frequency-Add-LCR-M
    No value
    nbap.Cell_Frequency_Add_LCR_MulFreq_Cell_ReconfRqstTDD

```

```

nbap.cell_Frequency_Delete_LCR_MulFreq_Cell_ReconfRqstTDD  cell-Frequency-Delete
    No value
    nbap.Cell_Frequency_Delete_LCR_MulFreq_Cell_ReconfRqstTDD
nbap.cell_Frequency_ModifyList_LCR_MulFreq_Cell_ReconfRqstTDD  cell-Frequency-Mo
    Unsigned 32-bit integer
    nbap.Cell_Frequency_ModifyList_LCR_MulFreq_Cell_ReconfRqstTDD
nbap.cell_InformationList  cell-InformationList
    Unsigned 32-bit integer
    nbap.Cell_InformationList_ResourceStatusInd
nbap.cfn  cfn
    Unsigned 32-bit integer
    nbap.CFN
nbap.channelCoding  channelCoding
    Unsigned 32-bit integer
    nbap.TransportFormatSet_ChannelCodingType
nbap.chipOffset  chipOffset
    Unsigned 32-bit integer
    nbap.ChipOffset
nbap.cid  cid
    Unsigned 32-bit integer
    nbap.C_ID
nbap.codeNumber  codeNumber
    Unsigned 32-bit integer
    nbap.INTEGER_0_127
nbap.codingRate  codingRate
    Unsigned 32-bit integer
    nbap.TransportFormatSet_CodingRate
nbap.combining  combining
    No value
    nbap.Combining_RL_SetupRspFDD
nbap.commonChannelsCapacityConsumptionLaw  commonChannelsCapacityConsumptionLaw
    Unsigned 32-bit integer
    nbap.CommonChannelsCapacityConsumptionLaw
nbap.commonMACFlow_ID  commonMACFlow-ID
    Unsigned 32-bit integer
    nbap.Common_MACFlow_ID
nbap.commonMACFlow_Specific_Info_Response  commonMACFlow-Specific-Info-Response
    Unsigned 32-bit integer
    nbap.CommonMACFlow_Specific_InfoList_Response
nbap.commonMACFlow_Specific_Information  commonMACFlow-Specific-Information
    Unsigned 32-bit integer
    nbap.CommonMACFlow_Specific_InfoList
nbap.commonMeasurementValue  commonMeasurementValue
    Unsigned 32-bit integer
    nbap.CommonMeasurementValue
nbap.commonMeasurementValueInformation  commonMeasurementValueInformation
    Unsigned 32-bit integer
    nbap.CommonMeasurementValueInformation

```

```
nbap.commonMidamble    commonMidamble
    No value
    nbap.NULL

nbap.commonPhysicalChannelID    commonPhysicalChannelID
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID

nbap.commonPhysicalChannelID768    commonPhysicalChannelID768
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID768

nbap.commonPhysicalChannelId    commonPhysicalChannelId
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID

nbap.commonTransportChannelID    commonTransportChannelID
    Unsigned 32-bit integer
    nbap.CommonTransportChannelID

nbap.common_MACFlow_ID    common-MACFlow-ID
    Unsigned 32-bit integer
    nbap.Common_MACFlow_ID

nbap.common_MACFlow_Id    common-MACFlow-Id
    Unsigned 32-bit integer
    nbap.Common_MACFlow_ID

nbap.common_MACFlow_PriorityQueue_Information    common-MACFlow-PriorityQueue-Info
    Unsigned 32-bit integer
    nbap.Common_MACFlow_PriorityQueue_Information

nbap.commonmeasurementValue    commonmeasurementValue
    Unsigned 32-bit integer
    nbap.CommonMeasurementValue

nbap.communicationContext    communicationContext
    No value
    nbap.CommunicationContextList_Reset

nbap.communicationContextInfoList_Reset    communicationContextInfoList-Reset
    Unsigned 32-bit integer
    nbap.CommunicationContextInfoList_Reset

nbap.communicationContextType_Reset    communicationContextType-Reset
    Unsigned 32-bit integer
    nbap.CommunicationContextType_Reset

nbap.communicationControlPort    communicationControlPort
    No value
    nbap.CommunicationControlPortList_Reset

nbap.communicationControlPortID    communicationControlPortID
    Unsigned 32-bit integer
    nbap.CommunicationControlPortID

nbap.communicationControlPortInfoList_Reset    communicationControlPortInfoList-Re
    Unsigned 32-bit integer
    nbap.CommunicationControlPortInfoList_Reset

nbap.computedGainFactors    computedGainFactors
    Unsigned 32-bit integer
    nbap.RefTFCNumber
```

```
nbap.configurationGenerationID  configurationGenerationID
    Unsigned 32-bit integer
    nbap.ConfigurationGenerationID

nbap.continuousPacketConnectivityDTX_DRX_Information  continuousPacketConnectivi
    No value
    nbap.ContinuousPacketConnectivityDTX_DRX_Information

nbap.continuousPacketConnectivityDTX_DRX_Information_to_Modify  continuousPacket
    No value
    nbap.ContinuousPacketConnectivityDTX_DRX_Information_to_Modify

nbap.continuousPacketConnectivityHS_SCCH_less_Information  continuousPacketConne
    Unsigned 32-bit integer
    nbap.ContinuousPacketConnectivityHS_SCCH_less_Information

nbap.cqiFeedback_CycleK  cqiFeedback-CycleK
    Unsigned 32-bit integer
    nbap.CQI_Feedback_Cycle

nbap.cqiPowerOffset  cqiPowerOffset
    Unsigned 32-bit integer
    nbap.CQI_Power_Offset

nbap.cqiRepetitionFactor  cqiRepetitionFactor
    Unsigned 32-bit integer
    nbap.CQI_RepetitionFactor

nbap.criticality  criticality
    Unsigned 32-bit integer
    nbap.Criticality

nbap.ctfc12bit  ctfc12bit
    Unsigned 32-bit integer
    nbap.INTEGER_0_4095

nbap.ctfc16bit  ctfc16bit
    Unsigned 32-bit integer
    nbap.INTEGER_0_65535

nbap.ctfc2bit  ctfc2bit
    Unsigned 32-bit integer
    nbap.INTEGER_0_3

nbap.ctfc4bit  ctfc4bit
    Unsigned 32-bit integer
    nbap.INTEGER_0_15

nbap.ctfc6bit  ctfc6bit
    Unsigned 32-bit integer
    nbap.INTEGER_0_63

nbap.ctfc8bit  ctfc8bit
    Unsigned 32-bit integer
    nbap.INTEGER_0_255

nbap.ctfcmaxbit  ctfcmaxbit
    Unsigned 32-bit integer
    nbap.INTEGER_0_maxCTFC

nbap.dCH_ID  dCH-ID
    Unsigned 32-bit integer
    nbap.DCH_ID
```

```
nbap.dCH_Information    dCH-Information
    No value
    nbap.DCH_Information_RL_AdditionRspTDD

nbap.dCH_InformationResponse    dCH-InformationResponse
    Unsigned 32-bit integer
    nbap.DCH_InformationResponse

nbap.dCH_InformationResponseList    dCH-InformationResponseList
    No value
    nbap.DCH_InformationResponseList_RL_SetupRspTDD

nbap.dCH_InformationResponseList_RL_ReconfReady    dCH-InformationResponseList-RL-
    No value
    nbap.DCH_InformationResponseList_RL_ReconfReady

nbap.dCH_InformationResponseList_RL_ReconfRsp    dCH-InformationResponseList-RL-Re
    No value
    nbap.DCH_InformationResponseList_RL_ReconfRsp

nbap.dCH_SpecificInformationList    dCH-SpecificInformationList
    Unsigned 32-bit integer
    nbap.DCH_Specific_FDD_InformationList

nbap.dCH_id    dCH-id
    Unsigned 32-bit integer
    nbap.DCH_ID

nbap.dGANSSThreshold    dGANSSThreshold
    No value
    nbap.DGANSSThreshold

nbap.dGANSS_Information    dGANSS-Information
    Unsigned 32-bit integer
    nbap.DGANSS_Information

nbap.dGANSS_ReferenceTime    dGANSS-ReferenceTime
    Unsigned 32-bit integer
    nbap.INTEGER_0_119

nbap.dGANSS_SignalInformation    dGANSS-SignalInformation
    Unsigned 32-bit integer
    nbap.DGANSS_SignalInformation

nbap.dLPowerAveragingWindowSize    dLPowerAveragingWindowSize
    Unsigned 32-bit integer
    nbap.DLPowerAveragingWindowSize

nbap.dLReferencePower    dLReferencePower
    Signed 32-bit integer
    nbap.DL_Power

nbap.dLReferencePowerList_DL_PC_Rqst    dLReferencePowerList-DL-PC-Rqst
    Unsigned 32-bit integer
    nbap.DL_ReferencePowerInformationList

nbap.dLTransPower    dLTransPower
    Signed 32-bit integer
    nbap.DL_Power

nbap.dL_Code_768_Information    dL-Code-768-Information
    Unsigned 32-bit integer
    nbap.TDD_DL_Code_768_Information
```

```

nbap.dL_Code_768_InformationModifyList_PSCH_ReconfRqst  dL-Code-768-InformationM
  Unsigned 32-bit integer
  nbap.DL_Code_768_InformationModifyList_PSCH_ReconfRqst
nbap.dL_Code_768_InformationModify_ModifyList_RL_ReconfPrepTDD  dL-Code-768-Info
  Unsigned 32-bit integer
  nbap.DL_Code_768_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.dL_Code_Information  dL-Code-Information
  Unsigned 32-bit integer
  nbap.TDD_DL_Code_Information
nbap.dL_Code_InformationAddList_768_PSCH_ReconfRqst  dL-Code-InformationAddList-
  Unsigned 32-bit integer
  nbap.DL_Code_InformationAddList_768_PSCH_ReconfRqst
nbap.dL_Code_InformationAddList_LCR_PSCH_ReconfRqst  dL-Code-InformationAddList-
  Unsigned 32-bit integer
  nbap.DL_Code_InformationAddList_LCR_PSCH_ReconfRqst
nbap.dL_Code_InformationAddList_PSCH_ReconfRqst  dL-Code-InformationAddList-PSCH
  Unsigned 32-bit integer
  nbap.DL_Code_InformationAddList_PSCH_ReconfRqst
nbap.dL_Code_InformationModifyList_PSCH_ReconfRqst  dL-Code-InformationModifyLis
  Unsigned 32-bit integer
  nbap.DL_Code_InformationModifyList_PSCH_ReconfRqst
nbap.dL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD  dL-Code-InformationM
  Unsigned 32-bit integer
  nbap.DL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.dL_Code_LCR_Information  dL-Code-LCR-Information
  Unsigned 32-bit integer
  nbap.TDD_DL_Code_LCR_Information
nbap.dL_Code_LCR_InformationModifyList_PSCH_ReconfRqst  dL-Code-LCR-InformationM
  Unsigned 32-bit integer
  nbap.DL_Code_LCR_InformationModifyList_PSCH_ReconfRqst
nbap.dL_Code_LCR_InformationModify_ModifyList_RL_ReconfPrepTDD  dL-Code-LCR-Info
  Unsigned 32-bit integer
  nbap.DL_Code_LCR_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.dL_DPCH_Information  dL-DPCH-Information
  No value
  nbap.DL_DPCH_Information_RL_SetupRqstTDD
nbap.dL_FrameType  dL-FrameType
  Unsigned 32-bit integer
  nbap.DL_FrameType
nbap.dL_HS_PDSCH_Timeslot_Information_LCR_PSCH_ReconfRqst  dL-HS-PDSCH-Timeslot-
  Unsigned 32-bit integer
  nbap.DL_HS_PDSCH_Timeslot_Information_LCR_PSCH_ReconfRqst
nbap.dL_HS_PDSCH_Timeslot_Information_PSCH_ReconfRqst  dL-HS-PDSCH-Timeslot-Info
  Unsigned 32-bit integer
  nbap.DL_HS_PDSCH_Timeslot_Information_PSCH_ReconfRqst
nbap.dL_TimeSlotISCPInfo  dL-TimeSlotISCPInfo
  Unsigned 32-bit integer
  nbap.DL_TimeSlotISCPInfo

```

```

nbap.dL_Timeslot768_Information  dL-Timeslot768-Information
    Unsigned 32-bit integer
    nbap.DL_Timeslot768_Information
nbap.dL_TimeslotISCP  dL-TimeslotISCP
    Unsigned 32-bit integer
    nbap.DL_TimeslotISCP
nbap.dL_TimeslotLCR_Information  dL-TimeslotLCR-Information
    Unsigned 32-bit integer
    nbap.DL_TimeslotLCR_Information
nbap.dL_Timeslot_768_InformationModifyList_PSCH_ReconfRqst  dL-Timeslot-768-Info
    Unsigned 32-bit integer
    nbap.DL_Timeslot_768_InformationModifyList_PSCH_ReconfRqst
nbap.dL_Timeslot_Information  dL-Timeslot-Information
    Unsigned 32-bit integer
    nbap.DL_Timeslot_Information
nbap.dL_Timeslot_Information768  dL-Timeslot-Information768
    Unsigned 32-bit integer
    nbap.DL_Timeslot768_Information
nbap.dL_Timeslot_InformationAddList_768_PSCH_ReconfRqst  dL-Timeslot-Information
    Unsigned 32-bit integer
    nbap.DL_Timeslot_InformationAddList_768_PSCH_ReconfRqst
nbap.dL_Timeslot_InformationAddList_LCR_PSCH_ReconfRqst  dL-Timeslot-Information
    Unsigned 32-bit integer
    nbap.DL_Timeslot_InformationAddList_LCR_PSCH_ReconfRqst
nbap.dL_Timeslot_InformationAddList_PSCH_ReconfRqst  dL-Timeslot-InformationAddL
    Unsigned 32-bit integer
    nbap.DL_Timeslot_InformationAddList_PSCH_ReconfRqst
nbap.dL_Timeslot_InformationAddModify_ModifyList_RL_ReconfPrepTDD  dL-Timeslot-I
    Unsigned 32-bit integer
    nbap.DL_Timeslot_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.dL_Timeslot_InformationLCR  dL-Timeslot-InformationLCR
    Unsigned 32-bit integer
    nbap.DL_TimeslotLCR_Information
nbap.dL_Timeslot_InformationModifyList_PSCH_ReconfRqst  dL-Timeslot-InformationM
    Unsigned 32-bit integer
    nbap.DL_Timeslot_InformationModifyList_PSCH_ReconfRqst
nbap.dL_Timeslot_LCR_InformationModifyList_PSCH_ReconfRqst  dL-Timeslot-LCR-Info
    Unsigned 32-bit integer
    nbap.DL_Timeslot_LCR_InformationModifyList_PSCH_ReconfRqst
nbap.dL_Timeslot_LCR_InformationModify_ModifyList_RL_ReconfRqstTDD  dL-Timeslot-
    Unsigned 32-bit integer
    nbap.DL_Timeslot_LCR_InformationModify_ModifyList_RL_ReconfRqstTDD
nbap.dPCH_ID  dPCH-ID
    Unsigned 32-bit integer
    nbap.DPCH_ID
nbap.dPCH_ID768  dPCH-ID768
    Unsigned 32-bit integer
    nbap.DPCH_ID768

```



```
nbap.dRX_Information    dRX-Information
    No value
    nbap.DRX_Information

nbap.dRX_Information_to_Modify    dRX-Information-to-Modify
    Unsigned 32-bit integer
    nbap.DRX_Information_to_Modify

nbap.dSCH_ID    dSCH-ID
    Unsigned 32-bit integer
    nbap.DSCH_ID

nbap.dSCH_InformationResponseList    dSCH-InformationResponseList
    No value
    nbap.DSCH_InformationResponseList_RL_SetupRspTDD

nbap.dSCH_InformationResponseList_RL_ReconfReady    dSCH-InformationResponseList-R
    No value
    nbap.DSCH_InformationResponseList_RL_ReconfReady

nbap.dTX_Information    dTX-Information
    No value
    nbap.DTX_Information

nbap.dTX_Information_to_Modify    dTX-Information-to-Modify
    Unsigned 32-bit integer
    nbap.DTX_Information_to_Modify

nbap.dataBitAssistanceSgnList    dataBitAssistanceSgnList
    Unsigned 32-bit integer
    nbap.GANSS_DataBitAssistanceSgnList

nbap.dataBitAssistancelist    dataBitAssistancelist
    Unsigned 32-bit integer
    nbap.GANSS_DataBitAssistanceList

nbap.data_id    data-id
    Unsigned 32-bit integer
    nbap.DATA_ID

nbap.ddMode    ddMode
    Unsigned 32-bit integer
    nbap.DdMode

nbap.deactivate    deactivate
    No value
    nbap.Deactivate_Info

nbap.deactivation_type    deactivation-type
    Unsigned 32-bit integer
    nbap.Execution_Type

nbap.dedicatedChannelsCapacityConsumptionLaw    dedicatedChannelsCapacityConsumpti
    Unsigned 32-bit integer
    nbap.DedicatedChannelsCapacityConsumptionLaw

nbap.dedicatedMeasurementValue    dedicatedMeasurementValue
    Unsigned 32-bit integer
    nbap.DedicatedMeasurementValue

nbap.dedicatedMeasurementValueInformation    dedicatedMeasurementValueInformation
    Unsigned 32-bit integer
    nbap.DedicatedMeasurementValueInformation
```

```
nbap.dedicatedmeasurementValue  dedicatedmeasurementValue
    Unsigned 32-bit integer
    nbap.DedicatedMeasurementValue

nbap.defaultMidamble  defaultMidamble
    No value
    nbap.NULL

nbap.degreesOfLatitude  degreesOfLatitude
    Unsigned 32-bit integer
    nbap.INTEGER_0_2147483647

nbap.degreesOfLongitude  degreesOfLongitude
    Signed 32-bit integer
    nbap.INTEGER_M2147483648_2147483647

nbap.delayed_activation_update  delayed-activation-update
    Unsigned 32-bit integer
    nbap.DelayedActivationUpdate

nbap.deletePriorityQueue  deletePriorityQueue
    Unsigned 32-bit integer
    nbap.PriorityQueue_Id

nbap.deletionIndicator  deletionIndicator
    Unsigned 32-bit integer
    nbap.DeletionIndicator_SystemInfoUpdate

nbap.delta_SIR1  delta-SIR1
    Unsigned 32-bit integer
    nbap.DeltaSIR

nbap.delta_SIR2  delta-SIR2
    Unsigned 32-bit integer
    nbap.DeltaSIR

nbap.delta_SIR_after1  delta-SIR-after1
    Unsigned 32-bit integer
    nbap.DeltaSIR

nbap.delta_SIR_after2  delta-SIR-after2
    Unsigned 32-bit integer
    nbap.DeltaSIR

nbap.delta_n_nav  delta-n-nav
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.delta_t_ls_utc  delta-t-ls-utc
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.delta_t_lsf_utc  delta-t-lsf-utc
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.dganss_Correction  dganss-Correction
    No value
    nbap.DGANSSCorrections

nbap.dgps  dgps
    No value
    nbap.DGPSThresholds
```

```
nbap.dgps_corrections  dgps-corrections
    No value
    nbap.DGPSCorrections

nbap.directionOfAltitude  directionOfAltitude
    Unsigned 32-bit integer
    nbap.T_directionOfAltitude

nbap.discardTimer  discardTimer
    Unsigned 32-bit integer
    nbap.DiscardTimer

nbap.diversityControlField  diversityControlField
    Unsigned 32-bit integer
    nbap.DiversityControlField

nbap.diversityIndication  diversityIndication
    Unsigned 32-bit integer
    nbap.DiversityIndication_RL_SetupRspFDD

nbap.diversityMode  diversityMode
    Unsigned 32-bit integer
    nbap.DiversityMode

nbap.dlTransPower  dlTransPower
    Signed 32-bit integer
    nbap.DL_Power

nbap.dl_CCTrCH_ID  dl-CCTrCH-ID
    Unsigned 32-bit integer
    nbap.CCTrCH_ID

nbap.dl_CodeInformation  dl-CodeInformation
    Unsigned 32-bit integer
    nbap.FDD_DL_CodeInformation

nbap.dl_Cost  dl-Cost
    Unsigned 32-bit integer
    nbap.INTEGER_0_65535

nbap.dl_Cost_1  dl-Cost-1
    Unsigned 32-bit integer
    nbap.INTEGER_0_65535

nbap.dl_Cost_2  dl-Cost-2
    Unsigned 32-bit integer
    nbap.INTEGER_0_65535

nbap.dl_DPCH_InformationAddList  dl-DPCH-InformationAddList
    No value
    nbap.DL_DPCH_InformationModify_AddList_RL_ReconfPrepTDD

nbap.dl_DPCH_InformationAddListLCR  dl-DPCH-InformationAddListLCR
    No value
    nbap.DL_DPCH_LCR_InformationModify_AddList_RL_ReconfPrepTDD

nbap.dl_DPCH_InformationDeleteList  dl-DPCH-InformationDeleteList
    No value
    nbap.DL_DPCH_InformationModify_DeleteList_RL_ReconfPrepTDD

nbap.dl_DPCH_InformationList  dl-DPCH-InformationList
    No value
    nbap.DL_DPCH_InformationAddList_RL_ReconfPrepTDD
```

```

nbap.dl_DPCH_InformationListLCR dl-DPCH-InformationListLCR
    No value
    nbap.DL_DPCH_LCR_InformationAddList_RL_ReconfPrepTDD
nbap.dl_DPCH_InformationModifyList dl-DPCH-InformationModifyList
    No value
    nbap.DL_DPCH_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.dl_DPCH_LCR_InformationModifyList dl-DPCH-LCR-InformationModifyList
    No value
    nbap.DL_DPCH_LCR_InformationModify_ModifyList_RL_ReconfRqstTDD
nbap.dl_DPCH_SlotFormat dl-DPCH-SlotFormat
    Unsigned 32-bit integer
    nbap.DL_DPCH_SlotFormat
nbap.dl_HS_PDSCH_Codelist_768_PSCH_ReconfRqst dl-HS-PDSCH-Codelist-768-PSCH-Rec
    Unsigned 32-bit integer
    nbap.DL_HS_PDSCH_Codelist_768_PSCH_ReconfRqst
nbap.dl_HS_PDSCH_Codelist_LCR_PSCH_ReconfRqst dl-HS-PDSCH-Codelist-LCR-PSCH-Rec
    Unsigned 32-bit integer
    nbap.DL_HS_PDSCH_Codelist_LCR_PSCH_ReconfRqst
nbap.dl_HS_PDSCH_Codelist_PSCH_ReconfRqst dl-HS-PDSCH-Codelist-PSCH-ReconfRqst
    Unsigned 32-bit integer
    nbap.DL_HS_PDSCH_Codelist_PSCH_ReconfRqst
nbap.dl_ReferencePower dl-ReferencePower
    Signed 32-bit integer
    nbap.DL_Power
nbap.dl_Reference_Power dl-Reference-Power
    Signed 32-bit integer
    nbap.DL_Power
nbap.dl_ScramblingCode dl-ScramblingCode
    Unsigned 32-bit integer
    nbap.DL_ScramblingCode
nbap.dl_TFCS dl-TFCS
    No value
    nbap.TFCS
nbap.dl_TransportFormatSet dl-TransportFormatSet
    No value
    nbap.TransportFormatSet
nbap.dl_or_global_capacityCredit dl-or-global-capacityCredit
    Unsigned 32-bit integer
    nbap.DL_or_Global_CapacityCredit
nbap.dn_utc dn-utc
    Byte array
    nbap.BIT_STRING_SIZE_8
nbap.downlink_Compressed_Mode_Method downlink-Compressed-Mode-Method
    Unsigned 32-bit integer
    nbap.Downlink_Compressed_Mode_Method
nbap.dsField dsField
    Byte array
    nbap.DsField

```

```
nbap.dwPCH_Power  dwPCH-Power
    Signed 32-bit integer
    nbap.DwPCH_Power

nbap.dynamicParts  dynamicParts
    Unsigned 32-bit integer
    nbap.TransportFormatSet_DynamicPartList

nbap.edCHLogicalChannelInformation  edCHLogicalChannelInformation
    Unsigned 32-bit integer
    nbap.E_DCH_LogicalChannelInformation

nbap.edCH_Grant_TypeTDD  edCH-Grant-TypeTDD
    Unsigned 32-bit integer
    nbap.E_DCH_Grant_TypeTDD

nbap.edCH_Grant_Type_Information  edCH-Grant-Type-Information
    Unsigned 32-bit integer
    nbap.E_DCH_Grant_Type_Information

nbap.edCH_HARQ_PO_FDD  edCH-HARQ-PO-FDD
    Unsigned 32-bit integer
    nbap.E_DCH_HARQ_PO_FDD

nbap.edCH_HARQ_PO_TDD  edCH-HARQ-PO-TDD
    Unsigned 32-bit integer
    nbap.E_DCH_HARQ_PO_TDD

nbap.edCH_LogicalChannelToAdd  edCH-LogicalChannelToAdd
    Unsigned 32-bit integer
    nbap.E_DCH_LogicalChannelInformation

nbap.edCH_LogicalChannelToDelete  edCH-LogicalChannelToDelete
    Unsigned 32-bit integer
    nbap.E_DCH_LogicalChannelToDelete

nbap.edCH_LogicalChannelToModify  edCH-LogicalChannelToModify
    Unsigned 32-bit integer
    nbap.E_DCH_LogicalChannelToModify

nbap.edCH_MACdFlow_Multiplexing_List  edCH-MACdFlow-Multiplexing-List
    Byte array
    nbap.E_DCH_MACdFlow_Multiplexing_List

nbap.edCH_MACdFlow_Retransmission_Timer  edCH-MACdFlow-Retransmission-Timer
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlow_Retransmission_Timer

nbap.eI  eI
    Unsigned 32-bit integer
    nbap.EI

nbap.eRUCCH_768_parameters  eRUCCH-768-parameters
    No value
    nbap.E_RUCCH_768_parameters

nbap.eRUCCH_SYNC_UL_codes_bitmap  eRUCCH-SYNC-UL-codes-bitmap
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.eRUCCH_parameters  eRUCCH-parameters
    No value
    nbap.E_RUCCH_parameters
```

```

nbap.e_AGCH_And_E_RGCH_E_HICH_FDD_Scrambling_Code  e-AGCH-And-E-RGCH-E-HICH-FDD-
  Unsigned 32-bit integer
  nbap.DL_ScramblingCode

nbap.e_AGCH_Channelisation_Code  e-AGCH-Channelisation-Code
  Unsigned 32-bit integer
  nbap.FDD_DL_ChannelisationCodeNumber

nbap.e_AGCH_FDD_Code_Information  e-AGCH-FDD-Code-Information
  Unsigned 32-bit integer
  nbap.E_AGCH_FDD_Code_Information

nbap.e_AGCH_ID  e-AGCH-ID
  Unsigned 32-bit integer
  nbap.E_AGCH_Id

nbap.e_AGCH_Id  e-AGCH-Id
  Unsigned 32-bit integer
  nbap.E_AGCH_Id

nbap.e_AGCH_InformationModify_768_PSCH_ReconfRqst  e-AGCH-InformationModify-768-
  Unsigned 32-bit integer
  nbap.E_AGCH_InformationModify_768_PSCH_ReconfRqst

nbap.e_AGCH_InformationModify_LCR_PSCH_ReconfRqst  e-AGCH-InformationModify-LCR-
  Unsigned 32-bit integer
  nbap.E_AGCH_InformationModify_LCR_PSCH_ReconfRqst

nbap.e_AGCH_InformationModify_PSCH_ReconfRqst  e-AGCH-InformationModify-PSCH-Rec
  Unsigned 32-bit integer
  nbap.E_AGCH_InformationModify_PSCH_ReconfRqst

nbap.e_AGCH_Information_768_PSCH_ReconfRqst  e-AGCH-Information-768-PSCH-ReconfR
  Unsigned 32-bit integer
  nbap.E_AGCH_Information_768_PSCH_ReconfRqst

nbap.e_AGCH_Information_LCR_PSCH_ReconfRqst  e-AGCH-Information-LCR-PSCH-ReconfR
  Unsigned 32-bit integer
  nbap.E_AGCH_Information_LCR_PSCH_ReconfRqst

nbap.e_AGCH_Information_PSCH_ReconfRqst  e-AGCH-Information-PSCH-ReconfRqst
  Unsigned 32-bit integer
  nbap.E_AGCH_Information_PSCH_ReconfRqst

nbap.e_AGCH_MaxPower  e-AGCH-MaxPower
  Signed 32-bit integer
  nbap.DL_Power

nbap.e_AGCH_PowerOffset  e-AGCH-PowerOffset
  Unsigned 32-bit integer
  nbap.E_AGCH_PowerOffset

nbap.e_AGCH_Specific_Information_ResponseTDD  e-AGCH-Specific-Information-Respon
  Unsigned 32-bit integer
  nbap.E_AGCH_Specific_InformationRespListTDD

nbap.e_AGCH_TPC_StepSize  e-AGCH-TPC-StepSize
  Unsigned 32-bit integer
  nbap.TDD_TPC_DownlinkStepSize

nbap.e_DCHProvidedBitRateValue  e-DCHProvidedBitRateValue
  Unsigned 32-bit integer
  nbap.E_DCHProvidedBitRateValue

```

```
nbap.e_DCH_DDI_Value e-DCH-DDI-Value
    Unsigned 32-bit integer
    nbap.E_DCH_DDI_Value

nbap.e_DCH_FDD_DL_Control_Channel_Info e-DCH-FDD-DL-Control-Channel-Info
    No value
    nbap.E_DCH_FDD_DL_Control_Channel_Information

nbap.e_DCH_LCRTDD_Information e-DCH-LCRTDD-Information
    No value
    nbap.E_DCH_LCRTDD_Information

nbap.e_DCH_LCRTDD_PhysicalLayerCategory e-DCH-LCRTDD-PhysicalLayerCategory
    Unsigned 32-bit integer
    nbap.E_DCH_LCRTDD_PhysicalLayerCategory

nbap.e_DCH_LogicalChannelToAdd e-DCH-LogicalChannelToAdd
    Unsigned 32-bit integer
    nbap.E_DCH_LogicalChannelInformation

nbap.e_DCH_LogicalChannelToDelete e-DCH-LogicalChannelToDelete
    Unsigned 32-bit integer
    nbap.E_DCH_LogicalChannelToDelete

nbap.e_DCH_LogicalChannelToModify e-DCH-LogicalChannelToModify
    Unsigned 32-bit integer
    nbap.E_DCH_LogicalChannelToModify

nbap.e_DCH_MACdFlow_ID e-DCH-MACdFlow-ID
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlow_ID

nbap.e_DCH_MACdFlow_Specific_Info e-DCH-MACdFlow-Specific-Info
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlow_Specific_InfoList

nbap.e_DCH_MACdFlow_Specific_Info_to_Modify e-DCH-MACdFlow-Specific-Info-to-Mod
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlow_Specific_InfoList_to_Modify

nbap.e_DCH_MACdFlow_Specific_InformationResp e-DCH-MACdFlow-Specific-Information
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlow_Specific_InformationResp

nbap.e_DCH_MACdFlow_Specific_UpdateInformation e-DCH-MACdFlow-Specific-UpdateIn
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlow_Specific_UpdateInformation

nbap.e_DCH_MACdFlows_Information e-DCH-MACdFlows-Information
    No value
    nbap.E_DCH_MACdFlows_Information

nbap.e_DCH_MACdFlows_Information_TDD e-DCH-MACdFlows-Information-TDD
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlows_Information_TDD

nbap.e_DCH_MACdFlows_to_Add e-DCH-MACdFlows-to-Add
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlows_Information_TDD

nbap.e_DCH_MACdFlows_to_Delete e-DCH-MACdFlows-to-Delete
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlows_to_Delete
```

```
nbap.e_DCH_MacdFlow_Id e-DCH-MacdFlow-Id
    Unsigned 32-bit integer
    nbap.E_DCH_MACdFlow_ID

nbap.e_DCH_Maximum_Bitrate e-DCH-Maximum-Bitrate
    Unsigned 32-bit integer
    nbap.E_DCH_Maximum_Bitrate

nbap.e_DCH_Min_Set_E_TFCI e-DCH-Min-Set-E-TFCI
    Unsigned 32-bit integer
    nbap.E_TFCI

nbap.e_DCH_Non_Scheduled_Grant_Info e-DCH-Non-Scheduled-Grant-Info
    No value
    nbap.E_DCH_Non_Scheduled_Grant_Info

nbap.e_DCH_Non_Scheduled_Grant_Info768 e-DCH-Non-Scheduled-Grant-Info768
    No value
    nbap.E_DCH_Non_Scheduled_Grant_Info768

nbap.e_DCH_Non_Scheduled_Grant_LCR_Info e-DCH-Non-Scheduled-Grant-LCR-Info
    No value
    nbap.E_DCH_Non_Scheduled_Grant_LCR_Info

nbap.e_DCH_Non_Scheduled_Transmission_Grant e-DCH-Non-Scheduled-Transmission-Gr
    No value
    nbap.E_DCH_Non_Scheduled_Transmission_Grant_Items

nbap.e_DCH_PowerOffset_for_SchedulingInfo e-DCH-PowerOffset-for-SchedulingInfo
    Unsigned 32-bit integer
    nbap.E_DCH_PowerOffset_for_SchedulingInfo

nbap.e_DCH_Processing_Overload_Level e-DCH-Processing-Overload-Level
    Unsigned 32-bit integer
    nbap.E_DCH_Processing_Overload_Level

nbap.e_DCH_QPSK_RefBetaInfo e-DCH-QPSK-RefBetaInfo
    Unsigned 32-bit integer
    nbap.E_DCH_QPSK_RefBetaInfo

nbap.e_DCH_RL_InformationList_Rsp e-DCH-RL-InformationList-Rsp
    Unsigned 32-bit integer
    nbap.E_DCH_RL_InformationList_Rsp

nbap.e_DCH_Reference_Power_Offset e-DCH-Reference-Power-Offset
    Unsigned 32-bit integer
    nbap.E_DCH_Reference_Power_Offset

nbap.e_DCH_SF_allocation e-DCH-SF-allocation
    Unsigned 32-bit integer
    nbap.E_DCH_SF_allocation

nbap.e_DCH_Scheduled_Transmission_Grant e-DCH-Scheduled-Transmission-Grant
    No value
    nbap.NULL

nbap.e_DCH_TDD_Information e-DCH-TDD-Information
    No value
    nbap.E_DCH_TDD_Information

nbap.e_DCH_TDD_Information768 e-DCH-TDD-Information768
    No value
    nbap.E_DCH_TDD_Information768
```



```

nbap.e_DCH_TDD_Information_to_Modify  e-DCH-TDD-Information-to-Modify
    No value
    nbap.E_DCH_TDD_Information_to_Modify
nbap.e_DCH_TDD_Information_to_Modify_List  e-DCH-TDD-Information-to-Modify-List
    Unsigned 32-bit integer
    nbap.E_DCH_TDD_Information_to_Modify_List
nbap.e_DCH_TDD_MACdFlow_Specific_InformationResp  e-DCH-TDD-MACdFlow-Specific-Info
    Unsigned 32-bit integer
    nbap.E_DCH_TDD_MACdFlow_Specific_InformationResp
nbap.e_DCH_TDD_Maximum_Bitrate  e-DCH-TDD-Maximum-Bitrate
    Unsigned 32-bit integer
    nbap.E_DCH_TDD_Maximum_Bitrate
nbap.e_DCH_TDD_Maximum_Bitrate768  e-DCH-TDD-Maximum-Bitrate768
    Unsigned 32-bit integer
    nbap.E_DCH_TDD_Maximum_Bitrate768
nbap.e_DCH_TFCI_Table_Index  e-DCH-TFCI-Table-Index
    Unsigned 32-bit integer
    nbap.E_DCH_TFCI_Table_Index
nbap.e_DCH_TTI_Length  e-DCH-TTI-Length
    Unsigned 32-bit integer
    nbap.E_DCH_TTI_Length
nbap.e_DCH_TTI_Length_to_Modify  e-DCH-TTI-Length-to-Modify
    Unsigned 32-bit integer
    nbap.E_DCH_TTI_Length_to_Modify
nbap.e_DCH_serving_cell_change_successful  e-DCH-serving-cell-change-successful
    No value
    nbap.E_DCH_serving_cell_change_successful
nbap.e_DCH_serving_cell_change_unsuccessful  e-DCH-serving-cell-change-unsuccessful
    No value
    nbap.E_DCH_serving_cell_change_unsuccessful
nbap.e_DCH_serving_cell_choice  e-DCH-serving-cell-choice
    Unsigned 32-bit integer
    nbap.E_DCH_serving_cell_choice
nbap.e_DCH_sixteenQAM_RefBetaInfo  e-DCH-sixteenQAM-RefBetaInfo
    Unsigned 32-bit integer
    nbap.E_DCH_sixteenQAM_RefBetaInfo
nbap.e_DPCCH_PO  e-DPCCH-PO
    Unsigned 32-bit integer
    nbap.E_DPCCH_PO
nbap.e_HICH_ID_TDD  e-HICH-ID-TDD
    Unsigned 32-bit integer
    nbap.E_HICH_ID_TDD
nbap.e_HICH_InformationModify_LCR_PSCH_ReconfRqst  e-HICH-InformationModify-LCR-PSCH-ReconfRqst
    Unsigned 32-bit integer
    nbap.E_HICH_InformationModify_LCR_PSCH_ReconfRqst
nbap.e_HICH_Information_LCR_PSCH_ReconfRqst  e-HICH-Information-LCR-PSCH-ReconfRqst
    Unsigned 32-bit integer
    nbap.E_HICH_Information_LCR_PSCH_ReconfRqst

```

```
nbap.e_HICH_LCR_Information  e-HICH-LCR-Information
    No value
    nbap.E_HICH_LCR_Information
nbap.e_HICH_MaxPower  e-HICH-MaxPower
    Signed 32-bit integer
    nbap.DL_Power
nbap.e_HICH_PowerOffset  e-HICH-PowerOffset
    Unsigned 32-bit integer
    nbap.E_HICH_PowerOffset
nbap.e_HICH_Signature_Sequence  e-HICH-Signature-Sequence
    Unsigned 32-bit integer
    nbap.E_HICH_Signature_Sequence
nbap.e_HICH_Type  e-HICH-Type
    Unsigned 32-bit integer
    nbap.E_HICH_Type
nbap.e_PUCH_Codelist_LCR  e-PUCH-Codelist-LCR
    Unsigned 32-bit integer
    nbap.E_PUCH_Codelist_LCR
nbap.e_PUCH_Information  e-PUCH-Information
    No value
    nbap.E_PUCH_Information
nbap.e_PUCH_LCR_Information  e-PUCH-LCR-Information
    No value
    nbap.E_PUCH_LCR_Information
nbap.e_PUCH_TPC_StepSize  e-PUCH-TPC-StepSize
    Unsigned 32-bit integer
    nbap.TDD_TPC_UplinkStepSize_LCR
nbap.e_PUCH_Timeslot_Info  e-PUCH-Timeslot-Info
    Unsigned 32-bit integer
    nbap.E_PUCH_Timeslot_Info
nbap.e_PUCH_Timeslot_InfoLCR  e-PUCH-Timeslot-InfoLCR
    Unsigned 32-bit integer
    nbap.E_PUCH_Timeslot_InfoLCR
nbap.e_RGCH_2_IndexStepThreshold  e-RGCH-2-IndexStepThreshold
    Unsigned 32-bit integer
    nbap.E_RGCH_2_IndexStepThreshold
nbap.e_RGCH_3_IndexStepThreshold  e-RGCH-3-IndexStepThreshold
    Unsigned 32-bit integer
    nbap.E_RGCH_3_IndexStepThreshold
nbap.e_RGCH_E_HICH_Channelisation_Code  e-RGCH-E-HICH-Channelisation-Code
    Unsigned 32-bit integer
    nbap.FDD_DL_ChannelisationCodeNumber
nbap.e_RGCH_E_HICH_FDD_Code_Information  e-RGCH-E-HICH-FDD-Code-Information
    Unsigned 32-bit integer
    nbap.E_RGCH_E_HICH_FDD_Code_Information
nbap.e_RGCH_PowerOffset  e-RGCH-PowerOffset
    Unsigned 32-bit integer
    nbap.E_RGCH_PowerOffset
```

```
nbap.e_RGCH_Release_Indicator  e-RGCH-Release-Indicator
    Unsigned 32-bit integer
    nbap.E_RGCH_Release_Indicator

nbap.e_RGCH_Signature_Sequence  e-RGCH-Signature-Sequence
    Unsigned 32-bit integer
    nbap.E_RGCH_Signature_Sequence

nbap.e_RNTI  e-RNTI
    Unsigned 32-bit integer
    nbap.E_RNTI

nbap.e_RUCCH_Midamble  e-RUCCH-Midamble
    Unsigned 32-bit integer
    nbap.PRACH_Midamble

nbap.e_TFCI_BetaEC_Boost  e-TFCI-BetaEC-Boost
    Unsigned 32-bit integer
    nbap.E_TFCI_BetaEC_Boost

nbap.e_TFCS_Information  e-TFCS-Information
    No value
    nbap.E_TFCS_Information

nbap.e_TFCS_Information_TDD  e-TFCS-Information-TDD
    No value
    nbap.E_TFCS_Information_TDD

nbap.e_TTI  e-TTI
    Unsigned 32-bit integer
    nbap.E_TTI

nbap.e_msb  e-msb
    Unsigned 32-bit integer
    nbap.INTEGER_0_127

nbap.eightPSK  eightPSK
    Unsigned 32-bit integer
    nbap.EightPSK_DL_DPCH_TimeSlotFormatTDD_LCR

nbap.enabling_Delay  enabling-Delay
    Unsigned 32-bit integer
    nbap.Enabling_Delay

nbap.event_a  event-a
    No value
    nbap.ReportCharacteristicsType_EventA

nbap.event_b  event-b
    No value
    nbap.ReportCharacteristicsType_EventB

nbap.event_c  event-c
    No value
    nbap.ReportCharacteristicsType_EventC

nbap.event_d  event-d
    No value
    nbap.ReportCharacteristicsType_EventD

nbap.event_e  event-e
    No value
    nbap.ReportCharacteristicsType_EventE
```

```

nbap.event_f      event-f
    No value
    nbap.ReportCharacteristicsType_EventF
nbap.explicit     explicit
    No value
    nbap.HARQ_MemoryPartitioning_Explicit
nbap.extensionValue  extensionValue
    No value
    nbap.T_extensionValue
nbap.extension_CauseLevel_PSCH_ReconfFailure  extension-CauseLevel-PSCH-ReconfFa
    No value
    nbap.Extension_CauseLevel_PSCH_ReconfFailure
nbap.extension_CommonMeasurementObjectType_CM_Rprt  extension-CommonMeasurementO
    No value
    nbap.Extension_CommonMeasurementObjectType_CM_Rprt
nbap.extension_CommonMeasurementObjectType_CM_Rqst  extension-CommonMeasurementO
    No value
    nbap.Extension_CommonMeasurementObjectType_CM_Rqst
nbap.extension_CommonMeasurementObjectType_CM_Rsp  extension-CommonMeasurementOb
    No value
    nbap.Extension_CommonMeasurementObjectType_CM_Rsp
nbap.extension_CommonMeasurementValue  extension-CommonMeasurementValue
    No value
    nbap.Extension_CommonMeasurementValue
nbap.extension_DedicatedMeasurementValue  extension-DedicatedMeasurementValue
    No value
    nbap.Extension_DedicatedMeasurementValue
nbap.extension_ReportCharacteristics  extension-ReportCharacteristics
    No value
    nbap.Extension_ReportCharacteristics
nbap.extension_ReportCharacteristicsType_MeasurementIncreaseDecreaseThreshold  e
    No value
    nbap.Extension_ReportCharacteristicsType_MeasurementIncreaseDecreaseThreshol
nbap.extension_ReportCharacteristicsType_MeasurementThreshold  extension-ReportC
    No value
    nbap.Extension_ReportCharacteristicsType_MeasurementThreshold
nbap.extension_neighbouringCellMeasurementInformation  extension-neighbouringCel
    No value
    nbap.Extension_neighbouringCellMeasurementInformation
nbap.fACH_CCTrCH_ID  fACH-CCTrCH-ID
    Unsigned 32-bit integer
    nbap.CCTrCH_ID
nbap.fACH_InformationList  fACH-InformationList
    Unsigned 32-bit integer
    nbap.fACH_InformationList_AuditRsp
nbap.fACH_Measurement_Occasion_Cycle_Length_Coefficient  fACH-Measurement-Occasi
    Unsigned 32-bit integer
    nbap.fACH_Measurement_Occasion_Cycle_Length_Coefficient

```

```
nbap.fACH_Parameters  fACH-Parameters
    No value
    nbap.fACH_ParametersList_CTCH_SetupRqstFDD
nbap.fACH_ParametersList  fACH-ParametersList
    No value
    nbap.fACH_ParametersList_CTCH_SetupRqstTDD
nbap.fACH_ParametersList_CTCH_ReconfRqstFDD  fACH-ParametersList-CTCH-ReconfRqst
    No value
    nbap.fACH_ParametersList_CTCH_ReconfRqstFDD
nbap.fDD_DL_ChannelisationCodeNumber  fDD-DL-ChannelisationCodeNumber
    Unsigned 32-bit integer
    nbap.FDD_DL_ChannelisationCodeNumber
nbap.fPACHPower  fPACHPower
    Signed 32-bit integer
    nbap.FPACH_Power
nbap.fPACH_Power  fPACH-Power
    Signed 32-bit integer
    nbap.FPACH_Power
nbap.failed_HS_SICH  failed-HS-SICH
    Unsigned 32-bit integer
    nbap.HS_SICH_failed
nbap.fdd  fdd
    No value
    nbap.T_fdd
nbap.fdd_DL_ChannelisationCodeNumber  fdd-DL-ChannelisationCodeNumber
    Unsigned 32-bit integer
    nbap.FDD_DL_ChannelisationCodeNumber
nbap.fdd_DL_Channelisation_CodeNumber  fdd-DL-Channelisation-CodeNumber
    Unsigned 32-bit integer
    nbap.FDD_DL_ChannelisationCodeNumber
nbap.fdd_S_CCPCH_Offset  fdd-S-CCPCH-Offset
    Unsigned 32-bit integer
    nbap.FDD_S_CCPCH_Offset
nbap.fdd_TPC_DownlinkStepSize  fdd-TPC-DownlinkStepSize
    Unsigned 32-bit integer
    nbap.FDD_TPC_DownlinkStepSize
nbap.fdd_dl_ChannelisationCodeNumber  fdd-dl-ChannelisationCodeNumber
    Unsigned 32-bit integer
    nbap.FDD_DL_ChannelisationCodeNumber
nbap.firstRLS_Indicator  firstRLS-Indicator
    Unsigned 32-bit integer
    nbap.FirstRLS_Indicator
nbap.firstRLS_indicator  firstRLS-indicator
    Unsigned 32-bit integer
    nbap.FirstRLS_Indicator
nbap.first_TDD_ChannelisationCode  first-TDD-ChannelisationCode
    Unsigned 32-bit integer
    nbap.TDD_ChannelisationCode
```

```
nbap.fit_interval_flag_nav  fit-interval-flag-nav
    Byte array
    nbap.BIT_STRING_SIZE_1

nbap.frameAdjustmentValue  frameAdjustmentValue
    Unsigned 32-bit integer
    nbap.FrameAdjustmentValue

nbap.frameHandlingPriority  frameHandlingPriority
    Unsigned 32-bit integer
    nbap.FrameHandlingPriority

nbap.frameOffset  frameOffset
    Unsigned 32-bit integer
    nbap.FrameOffset

nbap.frequencyAcquisition  frequencyAcquisition
    No value
    nbap.NULL

nbap.gANSS_AlmanacModel  gANSS-AlmanacModel
    Unsigned 32-bit integer
    nbap.GANSS_AlmanacModel

nbap.gANSS_CommonDataInfoReq  gANSS-CommonDataInfoReq
    No value
    nbap.GANSS_CommonDataInfoReq

nbap.gANSS_GenericDataInfoReqList  gANSS-GenericDataInfoReqList
    Unsigned 32-bit integer
    nbap.GANSS_GenericDataInfoReqList

nbap.gANSS_IonosphereRegionalStormFlags  gANSS-IonosphereRegionalStormFlags
    No value
    nbap.GANSS_IonosphereRegionalStormFlags

nbap.gANSS_SatelliteInformationKP  gANSS-SatelliteInformationKP
    Unsigned 32-bit integer
    nbap.GANSS_SatelliteInformationKP

nbap.gANSS_SignalId  gANSS-SignalId
    Unsigned 32-bit integer
    nbap.GANSS_Signal_ID

nbap.gANSS_StatusHealth  gANSS-StatusHealth
    Unsigned 32-bit integer
    nbap.GANSS_StatusHealth

nbap.gANSS_iod  gANSS-iod
    Byte array
    nbap.BIT_STRING_SIZE_10

nbap.gANSS_keplerianParameters  gANSS-keplerianParameters
    No value
    nbap.GANSS_KeplerianParametersAlm

nbap.gPSInformation  gPSInformation
    Unsigned 32-bit integer
    nbap.GPS_Information

nbap.gainFactor  gainFactor
    Unsigned 32-bit integer
    nbap.T_gainFactor
```

```
nbap.ganssClockModel  ganssClockModel
    Unsigned 32-bit integer
    nbap.GANSS_Clock_Model

nbap.ganssDataBitAssistance  ganssDataBitAssistance
    Boolean
    nbap.BOOLEAN

nbap.ganssDataBits  ganssDataBits
    Byte array
    nbap.BIT_STRING_SIZE_1_1024

nbap.ganssDay  ganssDay
    Unsigned 32-bit integer
    nbap.INTEGER_0_8191

nbap.ganssOrbitModel  ganssOrbitModel
    Unsigned 32-bit integer
    nbap.GANSS_Orbit_Model

nbap.ganssSatInfoNav  ganssSatInfoNav
    Unsigned 32-bit integer
    nbap.GANSS_Sat_Info_Nav

nbap.ganssTod  ganssTod
    Unsigned 32-bit integer
    nbap.INTEGER_0_59_

nbap.ganss_Almanac  ganss-Almanac
    Boolean
    nbap.BOOLEAN

nbap.ganss_Data_Bit_Assistance  ganss-Data-Bit-Assistance
    No value
    nbap.GANSS_Data_Bit_Assistance

nbap.ganss_Data_Bit_Assistance_Req  ganss-Data-Bit-Assistance-Req
    No value
    nbap.GANSS_Data_Bit_Assistance_ReqItem

nbap.ganss_Data_Bit_Assistance_ReqList  ganss-Data-Bit-Assistance-ReqList
    Unsigned 32-bit integer
    nbap.GANSS_Data_Bit_Assistance_ReqList

nbap.ganss_Id  ganss-Id
    Unsigned 32-bit integer
    nbap.GANSS_ID

nbap.ganss_Ionospheric_Model  ganss-Ionospheric-Model
    No value
    nbap.GANSS_Ionospheric_Model

nbap.ganss_Navigation_Model_And_Time_Recovery  ganss-Navigation-Model-And-Time-R
    Boolean
    nbap.BOOLEAN

nbap.ganss_Real_Time_Integrity  ganss-Real-Time-Integrity
    Boolean
    nbap.BOOLEAN

nbap.ganss_Rx_Pos  ganss-Rx-Pos
    No value
    nbap.GANSS_RX_Pos
```

```
nbap.ganss_SignalId  ganss-SignalId
    Unsigned 32-bit integer
    nbap.GANSS_Signal_ID

nbap.ganss_Time_Model  ganss-Time-Model
    No value
    nbap.GANSS_Time_Model

nbap.ganss_Time_Model_GNSS_GNSS  ganss-Time-Model-GNSS-GNSS
    Byte array
    nbap.BIT_STRING_SIZE_9

nbap.ganss_Transmission_Time  ganss-Transmission-Time
    No value
    nbap.GANSS_Transmission_Time

nbap.ganss_UTC_Model  ganss-UTC-Model
    Boolean
    nbap.BOOLEAN

nbap.ganss_UTC_TIME  ganss-UTC-TIME
    No value
    nbap.GANSS_UTC_Model

nbap.ganss_af_one_alm  ganss-af-one-alm
    Byte array
    nbap.BIT_STRING_SIZE_11

nbap.ganss_af_zero_alm  ganss-af-zero-alm
    Byte array
    nbap.BIT_STRING_SIZE_14

nbap.ganss_delta_I_alm  ganss-delta-I-alm
    Byte array
    nbap.BIT_STRING_SIZE_11

nbap.ganss_delta_a_sqrt_alm  ganss-delta-a-sqrt-alm
    Byte array
    nbap.BIT_STRING_SIZE_17

nbap.ganss_e_alm  ganss-e-alm
    Byte array
    nbap.BIT_STRING_SIZE_11

nbap.ganss_e_lsb_nav  ganss-e-lsb-nav
    Unsigned 32-bit integer
    nbap.INTEGER_0_33554431

nbap.ganss_m_zero_alm  ganss-m-zero-alm
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.ganss_omega_alm  ganss-omega-alm
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.ganss_omega_nav  ganss-omega-nav
    Byte array
    nbap.BIT_STRING_SIZE_32

nbap.ganss_omegadot_alm  ganss-omegadot-alm
    Byte array
    nbap.BIT_STRING_SIZE_11
```



```
nbap.ganss_omegazero_alm  ganss-omegazero-alm
    Byte array
    nbap.BIT_STRING_SIZE_16
nbap.ganss_prc  ganss-prc
    Signed 32-bit integer
    nbap.INTEGER_M2047_2047
nbap.ganss_rrc  ganss-rrc
    Signed 32-bit integer
    nbap.INTEGER_M127_127
nbap.ganss_svhealth_alm  ganss-svhealth-alm
    Byte array
    nbap.BIT_STRING_SIZE_4
nbap.ganss_t_a0  ganss-t-a0
    Signed 32-bit integer
    nbap.INTEGER_M2147483648_2147483647
nbap.ganss_t_a1  ganss-t-a1
    Signed 32-bit integer
    nbap.INTEGER_M8388608_8388607
nbap.ganss_t_a2  ganss-t-a2
    Signed 32-bit integer
    nbap.INTEGER_M64_63
nbap.ganss_time_model_Ref_Time  ganss-time-model-Ref-Time
    Unsigned 32-bit integer
    nbap.INTEGER_0_37799
nbap.ganss_wk_number  ganss-wk-number
    Unsigned 32-bit integer
    nbap.INTEGER_0_255
nbap.generalCause  generalCause
    No value
    nbap.GeneralCauseList_RL_SetupFailureFDD
nbap.genericTrafficCategory  genericTrafficCategory
    Byte array
    nbap.GenericTrafficCategory
nbap.global  global
    nbap.OBJECT_IDENTIFIER
nbap.gnss_to_id  gnss-to-id
    Unsigned 32-bit integer
    nbap.T_gnss_to_id
nbap.gps_a_sqrt_alm  gps-a-sqrt-alm
    Byte array
    nbap.BIT_STRING_SIZE_24
nbap.gps_af_one_alm  gps-af-one-alm
    Byte array
    nbap.BIT_STRING_SIZE_11
nbap.gps_af_zero_alm  gps-af-zero-alm
    Byte array
    nbap.BIT_STRING_SIZE_11
```

```
nbap.gps_almanac    gps-almanac
    No value
    nbap.GPS_Almanac

nbap.gps_delta_I_alm  gps-delta-I-alm
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.gps_e_alm    gps-e-alm
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.gps_e_nav    gps-e-nav
    Byte array
    nbap.BIT_STRING_SIZE_32

nbap.gps_ionos_model  gps-ionos-model
    No value
    nbap.GPS_Ionospheric_Model

nbap.gps_navandrecovery  gps-navandrecovery
    Unsigned 32-bit integer
    nbap.GPS_NavigationModel_and_TimeRecovery

nbap.gps_omega_alm  gps-omega-alm
    Byte array
    nbap.BIT_STRING_SIZE_24

nbap.gps_omega_nav  gps-omega-nav
    Byte array
    nbap.BIT_STRING_SIZE_32

nbap.gps_rt_integrity  gps-rt-integrity
    Unsigned 32-bit integer
    nbap.GPS_RealTime_Integrity

nbap.gps_toa_alm  gps-toa-alm
    Byte array
    nbap.BIT_STRING_SIZE_8

nbap.gps_utc_model  gps-utc-model
    No value
    nbap.GPS_UTC_Model

nbap.gpsrxpos    gpsrxpos
    No value
    nbap.GPS_RX_POS

nbap.gpstow    gpstow
    Unsigned 32-bit integer
    nbap.GPSTOW

nbap.hARQ_Info_for_E_DCH  hARQ-Info-for-E-DCH
    Unsigned 32-bit integer
    nbap.HARQ_Info_for_E_DCH

nbap.hARQ_MemoryPartitioning  hARQ-MemoryPartitioning
    Unsigned 32-bit integer
    nbap.HARQ_MemoryPartitioning

nbap.hARQ_MemoryPartitioningList  hARQ-MemoryPartitioningList
    Unsigned 32-bit integer
    nbap.HARQ_MemoryPartitioningList
```

```
nbap.hARQ_Process_Allocation_NonSched_2ms  hARQ-Process-Allocation-NonSched-2ms
  Byte array
  nbap.HARQ_Process_Allocation_2ms_EDCH
nbap.hARQ_Process_Allocation_NonSched_2ms_EDCH  hARQ-Process-Allocation-NonSched
  Byte array
  nbap.HARQ_Process_Allocation_2ms_EDCH
nbap.hARQ_Process_Allocation_Scheduled_2ms_EDCH  hARQ-Process-Allocation-Schedul
  Byte array
  nbap.HARQ_Process_Allocation_2ms_EDCH
nbap.hCR_TDD  hCR-TDD
  No value
  nbap.MICH_HCR_Parameters_CTCH_SetupRqstTDD
nbap.hSDPA_PICH_notShared_ID  hSDPA-PICH-notShared-ID
  Unsigned 32-bit integer
  nbap.CommonPhysicalChannelID
nbap.hSDPA_associated_PICH_Info  hSDPA-associated-PICH-Info
  Unsigned 32-bit integer
  nbap.HSDPA_Associated_PICH_Information
nbap.hSDSCH_Configured_Indicator  hSDSCH-Configured-Indicator
  Unsigned 32-bit integer
  nbap.HSDSCH_Configured_Indicator
nbap.hSDSCH_FDD_Information  hSDSCH-FDD-Information
  No value
  nbap.HSDSCH_FDD_Information
nbap.hSDSCH_FDD_Information_Response  hSDSCH-FDD-Information-Response
  No value
  nbap.HSDSCH_FDD_Information_Response
nbap.hSDSCH_InitialWindowSize  hSDSCH-InitialWindowSize
  Unsigned 32-bit integer
  nbap.HSDSCH_InitialWindowSize
nbap.hSDSCH_Initial_Capacity_Allocation  hSDSCH-Initial-Capacity-Allocation
  Unsigned 32-bit integer
  nbap.HSDSCH_Initial_Capacity_Allocation
nbap.hSDSCH_MACdFlow_Specific_Info  hSDSCH-MACdFlow-Specific-Info
  Unsigned 32-bit integer
  nbap.HSDSCH_MACdFlow_Specific_InfoList
nbap.hSDSCH_MACdFlows_Information  hSDSCH-MACdFlows-Information
  No value
  nbap.HSDSCH_MACdFlows_Information
nbap.hSDSCH_Physical_Layer_Category  hSDSCH-Physical-Layer-Category
  Unsigned 32-bit integer
  nbap.INTEGER_1_64_
nbap.hSPDSCH_Code_Index  hSPDSCH-Code-Index
  Unsigned 32-bit integer
  nbap.HSPDSCH_Code_Index
nbap.hSPDSCH_First_Code_Index  hSPDSCH-First-Code-Index
  Unsigned 32-bit integer
  nbap.HSPDSCH_First_Code_Index
```

```

nbap.hSPDSCH_Power    hSPDSCH-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.hSPDSCH_Second_Code_Index    hSPDSCH-Second-Code-Index
    Unsigned 32-bit integer
    nbap.HSPDSCH_Second_Code_Index

nbap.hSPDSCH_Second_Code_Support    hSPDSCH-Second-Code-Support
    Boolean
    nbap.HSPDSCH_Second_Code_Support

nbap.hSSCCHCodeChangeGrant    hSSCCHCodeChangeGrant
    Unsigned 32-bit integer
    nbap.HSSCCH_Code_Change_Grant

nbap.hSSCCH_Power    hSSCCH-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.hSSICH_Info    hSSICH-Info
    No value
    nbap.HSSICH_Info

nbap.hSSICH_Info768    hSSICH-Info768
    No value
    nbap.HSSICH_Info768

nbap.hSSICH_InfoLCR    hSSICH-InfoLCR
    No value
    nbap.HSSICH_InfoLCR

nbap.hS_DSCHProvidedBitRateValue    hS-DSCHProvidedBitRateValue
    Unsigned 32-bit integer
    nbap.HS_DSCHProvidedBitRateValue

nbap.hS_DSCHRequiredPowerPerUEInformation    hS-DSCHRequiredPowerPerUEInformation
    Unsigned 32-bit integer
    nbap.HS_DSCHRequiredPowerPerUEInformation

nbap.hS_DSCHRequiredPowerPerUEWeight    hS-DSCHRequiredPowerPerUEWeight
    Unsigned 32-bit integer
    nbap.HS_DSCHRequiredPowerPerUEWeight

nbap.hS_DSCHRequiredPowerValue    hS-DSCHRequiredPowerValue
    Unsigned 32-bit integer
    nbap.HS_DSCHRequiredPowerValue

nbap.hS_DSCH_serving_cell_choice    hS-DSCH-serving-cell-choice
    Unsigned 32-bit integer
    nbap.HS_DSCH_serving_cell_choice

nbap.hS_PDSCH_FDD_Code_Information_PSCH_ReconfRqst    hS-PDSCH-FDD-Code-Information
    No value
    nbap.HS_PDSCH_FDD_Code_Information

nbap.hS_PDSCH_HS_SCCH_E_AGCH_E_RGCH_E_HICH_MaxPower_PSCH_ReconfRqst    hS-PDSCH-HS-SCCH-E-AGCH-E-RGCH-E-HICH-MaxPower-PSCH-ReconfRqst
    Unsigned 32-bit integer
    nbap.MaximumTransmissionPower

nbap.hS_PDSCH_HS_SCCH_ScramblingCode_PSCH_ReconfRqst    hS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst
    Unsigned 32-bit integer
    nbap.DL_ScramblingCode

```

```

nbap.hS_PDSCH_Start_code_number  hS-PDSCH-Start-code-number
    Unsigned 32-bit integer
    nbap.HS_PDSCH_Start_code_number

nbap.hS_SCCH_FDD_Code_Information_PSCH_ReconfRqst  hS-SCCH-FDD-Code-Information-
    Unsigned 32-bit integer
    nbap.HS_SCCH_FDD_Code_Information

nbap.hS_SCCH_ID  hS-SCCH-ID
    Unsigned 32-bit integer
    nbap.HS_SCCH_ID

nbap.hS_SCCH_InformationModify_LCR_PSCH_ReconfRqst  hS-SCCH-InformationModify-LC
    Unsigned 32-bit integer
    nbap.HS_SCCH_InformationModify_LCR_PSCH_ReconfRqst

nbap.hS_SCCH_InformationModify_PSCH_ReconfRqst  hS-SCCH-InformationModify-PSCH-R
    Unsigned 32-bit integer
    nbap.HS_SCCH_InformationModify_PSCH_ReconfRqst

nbap.hS_SCCH_Information_LCR_PSCH_ReconfRqst  hS-SCCH-Information-LCR-PSCH-Recon
    Unsigned 32-bit integer
    nbap.HS_SCCH_Information_LCR_PSCH_ReconfRqst

nbap.hS_SCCH_Information_PSCH_ReconfRqst  hS-SCCH-Information-PSCH-ReconfRqst
    Unsigned 32-bit integer
    nbap.HS_SCCH_Information_PSCH_ReconfRqst

nbap.hS_SCCH_MaxPower  hS-SCCH-MaxPower
    Signed 32-bit integer
    nbap.DL_Power

nbap.hS_SICH_Information  hS-SICH-Information
    No value
    nbap.HS_SICH_Information_PSCH_ReconfRqst

nbap.hS_SICH_Information_768  hS-SICH-Information-768
    No value
    nbap.HS_SICH_Information_768_PSCH_ReconfRqst

nbap.hS_SICH_Information_LCR  hS-SICH-Information-LCR
    No value
    nbap.HS_SICH_Information_LCR_PSCH_ReconfRqst

nbap.hS_serving_cell_change_successful  hS-serving-cell-change-successful
    No value
    nbap.HS_serving_cell_change_successful

nbap.hS_serving_cell_change_unsuccessful  hS-serving-cell-change-unsuccessful
    No value
    nbap.HS_serving_cell_change_unsuccessful

nbap.harqInfo  harqInfo
    Unsigned 32-bit integer
    nbap.HARQ_Info_for_E_DCH

nbap.ho_word_nav  ho-word-nav
    Byte array
    nbap.BIT_STRING_SIZE_22

nbap.hours  hours
    Unsigned 32-bit integer
    nbap.ReportPeriodicity_Scaledhour

```

```

nbap.hsDSCHMacdFlow_Id  hsDSCHMacdFlow-Id
    Unsigned 32-bit integer
    nbap.HSDSCH_MACdFlow_ID

nbap.hsDSCH_MACdFlow_ID  hsDSCH-MACdFlow-ID
    Unsigned 32-bit integer
    nbap.HSDSCH_MACdFlow_ID

nbap.hsDSCH_MACdFlow_Specific_Info_to_Modify  hsDSCH-MACdFlow-Specific-Info-to-M
    Unsigned 32-bit integer
    nbap.HSDSCH_MACdFlow_Specific_InfoList_to_Modify

nbap.hsDSCH_MACdFlow_Specific_InformationResp  hsDSCH-MACdFlow-Specific-Informat
    Unsigned 32-bit integer
    nbap.HSDSCH_MACdFlow_Specific_InformationResp

nbap.hsSCCHCodeChangeIndicator  hsSCCHCodeChangeIndicator
    Unsigned 32-bit integer
    nbap.HSSCCH_CodeChangeIndicator

nbap.hsSCCH_Specific_Information_ResponseFDD  hsSCCH-Specific-Information-Respon
    Unsigned 32-bit integer
    nbap.HSSCCH_Specific_InformationRespListFDD

nbap.hsSCCH_Specific_Information_ResponseTDD  hsSCCH-Specific-Information-Respon
    Unsigned 32-bit integer
    nbap.HSSCCH_Specific_InformationRespListTDD

nbap.hsSCCH_Specific_Information_ResponseTDDLRCR  hsSCCH-Specific-Information-Res
    Unsigned 32-bit integer
    nbap.HSSCCH_Specific_InformationRespListTDDLRCR

nbap.hsSICH_ID  hsSICH-ID
    Unsigned 32-bit integer
    nbap.HS_SICH_ID

nbap.hsdpa_PICH_SharedPCH_ID  hsdpa-PICH-SharedPCH-ID
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID

nbap.hsdpa_PICH_Shared_with_PCH  hsdpa-PICH-Shared-with-PCH
    No value
    nbap.HSDPA_PICH_Shared_with_PCH

nbap.hsdpa_PICH_notShared_with_PCH  hsdpa-PICH-notShared-with-PCH
    No value
    nbap.HSDPA_PICH_notShared_with_PCH

nbap.hsdSCH_Common_Information  hsdSCH-Common-Information
    No value
    nbap.HSDSCH_Common_Information

nbap.hsdSCH_RNTI  hsdSCH-RNTI
    Unsigned 32-bit integer
    nbap.HSDSCH_RNTI

nbap.hspdsch_RL_ID  hspdsch-RL-ID
    Unsigned 32-bit integer
    nbap.RL_ID

nbap.hsscch_PowerOffset  hsscch-PowerOffset
    Unsigned 32-bit integer
    nbap.HSSCCH_PowerOffset

```

```
nbap.iB_OC_ID  iB-OC-ID
  Unsigned 32-bit integer
  nbap.IB_OC_ID

nbap.iB_SG_DATA  iB-SG-DATA
  Byte array
  nbap.IB_SG_DATA

nbap.iB_SG_POS  iB-SG-POS
  Unsigned 32-bit integer
  nbap.IB_SG_POS

nbap.iB_SG_REP  iB-SG-REP
  Unsigned 32-bit integer
  nbap.IB_SG_REP

nbap.iB_Type  iB-Type
  Unsigned 32-bit integer
  nbap.IB_Type

nbap.iECriticality  iECriticality
  Unsigned 32-bit integer
  nbap.Criticality

nbap.iE_Extensions  iE-Extensions
  Unsigned 32-bit integer
  nbap.ProtocolExtensionContainer

nbap.iE_ID  iE-ID
  Unsigned 32-bit integer
  nbap.ProtocolIE_ID

nbap.iEsCriticalityDiagnostics  iEsCriticalityDiagnostics
  Unsigned 32-bit integer
  nbap.CriticalityDiagnostics_IE_List

nbap.iPDL_FDD_Parameters  iPDL-FDD-Parameters
  No value
  nbap.IPDL_FDD_Parameters

nbap.iPDL_Indicator  iPDL-Indicator
  Unsigned 32-bit integer
  nbap.IPDL_Indicator

nbap.iPDL_TDD_Parameters  iPDL-TDD-Parameters
  No value
  nbap.IPDL_TDD_Parameters

nbap.iPDL_TDD_Parameters_LCR  iPDL-TDD-Parameters-LCR
  No value
  nbap.IPDL_TDD_Parameters_LCR

nbap.iP_Length  iP-Length
  Unsigned 32-bit integer
  nbap.T_iP_Length

nbap.iP_Offset  iP-Offset
  Unsigned 32-bit integer
  nbap.INTEGER_0_9

nbap.iP_PCCPCH  iP-PCCPCH
  Unsigned 32-bit integer
  nbap.T_iP_PCCPCH
```

```
nbap.iP_Slot  iP-Slot
  Unsigned 32-bit integer
  nbap.INTEGER_0_14

nbap.iP_SpacingFDD  iP-SpacingFDD
  Unsigned 32-bit integer
  nbap.T_iP_SpacingFDD

nbap.iP_SpacingTDD  iP-SpacingTDD
  Unsigned 32-bit integer
  nbap.T_iP_SpacingTDD

nbap.iP_Start  iP-Start
  Unsigned 32-bit integer
  nbap.INTEGER_0_4095

nbap.iP_Sub  iP-Sub
  Unsigned 32-bit integer
  nbap.T_iP_Sub

nbap.iSCP  iSCP
  Unsigned 32-bit integer
  nbap.UL_TimeslotISCP_Value

nbap.i_zero_nav  i-zero-nav
  Byte array
  nbap.BIT_STRING_SIZE_32

nbap.id  id
  Unsigned 32-bit integer
  nbap.ProtocolIE_ID

nbap.idot_nav  idot-nav
  Byte array
  nbap.BIT_STRING_SIZE_14

nbap.ie_Extensions  ie-Extensions
  Unsigned 32-bit integer
  nbap.ProtocolExtensionContainer

nbap.implicit  implicit
  No value
  nbap.HARQ_MemoryPartitioning_Implicit

nbap.inactivity_Threshold_for_UE_DRX_Cycle  inactivity-Threshold-for-UE-DRX-Cycle
  Unsigned 32-bit integer
  nbap.Inactivity_Threshold_for_UE_DRX_Cycle

nbap.inactivity_Threshold_for_UE_DTX_Cycle2  inactivity-Threshold-for-UE-DTX-Cycle2
  Unsigned 32-bit integer
  nbap.Inactivity_Threshold_for_UE_DTX_Cycle2

nbap.inactivity_Threshold_for_UE_Grant_Monitoring  inactivity-Threshold-for-UE-G
  Unsigned 32-bit integer
  nbap.Inactivity_Threshold_for_UE_Grant_Monitoring

nbap.informationAvailable  informationAvailable
  No value
  nbap.InformationAvailable

nbap.information_Type_Item  information-Type-Item
  Unsigned 32-bit integer
  nbap.Information_Type_Item
```



```
nbap.information_thresholds  information-thresholds
    Unsigned 32-bit integer
    nbap.InformationThresholds

nbap.informationnotAvailable  informationnotAvailable
    No value
    nbap.InformationnotAvailable

nbap.initialDLTransPower  initialDLTransPower
    Signed 32-bit integer
    nbap.DL_Power

nbap.initialDL_TransmissionPower  initialDL-TransmissionPower
    Signed 32-bit integer
    nbap.DL_Power

nbap.initialDL_transmissionPower  initialDL-transmissionPower
    Signed 32-bit integer
    nbap.DL_Power

nbap.initialOffset  initialOffset
    Unsigned 32-bit integer
    nbap.INTEGER_0_255

nbap.initialPhase  initialPhase
    Unsigned 32-bit integer
    nbap.INTEGER_0_1048575_

nbap.initial_DL_Transmission_Power  initial-DL-Transmission-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.initial_dl_tx_power  initial-dl-tx-power
    Signed 32-bit integer
    nbap.DL_Power

nbap.initiatingMessage  initiatingMessage
    No value
    nbap.InitiatingMessage

nbap.innerLoopDLPCStatus  innerLoopDLPCStatus
    Unsigned 32-bit integer
    nbap.InnerLoopDLPCStatus

nbap.intStdPhSyncInfo_CellSyncReprtTDD  intStdPhSyncInfo-CellSyncReprtTDD
    No value
    nbap.IntStdPhCellSyncInfo_CellSyncReprtTDD

nbap.ioid  ioid
    Byte array
    nbap.BIT_STRING_SIZE_10

nbap.ioid_a  ioid-a
    Unsigned 32-bit integer
    nbap.INTEGER_0_3

nbap.ioidc_nav  ioidc-nav
    Byte array
    nbap.BIT_STRING_SIZE_10

nbap.iode_dgps  iode-dgps
    Byte array
    nbap.BIT_STRING_SIZE_8
```

```
nbap.ionospheric_Model  ionospheric-Model
  Boolean
  nbap.BOOLEAN

nbap.l2_p_dataflag_nav  l2-p-dataflag-nav
  Byte array
  nbap.BIT_STRING_SIZE_1

nbap.lCR_TDD  lCR-TDD
  No value
  nbap.MICH_LCR_Parameters_CTCH_SetupRqstTDD

nbap.lS  lS
  Unsigned 32-bit integer
  nbap.INTEGER_0_4294967295

nbap.lTGI_Presence  lTGI-Presence
  Boolean
  nbap.LTGI_Presence

nbap.lateEntrantCell  lateEntrantCell
  No value
  nbap.NULL

nbap.latitude  latitude
  Unsigned 32-bit integer
  nbap.INTEGER_0_8388607

nbap.latitudeSign  latitudeSign
  Unsigned 32-bit integer
  nbap.T_latitudeSign

nbap.limitedPowerIncrease  limitedPowerIncrease
  Unsigned 32-bit integer
  nbap.LimitedPowerIncrease

nbap.local  local
  Unsigned 32-bit integer
  nbap.INTEGER_0_maxPrivateIEs

nbap.local_CellID  local-CellID
  Unsigned 32-bit integer
  nbap.Local_Cell_ID

nbap.local_Cell_Group_ID  local-Cell-Group-ID
  Unsigned 32-bit integer
  nbap.Local_Cell_ID

nbap.local_Cell_Group_InformationList  local-Cell-Group-InformationList
  Unsigned 32-bit integer
  nbap.Local_Cell_Group_InformationList_ResourceStatusInd

nbap.local_Cell_ID  local-Cell-ID
  Unsigned 32-bit integer
  nbap.Local_Cell_ID

nbap.local_Cell_InformationList  local-Cell-InformationList
  Unsigned 32-bit integer
  nbap.Local_Cell_InformationList_ResourceStatusInd

nbap.logicalChannelId  logicalChannelId
  Unsigned 32-bit integer
  nbap.LogicalChannelID
```

```
nbap.longTransActionId longTransActionId
    Unsigned 32-bit integer
    nbap.INTEGER_0_32767

nbap.longitude longitude
    Signed 32-bit integer
    nbap.INTEGER_M8388608_8388607

nbap.ls_part ls-part
    Unsigned 32-bit integer
    nbap.INTEGER_0_4294967295

nbap.mAC_DTX_Cycle_10ms mAC-DTX-Cycle-10ms
    Unsigned 32-bit integer
    nbap.MAC_DTX_Cycle_10ms

nbap.mAC_DTX_Cycle_2ms mAC-DTX-Cycle-2ms
    Unsigned 32-bit integer
    nbap.MAC_DTX_Cycle_2ms

nbap.mAC_Inactivity_Threshold mAC-Inactivity-Threshold
    Unsigned 32-bit integer
    nbap.MAC_Inactivity_Threshold

nbap.mAC_ehs_Reset_Timer mAC-ehs-Reset-Timer
    Unsigned 32-bit integer
    nbap.MAC_ehs_Reset_Timer

nbap.mAC_hsWindowSize mAC-hsWindowSize
    Unsigned 32-bit integer
    nbap.MAC_hsWindowSize

nbap.mACdPDU_Size mACdPDU-Size
    Unsigned 32-bit integer
    nbap.MACdPDU_Size

nbap.mACd_PDU_Size_List mACd-PDU-Size-List
    Unsigned 32-bit integer
    nbap.E_DCH_MACdPDU_SizeList

nbap.mACeReset_Indicator mACeReset-Indicator
    Unsigned 32-bit integer
    nbap.MACeReset_Indicator

nbap.mACesGuaranteedBitRate mACesGuaranteedBitRate
    Unsigned 32-bit integer
    nbap.MACesGuaranteedBitRate

nbap.mAChsGuaranteedBitRate mAChsGuaranteedBitRate
    Unsigned 32-bit integer
    nbap.MAChsGuaranteedBitRate

nbap.mAChs_Reordering_Buffer_Size_for_RLC_UM mAChs-Reordering-Buffer-Size-for-R
    Unsigned 32-bit integer
    nbap.MAChsReorderingBufferSize_for_RLC_UM

nbap.mICH_Mode mICH-Mode
    Unsigned 32-bit integer
    nbap.MICH_Mode

nbap.mICH_Power mICH-Power
    Signed 32-bit integer
    nbap.PICH_Power
```

```
nbap.mICH_TDDOption_Specific_Parameters  mICH-TDDOption-Specific-Parameters
    Unsigned 32-bit integer
    nbap.MICH_TDDOption_Specific_Parameters_CTCH_SetupRqstTDD

nbap.mS  mS
    Unsigned 32-bit integer
    nbap.INTEGER_0_16383

nbap.m_zero_alm  m-zero-alm
    Byte array
    nbap.BIT_STRING_SIZE_24

nbap.m_zero_nav  m-zero-nav
    Byte array
    nbap.BIT_STRING_SIZE_32

nbap.macdPDU_Size  macdPDU-Size
    Unsigned 32-bit integer
    nbap.MACdPDU_Size

nbap.macdPDU_Size_Index  macdPDU-Size-Index
    Unsigned 32-bit integer
    nbap.MACdPDU_Size_Indexlist

nbap.macdPDU_Size_Index_to_Modify  macdPDU-Size-Index-to-Modify
    Unsigned 32-bit integer
    nbap.MACdPDU_Size_Indexlist_to_Modify

nbap.maxAdjustmentStep  maxAdjustmentStep
    Unsigned 32-bit integer
    nbap.MaxAdjustmentStep

nbap.maxBits_MACe_PDU_non_scheduled  maxBits-MACe-PDU-non-scheduled
    Unsigned 32-bit integer
    nbap.Max_Bits_MACe_PDU_non_scheduled

nbap.maxCR  maxCR
    Unsigned 32-bit integer
    nbap.CodeRate

nbap.maxDL_Power  maxDL-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.maxE_RUCCH_MidambleShifts  maxE-RUCCH-MidambleShifts
    Unsigned 32-bit integer
    nbap.MaxPRACH_MidambleShifts

nbap.maxFACH_Power  maxFACH-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.maxHSDSCH_HSSCCH_Power  maxHSDSCH-HSSCCH-Power
    Unsigned 32-bit integer
    nbap.MaximumTransmissionPower

nbap.maxNrOfUL_DPDCHs  maxNrOfUL-DPDCHs
    Unsigned 32-bit integer
    nbap.MaxNrOfUL_DPDCHs

nbap.maxPRACH_MidambleShifts  maxPRACH-MidambleShifts
    Unsigned 32-bit integer
    nbap.MaxPRACH_MidambleShifts
```

```

nbap.maxPhysChPerTimeslot  maxPhysChPerTimeslot
    Unsigned 32-bit integer
    nbap.T_maxPhysChPerTimeslot

nbap.maxPowerLCR  maxPowerLCR
    Signed 32-bit integer
    nbap.DL_Power

nbap.maxPowerPLCCH  maxPowerPLCCH
    Signed 32-bit integer
    nbap.DL_Power

nbap.maxSet_E_DPDCHs  maxSet-E-DPDCHs
    Unsigned 32-bit integer
    nbap.Max_Set_E_DPDCHs

nbap.maxTimeslotsPerSubFrame  maxTimeslotsPerSubFrame
    Unsigned 32-bit integer
    nbap.INTEGER_1_6

nbap.maximumDL_Power  maximumDL-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.maximumDL_PowerCapability  maximumDL-PowerCapability
    Unsigned 32-bit integer
    nbap.MaximumDL_PowerCapability

nbap.maximumDL_power  maximumDL-power
    Signed 32-bit integer
    nbap.DL_Power

nbap.maximumTransmissionPowerforCellPortion  maximumTransmissionPowerforCellPort
    Unsigned 32-bit integer
    nbap.MaximumTransmissionPower

nbap.maximum_DL_PowerCapability  maximum-DL-PowerCapability
    Unsigned 32-bit integer
    nbap.MaximumDL_PowerCapability

nbap.maximum_MACcPDU_Size  maximum-MACcPDU-Size
    Unsigned 32-bit integer
    nbap.MAC_PDU_SizeExtended

nbap.maximum_MACdPDU_Size  maximum-MACdPDU-Size
    Unsigned 32-bit integer
    nbap.MACdPDU_Size

nbap.maximum_Number_of_Retransmissions_For_E_DCH  maximum-Number-of-Retransmissi
    Unsigned 32-bit integer
    nbap.Maximum_Number_of_Retransmissions_For_E_DCH

nbap.measurementAvailable  measurementAvailable
    No value
    nbap.CommonMeasurementAvailable

nbap.measurementChangeTime  measurementChangeTime
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_ScaledMeasurementChangeTime

nbap.measurementDecreaseThreshold  measurementDecreaseThreshold
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_MeasurementIncreaseDecreaseThreshold

```

```
nbap.measurementHysteresisTime measurementHysteresisTime
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_ScaledMeasurementHysteresisTime
nbap.measurementIncreaseThreshold measurementIncreaseThreshold
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_MeasurementIncreaseDecreaseThreshold
nbap.measurementThreshold measurementThreshold
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_MeasurementThreshold
nbap.measurementThreshold1 measurementThreshold1
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_MeasurementThreshold
nbap.measurementThreshold2 measurementThreshold2
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_MeasurementThreshold
nbap.measurement_Power_Offset measurement-Power-Offset
    Signed 32-bit integer
    nbap.Measurement_Power_Offset
nbap.measurementnotAvailable measurementnotAvailable
    No value
    nbap.CommonMeasurementnotAvailable
nbap.messageDiscriminator messageDiscriminator
    Unsigned 32-bit integer
    nbap.MessageDiscriminator
nbap.midambleAllocationMode midambleAllocationMode
    Unsigned 32-bit integer
    nbap.MidambleAllocationModel
nbap.midambleConfigurationBurstType1And3 midambleConfigurationBurstType1And3
    Unsigned 32-bit integer
    nbap.MidambleConfigurationBurstType1And3
nbap.midambleConfigurationBurstType2 midambleConfigurationBurstType2
    Unsigned 32-bit integer
    nbap.MidambleConfigurationBurstType2
nbap.midambleConfigurationBurstType2_768 midambleConfigurationBurstType2-768
    Unsigned 32-bit integer
    nbap.MidambleConfigurationBurstType2_768
nbap.midambleConfigurationLCR midambleConfigurationLCR
    Unsigned 32-bit integer
    nbap.MidambleConfigurationLCR
nbap.midambleShift midambleShift
    Unsigned 32-bit integer
    nbap.MidambleShiftLong
nbap.midambleShiftAndBurstType midambleShiftAndBurstType
    Unsigned 32-bit integer
    nbap.MidambleShiftAndBurstType
nbap.midambleShiftAndBurstType768 midambleShiftAndBurstType768
    Unsigned 32-bit integer
    nbap.MidambleShiftAndBurstType768
```

```
nbap.midambleShiftLCR midambleShiftLCR
    No value
    nbap.MidambleShiftLCR

nbap.midambleShiftandBurstType midambleShiftandBurstType
    Unsigned 32-bit integer
    nbap.MidambleShiftAndBurstType

nbap.midambleShiftandBurstType768 midambleShiftandBurstType768
    Unsigned 32-bit integer
    nbap.MidambleShiftAndBurstType768

nbap.midambleshiftAndBurstType midambleshiftAndBurstType
    Unsigned 32-bit integer
    nbap.MidambleShiftAndBurstType

nbap.midambleshiftAndBurstType768 midambleshiftAndBurstType768
    Unsigned 32-bit integer
    nbap.MidambleShiftAndBurstType768

nbap.midambleshiftAndBurstType78 midambleshiftAndBurstType78
    Unsigned 32-bit integer
    nbap.MidambleShiftAndBurstType768

nbap.min min
    Unsigned 32-bit integer
    nbap.ReportPeriodicity_Scaledmin

nbap.minCR minCR
    Unsigned 32-bit integer
    nbap.CodeRate

nbap.minDL_Power minDL-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.minPowerLCR minPowerLCR
    Signed 32-bit integer
    nbap.DL_Power

nbap.minSpreadingFactor minSpreadingFactor
    Unsigned 32-bit integer
    nbap.MinSpreadingFactor

nbap.minUL_ChannelisationCodeLength minUL-ChannelisationCodeLength
    Unsigned 32-bit integer
    nbap.MinUL_ChannelisationCodeLength

nbap.minimumDL_Power minimumDL-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.minimumDL_PowerCapability minimumDL-PowerCapability
    Unsigned 32-bit integer
    nbap.MinimumDL_PowerCapability

nbap.minimumDL_power minimumDL-power
    Signed 32-bit integer
    nbap.DL_Power

nbap.misc misc
    Unsigned 32-bit integer
    nbap.CauseMisc
```

```
nbap.missed_HS_SICH missed-HS-SICH
    Unsigned 32-bit integer
    nbap.HS_SICH_missed

nbap.mode mode
    Unsigned 32-bit integer
    nbap.TransportFormatSet_ModeDP

nbap.model_id model-id
    Unsigned 32-bit integer
    nbap.INTEGER_0_1_

nbap.modify modify
    No value
    nbap.DRX_Information_to_Modify_Items

nbap.modifyPriorityQueue modifyPriorityQueue
    No value
    nbap.PriorityQueue_InfoItem_to_Modify

nbap.modulation modulation
    Unsigned 32-bit integer
    nbap.Modulation

nbap.ms_part ms-part
    Unsigned 32-bit integer
    nbap.INTEGER_0_16383

nbap.msec msec
    Unsigned 32-bit integer
    nbap.MeasurementChangeTime_Scaledmsec

nbap.multiplexingPosition multiplexingPosition
    Unsigned 32-bit integer
    nbap.MultiplexingPosition

nbap.n_E_UCCH n-E-UCCH
    Unsigned 32-bit integer
    nbap.N_E_UCCH

nbap.n_E_UCCHLCR n-E-UCCHLCR
    Unsigned 32-bit integer
    nbap.N_E_UCCHLCR

nbap.n_INSYNC_IND n-INSYNC-IND
    Unsigned 32-bit integer
    nbap.N_INSYNC_IND

nbap.n_OUTSYNC_IND n-OUTSYNC-IND
    Unsigned 32-bit integer
    nbap.N_OUTSYNC_IND

nbap.nackPowerOffset nackPowerOffset
    Unsigned 32-bit integer
    nbap.Nack_Power_Offset

nbap.neighbouringFDDCellMeasurementInformation neighbouringFDDCellMeasurementIn
    No value
    nbap.NeighbouringFDDCellMeasurementInformation

nbap.neighbouringTDDCellMeasurementInformation neighbouringTDDCellMeasurementIn
    No value
    nbap.NeighbouringTDDCellMeasurementInformation
```



```
nbap.new_secondary_CPICH  new-secondary-CPICH
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID
nbap.no_Deletion  no-Deletion
    No value
    nbap.No_Deletion_SystemInfoUpdate
nbap.no_Failure  no-Failure
    No value
    nbap.No_Failure_ResourceStatusInd
nbap.no_Split_in_TFCI  no-Split-in-TFCI
    Unsigned 32-bit integer
    nbap.TFCS_TFCSList
nbap.no_bad_satellites  no-bad-satellites
    No value
    nbap.NULL
nbap.nodeB  nodeB
    No value
    nbap.NULL
nbap.nodeB_CommunicationContextID  nodeB-CommunicationContextID
    Unsigned 32-bit integer
    nbap.NodeB_CommunicationContextID
nbap.noinitialOffset  noinitialOffset
    Unsigned 32-bit integer
    nbap.INTEGER_0_63
nbap.nonCombiningOrFirstRL  nonCombiningOrFirstRL
    No value
    nbap.NonCombiningOrFirstRL_RL_SetupRspFDD
nbap.non_Combining  non-Combining
    No value
    nbap.Non_Combining_RL_AdditionRspTDD
nbap.non_broadcastIndication  non-broadcastIndication
    Unsigned 32-bit integer
    nbap.T_non_broadcastIndication
nbap.non_combining  non-combining
    No value
    nbap.Non_Combining_RL_AdditionRspFDD
nbap.normal_and_diversity_primary_CPICH  normal-and-diversity-primary-CPICH
    No value
    nbap.NULL
nbap.notApplicable  notApplicable
    No value
    nbap.NULL
nbap.notUsed_1_acknowledged_PCPCCH_access_preambles  notUsed-1-acknowledged-PCPCCH
    No value
    nbap.NULL
nbap.notUsed_1_pCPCH_InformationList  notUsed-1-pCPCH-InformationList
    No value
    nbap.NULL
```

```
nbap.notUsed_2_cPCH_InformationList  notUsed-2-cPCH-InformationList
  No value
  nbap.NULL

nbap.notUsed_2_detected_PCPCH_access_preambles  notUsed-2-detected-PCPCH-access-
  No value
  nbap.NULL

nbap.notUsed_3_aP_AICH_InformationList  notUsed-3-aP-AICH-InformationList
  No value
  nbap.NULL

nbap.notUsed_4_cDCA_ICH_InformationList  notUsed-4-cDCA-ICH-InformationList
  No value
  nbap.NULL

nbap.notUsed_cPCH  notUsed-cPCH
  No value
  nbap.NULL

nbap.notUsed_cPCH_parameters  notUsed-cPCH-parameters
  No value
  nbap.NULL

nbap.notUsed_pCPCHes_parameters  notUsed-pCPCHes-parameters
  No value
  nbap.NULL

nbap.not_Used_dSCH_InformationResponseList  not-Used-dSCH-InformationResponseLis
  No value
  nbap.NULL

nbap.not_Used_lengthOfTFICI2  not-Used-lengthOfTFICI2
  No value
  nbap.NULL

nbap.not_Used_pDSCH_CodeMapping  not-Used-pDSCH-CodeMapping
  No value
  nbap.NULL

nbap.not_Used_pDSCH_RL_ID  not-Used-pDSCH-RL-ID
  No value
  nbap.NULL

nbap.not_Used_sSDT_CellIDLength  not-Used-sSDT-CellIDLength
  No value
  nbap.NULL

nbap.not_Used_sSDT_CellID_Length  not-Used-sSDT-CellID-Length
  No value
  nbap.NULL

nbap.not_Used_sSDT_CellIdentity  not-Used-sSDT-CellIdentity
  No value
  nbap.NULL

nbap.not_Used_sSDT_Cell_Identity  not-Used-sSDT-Cell-Identity
  No value
  nbap.NULL

nbap.not_Used_sSDT_Indication  not-Used-sSDT-Indication
  No value
  nbap.NULL
```

```
nbap.not_Used_s_FieldLength  not-Used-s-FieldLength
    No value
    nbap.NULL

nbap.not_Used_splitType  not-Used-splitType
    No value
    nbap.NULL

nbap.not_Used_split_in_TFCI  not-Used-split-in-TFCI
    No value
    nbap.NULL

nbap.not_Used_tFCI2_BearerInformationResponse  not-Used-tFCI2-BearerInformationR
    No value
    nbap.NULL

nbap.not_to_be_used_1  not-to-be-used-1
    Unsigned 32-bit integer
    nbap.GapDuration

nbap.notificationIndicatorLength  notificationIndicatorLength
    Unsigned 32-bit integer
    nbap.NotificationIndicatorLength

nbap.nrOfTransportBlocks  nrOfTransportBlocks
    Unsigned 32-bit integer
    nbap.TransportFormatSet_NrOfTransportBlocks

nbap.number_of_HS_PDSCH_codes  number-of-HS-PDSCH-codes
    Unsigned 32-bit integer
    nbap.INTEGER_0_maxHS_PDSCHCodeNrComp_1

nbap.number_of_PCCH_transmission  number-of-PCCH-transmission
    Unsigned 32-bit integer
    nbap.Number_of_PCCH_transmission

nbap.number_of_Processes  number-of-Processes
    Unsigned 32-bit integer
    nbap.INTEGER_1_8_

nbap.omega_zero_nav  omega-zero-nav
    Byte array
    nbap.BIT_STRING_SIZE_32

nbap.omegadot_alm  omegadot-alm
    Byte array
    nbap.BIT_STRING_SIZE_16

nbap.omegadot_nav  omegadot-nav
    Byte array
    nbap.BIT_STRING_SIZE_24

nbap.omegazero_alm  omegazero-alm
    Byte array
    nbap.BIT_STRING_SIZE_24

nbap.onDemand  onDemand
    No value
    nbap.NULL

nbap.onModification  onModification
    No value
    nbap.InformationReportCharacteristicsType_OnModification
```

```
nbap.outcome outcome
  No value
  nbap.Outcome

nbap.pCCPCH_Power pCCPCH-Power
  Signed 32-bit integer
  nbap.PCCPCH_Power

nbap.pCH_CCTrCH_ID pCH-CCTrCH-ID
  Unsigned 32-bit integer
  nbap.CCTrCH_ID

nbap.pCH_Information pCH-Information
  No value
  nbap.PCH_Information_AuditRsp

nbap.pCH_Parameters pCH-Parameters
  No value
  nbap.PCH_Parameters_CTCH_SetupRqstFDD

nbap.pCH_Parameters_CTCH_ReconfRqstFDD pCH-Parameters-CTCH-ReconfRqstFDD
  No value
  nbap.PCH_Parameters_CTCH_ReconfRqstFDD

nbap.pCH_Power pCH-Power
  Signed 32-bit integer
  nbap.DL_Power

nbap.pDSCHSet_ID pDSCHSet-ID
  Unsigned 32-bit integer
  nbap.PDSCHSet_ID

nbap.pDSCH_ID pDSCH-ID
  Unsigned 32-bit integer
  nbap.PDSCH_ID

nbap.pDSCH_ID768 pDSCH-ID768
  Unsigned 32-bit integer
  nbap.PDSCH_ID768

nbap.pDSCH_InformationList pDSCH-InformationList
  No value
  nbap.PDSCH_Information_AddList_PSCH_ReconfRqst

nbap.pICH_Information pICH-Information
  No value
  nbap.PICH_Information_AuditRsp

nbap.pICH_Mode pICH-Mode
  Unsigned 32-bit integer
  nbap.PICH_Mode

nbap.pICH_Parameters pICH-Parameters
  No value
  nbap.PICH_Parameters_CTCH_SetupRqstFDD

nbap.pICH_Parameters_CTCH_ReconfRqstFDD pICH-Parameters-CTCH-ReconfRqstFDD
  No value
  nbap.PICH_Parameters_CTCH_ReconfRqstFDD

nbap.pICH_Power pICH-Power
  Signed 32-bit integer
  nbap.PICH_Power
```

```
nbap.pLCCH_parameters  pLCCH-parameters
    No value
    nbap.PLCCH_parameters
nbap.p01_ForTFCI_Bits  p01-ForTFCI-Bits
    Unsigned 32-bit integer
    nbap.PowerOffset
nbap.p02_ForTPC_Bits  p02-ForTPC-Bits
    Unsigned 32-bit integer
    nbap.PowerOffset
nbap.p03_ForPilotBits  p03-ForPilotBits
    Unsigned 32-bit integer
    nbap.PowerOffset
nbap.pRACH_InformationList  pRACH-InformationList
    Unsigned 32-bit integer
    nbap.PRACH_InformationList_AuditRsp
nbap.pRACH_Midamble  pRACH-Midamble
    Unsigned 32-bit integer
    nbap.PRACH_Midamble
nbap.pRACH_ParametersList_CTCH_ReconfRqstFDD  pRACH-ParametersList-CTCH-ReconfRq
    No value
    nbap.PRACH_ParametersList_CTCH_ReconfRqstFDD
nbap.pRACH_Parameters_CTCH_SetupRqstTDD  pRACH-Parameters-CTCH-SetupRqstTDD
    No value
    nbap.PRACH_Parameters_CTCH_SetupRqstTDD
nbap.pRACH_parameters  pRACH-parameters
    No value
    nbap.PRACH_CTCH_SetupRqstFDD
nbap.pRCDeviation  pRCDeviation
    Unsigned 32-bit integer
    nbap.PRCDeviation
nbap.pRXdes_base  pRXdes-base
    Signed 32-bit integer
    nbap.PRXdes_base
nbap.pUSCHSet_ID  pUSCHSet-ID
    Unsigned 32-bit integer
    nbap.PUSCHSet_ID
nbap.pUSCH_ID  pUSCH-ID
    Unsigned 32-bit integer
    nbap.PUSCH_ID
nbap.pUSCH_InformationList  pUSCH-InformationList
    No value
    nbap.PUSCH_Information_AddList_PSCH_ReconfRqst
nbap.pagingIndicatorLength  pagingIndicatorLength
    Unsigned 32-bit integer
    nbap.PagingIndicatorLength
nbap.pagingMACFlow_ID  pagingMACFlow-ID
    Unsigned 32-bit integer
    nbap.Paging_MACFlow_ID
```

```
nbap.paging_MACFlow_ID    paging-MACFlow-ID
    Unsigned 32-bit integer
    nbap.Paging_MACFlow_ID

nbap.paging_MACFlow_Id    paging-MACFlow-Id
    Unsigned 32-bit integer
    nbap.Paging_MACFlow_ID

nbap.paging_MACFlow_PriorityQueue_Information    paging-MACFlow-PriorityQueue-Info
    Unsigned 32-bit integer
    nbap.Paging_MACFlow_PriorityQueue_Information

nbap.paging_MACFlow_Specific_Information    paging-MACFlow-Specific-Information
    Unsigned 32-bit integer
    nbap.Paging_MACFlow_Specific_Information

nbap.payloadCRC_PresenceIndicator    payloadCRC-PresenceIndicator
    Unsigned 32-bit integer
    nbap.PayloadCRC_PresenceIndicator

nbap.periodic    periodic
    Unsigned 32-bit integer
    nbap.InformationReportCharacteristicsType_ReportPeriodicity

nbap.pich_Mode    pich-Mode
    Unsigned 32-bit integer
    nbap.PICH_Mode

nbap.pich_Power    pich-Power
    Signed 32-bit integer
    nbap.PICH_Power

nbap.powerAdjustmentType    powerAdjustmentType
    Unsigned 32-bit integer
    nbap.PowerAdjustmentType

nbap.powerLocalCellGroupID    powerLocalCellGroupID
    Unsigned 32-bit integer
    nbap.Local_Cell_ID

nbap.powerOffsetInformation    powerOffsetInformation
    No value
    nbap.PowerOffsetInformation_CTCH_SetupRqstFDD

nbap.powerRaiseLimit    powerRaiseLimit
    Unsigned 32-bit integer
    nbap.PowerRaiseLimit

nbap.powerResource    powerResource
    Unsigned 32-bit integer
    nbap.E_DCH_PowerResource

nbap.power_Local_Cell_Group_ID    power-Local-Cell-Group-ID
    Unsigned 32-bit integer
    nbap.Local_Cell_ID

nbap.prc    prc
    Signed 32-bit integer
    nbap.PRC

nbap.prcdeviation    prcdeviation
    Unsigned 32-bit integer
    nbap.PRCDeviation
```

```
nbap.pre_emptionCapability pre-emptionCapability
    Unsigned 32-bit integer
    nbap.Pre_emptionCapability

nbap.pre_emptionVulnerability pre-emptionVulnerability
    Unsigned 32-bit integer
    nbap.Pre_emptionVulnerability

nbap.preambleSignatures preambleSignatures
    Byte array
    nbap.PreambleSignatures

nbap.preambleThreshold preambleThreshold
    Unsigned 32-bit integer
    nbap.PreambleThreshold

nbap.predictedSFNSFNDeviationLimit predictedSFNSFNDeviationLimit
    Unsigned 32-bit integer
    nbap.PredictedSFNSFNDeviationLimit

nbap.predictedTUTRANGANSSDeviationLimit predictedTUTRANGANSSDeviationLimit
    Unsigned 32-bit integer
    nbap.INTEGER_1_256

nbap.predictedTUTRANGPSDeviationLimit predictedTUTRANGPSDeviationLimit
    Unsigned 32-bit integer
    nbap.PredictedTUTRANGPSDeviationLimit

nbap.primaryCPICH_Power primaryCPICH-Power
    Signed 32-bit integer
    nbap.PrimaryCPICH_Power

nbap.primarySCH_Power primarySCH-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.primaryScramblingCode primaryScramblingCode
    Unsigned 32-bit integer
    nbap.PrimaryScramblingCode

nbap.primary_CCPCH_Information primary-CCPCH-Information
    No value
    nbap.P_CCPCH_Information_AuditRsp

nbap.primary_CPICH_Information primary-CPICH-Information
    No value
    nbap.P_CPICH_Information_AuditRsp

nbap.primary_SCH_Information primary-SCH-Information
    No value
    nbap.P_SCH_Information_AuditRsp

nbap.primary_Secondary_Grant_Selector primary-Secondary-Grant-Selector
    Unsigned 32-bit integer
    nbap.E_Primary_Secondary_Grant_Selector

nbap.primary_and_secondary_CPICH primary-and-secondary-CPICH
    Unsigned 32-bit integer
    nbap.CommonPhysicalChannelID

nbap.primary_e_RNTI primary-e-RNTI
    Unsigned 32-bit integer
    nbap.E_RNTI
```

```
nbap.priorityLevel  priorityLevel
    Unsigned 32-bit integer
    nbap.PriorityLevel

nbap.priorityQueueId  priorityQueueId
    Unsigned 32-bit integer
    nbap.PriorityQueue_Id

nbap.priorityQueueInfoModify  priorityQueueInfoModify
    Unsigned 32-bit integer
    nbap.PriorityQueue_InfoList_to_Modify

nbap.priorityQueueInfoModifyUnsynchronised  priorityQueueInfoModifyUnsynchronised
    Unsigned 32-bit integer
    nbap.PriorityQueue_InfoList_to_Modify_Unsynchronised

nbap.priorityQueue_Id  priorityQueue-Id
    Unsigned 32-bit integer
    nbap.PriorityQueue_Id

nbap.priorityQueue_Info  priorityQueue-Info
    Unsigned 32-bit integer
    nbap.PriorityQueue_InfoList

nbap.priority_Queue_Information_for_Enhanced_FACH  priority-Queue-Information-for-Enhanced-FACH
    No value
    nbap.Priority_Queue_Information_for_Enhanced_FACH_PCH

nbap.priority_Queue_Information_for_Enhanced_PCH  priority-Queue-Information-for-Enhanced-PCH
    No value
    nbap.Priority_Queue_Information_for_Enhanced_FACH_PCH

nbap.privateIEs  privateIEs
    Unsigned 32-bit integer
    nbap.PrivateIE_Container

nbap.procedureCode  procedureCode
    Unsigned 32-bit integer
    nbap.ProcedureCode

nbap.procedureCriticality  procedureCriticality
    Unsigned 32-bit integer
    nbap.Criticality

nbap.procedureID  procedureID
    No value
    nbap.ProcedureID

nbap.process_Memory_Size  process-Memory-Size
    Unsigned 32-bit integer
    nbap.T_process_Memory_Size

nbap.propagationDelay  propagationDelay
    Unsigned 32-bit integer
    nbap.PropagationDelay

nbap.propagationDelayCompensation  propagationDelayCompensation
    Unsigned 32-bit integer
    nbap.TimingAdjustmentValueLCR

nbap.propagation_delay  propagation-delay
    Unsigned 32-bit integer
    nbap.PropagationDelay
```



```
nbap.protocol protocol
    Unsigned 32-bit integer
    nbap.CauseProtocol

nbap.protocolExtensions protocolExtensions
    Unsigned 32-bit integer
    nbap.ProtocolExtensionContainer

nbap.protocolIEs protocolIEs
    Unsigned 32-bit integer
    nbap.ProtocolIE_Container

nbap.punctureLimit punctureLimit
    Unsigned 32-bit integer
    nbap.PunctureLimit

nbap.qE_Selector qE-Selector
    Unsigned 32-bit integer
    nbap.QE_Selector

nbap.qPSK qPSK
    No value
    nbap.NULL

nbap.rACH rACH
    No value
    nbap.RACH_Parameter_CTCH_SetupRqstTDD

nbap.rACHSlotFormat rACHSlotFormat
    Unsigned 32-bit integer
    nbap.RACH_SlotFormat

nbap.rACH_InformationList rACH-InformationList
    Unsigned 32-bit integer
    nbap.RACH_InformationList_AuditRsp

nbap.rACH_Measurement_Result rACH-Measurement-Result
    Unsigned 32-bit integer
    nbap.RACH_Measurement_Result

nbap.rACH_Parameters rACH-Parameters
    No value
    nbap.RACH_Parameters_CTCH_SetupRqstFDD

nbap.rACH_SlotFormat rACH-SlotFormat
    Unsigned 32-bit integer
    nbap.RACH_SlotFormat

nbap.rACH_SubChannelNumbers rACH-SubChannelNumbers
    Byte array
    nbap.RACH_SubChannelNumbers

nbap.rL rL
    No value
    nbap.RL_DM_Rqst

nbap.rLC_Mode rLC-Mode
    Unsigned 32-bit integer
    nbap.RLC_Mode

nbap.rLS rLS
    No value
    nbap.RL_Set_DM_Rqst
```

```
nbap.rLSpecificCause  rLSpecificCause
    No value
    nbap.RLSpecificCauseList_RL_SetupFailureFDD

nbap.rL_ID  rL-ID
    Unsigned 32-bit integer
    nbap.RL_ID

nbap.rL_InformationList  rL-InformationList
    Unsigned 32-bit integer
    nbap.RL_InformationList_DM_Rqst

nbap.rL_InformationList_DM_Rprt  rL-InformationList-DM-Rprt
    Unsigned 32-bit integer
    nbap.RL_InformationList_DM_Rprt

nbap.rL_InformationList_DM_Rsp  rL-InformationList-DM-Rsp
    Unsigned 32-bit integer
    nbap.RL_InformationList_DM_Rsp

nbap.rL_InformationList_RL_FailureInd  rL-InformationList-RL-FailureInd
    Unsigned 32-bit integer
    nbap.RL_InformationList_RL_FailureInd

nbap.rL_InformationList_RL_RestoreInd  rL-InformationList-RL-RestoreInd
    Unsigned 32-bit integer
    nbap.RL_InformationList_RL_RestoreInd

nbap.rL_ReconfigurationFailureList_RL_ReconfFailure  rL-ReconfigurationFailureLi
    Unsigned 32-bit integer
    nbap.RL_ReconfigurationFailureList_RL_ReconfFailure

nbap.rL_Set  rL-Set
    No value
    nbap.RL_Set_RL_FailureInd

nbap.rL_Set_ID  rL-Set-ID
    Unsigned 32-bit integer
    nbap.RL_Set_ID

nbap.rL_Set_InformationList_DM_Rprt  rL-Set-InformationList-DM-Rprt
    Unsigned 32-bit integer
    nbap.RL_Set_InformationList_DM_Rprt

nbap.rL_Set_InformationList_DM_Rqst  rL-Set-InformationList-DM-Rqst
    Unsigned 32-bit integer
    nbap.RL_Set_InformationList_DM_Rqst

nbap.rL_Set_InformationList_DM_Rsp  rL-Set-InformationList-DM-Rsp
    Unsigned 32-bit integer
    nbap.RL_Set_InformationList_DM_Rsp

nbap.rL_Set_InformationList_RL_FailureInd  rL-Set-InformationList-RL-FailureInd
    Unsigned 32-bit integer
    nbap.RL_Set_InformationList_RL_FailureInd

nbap.rL_Set_InformationList_RL_RestoreInd  rL-Set-InformationList-RL-RestoreInd
    Unsigned 32-bit integer
    nbap.RL_Set_InformationList_RL_RestoreInd

nbap.rL_Specific_E_DCH_Information  rL-Specific-E-DCH-Information
    Unsigned 32-bit integer
    nbap.RL_Specific_E_DCH_Information
```

```
nbap.rNC_ID    rNC-ID
               Unsigned 32-bit integer
               nbap.RNC_ID

nbap.rSCP      rSCP
               Unsigned 32-bit integer
               nbap.RSCP_Value

nbap.radioNetwork  radioNetwork
               Unsigned 32-bit integer
               nbap.CauseRadioNetwork

nbap.range_correction_rate  range-correction-rate
               Signed 32-bit integer
               nbap.Range_Correction_Rate

nbap.rateMatchingAttribute  rateMatchingAttribute
               Unsigned 32-bit integer
               nbap.TransportFormatSet_RateMatchingAttribute

nbap.received_Scheduled_power_share_value  received-Scheduled-power-share-value
               Unsigned 32-bit integer
               nbap.RSEPS_Value

nbap.received_total_wide_band_power  received-total-wide-band-power
               Unsigned 32-bit integer
               nbap.Received_total_wide_band_power_Value

nbap.received_total_wide_band_power_value  received-total-wide-band-power-value
               Unsigned 32-bit integer
               nbap.Received_total_wide_band_power_Value

nbap.refBeta    refBeta
               Signed 32-bit integer
               nbap.RefBeta

nbap.refCodeRate  refCodeRate
               Unsigned 32-bit integer
               nbap.CodeRate_short

nbap.refTFCNumber  refTFCNumber
               Unsigned 32-bit integer
               nbap.RefTFCNumber

nbap.reference_E_TFCI  reference-E-TFCI
               Unsigned 32-bit integer
               nbap.E_TFCI

nbap.reference_E_TFCI_Information  reference-E-TFCI-Information
               Unsigned 32-bit integer
               nbap.Reference_E_TFCI_Information

nbap.reference_E_TFCI_PO  reference-E-TFCI-PO
               Unsigned 32-bit integer
               nbap.Reference_E_TFCI_PO

nbap.remove      remove
               No value
               nbap.NULL

nbap.repetitionLength  repetitionLength
               Unsigned 32-bit integer
               nbap.RepetitionLength
```

```
nbap.repetitionNumber repetitionNumber
    Unsigned 32-bit integer
    nbap.RepetitionNumber0

nbap.repetitionPeriod repetitionPeriod
    Unsigned 32-bit integer
    nbap.RepetitionPeriod

nbap.replace replace
    Unsigned 32-bit integer
    nbap.E_AGCH_FDD_Code_List

nbap.reportPeriodicity reportPeriodicity
    Unsigned 32-bit integer
    nbap.ReportCharacteristicsType_ReportPeriodicity

nbap.requestedDataValue requestedDataValue
    No value
    nbap.RequestedDataValue

nbap.requestedDataValueInformation requestedDataValueInformation
    Unsigned 32-bit integer
    nbap.RequestedDataValueInformation

nbap.requesteddataValue requesteddataValue
    No value
    nbap.RequestedDataValue

nbap.resourceOperationalState resourceOperationalState
    Unsigned 32-bit integer
    nbap.ResourceOperationalState

nbap.rl_ID rl-ID
    Unsigned 32-bit integer
    nbap.RL_ID

nbap.roundTripTime roundTripTime
    Unsigned 32-bit integer
    nbap.Round_Trip_Time_Value

nbap.round_trip_time round-trip-time
    Unsigned 32-bit integer
    nbap.Round_Trip_Time_IncrDecrThres

nbap.rscp rscp
    Unsigned 32-bit integer
    nbap.RSCP_Value_IncrDecrThres

nbap.rxTimingDeviationValue rxTimingDeviationValue
    Unsigned 32-bit integer
    nbap.Rx_Timing_Deviation_Value

nbap.rx_timing_deviation rx-timing-deviation
    Unsigned 32-bit integer
    nbap.Rx_Timing_Deviation_Value

nbap.sCCPCH_CCTrCH_ID sCCPCH-CCTrCH-ID
    Unsigned 32-bit integer
    nbap.CCTrCH_ID

nbap.sCCPCH_Power sCCPCH-Power
    Signed 32-bit integer
    nbap.DL_Power
```

```
nbap.sCH_Information  sCH-Information
    No value
    nbap.SCH_Information_AuditRsp
nbap.sCH_Power  sCH-Power
    Signed 32-bit integer
    nbap.DL_Power
nbap.sCH_TimeSlot  sCH-TimeSlot
    Unsigned 32-bit integer
    nbap.SCH_TimeSlot
nbap.sCTD_Indicator  sCTD-Indicator
    Unsigned 32-bit integer
    nbap.SCTD_Indicator
nbap.sFN  sFN
    Unsigned 32-bit integer
    nbap.SFN
nbap.sFNSFNChangeLimit  sFNSFNChangeLimit
    Unsigned 32-bit integer
    nbap.SFNSFNChangeLimit
nbap.sFNSFNDriftRate  sFNSFNDriftRate
    Signed 32-bit integer
    nbap.SFNSFNDriftRate
nbap.sFNSFNDriftRateQuality  sFNSFNDriftRateQuality
    Unsigned 32-bit integer
    nbap.SFNSFNDriftRateQuality
nbap.sFNSFNQuality  sFNSFNQuality
    Unsigned 32-bit integer
    nbap.SFNSFNQuality
nbap.sFNSFNTimeStampInformation  sFNSFNTimeStampInformation
    Unsigned 32-bit integer
    nbap.SFNSFNTimeStampInformation
nbap.sFNSFNTimeStamp_FDD  sFNSFNTimeStamp-FDD
    Unsigned 32-bit integer
    nbap.SFN
nbap.sFNSFNTimeStamp_TDD  sFNSFNTimeStamp-TDD
    No value
    nbap.SFNSFNTimeStamp_TDD
nbap.sFNSFNValue  sFNSFNValue
    Unsigned 32-bit integer
    nbap.SFNSFNValue
nbap.sFNSFN_FDD  sFNSFN-FDD
    Unsigned 32-bit integer
    nbap.SFNSFN_FDD
nbap.sFNSFN_TDD  sFNSFN-TDD
    Unsigned 32-bit integer
    nbap.SFNSFN_TDD
nbap.sFNSFN_TDD768  sFNSFN-TDD768
    Unsigned 32-bit integer
    nbap.SFNSFN_TDD768
```

```
nbap.sIB_Originator  sIB-Originator
    Unsigned 32-bit integer
    nbap.SIB_Originator

nbap.sID  sID
    Unsigned 32-bit integer
    nbap.SID

nbap.sIRValue  sIRValue
    Unsigned 32-bit integer
    nbap.SIR_Value

nbap.sIR_ErrorValue  sIR-ErrorValue
    Unsigned 32-bit integer
    nbap.SIR_Error_Value

nbap.sIR_Value  sIR-Value
    Unsigned 32-bit integer
    nbap.SIR_Value

nbap.sNPL_Reporting_Type  sNPL-Reporting-Type
    Unsigned 32-bit integer
    nbap.SNPL_Reporting_Type

nbap.sRB1_PriorityQueue_Id  sRB1-PriorityQueue-Id
    Unsigned 32-bit integer
    nbap.PriorityQueue_Id

nbap.sSDT_SupportIndicator  sSDT-SupportIndicator
    Unsigned 32-bit integer
    nbap.SSDT_SupportIndicator

nbap.sTTD_Indicator  sTTD-Indicator
    Unsigned 32-bit integer
    nbap.STTD_Indicator

nbap.sVGlobalHealth_alm  sVGlobalHealth-alm
    Byte array
    nbap.BIT_STRING_SIZE_364

nbap.sYNCD1CodeId  sYNCD1CodeId
    Unsigned 32-bit integer
    nbap.SYNCD1CodeId

nbap.sYNCD1CodeIdInfoLCR  sYNCD1CodeIdInfoLCR
    Unsigned 32-bit integer
    nbap.SYNCD1CodeIdInfoListLCR_CellSyncReconfRqstTDD

nbap.sYNCD1CodeIdMeasInfoList  sYNCD1CodeIdMeasInfoList
    Unsigned 32-bit integer
    nbap.SYNCD1CodeIdMeasInfoList_CellSyncReconfRqstTDD

nbap.s_CCPCH_Power  s-CCPCH-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.s_CCPCH_TimeSlotFormat_LCR  s-CCPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    nbap.TDD_DL_DPCH_TimeSlotFormat_LCR

nbap.satId  satId
    Unsigned 32-bit integer
    nbap.INTEGER_0_63
```

```

nbap.sat_id sat-id
    Unsigned 32-bit integer
    nbap.SAT_ID

nbap.sat_id_nav sat-id-nav
    Unsigned 32-bit integer
    nbap.SAT_ID

nbap.sat_info sat-info
    Unsigned 32-bit integer
    nbap.SATInfo_RealTime_Integrity

nbap.sat_info_almanac sat-info-almanac
    Unsigned 32-bit integer
    nbap.SAT_Info_Almanac

nbap.satelliteinfo satelliteinfo
    Unsigned 32-bit integer
    nbap.SAT_Info_DGPSCorrections

nbap.scheduled_E_HICH_Specific_InformationResp scheduled-E-HICH-Specific-InformationResponse
    Unsigned 32-bit integer
    nbap.Scheduled_E_HICH_Specific_Information_ResponseLCRTDD

nbap.schedulingInformation schedulingInformation
    Unsigned 32-bit integer
    nbap.SchedulingInformation

nbap.schedulingPriorityIndicator schedulingPriorityIndicator
    Unsigned 32-bit integer
    nbap.SchedulingPriorityIndicator

nbap.scramblingCodeNumber scramblingCodeNumber
    Unsigned 32-bit integer
    nbap.ScramblingCodeNumber

nbap.second_TDD_ChannelisationCode second-TDD-ChannelisationCode
    Unsigned 32-bit integer
    nbap.TDD_ChannelisationCode

nbap.second_TDD_ChannelisationCodeLCR second-TDD-ChannelisationCodeLCR
    No value
    nbap.TDD_ChannelisationCodeLCR

nbap.secondaryCCPCH768List secondaryCCPCH768List
    Unsigned 32-bit integer
    nbap.Secondary_CCPCH_768_List_CTCH_ReconfRqstTDD

nbap.secondaryCCPCHList secondaryCCPCHList
    No value
    nbap.Secondary_CCPCHList_CTCH_ReconfRqstTDD

nbap.secondaryCCPCH_parameterList secondaryCCPCH-parameterList
    No value
    nbap.Secondary_CCPCH_parameterList_CTCH_SetupRqstTDD

nbap.secondaryCPICH_Power secondaryCPICH-Power
    Signed 32-bit integer
    nbap.DL_Power

nbap.secondarySCH_Power secondarySCH-Power
    Signed 32-bit integer
    nbap.DL_Power

```

```
nbap.secondary_CCPCH_InformationList  secondary-CCPCH-InformationList
    Unsigned 32-bit integer
    nbap.S_CCPCH_InformationList_AuditRsp
nbap.secondary_CCPCH_SlotFormat  secondary-CCPCH-SlotFormat
    Unsigned 32-bit integer
    nbap.SecondaryCCPCH_SlotFormat
nbap.secondary_CCPCH_parameters  secondary-CCPCH-parameters
    No value
    nbap.Secondary_CCPCH_CTCH_SetupRqstFDD
nbap.secondary_CPICH_Information  secondary-CPICH-Information
    Unsigned 32-bit integer
    nbap.S_CPICH_InformationList_ResourceStatusInd
nbap.secondary_CPICH_InformationList  secondary-CPICH-InformationList
    Unsigned 32-bit integer
    nbap.S_CPICH_InformationList_AuditRsp
nbap.secondary_CPICH_shall_not_be_used  secondary-CPICH-shall-not-be-used
    No value
    nbap.NULL
nbap.secondary_SCH_Information  secondary-SCH-Information
    No value
    nbap.S_SCH_Information_AuditRsp
nbap.secondary_e_RNTI  secondary-e-RNTI
    Unsigned 32-bit integer
    nbap.E_RNTI
nbap.seed  seed
    Unsigned 32-bit integer
    nbap.INTEGER_0_63
nbap.segmentInformationList  segmentInformationList
    No value
    nbap.SegmentInformationList_SystemInfoUpdate
nbap.segment_Type  segment-Type
    Unsigned 32-bit integer
    nbap.Segment_Type
nbap.semi_staticPart  semi-staticPart
    No value
    nbap.TransportFormatSet_Semi_staticPart
nbap.separate_indication  separate-indication
    No value
    nbap.NULL
nbap.sequenceNumber  sequenceNumber
    Unsigned 32-bit integer
    nbap.PLCCHsequenceNumber
nbap.serviceImpacting  serviceImpacting
    No value
    nbap.ServiceImpacting_ResourceStatusInd
nbap.serving_E_DCH_RL_in_this_NodeB  serving-E-DCH-RL-in-this-NodeB
    No value
    nbap.Serving_E_DCH_RL_in_this_NodeB
```



```
nbap.serving_E_DCH_RL_not_in_this_NodeB  serving-E-DCH-RL-not-in-this-NodeB
  No value
  nbap.NULL

nbap.serving_Grant_Value  serving-Grant-Value
  Unsigned 32-bit integer
  nbap.E_Serving_Grant_Value

nbap.setSpecificCause  setSpecificCause
  No value
  nbap.SetSpecificCauseList_PSCH_ReconfFailureTDD

nbap.sfl_reserved_nav  sfl-reserved-nav
  Byte array
  nbap.BIT_STRING_SIZE_87

nbap.sfn  sfn
  Unsigned 32-bit integer
  nbap.SFN

nbap.shortTransActionId  shortTransActionId
  Unsigned 32-bit integer
  nbap.INTEGER_0_127

nbap.signalledGainFactors  signalledGainFactors
  No value
  nbap.T_signalledGainFactors

nbap.signature0  signature0
  Boolean

nbap.signature1  signature1
  Boolean

nbap.signature10  signature10
  Boolean

nbap.signature11  signature11
  Boolean

nbap.signature12  signature12
  Boolean

nbap.signature13  signature13
  Boolean

nbap.signature14  signature14
  Boolean

nbap.signature15  signature15
  Boolean

nbap.signature2  signature2
  Boolean

nbap.signature3  signature3
  Boolean

nbap.signature4  signature4
  Boolean

nbap.signature5  signature5
  Boolean
```

```
nbap.signature6  signature6
  Boolean

nbap.signature7  signature7
  Boolean

nbap.signature8  signature8
  Boolean

nbap.signature9  signature9
  Boolean

nbap.signatureSequenceGroupIndex  signatureSequenceGroupIndex
  Unsigned 32-bit integer
  nbap.SignatureSequenceGroupIndex

nbap.sir  sir
  Unsigned 32-bit integer
  nbap.SIR_Value_IncrDecrThres

nbap.sir_error  sir-error
  Unsigned 32-bit integer
  nbap.SIR_Error_Value_IncrDecrThres

nbap.sixteenQAM  sixteenQAM
  Signed 32-bit integer
  nbap.MBSFN_CPICH_secondary_CCPCH_power_offset

nbap.spare_zero_fill  spare-zero-fill
  Byte array
  nbap.BIT_STRING_SIZE_20

nbap.specialBurstScheduling  specialBurstScheduling
  Unsigned 32-bit integer
  nbap.SpecialBurstScheduling

nbap.sqrtA_msb  sqrtA-msb
  Unsigned 32-bit integer
  nbap.INTEGER_0_63

nbap.status_health  status-health
  Unsigned 32-bit integer
  nbap.GPS_Status_Health

nbap.steadyStatePhase  steadyStatePhase
  Unsigned 32-bit integer
  nbap.INTEGER_0_255_

nbap.storm_flag_five  storm-flag-five
  Boolean
  nbap.BOOLEAN

nbap.storm_flag_four  storm-flag-four
  Boolean
  nbap.BOOLEAN

nbap.storm_flag_one  storm-flag-one
  Boolean
  nbap.BOOLEAN

nbap.storm_flag_three  storm-flag-three
  Boolean
  nbap.BOOLEAN
```

```

nbap.storm_flag_two  storm-flag-two
  Boolean
  nbap.BOOLEAN

nbap.sttd_Indicator  sttd-Indicator
  Unsigned 32-bit integer
  nbap.STTD_Indicator

nbap.subCh0  subCh0
  Boolean

nbap.subCh1  subCh1
  Boolean

nbap.subCh10  subCh10
  Boolean

nbap.subCh11  subCh11
  Boolean

nbap.subCh2  subCh2
  Boolean

nbap.subCh3  subCh3
  Boolean

nbap.subCh4  subCh4
  Boolean

nbap.subCh5  subCh5
  Boolean

nbap.subCh6  subCh6
  Boolean

nbap.subCh7  subCh7
  Boolean

nbap.subCh8  subCh8
  Boolean

nbap.subCh9  subCh9
  Boolean

nbap.subframeNumber  subframeNumber
  Unsigned 32-bit integer
  nbap.T_subframeNumber

nbap.succesfulOutcome  succesfulOutcome
  No value
  nbap.SuccessfulOutcome

nbap.successful_RL_InformationRespList_RL_AdditionFailureFDD  successful-RL-Info
  Unsigned 32-bit integer
  nbap.Successful_RL_InformationRespList_RL_AdditionFailureFDD

nbap.successful_RL_InformationRespList_RL_SetupFailureFDD  successful-RL-Informa
  Unsigned 32-bit integer
  nbap.Successful_RL_InformationRespList_RL_SetupFailureFDD

nbap.successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformati
  Unsigned 32-bit integer
  nbap.T_successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInf

```

```

nbap.successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformati
    No value
    nbap.T_successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInf
nbap.svHealth    svHealth
    Byte array
    nbap.BIT_STRING_SIZE_5
nbap.sv_health_nav    sv-health-nav
    Byte array
    nbap.BIT_STRING_SIZE_6
nbap.svhealth_alm    svhealth-alm
    Byte array
    nbap.BIT_STRING_SIZE_8
nbap.syncBurstInfo    syncBurstInfo
    Unsigned 32-bit integer
    nbap.CellSyncBurstInfoList_CellSyncReconfRqstTDD
nbap.syncCaseIndicator    syncCaseIndicator
    No value
    nbap.SyncCaseIndicator_Cell_SetupRqstTDD_PSCH
nbap.syncDLCodeIDNotAvailable    syncDLCodeIDNotAvailable
    No value
    nbap.NULL
nbap.syncDLCodeId    syncDLCodeId
    Unsigned 32-bit integer
    nbap.SYNCDlCodeId
nbap.syncDLCodeIdArrivTime    syncDLCodeIdArrivTime
    Unsigned 32-bit integer
    nbap.CellSyncBurstTimingLCR
nbap.syncDLCodeIdAvailable    syncDLCodeIdAvailable
    No value
    nbap.SyncDLCodeIdAvailable_CellSyncReprtTDD
nbap.syncDLCodeIdInfoLCR    syncDLCodeIdInfoLCR
    Unsigned 32-bit integer
    nbap.SyncDLCodeInfoListLCR
nbap.syncDLCodeIdInfo_CellSyncReprtTDD    syncDLCodeIdInfo-CellSyncReprtTDD
    Unsigned 32-bit integer
    nbap.SyncDLCodeIdInfo_CellSyncReprtTDD
nbap.syncDLCodeIdSIR    syncDLCodeIdSIR
    Unsigned 32-bit integer
    nbap.CellSyncBurstSIR
nbap.syncDLCodeIdTiming    syncDLCodeIdTiming
    Unsigned 32-bit integer
    nbap.CellSyncBurstTimingLCR
nbap.syncDLCodeIdTimingThre    syncDLCodeIdTimingThre
    Unsigned 32-bit integer
    nbap.CellSyncBurstTimingThreshold
nbap.syncFrameNoToReceive    syncFrameNoToReceive
    Unsigned 32-bit integer
    nbap.SyncFrameNumber

```

```

nbap.syncFrameNrToReceive  syncFrameNrToReceive
    Unsigned 32-bit integer
    nbap.SyncFrameNumber

nbap.syncFrameNumber  syncFrameNumber
    Unsigned 32-bit integer
    nbap.SyncFrameNumber

nbap.syncFrameNumberToTransmit  syncFrameNumberToTransmit
    Unsigned 32-bit integer
    nbap.SyncFrameNumber

nbap.syncFrameNumberforTransmit  syncFrameNumberforTransmit
    Unsigned 32-bit integer
    nbap.SyncFrameNumber

nbap.syncReportType_CellSyncReprtTDD  syncReportType-CellSyncReprtTDD
    No value
    nbap.SyncReportTypeIE_CellSyncReprtTDD

nbap.synchronisationReportCharactThreExc  synchronisationReportCharactThreExc
    Unsigned 32-bit integer
    nbap.SynchronisationReportCharactThreExc

nbap.synchronisationReportCharacteristics  synchronisationReportCharacteristics
    No value
    nbap.SynchronisationReportCharacteristics

nbap.synchronisationReportCharacteristicsType  synchronisationReportCharacterist
    Unsigned 32-bit integer
    nbap.SynchronisationReportCharacteristicsType

nbap.synchronisationReportType  synchronisationReportType
    Unsigned 32-bit integer
    nbap.SynchronisationReportType

nbap.synchronised  synchronised
    Unsigned 32-bit integer
    nbap.CFN

nbap.t1  t1
    Unsigned 32-bit integer
    nbap.T1

nbap.tDDAckNackPowerOffset  tDDAckNackPowerOffset
    Signed 32-bit integer
    nbap.TDD_AckNack_Power_Offset

nbap.tDD_AckNack_Power_Offset  tDD-AckNack-Power-Offset
    Signed 32-bit integer
    nbap.TDD_AckNack_Power_Offset

nbap.tDD_ChannelisationCode  tDD-ChannelisationCode
    Unsigned 32-bit integer
    nbap.TDD_ChannelisationCode

nbap.tDD_ChannelisationCode768  tDD-ChannelisationCode768
    Unsigned 32-bit integer
    nbap.TDD_ChannelisationCode768

nbap.tDD_TPC_DownlinkStepSize  tDD-TPC-DownlinkStepSize
    Unsigned 32-bit integer
    nbap.TDD_TPC_DownlinkStepSize

```

```
nbap.tDD_TPC_DownlinkStepSize_InformationModify_RL_ReconfPrepTDD  tDD-TPC-Downli
    Unsigned 32-bit integer
    nbap.TDD_TPC_DownlinkStepSize
nbap.tDD_TPC_UplinkStepSize_LCR  tDD-TPC-UplinkStepSize-LCR
    Unsigned 32-bit integer
    nbap.TDD_TPC_UplinkStepSize_LCR
nbap.tFCI_Coding  tFCI-Coding
    Unsigned 32-bit integer
    nbap.TFCI_Coding
nbap.tFCI_Presence  tFCI-Presence
    Unsigned 32-bit integer
    nbap.TFCI_Presence
nbap.tFCI_Presence768  tFCI-Presence768
    Unsigned 32-bit integer
    nbap.TFCI_Presence
nbap.tFCI_SignallingMode  tFCI-SignallingMode
    No value
    nbap.TFCI_SignallingMode
nbap.tFCI_SignallingOption  tFCI-SignallingOption
    Unsigned 32-bit integer
    nbap.TFCI_SignallingMode_TFCI_SignallingOption
nbap.tFCS  tFCS
    No value
    nbap.TFCS
nbap.tFCSvalues  tFCSvalues
    Unsigned 32-bit integer
    nbap.T_tFCSvalues
nbap.tFC_Beta  tFC-Beta
    Unsigned 32-bit integer
    nbap.TransportFormatCombination_Beta
nbap.tGCFN  tGCFN
    Unsigned 32-bit integer
    nbap.CFN
nbap.tGD  tGD
    Unsigned 32-bit integer
    nbap.TGD
nbap.tGL1  tGL1
    Unsigned 32-bit integer
    nbap.GapLength
nbap.tGL2  tGL2
    Unsigned 32-bit integer
    nbap.GapLength
nbap.tGPL1  tGPL1
    Unsigned 32-bit integer
    nbap.GapDuration
nbap.tGPRC  tGPRC
    Unsigned 32-bit integer
    nbap.TGPRC
```

```
nbap.tGPSID    tGPSID
    Unsigned 32-bit integer
    nbap.TGPSID

nbap.tGSN     tGSN
    Unsigned 32-bit integer
    nbap.TGSN

nbap.tSTD_Indicator  tSTD-Indicator
    Unsigned 32-bit integer
    nbap.TSTD_Indicator

nbap.tUTRANGANSS  tUTRANGANSS
    No value
    nbap.TUTRANGANSS

nbap.tUTRANGANSSChangeLimit  tUTRANGANSSChangeLimit
    Unsigned 32-bit integer
    nbap.INTEGER_1_256

nbap.tUTRANGANSSDriftRate  tUTRANGANSSDriftRate
    Signed 32-bit integer
    nbap.INTEGER_M50_50

nbap.tUTRANGANSSDriftRateQuality  tUTRANGANSSDriftRateQuality
    Unsigned 32-bit integer
    nbap.INTEGER_0_50

nbap.tUTRANGANSSMeasurementAccuracyClass  tUTRANGANSSMeasurementAccuracyClass
    Unsigned 32-bit integer
    nbap.TUTRANGANSSAccuracyClass

nbap.tUTRANGANSSQuality  tUTRANGANSSQuality
    Unsigned 32-bit integer
    nbap.INTEGER_0_255

nbap.tUTRANGPS  tUTRANGPS
    No value
    nbap.TUTRANGPS

nbap.tUTRANGPSChangeLimit  tUTRANGPSChangeLimit
    Unsigned 32-bit integer
    nbap.TUTRANGPSChangeLimit

nbap.tUTRANGPSDriftRate  tUTRANGPSDriftRate
    Signed 32-bit integer
    nbap.TUTRANGPSDriftRate

nbap.tUTRANGPSDriftRateQuality  tUTRANGPSDriftRateQuality
    Unsigned 32-bit integer
    nbap.TUTRANGPSDriftRateQuality

nbap.tUTRANGPSMeasurementAccuracyClass  tUTRANGPSMeasurementAccuracyClass
    Unsigned 32-bit integer
    nbap.TUTRANGPSAccuracyClass

nbap.tUTRANGPSQuality  tUTRANGPSQuality
    Unsigned 32-bit integer
    nbap.TUTRANGPSQuality

nbap.t_RLFAILURE  t-RLFAILURE
    Unsigned 32-bit integer
    nbap.T_RLFAILURE
```

```
nbap.t_gd t-gd
  Byte array
  nbap.BIT_STRING_SIZE_10

nbap.t_gd_nav t-gd-nav
  Byte array
  nbap.BIT_STRING_SIZE_8

nbap.t_oa t-oa
  Unsigned 32-bit integer
  nbap.INTEGER_0_255

nbap.t_oc_lsb t-oc-lsb
  Unsigned 32-bit integer
  nbap.INTEGER_0_511

nbap.t_oc_nav t-oc-nav
  Byte array
  nbap.BIT_STRING_SIZE_16

nbap.t_oe_nav t-oe-nav
  Byte array
  nbap.BIT_STRING_SIZE_16

nbap.t_ot_utc t-ot-utc
  Byte array
  nbap.BIT_STRING_SIZE_8

nbap.tdd tdd
  Unsigned 32-bit integer
  nbap.BetaCD

nbap.tdde_PUCH_Offset tdde-PUCH-Offset
  Unsigned 32-bit integer
  nbap.Tdde_PUCH_Offset

nbap.tdd_ChannelisationCode tdd-ChannelisationCode
  Unsigned 32-bit integer
  nbap.TDD_ChannelisationCode

nbap.tdd_ChannelisationCode768 tdd-ChannelisationCode768
  Unsigned 32-bit integer
  nbap.TDD_ChannelisationCode768

nbap.tdd_ChannelisationCodeLCR tdd-ChannelisationCodeLCR
  No value
  nbap.TDD_ChannelisationCodeLCR

nbap.tdd_DL_DPCH_TimeSlotFormat_LCR tdd-DL-DPCH-TimeSlotFormat-LCR
  Unsigned 32-bit integer
  nbap.TDD_DL_DPCH_TimeSlotFormat_LCR

nbap.tdd_DPCHOffset tdd-DPCHOffset
  Unsigned 32-bit integer
  nbap.TDD_DPCHOffset

nbap.tdd_PhysicalChannelOffset tdd-PhysicalChannelOffset
  Unsigned 32-bit integer
  nbap.TDD_PhysicalChannelOffset

nbap.tdd_TPC_DownlinkStepSize tdd-TPC-DownlinkStepSize
  Unsigned 32-bit integer
  nbap.TDD_TPC_DownlinkStepSize
```



```
nbap.tdd_UL_DPCH_TimeSlotFormat_LCR  tdd-UL-DPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    nbap.TDD_UL_DPCH_TimeSlotFormat_LCR

nbap.ten_ms  ten-ms
    No value
    nbap.DTX_Cycle_10ms_Items

nbap.timeSlot  timeSlot
    Unsigned 32-bit integer
    nbap.TimeSlot

nbap.timeSlotConfigurationList_LCR_Cell_ReconfRqstTDD  timeSlotConfigurationList
    Unsigned 32-bit integer
    nbap.TimeSlotConfigurationList_LCR_Cell_ReconfRqstTDD

nbap.timeSlotConfigurationList_LCR_Cell_SetupRqstTDD  timeSlotConfigurationList-
    Unsigned 32-bit integer
    nbap.TimeSlotConfigurationList_LCR_Cell_SetupRqstTDD

nbap.timeSlotDirection  timeSlotDirection
    Unsigned 32-bit integer
    nbap.TimeSlotDirection

nbap.timeSlotLCR  timeSlotLCR
    Unsigned 32-bit integer
    nbap.TimeSlotLCR

nbap.timeSlotStatus  timeSlotStatus
    Unsigned 32-bit integer
    nbap.TimeSlotStatus

nbap.timeslot  timeslot
    Unsigned 32-bit integer
    nbap.TimeSlot

nbap.timeslotLCR  timeslotLCR
    Unsigned 32-bit integer
    nbap.TimeSlotLCR

nbap.timeslotLCR_Parameter_ID  timeslotLCR-Parameter-ID
    Unsigned 32-bit integer
    nbap.CellParameterID

nbap.timeslotResource  timeslotResource
    Byte array
    nbap.E_DCH_TimeslotResource

nbap.timeslotResourceLCR  timeslotResourceLCR
    Byte array
    nbap.E_DCH_TimeslotResourceLCR

nbap.timingAdjustmentValue  timingAdjustmentValue
    Unsigned 32-bit integer
    nbap.TimingAdjustmentValue

nbap.tlm_message_nav  tlm-message-nav
    Byte array
    nbap.BIT_STRING_SIZE_14

nbap.tlm_revd_c_nav  tlm-revd-c-nav
    Byte array
    nbap.BIT_STRING_SIZE_2
```

```
nbap.tnlQos    tnlQos
               Unsigned 32-bit integer
               nbap.TnlQos

nbap.tnl_qos  tnl-qos
               Unsigned 32-bit integer
               nbap.TnlQos

nbap.toAWE    toAWE
               Unsigned 32-bit integer
               nbap.ToAWE

nbap.toAWS    toAWS
               Unsigned 32-bit integer
               nbap.ToAWS

nbap.toe_c_msb  toe-c-msb
               Unsigned 32-bit integer
               nbap.INTEGER_0_31

nbap.toe_lsb_nav  toe-lsb-nav
               Unsigned 32-bit integer
               nbap.INTEGER_0_511

nbap.total_HS_SICH  total-HS-SICH
               Unsigned 32-bit integer
               nbap.HS_SICH_total

nbap.transactionID  transactionID
               Unsigned 32-bit integer
               nbap.TransactionID

nbap.transmissionGapPatternSequenceCodeInformation  transmissionGapPatternSequen
               Unsigned 32-bit integer
               nbap.TransmissionGapPatternSequenceCodeInformation

nbap.transmissionTimeInterval  transmissionTimeInterval
               Unsigned 32-bit integer
               nbap.TransportFormatSet_TransmissionTimeIntervalDynamic

nbap.transmissionTimeIntervalInformation  transmissionTimeIntervalInformation
               Unsigned 32-bit integer
               nbap.TransmissionTimeIntervalInformation

nbap.transmission_Gap_Pattern_Sequence_Status  transmission-Gap-Pattern-Sequence
               Unsigned 32-bit integer
               nbap.Transmission_Gap_Pattern_Sequence_Status_List

nbap.transmitDiversityIndicator  transmitDiversityIndicator
               Unsigned 32-bit integer
               nbap.TransmitDiversityIndicator

nbap.transmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue  transmitted
               Unsigned 32-bit integer
               nbap.TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue

nbap.transmittedCodePowerValue  transmittedCodePowerValue
               Unsigned 32-bit integer
               nbap.Transmitted_Code_Power_Value

nbap.transmitted_Carrier_Power_Value  transmitted-Carrier-Power-Value
               Unsigned 32-bit integer
               nbap.Transmitted_Carrier_Power_Value
```

```
nbap.transmitted_carrier_power  transmitted-carrier-power
    Unsigned 32-bit integer
    nbap.Transmitted_Carrier_Power_Value

nbap.transmitted_code_power  transmitted-code-power
    Unsigned 32-bit integer
    nbap.Transmitted_Code_Power_Value_IncrDecrThres

nbap.transport  transport
    Unsigned 32-bit integer
    nbap.CauseTransport

nbap.transportBearerRequestIndicator  transportBearerRequestIndicator
    Unsigned 32-bit integer
    nbap.TransportBearerRequestIndicator

nbap.transportBlockSize  transportBlockSize
    Unsigned 32-bit integer
    nbap.TransportFormatSet_TransportBlockSize

nbap.transportFormatSet  transportFormatSet
    No value
    nbap.TransportFormatSet

nbap.transportLayerAddress  transportLayerAddress
    Byte array
    nbap.TransportLayerAddress

nbap.transport_Block_Size_Index  transport-Block-Size-Index
    Unsigned 32-bit integer
    nbap.Transport_Block_Size_Index

nbap.transport_Block_Size_Index_for_Enhanced_PCH  transport-Block-Size-Index-for
    Unsigned 32-bit integer
    nbap.Transport_Block_Size_Index_for_Enhanced_PCH

nbap.transport_Block_Size_List  transport-Block-Size-List
    Unsigned 32-bit integer
    nbap.Transport_Block_Size_List

nbap.transportlayeraddress  transportlayeraddress
    Byte array
    nbap.TransportLayerAddress

nbap.triggeringMessage  triggeringMessage
    Unsigned 32-bit integer
    nbap.TriggeringMessage

nbap.tstdIndicator  tstdIndicator
    Unsigned 32-bit integer
    nbap.TSTD_Indicator

nbap.two_ms  two-ms
    No value
    nbap.DTX_Cycle_2ms_Items

nbap.tx_tow_nav  tx-tow-nav
    Unsigned 32-bit integer
    nbap.INTEGER_0_1048575

nbap.type1  type1
    No value
    nbap.Type1
```

```
nbap.type2    type2
              No value
              nbap.Type2

nbap.type3    type3
              No value
              nbap.Type3

nbap.uARFCN   uARFCN
              Unsigned 32-bit integer
              nbap.UARFCN

nbap.uC_Id    uC-Id
              No value
              nbap.UC_Id

nbap.uE_DPCCH_burst1  uE-DPCCH-burst1
              Unsigned 32-bit integer
              nbap.UE_DPCCH_burst1

nbap.uE_DPCCH_burst2  uE-DPCCH-burst2
              Unsigned 32-bit integer
              nbap.UE_DPCCH_burst2

nbap.uE_DRX_Cycle  uE-DRX-Cycle
              Unsigned 32-bit integer
              nbap.UE_DRX_Cycle

nbap.uE_DRX_Grant_Monitoring  uE-DRX-Grant-Monitoring
              Boolean
              nbap.UE_DRX_Grant_Monitoring

nbap.uE_DTX_Cycle1_10ms  uE-DTX-Cycle1-10ms
              Unsigned 32-bit integer
              nbap.UE_DTX_Cycle1_10ms

nbap.uE_DTX_Cycle1_2ms  uE-DTX-Cycle1-2ms
              Unsigned 32-bit integer
              nbap.UE_DTX_Cycle1_2ms

nbap.uE_DTX_Cycle2_10ms  uE-DTX-Cycle2-10ms
              Unsigned 32-bit integer
              nbap.UE_DTX_Cycle2_10ms

nbap.uE_DTX_Cycle2_2ms  uE-DTX-Cycle2-2ms
              Unsigned 32-bit integer
              nbap.UE_DTX_Cycle2_2ms

nbap.uE_DTX_DRX_Offset  uE-DTX-DRX-Offset
              Unsigned 32-bit integer
              nbap.UE_DTX_DRX_Offset

nbap.uE_DTX_Long_Preamble  uE-DTX-Long-Preamble
              Unsigned 32-bit integer
              nbap.UE_DTX_Long_Preamble

nbap.uL_Code_768_InformationModifyList_PSCH_ReconfRqst  uL-Code-768-InformationM
              Unsigned 32-bit integer
              nbap.UL_Code_768_InformationModifyList_PSCH_ReconfRqst

nbap.uL_Code_InformationAddList_768_PSCH_ReconfRqst  uL-Code-InformationAddList-
              Unsigned 32-bit integer
              nbap.UL_Code_InformationAddList_768_PSCH_ReconfRqst
```

```

nbap.uL_Code_InformationAddList_LCR_PSCH_ReconfRqst  uL-Code-InformationAddList-
  Unsigned 32-bit integer
  nbap.UL_Code_InformationAddList_LCR_PSCH_ReconfRqst
nbap.uL_Code_InformationAddList_PSCH_ReconfRqst  uL-Code-InformationAddList-PSCH
  Unsigned 32-bit integer
  nbap.UL_Code_InformationAddList_PSCH_ReconfRqst
nbap.uL_Code_InformationList  uL-Code-InformationList
  Unsigned 32-bit integer
  nbap.TDD_UL_Code_Information
nbap.uL_Code_InformationModifyList_PSCH_ReconfRqst  uL-Code-InformationModifyLis
  Unsigned 32-bit integer
  nbap.UL_Code_InformationModifyList_PSCH_ReconfRqst
nbap.uL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD  uL-Code-InformationM
  Unsigned 32-bit integer
  nbap.UL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.uL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD768  uL-Code-Informati
  Unsigned 32-bit integer
  nbap.UL_Code_InformationModify_ModifyList_RL_ReconfPrepTDD768
nbap.uL_Code_InformationModify_ModifyList_RL_ReconfPrepTDDLRCR  uL-Code-Informati
  Unsigned 32-bit integer
  nbap.UL_Code_InformationModify_ModifyList_RL_ReconfPrepTDDLRCR
nbap.uL_Code_LCR_InformationModifyList_PSCH_ReconfRqst  uL-Code-LCR-InformationM
  Unsigned 32-bit integer
  nbap.UL_Code_LCR_InformationModifyList_PSCH_ReconfRqst
nbap.uL_DL_mode  uL-DL-mode
  Unsigned 32-bit integer
  nbap.UL_DL_mode
nbap.uL_DPCH_Information  uL-DPCH-Information
  No value
  nbap.UL_DPCH_Information_RL_SetupRqstTDD
nbap.uL_Delta_T2TP  uL-Delta-T2TP
  Unsigned 32-bit integer
  nbap.UL_Delta_T2TP
nbap.uL_ScramblingCodeLength  uL-ScramblingCodeLength
  Unsigned 32-bit integer
  nbap.UL_ScramblingCodeLength
nbap.uL_ScramblingCodeNumber  uL-ScramblingCodeNumber
  Unsigned 32-bit integer
  nbap.UL_ScramblingCodeNumber
nbap.uL_Synchronisation_Frequency  uL-Synchronisation-Frequency
  Unsigned 32-bit integer
  nbap.UL_Synchronisation_Frequency
nbap.uL_Synchronisation_StepSize  uL-Synchronisation-StepSize
  Unsigned 32-bit integer
  nbap.UL_Synchronisation_StepSize
nbap.uL_TimeSlot_ISCP_Info  uL-TimeSlot-ISCP-Info
  Unsigned 32-bit integer
  nbap.UL_TimeSlot_ISCP_Info

```

```

nbap.uL_TimeSlot_ISCP_InfoLCR  uL-TimeSlot-ISCP-InfoLCR
    Unsigned 32-bit integer
    nbap.UL_TimeSlot_ISCP_LCR_Info
nbap.uL_TimeSlot_ISCP_LCR_Info  uL-TimeSlot-ISCP-LCR-Info
    Unsigned 32-bit integer
    nbap.UL_TimeSlot_ISCP_LCR_Info
nbap.uL_Timeslot768_Information  uL-Timeslot768-Information
    Unsigned 32-bit integer
    nbap.UL_Timeslot768_Information
nbap.uL_TimeslotISCP  uL-TimeslotISCP
    Unsigned 32-bit integer
    nbap.UL_TimeslotISCP_Value
nbap.uL_TimeslotLCR_Information  uL-TimeslotLCR-Information
    Unsigned 32-bit integer
    nbap.UL_TimeslotLCR_Information
nbap.uL_Timeslot_Information  uL-Timeslot-Information
    Unsigned 32-bit integer
    nbap.UL_Timeslot_Information
nbap.uL_Timeslot_Information768  uL-Timeslot-Information768
    Unsigned 32-bit integer
    nbap.UL_Timeslot768_Information
nbap.uL_Timeslot_InformationAddList_768_PSCH_ReconfRqst  uL-Timeslot-Information
    Unsigned 32-bit integer
    nbap.UL_Timeslot_InformationAddList_768_PSCH_ReconfRqst
nbap.uL_Timeslot_InformationAddList_LCR_PSCH_ReconfRqst  uL-Timeslot-Information
    Unsigned 32-bit integer
    nbap.UL_Timeslot_InformationAddList_LCR_PSCH_ReconfRqst
nbap.uL_Timeslot_InformationAddList_PSCH_ReconfRqst  uL-Timeslot-InformationAddL
    Unsigned 32-bit integer
    nbap.UL_Timeslot_InformationAddList_PSCH_ReconfRqst
nbap.uL_Timeslot_InformationLCR  uL-Timeslot-InformationLCR
    Unsigned 32-bit integer
    nbap.UL_TimeslotLCR_Information
nbap.uL_Timeslot_InformationModifyList_768_PSCH_ReconfRqst  uL-Timeslot-Informat
    Unsigned 32-bit integer
    nbap.UL_Timeslot_768_InformationModifyList_PSCH_ReconfRqst
nbap.uL_Timeslot_InformationModifyList_LCR_PSCH_ReconfRqst  uL-Timeslot-Informat
    Unsigned 32-bit integer
    nbap.UL_Timeslot_LCR_InformationModifyList_PSCH_ReconfRqst
nbap.uL_Timeslot_InformationModifyList_PSCH_ReconfRqst  uL-Timeslot-InformationM
    Unsigned 32-bit integer
    nbap.UL_Timeslot_InformationModifyList_PSCH_ReconfRqst
nbap.uL_Timeslot_InformationModify_ModifyList_RL_ReconfPrepTDD  uL-Timeslot-Info
    Unsigned 32-bit integer
    nbap.UL_Timeslot_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.uL_TransportFormatSet  uL-TransportFormatSet
    No value
    nbap.TransportFormatSet

```

```
nbap.uPPCHPositionLCR  uPPCHPositionLCR
    Unsigned 32-bit integer
    nbap.UPPCHPositionLCR

nbap.uSCH_ID  uSCH-ID
    Unsigned 32-bit integer
    nbap.USCH_ID

nbap.uSCH_InformationResponseList  uSCH-InformationResponseList
    No value
    nbap.USCH_InformationResponseList_RL_SetupRspTDD

nbap.uSCH_InformationResponseList_RL_ReconfReady  uSCH-InformationResponseList-R
    No value
    nbap.USCH_InformationResponseList_RL_ReconfReady

nbap.udre  udre
    Unsigned 32-bit integer
    nbap.UDRE

nbap.ueCapability_Info  ueCapability-Info
    No value
    nbap.UE_Capability_Information

nbap.ueSpecificMidamble  ueSpecificMidamble
    Unsigned 32-bit integer
    nbap.MidambleShiftLong

nbap.ul_CCTrCH_ID  ul-CCTrCH-ID
    Unsigned 32-bit integer
    nbap.CCTrCH_ID

nbap.ul_Cost  ul-Cost
    Unsigned 32-bit integer
    nbap.INTEGER_0_65535

nbap.ul_Cost_1  ul-Cost-1
    Unsigned 32-bit integer
    nbap.INTEGER_0_65535

nbap.ul_Cost_2  ul-Cost-2
    Unsigned 32-bit integer
    nbap.INTEGER_0_65535

nbap.ul_DPCCH_SlotFormat  ul-DPCCH-SlotFormat
    Unsigned 32-bit integer
    nbap.UL_DPCCH_SlotFormat

nbap.ul_DPCH_InformationAddList  ul-DPCH-InformationAddList
    No value
    nbap.UL_DPCH_InformationModify_AddList_RL_ReconfPrepTDD

nbap.ul_DPCH_InformationAddListLCR  ul-DPCH-InformationAddListLCR
    No value
    nbap.UL_DPCH_LCR_InformationModify_AddList_RL_ReconfPrepTDD

nbap.ul_DPCH_InformationDeleteList  ul-DPCH-InformationDeleteList
    No value
    nbap.UL_DPCH_InformationModify_DeleteList_RL_ReconfPrepTDD

nbap.ul_DPCH_InformationList  ul-DPCH-InformationList
    No value
    nbap.UL_DPCH_InformationAddList_RL_ReconfPrepTDD
```

```
nbap.ul_DPCH_InformationListLCR    ul-DPCH-InformationListLCR
    No value
    nbap.UL_DPCH_LCR_InformationAddList_RL_ReconfPrepTDD
nbap.ul_DPCH_InformationModifyList  ul-DPCH-InformationModifyList
    No value
    nbap.UL_DPCH_InformationModify_ModifyList_RL_ReconfPrepTDD
nbap.ul_FP_Mode    ul-FP-Mode
    Unsigned 32-bit integer
    nbap.UL_FP_Mode
nbap.ul_PhysCH_SF_Variation    ul-PhysCH-SF-Variation
    Unsigned 32-bit integer
    nbap.UL_PhysCH_SF_Variation
nbap.ul_PunctureLimit    ul-PunctureLimit
    Unsigned 32-bit integer
    nbap.PunctureLimit
nbap.ul_SIR_Target    ul-SIR-Target
    Signed 32-bit integer
    nbap.UL_SIR
nbap.ul_ScramblingCode    ul-ScramblingCode
    No value
    nbap.UL_ScramblingCode
nbap.ul_TFCS    ul-TFCS
    No value
    nbap.TFCS
nbap.ul_TransportFormatSet    ul-TransportFormatSet
    No value
    nbap.TransportFormatSet
nbap.ul_capacityCredit    ul-capacityCredit
    Unsigned 32-bit integer
    nbap.UL_CapacityCredit
nbap.ul_punctureLimit    ul-punctureLimit
    Unsigned 32-bit integer
    nbap.PunctureLimit
nbap.ul_sir_target    ul-sir-target
    Signed 32-bit integer
    nbap.UL_SIR
nbap.unsuccessfulOutcome    unsuccessfulOutcome
    No value
    nbap.UnsuccessfulOutcome
nbap.unsuccessful_PDSCHSetList_PSCH_ReconfFailureTDD    unsuccessful-PDSCHSetList-
    Unsigned 32-bit integer
    nbap.Unsuccessful_PDSCHSetList_PSCH_ReconfFailureTDD
nbap.unsuccessful_PUSCHSetList_PSCH_ReconfFailureTDD    unsuccessful-PUSCHSetList-
    Unsigned 32-bit integer
    nbap.Unsuccessful_PUSCHSetList_PSCH_ReconfFailureTDD
nbap.unsuccessful_RL_InformationRespItem_RL_AdditionFailureTDD    unsuccessful-RL-
    No value
    nbap.Unsuccessful_RL_InformationRespItem_RL_AdditionFailureTDD
```



```

nbap.unsuccessful_RL_InformationRespItem_RL_SetupFailureTDD  unsuccessful-RL-Inf
    No value
    nbap.Unsuccessful_RL_InformationRespItem_RL_SetupFailureTDD
nbap.unsuccessful_RL_InformationRespList_RL_AdditionFailureFDD  unsuccessful-RL-
    Unsigned 32-bit integer
    nbap.Unsuccessful_RL_InformationRespList_RL_AdditionFailureFDD
nbap.unsuccessful_RL_InformationRespList_RL_SetupFailureFDD  unsuccessful-RL-Inf
    Unsigned 32-bit integer
    nbap.Unsuccessful_RL_InformationRespList_RL_SetupFailureFDD
nbap.unsuccessful_cell_InformationRespList_SyncAdjustmntFailureTDD  unsuccessful
    Unsigned 32-bit integer
    nbap.Unsuccessful_cell_InformationRespList_SyncAdjustmntFailureTDD
nbap.unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInforma
    Unsigned 32-bit integer
    nbap.T_unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementI
nbap.unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInforma
    No value
    nbap.T_unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementI
nbap.unsynchronised  unsynchronised
    No value
    nbap.NULL
nbap.uplink_Compressed_Mode_Method  uplink-Compressed-Mode-Method
    Unsigned 32-bit integer
    nbap.Uplink_Compressed_Mode_Method
nbap.user_range_accuracy_index_nav  user-range-accuracy-index-nav
    Byte array
    nbap.BIT_STRING_SIZE_4
nbap.value  value
    No value
    nbap.ProtocolIE_Field_value
nbap.w_n_lsf_utc  w-n-lsf-utc
    Byte array
    nbap.BIT_STRING_SIZE_8
nbap.w_n_nav  w-n-nav
    Byte array
    nbap.BIT_STRING_SIZE_10
nbap.w_n_t_utc  w-n-t-utc
    Byte array
    nbap.BIT_STRING_SIZE_8
nbap.wna_alm  wna-alm
    Byte array
    nbap.BIT_STRING_SIZE_8
nbap.yes_Deletion  yes-Deletion
    No value
    nbap.NULL

```

**UTRAN Iub interface SABP signalling (sabp)**

sabp.Broadcast\_Message\_Content Broadcast-Message-Content  
Byte array  
sabp.Broadcast\_Message\_Content

sabp.Category Category  
Unsigned 32-bit integer  
sabp.Category

sabp.Cause Cause  
Unsigned 32-bit integer  
sabp.Cause

sabp.CriticalityDiagnostics\_IE\_List\_item Item  
No value  
sabp.CriticalityDiagnostics\_IE\_List\_item

sabp.Criticality\_Diagnostics Criticality-Diagnostics  
No value  
sabp.Criticality\_Diagnostics

sabp.Data\_Coding\_Scheme Data-Coding-Scheme  
Byte array  
sabp.Data\_Coding\_Scheme

sabp.Error\_Indication Error-Indication  
No value  
sabp.Error\_Indication

sabp.Failure Failure  
No value  
sabp.Failure

sabp.Failure\_List Failure-List  
Unsigned 32-bit integer  
sabp.Failure\_List

sabp.Failure\_List\_item Item  
No value  
sabp.Failure\_List\_Item

sabp.Kill Kill  
No value  
sabp.Kill

sabp.Kill\_Complete Kill-Complete  
No value  
sabp.Kill\_Complete

sabp.Kill\_Failure Kill-Failure  
No value  
sabp.Kill\_Failure

sabp.Load\_Query Load-Query  
No value  
sabp.Load\_Query

sabp.Load\_Query\_Complete Load-Query-Complete  
No value  
sabp.Load\_Query\_Complete

```
sabp.Load_Query_Failure Load-Query-Failure
  No value
  sabp.Load_Query_Failure
sabp.MessageStructure MessageStructure
  Unsigned 32-bit integer
  sabp.MessageStructure
sabp.MessageStructure_item Item
  No value
  sabp.MessageStructure_item
sabp.Message_Identifier Message-Identifier
  Byte array
  sabp.Message_Identifier
sabp.Message_Status_Query Message-Status-Query
  No value
  sabp.Message_Status_Query
sabp.Message_Status_Query_Complete Message-Status-Query-Complete
  No value
  sabp.Message_Status_Query_Complete
sabp.Message_Status_Query_Failure Message-Status-Query-Failure
  No value
  sabp.Message_Status_Query_Failure
sabp.New_Serial_Number New-Serial-Number
  Byte array
  sabp.New_Serial_Number
sabp.Number_of_Broadcasts_Completed_List Number-of-Broadcasts-Completed-List
  Unsigned 32-bit integer
  sabp.Number_of_Broadcasts_Completed_List
sabp.Number_of_Broadcasts_Completed_List_item Item
  No value
  sabp.Number_of_Broadcasts_Completed_List_Item
sabp.Number_of_Broadcasts_Requested Number-of-Broadcasts-Requested
  Unsigned 32-bit integer
  sabp.Number_of_Broadcasts_Requested
sabp.Old_Serial_Number Old-Serial-Number
  Byte array
  sabp.Old_Serial_Number
sabp.ProtocolExtensionContainer_item Item
  No value
  sabp.ProtocolExtensionField
sabp.ProtocolIE_Container_item Item
  No value
  sabp.ProtocolIE_Field
sabp.Radio_Resource>Loading_List Radio-Resource-Loading-List
  Unsigned 32-bit integer
  sabp.Radio_Resource>Loading_List
sabp.Radio_Resource>Loading_List_item Item
  No value
  sabp.Radio_Resource>Loading_List_Item
```

```
sabp.Recovery_Indication  Recovery-Indication
    Unsigned 32-bit integer
    sabp.Recovery_Indication

sabp.Repetition_Period  Repetition-Period
    Unsigned 32-bit integer
    sabp.Repetition_Period

sabp.Reset  Reset
    No value
    sabp.Reset

sabp.Reset_Complete  Reset-Complete
    No value
    sabp.Reset_Complete

sabp.Reset_Failure  Reset-Failure
    No value
    sabp.Reset_Failure

sabp.Restart  Restart
    No value
    sabp.Restart

sabp.SABP_PDU  SABP-PDU
    Unsigned 32-bit integer
    sabp.SABP_PDU

sabp.Serial_Number  Serial-Number
    Byte array
    sabp.Serial_Number

sabp.Service_Areas_List  Service-Areas-List
    Unsigned 32-bit integer
    sabp.Service_Areas_List

sabp.Service_Areas_List_item  Item
    No value
    sabp.Service_Area_Identifier

sabp.TypeOfError  TypeOfError
    Unsigned 32-bit integer
    sabp.TypeOfError

sabp.Write_Replace  Write-Replace
    No value
    sabp.Write_Replace

sabp.Write_Replace_Complete  Write-Replace-Complete
    No value
    sabp.Write_Replace_Complete

sabp.Write_Replace_Failure  Write-Replace-Failure
    No value
    sabp.Write_Replace_Failure

sabp.available_bandwidth  available-bandwidth
    Unsigned 32-bit integer
    sabp.Available_Bandwidth

sabp.cause  cause
    Unsigned 32-bit integer
    sabp.Cause
```

```
sabp.criticality    criticality
    Unsigned 32-bit integer
    sabp.Criticality

sabp.extensionValue extensionValue
    No value
    sabp.T_extensionValue

sabp.iECriticality iECriticality
    Unsigned 32-bit integer
    sabp.Criticality

sabp.iE_Extensions iE-Extensions
    Unsigned 32-bit integer
    sabp.ProtocolExtensionContainer

sabp.iE_ID         iE-ID
    Unsigned 32-bit integer
    sabp.ProtocolIE_ID

sabp.iEsCriticalityDiagnostics iEsCriticalityDiagnostics
    Unsigned 32-bit integer
    sabp.CriticalityDiagnostics_IE_List

sabp.id           id
    Unsigned 32-bit integer
    sabp.ProtocolIE_ID

sabp.initiatingMessage initiatingMessage
    No value
    sabp.InitiatingMessage

sabp.lac         lac
    Byte array
    sabp.OCTET_STRING_SIZE_2

sabp.number_of_broadcasts_completed number-of-broadcasts-completed
    Unsigned 32-bit integer
    sabp.INTEGER_0_65535

sabp.number_of_broadcasts_completed_info number-of-broadcasts-completed-info
    Unsigned 32-bit integer
    sabp.Number_Of_Broadcasts_Completed_Info

sabp.pLMNidentity pLMNidentity
    Byte array
    sabp.OCTET_STRING_SIZE_3

sabp.procedureCode procedureCode
    Unsigned 32-bit integer
    sabp.ProcedureCode

sabp.procedureCriticality procedureCriticality
    Unsigned 32-bit integer
    sabp.Criticality

sabp.protocolExtensions protocolExtensions
    Unsigned 32-bit integer
    sabp.ProtocolExtensionContainer

sabp.protocolIEs protocolIEs
    Unsigned 32-bit integer
    sabp.ProtocolIE_Container
```

```

sabp.repetitionNumber  repetitionNumber
    Unsigned 32-bit integer
    sabp.RepetitionNumber0

sabp.sac  sac
    Byte array
    sabp.OCTET_STRING_SIZE_2

sabp.service_area_identifier  service-area-identifier
    No value
    sabp.Service_Area_Identifier

sabp.successfulOutcome  successfulOutcome
    No value
    sabp.SuccessfulOutcome

sabp.triggeringMessage  triggeringMessage
    Unsigned 32-bit integer
    sabp.TriggeringMessage

sabp.unsuccessfulOutcome  unsuccessfulOutcome
    No value
    sabp.UnsuccessfulOutcome

sabp.value  value
    No value
    sabp.ProtocolIE_Field_value

```

#### **UTRAN Iupc interface Positioning Calculation Application Part (PCAP) (pcap)**

```

pcap.Abort  Abort
    No value
    pcap.Abort

pcap.AccuracyFulfilmentIndicator  AccuracyFulfilmentIndicator
    Unsigned 32-bit integer
    pcap.AccuracyFulfilmentIndicator

pcap.AcquisitionSatInfoList_item  Item
    No value
    pcap.AcquisitionSatInfo

pcap.AdditionalGPSAssistDataRequired  AdditionalGPSAssistDataRequired
    No value
    pcap.AdditionalGPSAssistDataRequired

pcap.AdditionalGanssAssistDataRequired  AdditionalGanssAssistDataRequired
    No value
    pcap.AdditionalGanssAssistDataRequired

pcap.AlmanacSatInfoList_item  Item
    No value
    pcap.AlmanacSatInfo

pcap.AmountOfReporting  AmountOfReporting
    Unsigned 32-bit integer
    pcap.AmountOfReporting

pcap.BadSatList_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

```

```
pcap.Cause Cause
    Unsigned 32-bit integer
    pcap.Cause

pcap.CellIDPositioning CellIDPositioning
    No value
    pcap.CellIDPositioning

pcap.CellId_MeasuredResultsInfoList_item Item
    No value
    pcap.CellId_MeasuredResultsInfo

pcap.CellId_MeasuredResultsSets CellId-MeasuredResultsSets
    Unsigned 32-bit integer
    pcap.CellId_MeasuredResultsSets

pcap.CellId_MeasuredResultsSets_item Item
    Unsigned 32-bit integer
    pcap.CellId_MeasuredResultsInfoList

pcap.ClientType ClientType
    Unsigned 32-bit integer
    pcap.ClientType

pcap.CriticalityDiagnostics CriticalityDiagnostics
    No value
    pcap.CriticalityDiagnostics

pcap.CriticalityDiagnostics_IE_List_item Item
    No value
    pcap.CriticalityDiagnostics_IE_List_item

pcap.DGANSS_Information_item Item
    No value
    pcap.DGANSS_InformationItem

pcap.DGANSS_SignalInformation_item Item
    No value
    pcap.DGANSS_SignalInformationItem

pcap.DGPS_CorrectionSatInfoList_item Item
    No value
    pcap.DGPS_CorrectionSatInfo

pcap.EnvironmentCharacterisation EnvironmentCharacterisation
    Unsigned 32-bit integer
    pcap.EnvironmentCharacterisation

pcap.ErrorIndication ErrorIndication
    No value
    pcap.ErrorIndication

pcap.ExplicitInformationList_item Item
    Unsigned 32-bit integer
    pcap.ExplicitInformation

pcap.GANSSGenericDataList_item Item
    No value
    pcap.GANSSGenericDataReq

pcap.GANSSPositioning GANSSPositioning
    No value
    pcap.GANSSPositioning
```

```
pcap.GANSS_Clock_Model_item  Item
    No value
    pcap.GANSS_SatelliteClockModelItem
pcap.GANSS_DataBitAssistanceList_item  Item
    No value
    pcap.GANSS_DataBitAssistanceItem
pcap.GANSS_GenericAssistanceDataList_item  Item
    No value
    pcap.GANSSGenericAssistanceData
pcap.GANSS_GenericMeasurementInfo_item  Item
    No value
    pcap.GANSS_GenericMeasurementInfo_item
pcap.GANSS_MeasuredResultsList  GANSS-MeasuredResultsList
    Unsigned 32-bit integer
    pcap.GANSS_MeasuredResultsList
pcap.GANSS_MeasuredResultsList_item  Item
    No value
    pcap.GANSS_MeasuredResults
pcap.GANSS_MeasurementParameters_item  Item
    No value
    pcap.GANSS_MeasurementParametersItem
pcap.GANSS_PositioningDataSet_item  Item
    Byte array
    pcap.GANSS_PositioningMethodAndUsage
pcap.GANSS_Real_Time_Integrity_item  Item
    No value
    pcap.GANSS_RealTimeInformationItem
pcap.GANSS_Sat_Info_Nav_item  Item
    No value
    pcap.GANSS_Sat_Info_Nav_item
pcap.GANSS_SatelliteInformationKP_item  Item
    No value
    pcap.GANSS_SatelliteInformationKPItem
pcap.GANSS_SatelliteInformation_item  Item
    No value
    pcap.GANSS_SatelliteInformationItem
pcap.GANSS_UTRAN_TRU  GANSS-UTRAN-TRU
    No value
    pcap.GANSS_UTRAN_TRU
pcap.GA_Polygon_item  Item
    No value
    pcap.GA_Polygon_item
pcap.GPSPositioning  GPSPositioning
    No value
    pcap.GPSPositioning
pcap.GPS_MeasurementParamList_item  Item
    No value
    pcap.GPS_MeasurementParam
```



```

pcap.GPS_NavigationModel_item  Item
    No value
    pcap.NavigationModelSatInfo
pcap.GPS_TOW_AssistList_item  Item
    No value
    pcap.GPS_TOW_Assist
pcap.GPS_UTRAN_TRU  GPS-UTRAN-TRU
    Unsigned 32-bit integer
    pcap.GPS_UTRAN_TRU
pcap.GanssRequestedGenericAssistanceDataList_item  Item
    No value
    pcap.GanssReqGenericData
pcap.HorizontalAccuracyCode  HorizontalAccuracyCode
    Unsigned 32-bit integer
    pcap.HorizontalAccuracyCode
pcap.IncludeVelocity  IncludeVelocity
    Unsigned 32-bit integer
    pcap.IncludeVelocity
pcap.InformationExchangeFailureIndication  InformationExchangeFailureIndication
    No value
    pcap.InformationExchangeFailureIndication
pcap.InformationExchangeID  InformationExchangeID
    Unsigned 32-bit integer
    pcap.InformationExchangeID
pcap.InformationExchangeInitiationFailure  InformationExchangeInitiationFailure
    No value
    pcap.InformationExchangeInitiationFailure
pcap.InformationExchangeInitiationRequest  InformationExchangeInitiationRequest
    No value
    pcap.InformationExchangeInitiationRequest
pcap.InformationExchangeInitiationResponse  InformationExchangeInitiationResponse
    No value
    pcap.InformationExchangeInitiationResponse
pcap.InformationExchangeObjectType_InfEx_Rprt  InformationExchangeObjectType-InfEx
    Unsigned 32-bit integer
    pcap.InformationExchangeObjectType_InfEx_Rprt
pcap.InformationExchangeObjectType_InfEx_Rqst  InformationExchangeObjectType-InfEx
    Unsigned 32-bit integer
    pcap.InformationExchangeObjectType_InfEx_Rqst
pcap.InformationExchangeObjectType_InfEx_Rsp  InformationExchangeObjectType-InfEx
    Unsigned 32-bit integer
    pcap.InformationExchangeObjectType_InfEx_Rsp
pcap.InformationExchangeTerminationRequest  InformationExchangeTerminationRequest
    No value
    pcap.InformationExchangeTerminationRequest
pcap.InformationReport  InformationReport
    No value
    pcap.InformationReport

```

```
pcap.InformationReportCharacteristics InformationReportCharacteristics
  No value
  pcap.InformationReportCharacteristics
pcap.InformationType InformationType
  Unsigned 32-bit integer
  pcap.InformationType
pcap.MeasInstructionsUsed MeasInstructionsUsed
  No value
  pcap.MeasInstructionsUsed
pcap.MeasuredResultsList MeasuredResultsList
  Unsigned 32-bit integer
  pcap.MeasuredResultsList
pcap.MeasuredResultsList_item Item
  No value
  pcap.GPS_MeasuredResults
pcap.MessageStructure_item Item
  No value
  pcap.MessageStructure_item
pcap.NetworkAssistedGANSSSupport_item Item
  No value
  pcap.NetworkAssistedGANSSSupport_item
pcap.OTDOAAssistanceData OTDOAAssistanceData
  No value
  pcap.OTDOAAssistanceData
pcap.OTDOA_MeasuredResultsInfoList_item Item
  No value
  pcap.OTDOA_MeasuredResultsInfo
pcap.OTDOA_MeasuredResultsSets OTDOA-MeasuredResultsSets
  Unsigned 32-bit integer
  pcap.OTDOA_MeasuredResultsSets
pcap.OTDOA_MeasuredResultsSets_item Item
  Unsigned 32-bit integer
  pcap.OTDOA_MeasuredResultsInfoList
pcap.OTDOA_MeasurementGroup OTDOA-MeasurementGroup
  No value
  pcap.OTDOA_MeasurementGroup
pcap.OTDOA_NeighbourCellInfoList_item Item
  No value
  pcap.OTDOA_NeighbourCellInfo
pcap.PCAP_PDU PCAP-PDU
  Unsigned 32-bit integer
  pcap.PCAP_PDU
pcap.PRACHparameters_item Item
  No value
  pcap.PRACH_ChannelInfo
pcap.PeriodicLocationInfo PeriodicLocationInfo
  No value
  pcap.PeriodicLocationInfo
```

```
pcap.PeriodicPosCalcInfo  PeriodicPosCalcInfo
    No value
    pcap.PeriodicPosCalcInfo
pcap.PeriodicTerminationCause  PeriodicTerminationCause
    Unsigned 32-bit integer
    pcap.PeriodicTerminationCause
pcap.PositionActivationFailure  PositionActivationFailure
    No value
    pcap.PositionActivationFailure
pcap.PositionActivationRequest  PositionActivationRequest
    No value
    pcap.PositionActivationRequest
pcap.PositionActivationResponse  PositionActivationResponse
    No value
    pcap.PositionActivationResponse
pcap.PositionCalculationFailure  PositionCalculationFailure
    No value
    pcap.PositionCalculationFailure
pcap.PositionCalculationRequest  PositionCalculationRequest
    No value
    pcap.PositionCalculationRequest
pcap.PositionCalculationResponse  PositionCalculationResponse
    No value
    pcap.PositionCalculationResponse
pcap.PositionData  PositionData
    No value
    pcap.PositionData
pcap.PositionInitiationFailure  PositionInitiationFailure
    No value
    pcap.PositionInitiationFailure
pcap.PositionInitiationRequest  PositionInitiationRequest
    No value
    pcap.PositionInitiationRequest
pcap.PositionInitiationResponse  PositionInitiationResponse
    No value
    pcap.PositionInitiationResponse
pcap.PositionParameterModification  PositionParameterModification
    No value
    pcap.PositionParameterModification
pcap.PositionPeriodicReport  PositionPeriodicReport
    No value
    pcap.PositionPeriodicReport
pcap.PositionPeriodicResult  PositionPeriodicResult
    No value
    pcap.PositionPeriodicResult
pcap.PositionPeriodicTermination  PositionPeriodicTermination
    No value
    pcap.PositionPeriodicTermination
```

```
pcap.PositioningDataSet_item  Item
    Byte array
    pcap.PositioningMethodAndUsage
pcap.PositioningMethod  PositioningMethod
    No value
    pcap.PositioningMethod
pcap.PositioningPriority  PositioningPriority
    Unsigned 32-bit integer
    pcap.PositioningPriority
pcap.Positioning_ResponseTime  Positioning-ResponseTime
    Unsigned 32-bit integer
    pcap.Positioning_ResponseTime
pcap.PrivateIE_Container_item  Item
    No value
    pcap.PrivateIE_Field
pcap.PrivateMessage  PrivateMessage
    No value
    pcap.PrivateMessage
pcap.ProtocolExtensionContainer_item  Item
    No value
    pcap.ProtocolExtensionField
pcap.ProtocolIE_ContainerList_item  Item
    Unsigned 32-bit integer
    pcap.ProtocolIE_Container
pcap.ProtocolIE_Container_item  Item
    No value
    pcap.ProtocolIE_Field
pcap.RRCstateChange  RRCstateChange
    No value
    pcap.RRCstateChange
pcap.Reference_E_TFCI_Information_item  Item
    No value
    pcap.Reference_E_TFCI_Information_Item
pcap.ReqDataBitAssistanceList_item  Item
    No value
    pcap.ReqDataBitAssistanceList_item
pcap.RequestType  RequestType
    No value
    pcap.RequestType
pcap.ResponseTime  ResponseTime
    Unsigned 32-bit integer
    pcap.ResponseTime
pcap.SatelliteRelatedDataListGANSS_item  Item
    No value
    pcap.SatelliteRelatedDataGANSS
pcap.SatelliteRelatedDataList_item  Item
    No value
    pcap.SatelliteRelatedData
```

```
pcap.TDD_UL_Code_Information_item  Item
    No value
    pcap.TDD_UL_Code_InformationItem

pcap.TFCS_item  Item
    Unsigned 32-bit integer
    pcap.CTFC

pcap.TrChInfoList_item  Item
    No value
    pcap.UL_TrCHInfo

pcap.Transmission_Gap_Pattern_Sequence_Information_item  Item
    No value
    pcap.Transmission_Gap_Pattern_Sequence_Information_item

pcap.Transmission_Gap_Pattern_Sequence_Status_List_item  Item
    No value
    pcap.Transmission_Gap_Pattern_Sequence_Status_List_item

pcap.TransportFormatSet_DynamicPartList_item  Item
    No value
    pcap.TransportFormatSet_DynamicPartList_item

pcap.UC_ID  UC-ID
    No value
    pcap.UC_ID

pcap.UC_ID_InfEx_Rqst  UC-ID-InfEx-Rqst
    No value
    pcap.UC_ID_InfEx_Rqst

pcap.UE_PositionEstimate  UE-PositionEstimate
    Unsigned 32-bit integer
    pcap.UE_PositionEstimate

pcap.UE_PositionEstimateInfo  UE-PositionEstimateInfo
    No value
    pcap.UE_PositionEstimateInfo

pcap.UE_PositioningCapability  UE-PositioningCapability
    No value
    pcap.UE_PositioningCapability

pcap.UE_Positioning_OTDOA_NeighbourCellList_item  Item
    No value
    pcap.UE_Positioning_OTDOA_NeighbourCellInfo

pcap.UL_Timeslot_Information_item  Item
    No value
    pcap.UL_Timeslot_InformationItem

pcap.UTDOAPositioning  UTDOAPositioning
    No value
    pcap.UTDOAPositioning

pcap.UTDOA_Group  UTDOA-Group
    No value
    pcap.UTDOA_Group

pcap.VelocityEstimate  VelocityEstimate
    Unsigned 32-bit integer
    pcap.VelocityEstimate
```

```
pcap.VerticalAccuracyCode VerticalAccuracyCode
    Unsigned 32-bit integer
    pcap.VerticalAccuracyCode

pcap.a0 a0
    Byte array
    pcap.BIT_STRING_SIZE_32

pcap.a1 a1
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.aOA_LCR aOA-LCR
    Unsigned 32-bit integer
    pcap.AOA_LCR

pcap.aOA_LCR_Accuracy_Class aOA-LCR-Accuracy-Class
    Unsigned 32-bit integer
    pcap.AOA_LCR_Accuracy_Class

pcap.a_Sqrt a-Sqrt
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.a_i0 a-i0
    Byte array
    pcap.BIT_STRING_SIZE_28

pcap.a_i1 a-i1
    Byte array
    pcap.BIT_STRING_SIZE_18

pcap.a_i2 a-i2
    Byte array
    pcap.BIT_STRING_SIZE_12

pcap.a_one_utc a-one-utc
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.a_sqrt_lsb_nav a-sqrt-lsb-nav
    Unsigned 32-bit integer
    pcap.INTEGER_0_67108863

pcap.a_zero_utc a-zero-utc
    Byte array
    pcap.BIT_STRING_SIZE_32

pcap.acquisitionAssistance acquisitionAssistance
    No value
    pcap.AcquisitionAssistance

pcap.activePatternSequenceInfo activePatternSequenceInfo
    No value
    pcap.Active_Pattern_Sequence_Information

pcap.additionalAssistanceDataRequest additionalAssistanceDataRequest
    Boolean
    pcap.BOOLEAN

pcap.additionalMethodType additionalMethodType
    Unsigned 32-bit integer
    pcap.AdditionalMethodType
```

```
pcap.adr adr
  Unsigned 32-bit integer
  pcap.INTEGER_0_33554431

pcap.af0 af0
  Byte array
  pcap.BIT_STRING_SIZE_11

pcap.af1 af1
  Byte array
  pcap.BIT_STRING_SIZE_11

pcap.af2 af2
  Byte array
  pcap.BIT_STRING_SIZE_8

pcap.alert alert
  Boolean
  pcap.BOOLEAN

pcap.alfa0 alfa0
  Byte array
  pcap.BIT_STRING_SIZE_8

pcap.alfa1 alfa1
  Byte array
  pcap.BIT_STRING_SIZE_8

pcap.alfa2 alfa2
  Byte array
  pcap.BIT_STRING_SIZE_8

pcap.alfa3 alfa3
  Byte array
  pcap.BIT_STRING_SIZE_8

pcap.almanacAndSatelliteHealth almanacAndSatelliteHealth
  No value
  pcap.AlmanacAndSatelliteHealth

pcap.almanacAndSatelliteHealthSIB almanacAndSatelliteHealthSIB
  No value
  pcap.AlmanacAndSatelliteHealthSIB_InfoType

pcap.almanacRequest almanacRequest
  Boolean
  pcap.BOOLEAN

pcap.almanacSatInfoList almanacSatInfoList
  Unsigned 32-bit integer
  pcap.AlmanacSatInfoList

pcap.alpha_one_ionos alpha-one-ionos
  Byte array
  pcap.BIT_STRING_SIZE_12

pcap.alpha_two_ionos alpha-two-ionos
  Byte array
  pcap.BIT_STRING_SIZE_12

pcap.alpha_zero_ionos alpha-zero-ionos
  Byte array
  pcap.BIT_STRING_SIZE_12
```

```
pcap.altitude altitude
  Unsigned 32-bit integer
  pcap.INTEGER_0_32767

pcap.altitudeAndDirection altitudeAndDirection
  No value
  pcap.GA_AltitudeAndDirection

pcap.amountOutstandingRequests amountOutstandingRequests
  Unsigned 32-bit integer
  pcap.INTEGER_1_8639999_

pcap.angleOfArrivalLCR angleOfArrivalLCR
  No value
  pcap.AngleOfArrivalLCR

pcap.angleOfArrivalLCRWanted angleOfArrivalLCRWanted
  Boolean
  pcap.BOOLEAN

pcap.antiSpoof antiSpoof
  Boolean
  pcap.BOOLEAN

pcap.aodo aodo
  Byte array
  pcap.BIT_STRING_SIZE_5

pcap.aquisitionAssistanceRequest aquisitionAssistanceRequest
  Boolean
  pcap.BOOLEAN

pcap.availableSF availableSF
  Unsigned 32-bit integer
  pcap.SF_PRACH

pcap.availableSignatures availableSignatures
  Byte array
  pcap.AvailableSignatures

pcap.availableSubChannelNumbers availableSubChannelNumbers
  Byte array
  pcap.AvailableSubChannelNumbers

pcap.azimuth azimuth
  Unsigned 32-bit integer
  pcap.INTEGER_0_31

pcap.azimuthAndElevation azimuthAndElevation
  No value
  pcap.AzimuthAndElevation

pcap.badSatellites badSatellites
  Unsigned 32-bit integer
  pcap.BadSatList

pcap.bad_ganss_satId bad-ganss-satId
  Unsigned 32-bit integer
  pcap.INTEGER_0_63

pcap.bad_ganss_signalId bad-ganss-signalId
  Unsigned 32-bit integer
  pcap.INTEGER_0_4_
```



```
pcap.bearing bearing
    Unsigned 32-bit integer
    pcap.INTEGER_0_359

pcap.beta0 beta0
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.beta1 beta1
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.beta2 beta2
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.beta3 beta3
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.burstFreq burstFreq
    Unsigned 32-bit integer
    pcap.INTEGER_1_16

pcap.burstLength burstLength
    Unsigned 32-bit integer
    pcap.INTEGER_10_25

pcap.burstModeParameters burstModeParameters
    No value
    pcap.BurstModeParameters

pcap.burstStart burstStart
    Unsigned 32-bit integer
    pcap.INTEGER_0_15

pcap.cFN cFN
    Unsigned 32-bit integer
    pcap.CFN

pcap.cmConfigurationChangeCFN cmConfigurationChangeCFN
    Unsigned 32-bit integer
    pcap.CFN

pcap.cRC_Size cRC-Size
    Unsigned 32-bit integer
    pcap.TransportFormatSet_CRC_Size

pcap.cRNTI cRNTI
    Byte array
    pcap.C_RNTI

pcap.cToNzero cToNzero
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.c_ID c-ID
    Unsigned 32-bit integer
    pcap.INTEGER_0_65535

pcap.c_N0 c-N0
    Unsigned 32-bit integer
    pcap.INTEGER_0_63
```

```
pcap.c_ic c-ic
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_ic_nav c-ic-nav
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_is c-is
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_is_nav c-is-nav
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_rc c-rc
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_rc_nav c-rc-nav
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_rs c-rs
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_rs_nav c-rs-nav
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_uc c-uc
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_uc_nav c-uc-nav
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_us c-us
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.c_us_nav c-us-nav
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.carrierQualityIndication carrierQualityIndication
  Byte array
  pcap.BIT_STRING_SIZE_2

pcap.cellParameterID cellParameterID
  Unsigned 32-bit integer
  pcap.CellParameterID

pcap.cellPosition cellPosition
  Unsigned 32-bit integer
  pcap.ReferenceCellPosition

pcap.cell_Timing cell-Timing
  No value
  pcap.Cell_Timing
```

```
pcap.channelCoding channelCoding
    Unsigned 32-bit integer
    pcap.TransportFormatSet_ChannelCodingType

pcap.chipOffset chipOffset
    Unsigned 32-bit integer
    pcap.ChipOffset

pcap.codeOnL2 codeOnL2
    Byte array
    pcap.BIT_STRING_SIZE_2

pcap.codePhase codePhase
    Unsigned 32-bit integer
    pcap.INTEGER_0_1022

pcap.codePhaseRmsError codePhaseRmsError
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.codePhaseSearchWindow codePhaseSearchWindow
    Unsigned 32-bit integer
    pcap.CodePhaseSearchWindow

pcap.codingRate codingRate
    Unsigned 32-bit integer
    pcap.TransportFormatSet_CodingRate

pcap.commonMidamble commonMidamble
    No value
    pcap.NULL

pcap.compressedModeAssistanceData compressedModeAssistanceData
    No value
    pcap.Compressed_Mode_Assistance_Data

pcap.confidence confidence
    Unsigned 32-bit integer
    pcap.INTEGER_0_100

pcap.cpicEcNoWanted cpicEcNoWanted
    Boolean
    pcap.BOOLEAN

pcap.cpichRSCPWanted cpichRSCPWanted
    Boolean
    pcap.BOOLEAN

pcap.cpich_EcNo cpich-EcNo
    Unsigned 32-bit integer
    pcap.CPICH_EcNo

pcap.cpich_RSCP cpich-RSCP
    Signed 32-bit integer
    pcap.CPICH_RSCP

pcap.criticality criticality
    Unsigned 32-bit integer
    pcap.Criticality

pcap.ctfc12Bit ctfc12Bit
    Unsigned 32-bit integer
    pcap.T_ctfc12Bit
```

```
pcap.ctfc12Bit_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_4095

pcap.ctfc16Bit      ctfc16Bit
    Unsigned 32-bit integer
    pcap.T_ctfc16Bit

pcap.ctfc16Bit_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_65535

pcap.ctfc24Bit      ctfc24Bit
    Unsigned 32-bit integer
    pcap.T_ctfc24Bit

pcap.ctfc24Bit_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_16777215

pcap.ctfc2Bit       ctfc2Bit
    Unsigned 32-bit integer
    pcap.T_ctfc2Bit

pcap.ctfc2Bit_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_3

pcap.ctfc4Bit       ctfc4Bit
    Unsigned 32-bit integer
    pcap.T_ctfc4Bit

pcap.ctfc4Bit_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_15

pcap.ctfc6Bit       ctfc6Bit
    Unsigned 32-bit integer
    pcap.T_ctfc6Bit

pcap.ctfc6Bit_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.ctfc8Bit       ctfc8Bit
    Unsigned 32-bit integer
    pcap.T_ctfc8Bit

pcap.ctfc8Bit_item  Item
    Unsigned 32-bit integer
    pcap.INTEGER_0_255

pcap.dCH_Information  dCH-Information
    No value
    pcap.DCH_Information

pcap.dGANSS_Information  dGANSS-Information
    Unsigned 32-bit integer
    pcap.DGANSS_Information

pcap.dGANSS_ReferenceTime  dGANSS-ReferenceTime
    Unsigned 32-bit integer
    pcap.INTEGER_0_119
```

```
pcap.dGANSS_SignalInformation  dGANSS-SignalInformation
    Unsigned 32-bit integer
    pcap.DGANSS_SignalInformation

pcap.dataBitAssistancelist  dataBitAssistancelist
    Unsigned 32-bit integer
    pcap.GANSS_DataBitAssistanceList

pcap.dataID  dataID
    Byte array
    pcap.BIT_STRING_SIZE_2

pcap.defaultMidamble  defaultMidamble
    No value
    pcap.NULL

pcap.deltaI  deltaI
    Byte array
    pcap.BIT_STRING_SIZE_16

pcap.delta_n  delta-n
    Byte array
    pcap.BIT_STRING_SIZE_16

pcap.delta_n_nav  delta-n-nav
    Byte array
    pcap.BIT_STRING_SIZE_16

pcap.delta_t_LS  delta-t-LS
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.delta_t_LSF  delta-t-LSF
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.delta_t_ls_utc  delta-t-ls-utc
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.delta_t_lsf_utc  delta-t-lsf-utc
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.dganssCorrections  dganssCorrections
    No value
    pcap.DganssCorrectionsReq

pcap.dganss_Corrections  dganss-Corrections
    No value
    pcap.DGANSS_Corrections

pcap.dgpsCorrections  dgpsCorrections
    No value
    pcap.DgpsCorrections

pcap.dgpsCorrectionsRequest  dgpsCorrectionsRequest
    Boolean
    pcap.BOOLEAN

pcap.dgps_CorrectionSatInfoList  dgps-CorrectionSatInfoList
    Unsigned 32-bit integer
    pcap.DGPS_CorrectionSatInfoList
```

```

pcap.directionOfAltitude  directionOfAltitude
    Unsigned 32-bit integer
    pcap.T_directionOfAltitude
pcap.dl_information  dl-information
    No value
    pcap.DL_InformationFDD
pcap.dn  dn
    Byte array
    pcap.BIT_STRING_SIZE_8
pcap.dn_utc  dn-utc
    Byte array
    pcap.BIT_STRING_SIZE_8
pcap.doppler  doppler
    Signed 32-bit integer
    pcap.INTEGER_M32768_32767
pcap.doppler0thOrder  doppler0thOrder
    Signed 32-bit integer
    pcap.INTEGER_M2048_2047
pcap.doppler1stOrder  doppler1stOrder
    Signed 32-bit integer
    pcap.INTEGER_M42_21
pcap.dopplerFirstOrder  dopplerFirstOrder
    Signed 32-bit integer
    pcap.INTEGER_M42_21
pcap.dopplerUncertainty  dopplerUncertainty
    Unsigned 32-bit integer
    pcap.DopplerUncertainty
pcap.dopplerZeroOrder  dopplerZeroOrder
    Signed 32-bit integer
    pcap.INTEGER_M2048_2047
pcap.dynamicPart  dynamicPart
    Unsigned 32-bit integer
    pcap.TransportFormatSet_DynamicPartList
pcap.e  e
    Byte array
    pcap.BIT_STRING_SIZE_16
pcap.e_DCH_TFCS_Index  e-DCH-TFCS-Index
    Unsigned 32-bit integer
    pcap.E_DCH_TFCS_Index
pcap.e_DPCCH_PO  e-DPCCH-PO
    Unsigned 32-bit integer
    pcap.E_DPCCH_PO
pcap.e_DPCH_Information  e-DPCH-Information
    No value
    pcap.E_DPCH_Information
pcap.e_TFCS_Information  e-TFCS-Information
    No value
    pcap.E_TFCS_Information

```

```

pcap.e_TTI e-TTI
    Unsigned 32-bit integer
    pcap.E_TTI

pcap.e_msb e-msb
    Unsigned 32-bit integer
    pcap.INTEGER_0_127

pcap.elevation elevation
    Unsigned 32-bit integer
    pcap.INTEGER_0_7

pcap.ellipsoidArc ellipsoidArc
    No value
    pcap.GA_EllipsoidArc

pcap.ellipsoidPoint ellipsoidPoint
    No value
    pcap.GeographicalCoordinates

pcap.ellipsoidPointWithAltitude ellipsoidPointWithAltitude
    No value
    pcap.GA_PointWithAltitude

pcap.event event
    Unsigned 32-bit integer
    pcap.RequestTypeEvent

pcap.explicitInformation explicitInformation
    Unsigned 32-bit integer
    pcap.ExplicitInformationList

pcap.extendedRoundTripTime extendedRoundTripTime
    Unsigned 32-bit integer
    pcap.ExtendedRoundTripTime

pcap.extensionValue extensionValue
    No value
    pcap.T_extensionValue

pcap.extension_InformationExchangeObjectType_InfEx_Rqst extension-InformationEx
    No value
    pcap.Extension_InformationExchangeObjectType_InfEx_Rqst

pcap.extraDoppler extraDoppler
    No value
    pcap.GANSS_ExtraDoppler

pcap.extraDopplerInfo extraDopplerInfo
    No value
    pcap.ExtraDopplerInfo

pcap.fdd fdd
    No value
    pcap.T_fdd

pcap.fineSFN_SFNN fineSFN-SFN
    Unsigned 32-bit integer
    pcap.FineSFNSFN

pcap.fitInterval fitInterval
    Byte array
    pcap.BIT_STRING_SIZE_1

```

```
pcap.fractionalGPS_Chips  fractionalGPS-Chips
    Unsigned 32-bit integer
    pcap.INTEGER_0_1023

pcap.frameOffset  frameOffset
    Unsigned 32-bit integer
    pcap.FrameOffset

pcap.frequencyInfo  frequencyInfo
    No value
    pcap.FrequencyInfo

pcap.gANSS_AlmanacModel  gANSS-AlmanacModel
    Unsigned 32-bit integer
    pcap.GANSS_AlmanacModel

pcap.gANSS_IonosphereRegionalStormFlags  gANSS-IonosphereRegionalStormFlags
    No value
    pcap.GANSS_IonosphereRegionalStormFlags

pcap.gANSS_SatelliteInformationKP  gANSS-SatelliteInformationKP
    Unsigned 32-bit integer
    pcap.GANSS_SatelliteInformationKP

pcap.gANSS_SignalId  gANSS-SignalId
    No value
    pcap.GANSS_SignalID

pcap.gANSS_StatusHealth  gANSS-StatusHealth
    Unsigned 32-bit integer
    pcap.GANSS_StatusHealth

pcap.gANSS_TimeId  gANSS-TimeId
    No value
    pcap.GANSSID

pcap.gANSS_TimeUncertainty  gANSS-TimeUncertainty
    Unsigned 32-bit integer
    pcap.INTEGER_0_127

pcap.gANSS_UTRAN_TimeRelationshipUncertainty  gANSS-UTRAN-TimeRelationshipUncert
    Unsigned 32-bit integer
    pcap.GANSS_UTRAN_TimeRelationshipUncertainty

pcap.gANSS_iod  gANSS-iod
    Byte array
    pcap.BIT_STRING_SIZE_10

pcap.gANSS_keplerianParameters  gANSS-keplerianParameters
    No value
    pcap.GANSS_KeplerianParametersAlm

pcap.gANSS_timeId  gANSS-timeId
    No value
    pcap.GANSSID

pcap.gANSS_tod  gANSS-tod
    Unsigned 32-bit integer
    pcap.INTEGER_0_3599999

pcap.ga_AltitudeAndDirection  ga-AltitudeAndDirection
    No value
    pcap.GA_AltitudeAndDirection
```



```
pcap.ganssAlmanac  ganssAlmanac
  Boolean
  pcap.BOOLEAN

pcap.ganssClockModel  ganssClockModel
  Unsigned 32-bit integer
  pcap.GANSS_Clock_Model

pcap.ganssDataBitAssistance  ganssDataBitAssistance
  Boolean
  pcap.BOOLEAN

pcap.ganssDataBits  ganssDataBits
  Byte array
  pcap.BIT_STRING_SIZE_1_1024

pcap.ganssDataTypeID  ganssDataTypeID
  Unsigned 32-bit integer
  pcap.INTEGER_0_3_

pcap.ganssDay  ganssDay
  Unsigned 32-bit integer
  pcap.INTEGER_0_8191

pcap.ganssDifferentialCorrection  ganssDifferentialCorrection
  Byte array
  pcap.DGANSS_Sig_Id_Req

pcap.ganssGenericMeasurementInfo  ganssGenericMeasurementInfo
  Unsigned 32-bit integer
  pcap.GANSS_GenericMeasurementInfo

pcap.ganssID  ganssID
  No value
  pcap.GANSSID

pcap.ganssId  ganssId
  No value
  pcap.GANSSID

pcap.ganssIonosphericModel  ganssIonosphericModel
  Boolean
  pcap.BOOLEAN

pcap.ganssMeasurementParameters  ganssMeasurementParameters
  Unsigned 32-bit integer
  pcap.GANSS_MeasurementParameters

pcap.ganssMode  ganssMode
  Unsigned 32-bit integer
  pcap.T_ganssMode

pcap.ganssNavigationModel  ganssNavigationModel
  Boolean
  pcap.BOOLEAN

pcap.ganssNavigationModelAdditionalData  ganssNavigationModelAdditionalData
  No value
  pcap.NavigationModelGANSS

pcap.ganssNbit  ganssNbit
  Unsigned 32-bit integer
  pcap.INTEGER_1_1024
```

```
pcap.ganssOrbitModel  ganssOrbitModel
    Unsigned 32-bit integer
    pcap.GANSS_Orbit_Model

pcap.ganssPositioningInstructions  ganssPositioningInstructions
    No value
    pcap.GANSS_PositioningInstructions

pcap.ganssRealTimeIntegrity  ganssRealTimeIntegrity
    Boolean
    pcap.BOOLEAN

pcap.ganssReferenceMeasurementInfo  ganssReferenceMeasurementInfo
    Boolean
    pcap.BOOLEAN

pcap.ganssReferenceTime  ganssReferenceTime
    Boolean
    pcap.BOOLEAN

pcap.ganssReferenceTimeOnly  ganssReferenceTimeOnly
    No value
    pcap.GANSS_ReferenceTimeOnly

pcap.ganssRequestedGenericAssistanceDataList  ganssRequestedGenericAssistanceDataList
    Unsigned 32-bit integer
    pcap.GanssRequestedGenericAssistanceDataList

pcap.ganssSatId  ganssSatId
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.ganssSatInfoNav  ganssSatInfoNav
    Unsigned 32-bit integer
    pcap.GANSS_Sat_Info_Nav

pcap.ganssSignalID  ganssSignalID
    Unsigned 32-bit integer
    pcap.INTEGER_0_3_

pcap.ganssSignalId  ganssSignalId
    No value
    pcap.GANSS_SignalID

pcap.ganssTOE  ganssTOE
    Unsigned 32-bit integer
    pcap.INTEGER_0_167

pcap.ganssTimeId  ganssTimeId
    No value
    pcap.GANSSID

pcap.ganssTimeModelGnssGnssExt  ganssTimeModelGnssGnssExt
    Byte array
    pcap.BIT_STRING_SIZE_9

pcap.ganssTimeModels  ganssTimeModels
    Byte array
    pcap.BIT_STRING_SIZE_9

pcap.ganssTimingOfCellWanted  ganssTimingOfCellWanted
    Byte array
    pcap.BIT_STRING_SIZE_8
```

```
pcap.ganssTod ganssTod
  Unsigned 32-bit integer
  pcap.INTEGER_0_59_

pcap.ganssTodUncertainty ganssTodUncertainty
  Unsigned 32-bit integer
  pcap.INTEGER_0_127

pcap.ganssUTCModel ganssUTCModel
  Boolean
  pcap.BOOLEAN

pcap.ganssWeek ganssWeek
  Unsigned 32-bit integer
  pcap.INTEGER_0_4095

pcap.ganss_AlmanacAndSatelliteHealth ganss-AlmanacAndSatelliteHealth
  No value
  pcap.GANSS_AlmanacAndSatelliteHealth

pcap.ganss_Common_DataReq ganss-Common-DataReq
  No value
  pcap.GANSSCommonDataReq

pcap.ganss_DataBitAssistance ganss-DataBitAssistance
  No value
  pcap.GANSS_Data_Bit_Assistance

pcap.ganss_Generic_DataList ganss-Generic-DataList
  Unsigned 32-bit integer
  pcap.GANSSGenericDataList

pcap.ganss_ID ganss-ID
  Unsigned 32-bit integer
  pcap.INTEGER_0_7

pcap.ganss_IonosphericModel ganss-IonosphericModel
  Unsigned 32-bit integer
  pcap.T_ganss_IonosphericModel

pcap.ganss_Ionospheric_Model ganss-Ionospheric-Model
  No value
  pcap.GANSS_Ionospheric_Model

pcap.ganss_Navigation_Model ganss-Navigation-Model
  No value
  pcap.GANSS_Navigation_Model

pcap.ganss_Real_Time_Integrity ganss-Real-Time-Integrity
  Unsigned 32-bit integer
  pcap.GANSS_Real_Time_Integrity

pcap.ganss_ReferenceLocation ganss-ReferenceLocation
  Unsigned 32-bit integer
  pcap.T_ganss_ReferenceLocation

pcap.ganss_ReferenceMeasurementInfo ganss-ReferenceMeasurementInfo
  No value
  pcap.GANSS_ReferenceMeasurementInfo

pcap.ganss_ReferenceTime ganss-ReferenceTime
  Unsigned 32-bit integer
  pcap.T_ganss_ReferenceTime
```

```
pcap.ganss_Reference_Location  ganss-Reference-Location
    No value
    pcap.GANSS_Reference_Location
pcap.ganss_Reference_Time  ganss-Reference-Time
    No value
    pcap.GANSS_Reference_Time
pcap.ganss_TimeModel_Ganss_Ganss  ganss-TimeModel-Ganss-Ganss
    No value
    pcap.Ganss_TimeModel_Ganss_Ganss
pcap.ganss_Time_Model  ganss-Time-Model
    No value
    pcap.GANSS_Time_Model
pcap.ganss_UTC_Model  ganss-UTC-Model
    No value
    pcap.GANSS_UTC_Model
pcap.ganss_af_one_alm  ganss-af-one-alm
    Byte array
    pcap.BIT_STRING_SIZE_11
pcap.ganss_af_zero_alm  ganss-af-zero-alm
    Byte array
    pcap.BIT_STRING_SIZE_14
pcap.ganss_almanacAndSatelliteHealth  ganss-almanacAndSatelliteHealth
    No value
    pcap.Ganss_almanacAndSatelliteHealthReq
pcap.ganss_dataBitAssistance  ganss-dataBitAssistance
    No value
    pcap.Ganss_dataBitAssistanceReq
pcap.ganss_delta_I_alm  ganss-delta-I-alm
    Byte array
    pcap.BIT_STRING_SIZE_11
pcap.ganss_delta_a_sqrt_alm  ganss-delta-a-sqrt-alm
    Byte array
    pcap.BIT_STRING_SIZE_17
pcap.ganss_e_alm  ganss-e-alm
    Byte array
    pcap.BIT_STRING_SIZE_11
pcap.ganss_e_lsb_nav  ganss-e-lsb-nav
    Unsigned 32-bit integer
    pcap.INTEGER_0_33554431
pcap.ganss_m_zero_alm  ganss-m-zero-alm
    Byte array
    pcap.BIT_STRING_SIZE_16
pcap.ganss_omega_alm  ganss-omega-alm
    Byte array
    pcap.BIT_STRING_SIZE_16
pcap.ganss_omega_nav  ganss-omega-nav
    Byte array
    pcap.BIT_STRING_SIZE_32
```

```
pcap.ganss_omegadot_alm  ganss-omegadot-alm
    Byte array
    pcap.BIT_STRING_SIZE_11

pcap.ganss_omegazero_alm  ganss-omegazero-alm
    Byte array
    pcap.BIT_STRING_SIZE_16

pcap.ganss_prc  ganss-prc
    Signed 32-bit integer
    pcap.INTEGER_M2047_2047

pcap.ganss_realTimeIntegrity  ganss-realTimeIntegrity
    No value
    pcap.Ganss_realTimeIntegrityReq

pcap.ganss_referenceMeasurementInfo  ganss-referenceMeasurementInfo
    No value
    pcap.Ganss_referenceMeasurementInfoReq

pcap.ganss_rrc  ganss-rrc
    Signed 32-bit integer
    pcap.INTEGER_M127_127

pcap.ganss_sat_id  ganss-sat-id
    Byte array
    pcap.BIT_STRING_SIZE_36

pcap.ganss_svhealth_alm  ganss-svhealth-alm
    Byte array
    pcap.BIT_STRING_SIZE_4

pcap.ganss_t_a0  ganss-t-a0
    Signed 32-bit integer
    pcap.INTEGER_M2147483648_2147483647

pcap.ganss_t_a1  ganss-t-a1
    Signed 32-bit integer
    pcap.INTEGER_M8388608_8388607

pcap.ganss_t_a2  ganss-t-a2
    Signed 32-bit integer
    pcap.INTEGER_M64_63

pcap.ganss_time_model_refTime  ganss-time-model-refTime
    Unsigned 32-bit integer
    pcap.INTEGER_0_37799

pcap.ganss_to_id  ganss-to-id
    Unsigned 32-bit integer
    pcap.INTEGER_0_7

pcap.ganss_utcModel  ganss-utcModel
    No value
    pcap.Ganss_utcModelReq

pcap.ganss_wk_number  ganss-wk-number
    Unsigned 32-bit integer
    pcap.INTEGER_0_8191

pcap.ganssreferenceLocation  ganssreferenceLocation
    Boolean
    pcap.BOOLEAN
```

```
pcap.geographicalCoordinates  geographicalCoordinates
    No value
    pcap.GeographicalCoordinates
pcap.global  global
    pcap.OBJECT_IDENTIFIER
pcap.gpsAlmanacAndSatelliteHealth  gpsAlmanacAndSatelliteHealth
    No value
    pcap.GPS_AlmanacAndSatelliteHealth
pcap.gpsPositioningInstructions  gpsPositioningInstructions
    No value
    pcap.GPSPositioningInstructions
pcap.gpsTimingOfCellWanted  gpsTimingOfCellWanted
    Boolean
    pcap.BOOLEAN
pcap.gps_AcquisitionAssistance  gps-AcquisitionAssistance
    No value
    pcap.GPS_AcquisitionAssistance
pcap.gps_BitNumber  gps-BitNumber
    Unsigned 32-bit integer
    pcap.INTEGER_0_3
pcap.gps_Ionospheric_Model  gps-Ionospheric-Model
    No value
    pcap.GPS_Ionospheric_Model
pcap.gps_MeasurementParamList  gps-MeasurementParamList
    Unsigned 32-bit integer
    pcap.GPS_MeasurementParamList
pcap.gps_NavigationModel  gps-NavigationModel
    Unsigned 32-bit integer
    pcap.GPS_NavigationModel
pcap.gps_RealTime_Integrity  gps-RealTime-Integrity
    Unsigned 32-bit integer
    pcap.GPS_RealTimeIntegrity
pcap.gps_RefTimeUNC  gps-RefTimeUNC
    Unsigned 32-bit integer
    pcap.INTEGER_0_127
pcap.gps_ReferenceTimeOnly  gps-ReferenceTimeOnly
    Unsigned 32-bit integer
    pcap.INTEGER_0_604799999_
pcap.gps_TOE  gps-TOE
    Unsigned 32-bit integer
    pcap.INTEGER_0_167
pcap.gps_TOW_1msec  gps-TOW-1msec
    Unsigned 32-bit integer
    pcap.INTEGER_0_604799999
pcap.gps_TOW_AssistList  gps-TOW-AssistList
    Unsigned 32-bit integer
    pcap.GPS_TOW_AssistList
```

```
pcap.gps_TOW_sec  gps-TOW-sec
    Unsigned 32-bit integer
    pcap.INTEGER_0_604799

pcap.gps_Transmission_TOW  gps-Transmission-TOW
    Unsigned 32-bit integer
    pcap.GPS_Transmission_TOW

pcap.gps_UTC_Model  gps-UTC-Model
    No value
    pcap.GPS_UTC_Model

pcap.gps_Week  gps-Week
    Unsigned 32-bit integer
    pcap.INTEGER_0_1023

pcap.gps_clockAndEphemerisParms  gps-clockAndEphemerisParms
    No value
    pcap.GPS_ClockAndEphemerisParameters

pcap.horizontalAccuracyCode  horizontalAccuracyCode
    Unsigned 32-bit integer
    pcap.HorizontalAccuracyCode

pcap.horizontalSpeed  horizontalSpeed
    Unsigned 32-bit integer
    pcap.INTEGER_0_2047

pcap.horizontalSpeedAndBearing  horizontalSpeedAndBearing
    No value
    pcap.HorizontalSpeedAndBearing

pcap.horizontalUncertaintySpeed  horizontalUncertaintySpeed
    Unsigned 32-bit integer
    pcap.INTEGER_0_255

pcap.horizontalVelocity  horizontalVelocity
    No value
    pcap.HorizontalVelocity

pcap.horizontalVelocityWithUncertainty  horizontalVelocityWithUncertainty
    No value
    pcap.HorizontalVelocityWithUncertainty

pcap.horizontalWithVerticalVelocity  horizontalWithVerticalVelocity
    No value
    pcap.HorizontalWithVerticalVelocity

pcap.horizontalWithVerticalVelocityAndUncertainty  horizontalWithVerticalVelocityAndUncertainty
    No value
    pcap.HorizontalWithVerticalVelocityAndUncertainty

pcap.horizontalaccuracyCode  horizontalaccuracyCode
    Unsigned 32-bit integer
    pcap.RequestTypeAccuracyCode

pcap.hour  hour
    Unsigned 32-bit integer
    pcap.INTEGER_1_24_

pcap.i0  i0
    Byte array
    pcap.BIT_STRING_SIZE_32
```

```
pcap.iDot iDot
  Byte array
  pcap.BIT_STRING_SIZE_14

pcap.iECriticality iECriticality
  Unsigned 32-bit integer
  pcap.Criticality

pcap.iE_Extensions iE-Extensions
  Unsigned 32-bit integer
  pcap.ProtocolExtensionContainer

pcap.iE_ID iE-ID
  Unsigned 32-bit integer
  pcap.ProtocolIE_ID

pcap.iEsCriticalityDiagnostics iEsCriticalityDiagnostics
  Unsigned 32-bit integer
  pcap.CriticalityDiagnostics_IE_List

pcap.i_zero_nav i-zero-nav
  Byte array
  pcap.BIT_STRING_SIZE_32

pcap.id id
  Unsigned 32-bit integer
  pcap.ProtocolIE_ID

pcap.idot_nav idot-nav
  Byte array
  pcap.BIT_STRING_SIZE_14

pcap.ie_Extensions ie-Extensions
  Unsigned 32-bit integer
  pcap.ProtocolExtensionContainer

pcap.implicitInformation implicitInformation
  Unsigned 32-bit integer
  pcap.MethodType

pcap.includedAngle includedAngle
  Unsigned 32-bit integer
  pcap.INTEGER_0_179

pcap.informationAvailable informationAvailable
  No value
  pcap.InformationAvailable

pcap.informationNotAvailable informationNotAvailable
  No value
  pcap.InformationNotAvailable

pcap.initialOffset initialOffset
  Unsigned 32-bit integer
  pcap.INTEGER_0_255

pcap.initiatingMessage initiatingMessage
  No value
  pcap.InitiatingMessage

pcap.innerRadius innerRadius
  Unsigned 32-bit integer
  pcap.INTEGER_0_65535
```



```
pcap.integerCodePhase integerCodePhase
    Unsigned 32-bit integer
    pcap.INTEGER_0_19

pcap.iod iod
    Byte array
    pcap.BIT_STRING_SIZE_10

pcap.iod_a iod-a
    Unsigned 32-bit integer
    pcap.INTEGER_0_3

pcap.iodc iodc
    Byte array
    pcap.BIT_STRING_SIZE_10

pcap.iode iode
    Unsigned 32-bit integer
    pcap.INTEGER_0_255

pcap.ionosphericModel ionosphericModel
    No value
    pcap.IonosphericModel

pcap.ionosphericModelRequest ionosphericModelRequest
    Boolean
    pcap.BOOLEAN

pcap.ip_Length ip-Length
    Unsigned 32-bit integer
    pcap.IP_Length

pcap.ip_Offset ip-Offset
    Unsigned 32-bit integer
    pcap.INTEGER_0_9

pcap.ip_Spacing ip-Spacing
    Unsigned 32-bit integer
    pcap.IP_Spacing

pcap.l2Pflag l2Pflag
    Byte array
    pcap.BIT_STRING_SIZE_1

pcap.latitude latitude
    Unsigned 32-bit integer
    pcap.INTEGER_0_8388607

pcap.latitudeSign latitudeSign
    Unsigned 32-bit integer
    pcap.T_latitudeSign

pcap.local local
    Unsigned 32-bit integer
    pcap.INTEGER_0_65535

pcap.longTID longTID
    Unsigned 32-bit integer
    pcap.INTEGER_0_32767

pcap.longitude longitude
    Signed 32-bit integer
    pcap.INTEGER_M8388608_8388607
```

```
pcap.ls_part  ls-part
    Unsigned 32-bit integer
    pcap.INTEGER_0_4294967295

pcap.lsbTOW  lsbTOW
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.m0  m0
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.m_zero_nav  m-zero-nav
    Byte array
    pcap.BIT_STRING_SIZE_32

pcap.maxPRACH_MidambleShifts  maxPRACH-MidambleShifts
    Unsigned 32-bit integer
    pcap.MaxPRACH_MidambleShifts

pcap.maxSet_E_DPDCHs  maxSet-E-DPDCHs
    Unsigned 32-bit integer
    pcap.Max_Set_E_DPDCHs

pcap.measurementDelay  measurementDelay
    Unsigned 32-bit integer
    pcap.INTEGER_0_65535

pcap.measurementValidity  measurementValidity
    No value
    pcap.MeasurementValidity

pcap.messageStructure  messageStructure
    Unsigned 32-bit integer
    pcap.MessageStructure

pcap.midambleAllocationMode  midambleAllocationMode
    Unsigned 32-bit integer
    pcap.T_midambleAllocationMode

pcap.midambleConfigurationBurstType1And3  midambleConfigurationBurstType1And3
    Unsigned 32-bit integer
    pcap.MidambleConfigurationBurstType1And3

pcap.midambleConfigurationBurstType2  midambleConfigurationBurstType2
    Unsigned 32-bit integer
    pcap.MidambleConfigurationBurstType2

pcap.midambleShiftAndBurstType  midambleShiftAndBurstType
    Unsigned 32-bit integer
    pcap.MidambleShiftAndBurstType

pcap.min  min
    Unsigned 32-bit integer
    pcap.INTEGER_1_60_

pcap.misc  misc
    Unsigned 32-bit integer
    pcap.CauseMisc

pcap.modeSpecificInfo  modeSpecificInfo
    Unsigned 32-bit integer
    pcap.T_modeSpecificInfo
```

```
pcap.model_id model-id
    Unsigned 32-bit integer
    pcap.INTEGER_0_3

pcap.ms_part ms-part
    Unsigned 32-bit integer
    pcap.INTEGER_0_16383

pcap.multipathIndicator multipathIndicator
    Unsigned 32-bit integer
    pcap.T_multipathIndicator

pcap.navModelAddDataRequest navModelAddDataRequest
    No value
    pcap.NavModelAdditionalData

pcap.navModelAdditionalData navModelAdditionalData
    No value
    pcap.NavModelAdditionalData

pcap.navigationModel navigationModel
    No value
    pcap.NavigationModel

pcap.navigationModelRequest navigationModelRequest
    Boolean
    pcap.BOOLEAN

pcap.networkAssistedGPSSupport networkAssistedGPSSupport
    Unsigned 32-bit integer
    pcap.NetworkAssistedGPSSupport

pcap.new_ue_State new-ue-State
    Unsigned 32-bit integer
    pcap.T_new_ue_State

pcap.noBadSatellites noBadSatellites
    No value
    pcap.NoBadSatellites

pcap.noinitialOffset noinitialOffset
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.non_broadcastIndication non-broadcastIndication
    Unsigned 32-bit integer
    pcap.T_non_broadcastIndication

pcap.numberOfFBI_Bits numberOfFBI-Bits
    Unsigned 32-bit integer
    pcap.NumberOfFBI_Bits

pcap.numberOfMeasurements numberOfMeasurements
    Byte array
    pcap.BIT_STRING_SIZE_3

pcap.numberOfTbs numberOfTbs
    Unsigned 32-bit integer
    pcap.TransportFormatSet_NrOfTransportBlocks

pcap.numberOfTbsTTIList numberOfTbsTTIList
    Unsigned 32-bit integer
    pcap.SEQUENCE_SIZE_1_maxNrOfTFs_OF_TbsTTIInfo
```

```
pcap.numberOfTbsTTIList_item  Item
    No value
    pcap.TbsTTIInfo

pcap.offsetAngle  offsetAngle
    Unsigned 32-bit integer
    pcap.INTEGER_0_179

pcap.omega  omega
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.omega0  omega0
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.omegaDot  omegaDot
    Byte array
    pcap.BIT_STRING_SIZE_16

pcap.omega_zero_nav  omega-zero-nav
    Byte array
    pcap.BIT_STRING_SIZE_32

pcap.omegadot_nav  omegadot-nav
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.orientationOfMajorAxis  orientationOfMajorAxis
    Unsigned 32-bit integer
    pcap.INTEGER_0_89

pcap.otdoa_MeasuredResultsSets  otdoa-MeasuredResultsSets
    Unsigned 32-bit integer
    pcap.OTDOA_MeasuredResultsSets

pcap.otdoa_NeighbourCellInfoList  otdoa-NeighbourCellInfoList
    Unsigned 32-bit integer
    pcap.OTDOA_NeighbourCellInfoList

pcap.otdoa_ReferenceCellInfo  otdoa-ReferenceCellInfo
    No value
    pcap.OTDOA_ReferenceCellInfo

pcap.outcome  outcome
    No value
    pcap.Outcome

pcap.pRACH_Info  pRACH-Info
    Unsigned 32-bit integer
    pcap.PRACH_Info

pcap.pRACH_Midamble  pRACH-Midamble
    Unsigned 32-bit integer
    pcap.PRACH_Midamble

pcap.pRACHparameters  pRACHparameters
    Unsigned 32-bit integer
    pcap.PRACHparameters

pcap.pathloss  pathloss
    Unsigned 32-bit integer
    pcap.Pathloss
```

```
pcap.pathlossWanted  pathlossWanted
    Boolean
    pcap.BOOLEAN

pcap.periodicity  periodicity
    Unsigned 32-bit integer
    pcap.InformationReportPeriodicity

pcap.point  point
    No value
    pcap.GA_Point

pcap.pointWithAltitude  pointWithAltitude
    No value
    pcap.GA_PointWithAltitude

pcap.pointWithAltitudeAndUncertaintyEllipsoid  pointWithAltitudeAndUncertaintyEl
    No value
    pcap.GA_PointWithAltitudeAndUncertaintyEllipsoid

pcap.pointWithUnCertainty  pointWithUnCertainty
    No value
    pcap.GA_PointWithUnCertainty

pcap.pointWithUncertaintyEllipse  pointWithUncertaintyEllipse
    No value
    pcap.GA_PointWithUnCertaintyEllipse

pcap.polygon  polygon
    Unsigned 32-bit integer
    pcap.GA_Polygon

pcap.positioningDataDiscriminator  positioningDataDiscriminator
    Byte array
    pcap.PositioningDataDiscriminator

pcap.positioningDataSet  positioningDataSet
    Unsigned 32-bit integer
    pcap.PositioningDataSet

pcap.positioningMode  positioningMode
    Unsigned 32-bit integer
    pcap.T_positioningMode

pcap.prc  prc
    Signed 32-bit integer
    pcap.PRC

pcap.preambleScramblingCodeWordNumber  preambleScramblingCodeWordNumber
    Unsigned 32-bit integer
    pcap.PreambleScramblingCodeWordNumber

pcap.primaryCPICH_Info  primaryCPICH-Info
    Unsigned 32-bit integer
    pcap.PrimaryScramblingCode

pcap.primaryScramblingCode  primaryScramblingCode
    Unsigned 32-bit integer
    pcap.PrimaryScramblingCode

pcap.privateIEs  privateIEs
    Unsigned 32-bit integer
    pcap.PrivateIE_Container
```

```
pcap.procedureCode procedureCode
    Unsigned 32-bit integer
    pcap.ProcedureCode

pcap.procedureCriticality procedureCriticality
    Unsigned 32-bit integer
    pcap.Criticality

pcap.protocol protocol
    Unsigned 32-bit integer
    pcap.CauseProtocol

pcap.protocolExtensions protocolExtensions
    Unsigned 32-bit integer
    pcap.ProtocolExtensionContainer

pcap.protocolIEs protocolIEs
    Unsigned 32-bit integer
    pcap.ProtocolIE_Container

pcap.pseudorangeRMS_Error pseudorangeRMS-Error
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.punctureLimit punctureLimit
    Unsigned 32-bit integer
    pcap.PuncturingLimit

pcap.puncturingLimit puncturingLimit
    Unsigned 32-bit integer
    pcap.PuncturingLimit

pcap.rNC_ID rNC-ID
    Unsigned 32-bit integer
    pcap.INTEGER_0_4095

pcap.radioNetwork radioNetwork
    Unsigned 32-bit integer
    pcap.CauseRadioNetwork

pcap.rateMatchingAttribute rateMatchingAttribute
    Unsigned 32-bit integer
    pcap.TransportFormatSet_RateMatchingAttribute

pcap.realTimeIntegrity realTimeIntegrity
    No value
    pcap.RealTimeIntegrity

pcap.realTimeIntegrityRequest realTimeIntegrityRequest
    Boolean
    pcap.BOOLEAN

pcap.referenceLocation referenceLocation
    No value
    pcap.ReferenceLocation

pcap.referenceLocationRequest referenceLocationRequest
    Boolean
    pcap.BOOLEAN

pcap.referenceNumber referenceNumber
    Unsigned 32-bit integer
    pcap.INTEGER_0_32767_
```

```
pcap.referencePosition  referencePosition
    No value
    pcap.RefPosition_InfEx_Rqst
pcap.referencePositionEstimate  referencePositionEstimate
    Unsigned 32-bit integer
    pcap.UE_PositionEstimate
pcap.referenceSfn  referenceSfn
    Unsigned 32-bit integer
    pcap.INTEGER_0_4095
pcap.referenceTime  referenceTime
    Unsigned 32-bit integer
    pcap.T_referenceTime
pcap.referenceTimeChoice  referenceTimeChoice
    Unsigned 32-bit integer
    pcap.ReferenceTimeChoice
pcap.referenceTimeRequest  referenceTimeRequest
    Boolean
    pcap.BOOLEAN
pcap.referenceUC_ID  referenceUC-ID
    No value
    pcap.UC_ID
pcap.reference_E_TFCI  reference-E-TFCI
    Unsigned 32-bit integer
    pcap.E_TFCI
pcap.reference_E_TFCI_Information  reference-E-TFCI-Information
    Unsigned 32-bit integer
    pcap.Reference_E_TFCI_Information
pcap.reference_E_TFCI_PO  reference-E-TFCI-PO
    Unsigned 32-bit integer
    pcap.Reference_E_TFCI_PO
pcap.relativeAltitude  relativeAltitude
    Signed 32-bit integer
    pcap.INTEGER_M4000_4000
pcap.relativeEast  relativeEast
    Signed 32-bit integer
    pcap.INTEGER_M20000_20000
pcap.relativeNorth  relativeNorth
    Signed 32-bit integer
    pcap.INTEGER_M20000_20000
pcap.relativeTimingDifferenceInfo  relativeTimingDifferenceInfo
    Unsigned 32-bit integer
    pcap.RelativeTimingDifferenceInfo
pcap.repetitionLength  repetitionLength
    Unsigned 32-bit integer
    pcap.RepetitionLength
pcap.repetitionNumber  repetitionNumber
    Unsigned 32-bit integer
    pcap.CriticalityDiagnosticsRepetition
```

```
pcap.repetitionPeriod  repetitionPeriod
    Unsigned 32-bit integer
    pcap.RepetitionPeriod

pcap.reportArea  reportArea
    Unsigned 32-bit integer
    pcap.RequestTypeReportArea

pcap.reportingAmount  reportingAmount
    Unsigned 32-bit integer
    pcap.INTEGER_1_8639999_

pcap.reportingInterval  reportingInterval
    Unsigned 32-bit integer
    pcap.INTEGER_1_8639999_

pcap.requestedCellIDMeasurements  requestedCellIDMeasurements
    Unsigned 32-bit integer
    pcap.RequestedCellIDMeasurements

pcap.requestedDataValue  requestedDataValue
    No value
    pcap.RequestedDataValue

pcap.requestedDataValueInformation  requestedDataValueInformation
    Unsigned 32-bit integer
    pcap.RequestedDataValueInformation

pcap.reserved1  reserved1
    Byte array
    pcap.BIT_STRING_SIZE_23

pcap.reserved2  reserved2
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.reserved3  reserved3
    Byte array
    pcap.BIT_STRING_SIZE_24

pcap.reserved4  reserved4
    Byte array
    pcap.BIT_STRING_SIZE_16

pcap.rlc_Size  rlc-Size
    Unsigned 32-bit integer
    pcap.RLC_Size

pcap.roundTripTime  roundTripTime
    Unsigned 32-bit integer
    pcap.RoundTripTime

pcap.roundTripTimeInfo  roundTripTimeInfo
    No value
    pcap.RoundTripTimeInfo

pcap.roundTripTimeInfoWanted  roundTripTimeInfoWanted
    Boolean
    pcap.BOOLEAN

pcap.roundTripTimeInfoWithTypelWanted  roundTripTimeInfoWithTypelWanted
    Boolean
    pcap.BOOLEAN
```



```
pcap.rrc rrc
Signed 32-bit integer
pcap.RRC

pcap.rxTimingDeviation rxTimingDeviation
Unsigned 32-bit integer
pcap.RxTimingDeviation

pcap.rxTimingDeviation384ext rxTimingDeviation384ext
Unsigned 32-bit integer
pcap.RxTimingDeviation384ext

pcap.rxTimingDeviation384extInfoWanted rxTimingDeviation384extInfoWanted
Boolean
pcap.BOOLEAN

pcap.rxTimingDeviation768 rxTimingDeviation768
Unsigned 32-bit integer
pcap.RxTimingDeviation768

pcap.rxTimingDeviation768InfoWanted rxTimingDeviation768InfoWanted
Boolean
pcap.BOOLEAN

pcap.rxTimingDeviationInfo rxTimingDeviationInfo
No value
pcap.RxTimingDeviationInfo

pcap.rxTimingDeviationInfoWanted rxTimingDeviationInfoWanted
Boolean
pcap.BOOLEAN

pcap.rxTimingDeviationLCR rxTimingDeviationLCR
Unsigned 32-bit integer
pcap.RxTimingDeviationLCR

pcap.rxTimingDeviationLCRInfo rxTimingDeviationLCRInfo
No value
pcap.RxTimingDeviationLCRInfo

pcap.rxTimingDeviationLCRInfoWanted rxTimingDeviationLCRInfoWanted
Boolean
pcap.BOOLEAN

pcap.sFN sFN
Unsigned 32-bit integer
pcap.SFN

pcap.sFNSFNDriftRate sFNSFNDriftRate
Signed 32-bit integer
pcap.SFNSFNDriftRate

pcap.sFNSFNDriftRateQuality sFNSFNDriftRateQuality
Unsigned 32-bit integer
pcap.SFNSFNDriftRateQuality

pcap.sFNSFNMeasurementValueInfo sFNSFNMeasurementValueInfo
No value
pcap.SFNSFNMeasurementValueInfo

pcap.sFNSFNQuality sFNSFNQuality
Unsigned 32-bit integer
pcap.SFNSFNQuality
```

```
pcap.sfNSFNValue sfNSFNValue
    Unsigned 32-bit integer
    pcap.SFNSFNValue

pcap.satHealth satHealth
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.satID satID
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.satId satId
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.satMask satMask
    Byte array
    pcap.BIT_STRING_SIZE_1_32

pcap.satRelatedDataList satRelatedDataList
    Unsigned 32-bit integer
    pcap.SatelliteRelatedDataList

pcap.satRelatedDataListGANSS satRelatedDataListGANSS
    Unsigned 32-bit integer
    pcap.SatelliteRelatedDataListGANSS

pcap.satelliteID satelliteID
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.satelliteInformation satelliteInformation
    Unsigned 32-bit integer
    pcap.GANSS_SatelliteInformation

pcap.satelliteInformationList satelliteInformationList
    Unsigned 32-bit integer
    pcap.AcquisitionSatInfoList

pcap.satelliteStatus satelliteStatus
    Unsigned 32-bit integer
    pcap.SatelliteStatus

pcap.scramblingCode scramblingCode
    Unsigned 32-bit integer
    pcap.UL_ScramblingCode

pcap.scramblingCodeType scramblingCodeType
    Unsigned 32-bit integer
    pcap.ScramblingCodeType

pcap.searchWindowSize searchWindowSize
    Unsigned 32-bit integer
    pcap.OTDOA_SearchWindowSize

pcap.seed seed
    Unsigned 32-bit integer
    pcap.INTEGER_0_63

pcap.selectedPositionMethod selectedPositionMethod
    Unsigned 32-bit integer
    pcap.SelectedPositionMethod
```

```
pcap.semi_staticPart  semi-staticPart
    No value
    pcap.TransportFormatSet_Semi_staticPart
pcap.sf1Revd  sf1Revd
    No value
    pcap.SubFrame1Reserved
pcap.sfn  sfn
    Unsigned 32-bit integer
    pcap.INTEGER_0_4095
pcap.sfn_Offset  sfn-Offset
    Unsigned 32-bit integer
    pcap.INTEGER_0_4095
pcap.sfn_Offset_Validity  sfn-Offset-Validity
    Unsigned 32-bit integer
    pcap.SFN_Offset_Validity
pcap.sfn_SFN_Drift  sfn-SFN-Drift
    Unsigned 32-bit integer
    pcap.SFN_SFN_Drift
pcap.sfn_SFN_RelTimeDifference  sfn-SFN-RelTimeDifference
    No value
    pcap.SFN_SFN_RelTimeDifference1
pcap.sfn_sfn_Reltimedifference  sfn-sfn-Reltimedifference
    Unsigned 32-bit integer
    pcap.INTEGER_0_38399
pcap.shortTID  shortTID
    Unsigned 32-bit integer
    pcap.INTEGER_0_127
pcap.signature0  signature0
    Boolean
pcap.signature1  signature1
    Boolean
pcap.signature10  signature10
    Boolean
pcap.signature11  signature11
    Boolean
pcap.signature12  signature12
    Boolean
pcap.signature13  signature13
    Boolean
pcap.signature14  signature14
    Boolean
pcap.signature15  signature15
    Boolean
pcap.signature2  signature2
    Boolean
```

```

pcap.signature3  signature3
  Boolean
pcap.signature4  signature4
  Boolean
pcap.signature5  signature5
  Boolean
pcap.signature6  signature6
  Boolean
pcap.signature7  signature7
  Boolean
pcap.signature8  signature8
  Boolean
pcap.signature9  signature9
  Boolean
pcap.specialBurstScheduling  specialBurstScheduling
  Unsigned 32-bit integer
  pcap.SpecialBurstScheduling
pcap.sqrtA_msb  sqrtA-msb
  Unsigned 32-bit integer
  pcap.INTEGER_0_63
pcap.standAloneLocationMethodsSupported  standAloneLocationMethodsSupported
  Boolean
  pcap.BOOLEAN
pcap.statusHealth  statusHealth
  Unsigned 32-bit integer
  pcap.DiffCorrectionStatus
pcap.stdOfMeasurements  stdOfMeasurements
  Byte array
  pcap.BIT_STRING_SIZE_5
pcap.stdResolution  stdResolution
  Byte array
  pcap.BIT_STRING_SIZE_2
pcap.storm_flag_five  storm-flag-five
  Boolean
  pcap.BOOLEAN
pcap.storm_flag_four  storm-flag-four
  Boolean
  pcap.BOOLEAN
pcap.storm_flag_one  storm-flag-one
  Boolean
  pcap.BOOLEAN
pcap.storm_flag_three  storm-flag-three
  Boolean
  pcap.BOOLEAN
pcap.storm_flag_two  storm-flag-two
  Boolean
  pcap.BOOLEAN

```

```
pcap.subCh0    subCh0
  Boolean

pcap.subCh1    subCh1
  Boolean

pcap.subCh10   subCh10
  Boolean

pcap.subCh11   subCh11
  Boolean

pcap.subCh2    subCh2
  Boolean

pcap.subCh3    subCh3
  Boolean

pcap.subCh4    subCh4
  Boolean

pcap.subCh5    subCh5
  Boolean

pcap.subCh6    subCh6
  Boolean

pcap.subCh7    subCh7
  Boolean

pcap.subCh8    subCh8
  Boolean

pcap.subCh9    subCh9
  Boolean

pcap.successfulOutcome  successfulOutcome
  No value
  pcap.SuccessfulOutcome

pcap.supportForIPDL  supportForIPDL
  Boolean
  pcap.BOOLEAN

pcap.supportForRxTxTimeDiff  supportForRxTxTimeDiff
  Boolean
  pcap.BOOLEAN

pcap.supportForSFNSFNTIMEDiff  supportForSFNSFNTIMEDiff
  Boolean
  pcap.BOOLEAN

pcap.supportForUEAGPSinCellPCH  supportForUEAGPSinCellPCH
  Boolean
  pcap.BOOLEAN

pcap.supportGANSSCarrierPhaseMeasurement  supportGANSSCarrierPhaseMeasurement
  Boolean
  pcap.BOOLEAN

pcap.supportGANSSTimingOfCellFrame  supportGANSSTimingOfCellFrame
  Boolean
  pcap.BOOLEAN
```

```
pcap.supportGPSTimingOfCellFrame  supportGPSTimingOfCellFrame
  Boolean
  pcap.BOOLEAN

pcap.svgGlobalHealth  svgGlobalHealth
  Byte array
  pcap.BIT_STRING_SIZE_364

pcap.svgHealth  svgHealth
  Byte array
  pcap.BIT_STRING_SIZE_5

pcap.tFCI_Coding  tFCI-Coding
  Unsigned 32-bit integer
  pcap.TFCI_Coding

pcap.tFCI_Presence  tFCI-Presence
  Boolean
  pcap.BOOLEAN

pcap.tFCS  tFCS
  Unsigned 32-bit integer
  pcap.TFCS

pcap.tFS  tFS
  No value
  pcap.TransportFormatSet

pcap.tGCFN  tGCFN
  Unsigned 32-bit integer
  pcap.CFN

pcap.tGD  tGD
  Unsigned 32-bit integer
  pcap.TGD

pcap.tGL1  tGL1
  Unsigned 32-bit integer
  pcap.GapLength

pcap.tGL2  tGL2
  Unsigned 32-bit integer
  pcap.GapLength

pcap.tGPL1  tGPL1
  Unsigned 32-bit integer
  pcap.GapDuration

pcap.tGPRC  tGPRC
  Unsigned 32-bit integer
  pcap.TGPRC

pcap.tGPSID  tGPSID
  Unsigned 32-bit integer
  pcap.TGPSID

pcap.tGSN  tGSN
  Unsigned 32-bit integer
  pcap.TGSN

pcap.tTIInfo  tTIInfo
  Unsigned 32-bit integer
  pcap.TransportFormatSet_TransmissionTimeIntervalDynamic
```

```
pcap.tUTRANGANSS tUTRANGANSS
    No value
    pcap.TUTRANGANSS

pcap.tUTRANGANSSDriftRate tUTRANGANSSDriftRate
    Signed 32-bit integer
    pcap.INTEGER_M50_50

pcap.tUTRANGANSSDriftRateQuality tUTRANGANSSDriftRateQuality
    Unsigned 32-bit integer
    pcap.INTEGER_0_50

pcap.tUTRANGANSSMeasurementValueInfo tUTRANGANSSMeasurementValueInfo
    No value
    pcap.TUTRANGANSSMeasurementValueInfo

pcap.tUTRANGANSSQuality tUTRANGANSSQuality
    Unsigned 32-bit integer
    pcap.INTEGER_0_255

pcap.tUTRANGPS tUTRANGPS
    No value
    pcap.TUTRANGPS

pcap.tUTRANGPSDriftRate tUTRANGPSDriftRate
    Signed 32-bit integer
    pcap.TUTRANGPSDriftRate

pcap.tUTRANGPSDriftRateQuality tUTRANGPSDriftRateQuality
    Unsigned 32-bit integer
    pcap.TUTRANGPSDriftRateQuality

pcap.tUTRANGPSMeasurementValueInfo tUTRANGPSMeasurementValueInfo
    No value
    pcap.TUTRANGPSMeasurementValueInfo

pcap.tUTRANGPSQuality tUTRANGPSQuality
    Unsigned 32-bit integer
    pcap.TUTRANGPSQuality

pcap.t_GD t-GD
    Byte array
    pcap.BIT_STRING_SIZE_8

pcap.t_TOE_limit t-TOE-limit
    Unsigned 32-bit integer
    pcap.INTEGER_0_10

pcap.t_gd t-gd
    Byte array
    pcap.BIT_STRING_SIZE_10

pcap.t_oa t-oa
    Unsigned 32-bit integer
    pcap.INTEGER_0_255

pcap.t_oc t-oc
    Byte array
    pcap.BIT_STRING_SIZE_16

pcap.t_oc_lsb t-oc-lsb
    Unsigned 32-bit integer
    pcap.INTEGER_0_511
```

```
pcap.t_oe t-oe
  Byte array
  pcap.BIT_STRING_SIZE_16

pcap.t_ot t-ot
  Byte array
  pcap.BIT_STRING_SIZE_8

pcap.t_ot_utc t-ot-utc
  Byte array
  pcap.BIT_STRING_SIZE_8

pcap.t_toe_limit t-toe-limit
  Unsigned 32-bit integer
  pcap.INTEGER_0_10

pcap.tdd tdd
  No value
  pcap.T_tdd

pcap.tdd_ChannelisationCode tdd-ChannelisationCode
  Unsigned 32-bit integer
  pcap.TDD_ChannelisationCode

pcap.tdd_DPCHOffset tdd-DPCHOffset
  Unsigned 32-bit integer
  pcap.TDD_DPCHOffset

pcap.tfci_Existence tfci-Existence
  Boolean
  pcap.BOOLEAN

pcap.tfs tfs
  No value
  pcap.TransportFormatSet

pcap.timeSlot timeSlot
  Unsigned 32-bit integer
  pcap.TimeSlot

pcap.timingAdvance timingAdvance
  Unsigned 32-bit integer
  pcap.TimingAdvance

pcap.timingAdvance384ext timingAdvance384ext
  Unsigned 32-bit integer
  pcap.TimingAdvance384ext

pcap.timingAdvance768 timingAdvance768
  Unsigned 32-bit integer
  pcap.TimingAdvance768

pcap.timingAdvanceLCR timingAdvanceLCR
  Unsigned 32-bit integer
  pcap.TimingAdvanceLCR

pcap.timingAdvanceLCRWanted timingAdvanceLCRWanted
  Boolean
  pcap.BOOLEAN

pcap.timingAdvanceLCR_R7 timingAdvanceLCR-R7
  Unsigned 32-bit integer
  pcap.TimingAdvanceLCR_R7
```



```
pcap.tlm_Message  tlm-Message
  Byte array
  pcap.BIT_STRING_SIZE_14
pcap.tlm_Reserved  tlm-Reserved
  Byte array
  pcap.BIT_STRING_SIZE_2
pcap.toe_c_msb    toe-c-msb
  Unsigned 32-bit integer
  pcap.INTEGER_0_31
pcap.toe_lsb_nav  toe-lsb-nav
  Unsigned 32-bit integer
  pcap.INTEGER_0_511
pcap.trChInfo    trChInfo
  Unsigned 32-bit integer
  pcap.TrChInfoList
pcap.transactionID  transactionID
  Unsigned 32-bit integer
  pcap.TransactionID
pcap.transmissionGanssTimeIndicator  transmissionGanssTimeIndicator
  Unsigned 32-bit integer
  pcap.TransmissionGanssTimeIndicator
pcap.transmissionGapPatternSequenceInfo  transmissionGapPatternSequenceInfo
  Unsigned 32-bit integer
  pcap.Transmission_Gap_Pattern_Sequence_Information
pcap.transmissionTOWIndicator  transmissionTOWIndicator
  Unsigned 32-bit integer
  pcap.TransmissionTOWIndicator
pcap.transmissionTimeInterval  transmissionTimeInterval
  Unsigned 32-bit integer
  pcap.TransportFormatSet_TransmissionTimeIntervalSemiStatic
pcap.transmission_Gap_Pattern_Sequence_Status  transmission-Gap-Pattern-Sequence
  Unsigned 32-bit integer
  pcap.Transmission_Gap_Pattern_Sequence_Status_List
pcap.transport  transport
  Unsigned 32-bit integer
  pcap.CauseTransport
pcap.triggeringMessage  triggeringMessage
  Unsigned 32-bit integer
  pcap.TriggeringMessage
pcap.tutran_ganss_driftRate  tutran-ganss-driftRate
  Unsigned 32-bit integer
  pcap.TUTRAN_GANSS_DriftRate
pcap.type  type
  Unsigned 32-bit integer
  pcap.InformationReportCharacteristicsType
pcap.type1  type1
  No value
  pcap.T_type1
```

```
pcap.type2 type2
    No value
    pcap.T_type2
pcap.type3 type3
    No value
    pcap.T_type3
pcap.typeOfError typeOfError
    Unsigned 32-bit integer
    pcap.TypeOfError
pcap.uC_ID uC-ID
    No value
    pcap.UC_ID
pcap.uE_Positioning_OTDOA_AssistanceData uE-Positioning-OTDOA-AssistanceData
    No value
    pcap.UE_Positioning_OTDOA_AssistanceData
pcap.uL_Code_InformationList uL-Code-InformationList
    Unsigned 32-bit integer
    pcap.TDD_UL_Code_Information
pcap.uL_DPCHInfo uL-DPCHInfo
    Unsigned 32-bit integer
    pcap.UL_DPCHInfo
pcap.uL_Timeslot_Information uL-Timeslot-Information
    Unsigned 32-bit integer
    pcap.UL_Timeslot_Information
pcap.uL_TrCHtype uL-TrCHtype
    Unsigned 32-bit integer
    pcap.UL_TrCHtype
pcap.uSCH_SchedulingOffset uSCH-SchedulingOffset
    Unsigned 32-bit integer
    pcap.USCH_SchedulingOffset
pcap.uTDOA_CELLDCH uTDOA-CELLDCH
    No value
    pcap.UTDOA_CELLDCH
pcap.uTDOA_CELLFACH uTDOA-CELLFACH
    No value
    pcap.UTDOA_CELLFACH
pcap.uTDOA_ChannelSettings uTDOA-ChannelSettings
    Unsigned 32-bit integer
    pcap.UTDOA_RRCState
pcap.uTRANAccessPointPositionAltitude uTRANAccessPointPositionAltitude
    No value
    pcap.UTRANAccessPointPositionAltitude
pcap.uarfcn uarfcn
    Unsigned 32-bit integer
    pcap.UARFCN
pcap.uarfcn_DL uarfcn-DL
    Unsigned 32-bit integer
    pcap.UARFCN
```

```
pcap.uarfcn_UL    uarfcn-UL
    Unsigned 32-bit integer
    pcap.UARFCN

pcap.udre    udre
    Unsigned 32-bit integer
    pcap.UDRE

pcap.ueAssisted    ueAssisted
    No value
    pcap.T_ueAssisted

pcap.ueBased    ueBased
    No value
    pcap.T_ueBased

pcap.ueBasedOTDOASupported    ueBasedOTDOASupported
    Boolean
    pcap.BOOLEAN

pcap.ueSpecificMidamble    ueSpecificMidamble
    Unsigned 32-bit integer
    pcap.MidambleShiftLong

pcap.ue_GANSSTimingOfCellFrames    ue-GANSSTimingOfCellFrames
    Unsigned 32-bit integer
    pcap.T_ue_GANSSTimingOfCellFrames

pcap.ue_GPSTimingOfCell    ue-GPSTimingOfCell
    Unsigned 32-bit integer
    pcap.T_ue_GPSTimingOfCell

pcap.ue_PositionEstimate    ue-PositionEstimate
    Unsigned 32-bit integer
    pcap.UE_PositionEstimate

pcap.ue_PositioningMeasQuality    ue-PositioningMeasQuality
    No value
    pcap.UE_PositioningMeasQuality

pcap.ue_RxTxTimeDifferenceType1    ue-RxTxTimeDifferenceType1
    Unsigned 32-bit integer
    pcap.UE_RxTxTimeDifferenceType1

pcap.ue_RxTxTimeDifferenceType2    ue-RxTxTimeDifferenceType2
    Unsigned 32-bit integer
    pcap.UE_RxTxTimeDifferenceType2

pcap.ue_SFNSFNTimeDifferenceType2    ue-SFNSFNTimeDifferenceType2
    Unsigned 32-bit integer
    pcap.INTEGER_0_40961

pcap.ue_SFNSFNTimeDifferenceType2Info    ue-SFNSFNTimeDifferenceType2Info
    No value
    pcap.UE_SFNSFNTimeDifferenceType2Info

pcap.ue_State    ue-State
    Unsigned 32-bit integer
    pcap.T_ue_State

pcap.ue_positionEstimate    ue-positionEstimate
    Unsigned 32-bit integer
    pcap.UE_PositionEstimate
```

```
pcap.ue_positioning_IPDL_Paremeters  ue-positioning-IPDL-Paremeters
    No value
    pcap.UE_Positioning_IPDL_Parameters
pcap.ue_positioning_OTDOA_NeighbourCellList  ue-positioning-OTDOA-NeighbourCellList
    Unsigned 32-bit integer
    pcap.UE_Positioning_OTDOA_NeighbourCellList
pcap.ue_positioning_OTDOA_ReferenceCellInfo  ue-positioning-OTDOA-ReferenceCellInfo
    No value
    pcap.UE_Positioning_OTDOA_ReferenceCellInfo
pcap.ul_PunctureLimit  ul-PunctureLimit
    Unsigned 32-bit integer
    pcap.PuncturingLimit
pcap.ul_information  ul-information
    No value
    pcap.UL_InformationFDD
pcap.uncertaintyAltitude  uncertaintyAltitude
    Unsigned 32-bit integer
    pcap.INTEGER_0_127
pcap.uncertaintyCode  uncertaintyCode
    Unsigned 32-bit integer
    pcap.INTEGER_0_127
pcap.uncertaintyEllipse  uncertaintyEllipse
    No value
    pcap.GA_UncertaintyEllipse
pcap.uncertaintyRadius  uncertaintyRadius
    Unsigned 32-bit integer
    pcap.INTEGER_0_127
pcap.uncertaintySemi_major  uncertaintySemi-major
    Unsigned 32-bit integer
    pcap.INTEGER_0_127
pcap.uncertaintySemi_minor  uncertaintySemi-minor
    Unsigned 32-bit integer
    pcap.INTEGER_0_127
pcap.uncertaintySpeed  uncertaintySpeed
    Unsigned 32-bit integer
    pcap.INTEGER_0_255
pcap.unsuccessfulOutcome  unsuccessfulOutcome
    No value
    pcap.UnsuccessfulOutcome
pcap.uplink_Compressed_Mode_Method  uplink-Compressed-Mode-Method
    Unsigned 32-bit integer
    pcap.Uplink_Compressed_Mode_Method
pcap.uraIndex  uraIndex
    Byte array
    pcap.BIT_STRING_SIZE_4
pcap.uschParameters  uschParameters
    No value
    pcap.UschParameters
```

```
pcap.utcModel    utcModel
    No value
    pcap.UtcModel

pcap.utcModelRequest    utcModelRequest
    Boolean
    pcap.BOOLEAN

pcap.utdoa_BitCount    utdoa-BitCount
    Unsigned 32-bit integer
    pcap.UTDOA_BitCount

pcap.utdoa_timeInterval    utdoa-timeInterval
    Unsigned 32-bit integer
    pcap.UTDOA_TimeInterval

pcap.utranReferenceTime    utranReferenceTime
    No value
    pcap.UTRAN_GANSSReferenceTimeUL

pcap.utran_GANSSTimingOfCellFrames    utran-GANSSTimingOfCellFrames
    Unsigned 32-bit integer
    pcap.INTEGER_0_3999999

pcap.utran_GPSReferenceTimeResult    utran-GPSReferenceTimeResult
    No value
    pcap.UTRAN_GPSReferenceTimeResult

pcap.utran_GPSTimingOfCell    utran-GPSTimingOfCell
    Unsigned 32-bit integer
    pcap.T_utran_GPSTimingOfCell

pcap.utran_ganssreferenceTime    utran-ganssreferenceTime
    No value
    pcap.UTRAN_GANSSReferenceTimeDL

pcap.value    value
    No value
    pcap.T_ie_field_value

pcap.verticalAccuracyCode    verticalAccuracyCode
    Unsigned 32-bit integer
    pcap.VerticalAccuracyCode

pcap.verticalSpeed    verticalSpeed
    Unsigned 32-bit integer
    pcap.INTEGER_0_255

pcap.verticalSpeedDirection    verticalSpeedDirection
    Unsigned 32-bit integer
    pcap.VerticalSpeedDirection

pcap.verticalUncertaintySpeed    verticalUncertaintySpeed
    Unsigned 32-bit integer
    pcap.INTEGER_0_255

pcap.verticalVelocity    verticalVelocity
    No value
    pcap.VerticalVelocity

pcap.w_n_lsf_utc    w-n-lsf-utc
    Byte array
    pcap.BIT_STRING_SIZE_8
```

```
pcap.w_n_t_utc  w-n-t-utc
  Byte array
  pcap.BIT_STRING_SIZE_8
```

```
pcap.weekNumber  weekNumber
  Unsigned 32-bit integer
  pcap.INTEGER_0_255
```

```
pcap.wholeGPS_Chips  wholeGPS-Chips
  Unsigned 32-bit integer
  pcap.INTEGER_0_1022
```

```
pcap.wn_a  wn-a
  Byte array
  pcap.BIT_STRING_SIZE_8
```

```
pcap.wn_lsf  wn-lsf
  Byte array
  pcap.BIT_STRING_SIZE_8
```

```
pcap.wn_t  wn-t
  Byte array
  pcap.BIT_STRING_SIZE_8
```

#### UTRAN Iur interface Radio Network Subsystem Application Part (rnsap)

```
rnsap.Active_MBMS_Bearer_Service_ListFDD  Active-MBMS-Bearer-Service-ListFDD
  Unsigned 32-bit integer
  rnsap.Active_MBMS_Bearer_Service_ListFDD
```

```
rnsap.Active_MBMS_Bearer_Service_ListFDD_PFL  Active-MBMS-Bearer-Service-ListFDD
  Unsigned 32-bit integer
  rnsap.Active_MBMS_Bearer_Service_ListFDD_PFL
```

```
rnsap.Active_MBMS_Bearer_Service_ListFDD_PFL_item  Item
  No value
  rnsap.MBMS_Bearer_ServiceItemFDD_PFL
```

```
rnsap.Active_MBMS_Bearer_Service_ListFDD_item  Item
  No value
  rnsap.MBMS_Bearer_ServiceItemFDD
```

```
rnsap.Active_MBMS_Bearer_Service_ListTDD  Active-MBMS-Bearer-Service-ListTDD
  Unsigned 32-bit integer
  rnsap.Active_MBMS_Bearer_Service_ListTDD
```

```
rnsap.Active_MBMS_Bearer_Service_ListTDD_PFL  Active-MBMS-Bearer-Service-ListTDD
  Unsigned 32-bit integer
  rnsap.Active_MBMS_Bearer_Service_ListTDD_PFL
```

```
rnsap.Active_MBMS_Bearer_Service_ListTDD_PFL_item  Item
  No value
  rnsap.MBMS_Bearer_ServiceItemTDD_PFL
```

```
rnsap.Active_MBMS_Bearer_Service_ListTDD_item  Item
  No value
  rnsap.MBMS_Bearer_ServiceItemTDD
```

```
rnsap.Active_Pattern_Sequence_Information  Active-Pattern-Sequence-Information
  No value
  rnsap.Active_Pattern_Sequence_Information
```

```

rnsap.AdditionalPreferredFrequency_item  Item
    No value
    rnsap.AdditionalPreferredFrequencyItem
rnsap.AdjustmentPeriod  AdjustmentPeriod
    Unsigned 32-bit integer
    rnsap.AdjustmentPeriod
rnsap.AffectedUEInformationForMBMS_item  Item
    Unsigned 32-bit integer
    rnsap.S_RNTI
rnsap.AllowedQueuingTime  AllowedQueuingTime
    Unsigned 32-bit integer
    rnsap.AllowedQueuingTime
rnsap.Allowed_Rate_Information  Allowed-Rate-Information
    No value
    rnsap.Allowed_Rate_Information
rnsap.AlternativeFormatReportingIndicator  AlternativeFormatReportingIndicator
    Unsigned 32-bit integer
    rnsap.AlternativeFormatReportingIndicator
rnsap.Angle_Of_Arrival_Value_LCR  Angle-Of-Arrival-Value-LCR
    No value
    rnsap.Angle_Of_Arrival_Value_LCR
rnsap.AntennaColocationIndicator  AntennaColocationIndicator
    Unsigned 32-bit integer
    rnsap.AntennaColocationIndicator
rnsap.BindingID  BindingID
    Byte array
    rnsap.BindingID
rnsap.CCTrCH_InformationItem_RL_FailureInd  CCTrCH-InformationItem-RL-FailureInd
    No value
    rnsap.CCTrCH_InformationItem_RL_FailureInd
rnsap.CCTrCH_InformationItem_RL_RestoreInd  CCTrCH-InformationItem-RL-RestoreInd
    No value
    rnsap.CCTrCH_InformationItem_RL_RestoreInd
rnsap.CCTrCH_InformationList_RL_FailureInd_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.CCTrCH_InformationList_RL_RestoreInd_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.CCTrCH_TPCAddList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.CCTrCH_TPCAddItem_RL_ReconfPrepTDD
rnsap.CCTrCH_TPCList_RL_SetupRqstTDD_item  Item
    No value
    rnsap.CCTrCH_TPCItem_RL_SetupRqstTDD
rnsap.CCTrCH_TPCModifyList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.CCTrCH_TPCModifyItem_RL_ReconfPrepTDD

```

```
rnsap.CFN CFN
  Unsigned 32-bit integer
  rnsap.CFN

rnsap.CNOriginatedPage_PagingRqst CNOriginatedPage-PagingRqst
  No value
  rnsap.CNOriginatedPage_PagingRqst

rnsap.CN_CS_DomainIdentifier CN-CS-DomainIdentifier
  No value
  rnsap.CN_CS_DomainIdentifier

rnsap.CN_PS_DomainIdentifier CN-PS-DomainIdentifier
  No value
  rnsap.CN_PS_DomainIdentifier

rnsap.CPC_Information CPC-Information
  No value
  rnsap.CPC_Information

rnsap.C_ID C-ID
  Unsigned 32-bit integer
  rnsap.C_ID

rnsap.C_RNTI C-RNTI
  Unsigned 32-bit integer
  rnsap.C_RNTI

rnsap.Cause Cause
  Unsigned 32-bit integer
  rnsap.Cause

rnsap.CauseLevel_RL_AdditionFailureFDD CauseLevel-RL-AdditionFailureFDD
  Unsigned 32-bit integer
  rnsap.CauseLevel_RL_AdditionFailureFDD

rnsap.CauseLevel_RL_AdditionFailureTDD CauseLevel-RL-AdditionFailureTDD
  Unsigned 32-bit integer
  rnsap.CauseLevel_RL_AdditionFailureTDD

rnsap.CauseLevel_RL_ReconfFailure CauseLevel-RL-ReconfFailure
  Unsigned 32-bit integer
  rnsap.CauseLevel_RL_ReconfFailure

rnsap.CauseLevel_RL_SetupFailureFDD CauseLevel-RL-SetupFailureFDD
  Unsigned 32-bit integer
  rnsap.CauseLevel_RL_SetupFailureFDD

rnsap.CauseLevel_RL_SetupFailureTDD CauseLevel-RL-SetupFailureTDD
  Unsigned 32-bit integer
  rnsap.CauseLevel_RL_SetupFailureTDD

rnsap.CellCapabilityContainer_FDD CellCapabilityContainer-FDD
  Byte array
  rnsap.CellCapabilityContainer_FDD

rnsap.CellCapabilityContainer_TDD CellCapabilityContainer-TDD
  Byte array
  rnsap.CellCapabilityContainer_TDD

rnsap.CellCapabilityContainer_TDD768 CellCapabilityContainer-TDD768
  Byte array
  rnsap.CellCapabilityContainer_TDD768
```



```
rnsap.CellCapabilityContainer_TDD_LCR  CellCapabilityContainer-TDD-LCR
    Byte array
    rnsap.CellCapabilityContainer_TDD_LCR
rnsap.CellPortionID  CellPortionID
    Unsigned 32-bit integer
    rnsap.CellPortionID
rnsap.Cell_Capacity_Class_Value  Cell-Capacity-Class-Value
    No value
    rnsap.Cell_Capacity_Class_Value
rnsap.ClosedLoopModel_SupportIndicator  ClosedLoopModel-SupportIndicator
    Unsigned 32-bit integer
    rnsap.ClosedLoopModel_SupportIndicator
rnsap.CommonMeasurementAccuracy  CommonMeasurementAccuracy
    Unsigned 32-bit integer
    rnsap.CommonMeasurementAccuracy
rnsap.CommonMeasurementFailureIndication  CommonMeasurementFailureIndication
    No value
    rnsap.CommonMeasurementFailureIndication
rnsap.CommonMeasurementInitiationFailure  CommonMeasurementInitiationFailure
    No value
    rnsap.CommonMeasurementInitiationFailure
rnsap.CommonMeasurementInitiationRequest  CommonMeasurementInitiationRequest
    No value
    rnsap.CommonMeasurementInitiationRequest
rnsap.CommonMeasurementInitiationResponse  CommonMeasurementInitiationResponse
    No value
    rnsap.CommonMeasurementInitiationResponse
rnsap.CommonMeasurementObjectType_CM_Rprt  CommonMeasurementObjectType-CM-Rprt
    Unsigned 32-bit integer
    rnsap.CommonMeasurementObjectType_CM_Rprt
rnsap.CommonMeasurementObjectType_CM_Rqst  CommonMeasurementObjectType-CM-Rqst
    Unsigned 32-bit integer
    rnsap.CommonMeasurementObjectType_CM_Rqst
rnsap.CommonMeasurementObjectType_CM_Rsp  CommonMeasurementObjectType-CM-Rsp
    Unsigned 32-bit integer
    rnsap.CommonMeasurementObjectType_CM_Rsp
rnsap.CommonMeasurementReport  CommonMeasurementReport
    No value
    rnsap.CommonMeasurementReport
rnsap.CommonMeasurementTerminationRequest  CommonMeasurementTerminationRequest
    No value
    rnsap.CommonMeasurementTerminationRequest
rnsap.CommonMeasurementType  CommonMeasurementType
    Unsigned 32-bit integer
    rnsap.CommonMeasurementType
rnsap.CommonTransportChannelResourcesFailure  CommonTransportChannelResourcesFailure
    No value
    rnsap.CommonTransportChannelResourcesFailure
```

```
rnsap.CommonTransportChannelResourcesInitialisationNotRequired  CommonTransportC
    Unsigned 32-bit integer
    rnsap.CommonTransportChannelResourcesInitialisationNotRequired
rnsap.CommonTransportChannelResourcesReleaseRequest  CommonTransportChannelResou
    No value
    rnsap.CommonTransportChannelResourcesReleaseRequest
rnsap.CommonTransportChannelResourcesRequest  CommonTransportChannelResourcesReq
    No value
    rnsap.CommonTransportChannelResourcesRequest
rnsap.CommonTransportChannelResourcesResponseFDD  CommonTransportChannelResource
    No value
    rnsap.CommonTransportChannelResourcesResponseFDD
rnsap.CommonTransportChannelResourcesResponseTDD  CommonTransportChannelResource
    No value
    rnsap.CommonTransportChannelResourcesResponseTDD
rnsap.CompressedModeCommand  CompressedModeCommand
    No value
    rnsap.CompressedModeCommand
rnsap.CongestionCause  CongestionCause
    Unsigned 32-bit integer
    rnsap.CongestionCause
rnsap.ContextGroupInfoItem_Reset  ContextGroupInfoItem-Reset
    No value
    rnsap.ContextGroupInfoItem_Reset
rnsap.ContextGroupInfoList_Reset_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.ContextInfoItem_Reset  ContextInfoItem-Reset
    No value
    rnsap.ContextInfoItem_Reset
rnsap.ContextInfoList_Reset_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.Continuous_Packet_Connectivity_DTX_DRX_Information  Continuous-Packet-Conn
    No value
    rnsap.Continuous_Packet_Connectivity_DTX_DRX_Information
rnsap.Continuous_Packet_Connectivity_HS_SCCH_Less_Information  Continuous-Packet
    Unsigned 32-bit integer
    rnsap.Continuous_Packet_Connectivity_HS_SCCH_Less_Information
rnsap.Continuous_Packet_Connectivity_HS_SCCH_Less_Information_Response  Continuo
    No value
    rnsap.Continuous_Packet_Connectivity_HS_SCCH_Less_Information_Response
rnsap.Continuous_Packet_Connectivity_HS_SCCH_Less_Information_item  Item
    No value
    rnsap.Continuous_Packet_Connectivity_HS_SCCH_Less_InformationItem
rnsap.CorrespondingCells_item  Item
    Unsigned 32-bit integer
    rnsap.C_ID
```

```
rnsap.CoverageIndicator CoverageIndicator
    Unsigned 32-bit integer
    rnsap.CoverageIndicator

rnsap.CriticalityDiagnostics CriticalityDiagnostics
    No value
    rnsap.CriticalityDiagnostics

rnsap.CriticalityDiagnostics_IE_List_item Item
    No value
    rnsap.CriticalityDiagnostics_IE_List_item

rnsap.DCH_DeleteList_RL_ReconfPrepFDD DCH-DeleteList-RL-ReconfPrepFDD
    Unsigned 32-bit integer
    rnsap.DCH_DeleteList_RL_ReconfPrepFDD

rnsap.DCH_DeleteList_RL_ReconfPrepFDD_item Item
    No value
    rnsap.DCH_DeleteItem_RL_ReconfPrepFDD

rnsap.DCH_DeleteList_RL_ReconfPrepTDD DCH-DeleteList-RL-ReconfPrepTDD
    Unsigned 32-bit integer
    rnsap.DCH_DeleteList_RL_ReconfPrepTDD

rnsap.DCH_DeleteList_RL_ReconfPrepTDD_item Item
    No value
    rnsap.DCH_DeleteItem_RL_ReconfPrepTDD

rnsap.DCH_DeleteList_RL_ReconfRqstFDD DCH-DeleteList-RL-ReconfRqstFDD
    Unsigned 32-bit integer
    rnsap.DCH_DeleteList_RL_ReconfRqstFDD

rnsap.DCH_DeleteList_RL_ReconfRqstFDD_item Item
    No value
    rnsap.DCH_DeleteItem_RL_ReconfRqstFDD

rnsap.DCH_DeleteList_RL_ReconfRqstTDD DCH-DeleteList-RL-ReconfRqstTDD
    Unsigned 32-bit integer
    rnsap.DCH_DeleteList_RL_ReconfRqstTDD

rnsap.DCH_DeleteList_RL_ReconfRqstTDD_item Item
    No value
    rnsap.DCH_DeleteItem_RL_ReconfRqstTDD

rnsap.DCH_FDD_Information DCH-FDD-Information
    Unsigned 32-bit integer
    rnsap.DCH_FDD_Information

rnsap.DCH_FDD_Information_item Item
    No value
    rnsap.DCH_FDD_InformationItem

rnsap.DCH_Indicator_For_E_DCH_HSDPA_Operation DCH-Indicator-For-E-DCH-HSDPA-Ope
    Unsigned 32-bit integer
    rnsap.DCH_Indicator_For_E_DCH_HSDPA_Operation

rnsap.DCH_InformationResponse DCH-InformationResponse
    Unsigned 32-bit integer
    rnsap.DCH_InformationResponse

rnsap.DCH_InformationResponse_item Item
    No value
    rnsap.DCH_InformationResponseItem
```

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rnsap.DCH_Rate_InformationItem_RL_CongestInd  DCH-Rate-InformationItem-RL-Conges
  No value
  rnsap.DCH_Rate_InformationItem_RL_CongestInd
rnsap.DCH_Rate_Information_RL_CongestInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DCH_Specific_FDD_InformationList_item  Item
  No value
  rnsap.DCH_Specific_FDD_Item
rnsap.DCH_Specific_TDD_InformationList_item  Item
  No value
  rnsap.DCH_Specific_TDD_Item
rnsap.DCH_TDD_Information  DCH-TDD-Information
  Unsigned 32-bit integer
  rnsap.DCH_TDD_Information
rnsap.DCH_TDD_Information_item  Item
  No value
  rnsap.DCH_TDD_InformationItem
rnsap.DL_CCTrCHInformationListIE_RL_AdditionRspTDD  DL-CCTrCHInformationListIE-R
  Unsigned 32-bit integer
  rnsap.DL_CCTrCHInformationListIE_RL_AdditionRspTDD
rnsap.DL_CCTrCHInformationListIE_RL_AdditionRspTDD768  DL-CCTrCHInformationListI
  Unsigned 32-bit integer
  rnsap.DL_CCTrCHInformationListIE_RL_AdditionRspTDD768
rnsap.DL_CCTrCHInformationListIE_RL_AdditionRspTDD768_item  Item
  No value
  rnsap.DL_CCTrCHInformationItem_RL_AdditionRspTDD768
rnsap.DL_CCTrCHInformationListIE_RL_AdditionRspTDD_item  Item
  No value
  rnsap.DL_CCTrCHInformationItem_RL_AdditionRspTDD
rnsap.DL_CCTrCHInformationListIE_RL_ReconfReadyTDD  DL-CCTrCHInformationListIE-R
  Unsigned 32-bit integer
  rnsap.DL_CCTrCHInformationListIE_RL_ReconfReadyTDD
rnsap.DL_CCTrCHInformationListIE_RL_ReconfReadyTDD_item  Item
  No value
  rnsap.DL_CCTrCH_InformationItem_RL_ReconfReadyTDD
rnsap.DL_CCTrCHInformationListIE_RL_SetupRspTDD  DL-CCTrCHInformationListIE-RL-S
  Unsigned 32-bit integer
  rnsap.DL_CCTrCHInformationListIE_RL_SetupRspTDD
rnsap.DL_CCTrCHInformationListIE_RL_SetupRspTDD768  DL-CCTrCHInformationListIE-R
  Unsigned 32-bit integer
  rnsap.DL_CCTrCHInformationListIE_RL_SetupRspTDD768
rnsap.DL_CCTrCHInformationListIE_RL_SetupRspTDD768_item  Item
  No value
  rnsap.DL_CCTrCHInformationItem_RL_SetupRspTDD768
rnsap.DL_CCTrCHInformationListIE_RL_SetupRspTDD_item  Item
  No value
  rnsap.DL_CCTrCHInformationItem_RL_SetupRspTDD

```

```
rnsap.DL_CCTrCH_InformationAddItem_RL_ReconfPrepTDD DL-CCTrCH-InformationAddItem
  No value
  rnsap.DL_CCTrCH_InformationAddItem_RL_ReconfPrepTDD
rnsap.DL_CCTrCH_InformationAddList_RL_ReconfPrepTDD DL-CCTrCH-InformationAddList
  Unsigned 32-bit integer
  rnsap.DL_CCTrCH_InformationAddList_RL_ReconfPrepTDD
rnsap.DL_CCTrCH_InformationAddList_RL_ReconfPrepTDD_item Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DL_CCTrCH_InformationDeleteItem_RL_ReconfPrepTDD DL-CCTrCH-InformationDeleteItem
  No value
  rnsap.DL_CCTrCH_InformationDeleteItem_RL_ReconfPrepTDD
rnsap.DL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD DL-CCTrCH-InformationDeleteItem
  No value
  rnsap.DL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD
rnsap.DL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD DL-CCTrCH-InformationDeleteList
  Unsigned 32-bit integer
  rnsap.DL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD
rnsap.DL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD_item Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD DL-CCTrCH-InformationDeleteList
  Unsigned 32-bit integer
  rnsap.DL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD
rnsap.DL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD_item Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DL_CCTrCH_InformationItem_RL_AdditionRqstTDD DL-CCTrCH-InformationItem-RL-AdditionRqstTDD
  No value
  rnsap.DL_CCTrCH_InformationItem_RL_AdditionRqstTDD
rnsap.DL_CCTrCH_InformationItem_RL_SetupRqstTDD DL-CCTrCH-InformationItem-RL-SetupRqstTDD
  No value
  rnsap.DL_CCTrCH_InformationItem_RL_SetupRqstTDD
rnsap.DL_CCTrCH_InformationListIE_PhyChReconfRqstTDD DL-CCTrCH-InformationListIE_PhyChReconfRqstTDD
  Unsigned 32-bit integer
  rnsap.DL_CCTrCH_InformationListIE_PhyChReconfRqstTDD
rnsap.DL_CCTrCH_InformationListIE_PhyChReconfRqstTDD_item Item
  No value
  rnsap.DL_CCTrCH_InformationItem_PhyChReconfRqstTDD
rnsap.DL_CCTrCH_InformationList_RL_AdditionRqstTDD DL-CCTrCH-InformationList-RL-AdditionRqstTDD
  Unsigned 32-bit integer
  rnsap.DL_CCTrCH_InformationList_RL_AdditionRqstTDD
rnsap.DL_CCTrCH_InformationList_RL_AdditionRqstTDD_item Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DL_CCTrCH_InformationList_RL_ReconfRspTDD DL-CCTrCH-InformationList-RL-ReconfRspTDD
  Unsigned 32-bit integer
  rnsap.DL_CCTrCH_InformationList_RL_ReconfRspTDD
```

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rnsap.DL_CCTrCH_InformationList_RL_ReconfRspTDD_item  Item
    No value
    rnsap.DL_CCTrCH_InformationItem_RL_ReconfRspTDD
rnsap.DL_CCTrCH_InformationList_RL_SetupRqstTDD  DL-CCTrCH-InformationList-RL-Se
    Unsigned 32-bit integer
    rnsap.DL_CCTrCH_InformationList_RL_SetupRqstTDD
rnsap.DL_CCTrCH_InformationList_RL_SetupRqstTDD_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.DL_CCTrCH_InformationModifyItem_RL_ReconfPrepTDD  DL-CCTrCH-InformationMod
    No value
    rnsap.DL_CCTrCH_InformationModifyItem_RL_ReconfPrepTDD
rnsap.DL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD  DL-CCTrCH-InformationMod
    No value
    rnsap.DL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD
rnsap.DL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD  DL-CCTrCH-InformationMod
    Unsigned 32-bit integer
    rnsap.DL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD
rnsap.DL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD  DL-CCTrCH-InformationMod
    Unsigned 32-bit integer
    rnsap.DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD
rnsap.DL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.DL_CCTrCH_LCR_InformationListIE_RL_AdditionRspTDD  DL-CCTrCH-LCR-Informati
    Unsigned 32-bit integer
    rnsap.DL_CCTrCH_LCR_InformationListIE_RL_AdditionRspTDD
rnsap.DL_CCTrCH_LCR_InformationListIE_RL_AdditionRspTDD_item  Item
    No value
    rnsap.DL_CCTrCH_LCR_InformationItem_RL_AdditionRspTDD
rnsap.DL_CCTrCH_LCR_InformationListIE_RL_SetupRspTDD  DL-CCTrCH-LCR-InformationL
    Unsigned 32-bit integer
    rnsap.DL_CCTrCH_LCR_InformationListIE_RL_SetupRspTDD
rnsap.DL_CCTrCH_LCR_InformationListIE_RL_SetupRspTDD_item  Item
    No value
    rnsap.DL_CCTrCH_LCR_InformationItem_RL_SetupRspTDD
rnsap.DL_DPCH_InformationAddListIE_RL_ReconfReadyTDD  DL-DPCH-InformationAddList
    No value
    rnsap.DL_DPCH_InformationAddListIE_RL_ReconfReadyTDD
rnsap.DL_DPCH_InformationAddList_RL_ReconfReadyTDD768  DL-DPCH-InformationAddLis
    No value
    rnsap.DL_DPCH_InformationAddList_RL_ReconfReadyTDD768
rnsap.DL_DPCH_InformationDeleteList768_RL_ReconfReadyTDD  DL-DPCH-InformationDel
    Unsigned 32-bit integer
    rnsap.DL_DPCH_InformationDeleteList768_RL_ReconfReadyTDD

```

```
rnsap.DL_DPCH_InformationDeleteList768_RL_ReconfReadyTDD_item  Item
  No value
  rnsap.DL_DPCH_InformationDeleteItem768_RL_ReconfReadyTDD
rnsap.DL_DPCH_InformationDeleteListIE_RL_ReconfReadyTDD  DL-DPCH-InformationDele
  Unsigned 32-bit integer
  rnsap.DL_DPCH_InformationDeleteListIE_RL_ReconfReadyTDD
rnsap.DL_DPCH_InformationDeleteListIE_RL_ReconfReadyTDD_item  Item
  No value
  rnsap.DL_DPCH_InformationDeleteItem_RL_ReconfReadyTDD
rnsap.DL_DPCH_InformationItem_PhyChReconfRqstTDD  DL-DPCH-InformationItem-PhyChR
  No value
  rnsap.DL_DPCH_InformationItem_PhyChReconfRqstTDD
rnsap.DL_DPCH_InformationItem_RL_AdditionRspTDD  DL-DPCH-InformationItem-RL-Addi
  No value
  rnsap.DL_DPCH_InformationItem_RL_AdditionRspTDD
rnsap.DL_DPCH_InformationItem_RL_AdditionRspTDD768  DL-DPCH-InformationItem-RL-A
  No value
  rnsap.DL_DPCH_InformationItem_RL_AdditionRspTDD768
rnsap.DL_DPCH_InformationItem_RL_SetupRspTDD  DL-DPCH-InformationItem-RL-SetupRs
  No value
  rnsap.DL_DPCH_InformationItem_RL_SetupRspTDD
rnsap.DL_DPCH_InformationItem_RL_SetupRspTDD768  DL-DPCH-InformationItem-RL-Setu
  No value
  rnsap.DL_DPCH_InformationItem_RL_SetupRspTDD768
rnsap.DL_DPCH_InformationModifyItem_LCR_RL_ReconfRspTDD  DL-DPCH-InformationModi
  No value
  rnsap.DL_DPCH_InformationModifyItem_LCR_RL_ReconfRspTDD
rnsap.DL_DPCH_InformationModifyListIE_RL_ReconfReadyTDD  DL-DPCH-InformationModi
  No value
  rnsap.DL_DPCH_InformationModifyListIE_RL_ReconfReadyTDD
rnsap.DL_DPCH_Information_RL_ReconfPrepFDD  DL-DPCH-Information-RL-ReconfPrepFDD
  No value
  rnsap.DL_DPCH_Information_RL_ReconfPrepFDD
rnsap.DL_DPCH_Information_RL_ReconfRqstFDD  DL-DPCH-Information-RL-ReconfRqstFDD
  No value
  rnsap.DL_DPCH_Information_RL_ReconfRqstFDD
rnsap.DL_DPCH_Information_RL_SetupRqstFDD  DL-DPCH-Information-RL-SetupRqstFDD
  No value
  rnsap.DL_DPCH_Information_RL_SetupRqstFDD
rnsap.DL_DPCH_LCR_InformationAddList_RL_ReconfReadyTDD  DL-DPCH-LCR-InformationA
  No value
  rnsap.DL_DPCH_LCR_InformationAddList_RL_ReconfReadyTDD
rnsap.DL_DPCH_LCR_InformationItem_RL_AdditionRspTDD  DL-DPCH-LCR-InformationItem
  No value
  rnsap.DL_DPCH_LCR_InformationItem_RL_AdditionRspTDD
rnsap.DL_DPCH_LCR_InformationItem_RL_SetupRspTDD  DL-DPCH-LCR-InformationItem-RL
  No value
  rnsap.DL_DPCH_LCR_InformationItem_RL_SetupRspTDD
```

```
rnsap.DL_DPCH_Power_Information_RL_ReconfPrepFDD  DL-DPCH-Power-Information-RL-R
  No value
  rnsap.DL_DPCH_Power_Information_RL_ReconfPrepFDD
rnsap.DL_DPCH_TimingAdjustment  DL-DPCH-TimingAdjustment
  Unsigned 32-bit integer
  rnsap.DL_DPCH_TimingAdjustment
rnsap.DL_Physical_Channel_Information_RL_SetupRqstTDD  DL-Physical-Channel-Infor
  No value
  rnsap.DL_Physical_Channel_Information_RL_SetupRqstTDD
rnsap.DL_Power  DL-Power
  Signed 32-bit integer
  rnsap.DL_Power
rnsap.DL_PowerBalancing_ActivationIndicator  DL-PowerBalancing-ActivationIndicat
  Unsigned 32-bit integer
  rnsap.DL_PowerBalancing_ActivationIndicator
rnsap.DL_PowerBalancing_Information  DL-PowerBalancing-Information
  No value
  rnsap.DL_PowerBalancing_Information
rnsap.DL_PowerBalancing_UpdatedIndicator  DL-PowerBalancing-UpdatedIndicator
  Unsigned 32-bit integer
  rnsap.DL_PowerBalancing_UpdatedIndicator
rnsap.DL_PowerControlRequest  DL-PowerControlRequest
  No value
  rnsap.DL_PowerControlRequest
rnsap.DL_PowerTimeslotControlRequest  DL-PowerTimeslotControlRequest
  No value
  rnsap.DL_PowerTimeslotControlRequest
rnsap.DL_ReferencePowerInformation  DL-ReferencePowerInformation
  No value
  rnsap.DL_ReferencePowerInformation
rnsap.DL_ReferencePowerInformationList_DL_PC_Rqst  DL-ReferencePowerInformationL
  Unsigned 32-bit integer
  rnsap.DL_ReferencePowerInformationList_DL_PC_Rqst
rnsap.DL_ReferencePowerInformationList_DL_PC_Rqst_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DL_ReferencePowerInformationList_item  Item
  No value
  rnsap.DL_ReferencePowerInformationItem
rnsap.DL_ReferencePowerInformation_DL_PC_Rqst  DL-ReferencePowerInformation-DL-P
  No value
  rnsap.DL_ReferencePowerInformation_DL_PC_Rqst
rnsap.DL_TimeSlot_ISCP_Info  DL-TimeSlot-ISCP-Info
  Unsigned 32-bit integer
  rnsap.DL_TimeSlot_ISCP_Info
rnsap.DL_TimeSlot_ISCP_Info_item  Item
  No value
  rnsap.DL_TimeSlot_ISCP_InfoItem
```



```
rnsap.DL_TimeSlot_ISCP_LCR_Information  DL-TimeSlot-ISCP-LCR-Information
  Unsigned 32-bit integer
  rnsap.DL_TimeSlot_ISCP_LCR_Information
rnsap.DL_TimeSlot_ISCP_LCR_Information_item  Item
  No value
  rnsap.DL_TimeSlot_ISCP_LCR_InfoItem
rnsap.DL_TimeslotLCR_InformationList_PhyChReconfRqstTDD  DL-TimeslotLCR-InformationList_PhyChReconfRqstTDD
  Unsigned 32-bit integer
  rnsap.DL_TimeslotLCR_InformationList_PhyChReconfRqstTDD
rnsap.DL_TimeslotLCR_InformationList_PhyChReconfRqstTDD_item  Item
  No value
  rnsap.DL_TimeslotLCR_InformationItem_PhyChReconfRqstTDD
rnsap.DL_TimeslotLCR_InformationModifyList_RL_ReconfReadyTDD  DL-TimeslotLCR-InformationModifyList_RL_ReconfReadyTDD
  Unsigned 32-bit integer
  rnsap.DL_TimeslotLCR_InformationModifyList_RL_ReconfReadyTDD
rnsap.DL_TimeslotLCR_InformationModifyList_RL_ReconfReadyTDD_item  Item
  No value
  rnsap.DL_TimeslotLCR_InformationModifyItem_RL_ReconfReadyTDD
rnsap.DL_TimeslotLCR_Information_item  Item
  No value
  rnsap.DL_TimeslotLCR_InformationItem
rnsap.DL_Timeslot_Information768_item  Item
  No value
  rnsap.DL_Timeslot_InformationItem768
rnsap.DL_Timeslot_InformationList_PhyChReconfRqstTDD768  DL-Timeslot-InformationList_PhyChReconfRqstTDD768
  Unsigned 32-bit integer
  rnsap.DL_Timeslot_InformationList_PhyChReconfRqstTDD768
rnsap.DL_Timeslot_InformationList_PhyChReconfRqstTDD768_item  Item
  No value
  rnsap.DL_Timeslot_InformationItem_PhyChReconfRqstTDD768
rnsap.DL_Timeslot_InformationList_PhyChReconfRqstTDD_item  Item
  No value
  rnsap.DL_Timeslot_InformationItem_PhyChReconfRqstTDD
rnsap.DL_Timeslot_InformationModifyList_RL_ReconfReadyTDD768  DL-Timeslot-InformationModifyList_RL_ReconfReadyTDD768
  Unsigned 32-bit integer
  rnsap.DL_Timeslot_InformationModifyList_RL_ReconfReadyTDD768
rnsap.DL_Timeslot_InformationModifyList_RL_ReconfReadyTDD768_item  Item
  No value
  rnsap.DL_Timeslot_InformationModifyItem_RL_ReconfReadyTDD768
rnsap.DL_Timeslot_InformationModifyList_RL_ReconfReadyTDD_item  Item
  No value
  rnsap.DL_Timeslot_InformationModifyItem_RL_ReconfReadyTDD
rnsap.DL_Timeslot_Information_item  Item
  No value
  rnsap.DL_Timeslot_InformationItem
rnsap.DL_Timeslot_LCR_InformationModifyList_RL_ReconfRspTDD_item  Item
  No value
  rnsap.DL_Timeslot_LCR_InformationModifyItem_RL_ReconfRspTDD
```

```
rnsap.DPCH_ID768 DPCH-ID768
  Unsigned 32-bit integer
  rnsap.DPCH_ID768

rnsap.DPC_Mode DPC-Mode
  Unsigned 32-bit integer
  rnsap.DPC_Mode

rnsap.DPC_Mode_Change_SupportIndicator DPC-Mode-Change-SupportIndicator
  Unsigned 32-bit integer
  rnsap.DPC_Mode_Change_SupportIndicator

rnsap.DRXCycleLengthCoefficient DRXCycleLengthCoefficient
  Unsigned 32-bit integer
  rnsap.DRXCycleLengthCoefficient

rnsap.DSCHToBeAddedOrModifiedList_RL_ReconfReadyTDD DSCHToBeAddedOrModifiedList
  Unsigned 32-bit integer
  rnsap.DSCHToBeAddedOrModifiedList_RL_ReconfReadyTDD

rnsap.DSCHToBeAddedOrModifiedList_RL_ReconfReadyTDD_item Item
  No value
  rnsap.DSCHToBeAddedOrModifiedItem_RL_ReconfReadyTDD

rnsap.DSCH_DeleteList_RL_ReconfPrepTDD DSCH-DeleteList-RL-ReconfPrepTDD
  Unsigned 32-bit integer
  rnsap.DSCH_DeleteList_RL_ReconfPrepTDD

rnsap.DSCH_DeleteList_RL_ReconfPrepTDD_item Item
  No value
  rnsap.DSCH_DeleteItem_RL_ReconfPrepTDD

rnsap.DSCH_FlowControlInformation_item Item
  No value
  rnsap.DSCH_FlowControlItem

rnsap.DSCH_InformationListIE_RL_AdditionRspTDD DSCH-InformationListIE-RL-Additi
  Unsigned 32-bit integer
  rnsap.DSCH_InformationListIE_RL_AdditionRspTDD

rnsap.DSCH_InformationListIE_RL_AdditionRspTDD_item Item
  No value
  rnsap.DSCHInformationItem_RL_AdditionRspTDD

rnsap.DSCH_InformationListIEs_RL_SetupRspTDD DSCH-InformationListIEs-RL-SetupRs
  Unsigned 32-bit integer
  rnsap.DSCH_InformationListIEs_RL_SetupRspTDD

rnsap.DSCH_InformationListIEs_RL_SetupRspTDD_item Item
  No value
  rnsap.DSCHInformationItem_RL_SetupRspTDD

rnsap.DSCH_InitialWindowSize DSCH-InitialWindowSize
  Unsigned 32-bit integer
  rnsap.DSCH_InitialWindowSize

rnsap.DSCH_LCR_InformationListIEs_RL_AdditionRspTDD DSCH-LCR-InformationListIEs
  Unsigned 32-bit integer
  rnsap.DSCH_LCR_InformationListIEs_RL_AdditionRspTDD

rnsap.DSCH_LCR_InformationListIEs_RL_AdditionRspTDD_item Item
  No value
  rnsap.DSCH_LCR_InformationItem_RL_AdditionRspTDD
```

```

rnsap.DSCH_LCR_InformationListIEs_RL_SetupRspTDD  DSCH-LCR-InformationListIEs-RL
    Unsigned 32-bit integer
    rnsap.DSCH_LCR_InformationListIEs_RL_SetupRspTDD
rnsap.DSCH_LCR_InformationListIEs_RL_SetupRspTDD_item  Item
    No value
    rnsap.DSCH_LCR_InformationItem_RL_SetupRspTDD
rnsap.DSCH_ModifyList_RL_ReconfPrepTDD  DSCH-ModifyList-RL-ReconfPrepTDD
    Unsigned 32-bit integer
    rnsap.DSCH_ModifyList_RL_ReconfPrepTDD
rnsap.DSCH_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.DSCH_ModifyItem_RL_ReconfPrepTDD
rnsap.DSCH_RNTI  DSCH-RNTI
    Unsigned 32-bit integer
    rnsap.DSCH_RNTI
rnsap.DSCH_TDD_Information  DSCH-TDD-Information
    Unsigned 32-bit integer
    rnsap.DSCH_TDD_Information
rnsap.DSCH_TDD_Information_item  Item
    No value
    rnsap.DSCH_TDD_InformationItem
rnsap.D_RNTI  D-RNTI
    Unsigned 32-bit integer
    rnsap.D_RNTI
rnsap.D_RNTI_ReleaseIndication  D-RNTI-ReleaseIndication
    Unsigned 32-bit integer
    rnsap.D_RNTI_ReleaseIndication
rnsap.DedicatedMeasurementFailureIndication  DedicatedMeasurementFailureIndicati
    No value
    rnsap.DedicatedMeasurementFailureIndication
rnsap.DedicatedMeasurementInitiationFailure  DedicatedMeasurementInitiationFailu
    No value
    rnsap.DedicatedMeasurementInitiationFailure
rnsap.DedicatedMeasurementInitiationRequest  DedicatedMeasurementInitiationReque
    No value
    rnsap.DedicatedMeasurementInitiationRequest
rnsap.DedicatedMeasurementInitiationResponse  DedicatedMeasurementInitiationResp
    No value
    rnsap.DedicatedMeasurementInitiationResponse
rnsap.DedicatedMeasurementObjectType_DM_Fail  DedicatedMeasurementObjectType-DM-
    Unsigned 32-bit integer
    rnsap.DedicatedMeasurementObjectType_DM_Fail
rnsap.DedicatedMeasurementObjectType_DM_Fail_Ind  DedicatedMeasurementObjectType
    Unsigned 32-bit integer
    rnsap.DedicatedMeasurementObjectType_DM_Fail_Ind
rnsap.DedicatedMeasurementObjectType_DM_Rprt  DedicatedMeasurementObjectType-DM-
    Unsigned 32-bit integer
    rnsap.DedicatedMeasurementObjectType_DM_Rprt

```

```
rnsap.DedicatedMeasurementObjectType_DM_Rqst  DedicatedMeasurementObjectType-DM-
  Unsigned 32-bit integer
  rnsap.DedicatedMeasurementObjectType_DM_Rqst
rnsap.DedicatedMeasurementObjectType_DM_Rsp  DedicatedMeasurementObjectType-DM-R
  Unsigned 32-bit integer
  rnsap.DedicatedMeasurementObjectType_DM_Rsp
rnsap.DedicatedMeasurementReport  DedicatedMeasurementReport
  No value
  rnsap.DedicatedMeasurementReport
rnsap.DedicatedMeasurementTerminationRequest  DedicatedMeasurementTerminationReq
  No value
  rnsap.DedicatedMeasurementTerminationRequest
rnsap.DedicatedMeasurementType  DedicatedMeasurementType
  Unsigned 32-bit integer
  rnsap.DedicatedMeasurementType
rnsap.DelayedActivation  DelayedActivation
  Unsigned 32-bit integer
  rnsap.DelayedActivation
rnsap.DelayedActivationInformationList_RL_ActivationCmdFDD  DelayedActivationInf
  Unsigned 32-bit integer
  rnsap.DelayedActivationInformationList_RL_ActivationCmdFDD
rnsap.DelayedActivationInformationList_RL_ActivationCmdFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DelayedActivationInformationList_RL_ActivationCmdTDD  DelayedActivationInf
  Unsigned 32-bit integer
  rnsap.DelayedActivationInformationList_RL_ActivationCmdTDD
rnsap.DelayedActivationInformationList_RL_ActivationCmdTDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.DelayedActivationInformation_RL_ActivationCmdFDD  DelayedActivationInforma
  No value
  rnsap.DelayedActivationInformation_RL_ActivationCmdFDD
rnsap.DelayedActivationInformation_RL_ActivationCmdTDD  DelayedActivationInforma
  No value
  rnsap.DelayedActivationInformation_RL_ActivationCmdTDD
rnsap.DirectInformationTransfer  DirectInformationTransfer
  No value
  rnsap.DirectInformationTransfer
rnsap.DownlinkSignallingTransferRequest  DownlinkSignallingTransferRequest
  No value
  rnsap.DownlinkSignallingTransferRequest
rnsap.EDCH_FDD_DL_ControlChannelInformation  EDCH-FDD-DL-ControlChannelInformati
  No value
  rnsap.EDCH_FDD_DL_ControlChannelInformation
rnsap.EDCH_FDD_Information  EDCH-FDD-Information
  No value
  rnsap.EDCH_FDD_Information
```

```

rnsap.EDCH_FDD_InformationResponse  EDCH-FDD-InformationResponse
    No value
    rnsap.EDCH_FDD_InformationResponse
rnsap.EDCH_FDD_Information_To_Modify  EDCH-FDD-Information-To-Modify
    No value
    rnsap.EDCH_FDD_Information_To_Modify
rnsap.EDCH_MACdFlow_Specific_InfoList_item  Item
    No value
    rnsap.EDCH_MACdFlow_Specific_InfoItem
rnsap.EDCH_MACdFlow_Specific_InfoToModifyList_item  Item
    No value
    rnsap.EDCH_MACdFlow_Specific_InfoToModifyItem
rnsap.EDCH_MACdFlow_Specific_InformationResponse_item  Item
    No value
    rnsap.EDCH_MACdFlow_Specific_InformationResponseItem
rnsap.EDCH_MACdFlows_Information  EDCH-MACdFlows-Information
    No value
    rnsap.EDCH_MACdFlows_Information
rnsap.EDCH_MACdFlows_To_Delete  EDCH-MACdFlows-To-Delete
    Unsigned 32-bit integer
    rnsap.EDCH_MACdFlows_To_Delete
rnsap.EDCH_MACdFlows_To_Delete_item  Item
    No value
    rnsap.EDCH_MACdFlows_To_Delete_Item
rnsap.EDCH_MacdFlowSpecificInformationItem_RL_CongestInd  EDCH-MacdFlowSpecificI
    No value
    rnsap.EDCH_MacdFlowSpecificInformationItem_RL_CongestInd
rnsap.EDCH_MacdFlowSpecificInformationItem_RL_PreemptRequiredInd  EDCH-MacdFlowS
    No value
    rnsap.EDCH_MacdFlowSpecificInformationItem_RL_PreemptRequiredInd
rnsap.EDCH_MacdFlowSpecificInformationList_RL_CongestInd  EDCH-MacdFlowSpecificI
    Unsigned 32-bit integer
    rnsap.EDCH_MacdFlowSpecificInformationList_RL_CongestInd
rnsap.EDCH_MacdFlowSpecificInformationList_RL_CongestInd_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.EDCH_MacdFlowSpecificInformationList_RL_PreemptRequiredInd  EDCH-MacdFlowS
    Unsigned 32-bit integer
    rnsap.EDCH_MacdFlowSpecificInformationList_RL_PreemptRequiredInd
rnsap.EDCH_MacdFlowSpecificInformationList_RL_PreemptRequiredInd_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.EDCH_RL_Indication  EDCH-RL-Indication
    Unsigned 32-bit integer
    rnsap.EDCH_RL_Indication
rnsap.EDCH_Serving_RL  EDCH-Serving-RL
    Unsigned 32-bit integer
    rnsap.EDCH_Serving_RL

```

```
rnsap.EDPCH_Information_FDD    EDPCH-Information-FDD
    No value
    rnsap.EDPCH_Information_FDD
rnsap.EDPCH_Information_RLAdditionReq_FDD    EDPCH-Information-RLAdditionReq-FDD
    No value
    rnsap.EDPCH_Information_RLAdditionReq_FDD
rnsap.EDPCH_Information_RLReconfRequest_FDD    EDPCH-Information-RLReconfRequest-F
    No value
    rnsap.EDPCH_Information_RLReconfRequest_FDD
rnsap.E_AGCH_Specific_InformationRespList768TDD_item    Item
    No value
    rnsap.E_AGCH_Specific_InformationResp_Item768TDD
rnsap.E_AGCH_Specific_InformationRespListTDD_item    Item
    No value
    rnsap.E_AGCH_Specific_InformationResp_ItemTDD
rnsap.E_AGCH_Specific_InformationRespList_LCR_TDD_item    Item
    No value
    rnsap.E_AGCH_Specific_InformationResp_Item_LCR_TDD
rnsap.E_DCH_768_Information    E-DCH-768-Information
    No value
    rnsap.E_DCH_768_Information
rnsap.E_DCH_768_Information_Reconfig    E-DCH-768-Information-Reconfig
    No value
    rnsap.E_DCH_768_Information_Reconfig
rnsap.E_DCH_768_Information_Response    E-DCH-768-Information-Response
    No value
    rnsap.E_DCH_768_Information_Response
rnsap.E_DCH_FDD_Update_Information    E-DCH-FDD-Update-Information
    No value
    rnsap.E_DCH_FDD_Update_Information
rnsap.E_DCH_Information    E-DCH-Information
    No value
    rnsap.E_DCH_Information
rnsap.E_DCH_Information_Reconfig    E-DCH-Information-Reconfig
    No value
    rnsap.E_DCH_Information_Reconfig
rnsap.E_DCH_Information_Response    E-DCH-Information-Response
    No value
    rnsap.E_DCH_Information_Response
rnsap.E_DCH_LCR_Information    E-DCH-LCR-Information
    No value
    rnsap.E_DCH_LCR_Information
rnsap.E_DCH_LCR_Information_Reconfig    E-DCH-LCR-Information-Reconfig
    No value
    rnsap.E_DCH_LCR_Information_Reconfig
rnsap.E_DCH_LCR_Information_Response    E-DCH-LCR-Information-Response
    No value
    rnsap.E_DCH_LCR_Information_Response
```

```
rnsap.E_DCH_LogicalChannelInformation_item  Item
  No value
  rnsap.E_DCH_LogicalChannelInformationItem
rnsap.E_DCH_LogicalChannelToDelete_item  Item
  No value
  rnsap.E_DCH_LogicalChannelToDeleteItem
rnsap.E_DCH_LogicalChannelToModify_item  Item
  No value
  rnsap.E_DCH_LogicalChannelToModifyItem
rnsap.E_DCH_MACdFlow_Retransmission_Timer_LCR  E-DCH-MACdFlow-Retransmission-Tim
  Unsigned 32-bit integer
  rnsap.E_DCH_MACdFlow_Retransmission_Timer_LCR
rnsap.E_DCH_MACdFlow_Specific_UpdateInformation_item  Item
  No value
  rnsap.E_DCH_MACdFlow_Specific_UpdateInformation_Item
rnsap.E_DCH_MACdFlows_Information_TDD_item  Item
  No value
  rnsap.E_DCH_MACdFlow_InfoTDDItem
rnsap.E_DCH_MACdPDU_SizeList_item  Item
  No value
  rnsap.E_DCH_MACdPDU_SizeListItem
rnsap.E_DCH_MACdPDU_SizeToModifyList_item  Item
  No value
  rnsap.E_DCH_MACdPDU_SizeListItem
rnsap.E_DCH_Minimum_Set_E_TFCIValidityIndicator  E-DCH-Minimum-Set-E-TFCIValidit
  Unsigned 32-bit integer
  rnsap.E_DCH_Minimum_Set_E_TFCIValidityIndicator
rnsap.E_DCH_PowerOffset_for_SchedulingInfo  E-DCH-PowerOffset-for-SchedulingInfo
  Unsigned 32-bit integer
  rnsap.E_DCH_PowerOffset_for_SchedulingInfo
rnsap.E_DCH_QPSK_RefBetaInfo_item  Item
  No value
  rnsap.E_DCH_RefBeta_Item
rnsap.E_DCH_RL_InformationList_Rsp_item  Item
  No value
  rnsap.E_DCH_RL_InformationList_Rsp_Item
rnsap.E_DCH_Serving_cell_change_informationResponse  E-DCH-Serving-cell-change-i
  No value
  rnsap.E_DCH_Serving_cell_change_informationResponse
rnsap.E_DCH_TDD_Information_to_Modify_List_item  Item
  No value
  rnsap.E_DCH_MACdFlow_ModifyTDDItem
rnsap.E_DCH_TDD_MACdFlow_Specific_InformationResp_item  Item
  No value
  rnsap.E_DCH_TDD_MACdFlow_Specific_InformationResp_Item
rnsap.E_DCH_sixteenQAM_RefBetaInfo_item  Item
  No value
  rnsap.E_DCH_RefBeta_Item
```

```
rnsap.E_HICH_Scheduled_InformationRespList_LCR_TDD_item  Item
  No value
  rnsap.E_HICH_Scheduled_InformationResp_Item_LCR_TDD
rnsap.E_RGCH_E_HICH_ChannelisationCodeValidityIndicator  E-RGCH-E-HICH-Channelis
  Unsigned 32-bit integer
  rnsap.E_RGCH_E_HICH_ChannelisationCodeValidityIndicator
rnsap.E_TFCI_BetaEC_Boost  E-TFCI-BetaEC-Boost
  Unsigned 32-bit integer
  rnsap.E_TFCI_BetaEC_Boost
rnsap.E_TFCI_BetaED_Switch  E-TFCI-BetaED-Switch
  Unsigned 32-bit integer
  rnsap.E_TFCI_BetaED_Switch
rnsap.Enhanced_FACH_Information_ResponseFDD  Enhanced-FACH-Information-ResponseF
  No value
  rnsap.Enhanced_FACH_Information_ResponseFDD
rnsap.Enhanced_FACH_Support_Indicator  Enhanced-FACH-Support-Indicator
  No value
  rnsap.Enhanced_FACH_Support_Indicator
rnsap.Enhanced_PCH_Support_Indicator  Enhanced-PCH-Support-Indicator
  No value
  rnsap.Enhanced_PCH_Support_Indicator
rnsap.Enhanced_PrimaryCPICH_EcNo  Enhanced-PrimaryCPICH-EcNo
  Unsigned 32-bit integer
  rnsap.Enhanced_PrimaryCPICH_EcNo
rnsap.ErrorIndication  ErrorIndication
  No value
  rnsap.ErrorIndication
rnsap.ExtendedGSMCellIndividualOffset  ExtendedGSMCellIndividualOffset
  Unsigned 32-bit integer
  rnsap.ExtendedGSMCellIndividualOffset
rnsap.ExtendedPropagationDelay  ExtendedPropagationDelay
  Unsigned 32-bit integer
  rnsap.ExtendedPropagationDelay
rnsap.Extended_RNC_ID  Extended-RNC-ID
  Unsigned 32-bit integer
  rnsap.Extended_RNC_ID
rnsap.Extended_Round_Trip_Time_Value  Extended-Round-Trip-Time-Value
  Unsigned 32-bit integer
  rnsap.Extended_Round_Trip_Time_Value
rnsap.FACH_FlowControlInformation  FACH-FlowControlInformation
  Unsigned 32-bit integer
  rnsap.FACH_FlowControlInformation
rnsap.FACH_FlowControlInformation_item  Item
  No value
  rnsap.FACH_FlowControlInformationItem
rnsap.FACH_InfoForUESelectedS_CCPCH_CTCH_ResourceRspFDD  FACH-InfoForUESelectedS
  No value
  rnsap.FACH_InfoForUESelectedS_CCPCH_CTCH_ResourceRspFDD
```



```
rnsap.FACH_InfoForUESelectedS_CCPCH_CTCH_ResourceRspTDD  FACH-InfoForUESelectedS
  No value
  rnsap.FACH_InfoForUESelectedS_CCPCH_CTCH_ResourceRspTDD
rnsap.FACH_InformationList_item  Item
  No value
  rnsap.FACH_InformationItem
rnsap.FDD_DCHs_to_Modify  FDD-DCHs-to-Modify
  Unsigned 32-bit integer
  rnsap.FDD_DCHs_to_Modify
rnsap.FDD_DCHs_to_ModifySpecificInformationList_item  Item
  No value
  rnsap.FDD_DCHs_to_ModifySpecificItem
rnsap.FDD_DCHs_to_Modify_item  Item
  No value
  rnsap.FDD_DCHs_to_ModifyItem
rnsap.FDD_DL_CodeInformation  FDD-DL-CodeInformation
  Unsigned 32-bit integer
  rnsap.FDD_DL_CodeInformation
rnsap.FDD_DL_CodeInformation_item  Item
  No value
  rnsap.FDD_DL_CodeInformationItem
rnsap.FNReportingIndicator  FNReportingIndicator
  Unsigned 32-bit integer
  rnsap.FNReportingIndicator
rnsap.F_DPCH_Information_RL_ReconfPrepFDD  F-DPCH-Information-RL-ReconfPrepFDD
  No value
  rnsap.F_DPCH_Information_RL_ReconfPrepFDD
rnsap.F_DPCH_Information_RL_SetupRqstFDD  F-DPCH-Information-RL-SetupRqstFDD
  No value
  rnsap.F_DPCH_Information_RL_SetupRqstFDD
rnsap.F_DPCH_SlotFormat  F-DPCH-SlotFormat
  Unsigned 32-bit integer
  rnsap.F_DPCH_SlotFormat
rnsap.F_DPCH_SlotFormatSupportRequest  F-DPCH-SlotFormatSupportRequest
  No value
  rnsap.F_DPCH_SlotFormatSupportRequest
rnsap.Fast_Reconfiguration_Mode  Fast-Reconfiguration-Mode
  Unsigned 32-bit integer
  rnsap.Fast_Reconfiguration_Mode
rnsap.Fast_Reconfiguration_Permission  Fast-Reconfiguration-Permission
  Unsigned 32-bit integer
  rnsap.Fast_Reconfiguration_Permission
rnsap.FrequencyBandIndicator  FrequencyBandIndicator
  Unsigned 32-bit integer
  rnsap.FrequencyBandIndicator
rnsap.GANSS_Clock_Model_item  Item
  No value
  rnsap.GANSS_Clock_Model_item
```

```
rnsap.GANSS_Common_Data  GANSS-Common-Data
  No value
  rnsap.GANSS_Common_Data
rnsap.GANSS_GenericDataInfoReqList_item  Item
  No value
  rnsap.GANSS_GenericDataInfoReqItem
rnsap.GANSS_Generic_Data  GANSS-Generic-Data
  Unsigned 32-bit integer
  rnsap.GANSS_Generic_Data
rnsap.GANSS_Generic_Data_item  Item
  No value
  rnsap.GANSS_Generic_DataItem
rnsap.GANSS_Information  GANSS-Information
  No value
  rnsap.GANSS_Information
rnsap.GANSS_Real_Time_Integrity_item  Item
  No value
  rnsap.GANSS_Real_Time_Integrity_item
rnsap.GANSS_Sat_Info_Nav_item  Item
  No value
  rnsap.GANSS_Sat_Info_Nav_item
rnsap.GANSS_SatelliteInformationKP_item  Item
  No value
  rnsap.GANSS_SatelliteInformationKP_item
rnsap.GA_Cell  GA-Cell
  Unsigned 32-bit integer
  rnsap.GA_Cell
rnsap.GA_CellAdditionalShapes  GA-CellAdditionalShapes
  Unsigned 32-bit integer
  rnsap.GA_CellAdditionalShapes
rnsap.GA_Cell_item  Item
  No value
  rnsap.GA_Cell_item
rnsap.GERANUplinkSignallingTransferIndication  GERANUplinkSignallingTransferIndi
  No value
  rnsap.GERANUplinkSignallingTransferIndication
rnsap.GERAN_Cell_Capability  GERAN-Cell-Capability
  Byte array
  rnsap.GERAN_Cell_Capability
rnsap.GERAN_Classmark  GERAN-Classmark
  Byte array
  rnsap.GERAN_Classmark
rnsap.GERAN_SystemInfo_item  Item
  No value
  rnsap.GERAN_SystemInfo_item
rnsap.GPSInformation_item  Item
  No value
  rnsap.GPSInformation_item
```

```
rnsap.GPS_NavigationModel_and_TimeRecovery_item  Item
  No value
  rnsap.GPS_NavigationModel_and_TimeRecovery_item
rnsap.GSM_Cell_InfEx_Rqst  GSM-Cell-InfEx-Rqst
  No value
  rnsap.GSM_Cell_InfEx_Rqst
rnsap.Guaranteed_Rate_Information  Guaranteed-Rate-Information
  No value
  rnsap.Guaranteed_Rate_Information
rnsap.HARQ_MemoryPartitioningList_item  Item
  No value
  rnsap.HARQ_MemoryPartitioningItem
rnsap.HARQ_Preamble_Mode  HARQ-Preamble-Mode
  Unsigned 32-bit integer
  rnsap.HARQ_Preamble_Mode
rnsap.HARQ_Preamble_Mode_Activation_Indicator  HARQ-Preamble-Mode-Activation-Ind
  Unsigned 32-bit integer
  rnsap.HARQ_Preamble_Mode_Activation_Indicator
rnsap.HCS_Prio  HCS-Prio
  Unsigned 32-bit integer
  rnsap.HCS_Prio
rnsap.HSDSCHMacdFlowSpecificInformationItem_RL_PreemptRequiredInd  HSDSCHMacdFlo
  No value
  rnsap.HSDSCHMacdFlowSpecificInformationItem_RL_PreemptRequiredInd
rnsap.HSDSCHMacdFlowSpecificInformationList_RL_PreemptRequiredInd  HSDSCHMacdFlo
  Unsigned 32-bit integer
  rnsap.HSDSCHMacdFlowSpecificInformationList_RL_PreemptRequiredInd
rnsap.HSDSCHMacdFlowSpecificInformationList_RL_PreemptRequiredInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.HSDSCH_Configured_Indicator  HSDSCH-Configured-Indicator
  Unsigned 32-bit integer
  rnsap.HSDSCH_Configured_Indicator
rnsap.HSDSCH_FDD_Information  HSDSCH-FDD-Information
  No value
  rnsap.HSDSCH_FDD_Information
rnsap.HSDSCH_FDD_Information_Response  HSDSCH-FDD-Information-Response
  No value
  rnsap.HSDSCH_FDD_Information_Response
rnsap.HSDSCH_FDD_Update_Information  HSDSCH-FDD-Update-Information
  No value
  rnsap.HSDSCH_FDD_Update_Information
rnsap.HSDSCH_Information_to_Modify  HSDSCH-Information-to-Modify
  No value
  rnsap.HSDSCH_Information_to_Modify
rnsap.HSDSCH_Information_to_Modify_Unsynchronised  HSDSCH-Information-to-Modify-
  No value
  rnsap.HSDSCH_Information_to_Modify_Unsynchronised
```

```

rnsap.HSDSCH_Initial_Capacity_Allocation_item  Item
  No value
  rnsap.HSDSCH_Initial_Capacity_AllocationItem
rnsap.HSDSCH_MACdFlow_Specific_InfoList_Response_item  Item
  No value
  rnsap.HSDSCH_MACdFlow_Specific_InfoItem_Response
rnsap.HSDSCH_MACdFlow_Specific_InfoList_item  Item
  No value
  rnsap.HSDSCH_MACdFlow_Specific_InfoItem
rnsap.HSDSCH_MACdFlow_Specific_InfoList_to_Modify_item  Item
  No value
  rnsap.HSDSCH_MACdFlow_Specific_InfoItem_to_Modify
rnsap.HSDSCH_MACdFlows_Information  HSDSCH-MACdFlows-Information
  No value
  rnsap.HSDSCH_MACdFlows_Information
rnsap.HSDSCH_MACdFlows_to_Delete  HSDSCH-MACdFlows-to-Delete
  Unsigned 32-bit integer
  rnsap.HSDSCH_MACdFlows_to_Delete
rnsap.HSDSCH_MACdFlows_to_Delete_item  Item
  No value
  rnsap.HSDSCH_MACdFlows_to_Delete_Item
rnsap.HSDSCH_MACdPDUSizeFormat  HSDSCH-MACdPDUSizeFormat
  Unsigned 32-bit integer
  rnsap.HSDSCH_MACdPDUSizeFormat
rnsap.HSDSCH_RNTI  HSDSCH-RNTI
  Unsigned 32-bit integer
  rnsap.HSDSCH_RNTI
rnsap.HSDSCH_TDD_Information  HSDSCH-TDD-Information
  No value
  rnsap.HSDSCH_TDD_Information
rnsap.HSDSCH_TDD_Information_Response  HSDSCH-TDD-Information-Response
  No value
  rnsap.HSDSCH_TDD_Information_Response
rnsap.HSDSCH_TDD_Update_Information  HSDSCH-TDD-Update-Information
  No value
  rnsap.HSDSCH_TDD_Update_Information
rnsap.HSPDSCH_TDD_Specific_InfoList_Response768  HSPDSCH-TDD-Specific-InfoList-R
  Unsigned 32-bit integer
  rnsap.HSPDSCH_TDD_Specific_InfoList_Response768
rnsap.HSPDSCH_TDD_Specific_InfoList_Response768_item  Item
  No value
  rnsap.HSPDSCH_TDD_Specific_InfoItem_Response768
rnsap.HSPDSCH_TDD_Specific_InfoList_Response_LCR_item  Item
  No value
  rnsap.HSPDSCH_TDD_Specific_InfoItem_Response_LCR
rnsap.HSPDSCH_TDD_Specific_InfoList_Response_item  Item
  No value
  rnsap.HSPDSCH_TDD_Specific_InfoItem_Response

```

```

rnsap.HSPDSCH_Timeslot_InformationListLCR_PhyChReconfRqstTDD  HSPDSCH-Timeslot-I
  Unsigned 32-bit integer
  rnsap.HSPDSCH_Timeslot_InformationListLCR_PhyChReconfRqstTDD
rnsap.HSPDSCH_Timeslot_InformationListLCR_PhyChReconfRqstTDD_item  Item
  No value
  rnsap.HSPDSCH_Timeslot_InformationItemLCR_PhyChReconfRqstTDD
rnsap.HSPDSCH_Timeslot_InformationList_PhyChReconfRqstTDD  HSPDSCH-Timeslot-Info
  Unsigned 32-bit integer
  rnsap.HSPDSCH_Timeslot_InformationList_PhyChReconfRqstTDD
rnsap.HSPDSCH_Timeslot_InformationList_PhyChReconfRqstTDD768  HSPDSCH-Timeslot-I
  Unsigned 32-bit integer
  rnsap.HSPDSCH_Timeslot_InformationList_PhyChReconfRqstTDD768
rnsap.HSPDSCH_Timeslot_InformationList_PhyChReconfRqstTDD768_item  Item
  No value
  rnsap.HSPDSCH_Timeslot_InformationItem_PhyChReconfRqstTDD768
rnsap.HSPDSCH_Timeslot_InformationList_PhyChReconfRqstTDD_item  Item
  No value
  rnsap.HSPDSCH_Timeslot_InformationItem_PhyChReconfRqstTDD
rnsap.HSSCCH_FDD_Specific_InfoList_Response_item  Item
  No value
  rnsap.HSSCCH_FDD_Specific_InfoItem_Response
rnsap.HSSCCH_TDD_Specific_InfoList_Response768  HSSCCH-TDD-Specific-InfoList-Res
  Unsigned 32-bit integer
  rnsap.HSSCCH_TDD_Specific_InfoList_Response768
rnsap.HSSCCH_TDD_Specific_InfoList_Response768_item  Item
  No value
  rnsap.HSSCCH_TDD_Specific_InfoItem_Response768
rnsap.HSSCCH_TDD_Specific_InfoList_Response_LCR_item  Item
  No value
  rnsap.HSSCCH_TDD_Specific_InfoItem_Response_LCR
rnsap.HSSCCH_TDD_Specific_InfoList_Response_item  Item
  No value
  rnsap.HSSCCH_TDD_Specific_InfoItem_Response
rnsap.HSSICH_Info_DM_Rqst  HSSICH-Info-DM-Rqst
  Unsigned 32-bit integer
  rnsap.HSSICH_Info_DM_Rqst
rnsap.HSSICH_Info_DM_Rqst_item  Item
  Unsigned 32-bit integer
  rnsap.HS_SICH_ID
rnsap.HS_DSCH_serving_cell_change_information  HS-DSCH-serving-cell-change-infor
  No value
  rnsap.HS_DSCH_serving_cell_change_information
rnsap.HS_DSCH_serving_cell_change_informationResponse  HS-DSCH-serving-cell-chan
  No value
  rnsap.HS_DSCH_serving_cell_change_informationResponse
rnsap.HS_PDSCH_Code_Change_Grant  HS-PDSCH-Code-Change-Grant
  Unsigned 32-bit integer
  rnsap.HS_PDSCH_Code_Change_Grant

```

```
rnsap.HS_PDSCH_Code_Change_Indicator  HS-PDSCH-Code-Change-Indicator
    Unsigned 32-bit integer
    rnsap.HS_PDSCH_Code_Change_Indicator

rnsap.HS_SICH_ID  HS-SICH-ID
    Unsigned 32-bit integer
    rnsap.HS_SICH_ID

rnsap.HS_SICH_Reception_Quality_Measurement_Value  HS-SICH-Reception-Quality-Mea
    Unsigned 32-bit integer
    rnsap.HS_SICH_Reception_Quality_Measurement_Value

rnsap.HS_SICH_Reception_Quality_Value  HS-SICH-Reception-Quality-Value
    No value
    rnsap.HS_SICH_Reception_Quality_Value

rnsap.IMSI  IMSI
    Byte array
    rnsap.IMSI

rnsap.IPDL_TDD_ParametersLCR  IPDL-TDD-ParametersLCR
    No value
    rnsap.IPDL_TDD_ParametersLCR

rnsap.InformationExchangeFailureIndication  InformationExchangeFailureIndication
    No value
    rnsap.InformationExchangeFailureIndication

rnsap.InformationExchangeID  InformationExchangeID
    Unsigned 32-bit integer
    rnsap.InformationExchangeID

rnsap.InformationExchangeInitiationFailure  InformationExchangeInitiationFailure
    No value
    rnsap.InformationExchangeInitiationFailure

rnsap.InformationExchangeInitiationRequest  InformationExchangeInitiationRequest
    No value
    rnsap.InformationExchangeInitiationRequest

rnsap.InformationExchangeInitiationResponse  InformationExchangeInitiationRespon
    No value
    rnsap.InformationExchangeInitiationResponse

rnsap.InformationExchangeObjectType_InfEx_Rprt  InformationExchangeObjectType-In
    Unsigned 32-bit integer
    rnsap.InformationExchangeObjectType_InfEx_Rprt

rnsap.InformationExchangeObjectType_InfEx_Rqst  InformationExchangeObjectType-In
    Unsigned 32-bit integer
    rnsap.InformationExchangeObjectType_InfEx_Rqst

rnsap.InformationExchangeObjectType_InfEx_Rsp  InformationExchangeObjectType-Inf
    Unsigned 32-bit integer
    rnsap.InformationExchangeObjectType_InfEx_Rsp

rnsap.InformationExchangeTerminationRequest  InformationExchangeTerminationReque
    No value
    rnsap.InformationExchangeTerminationRequest

rnsap.InformationReport  InformationReport
    No value
    rnsap.InformationReport
```

```
rnsap.InformationReportCharacteristics InformationReportCharacteristics
    Unsigned 32-bit integer
    rnsap.InformationReportCharacteristics
rnsap.InformationType InformationType
    No value
    rnsap.InformationType
rnsap.Initial_DL_DPCH_TimingAdjustment_Allowed Initial-DL-DPCH-TimingAdjustment
    Unsigned 32-bit integer
    rnsap.Initial_DL_DPCH_TimingAdjustment_Allowed
rnsap.InnerLoopDLPCStatus InnerLoopDLPCStatus
    Unsigned 32-bit integer
    rnsap.InnerLoopDLPCStatus
rnsap.Inter_Frequency_Cell_Information Inter-Frequency-Cell-Information
    No value
    rnsap.Inter_Frequency_Cell_Information
rnsap.Inter_Frequency_Cell_Information_SIB11_item Item
    No value
    rnsap.Inter_Frequency_Cells_Information_SIB11_Per_Indication
rnsap.Inter_Frequency_Cell_Information_SIB12_item Item
    No value
    rnsap.Inter_Frequency_Cells_Information_SIB12_Per_Indication
rnsap.Inter_Frequency_Cell_List Inter-Frequency-Cell-List
    Unsigned 32-bit integer
    rnsap.Inter_Frequency_Cell_List
rnsap.Inter_Frequency_Cell_List_item Item
    No value
    rnsap.Inter_Frequency_Cell
rnsap.Inter_Frequency_Cell_SIB11_or_SIB12_List_item Item
    No value
    rnsap.Inter_Frequency_Cell_SIB11_or_SIB12
rnsap.InterfacesToTraceItem InterfacesToTraceItem
    No value
    rnsap.InterfacesToTraceItem
rnsap.IurDeactivateTrace IurDeactivateTrace
    No value
    rnsap.IurDeactivateTrace
rnsap.IurInvokeTrace IurInvokeTrace
    No value
    rnsap.IurInvokeTrace
rnsap.L3_Information L3-Information
    Byte array
    rnsap.L3_Information
rnsap.ListOfInterfacesToTrace ListOfInterfacesToTrace
    Unsigned 32-bit integer
    rnsap.ListOfInterfacesToTrace
rnsap.ListOfInterfacesToTrace_item Item
    No value
    rnsap.ProtocolIE_Single_Container
```

```
rnsap.ListOfSNAs_item  Item
    Unsigned 32-bit integer
    rnsap.SNACode

rnsap.Load_Value  Load-Value
    Unsigned 32-bit integer
    rnsap.Load_Value

rnsap.Load_Value_IncrDecrThres  Load-Value-IncrDecrThres
    Unsigned 32-bit integer
    rnsap.Load_Value_IncrDecrThres

rnsap.MAC_PDU_SizeExtended  MAC-PDU-SizeExtended
    Unsigned 32-bit integer
    rnsap.MAC_PDU_SizeExtended

rnsap.MAC_c_sh_SDU_LengthList_item  Item
    Unsigned 32-bit integer
    rnsap.MAC_c_sh_SDU_Length

rnsap.MACdPDU_Size_IndexList_item  Item
    No value
    rnsap.MACdPDU_Size_IndexItem

rnsap.MACdPDU_Size_IndexList_to_Modify_item  Item
    No value
    rnsap.MACdPDU_Size_IndexItem_to_Modify

rnsap.MACHs_ResetIndicator  MACHs-ResetIndicator
    Unsigned 32-bit integer
    rnsap.MACHs_ResetIndicator

rnsap.MBMSAttachCommand  MBMSAttachCommand
    No value
    rnsap.MBMSAttachCommand

rnsap.MBMSDetachCommand  MBMSDetachCommand
    No value
    rnsap.MBMSDetachCommand

rnsap.MBMS_Bearer_Service_Full_Address  MBMS-Bearer-Service-Full-Address
    No value
    rnsap.MBMS_Bearer_Service_Full_Address

rnsap.MBMS_Bearer_Service_List  MBMS-Bearer-Service-List
    Unsigned 32-bit integer
    rnsap.MBMS_Bearer_Service_List

rnsap.MBMS_Bearer_Service_List_InfEx_Rsp  MBMS-Bearer-Service-List-InfEx-Rsp
    Unsigned 32-bit integer
    rnsap.MBMS_Bearer_Service_List_InfEx_Rsp

rnsap.MBMS_Bearer_Service_List_InfEx_Rsp_item  Item
    No value
    rnsap.MBMS_Bearer_ServiceItemIEs_InfEx_Rsp

rnsap.MBMS_Bearer_Service_List_item  Item
    No value
    rnsap.TMGI

rnsap.MIMO_Information  MIMO-Information
    No value
    rnsap.MIMO_Information
```



```
rnsap.MIMO_InformationResponse  MIMO-InformationResponse
  No value
  rnsap.MIMO_InformationResponse
rnsap.MIMO_InformationToModify  MIMO-InformationToModify
  No value
  rnsap.MIMO_InformationToModify
rnsap.MaxAdjustmentStep  MaxAdjustmentStep
  Unsigned 32-bit integer
  rnsap.MaxAdjustmentStep
rnsap.MaxNrDLPhysicalchannels768  MaxNrDLPhysicalchannels768
  Unsigned 32-bit integer
  rnsap.MaxNrDLPhysicalchannels768
rnsap.MaxNrDLPhysicalchannelsTS  MaxNrDLPhysicalchannelsTS
  Unsigned 32-bit integer
  rnsap.MaxNrDLPhysicalchannelsTS
rnsap.MaxNrDLPhysicalchannelsTS768  MaxNrDLPhysicalchannelsTS768
  Unsigned 32-bit integer
  rnsap.MaxNrDLPhysicalchannelsTS768
rnsap.Max_UE_DTX_Cycle  Max-UE-DTX-Cycle
  Unsigned 32-bit integer
  rnsap.Max_UE_DTX_Cycle
rnsap.MeasurementFilterCoefficient  MeasurementFilterCoefficient
  Unsigned 32-bit integer
  rnsap.MeasurementFilterCoefficient
rnsap.MeasurementID  MeasurementID
  Unsigned 32-bit integer
  rnsap.MeasurementID
rnsap.MeasurementRecoveryBehavior  MeasurementRecoveryBehavior
  No value
  rnsap.MeasurementRecoveryBehavior
rnsap.MeasurementRecoveryReportingIndicator  MeasurementRecoveryReportingIndicator
  No value
  rnsap.MeasurementRecoveryReportingIndicator
rnsap.MeasurementRecoverySupportIndicator  MeasurementRecoverySupportIndicator
  No value
  rnsap.MeasurementRecoverySupportIndicator
rnsap.MessageStructure  MessageStructure
  Unsigned 32-bit integer
  rnsap.MessageStructure
rnsap.MessageStructure_item  Item
  No value
  rnsap.MessageStructure_item
rnsap.MinimumSpreadingFactor768  MinimumSpreadingFactor768
  Unsigned 32-bit integer
  rnsap.MinimumSpreadingFactor768
rnsap.Multiple_DedicatedMeasurementValueList_LCR_TDD_DM_Rsp  Multiple-DedicatedM
  Unsigned 32-bit integer
  rnsap.Multiple_DedicatedMeasurementValueList_LCR_TDD_DM_Rsp
```

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rnsap.Multiple_DedicatedMeasurementValueList_LCR_TDD_DM_Rsp_item  Item
    No value
    rnsap.Multiple_DedicatedMeasurementValueItem_LCR_TDD_DM_Rsp
rnsap.Multiple_DedicatedMeasurementValueList_TDD768_DM_Rsp  Multiple-DedicatedMe
    Unsigned 32-bit integer
    rnsap.Multiple_DedicatedMeasurementValueList_TDD768_DM_Rsp
rnsap.Multiple_DedicatedMeasurementValueList_TDD768_DM_Rsp_item  Item
    No value
    rnsap.Multiple_DedicatedMeasurementValueItem_TDD768_DM_Rsp
rnsap.Multiple_DedicatedMeasurementValueList_TDD_DM_Rsp  Multiple-DedicatedMeasu
    Unsigned 32-bit integer
    rnsap.Multiple_DedicatedMeasurementValueList_TDD_DM_Rsp
rnsap.Multiple_DedicatedMeasurementValueList_TDD_DM_Rsp_item  Item
    No value
    rnsap.Multiple_DedicatedMeasurementValueItem_TDD_DM_Rsp
rnsap.Multiple_HSSICHMeasurementValueList_TDD_DM_Rsp  Multiple-HSSICHMeasurement
    Unsigned 32-bit integer
    rnsap.Multiple_HSSICHMeasurementValueList_TDD_DM_Rsp
rnsap.Multiple_HSSICHMeasurementValueList_TDD_DM_Rsp_item  Item
    No value
    rnsap.Multiple_HSSICHMeasurementValueItem_TDD_DM_Rsp
rnsap.Multiple_RL_InformationResponse_RL_ReconfReadyTDD  Multiple-RL-Information
    Unsigned 32-bit integer
    rnsap.Multiple_RL_InformationResponse_RL_ReconfReadyTDD
rnsap.Multiple_RL_InformationResponse_RL_ReconfReadyTDD_item  Item
    No value
    rnsap.RL_InformationResponse_RL_ReconfReadyTDD
rnsap.Multiple_RL_InformationResponse_RL_ReconfRspTDD  Multiple-RL-InformationRe
    Unsigned 32-bit integer
    rnsap.Multiple_RL_InformationResponse_RL_ReconfRspTDD
rnsap.Multiple_RL_InformationResponse_RL_ReconfRspTDD_item  Item
    No value
    rnsap.RL_InformationResponse_RL_ReconfRspTDD
rnsap.Multiple_RL_ReconfigurationRequestTDD_RL_Information  Multiple-RL-Reconfig
    Unsigned 32-bit integer
    rnsap.Multiple_RL_ReconfigurationRequestTDD_RL_Information
rnsap.Multiple_RL_ReconfigurationRequestTDD_RL_Information_item  Item
    No value
    rnsap.RL_ReconfigurationRequestTDD_RL_Information
rnsap.NACC_Related_Data  NACC-Related-Data
    No value
    rnsap.NACC_Related_Data
rnsap.NRTLLoadInformationValue  NRTLLoadInformationValue
    No value
    rnsap.NRTLLoadInformationValue
rnsap.NRT_Load_Information_Value  NRT-Load-Information-Value
    Unsigned 32-bit integer
    rnsap.NRT_Load_Information_Value

```

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rnsap.NRT_Load_Information_Value_IncrDecrThres  NRT-Load-Information-Value-IncrD
  Unsigned 32-bit integer
  rnsap.NRT_Load_Information_Value_IncrDecrThres
rnsap.NeighbouringCellMeasurementInfo_item  Item
  Unsigned 32-bit integer
  rnsap.NeighbouringCellMeasurementInfo_item
rnsap.NeighbouringTDDCellMeasurementInformation768  NeighbouringTDDCellMeasureme
  No value
  rnsap.NeighbouringTDDCellMeasurementInformation768
rnsap.NeighbouringTDDCellMeasurementInformationLCR  NeighbouringTDDCellMeasureme
  No value
  rnsap.NeighbouringTDDCellMeasurementInformationLCR
rnsap.Neighbouring_FDD_CellInformation_item  Item
  No value
  rnsap.Neighbouring_FDD_CellInformationItem
rnsap.Neighbouring_GSM_CellInformationIEs  Neighbouring-GSM-CellInformationIEs
  Unsigned 32-bit integer
  rnsap.Neighbouring_GSM_CellInformationIEs
rnsap.Neighbouring_GSM_CellInformationIEs_item  Item
  No value
  rnsap.Neighbouring_GSM_CellInformationItem
rnsap.Neighbouring_LCR_TDD_CellInformation  Neighbouring-LCR-TDD-CellInformation
  Unsigned 32-bit integer
  rnsap.Neighbouring_LCR_TDD_CellInformation
rnsap.Neighbouring_LCR_TDD_CellInformation_item  Item
  No value
  rnsap.Neighbouring_LCR_TDD_CellInformationItem
rnsap.Neighbouring_TDD_CellInformation_item  Item
  No value
  rnsap.Neighbouring_TDD_CellInformationItem
rnsap.Neighbouring_UMTS_CellInformationItem  Neighbouring-UMTS-CellInformationIt
  No value
  rnsap.Neighbouring_UMTS_CellInformationItem
rnsap.Neighbouring_UMTS_CellInformation_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.NotProvidedCellList_item  Item
  No value
  rnsap.MBMSChannelTypeCellList
rnsap.OnModification  OnModification
  No value
  rnsap.OnModification
rnsap.PCH_InformationList_item  Item
  No value
  rnsap.PCH_InformationItem
rnsap.PLCCHinformation  PLCCHinformation
  No value
  rnsap.PLCCHinformation

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```
rnsap.PTMCellList_item  Item
    No value
    rnsap.MBMSChannelTypeCellList
rnsap.PTPCellList_item  Item
    No value
    rnsap.MBMSChannelTypeCellList
rnsap.PagingArea_PagingRqst  PagingArea-PagingRqst
    Unsigned 32-bit integer
    rnsap.PagingArea_PagingRqst
rnsap.PagingRequest  PagingRequest
    No value
    rnsap.PagingRequest
rnsap.PartialReportingIndicator  PartialReportingIndicator
    Unsigned 32-bit integer
    rnsap.PartialReportingIndicator
rnsap.Permanent_NAS_UE_Identity  Permanent-NAS-UE-Identity
    Unsigned 32-bit integer
    rnsap.Permanent_NAS_UE_Identity
rnsap.Phase_Reference_Update_Indicator  Phase-Reference-Update-Indicator
    Unsigned 32-bit integer
    rnsap.Phase_Reference_Update_Indicator
rnsap.PhysicalChannelReconfigurationCommand  PhysicalChannelReconfigurationComma
    No value
    rnsap.PhysicalChannelReconfigurationCommand
rnsap.PhysicalChannelReconfigurationFailure  PhysicalChannelReconfigurationFailu
    No value
    rnsap.PhysicalChannelReconfigurationFailure
rnsap.PhysicalChannelReconfigurationRequestFDD  PhysicalChannelReconfigurationRe
    No value
    rnsap.PhysicalChannelReconfigurationRequestFDD
rnsap.PhysicalChannelReconfigurationRequestTDD  PhysicalChannelReconfigurationRe
    No value
    rnsap.PhysicalChannelReconfigurationRequestTDD
rnsap.PowerAdjustmentType  PowerAdjustmentType
    Unsigned 32-bit integer
    rnsap.PowerAdjustmentType
rnsap.PrimaryCCPCH_RSCP  PrimaryCCPCH-RSCP
    Unsigned 32-bit integer
    rnsap.PrimaryCCPCH_RSCP
rnsap.PrimaryCCPCH_RSCP_Delta  PrimaryCCPCH-RSCP-Delta
    Signed 32-bit integer
    rnsap.PrimaryCCPCH_RSCP_Delta
rnsap.Primary_CPICH_Usage_For_Channel_Estimation  Primary-CPICH-Usage-For-Channe
    Unsigned 32-bit integer
    rnsap.Primary_CPICH_Usage_For_Channel_Estimation
rnsap.PriorityQueue_InfoList_EnhancedFACH_item  Item
    No value
    rnsap.PriorityQueue_InfoItem_EnhancedFACH
```

```
rnsap.PriorityQueue_InfoList_item  Item
    No value
    rnsap.PriorityQueue_InfoItem
rnsap.PriorityQueue_InfoList_to_Modify_Unsynchronised_item  Item
    No value
    rnsap.PriorityQueue_InfoItem_to_Modify_Unsynchronised
rnsap.PriorityQueue_InfoList_to_Modify_item  Item
    Unsigned 32-bit integer
    rnsap.ModifyPriorityQueue
rnsap.PrivateIE_Container_item  Item
    No value
    rnsap.PrivateIE_Field
rnsap.PrivateMessage  PrivateMessage
    No value
    rnsap.PrivateMessage
rnsap.PropagationDelay  PropagationDelay
    Unsigned 32-bit integer
    rnsap.PropagationDelay
rnsap.ProtocolExtensionContainer_item  Item
    No value
    rnsap.ProtocolExtensionField
rnsap.ProtocolIE_Container_item  Item
    No value
    rnsap.ProtocolIE_Field
rnsap.ProvidedInformation  ProvidedInformation
    No value
    rnsap.ProvidedInformation
rnsap.RANAP_RelocationInformation  RANAP-RelocationInformation
    Byte array
    rnsap.RANAP_RelocationInformation
rnsap.RB_Info_item  Item
    Unsigned 32-bit integer
    rnsap.RB_Identity
rnsap.RL_ID  RL-ID
    Unsigned 32-bit integer
    rnsap.RL_ID
rnsap.RL_InformationItem_DM_Rprt  RL-InformationItem-DM-Rprt
    No value
    rnsap.RL_InformationItem_DM_Rprt
rnsap.RL_InformationItem_DM_Rqst  RL-InformationItem-DM-Rqst
    No value
    rnsap.RL_InformationItem_DM_Rqst
rnsap.RL_InformationItem_DM_Rsp  RL-InformationItem-DM-Rsp
    No value
    rnsap.RL_InformationItem_DM_Rsp
rnsap.RL_InformationItem_RL_CongestInd  RL-InformationItem-RL-CongestInd
    No value
    rnsap.RL_InformationItem_RL_CongestInd
```

```
rnsap.RL_InformationItem_RL_PreemptRequiredInd  RL-InformationItem-RL-PreemptReq
  No value
  rnsap.RL_InformationItem_RL_PreemptRequiredInd
rnsap.RL_InformationItem_RL_SetupRqstFDD  RL-InformationItem-RL-SetupRqstFDD
  No value
  rnsap.RL_InformationItem_RL_SetupRqstFDD
rnsap.RL_InformationList_DM_Rprt_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_DM_Rqst_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_DM_Rsp_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_RL_AdditionRqstFDD  RL-InformationList-RL-AdditionRqstF
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_AdditionRqstFDD
rnsap.RL_InformationList_RL_AdditionRqstFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_RL_CongestInd  RL-InformationList-RL-CongestInd
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_CongestInd
rnsap.RL_InformationList_RL_CongestInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_RL_DeletionRqst  RL-InformationList-RL-DeletionRqst
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_DeletionRqst
rnsap.RL_InformationList_RL_DeletionRqst_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_RL_FailureInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_RL_PreemptRequiredInd  RL-InformationList-RL-PreemptReq
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_PreemptRequiredInd
rnsap.RL_InformationList_RL_PreemptRequiredInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_RL_ReconfPrepFDD  RL-InformationList-RL-ReconfPrepFDD
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_ReconfPrepFDD
rnsap.RL_InformationList_RL_ReconfPrepFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
```

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rnsap.RL_InformationList_RL_RestoreInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationList_RL_SetupRqstFDD  RL-InformationList-RL-SetupRqstFDD
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_SetupRqstFDD
rnsap.RL_InformationList_RL_SetupRqstFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationResponseItem_RL_AdditionRspFDD  RL-InformationResponseItem-RL-
  No value
  rnsap.RL_InformationResponseItem_RL_AdditionRspFDD
rnsap.RL_InformationResponseItem_RL_ReconfReadyFDD  RL-InformationResponseItem-RL-
  No value
  rnsap.RL_InformationResponseItem_RL_ReconfReadyFDD
rnsap.RL_InformationResponseItem_RL_ReconfRspFDD  RL-InformationResponseItem-RL-
  No value
  rnsap.RL_InformationResponseItem_RL_ReconfRspFDD
rnsap.RL_InformationResponseItem_RL_SetupRspFDD  RL-InformationResponseItem-RL-S
  No value
  rnsap.RL_InformationResponseItem_RL_SetupRspFDD
rnsap.RL_InformationResponseList_RL_AdditionRspFDD  RL-InformationResponseList-RL-
  Unsigned 32-bit integer
  rnsap.RL_InformationResponseList_RL_AdditionRspFDD
rnsap.RL_InformationResponseList_RL_AdditionRspFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationResponseList_RL_ReconfReadyFDD  RL-InformationResponseList-RL-
  Unsigned 32-bit integer
  rnsap.RL_InformationResponseList_RL_ReconfReadyFDD
rnsap.RL_InformationResponseList_RL_ReconfReadyFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationResponseList_RL_ReconfRspFDD  RL-InformationResponseList-RL-
  Unsigned 32-bit integer
  rnsap.RL_InformationResponseList_RL_ReconfRspFDD
rnsap.RL_InformationResponseList_RL_ReconfRspFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationResponseList_RL_SetupRspFDD  RL-InformationResponseList-RL-S
  Unsigned 32-bit integer
  rnsap.RL_InformationResponseList_RL_SetupRspFDD
rnsap.RL_InformationResponseList_RL_SetupRspFDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_InformationResponse_RL_AdditionRspTDD  RL-InformationResponse-RL-Additi
  No value
  rnsap.RL_InformationResponse_RL_AdditionRspTDD

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```
rnsap.RL_InformationResponse_RL_AdditionRspTDD768  RL-InformationResponse-RL-Add
  No value
  rnsap.RL_InformationResponse_RL_AdditionRspTDD768
rnsap.RL_InformationResponse_RL_ReconfRspTDD  RL-InformationResponse-RL-ReconfRs
  No value
  rnsap.RL_InformationResponse_RL_ReconfRspTDD
rnsap.RL_InformationResponse_RL_SetupRspTDD  RL-InformationResponse-RL-SetupRspT
  No value
  rnsap.RL_InformationResponse_RL_SetupRspTDD
rnsap.RL_InformationResponse_RL_SetupRspTDD768  RL-InformationResponse-RL-SetupR
  No value
  rnsap.RL_InformationResponse_RL_SetupRspTDD768
rnsap.RL_Information_PhyChReconfRqstFDD  RL-Information-PhyChReconfRqstFDD
  No value
  rnsap.RL_Information_PhyChReconfRqstFDD
rnsap.RL_Information_PhyChReconfRqstTDD  RL-Information-PhyChReconfRqstTDD
  No value
  rnsap.RL_Information_PhyChReconfRqstTDD
rnsap.RL_Information_RL_AdditionRqstFDD  RL-Information-RL-AdditionRqstFDD
  No value
  rnsap.RL_Information_RL_AdditionRqstFDD
rnsap.RL_Information_RL_AdditionRqstTDD  RL-Information-RL-AdditionRqstTDD
  No value
  rnsap.RL_Information_RL_AdditionRqstTDD
rnsap.RL_Information_RL_DeletionRqst  RL-Information-RL-DeletionRqst
  No value
  rnsap.RL_Information_RL_DeletionRqst
rnsap.RL_Information_RL_FailureInd  RL-Information-RL-FailureInd
  No value
  rnsap.RL_Information_RL_FailureInd
rnsap.RL_Information_RL_ReconfPrepFDD  RL-Information-RL-ReconfPrepFDD
  No value
  rnsap.RL_Information_RL_ReconfPrepFDD
rnsap.RL_Information_RL_ReconfPrepTDD  RL-Information-RL-ReconfPrepTDD
  Unsigned 32-bit integer
  rnsap.RL_Information_RL_ReconfPrepTDD
rnsap.RL_Information_RL_ReconfPrepTDD_item  Item
  No value
  rnsap.RL_InformationIE_RL_ReconfPrepTDD
rnsap.RL_Information_RL_RestoreInd  RL-Information-RL-RestoreInd
  No value
  rnsap.RL_Information_RL_RestoreInd
rnsap.RL_Information_RL_SetupRqstTDD  RL-Information-RL-SetupRqstTDD
  No value
  rnsap.RL_Information_RL_SetupRqstTDD
rnsap.RL_LCR_InformationResponse_RL_AdditionRspTDD  RL-LCR-InformationResponse-R
  No value
  rnsap.RL_LCR_InformationResponse_RL_AdditionRspTDD
```



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rnsap.RL_LCR_InformationResponse_RL_SetupRspTDD  RL-LCR-InformationResponse-RL-S
  No value
  rnsap.RL_LCR_InformationResponse_RL_SetupRspTDD
rnsap.RL_ParameterUpdateIndicationFDD_RL_InformationList  RL-ParameterUpdateIndi
  Unsigned 32-bit integer
  rnsap.RL_ParameterUpdateIndicationFDD_RL_InformationList
rnsap.RL_ParameterUpdateIndicationFDD_RL_InformationList_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_ParameterUpdateIndicationFDD_RL_Information_Item  RL-ParameterUpdateInd
  No value
  rnsap.RL_ParameterUpdateIndicationFDD_RL_Information_Item
rnsap.RL_ReconfigurationFailureList_RL_ReconfFailure_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_ReconfigurationFailure_RL_ReconfFail  RL-ReconfigurationFailure-RL-Reco
  No value
  rnsap.RL_ReconfigurationFailure_RL_ReconfFail
rnsap.RL_ReconfigurationRequestFDD_RL_InformationList  RL-ReconfigurationRequest
  Unsigned 32-bit integer
  rnsap.RL_ReconfigurationRequestFDD_RL_InformationList
rnsap.RL_ReconfigurationRequestFDD_RL_InformationList_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_ReconfigurationRequestFDD_RL_Information_IEs  RL-ReconfigurationRequest
  No value
  rnsap.RL_ReconfigurationRequestFDD_RL_Information_IEs
rnsap.RL_Set_ID  RL-Set-ID
  Unsigned 32-bit integer
  rnsap.RL_Set_ID
rnsap.RL_Set_InformationItem_DM_Rprt  RL-Set-InformationItem-DM-Rprt
  No value
  rnsap.RL_Set_InformationItem_DM_Rprt
rnsap.RL_Set_InformationItem_DM_Rqst  RL-Set-InformationItem-DM-Rqst
  No value
  rnsap.RL_Set_InformationItem_DM_Rqst
rnsap.RL_Set_InformationItem_DM_Rsp  RL-Set-InformationItem-DM-Rsp
  No value
  rnsap.RL_Set_InformationItem_DM_Rsp
rnsap.RL_Set_InformationList_DM_Rprt_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Set_InformationList_DM_Rqst_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Set_InformationList_DM_Rsp_item  Item
  No value
  rnsap.ProtocolIE_Single_Container

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```

rnsap.RL_Set_InformationList_RL_FailureInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Set_InformationList_RL_RestoreInd_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Set_Information_RL_FailureInd  RL-Set-Information-RL-FailureInd
  No value
  rnsap.RL_Set_Information_RL_FailureInd
rnsap.RL_Set_Information_RL_RestoreInd  RL-Set-Information-RL-RestoreInd
  No value
  rnsap.RL_Set_Information_RL_RestoreInd
rnsap.RL_Set_Successful_InformationItem_DM_Fail  RL-Set-Successful-InformationIT
  No value
  rnsap.RL_Set_Successful_InformationItem_DM_Fail
rnsap.RL_Set_Successful_InformationRespList_DM_Fail_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Set_Unsuccessful_InformationItem_DM_Fail  RL-Set-Unsuccessful-Informati
  No value
  rnsap.RL_Set_Unsuccessful_InformationItem_DM_Fail
rnsap.RL_Set_Unsuccessful_InformationItem_DM_Fail_Ind  RL-Set-Unsuccessful-Infor
  No value
  rnsap.RL_Set_Unsuccessful_InformationItem_DM_Fail_Ind
rnsap.RL_Set_Unsuccessful_InformationRespList_DM_Fail_Ind_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Set_Unsuccessful_InformationRespList_DM_Fail_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Specific_DCH_Info  RL-Specific-DCH-Info
  Unsigned 32-bit integer
  rnsap.RL_Specific_DCH_Info
rnsap.RL_Specific_DCH_Info_item  Item
  No value
  rnsap.RL_Specific_DCH_Info_Item
rnsap.RL_Specific_EDCH_Info_item  Item
  No value
  rnsap.RL_Specific_EDCH_InfoItem
rnsap.RL_Specific_EDCH_Information  RL-Specific-EDCH-Information
  No value
  rnsap.RL_Specific_EDCH_Information
rnsap.RL_Successful_InformationItem_DM_Fail  RL-Successful-InformationItem-DM-Fa
  No value
  rnsap.RL_Successful_InformationItem_DM_Fail
rnsap.RL_Successful_InformationRespList_DM_Fail_item  Item
  No value
  rnsap.ProtocolIE_Single_Container

```

```
rnsap.RL_Unsuccessful_InformationItem_DM_Fail  RL-Unsuccessful-InformationItem-D
  No value
  rnsap.RL_Unsuccessful_InformationItem_DM_Fail
rnsap.RL_Unsuccessful_InformationItem_DM_Fail_Ind  RL-Unsuccessful-InformationIt
  No value
  rnsap.RL_Unsuccessful_InformationItem_DM_Fail_Ind
rnsap.RL_Unsuccessful_InformationRespList_DM_Fail_Ind_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RL_Unsuccessful_InformationRespList_DM_Fail_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.RNC_ID  RNC-ID
  Unsigned 32-bit integer
  rnsap.RNC_ID
rnsap.RNCsWithCellsInTheAccessedURA_List_item  Item
  No value
  rnsap.RNCsWithCellsInTheAccessedURA_Item
rnsap.RNSAP_PDU  RNSAP-PDU
  Unsigned 32-bit integer
  rnsap.RNSAP_PDU
rnsap.RTLoadValue  RTLoadValue
  No value
  rnsap.RTLoadValue
rnsap.RT_Load_Value  RT-Load-Value
  Unsigned 32-bit integer
  rnsap.RT_Load_Value
rnsap.RT_Load_Value_IncrDecrThres  RT-Load-Value-IncrDecrThres
  Unsigned 32-bit integer
  rnsap.RT_Load_Value_IncrDecrThres
rnsap.RadioLinkActivationCommandFDD  RadioLinkActivationCommandFDD
  No value
  rnsap.RadioLinkActivationCommandFDD
rnsap.RadioLinkActivationCommandTDD  RadioLinkActivationCommandTDD
  No value
  rnsap.RadioLinkActivationCommandTDD
rnsap.RadioLinkAdditionFailureFDD  RadioLinkAdditionFailureFDD
  No value
  rnsap.RadioLinkAdditionFailureFDD
rnsap.RadioLinkAdditionFailureTDD  RadioLinkAdditionFailureTDD
  No value
  rnsap.RadioLinkAdditionFailureTDD
rnsap.RadioLinkAdditionRequestFDD  RadioLinkAdditionRequestFDD
  No value
  rnsap.RadioLinkAdditionRequestFDD
rnsap.RadioLinkAdditionRequestTDD  RadioLinkAdditionRequestTDD
  No value
  rnsap.RadioLinkAdditionRequestTDD
```

```
rnsap.RadioLinkAdditionResponseFDD  RadioLinkAdditionResponseFDD
  No value
  rnsap.RadioLinkAdditionResponseFDD
rnsap.RadioLinkAdditionResponseTDD  RadioLinkAdditionResponseTDD
  No value
  rnsap.RadioLinkAdditionResponseTDD
rnsap.RadioLinkCongestionIndication  RadioLinkCongestionIndication
  No value
  rnsap.RadioLinkCongestionIndication
rnsap.RadioLinkDeletionRequest  RadioLinkDeletionRequest
  No value
  rnsap.RadioLinkDeletionRequest
rnsap.RadioLinkDeletionResponse  RadioLinkDeletionResponse
  No value
  rnsap.RadioLinkDeletionResponse
rnsap.RadioLinkFailureIndication  RadioLinkFailureIndication
  No value
  rnsap.RadioLinkFailureIndication
rnsap.RadioLinkParameterUpdateIndicationFDD  RadioLinkParameterUpdateIndicationFDD
  No value
  rnsap.RadioLinkParameterUpdateIndicationFDD
rnsap.RadioLinkParameterUpdateIndicationTDD  RadioLinkParameterUpdateIndicationTDD
  No value
  rnsap.RadioLinkParameterUpdateIndicationTDD
rnsap.RadioLinkPreemptionRequiredIndication  RadioLinkPreemptionRequiredIndication
  No value
  rnsap.RadioLinkPreemptionRequiredIndication
rnsap.RadioLinkReconfigurationCancel  RadioLinkReconfigurationCancel
  No value
  rnsap.RadioLinkReconfigurationCancel
rnsap.RadioLinkReconfigurationCommit  RadioLinkReconfigurationCommit
  No value
  rnsap.RadioLinkReconfigurationCommit
rnsap.RadioLinkReconfigurationFailure  RadioLinkReconfigurationFailure
  No value
  rnsap.RadioLinkReconfigurationFailure
rnsap.RadioLinkReconfigurationPrepareFDD  RadioLinkReconfigurationPrepareFDD
  No value
  rnsap.RadioLinkReconfigurationPrepareFDD
rnsap.RadioLinkReconfigurationPrepareTDD  RadioLinkReconfigurationPrepareTDD
  No value
  rnsap.RadioLinkReconfigurationPrepareTDD
rnsap.RadioLinkReconfigurationReadyFDD  RadioLinkReconfigurationReadyFDD
  No value
  rnsap.RadioLinkReconfigurationReadyFDD
rnsap.RadioLinkReconfigurationReadyTDD  RadioLinkReconfigurationReadyTDD
  No value
  rnsap.RadioLinkReconfigurationReadyTDD
```

```

rnsap.RadioLinkReconfigurationRequestFDD  RadioLinkReconfigurationRequestFDD
  No value
  rnsap.RadioLinkReconfigurationRequestFDD
rnsap.RadioLinkReconfigurationRequestTDD  RadioLinkReconfigurationRequestTDD
  No value
  rnsap.RadioLinkReconfigurationRequestTDD
rnsap.RadioLinkReconfigurationResponseFDD  RadioLinkReconfigurationResponseFDD
  No value
  rnsap.RadioLinkReconfigurationResponseFDD
rnsap.RadioLinkReconfigurationResponseTDD  RadioLinkReconfigurationResponseTDD
  No value
  rnsap.RadioLinkReconfigurationResponseTDD
rnsap.RadioLinkRestoreIndication  RadioLinkRestoreIndication
  No value
  rnsap.RadioLinkRestoreIndication
rnsap.RadioLinkSetupFailureFDD  RadioLinkSetupFailureFDD
  No value
  rnsap.RadioLinkSetupFailureFDD
rnsap.RadioLinkSetupFailureTDD  RadioLinkSetupFailureTDD
  No value
  rnsap.RadioLinkSetupFailureTDD
rnsap.RadioLinkSetupRequestFDD  RadioLinkSetupRequestFDD
  No value
  rnsap.RadioLinkSetupRequestFDD
rnsap.RadioLinkSetupRequestTDD  RadioLinkSetupRequestTDD
  No value
  rnsap.RadioLinkSetupRequestTDD
rnsap.RadioLinkSetupResponseFDD  RadioLinkSetupResponseFDD
  No value
  rnsap.RadioLinkSetupResponseFDD
rnsap.RadioLinkSetupResponseTDD  RadioLinkSetupResponseTDD
  No value
  rnsap.RadioLinkSetupResponseTDD
rnsap.Received_Total_Wideband_Power_Value  Received-Total-Wideband-Power-Value
  Unsigned 32-bit integer
  rnsap.Received_Total_Wideband_Power_Value
rnsap.Received_Total_Wideband_Power_Value_IncrDecrThres  Received-Total-Wideband
  Unsigned 32-bit integer
  rnsap.Received_Total_Wideband_Power_Value_IncrDecrThres
rnsap.Reference_E_TFCI_Information_item  Item
  No value
  rnsap.Reference_E_TFCI_Information_Item
rnsap.RelocationCommit  RelocationCommit
  No value
  rnsap.RelocationCommit
rnsap.ReportCharacteristics  ReportCharacteristics
  Unsigned 32-bit integer
  rnsap.ReportCharacteristics

```

```
rnsap.Reporting_Object_RL_FailureInd Reporting-Object-RL-FailureInd
  Unsigned 32-bit integer
  rnsap.Reporting_Object_RL_FailureInd
rnsap.Reporting_Object_RL_RestoreInd Reporting-Object-RL-RestoreInd
  Unsigned 32-bit integer
  rnsap.Reporting_Object_RL_RestoreInd
rnsap.ResetIndicator ResetIndicator
  Unsigned 32-bit integer
  rnsap.ResetIndicator
rnsap.ResetRequest ResetRequest
  No value
  rnsap.ResetRequest
rnsap.ResetResponse ResetResponse
  No value
  rnsap.ResetResponse
rnsap.RestrictionStateIndicator RestrictionStateIndicator
  Unsigned 32-bit integer
  rnsap.RestrictionStateIndicator
rnsap.RxTimingDeviationForTA RxTimingDeviationForTA
  Unsigned 32-bit integer
  rnsap.RxTimingDeviationForTA
rnsap.RxTimingDeviationForTA768 RxTimingDeviationForTA768
  Unsigned 32-bit integer
  rnsap.RxTimingDeviationForTA768
rnsap.RxTimingDeviationForTAext RxTimingDeviationForTAext
  Unsigned 32-bit integer
  rnsap.RxTimingDeviationForTAext
rnsap.Rx_Timing_Deviation_Value_768 Rx-Timing-Deviation-Value-768
  Unsigned 32-bit integer
  rnsap.Rx_Timing_Deviation_Value_768
rnsap.Rx_Timing_Deviation_Value_LCR Rx-Timing-Deviation-Value-LCR
  Unsigned 32-bit integer
  rnsap.Rx_Timing_Deviation_Value_LCR
rnsap.Rx_Timing_Deviation_Value_ext Rx-Timing-Deviation-Value-ext
  Unsigned 32-bit integer
  rnsap.Rx_Timing_Deviation_Value_ext
rnsap.SAI SAI
  No value
  rnsap.SAI
rnsap.SFN SFN
  Unsigned 32-bit integer
  rnsap.SFN
rnsap.SFNMeasurementThresholdInformation SFNMeasurementThresholdInformation
  No value
  rnsap.SFNMeasurementThresholdInformation
rnsap.SNA_Information SNA-Information
  No value
  rnsap.SNA_Information
```

```
rnsap.STTD_SupportIndicator  STTD-SupportIndicator
    Unsigned 32-bit integer
    rnsap.STTD_SupportIndicator

rnsap.S_RNTI  S-RNTI
    Unsigned 32-bit integer
    rnsap.S_RNTI

rnsap.Satellite_Almanac_Information_ExtItem  Satellite-Almanac-Information-ExtItem
    Unsigned 32-bit integer
    rnsap.Satellite_Almanac_Information_ExtItem

rnsap.Satellite_Almanac_Information_ExtItem_item  Item
    No value
    rnsap.Satellite_Almanac_Information_ExtItem_item

rnsap.ScaledAdjustmentRatio  ScaledAdjustmentRatio
    Unsigned 32-bit integer
    rnsap.ScaledAdjustmentRatio

rnsap.Secondary_CCPCH_Info_TDD768  Secondary-CCPCH-Info-TDD768
    No value
    rnsap.Secondary_CCPCH_Info_TDD768

rnsap.Secondary_CCPCH_TDD_Code_Information768_item  Item
    No value
    rnsap.Secondary_CCPCH_TDD_Code_InformationItem768

rnsap.Secondary_CCPCH_TDD_Code_Information_item  Item
    No value
    rnsap.Secondary_CCPCH_TDD_Code_InformationItem

rnsap.Secondary_CCPCH_TDD_InformationList768_item  Item
    No value
    rnsap.Secondary_CCPCH_TDD_InformationItem768

rnsap.Secondary_CCPCH_TDD_InformationList_item  Item
    No value
    rnsap.Secondary_CCPCH_TDD_InformationItem

rnsap.Secondary_CPICH_Information  Secondary-CPICH-Information
    No value
    rnsap.Secondary_CPICH_Information

rnsap.Secondary_CPICH_Information_Change  Secondary-CPICH-Information-Change
    Unsigned 32-bit integer
    rnsap.Secondary_CPICH_Information_Change

rnsap.Secondary_LCR_CCPCH_Info_TDD  Secondary-LCR-CCPCH-Info-TDD
    No value
    rnsap.Secondary_LCR_CCPCH_Info_TDD

rnsap.Secondary_LCR_CCPCH_TDD_Code_Information_item  Item
    No value
    rnsap.Secondary_LCR_CCPCH_TDD_Code_InformationItem

rnsap.Secondary_LCR_CCPCH_TDD_InformationList_item  Item
    No value
    rnsap.Secondary_LCR_CCPCH_TDD_InformationItem

rnsap.SixteenQAM_UL_Information  SixteenQAM-UL-Information
    No value
    rnsap.SixteenQAM_UL_Information
```

```
rnsap.SixteenQAM_UL_Information_to_Modify  SixteenQAM-UL-Information-to-Modify
No value
rnsap.SixteenQAM_UL_Information_to_Modify

rnsap.SixtyfourQAM_DL_SupportIndicator  SixtyfourQAM-DL-SupportIndicator
Unsigned 32-bit integer
rnsap.SixtyfourQAM_DL_SupportIndicator

rnsap.SuccessfulRL_InformationResponseList_RL_AdditionFailureFDD_item  Item
No value
rnsap.ProtocolIE_Single_Container

rnsap.SuccessfulRL_InformationResponseList_RL_SetupFailureFDD_item  Item
No value
rnsap.ProtocolIE_Single_Container

rnsap.SuccessfulRL_InformationResponse_RL_AdditionFailureFDD  SuccessfulRL-Infor
No value
rnsap.SuccessfulRL_InformationResponse_RL_AdditionFailureFDD

rnsap.SuccessfulRL_InformationResponse_RL_SetupFailureFDD  SuccessfulRL-Informat
No value
rnsap.SuccessfulRL_InformationResponse_RL_SetupFailureFDD

rnsap.Support_8PSK  Support-8PSK
Unsigned 32-bit integer
rnsap.Support_8PSK

rnsap.Support_PLCCCH  Support-PLCCCH
Unsigned 32-bit integer
rnsap.Support_PLCCCH

rnsap.SynchronisationIndicator  SynchronisationIndicator
Unsigned 32-bit integer
rnsap.SynchronisationIndicator

rnsap.TDD_DCHs_to_Modify  TDD-DCHs-to-Modify
Unsigned 32-bit integer
rnsap.TDD_DCHs_to_Modify

rnsap.TDD_DCHs_to_ModifySpecificInformationList_item  Item
No value
rnsap.TDD_DCHs_to_ModifySpecificItem

rnsap.TDD_DCHs_to_Modify_item  Item
No value
rnsap.TDD_DCHs_to_ModifyItem

rnsap.TDD_DL_Code_Information768_item  Item
No value
rnsap.TDD_DL_Code_InformationItem768

rnsap.TDD_DL_Code_InformationModifyList_RL_ReconfReadyTDD768_item  Item
No value
rnsap.TDD_DL_Code_InformationModifyItem_RL_ReconfReadyTDD768

rnsap.TDD_DL_Code_InformationModifyList_RL_ReconfReadyTDD_item  Item
No value
rnsap.TDD_DL_Code_InformationModifyItem_RL_ReconfReadyTDD

rnsap.TDD_DL_Code_Information_item  Item
No value
rnsap.TDD_DL_Code_InformationItem
```



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rnsap.TDD_DL_Code_LCR_InformationModifyList_RL_ReconfReadyTDD_item  Item
    No value
    rnsap.TDD_DL_Code_LCR_InformationModifyItem_RL_ReconfReadyTDD
rnsap.TDD_DL_Code_LCR_Information_item  Item
    No value
    rnsap.TDD_DL_Code_LCR_InformationItem
rnsap.TDD_DL_DPCH_TimeSlotFormat_LCR  TDD-DL-DPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    rnsap.TDD_DL_DPCH_TimeSlotFormat_LCR
rnsap.TDD_TPC_DownlinkStepSize  TDD-TPC-DownlinkStepSize
    Unsigned 32-bit integer
    rnsap.TDD_TPC_DownlinkStepSize
rnsap.TDD_TPC_UplinkStepSize_LCR  TDD-TPC-UplinkStepSize-LCR
    Unsigned 32-bit integer
    rnsap.TDD_TPC_UplinkStepSize_LCR
rnsap.TDD_UL_Code_Information768_item  Item
    No value
    rnsap.TDD_UL_Code_InformationItem768
rnsap.TDD_UL_Code_InformationModifyList_RL_ReconfReadyTDD768_item  Item
    No value
    rnsap.TDD_UL_Code_InformationModifyItem_RL_ReconfReadyTDD768
rnsap.TDD_UL_Code_InformationModifyList_RL_ReconfReadyTDD_item  Item
    No value
    rnsap.TDD_UL_Code_InformationModifyItem_RL_ReconfReadyTDD
rnsap.TDD_UL_Code_Information_item  Item
    No value
    rnsap.TDD_UL_Code_InformationItem
rnsap.TDD_UL_Code_LCR_InformationModifyList_RL_ReconfReadyTDD_item  Item
    No value
    rnsap.TDD_UL_Code_LCR_InformationModifyItem_RL_ReconfReadyTDD
rnsap.TDD_UL_Code_LCR_Information_item  Item
    No value
    rnsap.TDD_UL_Code_LCR_InformationItem
rnsap.TDD_UL_DPCH_TimeSlotFormat_LCR  TDD-UL-DPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    rnsap.TDD_UL_DPCH_TimeSlotFormat_LCR
rnsap.TFCS_TFCSList_item  Item
    No value
    rnsap.TFCS_TFCSList_item
rnsap.TSTD_Support_Indicator  TSTD-Support-Indicator
    Unsigned 32-bit integer
    rnsap.TSTD_Support_Indicator
rnsap.TUTRANGANSSMeasurementThresholdInformation  TUTRANGANSSMeasurementThreshol
    No value
    rnsap.TUTRANGANSSMeasurementThresholdInformation
rnsap.TUTRANGANSSMeasurementValueInformation  TUTRANGANSSMeasurementValueInforma
    No value
    rnsap.TUTRANGANSSMeasurementValueInformation

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```
rnsap.TUTRANGPSMeasurementThresholdInformation  TUTRANGPSMeasurementThresholdInf
    No value
    rnsap.TUTRANGPSMeasurementThresholdInformation
rnsap.TimeSlot  TimeSlot
    Unsigned 32-bit integer
    rnsap.TimeSlot
rnsap.TnlQos  TnlQos
    Unsigned 32-bit integer
    rnsap.TnlQos
rnsap.TrCH_SrcStatisticsDescr  TrCH-SrcStatisticsDescr
    Unsigned 32-bit integer
    rnsap.TrCH_SrcStatisticsDescr
rnsap.TraceDepth  TraceDepth
    Unsigned 32-bit integer
    rnsap.TraceDepth
rnsap.TraceRecordingSessionReference  TraceRecordingSessionReference
    Unsigned 32-bit integer
    rnsap.TraceRecordingSessionReference
rnsap.TraceReference  TraceReference
    Byte array
    rnsap.TraceReference
rnsap.TrafficClass  TrafficClass
    Unsigned 32-bit integer
    rnsap.TrafficClass
rnsap.TransmissionTimeIntervalInformation_item  Item
    No value
    rnsap.TransmissionTimeIntervalInformation_item
rnsap.Transmission_Gap_Pattern_Sequence_Information  Transmission-Gap-Pattern-Se
    Unsigned 32-bit integer
    rnsap.Transmission_Gap_Pattern_Sequence_Information
rnsap.Transmission_Gap_Pattern_Sequence_Information_item  Item
    No value
    rnsap.Transmission_Gap_Pattern_Sequence_Information_item
rnsap.Transmission_Gap_Pattern_Sequence_Status_List_item  Item
    No value
    rnsap.Transmission_Gap_Pattern_Sequence_Status_List_item
rnsap.Transmitted_Carrier_Power_Value  Transmitted-Carrier-Power-Value
    Unsigned 32-bit integer
    rnsap.Transmitted_Carrier_Power_Value
rnsap.Transmitted_Carrier_Power_Value_IncrDecrThres  Transmitted-Carrier-Power-V
    Unsigned 32-bit integer
    rnsap.Transmitted_Carrier_Power_Value_IncrDecrThres
rnsap.TransportBearerID  TransportBearerID
    Unsigned 32-bit integer
    rnsap.TransportBearerID
rnsap.TransportBearerRequestIndicator  TransportBearerRequestIndicator
    Unsigned 32-bit integer
    rnsap.TransportBearerRequestIndicator
```

```
rnsap.TransportFormatSet_DynamicPartList_item  Item
  No value
  rnsap.TransportFormatSet_DynamicPartList_item
rnsap.TransportLayerAddress  TransportLayerAddress
  Byte array
  rnsap.TransportLayerAddress
rnsap.TypeOfError  TypeOfError
  Unsigned 32-bit integer
  rnsap.TypeOfError
rnsap.UC_ID  UC-ID
  No value
  rnsap.UC_ID
rnsap.UEIdentity  UEIdentity
  Unsigned 32-bit integer
  rnsap.UEIdentity
rnsap.UEMeasurementFailureIndication  UEMeasurementFailureIndication
  No value
  rnsap.UEMeasurementFailureIndication
rnsap.UEMeasurementInitiationFailure  UEMeasurementInitiationFailure
  No value
  rnsap.UEMeasurementInitiationFailure
rnsap.UEMeasurementInitiationRequest  UEMeasurementInitiationRequest
  No value
  rnsap.UEMeasurementInitiationRequest
rnsap.UEMeasurementInitiationResponse  UEMeasurementInitiationResponse
  No value
  rnsap.UEMeasurementInitiationResponse
rnsap.UEMeasurementParameterModAllow  UEMeasurementParameterModAllow
  Unsigned 32-bit integer
  rnsap.UEMeasurementParameterModAllow
rnsap.UEMeasurementReport  UEMeasurementReport
  No value
  rnsap.UEMeasurementReport
rnsap.UEMeasurementReportCharacteristics  UEMeasurementReportCharacteristics
  Unsigned 32-bit integer
  rnsap.UEMeasurementReportCharacteristics
rnsap.UEMeasurementTerminationRequest  UEMeasurementTerminationRequest
  No value
  rnsap.UEMeasurementTerminationRequest
rnsap.UEMeasurementTimeslotInfo768  UEMeasurementTimeslotInfo768
  Unsigned 32-bit integer
  rnsap.UEMeasurementTimeslotInfo768
rnsap.UEMeasurementTimeslotInfo768_item  Item
  No value
  rnsap.UEMeasurementTimeslotInfo768_IEs
rnsap.UEMeasurementTimeslotInfoHCR  UEMeasurementTimeslotInfoHCR
  Unsigned 32-bit integer
  rnsap.UEMeasurementTimeslotInfoHCR
```

```
rnsap.UEMeasurementTimeslotInfoHCR_item  Item
    No value
    rnsap.UEMeasurementTimeslotInfoHCR_IEs
rnsap.UEMeasurementTimeslotInfoLCR  UEMeasurementTimeslotInfoLCR
    Unsigned 32-bit integer
    rnsap.UEMeasurementTimeslotInfoLCR
rnsap.UEMeasurementTimeslotInfoLCR_item  Item
    No value
    rnsap.UEMeasurementTimeslotInfoLCR_IEs
rnsap.UEMeasurementType  UEMeasurementType
    Unsigned 32-bit integer
    rnsap.UEMeasurementType
rnsap.UEMeasurementValueInformation  UEMeasurementValueInformation
    Unsigned 32-bit integer
    rnsap.UEMeasurementValueInformation
rnsap.UEMeasurementValueTimeslotISCPList768  UEMeasurementValueTimeslotISCPList768
    Unsigned 32-bit integer
    rnsap.UEMeasurementValueTimeslotISCPList768
rnsap.UEMeasurementValueTimeslotISCPList768_item  Item
    No value
    rnsap.UEMeasurementValueTimeslotISCPList768_IEs
rnsap.UEMeasurementValueTimeslotISCPListHCR_item  Item
    No value
    rnsap.UEMeasurementValueTimeslotISCPListHCR_IEs
rnsap.UEMeasurementValueTimeslotISCPListLCR_item  Item
    No value
    rnsap.UEMeasurementValueTimeslotISCPListLCR_IEs
rnsap.UEMeasurementValueTransmittedPowerList768  UEMeasurementValueTransmittedPowerList768
    Unsigned 32-bit integer
    rnsap.UEMeasurementValueTransmittedPowerList768
rnsap.UEMeasurementValueTransmittedPowerList768_item  Item
    No value
    rnsap.UEMeasurementValueTransmittedPowerList768_IEs
rnsap.UEMeasurementValueTransmittedPowerListHCR_item  Item
    No value
    rnsap.UEMeasurementValueTransmittedPowerListHCR_IEs
rnsap.UEMeasurementValueTransmittedPowerListLCR_item  Item
    No value
    rnsap.UEMeasurementValueTransmittedPowerListLCR_IEs
rnsap.UE_State  UE-State
    Unsigned 32-bit integer
    rnsap.UE_State
rnsap.UL_CCTrCHInformationListIE_RL_AdditionRspTDD  UL-CCTrCHInformationListIE-R
    Unsigned 32-bit integer
    rnsap.UL_CCTrCHInformationListIE_RL_AdditionRspTDD
rnsap.UL_CCTrCHInformationListIE_RL_AdditionRspTDD768  UL-CCTrCHInformationListI
    Unsigned 32-bit integer
    rnsap.UL_CCTrCHInformationListIE_RL_AdditionRspTDD768
```

```

rnsap.UL_CCTrCHInformationListIE_RL_AdditionRspTDD768_item  Item
    No value
    rnsap.UL_CCTrCHInformationItem_RL_AdditionRspTDD768
rnsap.UL_CCTrCHInformationListIE_RL_AdditionRspTDD_item  Item
    No value
    rnsap.UL_CCTrCHInformationItem_RL_AdditionRspTDD
rnsap.UL_CCTrCHInformationListIE_RL_ReconfReadyTDD  UL-CCTrCHInformationListIE-R
    Unsigned 32-bit integer
    rnsap.UL_CCTrCHInformationListIE_RL_ReconfReadyTDD
rnsap.UL_CCTrCHInformationListIE_RL_ReconfReadyTDD_item  Item
    No value
    rnsap.UL_CCTrCH_InformationItem_RL_ReconfReadyTDD
rnsap.UL_CCTrCHInformationListIE_RL_SetupRspTDD  UL-CCTrCHInformationListIE-RL-S
    Unsigned 32-bit integer
    rnsap.UL_CCTrCHInformationListIE_RL_SetupRspTDD
rnsap.UL_CCTrCHInformationListIE_RL_SetupRspTDD768  UL-CCTrCHInformationListIE-R
    Unsigned 32-bit integer
    rnsap.UL_CCTrCHInformationListIE_RL_SetupRspTDD768
rnsap.UL_CCTrCHInformationListIE_RL_SetupRspTDD768_item  Item
    No value
    rnsap.UL_CCTrCHInformationItem_RL_SetupRspTDD768
rnsap.UL_CCTrCHInformationListIE_RL_SetupRspTDD_item  Item
    No value
    rnsap.UL_CCTrCHInformationItem_RL_SetupRspTDD
rnsap.UL_CCTrCH_AddInformation_RL_ReconfPrepTDD  UL-CCTrCH-AddInformation-RL-Rec
    No value
    rnsap.UL_CCTrCH_AddInformation_RL_ReconfPrepTDD
rnsap.UL_CCTrCH_DeleteInformation_RL_ReconfPrepTDD  UL-CCTrCH-DeleteInformation-
    No value
    rnsap.UL_CCTrCH_DeleteInformation_RL_ReconfPrepTDD
rnsap.UL_CCTrCH_InformationAddList_RL_ReconfPrepTDD  UL-CCTrCH-InformationAddLis
    Unsigned 32-bit integer
    rnsap.UL_CCTrCH_InformationAddList_RL_ReconfPrepTDD
rnsap.UL_CCTrCH_InformationAddList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.UL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD  UL-CCTrCH-InformationDel
    No value
    rnsap.UL_CCTrCH_InformationDeleteItem_RL_ReconfRqstTDD
rnsap.UL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD  UL-CCTrCH-InformationDel
    Unsigned 32-bit integer
    rnsap.UL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD
rnsap.UL_CCTrCH_InformationDeleteList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.UL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD  UL-CCTrCH-InformationDel
    Unsigned 32-bit integer
    rnsap.UL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD

```

```
rnsap.UL_CCTrCH_InformationDeleteList_RL_ReconfRqstTDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.UL_CCTrCH_InformationItem_RL_AdditionRqstTDD  UL-CCTrCH-InformationItem-RL-
  No value
  rnsap.UL_CCTrCH_InformationItem_RL_AdditionRqstTDD
rnsap.UL_CCTrCH_InformationItem_RL_SetupRqstTDD  UL-CCTrCH-InformationItem-RL-Se
  No value
  rnsap.UL_CCTrCH_InformationItem_RL_SetupRqstTDD
rnsap.UL_CCTrCH_InformationListIE_PhyChReconfRqstTDD  UL-CCTrCH-InformationListI
  Unsigned 32-bit integer
  rnsap.UL_CCTrCH_InformationListIE_PhyChReconfRqstTDD
rnsap.UL_CCTrCH_InformationListIE_PhyChReconfRqstTDD_item  Item
  No value
  rnsap.UL_CCTrCH_InformationItem_PhyChReconfRqstTDD
rnsap.UL_CCTrCH_InformationList_RL_AdditionRqstTDD  UL-CCTrCH-InformationList-RL
  Unsigned 32-bit integer
  rnsap.UL_CCTrCH_InformationList_RL_AdditionRqstTDD
rnsap.UL_CCTrCH_InformationList_RL_AdditionRqstTDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.UL_CCTrCH_InformationList_RL_SetupRqstTDD  UL-CCTrCH-InformationList-RL-Se
  Unsigned 32-bit integer
  rnsap.UL_CCTrCH_InformationList_RL_SetupRqstTDD
rnsap.UL_CCTrCH_InformationList_RL_SetupRqstTDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.UL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD  UL-CCTrCH-InformationMod
  No value
  rnsap.UL_CCTrCH_InformationModifyItem_RL_ReconfRqstTDD
rnsap.UL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD  UL-CCTrCH-InformationMod
  Unsigned 32-bit integer
  rnsap.UL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD
rnsap.UL_CCTrCH_InformationModifyList_RL_ReconfPrepTDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.UL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD  UL-CCTrCH-InformationMod
  Unsigned 32-bit integer
  rnsap.UL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD
rnsap.UL_CCTrCH_InformationModifyList_RL_ReconfRqstTDD_item  Item
  No value
  rnsap.ProtocolIE_Single_Container
rnsap.UL_CCTrCH_LCR_InformationListIE_RL_AdditionRspTDD  UL-CCTrCH-LCR-Informati
  Unsigned 32-bit integer
  rnsap.UL_CCTrCH_LCR_InformationListIE_RL_AdditionRspTDD
rnsap.UL_CCTrCH_LCR_InformationListIE_RL_AdditionRspTDD_item  Item
  No value
  rnsap.UL_CCTrCH_LCR_InformationItem_RL_AdditionRspTDD
```

```
rnsap.UL_CCTrCH_ModifyInformation_RL_ReconfPrepTDD  UL-CCTrCH-ModifyInformation-  
  No value  
  rnsap.UL_CCTrCH_ModifyInformation_RL_ReconfPrepTDD  
rnsap.UL_DPCH_InformationAddListIE_RL_ReconfReadyTDD  UL-DPCH-InformationAddList  
  No value  
  rnsap.UL_DPCH_InformationAddListIE_RL_ReconfReadyTDD  
rnsap.UL_DPCH_InformationAddList_RL_ReconfReadyTDD768  UL-DPCH-InformationAddList  
  No value  
  rnsap.UL_DPCH_InformationAddList_RL_ReconfReadyTDD768  
rnsap.UL_DPCH_InformationDeleteListIE_RL_ReconfReadyTDD  UL-DPCH-InformationDelete  
  Unsigned 32-bit integer  
  rnsap.UL_DPCH_InformationDeleteListIE_RL_ReconfReadyTDD  
rnsap.UL_DPCH_InformationDeleteListIE_RL_ReconfReadyTDD_item  Item  
  No value  
  rnsap.UL_DPCH_InformationDeleteItem_RL_ReconfReadyTDD  
rnsap.UL_DPCH_InformationItem_PhyChReconfRqstTDD  UL-DPCH-InformationItem-PhyChR  
  No value  
  rnsap.UL_DPCH_InformationItem_PhyChReconfRqstTDD  
rnsap.UL_DPCH_InformationItem_RL_AdditionRspTDD  UL-DPCH-InformationItem-RL-Addi  
  No value  
  rnsap.UL_DPCH_InformationItem_RL_AdditionRspTDD  
rnsap.UL_DPCH_InformationItem_RL_AdditionRspTDD768  UL-DPCH-InformationItem-RL-A  
  No value  
  rnsap.UL_DPCH_InformationItem_RL_AdditionRspTDD768  
rnsap.UL_DPCH_InformationItem_RL_SetupRspTDD  UL-DPCH-InformationItem-RL-SetupRs  
  No value  
  rnsap.UL_DPCH_InformationItem_RL_SetupRspTDD  
rnsap.UL_DPCH_InformationItem_RL_SetupRspTDD768  UL-DPCH-InformationItem-RL-Setu  
  No value  
  rnsap.UL_DPCH_InformationItem_RL_SetupRspTDD768  
rnsap.UL_DPCH_InformationModifyListIE_RL_ReconfReadyTDD  UL-DPCH-InformationModi  
  No value  
  rnsap.UL_DPCH_InformationModifyListIE_RL_ReconfReadyTDD  
rnsap.UL_DPCH_Information_RL_ReconfPrepFDD  UL-DPCH-Information-RL-ReconfPrepFDD  
  No value  
  rnsap.UL_DPCH_Information_RL_ReconfPrepFDD  
rnsap.UL_DPCH_Information_RL_ReconfRqstFDD  UL-DPCH-Information-RL-ReconfRqstFDD  
  No value  
  rnsap.UL_DPCH_Information_RL_ReconfRqstFDD  
rnsap.UL_DPCH_Information_RL_SetupRqstFDD  UL-DPCH-Information-RL-SetupRqstFDD  
  No value  
  rnsap.UL_DPCH_Information_RL_SetupRqstFDD  
rnsap.UL_DPCH_LCR_InformationAddList_RL_ReconfReadyTDD  UL-DPCH-LCR-InformationA  
  No value  
  rnsap.UL_DPCH_LCR_InformationAddList_RL_ReconfReadyTDD  
rnsap.UL_DPCH_LCR_InformationItem_RL_AdditionRspTDD  UL-DPCH-LCR-InformationItem  
  No value  
  rnsap.UL_DPCH_LCR_InformationItem_RL_AdditionRspTDD
```

```
rnsap.UL_DPCH_LCR_InformationItem_RL_SetupRspTDD  UL-DPCH-LCR-InformationItem-RL
  No value
  rnsap.UL_DPCH_LCR_InformationItem_RL_SetupRspTDD
rnsap.UL_DPDCHIndicatorEDCH  UL-DPDCHIndicatorEDCH
  Unsigned 32-bit integer
  rnsap.UL_DPDCHIndicatorEDCH
rnsap.UL_LCR_CCTrCHInformationListIE_RL_SetupRspTDD  UL-LCR-CCTrCHInformationList
  Unsigned 32-bit integer
  rnsap.UL_LCR_CCTrCHInformationListIE_RL_SetupRspTDD
rnsap.UL_LCR_CCTrCHInformationListIE_RL_SetupRspTDD_item  Item
  No value
  rnsap.UL_LCR_CCTrCHInformationItem_RL_SetupRspTDD
rnsap.UL_Physical_Channel_Information_RL_SetupRqstTDD  UL-Physical-Channel-Information
  No value
  rnsap.UL_Physical_Channel_Information_RL_SetupRqstTDD
rnsap.UL_SIR  UL-SIR
  Signed 32-bit integer
  rnsap.UL_SIR
rnsap.UL_Synchronisation_Parameters_LCR  UL-Synchronisation-Parameters-LCR
  No value
  rnsap.UL_Synchronisation_Parameters_LCR
rnsap.UL_TimeSlot_ISCP_Info_item  Item
  No value
  rnsap.UL_TimeSlot_ISCP_InfoItem
rnsap.UL_TimeSlot_ISCP_LCR_Info_item  Item
  No value
  rnsap.UL_TimeSlot_ISCP_LCR_InfoItem
rnsap.UL_TimeslotLCR_InformationList_PhyChReconfRqstTDD  UL-TimeslotLCR-InformationList
  Unsigned 32-bit integer
  rnsap.UL_TimeslotLCR_InformationList_PhyChReconfRqstTDD
rnsap.UL_TimeslotLCR_InformationList_PhyChReconfRqstTDD_item  Item
  No value
  rnsap.UL_TimeslotLCR_InformationItem_PhyChReconfRqstTDD
rnsap.UL_TimeslotLCR_InformationModifyList_RL_ReconfReadyTDD  UL-TimeslotLCR-InformationModifyList
  Unsigned 32-bit integer
  rnsap.UL_TimeslotLCR_InformationModifyList_RL_ReconfReadyTDD
rnsap.UL_TimeslotLCR_InformationModifyList_RL_ReconfReadyTDD_item  Item
  No value
  rnsap.UL_TimeslotLCR_InformationModifyItem_RL_ReconfReadyTDD
rnsap.UL_TimeslotLCR_Information_item  Item
  No value
  rnsap.UL_TimeslotLCR_InformationItem
rnsap.UL_Timeslot_ISCP_Value  UL-Timeslot-ISCP-Value
  Unsigned 32-bit integer
  rnsap.UL_Timeslot_ISCP_Value
rnsap.UL_Timeslot_ISCP_Value_IncrDecrThres  UL-Timeslot-ISCP-Value-IncrDecrThres
  Unsigned 32-bit integer
  rnsap.UL_Timeslot_ISCP_Value_IncrDecrThres
```



```
rnsap.UL_Timeslot_Information768_item  Item
    No value
    rnsap.UL_Timeslot_InformationItem768
rnsap.UL_Timeslot_InformationList_PhyChReconfRqstTDD768  UL-Timeslot-Information
    Unsigned 32-bit integer
    rnsap.UL_Timeslot_InformationList_PhyChReconfRqstTDD768
rnsap.UL_Timeslot_InformationList_PhyChReconfRqstTDD768_item  Item
    No value
    rnsap.UL_Timeslot_InformationItem_PhyChReconfRqstTDD768
rnsap.UL_Timeslot_InformationList_PhyChReconfRqstTDD_item  Item
    No value
    rnsap.UL_Timeslot_InformationItem_PhyChReconfRqstTDD
rnsap.UL_Timeslot_InformationModifyList_RL_ReconfReadyTDD768  UL-Timeslot-Inform
    Unsigned 32-bit integer
    rnsap.UL_Timeslot_InformationModifyList_RL_ReconfReadyTDD768
rnsap.UL_Timeslot_InformationModifyList_RL_ReconfReadyTDD768_item  Item
    No value
    rnsap.UL_Timeslot_InformationModifyItem_RL_ReconfReadyTDD768
rnsap.UL_Timeslot_InformationModifyList_RL_ReconfReadyTDD_item  Item
    No value
    rnsap.UL_Timeslot_InformationModifyItem_RL_ReconfReadyTDD
rnsap.UL_Timeslot_Information_item  Item
    No value
    rnsap.UL_Timeslot_InformationItem
rnsap.UL_TimingAdvanceCtrl_LCR  UL-TimingAdvanceCtrl-LCR
    No value
    rnsap.UL_TimingAdvanceCtrl_LCR
rnsap.URA_ID  URA-ID
    Unsigned 32-bit integer
    rnsap.URA_ID
rnsap.URA_Information  URA-Information
    No value
    rnsap.URA_Information
rnsap.USCHToBeAddedOrModifiedList_RL_ReconfReadyTDD  USCHToBeAddedOrModifiedList
    Unsigned 32-bit integer
    rnsap.USCHToBeAddedOrModifiedList_RL_ReconfReadyTDD
rnsap.USCHToBeAddedOrModifiedList_RL_ReconfReadyTDD_item  Item
    No value
    rnsap.USCHToBeAddedOrModifiedItem_RL_ReconfReadyTDD
rnsap.USCH_DeleteList_RL_ReconfPrepTDD  USCH-DeleteList-RL-ReconfPrepTDD
    Unsigned 32-bit integer
    rnsap.USCH_DeleteList_RL_ReconfPrepTDD
rnsap.USCH_DeleteList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.USCH_DeleteItem_RL_ReconfPrepTDD
rnsap.USCH_Information  USCH-Information
    Unsigned 32-bit integer
    rnsap.USCH_Information
```

```

rnsap.USCH_InformationListIE_RL_AdditionRspTDD  USCH-InformationListIE-RL-Additi
    Unsigned 32-bit integer
    rnsap.USCH_InformationListIE_RL_AdditionRspTDD
rnsap.USCH_InformationListIE_RL_AdditionRspTDD_item  Item
    No value
    rnsap.USCHInformationItem_RL_AdditionRspTDD
rnsap.USCH_InformationListIEs_RL_SetupRspTDD  USCH-InformationListIEs-RL-SetupRs
    Unsigned 32-bit integer
    rnsap.USCH_InformationListIEs_RL_SetupRspTDD
rnsap.USCH_InformationListIEs_RL_SetupRspTDD_item  Item
    No value
    rnsap.USCHInformationItem_RL_SetupRspTDD
rnsap.USCH_Information_item  Item
    No value
    rnsap.USCH_InformationItem
rnsap.USCH_LCR_InformationListIEs_RL_AdditionRspTDD  USCH-LCR-InformationListIEs
    Unsigned 32-bit integer
    rnsap.USCH_LCR_InformationListIEs_RL_AdditionRspTDD
rnsap.USCH_LCR_InformationListIEs_RL_AdditionRspTDD_item  Item
    No value
    rnsap.USCH_LCR_InformationItem_RL_AdditionRspTDD
rnsap.USCH_LCR_InformationListIEs_RL_SetupRspTDD  USCH-LCR-InformationListIEs-RL
    Unsigned 32-bit integer
    rnsap.USCH_LCR_InformationListIEs_RL_SetupRspTDD
rnsap.USCH_LCR_InformationListIEs_RL_SetupRspTDD_item  Item
    No value
    rnsap.USCH_LCR_InformationItem_RL_SetupRspTDD
rnsap.USCH_ModifyList_RL_ReconfPrepTDD  USCH-ModifyList-RL-ReconfPrepTDD
    Unsigned 32-bit integer
    rnsap.USCH_ModifyList_RL_ReconfPrepTDD
rnsap.USCH_ModifyList_RL_ReconfPrepTDD_item  Item
    No value
    rnsap.USCH_ModifyItem_RL_ReconfPrepTDD
rnsap.Unidirectional_DCH_Indicator  Unidirectional-DCH-Indicator
    Unsigned 32-bit integer
    rnsap.Unidirectional_DCH_Indicator
rnsap.UnsuccessfulRL_InformationResponseList_RL_AdditionFailureFDD_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.UnsuccessfulRL_InformationResponseList_RL_SetupFailureFDD_item  Item
    No value
    rnsap.ProtocolIE_Single_Container
rnsap.UnsuccessfulRL_InformationResponse_RL_AdditionFailureFDD  UnsuccessfulRL-I
    No value
    rnsap.UnsuccessfulRL_InformationResponse_RL_AdditionFailureFDD
rnsap.UnsuccessfulRL_InformationResponse_RL_AdditionFailureTDD  UnsuccessfulRL-I
    No value
    rnsap.UnsuccessfulRL_InformationResponse_RL_AdditionFailureTDD

```

```

rnsap.UnsuccessfulRL_InformationResponse_RL_SetupFailureFDD  UnsuccessfulRL-Info
    No value
    rnsap.UnsuccessfulRL_InformationResponse_RL_SetupFailureFDD
rnsap.UnsuccessfulRL_InformationResponse_RL_SetupFailureTDD  UnsuccessfulRL-Info
    No value
    rnsap.UnsuccessfulRL_InformationResponse_RL_SetupFailureTDD
rnsap.UpPTSInterferenceValue  UpPTSInterferenceValue
    Unsigned 32-bit integer
    rnsap.UpPTSInterferenceValue
rnsap.UplinkSignallingTransferIndicationFDD  UplinkSignallingTransferIndicationF
    No value
    rnsap.UplinkSignallingTransferIndicationFDD
rnsap.UplinkSignallingTransferIndicationTDD  UplinkSignallingTransferIndicationT
    No value
    rnsap.UplinkSignallingTransferIndicationTDD
rnsap.User_Plane_Congestion_Fields_Inclusion  User-Plane-Congestion-Fields-Inclu
    Unsigned 32-bit integer
    rnsap.User_Plane_Congestion_Fields_Inclusion
rnsap.aOA_LCR  aOA-LCR
    Unsigned 32-bit integer
    rnsap.AOA_LCR
rnsap.aOA_LCR_Accuracy_Class  aOA-LCR-Accuracy-Class
    Unsigned 32-bit integer
    rnsap.AOA_LCR_Accuracy_Class
rnsap.a_f_1_nav  a-f-1-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16
rnsap.a_f_2_nav  a-f-2-nav
    Byte array
    rnsap.BIT_STRING_SIZE_8
rnsap.a_f_zero_nav  a-f-zero-nav
    Byte array
    rnsap.BIT_STRING_SIZE_22
rnsap.a_i0  a-i0
    Byte array
    rnsap.BIT_STRING_SIZE_28
rnsap.a_i1  a-i1
    Byte array
    rnsap.BIT_STRING_SIZE_18
rnsap.a_i2  a-i2
    Byte array
    rnsap.BIT_STRING_SIZE_12
rnsap.a_one_utc  a-one-utc
    Byte array
    rnsap.BIT_STRING_SIZE_24
rnsap.a_sqrt_lsb_nav  a-sqrt-lsb-nav
    Unsigned 32-bit integer
    rnsap.INTEGER_0_67108863

```

```
rnsap.a_sqrt_nav  a-sqrt-nav
  Byte array
  rnsap.BIT_STRING_SIZE_32
rnsap.a_zero_utc  a-zero-utc
  Byte array
  rnsap.BIT_STRING_SIZE_32
rnsap.accessPointName  accessPointName
  Byte array
  rnsap.AccessPointName
rnsap.ackNackRepetitionFactor  ackNackRepetitionFactor
  Unsigned 32-bit integer
  rnsap.AckNack_RepetitionFactor
rnsap.ackPowerOffset  ackPowerOffset
  Unsigned 32-bit integer
  rnsap.Ack_Power_Offset
rnsap.activate  activate
  No value
  rnsap.Activate_Info
rnsap.activation_type  activation-type
  Unsigned 32-bit integer
  rnsap.Execution_Type
rnsap.addPriorityQueue  addPriorityQueue
  No value
  rnsap.PriorityQueue_InfoItem_to_Add
rnsap.additionalPreferredFrequency  additionalPreferredFrequency
  Unsigned 32-bit integer
  rnsap.AdditionalPreferredFrequency
rnsap.adjustmentPeriod  adjustmentPeriod
  Unsigned 32-bit integer
  rnsap.AdjustmentPeriod
rnsap.adjustmentRatio  adjustmentRatio
  Unsigned 32-bit integer
  rnsap.ScaledAdjustmentRatio
rnsap.affectedUEInformationForMBMS  affectedUEInformationForMBMS
  Unsigned 32-bit integer
  rnsap.AffectedUEInformationForMBMS
rnsap.allRL  allRL
  No value
  rnsap.All_RL_DM_Rqst
rnsap.allRLS  allRLS
  No value
  rnsap.All_RL_Set_DM_Rqst
rnsap.all_contexts  all-contexts
  No value
  rnsap.NULL
rnsap.allocationRetentionPriority  allocationRetentionPriority
  No value
  rnsap.AllocationRetentionPriority
```

```
rnsap.allowed_DL_Rate    allowed-DL-Rate
    Unsigned 32-bit integer
    rnsap.Allowed_Rate

rnsap.allowed_Rate_Information    allowed-Rate-Information
    No value
    rnsap.Allowed_Rate_Information

rnsap.allowed_UL_Rate    allowed-UL-Rate
    Unsigned 32-bit integer
    rnsap.Allowed_Rate

rnsap.alphaValue    alphaValue
    Unsigned 32-bit integer
    rnsap.AlphaValue

rnsap.alpha_one_ionos    alpha-one-ionos
    Byte array
    rnsap.BIT_STRING_SIZE_12

rnsap.alpha_three_ionos    alpha-three-ionos
    Byte array
    rnsap.BIT_STRING_SIZE_8

rnsap.alpha_two_ionos    alpha-two-ionos
    Byte array
    rnsap.BIT_STRING_SIZE_12

rnsap.alpha_zero_ionos    alpha-zero-ionos
    Byte array
    rnsap.BIT_STRING_SIZE_12

rnsap.altitude    altitude
    Unsigned 32-bit integer
    rnsap.INTEGER_0_32767

rnsap.altitudeAndDirection    altitudeAndDirection
    No value
    rnsap.GA_AltitudeAndDirection

rnsap.amountofReporting    amountofReporting
    Unsigned 32-bit integer
    rnsap.UEMeasurementReportCharacteristicsPeriodicAmountofReporting

rnsap.aodo_nav    aodo-nav
    Byte array
    rnsap.BIT_STRING_SIZE_5

rnsap.associatedHSDSCH_MACdFlow    associatedHSDSCH-MACdFlow
    Unsigned 32-bit integer
    rnsap.HSDSCH_MACdFlow_ID

rnsap.bCC    bCC
    Byte array
    rnsap.BCC

rnsap.bcCH_ARFCN    bcCH-ARFCN
    Unsigned 32-bit integer
    rnsap.BCCH_ARFCN

rnsap.bLER    bLER
    Signed 32-bit integer
    rnsap.BLER
```

```
rnsap.bsIC bsIC
  No value
  rnsap.BSIC
rnsap.badSAT_ID badSAT-ID
  Unsigned 32-bit integer
  rnsap.SAT_ID
rnsap.badSatelliteInformation badSatelliteInformation
  Unsigned 32-bit integer
  rnsap.T_badSatelliteInformation
rnsap.badSatelliteInformation_item Item
  No value
  rnsap.T_badSatelliteInformation_item
rnsap.badSatellites badSatellites
  No value
  rnsap.BadSatellites
rnsap.bad_ganss_satId bad-ganss-satId
  Unsigned 32-bit integer
  rnsap.INTEGER_0_63
rnsap.bad_ganss_signalId bad-ganss-signalId
  Unsigned 32-bit integer
  rnsap.INTEGER_0_4_
rnsap.band_Indicator band-Indicator
  Unsigned 32-bit integer
  rnsap.Band_Indicator
rnsap.betaC betaC
  Unsigned 32-bit integer
  rnsap.BetaCD
rnsap.betaD betaD
  Unsigned 32-bit integer
  rnsap.BetaCD
rnsap.beta_one_ionos beta-one-ionos
  Byte array
  rnsap.BIT_STRING_SIZE_8
rnsap.beta_three_ionos beta-three-ionos
  Byte array
  rnsap.BIT_STRING_SIZE_8
rnsap.beta_two_ionos beta-two-ionos
  Byte array
  rnsap.BIT_STRING_SIZE_8
rnsap.beta_zero_ionos beta-zero-ionos
  Byte array
  rnsap.BIT_STRING_SIZE_8
rnsap.bindingID bindingID
  Byte array
  rnsap.BindingID
rnsap.bundlingModeIndicator bundlingModeIndicator
  Unsigned 32-bit integer
  rnsap.BundlingModeIndicator
```

```
rnsap.burstFreq burstFreq
    Unsigned 32-bit integer
    rnsap.INTEGER_1_16

rnsap.burstLength burstLength
    Unsigned 32-bit integer
    rnsap.INTEGER_10_25

rnsap.burstModeParameters burstModeParameters
    No value
    rnsap.BurstModeParameters

rnsap.burstStart burstStart
    Unsigned 32-bit integer
    rnsap.INTEGER_0_15

rnsap.burstType burstType
    Unsigned 32-bit integer
    rnsap.UEMeasurementTimeslotInfoHCRBurstType

rnsap.cCTrCH cCTrCH
    No value
    rnsap.CCTrCH_RL_FailureInd

rnsap.cCTrCH_ID cCTrCH-ID
    Unsigned 32-bit integer
    rnsap.CCTrCH_ID

rnsap.cCTrCH_InformationList_RL_FailureInd cCTrCH-InformationList-RL-FailureInd
    Unsigned 32-bit integer
    rnsap.CCTrCH_InformationList_RL_FailureInd

rnsap.cCTrCH_InformationList_RL_RestoreInd cCTrCH-InformationList-RL-RestoreInd
    Unsigned 32-bit integer
    rnsap.CCTrCH_InformationList_RL_RestoreInd

rnsap.cCTrCH_Maximum_DL_Power cCTrCH-Maximum-DL-Power
    Signed 32-bit integer
    rnsap.DL_Power

rnsap.cCTrCH_Minimum_DL_Power cCTrCH-Minimum-DL-Power
    Signed 32-bit integer
    rnsap.DL_Power

rnsap.cCTrCH_TPCList cCTrCH-TPCList
    Unsigned 32-bit integer
    rnsap.CCTrCH_TPCList_RL_SetupRqstTDD

rnsap.cFN cFN
    Unsigned 32-bit integer
    rnsap.CFN

rnsap.cGI cGI
    No value
    rnsap.CGI

rnsap.cI cI
    Byte array
    rnsap.CI

rnsap.cMConfigurationChangeCFN cMConfigurationChangeCFN
    Unsigned 32-bit integer
    rnsap.CFN
```

```
rnsap.cNDomainType  cNDomainType
    Unsigned 32-bit integer
    rnsap.CNDomainType

rnsap.cN_CS_DomainIdentifier  cN-CS-DomainIdentifier
    No value
    rnsap.CN_CS_DomainIdentifier

rnsap.cN_PS_DomainIdentifier  cN-PS-DomainIdentifier
    No value
    rnsap.CN_PS_DomainIdentifier

rnsap.cPC_DPCCH_Slot_Format  cPC-DPCCH-Slot-Format
    Unsigned 32-bit integer
    rnsap.CPC_DPCCH_Slot_Format

rnsap.cQI_DTX_Timer  cQI-DTX-Timer
    Unsigned 32-bit integer
    rnsap.CQI_DTX_Timer

rnsap.cCRC_Size  cCRC-Size
    Unsigned 32-bit integer
    rnsap.CCRC_Size

rnsap.cTFC  cTFC
    Unsigned 32-bit integer
    rnsap.TFCS_CTFC

rnsap.c_ID  c-ID
    Unsigned 32-bit integer
    rnsap.C_ID

rnsap.c_ic_nav  c-ic-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.c_is_nav  c-is-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.c_rc_nav  c-rc-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.c_rs_nav  c-rs-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.c_uc_nav  c-uc-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.c_us_nav  c-us-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.ca_or_p_on_l2_nav  ca-or-p-on-l2-nav
    Byte array
    rnsap.BIT_STRING_SIZE_2

rnsap.cause  cause
    Unsigned 32-bit integer
    rnsap.Cause
```



```
rnsap.cell cell
  No value
  rnsap.Cell_PagingRqst
rnsap.cellIndividualOffset cellIndividualOffset
  Signed 32-bit integer
  rnsap.CellIndividualOffset
rnsap.cellParameterID cellParameterID
  Unsigned 32-bit integer
  rnsap.CellParameterID
rnsap.cell_GAIgeographicalCoordinate cell-GAIgeographicalCoordinate
  No value
  rnsap.GeographicalCoordinate
rnsap.cell_fach_pch cell-fach-pch
  No value
  rnsap.Cell_Fach_Pch_State
rnsap.cfn cfn
  Unsigned 32-bit integer
  rnsap.CFN
rnsap.channelCoding channelCoding
  Unsigned 32-bit integer
  rnsap.ChannelCodingType
rnsap.chipOffset chipOffset
  Unsigned 32-bit integer
  rnsap.ChipOffset
rnsap.closedLoopModel_SupportIndicator closedLoopModel-SupportIndicator
  Unsigned 32-bit integer
  rnsap.ClosedLoopModel_SupportIndicator
rnsap.closedlooptimingadjustmentmode closedlooptimingadjustmentmode
  Unsigned 32-bit integer
  rnsap.Closedlooptimingadjustmentmode
rnsap.code_Number code-Number
  Unsigned 32-bit integer
  rnsap.INTEGER_0_127
rnsap.codingRate codingRate
  Unsigned 32-bit integer
  rnsap.CodingRate
rnsap.combining combining
  No value
  rnsap.Combining_RL_SetupRspFDD
rnsap.commonMeasurementValue commonMeasurementValue
  Unsigned 32-bit integer
  rnsap.CommonMeasurementValue
rnsap.commonMeasurementValueInformation commonMeasurementValueInformation
  Unsigned 32-bit integer
  rnsap.CommonMeasurementValueInformation
rnsap.commonMidamble commonMidamble
  No value
  rnsap.NULL
```

```

rnsap.common_DL_ReferencePowerInformation  common-DL-ReferencePowerInformation
Signed 32-bit integer
rnsap.DL_Power

rnsap.confidence  confidence
Unsigned 32-bit integer
rnsap.INTEGER_0_127

rnsap.context  context
No value
rnsap.ContextList_Reset

rnsap.contextGroup  contextGroup
No value
rnsap.ContextGroupList_Reset

rnsap.contextGroupInfoList_Reset  contextGroupInfoList-Reset
Unsigned 32-bit integer
rnsap.ContextGroupInfoList_Reset

rnsap.contextInfoList_Reset  contextInfoList-Reset
Unsigned 32-bit integer
rnsap.ContextInfoList_Reset

rnsap.contextType_Reset  contextType-Reset
Unsigned 32-bit integer
rnsap.ContextType_Reset

rnsap.continuous_Packet_Connectivity_DTX_DRX_Information  continuous-Packet-Conn
No value
rnsap.Continuous_Packet_Connectivity_DTX_DRX_Information

rnsap.continuous_Packet_Connectivity_DTX_DRX_Information_to_Modify  continuous-P
No value
rnsap.Continuous_Packet_Connectivity_DTX_DRX_Information_to_Modify

rnsap.continuous_Packet_Connectivity_HS_SCCH_Less_Information  continuous-Packet
Unsigned 32-bit integer
rnsap.Continuous_Packet_Connectivity_HS_SCCH_Less_Information

rnsap.correspondingCells  correspondingCells
Unsigned 32-bit integer
rnsap.CorrespondingCells

rnsap.cqiFeedback_CycleK  cqiFeedback-CycleK
Unsigned 32-bit integer
rnsap.CQI_Feedback_Cycle

rnsap.cqiPowerOffset  cqiPowerOffset
Unsigned 32-bit integer
rnsap.CQI_Power_Offset

rnsap.cqiRepetitionFactor  cqiRepetitionFactor
Unsigned 32-bit integer
rnsap.CQI_RepetitionFactor

rnsap.criticality  criticality
Unsigned 32-bit integer
rnsap.Criticality

rnsap.ctfc12bit  ctfc12bit
Unsigned 32-bit integer
rnsap.INTEGER_0_4095

```

```
rnsap.ctfc16bit  ctfc16bit
  Unsigned 32-bit integer
  rnsap.INTEGER_0_65535

rnsap.ctfc2bit  ctfc2bit
  Unsigned 32-bit integer
  rnsap.INTEGER_0_3

rnsap.ctfc4bit  ctfc4bit
  Unsigned 32-bit integer
  rnsap.INTEGER_0_15

rnsap.ctfc6bit  ctfc6bit
  Unsigned 32-bit integer
  rnsap.INTEGER_0_63

rnsap.ctfc8bit  ctfc8bit
  Unsigned 32-bit integer
  rnsap.INTEGER_0_255

rnsap.ctfcmaxbit  ctfcmaxbit
  Unsigned 32-bit integer
  rnsap.INTEGER_0_maxCTFC

rnsap.DATA_ID  DATA-ID
  Unsigned 32-bit integer
  rnsap.DATA_ID

rnsap.dCHInformationResponse  dCHInformationResponse
  No value
  rnsap.DCH_InformationResponseList_RL_ReconfReadyFDD

rnsap.dCH_ID  dCH-ID
  Unsigned 32-bit integer
  rnsap.DCH_ID

rnsap.dCH_Information  dCH-Information
  No value
  rnsap.DCH_Information_RL_AdditionRspTDD

rnsap.dCH_InformationResponse  dCH-InformationResponse
  Unsigned 32-bit integer
  rnsap.DCH_InformationResponse

rnsap.dCH_Rate_Information  dCH-Rate-Information
  Unsigned 32-bit integer
  rnsap.DCH_Rate_Information_RL_CongestInd

rnsap.dCH_SpecificInformationList  dCH-SpecificInformationList
  Unsigned 32-bit integer
  rnsap.DCH_Specific_FDD_InformationList

rnsap.dCH_id  dCH-id
  Unsigned 32-bit integer
  rnsap.DCH_ID

rnsap.dCHsInformationResponseList  dCHsInformationResponseList
  No value
  rnsap.DCH_InformationResponseList_RL_ReconfRspFDD

rnsap.dGANSSThreshold  dGANSSThreshold
  No value
  rnsap.DGANSSThreshold
```

```
rnsap.dGANSS_Information  dGANSS-Information
    Unsigned 32-bit integer
    rnsap.T_dGANSS_Information
rnsap.dGANSS_Information_item  Item
    No value
    rnsap.T_dGANSS_Information_item
rnsap.dGANSS_ReferenceTime  dGANSS-ReferenceTime
    Unsigned 32-bit integer
    rnsap.INTEGER_0_119
rnsap.dGANSS_SignalInformation  dGANSS-SignalInformation
    Unsigned 32-bit integer
    rnsap.T_dGANSS_SignalInformation
rnsap.dGANSS_SignalInformation_item  Item
    No value
    rnsap.T_dGANSS_SignalInformation_item
rnsap.dGPSCorrections  dGPSCorrections
    No value
    rnsap.DGPSCorrections
rnsap.dGPSThreshold  dGPSThreshold
    No value
    rnsap.DGPSThreshold
rnsap.dLReferencePower  dLReferencePower
    Signed 32-bit integer
    rnsap.DL_Power
rnsap.dLReferencePowerList  dLReferencePowerList
    Unsigned 32-bit integer
    rnsap.DL_ReferencePowerInformationList
rnsap.dL_CodeInformationList_RL_ReconfResp  dL-CodeInformationList-RL-ReconfResp
    No value
    rnsap.DL_CodeInformationList_RL_ReconfRspFDD
rnsap.dL_Code_Information  dL-Code-Information
    Unsigned 32-bit integer
    rnsap.TDD_DL_Code_Information
rnsap.dL_Code_Information768  dL-Code-Information768
    Unsigned 32-bit integer
    rnsap.TDD_DL_Code_Information768
rnsap.dL_Code_LCR_Information  dL-Code-LCR-Information
    Unsigned 32-bit integer
    rnsap.TDD_DL_Code_LCR_Information
rnsap.dL_FrameType  dL-FrameType
    Unsigned 32-bit integer
    rnsap.DL_FrameType
rnsap.dL_TimeSlot_ISCP  dL-TimeSlot-ISCP
    Unsigned 32-bit integer
    rnsap.DL_TimeSlot_ISCP_Info
rnsap.dL_TimeSlot_ISCP_Info  dL-TimeSlot-ISCP-Info
    Unsigned 32-bit integer
    rnsap.DL_TimeSlot_ISCP_Info
```

```

rnsap.dL_TimeslotISCP    dL-TimeslotISCP
    Unsigned 32-bit integer
    rnsap.DL_TimeslotISCP

rnsap.dL_TimeslotLCR_Info    dL-TimeslotLCR-Info
    Unsigned 32-bit integer
    rnsap.DL_TimeslotLCR_Information

rnsap.dL_TimeslotLCR_Information    dL-TimeslotLCR-Information
    Unsigned 32-bit integer
    rnsap.DL_TimeslotLCR_Information

rnsap.dL_Timeslot_ISCP    dL-Timeslot-ISCP
    No value
    rnsap.UE_MeasurementValue_DL_Timeslot_ISCP

rnsap.dL_Timeslot_Information    dL-Timeslot-Information
    Unsigned 32-bit integer
    rnsap.DL_Timeslot_Information

rnsap.dL_Timeslot_Information768    dL-Timeslot-Information768
    Unsigned 32-bit integer
    rnsap.DL_Timeslot_Information768

rnsap.dL_Timeslot_InformationList_PhyChReconfRqstTDD    dL-Timeslot-InformationLis
    Unsigned 32-bit integer
    rnsap.DL_Timeslot_InformationList_PhyChReconfRqstTDD

rnsap.dL_Timeslot_InformationModifyList_RL_ReconfReadyTDD    dL-Timeslot-Informati
    Unsigned 32-bit integer
    rnsap.DL_Timeslot_InformationModifyList_RL_ReconfReadyTDD

rnsap.dL_Timeslot_LCR_Information    dL-Timeslot-LCR-Information
    Unsigned 32-bit integer
    rnsap.DL_TimeslotLCR_Information

rnsap.dL_Timeslot_LCR_InformationModifyList_RL_ReconfRqstTDD    dL-Timeslot-LCR-In
    Unsigned 32-bit integer
    rnsap.DL_Timeslot_LCR_InformationModifyList_RL_ReconfRspTDD

rnsap.dL_UARFCN    dL-UARFCN
    Unsigned 32-bit integer
    rnsap.UARFCN

rnsap.dPCHConstantValue    dPCHConstantValue
    Signed 32-bit integer
    rnsap.DPCHConstantValue

rnsap.dPCH_ID    dPCH-ID
    Unsigned 32-bit integer
    rnsap.DPCH_ID

rnsap.dPCH_ID768    dPCH-ID768
    Unsigned 32-bit integer
    rnsap.DPCH_ID768

rnsap.dRACControl    dRACControl
    Unsigned 32-bit integer
    rnsap.DRACControl

rnsap.dRNTI    dRNTI
    Unsigned 32-bit integer
    rnsap.D_RNTI

```

```
rnsap.dRX_Information    dRX-Information
    No value
    rnsap.DRX_Information
rnsap.dRX_Information_to_Modify    dRX-Information-to-Modify
    Unsigned 32-bit integer
    rnsap.DRX_Information_to_Modify
rnsap.dSCH_FlowControlInformation    dSCH-FlowControlInformation
    Unsigned 32-bit integer
    rnsap.DSCH_FlowControlInformation
rnsap.dSCH_ID    dSCH-ID
    Unsigned 32-bit integer
    rnsap.DSCH_ID
rnsap.dSCH_InformationResponse    dSCH-InformationResponse
    No value
    rnsap.DSCH_InformationResponse_RL_AdditionRspTDD
rnsap.dSCH_SchedulingPriority    dSCH-SchedulingPriority
    Unsigned 32-bit integer
    rnsap.SchedulingPriorityIndicator
rnsap.dSCHsToBeAddedOrModified    dSCHsToBeAddedOrModified
    No value
    rnsap.DSCHToBeAddedOrModified_RL_ReconfReadyTDD
rnsap.dTX_Information    dTX-Information
    No value
    rnsap.DTX_Information
rnsap.dTX_Information_to_Modify    dTX-Information-to-Modify
    Unsigned 32-bit integer
    rnsap.DTX_Information_to_Modify
rnsap.d_RNTI    d-RNTI
    Unsigned 32-bit integer
    rnsap.D_RNTI
rnsap.ddMode    ddMode
    Unsigned 32-bit integer
    rnsap.DdMode
rnsap.deactivate    deactivate
    No value
    rnsap.Deactivate_Info
rnsap.deactivation_type    deactivation-type
    Unsigned 32-bit integer
    rnsap.Execution_Type
rnsap.dedicatedMeasurementValue    dedicatedMeasurementValue
    Unsigned 32-bit integer
    rnsap.DedicatedMeasurementValue
rnsap.dedicatedMeasurementValueInformation    dedicatedMeasurementValueInformation
    Unsigned 32-bit integer
    rnsap.DedicatedMeasurementValueInformation
rnsap.dedicatedmeasurementValue    dedicatedmeasurementValue
    Unsigned 32-bit integer
    rnsap.DedicatedMeasurementValue
```

```
rnsap.defaultMidamble defaultMidamble
  No value
  rnsap.NULL

rnsap.defaultPreferredFrequency defaultPreferredFrequency
  Unsigned 32-bit integer
  rnsap.UARFCN

rnsap.degreesOfLatitude degreesOfLatitude
  Unsigned 32-bit integer
  rnsap.INTEGER_0_2147483647

rnsap.degreesOfLongitude degreesOfLongitude
  Signed 32-bit integer
  rnsap.INTEGER_M2147483648_2147483647

rnsap.delayed_activation_update delayed-activation-update
  Unsigned 32-bit integer
  rnsap.DelayedActivationUpdate

rnsap.deletePriorityQueue deletePriorityQueue
  Unsigned 32-bit integer
  rnsap.PriorityQueue_Id

rnsap.delta_SIR1 delta-SIR1
  Unsigned 32-bit integer
  rnsap.DeltaSIR

rnsap.delta_SIR2 delta-SIR2
  Unsigned 32-bit integer
  rnsap.DeltaSIR

rnsap.delta_SIR_after1 delta-SIR-after1
  Unsigned 32-bit integer
  rnsap.DeltaSIR

rnsap.delta_SIR_after2 delta-SIR-after2
  Unsigned 32-bit integer
  rnsap.DeltaSIR

rnsap.delta_n_nav delta-n-nav
  Byte array
  rnsap.BIT_STRING_SIZE_16

rnsap.delta_t_ls_utc delta-t-ls-utc
  Byte array
  rnsap.BIT_STRING_SIZE_8

rnsap.delta_t_lsf_utc delta-t-lsf-utc
  Byte array
  rnsap.BIT_STRING_SIZE_8

rnsap.dganss_Correction dganss-Correction
  No value
  rnsap.DGANSSCorrections

rnsap.directionOfAltitude directionOfAltitude
  Unsigned 32-bit integer
  rnsap.T_directionOfAltitude

rnsap.discardTimer discardTimer
  Unsigned 32-bit integer
  rnsap.DiscardTimer
```

```
rnsap.diversityControlField  diversityControlField
    Unsigned 32-bit integer
    rnsap.DiversityControlField

rnsap.diversityIndication  diversityIndication
    Unsigned 32-bit integer
    rnsap.DiversityIndication_RL_SetupRspFDD

rnsap.diversityMode  diversityMode
    Unsigned 32-bit integer
    rnsap.DiversityMode

rnsap.dl_BLER  dl-BLER
    Signed 32-bit integer
    rnsap.BLER

rnsap.dl_CCTrCHInformation  dl-CCTrCHInformation
    No value
    rnsap.DL_CCTrCHInformationList_RL_SetupRspTDD

rnsap.dl_CCTrCHInformation768  dl-CCTrCHInformation768
    No value
    rnsap.DL_CCTrCHInformationList_RL_SetupRspTDD768

rnsap.dl_CCTrCH_ID  dl-CCTrCH-ID
    Unsigned 32-bit integer
    rnsap.CCTrCH_ID

rnsap.dl_CCTrCH_Information  dl-CCTrCH-Information
    No value
    rnsap.DL_CCTrCH_InformationList_RL_ReconfReadyTDD

rnsap.dl_CCTrCH_LCR_Information  dl-CCTrCH-LCR-Information
    No value
    rnsap.DL_CCTrCH_LCR_InformationList_RL_AdditionRspTDD

rnsap.dl_CodeInformation  dl-CodeInformation
    Unsigned 32-bit integer
    rnsap.FDD_DL_CodeInformation

rnsap.dl_CodeInformationList  dl-CodeInformationList
    No value
    rnsap.DL_CodeInformationList_RL_ReconfReadyFDD

rnsap.dl_DPCH_AddInformation  dl-DPCH-AddInformation
    No value
    rnsap.DL_DPCH_InformationAddList_RL_ReconfReadyTDD

rnsap.dl_DPCH_DeleteInformation  dl-DPCH-DeleteInformation
    No value
    rnsap.DL_DPCH_InformationDeleteList_RL_ReconfReadyTDD

rnsap.dl_DPCH_Information  dl-DPCH-Information
    No value
    rnsap.DL_DPCH_InformationList_RL_SetupRspTDD

rnsap.dl_DPCH_Information768  dl-DPCH-Information768
    No value
    rnsap.DL_DPCH_InformationList_RL_SetupRspTDD768

rnsap.dl_DPCH_LCR_Information  dl-DPCH-LCR-Information
    No value
    rnsap.DL_DPCH_LCR_InformationList_RL_SetupRspTDD
```



```
rnsap.dl_DPCH_ModifyInformation dl-DPCH-ModifyInformation
  No value
  rnsap.DL_DPCH_InformationModifyList_RL_ReconfReadyTDD
rnsap.dl_DPCH_ModifyInformation_LCR dl-DPCH-ModifyInformation-LCR
  No value
  rnsap.DL_DPCH_InformationModifyList_LCR_RL_ReconfRspTDD
rnsap.dl_DPCH_SlotFormat dl-DPCH-SlotFormat
  Unsigned 32-bit integer
  rnsap.DL_DPCH_SlotFormat
rnsap.dl_InitialTX_Power dl-InitialTX-Power
  Signed 32-bit integer
  rnsap.DL_Power
rnsap.dl_LCR_CCTrCHInformation dl-LCR-CCTrCHInformation
  No value
  rnsap.DL_LCR_CCTrCHInformationList_RL_SetupRspTDD
rnsap.dl_PunctureLimit dl-PunctureLimit
  Unsigned 32-bit integer
  rnsap.PunctureLimit
rnsap.dl_Reference_Power dl-Reference-Power
  Signed 32-bit integer
  rnsap.DL_Power
rnsap.dl_ScramblingCode dl-ScramblingCode
  Unsigned 32-bit integer
  rnsap.DL_ScramblingCode
rnsap.dl_TFCS dl-TFCS
  No value
  rnsap.TFCS
rnsap.dl_TransportformatSet dl-TransportformatSet
  No value
  rnsap.TransportFormatSet
rnsap.dl_cCCTrCH_ID dl-cCCTrCH-ID
  Unsigned 32-bit integer
  rnsap.CCTrCH_ID
rnsap.dl_ccTrCHID dl-ccTrCHID
  Unsigned 32-bit integer
  rnsap.CCTrCH_ID
rnsap.dl_transportFormatSet dl-transportFormatSet
  No value
  rnsap.TransportFormatSet
rnsap.dn_utc dn-utc
  Byte array
  rnsap.BIT_STRING_SIZE_8
rnsap.downlinkCellCapacityClassValue downlinkCellCapacityClassValue
  Unsigned 32-bit integer
  rnsap.INTEGER_1_100_
rnsap.downlinkLoadValue downlinkLoadValue
  Unsigned 32-bit integer
  rnsap.INTEGER_0_100
```

```
rnsap.downlinkNRTLoadInformationValue  downlinkNRTLoadInformationValue
    Unsigned 32-bit integer
    rnsap.INTEGER_0_3

rnsap.downlinkRTLoadValue  downlinkRTLoadValue
    Unsigned 32-bit integer
    rnsap.INTEGER_0_100

rnsap.downlinkStepSize  downlinkStepSize
    Unsigned 32-bit integer
    rnsap.TDD_TPC_DownlinkStepSize

rnsap.downlink_Compressed_Mode_Method  downlink-Compressed-Mode-Method
    Unsigned 32-bit integer
    rnsap.Downlink_Compressed_Mode_Method

rnsap.dsField  dsField
    Byte array
    rnsap.DsField

rnsap.dsch_ID  dsch-ID
    Unsigned 32-bit integer
    rnsap.DSCH_ID

rnsap.dsch_InformationResponse  dsch-InformationResponse
    No value
    rnsap.DSCH_InformationResponse_RL_SetupRspTDD

rnsap.dsch_LCR_InformationResponse  dsch-LCR-InformationResponse
    No value
    rnsap.DSCH_LCR_InformationResponse_RL_SetupRspTDD

rnsap.dynamicParts  dynamicParts
    Unsigned 32-bit integer
    rnsap.TransportFormatSet_DynamicPartList

rnsap.eAGCH_ChannelisationCode  eAGCH-ChannelisationCode
    Unsigned 32-bit integer
    rnsap.FDD_DL_ChannelisationCodeNumber

rnsap.eAGCH_ERGCH_EHICH_FDD_ScramblingCode  eAGCH-ERGCH-EHICH-FDD-ScramblingCode
    Unsigned 32-bit integer
    rnsap.DL_ScramblingCode

rnsap.eDCHLogicalChannelInformation  eDCHLogicalChannelInformation
    Unsigned 32-bit integer
    rnsap.E_DCH_LogicalChannelInformation

rnsap.eDCH_DDI_Value  eDCH-DDI-Value
    Unsigned 32-bit integer
    rnsap.EDCH_DDI_Value

rnsap.eDCH_Grant_TypeTDD  eDCH-Grant-TypeTDD
    Unsigned 32-bit integer
    rnsap.E_DCH_Grant_TypeTDD

rnsap.eDCH_Grant_Type_Information  eDCH-Grant-Type-Information
    Unsigned 32-bit integer
    rnsap.E_DCH_Grant_Type_Information

rnsap.eDCH_HARQ_PO_FDD  eDCH-HARQ-PO-FDD
    Unsigned 32-bit integer
    rnsap.E_DCH_HARQ_PO_FDD
```

```

rnsap.eDCH_HARQ_PO_TDD    eDCH-HARQ-PO-TDD
    Unsigned 32-bit integer
    rnsap.E_DCH_HARQ_PO_TDD

rnsap.eDCH_LogicalChannelToAdd    eDCH-LogicalChannelToAdd
    Unsigned 32-bit integer
    rnsap.E_DCH_LogicalChannelInformation

rnsap.eDCH_LogicalChannelToDelete    eDCH-LogicalChannelToDelete
    Unsigned 32-bit integer
    rnsap.E_DCH_LogicalChannelToDelete

rnsap.eDCH_LogicalChannelToModify    eDCH-LogicalChannelToModify
    Unsigned 32-bit integer
    rnsap.E_DCH_LogicalChannelToModify

rnsap.eDCH_MACdFlow_ID    eDCH-MACdFlow-ID
    Unsigned 32-bit integer
    rnsap.EDCH_MACdFlow_ID

rnsap.eDCH_MACdFlow_Multiplexing_List    eDCH-MACdFlow-Multiplexing-List
    Byte array
    rnsap.E_DCH_MACdFlow_Multiplexing_List

rnsap.eDCH_MACdFlow_Specific_Information    eDCH-MACdFlow-Specific-Information
    Unsigned 32-bit integer
    rnsap.EDCH_MACdFlow_Specific_InfoToModifyList

rnsap.eDCH_MACdFlow_Specific_InformationResponse    eDCH-MACdFlow-Specific-InformationResponse
    Unsigned 32-bit integer
    rnsap.EDCH_MACdFlow_Specific_InformationResponse

rnsap.eDCH_MACdFlows_Information    eDCH-MACdFlows-Information
    No value
    rnsap.EDCH_MACdFlows_Information

rnsap.eHICH_SignatureSequence    eHICH-SignatureSequence
    Unsigned 32-bit integer
    rnsap.EHICH_SignatureSequence

rnsap.eRGCH_EHICH_ChannelisationCode    eRGCH-EHICH-ChannelisationCode
    Unsigned 32-bit integer
    rnsap.FDD_DL_ChannelisationCodeNumber

rnsap.eRGCH_SignatureSequence    eRGCH-SignatureSequence
    Unsigned 32-bit integer
    rnsap.ERGCH_SignatureSequence

rnsap.e_AGCH_PowerOffset    e-AGCH-PowerOffset
    Unsigned 32-bit integer
    rnsap.E_AGCH_PowerOffset

rnsap.e_AGCH_Specific_Information_Response768TDD    e-AGCH-Specific-Information-Response768TDD
    Unsigned 32-bit integer
    rnsap.E_AGCH_Specific_InformationRespList768TDD

rnsap.e_AGCH_Specific_Information_ResponseTDD    e-AGCH-Specific-Information-ResponseTDD
    Unsigned 32-bit integer
    rnsap.E_AGCH_Specific_InformationRespListTDD

rnsap.e_AGCH_Specific_Information_Response_LCR_TDD    e-AGCH-Specific-Information-ResponseLCR_TDD
    Unsigned 32-bit integer
    rnsap.E_AGCH_Specific_InformationRespList_LCR_TDD

```

```
rnsap.e_DCH_FDD_DL_Control_Channel_Info  e-DCH-FDD-DL-Control-Channel-Info
No value
rnsap.EDCH_FDD_DL_ControlChannelInformation

rnsap.e_DCH_LCR_TDD_Information  e-DCH-LCR-TDD-Information
No value
rnsap.E_DCH_LCR_TDD_Information

rnsap.e_DCH_LogicalChannelToAdd  e-DCH-LogicalChannelToAdd
Unsigned 32-bit integer
rnsap.E_DCH_LogicalChannelInformation

rnsap.e_DCH_LogicalChannelToDelete  e-DCH-LogicalChannelToDelete
Unsigned 32-bit integer
rnsap.E_DCH_LogicalChannelToDelete

rnsap.e_DCH_LogicalChannelToModify  e-DCH-LogicalChannelToModify
Unsigned 32-bit integer
rnsap.E_DCH_LogicalChannelToModify

rnsap.e_DCH_MACdFlow_ID  e-DCH-MACdFlow-ID
Unsigned 32-bit integer
rnsap.EDCH_MACdFlow_ID

rnsap.e_DCH_MACdFlow_Specific_UpdateInformation  e-DCH-MACdFlow-Specific-UpdateI
Unsigned 32-bit integer
rnsap.E_DCH_MACdFlow_Specific_UpdateInformation

rnsap.e_DCH_MACdFlows_Information_TDD  e-DCH-MACdFlows-Information-TDD
Unsigned 32-bit integer
rnsap.E_DCH_MACdFlows_Information_TDD

rnsap.e_DCH_MACdFlows_to_Add  e-DCH-MACdFlows-to-Add
Unsigned 32-bit integer
rnsap.E_DCH_MACdFlows_Information_TDD

rnsap.e_DCH_MACdFlows_to_Delete  e-DCH-MACdFlows-to-Delete
Unsigned 32-bit integer
rnsap.EDCH_MACdFlows_To_Delete

rnsap.e_DCH_MacdFlow_Id  e-DCH-MacdFlow-Id
Unsigned 32-bit integer
rnsap.EDCH_MACdFlow_ID

rnsap.e_DCH_Maximum_Bitrate  e-DCH-Maximum-Bitrate
Unsigned 32-bit integer
rnsap.E_DCH_Maximum_Bitrate

rnsap.e_DCH_Min_Set_E_TFCI  e-DCH-Min-Set-E-TFCI
Unsigned 32-bit integer
rnsap.E_TFCI

rnsap.e_DCH_Non_Scheduled_Grant_Info  e-DCH-Non-Scheduled-Grant-Info
No value
rnsap.E_DCH_Non_Scheduled_Grant_Info

rnsap.e_DCH_Non_Scheduled_Grant_Info768  e-DCH-Non-Scheduled-Grant-Info768
No value
rnsap.E_DCH_Non_Scheduled_Grant_Info768

rnsap.e_DCH_Non_Scheduled_Grant_Info_LCR  e-DCH-Non-Scheduled-Grant-Info-LCR
No value
rnsap.E_DCH_Non_Scheduled_Grant_Info_LCR
```

```
rnsap.e_DCH_Non_Scheduled_Transmission_Grant  e-DCH-Non-Scheduled-Transmission-G
No value
rnsap.E_DCH_Non_Scheduled_Transmission_Grant_Items
rnsap.e_DCH_Physical_Layer_Category_LCR  e-DCH-Physical-Layer-Category-LCR
Unsigned 32-bit integer
rnsap.E_DCH_Physical_Layer_Category_LCR
rnsap.e_DCH_PowerOffset_for_SchedulingInfo  e-DCH-PowerOffset-for-SchedulingInfo
Unsigned 32-bit integer
rnsap.E_DCH_PowerOffset_for_SchedulingInfo
rnsap.e_DCH_Processing_Overload_Level  e-DCH-Processing-Overload-Level
Unsigned 32-bit integer
rnsap.E_DCH_Processing_Overload_Level
rnsap.e_DCH_QPSK_RefBetaInfo  e-DCH-QPSK-RefBetaInfo
Unsigned 32-bit integer
rnsap.E_DCH_QPSK_RefBetaInfo
rnsap.e_DCH_RL_InformationList_Rsp  e-DCH-RL-InformationList-Rsp
Unsigned 32-bit integer
rnsap.E_DCH_RL_InformationList_Rsp
rnsap.e_DCH_Reference_Power_Offset  e-DCH-Reference-Power-Offset
Unsigned 32-bit integer
rnsap.E_DCH_Reference_Power_Offset
rnsap.e_DCH_Scheduled_Transmission_Grant  e-DCH-Scheduled-Transmission-Grant
No value
rnsap.NULL
rnsap.e_DCH_Serving_RL_Id  e-DCH-Serving-RL-Id
Unsigned 32-bit integer
rnsap.RL_ID
rnsap.e_DCH_Serving_RL_in_this_DRNS  e-DCH-Serving-RL-in-this-DRNS
No value
rnsap.EDCH_Serving_RL_in_this_DRNS
rnsap.e_DCH_Serving_RL_not_in_this_DRNS  e-DCH-Serving-RL-not-in-this-DRNS
No value
rnsap.NULL
rnsap.e_DCH_TDD_Information  e-DCH-TDD-Information
No value
rnsap.E_DCH_TDD_Information
rnsap.e_DCH_TDD_Information768  e-DCH-TDD-Information768
No value
rnsap.E_DCH_TDD_Information768
rnsap.e_DCH_TDD_Information_to_Modify  e-DCH-TDD-Information-to-Modify
No value
rnsap.E_DCH_TDD_Information_to_Modify
rnsap.e_DCH_TDD_Information_to_Modify_List  e-DCH-TDD-Information-to-Modify-List
Unsigned 32-bit integer
rnsap.E_DCH_TDD_Information_to_Modify_List
rnsap.e_DCH_TDD_MACdFlow_Specific_InformationResp  e-DCH-TDD-MACdFlow-Specific-I
Unsigned 32-bit integer
rnsap.E_DCH_TDD_MACdFlow_Specific_InformationResp
```

```
rnsap.e_DCH_TDD_Maximum_Bitrate e-DCH-TDD-Maximum-Bitrate
  Unsigned 32-bit integer
  rnsap.E_DCH_TDD_Maximum_Bitrate
rnsap.e_DCH_TDD_Maximum_Bitrate768 e-DCH-TDD-Maximum-Bitrate768
  Unsigned 32-bit integer
  rnsap.E_DCH_TDD_Maximum_Bitrate768
rnsap.e_DCH_TFCI_Table_Index e-DCH-TFCI-Table-Index
  Unsigned 32-bit integer
  rnsap.E_DCH_TFCI_Table_Index
rnsap.e_DCH_TTI_Length e-DCH-TTI-Length
  Unsigned 32-bit integer
  rnsap.E_DCH_TTI_Length
rnsap.e_DCH_TTI_Length_to_Modify e-DCH-TTI-Length-to-Modify
  Unsigned 32-bit integer
  rnsap.E_DCH_TTI_Length_to_Modify
rnsap.e_DCH_reconfigured_RL_Id e-DCH-reconfigured-RL-Id
  Unsigned 32-bit integer
  rnsap.RL_ID
rnsap.e_DCH_serving_cell_change_successful e-DCH-serving-cell-change-successful
  No value
  rnsap.E_DCH_serving_cell_change_successful
rnsap.e_DCH_serving_cell_change_unsuccessful e-DCH-serving-cell-change-unsuccessful
  No value
  rnsap.E_DCH_serving_cell_change_unsuccessful
rnsap.e_DCH_serving_cell_outcome_choice e-DCH-serving-cell-outcome-choice
  Unsigned 32-bit integer
  rnsap.E_DCH_serving_cell_change_choice
rnsap.e_DCH_sixteenQAM_RefBetaInfo e-DCH-sixteenQAM-RefBetaInfo
  Unsigned 32-bit integer
  rnsap.E_DCH_sixteenQAM_RefBetaInfo
rnsap.e_DPCCH_PO e-DPCCH-PO
  Unsigned 32-bit integer
  rnsap.E_DPCCH_PO
rnsap.e_HICH_EI e-HICH-EI
  Unsigned 32-bit integer
  rnsap.E_HICH_EI
rnsap.e_HICH_Information_Response e-HICH-Information-Response
  No value
  rnsap.E_HICH_InformationResp
rnsap.e_HICH_Information_Response768 e-HICH-Information-Response768
  No value
  rnsap.E_HICH_InformationResp768
rnsap.e_HICH_PowerOffset e-HICH-PowerOffset
  Unsigned 32-bit integer
  rnsap.E_HICH_PowerOffset
rnsap.e_HICH_Scheduled_InformationResp_LCR e-HICH-Scheduled-InformationResp-LCR
  Unsigned 32-bit integer
  rnsap.E_HICH_Scheduled_InformationRespList_LCR_TDD
```

```
rnsap.e_HICH_Specific_Information_Response_LCR  e-HICH-Specific-Information-Resp
  No value
  rnsap.E_HICH_Specific_InformationResp_LCR
rnsap.e_HICH_TimeOffset  e-HICH-TimeOffset
  Unsigned 32-bit integer
  rnsap.E_HICH_TimeOffset
rnsap.e_HICH_TimeOffset_lcr  e-HICH-TimeOffset-lcr
  Unsigned 32-bit integer
  rnsap.E_HICH_TimeOffset_LCR
rnsap.e_HICH_non_Scheduled_InformationResp_LCR  e-HICH-non-Scheduled-Information
  No value
  rnsap.E_HICH_InformationResp_LCR
rnsap.e_PUCH_Information  e-PUCH-Information
  No value
  rnsap.E_PUCH_Information
rnsap.e_PUCH_LCR_Information  e-PUCH-LCR-Information
  No value
  rnsap.E_PUCH_LCR_Information
rnsap.e_PUCH_TPC_Step_Size  e-PUCH-TPC-Step-Size
  Unsigned 32-bit integer
  rnsap.TDD_TPC_UplinkStepSize_LCR
rnsap.e_RGCH_2_IndexStepThreshold  e-RGCH-2-IndexStepThreshold
  Unsigned 32-bit integer
  rnsap.E_RGCH_2_IndexStepThreshold
rnsap.e_RGCH_3_IndexStepThreshold  e-RGCH-3-IndexStepThreshold
  Unsigned 32-bit integer
  rnsap.E_RGCH_3_IndexStepThreshold
rnsap.e_RGCH_PowerOffset  e-RGCH-PowerOffset
  Unsigned 32-bit integer
  rnsap.E_RGCH_PowerOffset
rnsap.e_RGCH_Release_Indicator  e-RGCH-Release-Indicator
  Unsigned 32-bit integer
  rnsap.E_RGCH_Release_Indicator
rnsap.e_RNTI  e-RNTI
  Unsigned 32-bit integer
  rnsap.E_RNTI
rnsap.e_TFCS_Information  e-TFCS-Information
  No value
  rnsap.E_TFCS_Information
rnsap.e_TFCS_Information_TDD  e-TFCS-Information-TDD
  No value
  rnsap.E_TFCS_Information_TDD
rnsap.e_TTI  e-TTI
  Unsigned 32-bit integer
  rnsap.E_TTI
rnsap.e_msb  e-msb
  Unsigned 32-bit integer
  rnsap.INTEGER_0_127
```

```
rnsap.eightPSK  eightPSK
    Unsigned 32-bit integer
    rnsap.EightPSK_DL_DPCH_TimeSlotFormatTDD_LCR
rnsap.ellipsoidArc  ellipsoidArc
    No value
    rnsap.GA_EllipsoidArc
rnsap.enabling_Delay  enabling-Delay
    Unsigned 32-bit integer
    rnsap.Enabling_Delay
rnsap.event1h  event1h
    No value
    rnsap.UEMeasurementReportCharacteristicsEvent1h
rnsap.event1i  event1i
    No value
    rnsap.UEMeasurementReportCharacteristicsEvent1i
rnsap.event6a  event6a
    No value
    rnsap.UEMeasurementReportCharacteristicsEvent6a
rnsap.event6b  event6b
    No value
    rnsap.UEMeasurementReportCharacteristicsEvent6b
rnsap.event6c  event6c
    No value
    rnsap.UEMeasurementReportCharacteristicsEvent6c
rnsap.event6d  event6d
    No value
    rnsap.UEMeasurementReportCharacteristicsEvent6d
rnsap.eventA  eventA
    No value
    rnsap.EventA
rnsap.eventB  eventB
    No value
    rnsap.EventB
rnsap.eventC  eventC
    No value
    rnsap.EventC
rnsap.eventD  eventD
    No value
    rnsap.EventD
rnsap.eventE  eventE
    No value
    rnsap.EventE
rnsap.eventF  eventF
    No value
    rnsap.EventF
rnsap.explicit  explicit
    No value
    rnsap.HARQ_MemoryPartitioning_Explicit
```



```

rnsap.extensionValue extensionValue
  No value
  rnsap.T_extensionValue
rnsap.extension_CommonMeasurementValue extension-CommonMeasurementValue
  No value
  rnsap.Extension_CommonMeasurementValue
rnsap.extension_DedicatedMeasurementValue extension-DedicatedMeasurementValue
  No value
  rnsap.Extension_DedicatedMeasurementValue
rnsap.extension_IPDLParameters extension-IPDLParameters
  No value
  rnsap.Extension_IPDLParameters
rnsap.extension_InformationExchangeObjectType_InfEx_Rqst extension-InformationE
  No value
  rnsap.Extension_InformationExchangeObjectType_InfEx_Rqst
rnsap.extension_InformationExchangeObjectType_InfEx_Rsp extension-InformationEx
  No value
  rnsap.Extension_InformationExchangeObjectType_InfEx_Rsp
rnsap.extension_MeasurementIncreaseDecreaseThreshold extension-MeasurementIncre
  No value
  rnsap.Extension_MeasurementIncreaseDecreaseThreshold
rnsap.extension_MeasurementThreshold extension-MeasurementThreshold
  No value
  rnsap.Extension_MeasurementThreshold
rnsap.extension_ReportCharacteristics extension-ReportCharacteristics
  No value
  rnsap.Extension_ReportCharacteristics
rnsap.extension_UEMeasurementThreshold extension-UEMeasurementThreshold
  No value
  rnsap.UEMeasurementThreshold_Extension
rnsap.extension_UEMeasurementValue extension-UEMeasurementValue
  No value
  rnsap.UEMeasurementValue_Extension
rnsap.extension_neighbouringCellMeasurementInformation extension-neighbouringCe
  No value
  rnsap.Extension_neighbouringCellMeasurementInformation
rnsap.extension_neighbouringCellMeasurementInformation768 extension-neighbourin
  No value
  rnsap.Extension_neighbouringCellMeasurementInformation768
rnsap.fACH_FlowControlInformation fACH-FlowControlInformation
  No value
  rnsap.FACH_FlowControlInformation_CTCH_ResourceRspFDD
rnsap.fACH_InformationList fACH-InformationList
  Unsigned 32-bit integer
  rnsap.FACH_InformationList
rnsap.fACH_InitialWindowSize fACH-InitialWindowSize
  Unsigned 32-bit integer
  rnsap.FACH_InitialWindowSize

```

```
rnsap.fACH_SchedulingPriority  fACH-SchedulingPriority
    Unsigned 32-bit integer
    rnsap.SchedulingPriorityIndicator

rnsap.fDD_DL_ChannelisationCodeNumber  fDD-DL-ChannelisationCodeNumber
    Unsigned 32-bit integer
    rnsap.FDD_DL_ChannelisationCodeNumber

rnsap.fPACH_info  fPACH-info
    No value
    rnsap.FPACH_Information

rnsap.failed_HS_SICH  failed-HS-SICH
    Unsigned 32-bit integer
    rnsap.HS_SICH_failed

rnsap.fdd_TPC_DownlinkStepSize  fdd-TPC-DownlinkStepSize
    Unsigned 32-bit integer
    rnsap.FDD_TPC_DownlinkStepSize

rnsap.fdd_dl_TPC_DownlinkStepSize  fdd-dl-TPC-DownlinkStepSize
    Unsigned 32-bit integer
    rnsap.FDD_TPC_DownlinkStepSize

rnsap.firstRLS_Indicator  firstRLS-Indicator
    Unsigned 32-bit integer
    rnsap.FirstRLS_Indicator

rnsap.firstRLS_indicator  firstRLS-indicator
    Unsigned 32-bit integer
    rnsap.FirstRLS_Indicator

rnsap.first_TDD_ChannelisationCode  first-TDD-ChannelisationCode
    Unsigned 32-bit integer
    rnsap.TDD_ChannelisationCode

rnsap.fit_interval_flag_nav  fit-interval-flag-nav
    Byte array
    rnsap.BIT_STRING_SIZE_1

rnsap.frameHandlingPriority  frameHandlingPriority
    Unsigned 32-bit integer
    rnsap.FrameHandlingPriority

rnsap.frameOffset  frameOffset
    Unsigned 32-bit integer
    rnsap.FrameOffset

rnsap.gANSS_AlmanacModel  gANSS-AlmanacModel
    Unsigned 32-bit integer
    rnsap.T_gANSS_AlmanacModel

rnsap.gANSS_CommonDataInfoReq  gANSS-CommonDataInfoReq
    No value
    rnsap.GANSS_CommonDataInfoReq

rnsap.gANSS_GenericDataInfoReqList  gANSS-GenericDataInfoReqList
    Unsigned 32-bit integer
    rnsap.GANSS_GenericDataInfoReqList

rnsap.gANSS_IonosphereRegionalStormFlags  gANSS-IonosphereRegionalStormFlags
    No value
    rnsap.GANSS_IonosphereRegionalStormFlags
```

```
rnsap.gANSS_SatelliteInformationKP  gANSS-SatelliteInformationKP
    Unsigned 32-bit integer
    rnsap.GANSS_SatelliteInformationKP

rnsap.gANSS_SignalId  gANSS-SignalId
    Unsigned 32-bit integer
    rnsap.INTEGER_0_3_

rnsap.gANSS_StatusHealth  gANSS-StatusHealth
    Unsigned 32-bit integer
    rnsap.GANSS_StatusHealth

rnsap.gANSS_iod  gANSS-iod
    Byte array
    rnsap.BIT_STRING_SIZE_10

rnsap.gANSS_keplerianParameters  gANSS-keplerianParameters
    No value
    rnsap.T_gANSS_keplerianParameters

rnsap.gA_AccessPointPosition  gA-AccessPointPosition
    No value
    rnsap.GA_AccessPointPosition

rnsap.gA_AccessPointPositionwithAltitude  gA-AccessPointPositionwithAltitude
    No value
    rnsap.GA_AccessPointPositionwithOptionalAltitude

rnsap.gA_Cell  gA-Cell
    Unsigned 32-bit integer
    rnsap.GA_Cell

rnsap.gA_CellAdditionalShapes  gA-CellAdditionalShapes
    Unsigned 32-bit integer
    rnsap.GA_CellAdditionalShapes

rnsap.gERAN_SI_Type  gERAN-SI-Type
    Unsigned 32-bit integer
    rnsap.GERAN_SI_Type

rnsap.gERAN_SI_block  gERAN-SI-block
    Byte array
    rnsap.OCTET_STRING_SIZE_1_23

rnsap.gPSInformation  gPSInformation
    Unsigned 32-bit integer
    rnsap.GPSInformation

rnsap.gPSInformationItem  gPSInformationItem
    Unsigned 32-bit integer
    rnsap.T_gPSInformationItem

rnsap.gPSTOW  gPSTOW
    Unsigned 32-bit integer
    rnsap.GPSTOW

rnsap.gPS_Almanac  gPS-Almanac
    No value
    rnsap.GPS_Almanac

rnsap.gPS_Ionospheric_Model  gPS-Ionospheric-Model
    No value
    rnsap.GPS_Ionospheric_Model
```

```
rnsap.gPS_NavigationModel_and_TimeRecovery  gPS-NavigationModel-and-TimeRecovery
    Unsigned 32-bit integer
    rnsap.GPS_NavigationModel_and_TimeRecovery
rnsap.gPS_RX_POS  gPS-RX-POS
    No value
    rnsap.GPS_RX_POS
rnsap.gPS_RealTime_Integrity  gPS-RealTime-Integrity
    Unsigned 32-bit integer
    rnsap.GPS_RealTime_Integrity
rnsap.gPS_Status_Health  gPS-Status-Health
    Unsigned 32-bit integer
    rnsap.GPS_Status_Health
rnsap.gPS_UTC_Model  gPS-UTC-Model
    No value
    rnsap.GPS_UTC_Model
rnsap.ganssClockModel  ganssClockModel
    Unsigned 32-bit integer
    rnsap.GANSS_Clock_Model
rnsap.ganssDay  ganssDay
    Unsigned 32-bit integer
    rnsap.INTEGER_0_8191
rnsap.ganssOrbitModel  ganssOrbitModel
    Unsigned 32-bit integer
    rnsap.GANSS_Orbit_Model
rnsap.ganssSatInfoNav  ganssSatInfoNav
    Unsigned 32-bit integer
    rnsap.GANSS_Sat_Info_Nav
rnsap.ganssTod  ganssTod
    Unsigned 32-bit integer
    rnsap.INTEGER_0_86399
rnsap.ganssTodUncertainty  ganssTodUncertainty
    Unsigned 32-bit integer
    rnsap.INTEGER_0_127
rnsap.ganss_Almanac  ganss-Almanac
    Boolean
    rnsap.BOOLEAN
rnsap.ganss_Id  ganss-Id
    Unsigned 32-bit integer
    rnsap.INTEGER_0_7
rnsap.ganss_Ionospheric_Model  ganss-Ionospheric-Model
    No value
    rnsap.GANSS_Ionospheric_Model
rnsap.ganss_Navigation_Model  ganss-Navigation-Model
    Boolean
    rnsap.BOOLEAN
rnsap.ganss_Real_Time_Integrity  ganss-Real-Time-Integrity
    Boolean
    rnsap.BOOLEAN
```

```
rnsap.ganss_Ref_Time  ganss-Ref-Time
  No value
  rnsap.GANSS_Reference_Time
rnsap.ganss_Rx_Pos  ganss-Rx-Pos
  No value
  rnsap.GANSS_RX_Pos
rnsap.ganss_Time_Model  ganss-Time-Model
  Byte array
  rnsap.BIT_STRING_SIZE_8
rnsap.ganss_UTC_Model  ganss-UTC-Model
  Boolean
  rnsap.BOOLEAN
rnsap.ganss_UTC_TIME  ganss-UTC-TIME
  No value
  rnsap.GANSS_UTC_Model
rnsap.ganss_af_one_alm  ganss-af-one-alm
  Byte array
  rnsap.BIT_STRING_SIZE_11
rnsap.ganss_af_zero_alm  ganss-af-zero-alm
  Byte array
  rnsap.BIT_STRING_SIZE_14
rnsap.ganss_delta_I_alm  ganss-delta-I-alm
  Byte array
  rnsap.BIT_STRING_SIZE_11
rnsap.ganss_delta_a_sqrt_alm  ganss-delta-a-sqrt-alm
  Byte array
  rnsap.BIT_STRING_SIZE_17
rnsap.ganss_e_alm  ganss-e-alm
  Byte array
  rnsap.BIT_STRING_SIZE_11
rnsap.ganss_e_lsb_nav  ganss-e-lsb-nav
  Unsigned 32-bit integer
  rnsap.INTEGER_0_33554431
rnsap.ganss_m_zero_alm  ganss-m-zero-alm
  Byte array
  rnsap.BIT_STRING_SIZE_16
rnsap.ganss_omega_alm  ganss-omega-alm
  Byte array
  rnsap.BIT_STRING_SIZE_16
rnsap.ganss_omega_nav  ganss-omega-nav
  Byte array
  rnsap.BIT_STRING_SIZE_32
rnsap.ganss_omegadot_alm  ganss-omegadot-alm
  Byte array
  rnsap.BIT_STRING_SIZE_11
rnsap.ganss_omegazero_alm  ganss-omegazero-alm
  Byte array
  rnsap.BIT_STRING_SIZE_16
```

```
rnsap.ganss_prc ganss-prc
Signed 32-bit integer
rnsap.INTEGER_M2047_2047

rnsap.ganss_rrc ganss-rrc
Signed 32-bit integer
rnsap.INTEGER_M127_127

rnsap.ganss_sat_id ganss-sat-id
Byte array
rnsap.BIT_STRING_SIZE_36

rnsap.ganss_svhealth_alm ganss-svhealth-alm
Byte array
rnsap.BIT_STRING_SIZE_4

rnsap.ganss_t_a0 ganss-t-a0
Signed 32-bit integer
rnsap.INTEGER_M2147483648_2147483647

rnsap.ganss_t_a1 ganss-t-a1
Signed 32-bit integer
rnsap.INTEGER_M8388608_8388607

rnsap.ganss_t_a2 ganss-t-a2
Signed 32-bit integer
rnsap.INTEGER_M64_63

rnsap.ganss_time_model ganss-time-model
Unsigned 32-bit integer
rnsap.INTEGER_0_65535

rnsap.ganss_to_id ganss-to-id
Unsigned 32-bit integer
rnsap.INTEGER_0_7

rnsap.ganss_wk_number ganss-wk-number
Unsigned 32-bit integer
rnsap.INTEGER_0_255

rnsap.generalCause generalCause
No value
rnsap.GeneralCauseList_RL_SetupFailureFDD

rnsap.genericTrafficCategory genericTrafficCategory
Byte array
rnsap.GenericTrafficCategory

rnsap.geographicalCoordinate geographicalCoordinate
No value
rnsap.GeographicalCoordinate

rnsap.geographicalCoordinates geographicalCoordinates
No value
rnsap.GeographicalCoordinate

rnsap.global global
rnsap.OBJECT_IDENTIFIER

rnsap.gps_a_sqrt_alm gps-a-sqrt-alm
Byte array
rnsap.BIT_STRING_SIZE_24
```

```
rnsap.gps_af_one_alm  gps-af-one-alm
    Byte array
    rnsap.BIT_STRING_SIZE_11
rnsap.gps_af_zero_alm  gps-af-zero-alm
    Byte array
    rnsap.BIT_STRING_SIZE_11
rnsap.gps_delta_I_alm  gps-delta-I-alm
    Byte array
    rnsap.BIT_STRING_SIZE_16
rnsap.gps_e_alm  gps-e-alm
    Byte array
    rnsap.BIT_STRING_SIZE_16
rnsap.gps_e_nav  gps-e-nav
    Byte array
    rnsap.BIT_STRING_SIZE_32
rnsap.gps_omega_alm  gps-omega-alm
    Byte array
    rnsap.BIT_STRING_SIZE_24
rnsap.gps_omega_nav  gps-omega-nav
    Byte array
    rnsap.BIT_STRING_SIZE_32
rnsap.gps_toa_alm  gps-toa-alm
    Byte array
    rnsap.BIT_STRING_SIZE_8
rnsap.guaranteed_DL_Rate  guaranteed-DL-Rate
    Unsigned 32-bit integer
    rnsap.Guaranteed_Rate
rnsap.guaranteed_UL_Rate  guaranteed-UL-Rate
    Unsigned 32-bit integer
    rnsap.Guaranteed_Rate
rnsap.hARQ_Info_for_E_DCH  hARQ-Info-for-E-DCH
    Unsigned 32-bit integer
    rnsap.HARQ_Info_for_E_DCH
rnsap.hARQ_MemoryPartitioning  hARQ-MemoryPartitioning
    Unsigned 32-bit integer
    rnsap.HARQ_MemoryPartitioning
rnsap.hARQ_MemoryPartitioningList  hARQ-MemoryPartitioningList
    Unsigned 32-bit integer
    rnsap.HARQ_MemoryPartitioningList
rnsap.hARQ_Process_Allocation_NonSched_2ms  hARQ-Process-Allocation-NonSched-2ms
    Byte array
    rnsap.HARQ_Process_Allocation_2ms_EDCH
rnsap.hARQ_Process_Allocation_NonSched_2ms_EDCH  hARQ-Process-Allocation-NonSched
    Byte array
    rnsap.HARQ_Process_Allocation_2ms_EDCH
rnsap.hARQ_Process_Allocation_Scheduled_2ms_EDCH  hARQ-Process-Allocation-Schedu
    Byte array
    rnsap.HARQ_Process_Allocation_2ms_EDCH
```

```
rnsap.hCS_Prio hCS-Prio
  Unsigned 32-bit integer
  rnsap.HCS_Prio

rnsap.hSDSCH_Configured_Indicator hSDSCH-Configured-Indicator
  Unsigned 32-bit integer
  rnsap.HSDSCH_Configured_Indicator

rnsap.hSDSCH_FDD_Information hSDSCH-FDD-Information
  No value
  rnsap.HSDSCH_FDD_Information

rnsap.hSDSCH_FDD_Information_Response hSDSCH-FDD-Information-Response
  No value
  rnsap.HSDSCH_FDD_Information_Response

rnsap.hSDSCH_InitialWindowSize hSDSCH-InitialWindowSize
  Unsigned 32-bit integer
  rnsap.HSDSCH_InitialWindowSize

rnsap.hSDSCH_Initial_Capacity_Allocation hSDSCH-Initial-Capacity-Allocation
  Unsigned 32-bit integer
  rnsap.HSDSCH_Initial_Capacity_Allocation

rnsap.hSDSCH_MACdFlow_ID hSDSCH-MACdFlow-ID
  Unsigned 32-bit integer
  rnsap.HSDSCH_MACdFlow_ID

rnsap.hSDSCH_MACdFlow_Specific_Info hSDSCH-MACdFlow-Specific-Info
  Unsigned 32-bit integer
  rnsap.HSDSCH_MACdFlow_Specific_InfoList

rnsap.hSDSCH_MACdFlow_Specific_InfoList_Response hSDSCH-MACdFlow-Specific-InfoL
  Unsigned 32-bit integer
  rnsap.HSDSCH_MACdFlow_Specific_InfoList_Response

rnsap.hSDSCH_MACdFlow_Specific_InfoList_to_Modify hSDSCH-MACdFlow-Specific-Info
  Unsigned 32-bit integer
  rnsap.HSDSCH_MACdFlow_Specific_InfoList_to_Modify

rnsap.hSDSCH_MACdFlows_Information hSDSCH-MACdFlows-Information
  No value
  rnsap.HSDSCH_MACdFlows_Information

rnsap.hSDSCH_Physical_Layer_Category hSDSCH-Physical-Layer-Category
  Unsigned 32-bit integer
  rnsap.INTEGER_1_64_

rnsap.hSDSCH_RNTI hSDSCH-RNTI
  Unsigned 32-bit integer
  rnsap.HSDSCH_RNTI

rnsap.hSPDSCH_First_Code_Index hSPDSCH-First-Code-Index
  Unsigned 32-bit integer
  rnsap.HSPDSCH_First_Code_Index

rnsap.hSPDSCH_Second_Code_Index hSPDSCH-Second-Code-Index
  Unsigned 32-bit integer
  rnsap.HSPDSCH_Second_Code_Index

rnsap.hSPDSCH_Second_Code_Support hSPDSCH-Second-Code-Support
  Boolean
  rnsap.HSPDSCH_Second_Code_Support
```



```

rnsap.hSPDSCH_TDD_Specific_InfoList_Response  hSPDSCH-TDD-Specific-InfoList-Resp
  Unsigned 32-bit integer
  rnsap.HSPDSCH_TDD_Specific_InfoList_Response
rnsap.hSPDSCH_TDD_Specific_InfoList_Response_LCR  hSPDSCH-TDD-Specific-InfoList-
  Unsigned 32-bit integer
  rnsap.HSPDSCH_TDD_Specific_InfoList_Response_LCR
rnsap.hSPDSCH_and_HSSCCH_ScramblingCode  hSPDSCH-and-HSSCCH-ScramblingCode
  Unsigned 32-bit integer
  rnsap.DL_ScramblingCode
rnsap.hSSCCH_CodeChangeGrant  hSSCCH-CodeChangeGrant
  Unsigned 32-bit integer
  rnsap.HSSCCH_Code_Change_Grant
rnsap.hSSCCH_Specific_InfoList_Response  hSSCCH-Specific-InfoList-Response
  Unsigned 32-bit integer
  rnsap.HSSCCH_FDD_Specific_InfoList_Response
rnsap.hSSCCH_TDD_Specific_InfoList_Response  hSSCCH-TDD-Specific-InfoList-Respon
  Unsigned 32-bit integer
  rnsap.HSSCCH_TDD_Specific_InfoList_Response
rnsap.hSSCCH_TDD_Specific_InfoList_Response_LCR  hSSCCH-TDD-Specific-InfoList-Re
  Unsigned 32-bit integer
  rnsap.HSSCCH_TDD_Specific_InfoList_Response_LCR
rnsap.hSSICH_Info  hSSICH-Info
  No value
  rnsap.HSSICH_Info
rnsap.hSSICH_Info768  hSSICH-Info768
  No value
  rnsap.HSSICH_Info768
rnsap.hSSICH_InfoLCR  hSSICH-InfoLCR
  No value
  rnsap.HSSICH_InfoLCR
rnsap.hS_DSCH_serving_cell_choice  hS-DSCH-serving-cell-choice
  Unsigned 32-bit integer
  rnsap.HS_DSCH_serving_cell_change_choice
rnsap.hS_PDSCH_RLID  hS-PDSCH-RLID
  Unsigned 32-bit integer
  rnsap.RL_ID
rnsap.hS_serving_cell_change_successful  hS-serving-cell-change-successful
  No value
  rnsap.HS_serving_cell_change_successful
rnsap.hS_serving_cell_change_unsuccessful  hS-serving-cell-change-unsuccessful
  No value
  rnsap.HS_serving_cell_change_unsuccessful
rnsap.harqInfo  harqInfo
  Unsigned 32-bit integer
  rnsap.HARQ_Info_for_E_DCH
rnsap.ho_word_nav  ho-word-nav
  Byte array
  rnsap.BIT_STRING_SIZE_22

```

```
rnsap.hour hour
    Unsigned 32-bit integer
    rnsap.INTEGER_1_24_

rnsap.hsDSCH_MACdFlow_ID hsDSCH-MACdFlow-ID
    Unsigned 32-bit integer
    rnsap.HSDSCH_MACdFlow_ID

rnsap.hsSCCHCodeChangeIndicator hsSCCHCodeChangeIndicator
    Unsigned 32-bit integer
    rnsap.HSSCCH_CodeChangeIndicator

rnsap.hsSICH_ID hsSICH-ID
    Unsigned 32-bit integer
    rnsap.HS_SICH_ID

rnsap.hsscch_PowerOffset hsscch-PowerOffset
    Unsigned 32-bit integer
    rnsap.HSSCCH_PowerOffset

rnsap.iECriticality iECriticality
    Unsigned 32-bit integer
    rnsap.Criticality

rnsap.iE_Extensions iE-Extensions
    Unsigned 32-bit integer
    rnsap.ProtocolExtensionContainer

rnsap.iE_ID iE-ID
    Unsigned 32-bit integer
    rnsap.ProtocolIE_ID

rnsap.iEe_Extensions iEe-Extensions
    Unsigned 32-bit integer
    rnsap.ProtocolExtensionContainer

rnsap.iEsCriticalityDiagnostics iEsCriticalityDiagnostics
    Unsigned 32-bit integer
    rnsap.CriticalityDiagnostics_IE_List

rnsap.iPDLParameters iPDLParameters
    Unsigned 32-bit integer
    rnsap.IPDLParameters

rnsap.iPDL_FDD_Parameters iPDL-FDD-Parameters
    No value
    rnsap.IPDL_FDD_Parameters

rnsap.iPDL_TDD_Parameters iPDL-TDD-Parameters
    No value
    rnsap.IPDL_TDD_Parameters

rnsap.iPLength iPLength
    Unsigned 32-bit integer
    rnsap.IPLength

rnsap.iPMulticastAddress iPMulticastAddress
    Byte array
    rnsap.IPMulticastAddress

rnsap.iPOffset iPOffset
    Unsigned 32-bit integer
    rnsap.IPOffset
```

```
rnsap.iPSlot  iPSlot
  Unsigned 32-bit integer
  rnsap.iPSlot

rnsap.iPSpacingFDD  iPSpacingFDD
  Unsigned 32-bit integer
  rnsap.iPSpacingFDD

rnsap.iPSpacingTDD  iPSpacingTDD
  Unsigned 32-bit integer
  rnsap.iPSpacingTDD

rnsap.iPStart  iPStart
  Unsigned 32-bit integer
  rnsap.iPStart

rnsap.iPSub  iPSub
  Unsigned 32-bit integer
  rnsap.iPSub

rnsap.iP_P_CCPCH  iP-P-CCPCH
  Unsigned 32-bit integer
  rnsap.iP_P_CCPCH

rnsap.iSCP  iSCP
  Unsigned 32-bit integer
  rnsap.UL_Timeslot_ISCP_Value

rnsap.i_zero_nav  i-zero-nav
  Byte array
  rnsap.BIT_STRING_SIZE_32

rnsap.id  id
  Unsigned 32-bit integer
  rnsap.ProtocolIE_ID

rnsap.idot_nav  idot-nav
  Byte array
  rnsap.BIT_STRING_SIZE_14

rnsap.ie_Extensions  ie-Extensions
  Unsigned 32-bit integer
  rnsap.ProtocolExtensionContainer

rnsap.imei  imei
  Byte array
  rnsap.IMEI

rnsap.imeisv  imeisv
  Byte array
  rnsap.IMEISV

rnsap.implicit  implicit
  No value
  rnsap.HARQ_MemoryPartitioning_Implicit

rnsap.imsi  imsi
  Byte array
  rnsap.IMSI

rnsap.inactivity_Threshold_for_UE_DRX_Cycle  inactivity-Threshold-for-UE-DRX-Cyc
  Unsigned 32-bit integer
  rnsap.Inactivity_Threshold_for_UE_DRX_Cycle
```

```
rnsap.inactivity_Threshold_for_UE_DTX_Cycle2  inactivity-Threshold-for-UE-DTX-Cy
  Unsigned 32-bit integer
  rnsap.Inactivity_Threshold_for_UE_DTX_Cycle2
rnsap.inactivity_Threshold_for_UE_Grant_Monitoring  inactivity-Threshold-for-UE-
  Unsigned 32-bit integer
  rnsap.Inactivity_Threshold_for_UE_Grant_Monitoring
rnsap.includedAngle  includedAngle
  Unsigned 32-bit integer
  rnsap.INTEGER_0_179
rnsap.individual_DL_ReferencePowerInformation  individual-DL-ReferencePowerInfor
  Unsigned 32-bit integer
  rnsap.DL_ReferencePowerInformationList
rnsap.individualcause  individualcause
  Unsigned 32-bit integer
  rnsap.Cause
rnsap.informationAvailable  informationAvailable
  No value
  rnsap.InformationAvailable
rnsap.informationNotAvailable  informationNotAvailable
  No value
  rnsap.InformationNotAvailable
rnsap.informationReportPeriodicity  informationReportPeriodicity
  Unsigned 32-bit integer
  rnsap.InformationReportPeriodicity
rnsap.informationThreshold  informationThreshold
  Unsigned 32-bit integer
  rnsap.InformationThreshold
rnsap.informationTypeItem  informationTypeItem
  Unsigned 32-bit integer
  rnsap.T_informationTypeItem
rnsap.initialOffset  initialOffset
  Unsigned 32-bit integer
  rnsap.INTEGER_0_255
rnsap.initial_dl_tx_power  initial-dl-tx-power
  Signed 32-bit integer
  rnsap.DL_Power
rnsap.initiatingMessage  initiatingMessage
  No value
  rnsap.InitiatingMessage
rnsap.innerLoopDLPCStatus  innerLoopDLPCStatus
  Unsigned 32-bit integer
  rnsap.InnerLoopDLPCStatus
rnsap.innerRadius  innerRadius
  Unsigned 32-bit integer
  rnsap.INTEGER_0_65535
rnsap.interFrequencyCellID  interFrequencyCellID
  Unsigned 32-bit integer
  rnsap.InterFrequencyCellID
```

```

rnsap.inter_Frequency_Cell_Indication_SIB11  inter-Frequency-Cell-Indication-SIB
    Unsigned 32-bit integer
    rnsap.Inter_Frequency_Cell_Indication
rnsap.inter_Frequency_Cell_Indication_SIB12  inter-Frequency-Cell-Indication-SIB
    Unsigned 32-bit integer
    rnsap.Inter_Frequency_Cell_Indication
rnsap.inter_Frequency_Cell_Information_SIB11  inter-Frequency-Cell-Information-S
    Unsigned 32-bit integer
    rnsap.Inter_Frequency_Cell_Information_SIB11
rnsap.inter_Frequency_Cell_Information_SIB12  inter-Frequency-Cell-Information-S
    Unsigned 32-bit integer
    rnsap.Inter_Frequency_Cell_Information_SIB12
rnsap.inter_Frequency_Cell_List_SIB11  inter-Frequency-Cell-List-SIB11
    Unsigned 32-bit integer
    rnsap.Inter_Frequency_Cell_SIB11_or_SIB12_List
rnsap.inter_Frequency_Cell_List_SIB12  inter-Frequency-Cell-List-SIB12
    Unsigned 32-bit integer
    rnsap.Inter_Frequency_Cell_SIB11_or_SIB12_List
rnsap.interface  interface
    Unsigned 32-bit integer
    rnsap.T_interface
rnsap.ioid  ioid
    Byte array
    rnsap.BIT_STRING_SIZE_10
rnsap.ioid_a  ioid-a
    Unsigned 32-bit integer
    rnsap.INTEGER_0_3
rnsap.ioidc_nav  ioidc-nav
    Byte array
    rnsap.BIT_STRING_SIZE_10
rnsap.iode_dgps  iode-dgps
    Byte array
    rnsap.BIT_STRING_SIZE_8
rnsap.ionospheric_Model  ionospheric-Model
    Boolean
    rnsap.BOOLEAN
rnsap.l2_p_dataflag_nav  l2-p-dataflag-nav
    Byte array
    rnsap.BIT_STRING_SIZE_1
rnsap.lAC  lAC
    Byte array
    rnsap.LAC
rnsap.lAI  lAI
    No value
    rnsap.T_lAI
rnsap.lS  lS
    Unsigned 32-bit integer
    rnsap.INTEGER_0_4294967295

```

```
rnsap.latitude latitude
    Unsigned 32-bit integer
    rnsap.INTEGER_0_8388607

rnsap.latitudeSign latitudeSign
    Unsigned 32-bit integer
    rnsap.T_latitudeSign

rnsap.limitedPowerIncrease limitedPowerIncrease
    Unsigned 32-bit integer
    rnsap.LimitedPowerIncrease

rnsap.listOfSNAs listOfSNAs
    Unsigned 32-bit integer
    rnsap.ListOfSNAs

rnsap.loadValue loadValue
    No value
    rnsap.LoadValue

rnsap.local local
    Unsigned 32-bit integer
    rnsap.INTEGER_0_maxPrivateIEs

rnsap.logicalChannelId logicalChannelId
    Unsigned 32-bit integer
    rnsap.LogicalChannelID

rnsap.longTransActionId longTransActionId
    Unsigned 32-bit integer
    rnsap.INTEGER_0_32767

rnsap.longitude longitude
    Signed 32-bit integer
    rnsap.INTEGER_M8388608_8388607

rnsap.ls_part ls-part
    Unsigned 32-bit integer
    rnsap.INTEGER_0_4294967295

rnsap.mAC_DTX_Cycle_10ms mAC-DTX-Cycle-10ms
    Unsigned 32-bit integer
    rnsap.MAC_DTX_Cycle_10ms

rnsap.mAC_DTX_Cycle_2ms mAC-DTX-Cycle-2ms
    Unsigned 32-bit integer
    rnsap.MAC_DTX_Cycle_2ms

rnsap.mAC_c_sh_SDU_Lengths mAC-c-sh-SDU-Lengths
    Unsigned 32-bit integer
    rnsap.MAC_c_sh_SDU_LengthList

rnsap.mAC_hsWindowSize mAC-hsWindowSize
    Unsigned 32-bit integer
    rnsap.MAC_hsWindowSize

rnsap.mACdPDU_Size mACdPDU-Size
    Unsigned 32-bit integer
    rnsap.MACdPDU_Size

rnsap.mACdPDU_Size_Index mACdPDU-Size-Index
    Unsigned 32-bit integer
    rnsap.MACdPDU_Size_IndexList
```

```
rnsap.mACdPDU_Size_Index_to_Modify  mACdPDU-Size-Index-to-Modify
    Unsigned 32-bit integer
    rnsap.MACdPDU_Size_IndexList_to_Modify
rnsap.mACd_PDU_Size_List  mACd-PDU-Size-List
    Unsigned 32-bit integer
    rnsap.E_DCH_MACdPDU_SizeList
rnsap.mACeReset_Indicator  mACeReset-Indicator
    Unsigned 32-bit integer
    rnsap.MACeReset_Indicator
rnsap.mACes_GuaranteedBitRate  mACes-GuaranteedBitRate
    Unsigned 32-bit integer
    rnsap.MACes_Guaranteed_Bitrate
rnsap.mAChsGuaranteedBitRate  mAChsGuaranteedBitRate
    Unsigned 32-bit integer
    rnsap.MAChsGuaranteedBitRate
rnsap.mAChs_Reordering_Buffer_Size_for_RLC_UM  mAChs-Reordering-Buffer-Size-for-
    Unsigned 32-bit integer
    rnsap.MAChsReorderingBufferSize_for_RLC_UM
rnsap.mBMSSchannelTypeInfo  mBMSSchannelTypeInfo
    No value
    rnsap.MBMSSchannelTypeInfo
rnsap.mBMSPreferredFreqLayerInfo  mBMSPreferredFreqLayerInfo
    No value
    rnsap.MBMSPreferredFreqLayerInfo
rnsap.mIMO_Mode_Indicator  mIMO-Mode-Indicator
    Unsigned 32-bit integer
    rnsap.MIMO_Mode_Indicator
rnsap.mIMO_N_M_Ratio  mIMO-N-M-Ratio
    Unsigned 32-bit integer
    rnsap.MIMO_N_M_Ratio
rnsap.mIMO_PilotConfiguration  mIMO-PilotConfiguration
    Unsigned 32-bit integer
    rnsap.MIMO_PilotConfiguration
rnsap.mMax  mMax
    Unsigned 32-bit integer
    rnsap.INTEGER_1_32
rnsap.mS  mS
    Unsigned 32-bit integer
    rnsap.INTEGER_0_16383
rnsap.m_zero_alm  m-zero-alm
    Byte array
    rnsap.BIT_STRING_SIZE_24
rnsap.m_zero_nav  m-zero-nav
    Byte array
    rnsap.BIT_STRING_SIZE_32
rnsap.maxAdjustmentStep  maxAdjustmentStep
    Unsigned 32-bit integer
    rnsap.MaxAdjustmentStep
```

```
rnsap.maxBits_MACe_PDU_non_scheduled  maxBits-MACe-PDU-non-scheduled
    Unsigned 32-bit integer
    rnsap.Max_Bits_MACe_PDU_non_scheduled

rnsap.maxCR  maxCR
    Unsigned 32-bit integer
    rnsap.CodeRate

rnsap.maxNrDLPhysicalchannels  maxNrDLPhysicalchannels
    Unsigned 32-bit integer
    rnsap.MaxNrDLPhysicalchannels

rnsap.maxNrOfUL_DPCHs  maxNrOfUL-DPCHs
    Unsigned 32-bit integer
    rnsap.MaxNrOfUL_DPCHs

rnsap.maxNrOfUL_DPDCHs  maxNrOfUL-DPDCHs
    Unsigned 32-bit integer
    rnsap.MaxNrOfUL_DPDCHs

rnsap.maxNrTimeslots_DL  maxNrTimeslots-DL
    Unsigned 32-bit integer
    rnsap.MaxNrTimeslots

rnsap.maxNrTimeslots_UL  maxNrTimeslots-UL
    Unsigned 32-bit integer
    rnsap.MaxNrTimeslots

rnsap.maxNrULPhysicalchannels  maxNrULPhysicalchannels
    Unsigned 32-bit integer
    rnsap.MaxNrULPhysicalchannels

rnsap.maxNr_Retransmissions_EDCH  maxNr-Retransmissions-EDCH
    Unsigned 32-bit integer
    rnsap.MaxNr_Retransmissions_EDCH

rnsap.maxPowerLCR  maxPowerLCR
    Signed 32-bit integer
    rnsap.DL_Power

rnsap.maxSYNC_UL_transmissions  maxSYNC-UL-transmissions
    Unsigned 32-bit integer
    rnsap.T_maxSYNC_UL_transmissions

rnsap.maxSet_E_DPDCHs  maxSet-E-DPDCHs
    Unsigned 32-bit integer
    rnsap.Max_Set_E_DPDCHs

rnsap.maxUL_SIR  maxUL-SIR
    Signed 32-bit integer
    rnsap.UL_SIR

rnsap.max_UL_SIR  max-UL-SIR
    Signed 32-bit integer
    rnsap.UL_SIR

rnsap.maximumAllowedULTxPower  maximumAllowedULTxPower
    Signed 32-bit integer
    rnsap.MaximumAllowedULTxPower

rnsap.maximumDLTxPower  maximumDLTxPower
    Signed 32-bit integer
    rnsap.DL_Power
```



```
rnsap.maximum_MACdPDU_Size    maximum-MACdPDU-Size
    Unsigned 32-bit integer
    rnsap.MACdPDU_Size

rnsap.maximum_Number_of_Retransmissions_For_E_DCH    maximum-Number-of-Retransmiss
    Unsigned 32-bit integer
    rnsap.MaxNr_Retransmissions_EDCH

rnsap.measurementAvailable    measurementAvailable
    No value
    rnsap.CommonMeasurementAvailable

rnsap.measurementChangeTime    measurementChangeTime
    Unsigned 32-bit integer
    rnsap.MeasurementChangeTime

rnsap.measurementHysteresisTime    measurementHysteresisTime
    Unsigned 32-bit integer
    rnsap.MeasurementHysteresisTime

rnsap.measurementIncreaseDecreaseThreshold    measurementIncreaseDecreaseThreshold
    Unsigned 32-bit integer
    rnsap.MeasurementIncreaseDecreaseThreshold

rnsap.measurementThreshold    measurementThreshold
    Unsigned 32-bit integer
    rnsap.MeasurementThreshold

rnsap.measurementThreshold1    measurementThreshold1
    Unsigned 32-bit integer
    rnsap.MeasurementThreshold

rnsap.measurementThreshold2    measurementThreshold2
    Unsigned 32-bit integer
    rnsap.MeasurementThreshold

rnsap.measurementTreshold    measurementTreshold
    Unsigned 32-bit integer
    rnsap.MeasurementThreshold

rnsap.measurement_Power_Offset    measurement-Power-Offset
    Signed 32-bit integer
    rnsap.Measurement_Power_Offset

rnsap.measurementnotAvailable    measurementnotAvailable
    No value
    rnsap.NULL

rnsap.midambleAllocationMode    midambleAllocationMode
    Unsigned 32-bit integer
    rnsap.MidambleAllocationMode1

rnsap.midambleConfigurationBurstType1And3    midambleConfigurationBurstType1And3
    Unsigned 32-bit integer
    rnsap.MidambleConfigurationBurstType1And3

rnsap.midambleConfigurationBurstType2    midambleConfigurationBurstType2
    Unsigned 32-bit integer
    rnsap.MidambleConfigurationBurstType2

rnsap.midambleConfigurationBurstType2_768    midambleConfigurationBurstType2-768
    Unsigned 32-bit integer
    rnsap.MidambleConfigurationBurstType2_768
```

```
rnsap.midambleConfigurationLCR  midambleConfigurationLCR
    Unsigned 32-bit integer
    rnsap.MidambleConfigurationLCR

rnsap.midambleShift  midambleShift
    Unsigned 32-bit integer
    rnsap.MidambleShiftLong

rnsap.midambleShiftAndBurstType  midambleShiftAndBurstType
    Unsigned 32-bit integer
    rnsap.MidambleShiftAndBurstType

rnsap.midambleShiftAndBurstType768  midambleShiftAndBurstType768
    Unsigned 32-bit integer
    rnsap.MidambleShiftAndBurstType768

rnsap.midambleShiftLCR  midambleShiftLCR
    No value
    rnsap.MidambleShiftLCR

rnsap.min  min
    Unsigned 32-bit integer
    rnsap.INTEGER_1_60_

rnsap.minCR  minCR
    Unsigned 32-bit integer
    rnsap.CodeRate

rnsap.minPowerLCR  minPowerLCR
    Signed 32-bit integer
    rnsap.DL_Power

rnsap.minUL_ChannelisationCodeLength  minUL-ChannelisationCodeLength
    Unsigned 32-bit integer
    rnsap.MinUL_ChannelisationCodeLength

rnsap.minUL_SIR  minUL-SIR
    Signed 32-bit integer
    rnsap.UL_SIR

rnsap.min_UL_SIR  min-UL-SIR
    Signed 32-bit integer
    rnsap.UL_SIR

rnsap.minimumDLTxPower  minimumDLTxPower
    Signed 32-bit integer
    rnsap.DL_Power

rnsap.minimumSpreadingFactor_DL  minimumSpreadingFactor-DL
    Unsigned 32-bit integer
    rnsap.MinimumSpreadingFactor

rnsap.minimumSpreadingFactor_UL  minimumSpreadingFactor-UL
    Unsigned 32-bit integer
    rnsap.MinimumSpreadingFactor

rnsap.misc  misc
    Unsigned 32-bit integer
    rnsap.CauseMisc

rnsap.missed_HS_SICH  missed-HS-SICH
    Unsigned 32-bit integer
    rnsap.HS_SICH_missed
```

```
rnsap.mode mode
    Unsigned 32-bit integer
    rnsap.TransportFormatSet_ModeDP

rnsap.model_id model-id
    Unsigned 32-bit integer
    rnsap.INTEGER_0_1

rnsap.modify modify
    No value
    rnsap.DRX_Information_to_Modify_Items

rnsap.modifyPriorityQueue modifyPriorityQueue
    No value
    rnsap.PriorityQueue_InfoItem_to_Modify

rnsap.modulation modulation
    Unsigned 32-bit integer
    rnsap.Modulation

rnsap.ms_part ms-part
    Unsigned 32-bit integer
    rnsap.INTEGER_0_16383

rnsap.multipleURAsIndicator multipleURAsIndicator
    Unsigned 32-bit integer
    rnsap.MultipleURAsIndicator

rnsap.multiplexingPosition multiplexingPosition
    Unsigned 32-bit integer
    rnsap.MultiplexingPosition

rnsap.nCC nCC
    Byte array
    rnsap.NCC

rnsap.n_E_UCCH n-E-UCCH
    Unsigned 32-bit integer
    rnsap.N_E_UCCH

rnsap.n_E_UCCH_LCR n-E-UCCH-LCR
    Unsigned 32-bit integer
    rnsap.N_E_UCCH_LCR

rnsap.n_INSYNC_IND n-INSYNC-IND
    Unsigned 32-bit integer
    rnsap.INTEGER_1_256

rnsap.n_OUTSYNC_IND n-OUTSYNC-IND
    Unsigned 32-bit integer
    rnsap.INTEGER_1_256

rnsap.nackPowerOffset nackPowerOffset
    Unsigned 32-bit integer
    rnsap.Nack_Power_Offset

rnsap.neighbouringCellMeasurementInformation neighbouringCellMeasurementInforma
    Unsigned 32-bit integer
    rnsap.NeighbouringCellMeasurementInfo

rnsap.neighbouringFDDCellMeasurementInformation neighbouringFDDCellMeasurementI
    No value
    rnsap.NeighbouringFDDCellMeasurementInformation
```

```
rnsap.neighbouringTDDCellMeasurementInformation  neighbouringTDDCellMeasurementI
  No value
  rnsap.NeighbouringTDDCellMeasurementInformation
rnsap.neighbouring_FDD_CellInformation  neighbouring-FDD-CellInformation
  Unsigned 32-bit integer
  rnsap.Neighbouring_FDD_CellInformation
rnsap.neighbouring_GSM_CellInformation  neighbouring-GSM-CellInformation
  No value
  rnsap.Neighbouring_GSM_CellInformation
rnsap.neighbouring_TDD_CellInformation  neighbouring-TDD-CellInformation
  Unsigned 32-bit integer
  rnsap.Neighbouring_TDD_CellInformation
rnsap.neighbouring_UMTS_CellInformation  neighbouring-UMTS-CellInformation
  Unsigned 32-bit integer
  rnsap.Neighbouring_UMTS_CellInformation
rnsap.new_secondary_CPICH  new-secondary-CPICH
  No value
  rnsap.Secondary_CPICH_Information
rnsap.noBadSatellite  noBadSatellite
  No value
  rnsap.NULL
rnsap.no_Split_in_TFCI  no-Split-in-TFCI
  Unsigned 32-bit integer
  rnsap.TFCS_TFCSList
rnsap.noinitialOffset  noinitialOffset
  Unsigned 32-bit integer
  rnsap.INTEGER_0_63
rnsap.nonCombining  nonCombining
  No value
  rnsap.NonCombining_RL_AdditionRspFDD
rnsap.nonCombiningOrFirstRL  nonCombiningOrFirstRL
  No value
  rnsap.NonCombiningOrFirstRL_RL_SetupRspFDD
rnsap.non_broadcastIndication  non-broadcastIndication
  Unsigned 32-bit integer
  rnsap.T_non_broadcastIndication
rnsap.normal_and_diversity_primary_CPICH  normal-and-diversity-primary-CPICH
  No value
  rnsap.NULL
rnsap.notApplicable  notApplicable
  No value
  rnsap.NULL
rnsap.not_Provided_Cell_List  not-Provided-Cell-List
  Unsigned 32-bit integer
  rnsap.NotProvidedCellList
rnsap.not_Used_dRACControl  not-Used-dRACControl
  No value
  rnsap.NULL
```

```
rnsap.not_Used_dSCHInformationResponse  not-Used-dSCHInformationResponse
  No value
  rnsap.NULL

rnsap.not_Used_dSCH_InformationResponse_RL_SetupFailureFDD  not-Used-dSCH-Inform
  No value
  rnsap.NULL

rnsap.not_Used_dSCHsToBeAddedOrModified  not-Used-dSCHsToBeAddedOrModified
  No value
  rnsap.NULL

rnsap.not_Used_sSDT_CellID  not-Used-sSDT-CellID
  No value
  rnsap.NULL

rnsap.not_Used_sSDT_CellIDLength  not-Used-sSDT-CellIDLength
  No value
  rnsap.NULL

rnsap.not_Used_sSDT_CellIdLength  not-Used-sSDT-CellIdLength
  No value
  rnsap.NULL

rnsap.not_Used_sSDT_CellIdentity  not-Used-sSDT-CellIdentity
  No value
  rnsap.NULL

rnsap.not_Used_sSDT_Indication  not-Used-sSDT-Indication
  No value
  rnsap.NULL

rnsap.not_Used_s_FieldLength  not-Used-s-FieldLength
  No value
  rnsap.NULL

rnsap.not_Used_secondary_CCPCH_Info  not-Used-secondary-CCPCH-Info
  No value
  rnsap.NULL

rnsap.not_Used_split_in_TFCI  not-Used-split-in-TFCI
  No value
  rnsap.NULL

rnsap.not_to_be_used_1  not-to-be-used-1
  Unsigned 32-bit integer
  rnsap.GapDuration

rnsap.not_used_closedLoopMode2_SupportIndicator  not-used-closedLoopMode2-Support
  No value
  rnsap.NULL

rnsap.nrOfDLchannelisationcodes  nrOfDLchannelisationcodes
  Unsigned 32-bit integer
  rnsap.NrOfDLchannelisationcodes

rnsap.nrOfTransportBlocks  nrOfTransportBlocks
  Unsigned 32-bit integer
  rnsap.NrOfTransportBlocks

rnsap.number_of_Processes  number-of-Processes
  Unsigned 32-bit integer
  rnsap.INTEGER_1_8_
```

```
rnsap.offsetAngle  offsetAngle
    Unsigned 32-bit integer
    rnsap.INTEGER_0_179

rnsap.omega_zero_nav  omega-zero-nav
    Byte array
    rnsap.BIT_STRING_SIZE_32

rnsap.omegadot_alm  omegadot-alm
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.omegadot_nav  omegadot-nav
    Byte array
    rnsap.BIT_STRING_SIZE_24

rnsap.omegazero_alm  omegazero-alm
    Byte array
    rnsap.BIT_STRING_SIZE_24

rnsap.onDemand  onDemand
    No value
    rnsap.NULL

rnsap.onModification  onModification
    No value
    rnsap.OnModificationInformation

rnsap.orientationOfMajorAxis  orientationOfMajorAxis
    Unsigned 32-bit integer
    rnsap.INTEGER_0_179

rnsap.outcome  outcome
    No value
    rnsap.Outcome

rnsap.pCCPCH_Power  pCCPCH-Power
    Signed 32-bit integer
    rnsap.PCCPCH_Power

rnsap.pCH_InformationList  pCH-InformationList
    Unsigned 32-bit integer
    rnsap.PCH_InformationList

rnsap.pC_Preamble  pC-Preamble
    Unsigned 32-bit integer
    rnsap.PC_Preamble

rnsap.pLMN_Identity  pLMN-Identity
    Byte array
    rnsap.PLMN_Identity

rnsap.p01_ForTFCI_Bits  p01-ForTFCI-Bits
    Unsigned 32-bit integer
    rnsap.PowerOffset

rnsap.p02_ForTPC_Bits  p02-ForTPC-Bits
    Unsigned 32-bit integer
    rnsap.PowerOffset

rnsap.p03_ForPilotBits  p03-ForPilotBits
    Unsigned 32-bit integer
    rnsap.PowerOffset
```

```
rnsap.pRC pRC
Signed 32-bit integer
rnsap.PRC

rnsap.pRCDeviation pRCDeviation
Unsigned 32-bit integer
rnsap.PRCDeviation

rnsap.pRxdesBase pRxdesBase
Signed 32-bit integer
rnsap.E_PUCH_PRXdesBase

rnsap.pSI pSI
Unsigned 32-bit integer
rnsap.GERAN_SystemInfo

rnsap.pTM_Cell_List pTM-Cell-List
Unsigned 32-bit integer
rnsap.PTMCellList

rnsap.pTP_Cell_List pTP-Cell-List
Unsigned 32-bit integer
rnsap.PTPCellList

rnsap.pagingCause pagingCause
Unsigned 32-bit integer
rnsap.PagingCause

rnsap.pagingRecordType pagingRecordType
Unsigned 32-bit integer
rnsap.PagingRecordType

rnsap.payloadCRC_PresenceIndicator payloadCRC-PresenceIndicator
Unsigned 32-bit integer
rnsap.PayloadCRC_PresenceIndicator

rnsap.periodic periodic
No value
rnsap.PeriodicInformation

rnsap.phase_Reference_Update_Indicator phase-Reference-Update-Indicator
Unsigned 32-bit integer
rnsap.Phase_Reference_Update_Indicator

rnsap.plmn_id plmn-id
Byte array
rnsap.PLMN_Identity

rnsap.po1_ForTFCI_Bits po1-ForTFCI-Bits
Unsigned 32-bit integer
rnsap.PowerOffset

rnsap.po2_ForTPC_Bits po2-ForTPC-Bits
Unsigned 32-bit integer
rnsap.PowerOffset

rnsap.po3_ForPilotBits po3-ForPilotBits
Unsigned 32-bit integer
rnsap.PowerOffset

rnsap.pointWithAltitude pointWithAltitude
No value
rnsap.GA_PointWithAltitude
```

```
rnsap.pointWithAltitudeAndUncertaintyEllipsoid  pointWithAltitudeAndUncertaintyE
  No value
  rnsap.GA_PointWithAltitudeAndUncertaintyEllipsoid
rnsap.pointWithUncertainty  pointWithUncertainty
  No value
  rnsap.GA_PointWithUnCertainty
rnsap.pointWithUncertaintyEllipse  pointWithUncertaintyEllipse
  No value
  rnsap.GA_PointWithUnCertaintyEllipse
rnsap.powerAdjustmentType  powerAdjustmentType
  Unsigned 32-bit integer
  rnsap.PowerAdjustmentType
rnsap.powerOffsetInformation  powerOffsetInformation
  No value
  rnsap.PowerOffsetInformation_RL_SetupRqstFDD
rnsap.powerRampStep  powerRampStep
  Unsigned 32-bit integer
  rnsap.INTEGER_0_3_
rnsap.powerResource  powerResource
  Unsigned 32-bit integer
  rnsap.E_DCH_PowerResource
rnsap.pre_emptionCapability  pre-emptionCapability
  Unsigned 32-bit integer
  rnsap.Pre_emptionCapability
rnsap.pre_emptionVulnerability  pre-emptionVulnerability
  Unsigned 32-bit integer
  rnsap.Pre_emptionVulnerability
rnsap.predictedSFNSFNDeviationLimit  predictedSFNSFNDeviationLimit
  Unsigned 32-bit integer
  rnsap.PredictedSFNSFNDeviationLimit
rnsap.predictedTUTRANGANSSDeviationLimit  predictedTUTRANGANSSDeviationLimit
  Unsigned 32-bit integer
  rnsap.INTEGER_1_256
rnsap.predictedTUTRANGPSDeviationLimit  predictedTUTRANGPSDeviationLimit
  Unsigned 32-bit integer
  rnsap.PredictedTUTRANGPSDeviationLimit
rnsap.preferredFrequencyLayer  preferredFrequencyLayer
  Unsigned 32-bit integer
  rnsap.UARFCN
rnsap.preferredFrequencyLayerInfo  preferredFrequencyLayerInfo
  No value
  rnsap.PreferredFrequencyLayerInfo
rnsap.primaryCCPCH_RSCP  primaryCCPCH-RSCP
  Unsigned 32-bit integer
  rnsap.PrimaryCCPCH_RSCP
rnsap.primaryCCPCH_RSCP_Delta  primaryCCPCH-RSCP-Delta
  Signed 32-bit integer
  rnsap.PrimaryCCPCH_RSCP_Delta
```



```

rnsap.primaryCPICH_EcNo  primaryCPICH-EcNo
    Signed 32-bit integer
    rnsap.PrimaryCPICH_EcNo

rnsap.primaryCPICH_Power  primaryCPICH-Power
    Signed 32-bit integer
    rnsap.PrimaryCPICH_Power

rnsap.primaryScramblingCode  primaryScramblingCode
    Unsigned 32-bit integer
    rnsap.PrimaryScramblingCode

rnsap.primary_CCPCCH_RSCP  primary-CCPCCH-RSCP
    No value
    rnsap.UE_MeasurementValue_Primary_CCPCCH_RSCP

rnsap.primary_Secondary_Grant_Selector  primary-Secondary-Grant-Selector
    Unsigned 32-bit integer
    rnsap.E_Primary_Secondary_Grant_Selector

rnsap.primary_and_secondary_CPICH  primary-and-secondary-CPICH
    Unsigned 32-bit integer
    rnsap.CommonPhysicalChannelID

rnsap.primary_e_RNTI  primary-e-RNTI
    Unsigned 32-bit integer
    rnsap.E_RNTI

rnsap.priorityLevel  priorityLevel
    Unsigned 32-bit integer
    rnsap.PriorityLevel

rnsap.priorityQueueId  priorityQueueId
    Unsigned 32-bit integer
    rnsap.PriorityQueue_Id

rnsap.priorityQueueInfo_Common_HS_DSCH_RNTI  priorityQueueInfo-Common-HS-DSCH-RN
    Unsigned 32-bit integer
    rnsap.PriorityQueue_InfoList_EnhancedFACH

rnsap.priorityQueueInfo_Dedicated_HS_DSCH_RNTI  priorityQueueInfo-Dedicated-HS-D
    Unsigned 32-bit integer
    rnsap.PriorityQueue_InfoList_EnhancedFACH

rnsap.priorityQueueInfoModifyUnsynchronised  priorityQueueInfoModifyUnsynchron
    Unsigned 32-bit integer
    rnsap.PriorityQueue_InfoList_to_Modify_Unsynchronised

rnsap.priorityQueue_Id  priorityQueue-Id
    Unsigned 32-bit integer
    rnsap.PriorityQueue_Id

rnsap.priorityQueue_Info  priorityQueue-Info
    Unsigned 32-bit integer
    rnsap.PriorityQueue_InfoList

rnsap.priorityQueue_Info_to_Modify  priorityQueue-Info-to-Modify
    Unsigned 32-bit integer
    rnsap.PriorityQueue_InfoList_to_Modify

rnsap.privateIEs  privateIEs
    Unsigned 32-bit integer
    rnsap.PrivateIE_Container

```

```
rnsap.procedureCode procedureCode
    Unsigned 32-bit integer
    rnsap.ProcedureCode

rnsap.procedureCriticality procedureCriticality
    Unsigned 32-bit integer
    rnsap.Criticality

rnsap.procedureID procedureID
    No value
    rnsap.ProcedureID

rnsap.process_Memory_Size process-Memory-Size
    Unsigned 32-bit integer
    rnsap.T_process_Memory_Size

rnsap.propagationDelay propagationDelay
    Unsigned 32-bit integer
    rnsap.PropagationDelay

rnsap.propagation_delay propagation-delay
    Unsigned 32-bit integer
    rnsap.PropagationDelay

rnsap.protocol protocol
    Unsigned 32-bit integer
    rnsap.CauseProtocol

rnsap.protocolExtensions protocolExtensions
    Unsigned 32-bit integer
    rnsap.ProtocolExtensionContainer

rnsap.protocolIEs protocolIEs
    Unsigned 32-bit integer
    rnsap.ProtocolIE_Container

rnsap.prxUpPCHdes prxUpPCHdes
    Signed 32-bit integer
    rnsap.INTEGER_M120_M58_

rnsap.punctureLimit punctureLimit
    Unsigned 32-bit integer
    rnsap.PunctureLimit

rnsap.qE_Selector qE-Selector
    Unsigned 32-bit integer
    rnsap.QE_Selector

rnsap.qPSK qPSK
    Unsigned 32-bit integer
    rnsap.QPSK_DL_DPCH_TimeSlotFormatTDD_LCR

rnsap.rAC rAC
    Byte array
    rnsap.RAC

rnsap.rL rL
    No value
    rnsap.RL_RL_FailureInd

rnsap.rLC_Mode rLC-Mode
    Unsigned 32-bit integer
    rnsap.RLC_Mode
```

```
rnsap.rLS rLS
  No value
  rnsap.RL_Set_DM_Rqst
rnsap.rLSpecificCause rLSpecificCause
  No value
  rnsap.RLSpecificCauseList_RL_SetupFailureFDD
rnsap.rL_ID rL-ID
  Unsigned 32-bit integer
  rnsap.RL_ID
rnsap.rL_InformationList_DM_Rprt rL-InformationList-DM-Rprt
  Unsigned 32-bit integer
  rnsap.RL_InformationList_DM_Rprt
rnsap.rL_InformationList_DM_Rqst rL-InformationList-DM-Rqst
  Unsigned 32-bit integer
  rnsap.RL_InformationList_DM_Rqst
rnsap.rL_InformationList_DM_Rsp rL-InformationList-DM-Rsp
  Unsigned 32-bit integer
  rnsap.RL_InformationList_DM_Rsp
rnsap.rL_InformationList_RL_FailureInd rL-InformationList-RL-FailureInd
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_FailureInd
rnsap.rL_InformationList_RL_RestoreInd rL-InformationList-RL-RestoreInd
  Unsigned 32-bit integer
  rnsap.RL_InformationList_RL_RestoreInd
rnsap.rL_ReconfigurationFailureList_RL_ReconfFailure rL-ReconfigurationFailureL
  Unsigned 32-bit integer
  rnsap.RL_ReconfigurationFailureList_RL_ReconfFailure
rnsap.rL_Set rL-Set
  No value
  rnsap.RL_Set_RL_FailureInd
rnsap.rL_Set_ID rL-Set-ID
  Unsigned 32-bit integer
  rnsap.RL_Set_ID
rnsap.rL_Set_InformationList_DM_Rprt rL-Set-InformationList-DM-Rprt
  Unsigned 32-bit integer
  rnsap.RL_Set_InformationList_DM_Rprt
rnsap.rL_Set_InformationList_DM_Rqst rL-Set-InformationList-DM-Rqst
  Unsigned 32-bit integer
  rnsap.RL_Set_InformationList_DM_Rqst
rnsap.rL_Set_InformationList_DM_Rsp rL-Set-InformationList-DM-Rsp
  Unsigned 32-bit integer
  rnsap.RL_Set_InformationList_DM_Rsp
rnsap.rL_Set_InformationList_RL_FailureInd rL-Set-InformationList-RL-FailureInd
  Unsigned 32-bit integer
  rnsap.RL_Set_InformationList_RL_FailureInd
rnsap.rL_Set_InformationList_RL_RestoreInd rL-Set-InformationList-RL-RestoreInd
  Unsigned 32-bit integer
  rnsap.RL_Set_InformationList_RL_RestoreInd
```

```

rnsap.rL_Set_successful_InformationRespList_DM_Fail  rL-Set-successful-InformationRespList_DM_Fail
    Unsigned 32-bit integer
    rnsap.RL_Set_Successful_InformationRespList_DM_Fail
rnsap.rL_Set_unsuccessful_InformationRespList_DM_Fail  rL-Set-unsuccessful-InformationRespList_DM_Fail
    Unsigned 32-bit integer
    rnsap.RL_Set_Unsuccessful_InformationRespList_DM_Fail
rnsap.rL_Set_unsuccessful_InformationRespList_DM_Fail_Ind  rL-Set-unsuccessful-InformationRespList_DM_Fail_Ind
    Unsigned 32-bit integer
    rnsap.RL_Set_Unsuccessful_InformationRespList_DM_Fail_Ind
rnsap.rL_Specific_DCH_Info  rL-Specific-DCH-Info
    Unsigned 32-bit integer
    rnsap.RL_Specific_DCH_Info
rnsap.rL_Specific_EDCH_Info  rL-Specific-EDCH-Info
    Unsigned 32-bit integer
    rnsap.RL_Specific_EDCH_Info
rnsap.rL_successful_InformationRespList_DM_Fail  rL-successful-InformationRespList_DM_Fail
    Unsigned 32-bit integer
    rnsap.RL_Successful_InformationRespList_DM_Fail
rnsap.rL_unsuccessful_InformationRespList_DM_Fail  rL-unsuccessful-InformationRespList_DM_Fail
    Unsigned 32-bit integer
    rnsap.RL_Unsuccessful_InformationRespList_DM_Fail
rnsap.rL_unsuccessful_InformationRespList_DM_Fail_Ind  rL-unsuccessful-InformationRespList_DM_Fail_Ind
    Unsigned 32-bit integer
    rnsap.RL_Unsuccessful_InformationRespList_DM_Fail_Ind
rnsap.rLs  rLs
    No value
    rnsap.RL_DM_Rsp
rnsap.rNC_ID  rNC-ID
    Unsigned 32-bit integer
    rnsap.RNC_ID
rnsap.rNCsWithCellsInTheAccessedURA_List  rNCsWithCellsInTheAccessedURA-List
    Unsigned 32-bit integer
    rnsap.RNCsWithCellsInTheAccessedURA_List
rnsap.rSCP  rSCP
    Unsigned 32-bit integer
    rnsap.RSCP_Value
rnsap.radioNetwork  radioNetwork
    Unsigned 32-bit integer
    rnsap.CauseRadioNetwork
rnsap.range_Correction_Rate  range-Correction-Rate
    Signed 32-bit integer
    rnsap.Range_Correction_Rate
rnsap.rateMatcingAttribute  rateMatcingAttribute
    Unsigned 32-bit integer
    rnsap.RateMatchingAttribute
rnsap.rb_Info  rb-Info
    Unsigned 32-bit integer
    rnsap.RB_Info

```

```
rnsap.receivedTotalWideBandPowerValue  receivedTotalWideBandPowerValue
    Unsigned 32-bit integer
    rnsap.INTEGER_0_621

rnsap.received_total_wide_band_power  received-total-wide-band-power
    Unsigned 32-bit integer
    rnsap.Received_total_wide_band_power

rnsap.refBeta  refBeta
    Signed 32-bit integer
    rnsap.RefBeta

rnsap.refCodeRate  refCodeRate
    Unsigned 32-bit integer
    rnsap.CodeRate_short

rnsap.refTFCNumber  refTFCNumber
    Unsigned 32-bit integer
    rnsap.RefTFCNumber

rnsap.reference_E_TFCI  reference-E-TFCI
    Unsigned 32-bit integer
    rnsap.E_TFCI

rnsap.reference_E_TFCI_Information  reference-E-TFCI-Information
    Unsigned 32-bit integer
    rnsap.Reference_E_TFCI_Information

rnsap.reference_E_TFCI_PO  reference-E-TFCI-PO
    Unsigned 32-bit integer
    rnsap.Reference_E_TFCI_PO

rnsap.repetitionLength  repetitionLength
    Unsigned 32-bit integer
    rnsap.RepetitionLength

rnsap.repetitionNumber  repetitionNumber
    Unsigned 32-bit integer
    rnsap.RepetitionNumber0

rnsap.repetitionPeriod  repetitionPeriod
    Unsigned 32-bit integer
    rnsap.RepetitionPeriod

rnsap.reportPeriodicity  reportPeriodicity
    Unsigned 32-bit integer
    rnsap.ReportPeriodicity

rnsap.reportingInterval  reportingInterval
    Unsigned 32-bit integer
    rnsap.UEMeasurementReportCharacteristicsPeriodicReportingInterval

rnsap.requestedDataValue  requestedDataValue
    No value
    rnsap.RequestedDataValue

rnsap.requestedDataValueInformation  requestedDataValueInformation
    Unsigned 32-bit integer
    rnsap.RequestedDataValueInformation

rnsap.restrictionStateIndicator  restrictionStateIndicator
    Unsigned 32-bit integer
    rnsap.RestrictionStateIndicator
```

```
rnsap.roundTripTime roundTripTime
    Unsigned 32-bit integer
    rnsap.Round_Trip_Time_Value

rnsap.round_trip_time round-trip-time
    Unsigned 32-bit integer
    rnsap.Round_Trip_Time_IncrDecrThres

rnsap.rscp rscp
    Unsigned 32-bit integer
    rnsap.RSCP_Value_IncrDecrThres

rnsap.rxTimingDeviationForTA rxTimingDeviationForTA
    Unsigned 32-bit integer
    rnsap.RxTimingDeviationForTA

rnsap.rxTimingDeviationForTA768 rxTimingDeviationForTA768
    Unsigned 32-bit integer
    rnsap.RxTimingDeviationForTA768

rnsap.rxTimingDeviationValue rxTimingDeviationValue
    Unsigned 32-bit integer
    rnsap.Rx_Timing_Deviation_Value

rnsap.rx_timing_deviation rx-timing-deviation
    Unsigned 32-bit integer
    rnsap.Rx_Timing_Deviation_Value

rnsap.sAC sAC
    Byte array
    rnsap.SAC

rnsap.sAI sAI
    No value
    rnsap.SAI

rnsap.sAT_ID sAT-ID
    Unsigned 32-bit integer
    rnsap.SAT_ID

rnsap.sCH_TimeSlot sCH-TimeSlot
    Unsigned 32-bit integer
    rnsap.SCH_TimeSlot

rnsap.sCTD_Indicator sCTD-Indicator
    Unsigned 32-bit integer
    rnsap.SCTD_Indicator

rnsap.sFN sFN
    Unsigned 32-bit integer
    rnsap.SFN

rnsap.sFNSFNChangeLimit sFNSFNChangeLimit
    Unsigned 32-bit integer
    rnsap.SFNSFNChangeLimit

rnsap.sFNSFNDriftRate sFNSFNDriftRate
    Signed 32-bit integer
    rnsap.SFNSFNDriftRate

rnsap.sFNSFNDriftRateQuality sFNSFNDriftRateQuality
    Unsigned 32-bit integer
    rnsap.SFNSFNDriftRateQuality
```

```
rnsap.sFNSFNMeasurementValueInformation  sFNSFNMeasurementValueInformation
    No value
    rnsap.sFNSFNMeasurementValueInformation
rnsap.sFNSFNQuality  sFNSFNQuality
    Unsigned 32-bit integer
    rnsap.sFNSFNQuality
rnsap.sFNSFNTimeStampInformation  sFNSFNTimeStampInformation
    Unsigned 32-bit integer
    rnsap.sFNSFNTimeStampInformation
rnsap.sFNSFNTimeStamp_FDD  sFNSFNTimeStamp-FDD
    Unsigned 32-bit integer
    rnsap.sFN
rnsap.sFNSFNTimeStamp_TDD  sFNSFNTimeStamp-TDD
    No value
    rnsap.sFNSFNTimeStamp_TDD
rnsap.sFNSFNValue  sFNSFNValue
    Unsigned 32-bit integer
    rnsap.sFNSFNValue
rnsap.sFNSFN_FDD  sFNSFN-FDD
    Unsigned 32-bit integer
    rnsap.sFNSFN_FDD
rnsap.sFNSFN_GA_AccessPointPosition  sFNSFN-GA-AccessPointPosition
    No value
    rnsap.GA_AccessPointPositionwithOptionalAltitude
rnsap.sFNSFN_TDD  sFNSFN-TDD
    Unsigned 32-bit integer
    rnsap.sFNSFN_TDD
rnsap.sFNSFN_TDD768  sFNSFN-TDD768
    Unsigned 32-bit integer
    rnsap.sFNSFN_TDD768
rnsap.sI  sI
    Unsigned 32-bit integer
    rnsap.GERAN_SystemInfo
rnsap.sID  sID
    Unsigned 32-bit integer
    rnsap.SID
rnsap.sIR_ErrorValue  sIR-ErrorValue
    Unsigned 32-bit integer
    rnsap.sIR_Error_Value
rnsap.sIR_Value  sIR-Value
    Unsigned 32-bit integer
    rnsap.sIR_Value
rnsap.sRB_Delay  sRB-Delay
    Unsigned 32-bit integer
    rnsap.sRB_Delay
rnsap.sRNTI  sRNTI
    Unsigned 32-bit integer
    rnsap.S_RNTI
```

```
rnsap.sRNTI_BitMaskIndex  sRNTI-BitMaskIndex
    Unsigned 32-bit integer
    rnsap.T_sRNTI_BitMaskIndex

rnsap.sSDT_SupportIndicator  sSDT-SupportIndicator
    Unsigned 32-bit integer
    rnsap.SSDT_SupportIndicator

rnsap.sTTD_SupportIndicator  sTTD-SupportIndicator
    Unsigned 32-bit integer
    rnsap.STTD_SupportIndicator

rnsap.sVGlobalHealth_alm  sVGlobalHealth-alm
    Byte array
    rnsap.BIT_STRING_SIZE_364

rnsap.s_CCPCH_TimeSlotFormat_LCR  s-CCPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    rnsap.TDD_DL_DPCH_TimeSlotFormat_LCR

rnsap.s_RNTI_Group  s-RNTI-Group
    No value
    rnsap.S_RNTI_Group

rnsap.satId  satId
    Unsigned 32-bit integer
    rnsap.INTEGER_0_63

rnsap.satellite_Almanac_Information  satellite-Almanac-Information
    Unsigned 32-bit integer
    rnsap.T_satellite_Almanac_Information

rnsap.satellite_Almanac_Information_item  Item
    No value
    rnsap.T_satellite_Almanac_Information_item

rnsap.satellite_DGPSCorrections_Information  satellite-DGPSCorrections-Information
    Unsigned 32-bit integer
    rnsap.T_satellite_DGPSCorrections_Information

rnsap.satellite_DGPSCorrections_Information_item  Item
    No value
    rnsap.T_satellite_DGPSCorrections_Information_item

rnsap.schedulingInformation  schedulingInformation
    Unsigned 32-bit integer
    rnsap.SchedulingInformation

rnsap.schedulingPriorityIndicator  schedulingPriorityIndicator
    Unsigned 32-bit integer
    rnsap.SchedulingPriorityIndicator

rnsap.second_TDD_ChannelisationCode  second-TDD-ChannelisationCode
    Unsigned 32-bit integer
    rnsap.TDD_ChannelisationCode

rnsap.secondary_CCPCH_Info_TDD  secondary-CCPCH-Info-TDD
    No value
    rnsap.Secondary_CCPCH_Info_TDD

rnsap.secondary_CCPCH_Info_TDD768  secondary-CCPCH-Info-TDD768
    No value
    rnsap.Secondary_CCPCH_Info_TDD768
```



```

rnsap.secondary_CCPCH_TDD_Code_Information  secondary-CCPCH-TDD-Code-Information
    Unsigned 32-bit integer
    rnsap.Secondary_CCPCH_TDD_Code_Information
rnsap.secondary_CCPCH_TDD_Code_Information768  secondary-CCPCH-TDD-Code-Information768
    Unsigned 32-bit integer
    rnsap.Secondary_CCPCH_TDD_Code_Information768
rnsap.secondary_CCPCH_TDD_InformationList  secondary-CCPCH-TDD-InformationList
    Unsigned 32-bit integer
    rnsap.Secondary_CCPCH_TDD_InformationList
rnsap.secondary_CCPCH_TDD_InformationList768  secondary-CCPCH-TDD-InformationList768
    Unsigned 32-bit integer
    rnsap.Secondary_CCPCH_TDD_InformationList768
rnsap.secondary_CPICH_shall_not_be_used  secondary-CPICH-shall-not-be-used
    No value
    rnsap.NULL
rnsap.secondary_LCR_CCPCH_Info_TDD  secondary-LCR-CCPCH-Info-TDD
    No value
    rnsap.Secondary_LCR_CCPCH_Info_TDD
rnsap.secondary_LCR_CCPCH_TDD_Code_Information  secondary-LCR-CCPCH-TDD-Code-Information
    Unsigned 32-bit integer
    rnsap.Secondary_LCR_CCPCH_TDD_Code_Information
rnsap.secondary_LCR_CCPCH_TDD_InformationList  secondary-LCR-CCPCH-TDD-InformationList
    Unsigned 32-bit integer
    rnsap.Secondary_LCR_CCPCH_TDD_InformationList
rnsap.secondary_e_RNTI  secondary-e-RNTI
    Unsigned 32-bit integer
    rnsap.E_RNTI
rnsap.seed  seed
    Unsigned 32-bit integer
    rnsap.Seed
rnsap.semi_staticPart  semi-staticPart
    No value
    rnsap.TransportFormatSet_Semi_staticPart
rnsap.separate_indication  separate-indication
    No value
    rnsap.NULL
rnsap.sequenceNumber  sequenceNumber
    Unsigned 32-bit integer
    rnsap.PLCCHsequenceNumber
rnsap.service_id  service-id
    Byte array
    rnsap.Service_ID
rnsap.serving_Grant_Value  serving-Grant-Value
    Unsigned 32-bit integer
    rnsap.E_Serving_Grant_Value
rnsap.sf1_reserved_nav  sf1-reserved-nav
    Byte array
    rnsap.BIT_STRING_SIZE_87

```

```
rnsap.shortTransActionId  shortTransActionId
    Unsigned 32-bit integer
    rnsap.INTEGER_0_127

rnsap.signalledGainFactors  signalledGainFactors
    No value
    rnsap.T_signalledGainFactors

rnsap.signatureSequenceGroupIndex  signatureSequenceGroupIndex
    Unsigned 32-bit integer
    rnsap.SignatureSequenceGroupIndex

rnsap.sir  sir
    Unsigned 32-bit integer
    rnsap.SIR_Value_IncrDecrThres

rnsap.sir_error  sir-error
    Unsigned 32-bit integer
    rnsap.SIR_Error_Value_IncrDecrThres

rnsap.sixteenQAM_UL_Delta_T2TP  sixteenQAM-UL-Delta-T2TP
    Unsigned 32-bit integer
    rnsap.SixteenQAM_UL_Delta_T2TP

rnsap.sixteenQAM_UL_Operation_Indicator  sixteenQAM-UL-Operation-Indicator
    Unsigned 32-bit integer
    rnsap.SixteenQAM_UL_Operation_Indicator

rnsap.spare_zero_fill  spare-zero-fill
    Byte array
    rnsap.BIT_STRING_SIZE_20

rnsap.specialBurstScheduling  specialBurstScheduling
    Unsigned 32-bit integer
    rnsap.SpecialBurstScheduling

rnsap.sqrtA_msb  sqrtA-msb
    Unsigned 32-bit integer
    rnsap.INTEGER_0_63

rnsap.srnc_id  srnc-id
    Unsigned 32-bit integer
    rnsap.RNC_ID

rnsap.storm_flag_five  storm-flag-five
    Boolean
    rnsap.BOOLEAN

rnsap.storm_flag_four  storm-flag-four
    Boolean
    rnsap.BOOLEAN

rnsap.storm_flag_one  storm-flag-one
    Boolean
    rnsap.BOOLEAN

rnsap.storm_flag_three  storm-flag-three
    Boolean
    rnsap.BOOLEAN

rnsap.storm_flag_two  storm-flag-two
    Boolean
    rnsap.BOOLEAN
```

```

rnsap.subframenumber  subframenumber
    Unsigned 32-bit integer
    rnsap.E_DCH_SubframeNumber_LCR

rnsap.successfulOutcome  successfulOutcome
    No value
    rnsap.SuccessfulOutcome

rnsap.successful_RL_InformationRespList_RL_AdditionFailureFDD  successful-RL-Inf
    Unsigned 32-bit integer
    rnsap.SuccessfulRL_InformationResponseList_RL_AdditionFailureFDD

rnsap.successful_RL_InformationRespList_RL_SetupFailureFDD  successful-RL-Inform
    Unsigned 32-bit integer
    rnsap.SuccessfulRL_InformationResponseList_RL_SetupFailureFDD

rnsap.successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformat
    Unsigned 32-bit integer
    rnsap.T_successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementIn

rnsap.successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformat
    No value
    rnsap.T_successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementIn

rnsap.svHealth  svHealth
    Byte array
    rnsap.BIT_STRING_SIZE_5

rnsap.sv_health_nav  sv-health-nav
    Byte array
    rnsap.BIT_STRING_SIZE_6

rnsap.svhealth_alm  svhealth-alm
    Byte array
    rnsap.BIT_STRING_SIZE_8

rnsap.syncCase  syncCase
    Unsigned 32-bit integer
    rnsap.SyncCase

rnsap.syncUL_procParameter  syncUL-procParameter
    No value
    rnsap.SYNC_UL_ProcParameters

rnsap.sync_UL_codes_bitmap  sync-UL-codes-bitmap
    Byte array
    rnsap.BIT_STRING_SIZE_8

rnsap.synchronisationConfiguration  synchronisationConfiguration
    No value
    rnsap.SynchronisationConfiguration

rnsap.synchronised  synchronised
    Unsigned 32-bit integer
    rnsap.CFN

rnsap.t1  t1
    Unsigned 32-bit integer
    rnsap.T1

rnsap.tDDAckNackPowerOffset  tDDAckNackPowerOffset
    Signed 32-bit integer
    rnsap.TDD_AckNack_Power_Offset

```

```
rnsap.tDD_AckNack_Power_Offset  tDD-AckNack-Power-Offset
Signed 32-bit integer
rnsap.TDD_AckNack_Power_Offset

rnsap.tDD_ChannelisationCode  tDD-ChannelisationCode
Unsigned 32-bit integer
rnsap.TDD_ChannelisationCode

rnsap.tDD_ChannelisationCode768  tDD-ChannelisationCode768
Unsigned 32-bit integer
rnsap.TDD_ChannelisationCode768

rnsap.tDD_ChannelisationCodeLCR  tDD-ChannelisationCodeLCR
No value
rnsap.TDD_ChannelisationCodeLCR

rnsap.tDD_DPCHOffset  tDD-DPCHOffset
Unsigned 32-bit integer
rnsap.TDD_DPCHOffset

rnsap.tDD_PhysicalChannelOffset  tDD-PhysicalChannelOffset
Unsigned 32-bit integer
rnsap.TDD_PhysicalChannelOffset

rnsap.tDD_dL_Code_LCR_Information  tDD-dL-Code-LCR-Information
Unsigned 32-bit integer
rnsap.TDD_DL_Code_LCR_InformationModifyList_RL_ReconfReadyTDD

rnsap.tDD_uL_Code_LCR_Information  tDD-uL-Code-LCR-Information
Unsigned 32-bit integer
rnsap.TDD_UL_Code_LCR_InformationModifyList_RL_ReconfReadyTDD

rnsap.tFCI_Coding  tFCI-Coding
Unsigned 32-bit integer
rnsap.TFCI_Coding

rnsap.tFCI_Presence  tFCI-Presence
Unsigned 32-bit integer
rnsap.TFCI_Presence

rnsap.tFCI_SignallingMode  tFCI-SignallingMode
Unsigned 32-bit integer
rnsap.TFCI_SignallingMode

rnsap.tFCS  tFCS
No value
rnsap.TFCS

rnsap.tFCSvalues  tFCSvalues
Unsigned 32-bit integer
rnsap.T_tFCSvalues

rnsap.tFC_Beta  tFC-Beta
Unsigned 32-bit integer
rnsap.TransportFormatCombination_Beta

rnsap.tGCFN  tGCFN
Unsigned 32-bit integer
rnsap.CFN

rnsap.tGD  tGD
Unsigned 32-bit integer
rnsap.TGD
```

```
rnsap.tGL1 tGL1
    Unsigned 32-bit integer
    rnsap.GapLength

rnsap.tGL2 tGL2
    Unsigned 32-bit integer
    rnsap.GapLength

rnsap.tGPL1 tGPL1
    Unsigned 32-bit integer
    rnsap.GapDuration

rnsap.tGPRC tGPRC
    Unsigned 32-bit integer
    rnsap.TGPRC

rnsap.tGPSID tGPSID
    Unsigned 32-bit integer
    rnsap.TGPSID

rnsap.tGSN tGSN
    Unsigned 32-bit integer
    rnsap.TGSN

rnsap.tMGI tMGI
    No value
    rnsap.TMGI

rnsap.tSTD_Indicator tSTD-Indicator
    Unsigned 32-bit integer
    rnsap.TSTD_Indicator

rnsap.tUTRANGANSS tUTRANGANSS
    No value
    rnsap.TUTRANGANSS

rnsap.tUTRANGANSSChangeLimit tUTRANGANSSChangeLimit
    Unsigned 32-bit integer
    rnsap.INTEGER_1_256

rnsap.tUTRANGANSSDriftRate tUTRANGANSSDriftRate
    Signed 32-bit integer
    rnsap.INTEGER_M50_50

rnsap.tUTRANGANSSDriftRateQuality tUTRANGANSSDriftRateQuality
    Unsigned 32-bit integer
    rnsap.INTEGER_0_50

rnsap.tUTRANGANSSMeasurementAccuracyClass tUTRANGANSSMeasurementAccuracyClass
    Unsigned 32-bit integer
    rnsap.TUTRANGANSSAccuracyClass

rnsap.tUTRANGANSSMeasurementValueInformation tUTRANGANSSMeasurementValueInforma
    No value
    rnsap.TUTRANGANSSMeasurementValueInformation

rnsap.tUTRANGANSSQuality tUTRANGANSSQuality
    Unsigned 32-bit integer
    rnsap.INTEGER_0_255

rnsap.tUTRANGPS tUTRANGPS
    No value
    rnsap.TUTRANGPS
```

```
rnsap.tUTRANGPSChangeLimit  tUTRANGPSChangeLimit
    Unsigned 32-bit integer
    rnsap.TUTRANGPSChangeLimit

rnsap.tUTRANGPSDriftRate  tUTRANGPSDriftRate
    Signed 32-bit integer
    rnsap.TUTRANGPSDriftRate

rnsap.tUTRANGPSDriftRateQuality  tUTRANGPSDriftRateQuality
    Unsigned 32-bit integer
    rnsap.TUTRANGPSDriftRateQuality

rnsap.tUTRANGPSMeasurementAccuracyClass  tUTRANGPSMeasurementAccuracyClass
    Unsigned 32-bit integer
    rnsap.TUTRANGPSAccuracyClass

rnsap.tUTRANGPSMeasurementValueInformation  tUTRANGPSMeasurementValueInformation
    No value
    rnsap.TUTRANGPSMeasurementValueInformation

rnsap.tUTRANGPSQuality  tUTRANGPSQuality
    Unsigned 32-bit integer
    rnsap.TUTRANGPSQuality

rnsap.t_RLFAILURE  t-RLFAILURE
    Unsigned 32-bit integer
    rnsap.INTEGER_0_255

rnsap.t_gd  t-gd
    Byte array
    rnsap.BIT_STRING_SIZE_10

rnsap.t_gd_nav  t-gd-nav
    Byte array
    rnsap.BIT_STRING_SIZE_8

rnsap.t_oa  t-oa
    Unsigned 32-bit integer
    rnsap.INTEGER_0_255

rnsap.t_oc_lsb  t-oc-lsb
    Unsigned 32-bit integer
    rnsap.INTEGER_0_511

rnsap.t_oc_nav  t-oc-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.t_oe_nav  t-oe-nav
    Byte array
    rnsap.BIT_STRING_SIZE_16

rnsap.t_ot_utc  t-ot-utc
    Byte array
    rnsap.BIT_STRING_SIZE_8

rnsap.tdd  tdd
    No value
    rnsap.TDD_TransportFormatSet_ModeDP

rnsap.tdde_PUCH_Offset  tdde-PUCH-Offset
    Unsigned 32-bit integer
    rnsap.Tdde_PUCH_Offset
```

```
rnsap.tdd_ChannelisationCode  tdd-ChannelisationCode
    Unsigned 32-bit integer
    rnsap.TDD_ChannelisationCode

rnsap.tdd_ChannelisationCode768  tdd-ChannelisationCode768
    Unsigned 32-bit integer
    rnsap.TDD_ChannelisationCode768

rnsap.tdd_ChannelisationCodeLCR  tdd-ChannelisationCodeLCR
    No value
    rnsap.TDD_ChannelisationCodeLCR

rnsap.tdd_DL_DPCH_TimeSlotFormat_LCR  tdd-DL-DPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    rnsap.TDD_DL_DPCH_TimeSlotFormat_LCR

rnsap.tdd_TPC_DownlinkStepSize  tdd-TPC-DownlinkStepSize
    Unsigned 32-bit integer
    rnsap.TDD_TPC_DownlinkStepSize

rnsap.tdd_UL_DPCH_TimeSlotFormat_LCR  tdd-UL-DPCH-TimeSlotFormat-LCR
    Unsigned 32-bit integer
    rnsap.TDD_UL_DPCH_TimeSlotFormat_LCR

rnsap.ten_ms  ten-ms
    No value
    rnsap.DTX_Cycle_10ms_Items

rnsap.ten_msec  ten-msec
    Unsigned 32-bit integer
    rnsap.INTEGER_1_6000_

rnsap.timeSlot  timeSlot
    Unsigned 32-bit integer
    rnsap.TimeSlot

rnsap.timeSlotLCR  timeSlotLCR
    Unsigned 32-bit integer
    rnsap.TimeSlotLCR

rnsap.timeSlot_RL_SetupRspTDD  timeSlot-RL-SetupRspTDD
    Unsigned 32-bit integer
    rnsap.TimeSlot

rnsap.timeslot  timeslot
    Unsigned 32-bit integer
    rnsap.TimeSlot

rnsap.timeslotISCP  timeslotISCP
    Signed 32-bit integer
    rnsap.UEMeasurementThresholdDLTimeslotISCP

rnsap.timeslotLCR  timeslotLCR
    Unsigned 32-bit integer
    rnsap.TimeSlotLCR

rnsap.timeslotResource  timeslotResource
    Byte array
    rnsap.E_DCH_TimeslotResource

rnsap.timeslotResource_LCR  timeslotResource-LCR
    Byte array
    rnsap.E_DCH_TimeslotResource_LCR
```

```
rnsap.timingAdvanceApplied timingAdvanceApplied
    Unsigned 32-bit integer
    rnsap.TimingAdvanceApplied

rnsap.tlm_message_nav tlm-message-nav
    Byte array
    rnsap.BIT_STRING_SIZE_14

rnsap.tlm_revd_c_nav tlm-revd-c-nav
    Byte array
    rnsap.BIT_STRING_SIZE_2

rnsap.tmgi tmgi
    No value
    rnsap.TMGI

rnsap.tnlQoS tnlQoS
    Unsigned 32-bit integer
    rnsap.TnlQoS

rnsap.tnlQos tnlQos
    Unsigned 32-bit integer
    rnsap.TnlQos

rnsap.toAWE toAWE
    Unsigned 32-bit integer
    rnsap.ToAWE

rnsap.toAWS toAWS
    Unsigned 32-bit integer
    rnsap.ToAWS

rnsap.toe_c_msb toe-c-msb
    Unsigned 32-bit integer
    rnsap.INTEGER_0_31

rnsap.toe_lsb_nav toe-lsb-nav
    Unsigned 32-bit integer
    rnsap.INTEGER_0_511

rnsap.total_HS_SICH total-HS-SICH
    Unsigned 32-bit integer
    rnsap.HS_SICH_total

rnsap.trCH_SrcStatisticsDescr trCH-SourceStatisticsDescr
    Unsigned 32-bit integer
    rnsap.TrCH_SrcStatisticsDescr

rnsap.trChSourceStatisticsDescriptor trChSourceStatisticsDescriptor
    Unsigned 32-bit integer
    rnsap.TrCH_SrcStatisticsDescr

rnsap.trafficClass trafficClass
    Unsigned 32-bit integer
    rnsap.TrafficClass

rnsap.transactionID transactionID
    Unsigned 32-bit integer
    rnsap.TransactionID

rnsap.transmissionMode transmissionMode
    Unsigned 32-bit integer
    rnsap.TransmissionMode
```



```

rnsap.transmissionTime transmissionTime
    Unsigned 32-bit integer
    rnsap.TransmissionTimeIntervalSemiStatic
rnsap.transmissionTimeInterval transmissionTimeInterval
    Unsigned 32-bit integer
    rnsap.TransmissionTimeIntervalDynamic
rnsap.transmissionTimeIntervalInformation transmissionTimeIntervalInformation
    Unsigned 32-bit integer
    rnsap.TransmissionTimeIntervalInformation
rnsap.transmission_Gap_Pattern_Sequence_ScramblingCode_Information transmission
    Unsigned 32-bit integer
    rnsap.Transmission_Gap_Pattern_Sequence_ScramblingCode_Information
rnsap.transmission_Gap_Pattern_Sequence_Status transmission-Gap-Pattern-Sequenc
    Unsigned 32-bit integer
    rnsap.Transmission_Gap_Pattern_Sequence_Status_List
rnsap.transmitDiversityIndicator transmitDiversityIndicator
    Unsigned 32-bit integer
    rnsap.TransmitDiversityIndicator
rnsap.transmittedCarrierPowerValue transmittedCarrierPowerValue
    Unsigned 32-bit integer
    rnsap.INTEGER_0_100
rnsap.transmittedCodePowerValue transmittedCodePowerValue
    Unsigned 32-bit integer
    rnsap.Transmitted_Code_Power_Value
rnsap.transmitted_code_power transmitted-code-power
    Unsigned 32-bit integer
    rnsap.Transmitted_Code_Power_Value_IncrDecrThres
rnsap.transport transport
    Unsigned 32-bit integer
    rnsap.CauseTransport
rnsap.transportBearerRequestIndicator transportBearerRequestIndicator
    Unsigned 32-bit integer
    rnsap.TransportBearerRequestIndicator
rnsap.transportBlockSize transportBlockSize
    Unsigned 32-bit integer
    rnsap.TransportBlockSize
rnsap.transportFormatManagement transportFormatManagement
    Unsigned 32-bit integer
    rnsap.TransportFormatManagement
rnsap.transportFormatSet transportFormatSet
    No value
    rnsap.TransportFormatSet
rnsap.transportLayerAddress transportLayerAddress
    Byte array
    rnsap.TransportLayerAddress
rnsap.transport_Block_Size_Index transport-Block-Size-Index
    Unsigned 32-bit integer
    rnsap.Transport_Block_Size_Index

```

```
rnsap.triggeringMessage  triggeringMessage
    Unsigned 32-bit integer
    rnsap.TriggeringMessage

rnsap.two_ms  two-ms
    No value
    rnsap.DTX_Cycle_2ms_Items

rnsap.txDiversityIndicator  txDiversityIndicator
    Unsigned 32-bit integer
    rnsap.TxDiversityIndicator

rnsap.tx_tow_nav  tx-tow-nav
    Unsigned 32-bit integer
    rnsap.INTEGER_0_1048575

rnsap.type1  type1
    No value
    rnsap.Type1

rnsap.type2  type2
    No value
    rnsap.Type2

rnsap.type3  type3
    No value
    rnsap.Type3

rnsap.uARFCN  uARFCN
    Unsigned 32-bit integer
    rnsap.UARFCN

rnsap.uARFCNforNd  uARFCNforNd
    Unsigned 32-bit integer
    rnsap.UARFCN

rnsap.uARFCNforNt  uARFCNforNt
    Unsigned 32-bit integer
    rnsap.UARFCN

rnsap.uARFCNforNu  uARFCNforNu
    Unsigned 32-bit integer
    rnsap.UARFCN

rnsap.uC_ID  uC-ID
    No value
    rnsap.UC_ID

rnsap.uDRE  uDRE
    Unsigned 32-bit integer
    rnsap.UDRE

rnsap.uEMeasurementHysteresisTime  uEMeasurementHysteresisTime
    Unsigned 32-bit integer
    rnsap.UEMeasurementHysteresisTime

rnsap.uEMeasurementTimeToTrigger  uEMeasurementTimeToTrigger
    Unsigned 32-bit integer
    rnsap.UEMeasurementTimeToTrigger

rnsap.uEMeasurementTimeslotISCPListHCR  uEMeasurementTimeslotISCPListHCR
    Unsigned 32-bit integer
    rnsap.UEMeasurementValueTimeslotISCPListHCR
```

```
rnsap.uEMeasurementTimeslotISCPListLCR  uEMeasurementTimeslotISCPListLCR
    Unsigned 32-bit integer
    rnsap.UEMeasurementValueTimeslotISCPListLCR

rnsap.uEMeasurementTransmittedPowerListHCR  uEMeasurementTransmittedPowerListHCR
    Unsigned 32-bit integer
    rnsap.UEMeasurementValueTransmittedPowerListHCR

rnsap.uEMeasurementTransmittedPowerListLCR  uEMeasurementTransmittedPowerListLCR
    Unsigned 32-bit integer
    rnsap.UEMeasurementValueTransmittedPowerListLCR

rnsap.uEMeasurementTreshold  uEMeasurementTreshold
    Unsigned 32-bit integer
    rnsap.UEMeasurementThreshold

rnsap.uETransmitPower  uETransmitPower
    Signed 32-bit integer
    rnsap.UEMeasurementThresholdUETransmitPower

rnsap.uE_Capabilities_Info  uE-Capabilities-Info
    No value
    rnsap.UE_Capabilities_Info

rnsap.uE_DPCCH_burst1  uE-DPCCH-burst1
    Unsigned 32-bit integer
    rnsap.UE_DPCCH_burst1

rnsap.uE_DPCCH_burst2  uE-DPCCH-burst2
    Unsigned 32-bit integer
    rnsap.UE_DPCCH_burst2

rnsap.uE_DRX_Cycle  uE-DRX-Cycle
    Unsigned 32-bit integer
    rnsap.UE_DRX_Cycle

rnsap.uE_DRX_Grant_Monitoring  uE-DRX-Grant-Monitoring
    Boolean
    rnsap.UE_DRX_Grant_Monitoring

rnsap.uE_DTX_Cycle1_10ms  uE-DTX-Cycle1-10ms
    Unsigned 32-bit integer
    rnsap.UE_DTX_Cycle1_10ms

rnsap.uE_DTX_Cycle1_2ms  uE-DTX-Cycle1-2ms
    Unsigned 32-bit integer
    rnsap.UE_DTX_Cycle1_2ms

rnsap.uE_DTX_Cycle2_10ms  uE-DTX-Cycle2-10ms
    Unsigned 32-bit integer
    rnsap.UE_DTX_Cycle2_10ms

rnsap.uE_DTX_Cycle2_2ms  uE-DTX-Cycle2-2ms
    Unsigned 32-bit integer
    rnsap.UE_DTX_Cycle2_2ms

rnsap.uE_DTX_DRX_Offset  uE-DTX-DRX-Offset
    Unsigned 32-bit integer
    rnsap.UE_DTX_DRX_Offset

rnsap.uE_DTX_Long_Preamble  uE-DTX-Long-Preamble
    Unsigned 32-bit integer
    rnsap.UE_DTX_Long_Preamble
```

```
rnsap.uE_Inactivity_Threshold  uE-Inactivity-Threshold
    Unsigned 32-bit integer
    rnsap.UE_Inactivity_Threshold
rnsap.uE_Transmitted_Power  uE-Transmitted-Power
    No value
    rnsap.UE_MeasurementValue_UE_Transmitted_Power
rnsap.uEMeasurementValue  uEMeasurementValue
    Unsigned 32-bit integer
    rnsap.UEMeasurementValue
rnsap.uL_Code_Information  uL-Code-Information
    Unsigned 32-bit integer
    rnsap.TDD_UL_Code_Information
rnsap.uL_Code_Information768  uL-Code-Information768
    Unsigned 32-bit integer
    rnsap.TDD_UL_Code_Information768
rnsap.uL_Code_LCR_Information  uL-Code-LCR-Information
    Unsigned 32-bit integer
    rnsap.TDD_UL_Code_LCR_Information
rnsap.uL_Code_LCR_InformationList  uL-Code-LCR-InformationList
    Unsigned 32-bit integer
    rnsap.TDD_UL_Code_LCR_Information
rnsap.uL_DL_mode  uL-DL-mode
    Unsigned 32-bit integer
    rnsap.UL_DL_mode
rnsap.uL_SIR_Target_CCTrCH_InformationItem_RL_SetupRspTDD768  uL-SIR-Target-CCTr
    Signed 32-bit integer
    rnsap.UL_SIR
rnsap.uL_Synchronisation_Frequency  uL-Synchronisation-Frequency
    Unsigned 32-bit integer
    rnsap.UL_Synchronisation_Frequency
rnsap.uL_Synchronisation_StepSize  uL-Synchronisation-StepSize
    Unsigned 32-bit integer
    rnsap.UL_Synchronisation_StepSize
rnsap.uL_TimeslotISCP  uL-TimeslotISCP
    Unsigned 32-bit integer
    rnsap.UL_TimeslotISCP
rnsap.uL_TimeslotLCR_Info  uL-TimeslotLCR-Info
    Unsigned 32-bit integer
    rnsap.UL_TimeslotLCR_Information
rnsap.uL_TimeslotLCR_Information  uL-TimeslotLCR-Information
    Unsigned 32-bit integer
    rnsap.UL_TimeslotLCR_Information
rnsap.uL_Timeslot_Information  uL-Timeslot-Information
    Unsigned 32-bit integer
    rnsap.UL_Timeslot_Information
rnsap.uL_Timeslot_Information768  uL-Timeslot-Information768
    Unsigned 32-bit integer
    rnsap.UL_Timeslot_Information768
```

```

rnsap.ul_Timeslot_InformationList_PhyChReconfRqstTDD  ul-Timeslot-InformationList
    Unsigned 32-bit integer
    rnsap.UL_Timeslot_InformationList_PhyChReconfRqstTDD
rnsap.ul_Timeslot_InformationModifyList_RL_ReconfReadyTDD  ul-Timeslot-InformationModifyList_RL_ReconfReadyTDD
    Unsigned 32-bit integer
    rnsap.UL_Timeslot_InformationModifyList_RL_ReconfReadyTDD
rnsap.ul_UARFCN  ul-UARFCN
    Unsigned 32-bit integer
    rnsap.UARFCN
rnsap.uRA  uRA
    No value
    rnsap.URA_PagingRqst
rnsap.uRA_ID  uRA-ID
    Unsigned 32-bit integer
    rnsap.URA_ID
rnsap.uRA_Information  uRA-Information
    No value
    rnsap.URA_Information
rnsap.uSCH_ID  uSCH-ID
    Unsigned 32-bit integer
    rnsap.USCH_ID
rnsap.uSCH_InformationResponse  uSCH-InformationResponse
    No value
    rnsap.USCH_InformationResponse_RL_AdditionRspTDD
rnsap.uSCHsToBeAddedOrModified  uSCHsToBeAddedOrModified
    No value
    rnsap.USCHToBeAddedOrModified_RL_ReconfReadyTDD
rnsap.udre  udre
    Unsigned 32-bit integer
    rnsap.UDRE
rnsap.ueSpecificMidamble  ueSpecificMidamble
    Unsigned 32-bit integer
    rnsap.MidambleShiftLong
rnsap.ul_BLER  ul-BLER
    Signed 32-bit integer
    rnsap.BLER
rnsap.ul_CCTrCHInformation  ul-CCTrCHInformation
    No value
    rnsap.UL_CCTrCHInformationList_RL_SetupRspTDD
rnsap.ul_CCTrCHInformation768  ul-CCTrCHInformation768
    No value
    rnsap.UL_CCTrCHInformationList_RL_SetupRspTDD768
rnsap.ul_CCTrCH_ID  ul-CCTrCH-ID
    Unsigned 32-bit integer
    rnsap.CCTrCH_ID
rnsap.ul_CCTrCH_Information  ul-CCTrCH-Information
    No value
    rnsap.UL_CCTrCH_InformationList_RL_ReconfReadyTDD

```

```
rnsap.ul_CCTrCH_LCR_Information  ul-CCTrCH-LCR-Information
    No value
    rnsap.UL_CCTrCH_LCR_InformationList_RL_AdditionRspTDD
rnsap.ul_DPCCH_SlotFormat  ul-DPCCH-SlotFormat
    Unsigned 32-bit integer
    rnsap.UL_DPCCH_SlotFormat
rnsap.ul_DPCH_AddInformation  ul-DPCH-AddInformation
    No value
    rnsap.UL_DPCH_InformationAddList_RL_ReconfReadyTDD
rnsap.ul_DPCH_DeleteInformation  ul-DPCH-DeleteInformation
    No value
    rnsap.UL_DPCH_InformationDeleteList_RL_ReconfReadyTDD
rnsap.ul_DPCH_Information  ul-DPCH-Information
    No value
    rnsap.UL_DPCH_InformationList_RL_SetupRspTDD
rnsap.ul_DPCH_Information768  ul-DPCH-Information768
    No value
    rnsap.UL_DPCH_InformationList_RL_SetupRspTDD768
rnsap.ul_DPCH_LCR_Information  ul-DPCH-LCR-Information
    No value
    rnsap.UL_DPCH_LCR_InformationList_RL_SetupRspTDD
rnsap.ul_DPCH_ModifyInformation  ul-DPCH-ModifyInformation
    No value
    rnsap.UL_DPCH_InformationModifyList_RL_ReconfReadyTDD
rnsap.ul_FP_Mode  ul-FP-Mode
    Unsigned 32-bit integer
    rnsap.UL_FP_Mode
rnsap.ul_LCR_CCTrCHInformation  ul-LCR-CCTrCHInformation
    No value
    rnsap.UL_LCR_CCTrCHInformationList_RL_SetupRspTDD
rnsap.ul_PhysCH_SF_Variation  ul-PhysCH-SF-Variation
    Unsigned 32-bit integer
    rnsap.UL_PhysCH_SF_Variation
rnsap.ul_PunctureLimit  ul-PunctureLimit
    Unsigned 32-bit integer
    rnsap.PunctureLimit
rnsap.ul_SIRTarget  ul-SIRTarget
    Signed 32-bit integer
    rnsap.UL_SIR
rnsap.ul_ScramblingCode  ul-ScramblingCode
    No value
    rnsap.UL_ScramblingCode
rnsap.ul_ScramblingCodeLength  ul-ScramblingCodeLength
    Unsigned 32-bit integer
    rnsap.UL_ScramblingCodeLength
rnsap.ul_ScramblingCodeNumber  ul-ScramblingCodeNumber
    Unsigned 32-bit integer
    rnsap.UL_ScramblingCodeNumber
```

```
rnsap.ul_TFCS    ul-TFCS
  No value
  rnsap.TFCS

rnsap.ul_TimeSlot_ISCP_Info  ul-TimeSlot-ISCP-Info
  Unsigned 32-bit integer
  rnsap.UL_TimeSlot_ISCP_Info

rnsap.ul_TimeSlot_ISCP_LCR_Info  ul-TimeSlot-ISCP-LCR-Info
  Unsigned 32-bit integer
  rnsap.UL_TimeSlot_ISCP_LCR_Info

rnsap.ul_TransportformatSet  ul-TransportformatSet
  No value
  rnsap.TransportFormatSet

rnsap.ul_cCTrCH_ID  ul-cCTrCH-ID
  Unsigned 32-bit integer
  rnsap.CCTrCH_ID

rnsap.ul_ccTrCHID  ul-ccTrCHID
  Unsigned 32-bit integer
  rnsap.CCTrCH_ID

rnsap.ul_transportFormatSet  ul-transportFormatSet
  No value
  rnsap.TransportFormatSet

rnsap.uncertaintyAltitude  uncertaintyAltitude
  Unsigned 32-bit integer
  rnsap.INTEGER_0_127

rnsap.uncertaintyCode  uncertaintyCode
  Unsigned 32-bit integer
  rnsap.INTEGER_0_127

rnsap.uncertaintyEllipse  uncertaintyEllipse
  No value
  rnsap.GA_UncertaintyEllipse

rnsap.uncertaintyRadius  uncertaintyRadius
  Unsigned 32-bit integer
  rnsap.INTEGER_0_127

rnsap.uncertaintySemi_major  uncertaintySemi-major
  Unsigned 32-bit integer
  rnsap.INTEGER_0_127

rnsap.uncertaintySemi_minor  uncertaintySemi-minor
  Unsigned 32-bit integer
  rnsap.INTEGER_0_127

rnsap.unsuccessfulOutcome  unsuccessfulOutcome
  No value
  rnsap.UnsuccessfulOutcome

rnsap.unsuccessful_RL_InformationRespItem_RL_AdditionFailureTDD  unsuccessful-RL-
  No value
  rnsap.Unsuccessful_RL_InformationRespItem_RL_AdditionFailureTDD

rnsap.unsuccessful_RL_InformationRespItem_RL_SetupFailureTDD  unsuccessful-RL-In
  No value
  rnsap.Unsuccessful_RL_InformationRespItem_RL_SetupFailureTDD
```

```

rnsap.unsuccessful_RL_InformationRespList_RL_AdditionFailureFDD  unsuccessful-RL-
    Unsigned 32-bit integer
    rnsap.UnsuccessfulRL_InformationResponseList_RL_AdditionFailureFDD
rnsap.unsuccessful_RL_InformationRespList_RL_SetupFailureFDD  unsuccessful-RL-Inf
    Unsigned 32-bit integer
    rnsap.UnsuccessfulRL_InformationResponseList_RL_SetupFailureFDD
rnsap.unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInform
    Unsigned 32-bit integer
    rnsap.T_unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurement
rnsap.unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInform
    No value
    rnsap.T_unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurement
rnsap.unsynchronised  unsynchronised
    No value
    rnsap.NULL
rnsap.uplinkCellCapacityClassValue  uplinkCellCapacityClassValue
    Unsigned 32-bit integer
    rnsap.INTEGER_1_100_
rnsap.uplinkLoadValue  uplinkLoadValue
    Unsigned 32-bit integer
    rnsap.INTEGER_0_100
rnsap.uplinkNRTLLoadInformationValue  uplinkNRTLLoadInformationValue
    Unsigned 32-bit integer
    rnsap.INTEGER_0_3
rnsap.uplinkRTLLoadValue  uplinkRTLLoadValue
    Unsigned 32-bit integer
    rnsap.INTEGER_0_100
rnsap.uplinkStepSizeLCR  uplinkStepSizeLCR
    Unsigned 32-bit integer
    rnsap.TDD_TPC_UplinkStepSize_LCR
rnsap.uplinkTimeslotISCPValue  uplinkTimeslotISCPValue
    Unsigned 32-bit integer
    rnsap.UL_TimeslotISCP
rnsap.uplink_Companded_Mode_Method  uplink-Companded-Mode-Method
    Unsigned 32-bit integer
    rnsap.Uplink_Companded_Mode_Method
rnsap.ura_id  ura-id
    Unsigned 32-bit integer
    rnsap.URA_ID
rnsap.ura_pch  ura-pch
    No value
    rnsap.Ura_Pch_State
rnsap.usch_ID  usch-ID
    Unsigned 32-bit integer
    rnsap.USCH_ID
rnsap.usch_InformationResponse  usch-InformationResponse
    No value
    rnsap.USCH_InformationResponse_RL_SetupRspTDD

```



```
rnsap.usch_LCR_InformationResponse  usch-LCR-InformationResponse
    No value
    rnsap.USCH_LCR_InformationResponse_RL_SetupRspTDD
rnsap.user_range_accuracy_index_nav  user-range-accuracy-index-nav
    Byte array
    rnsap.BIT_STRING_SIZE_4
rnsap.value  value
    No value
    rnsap.ProtocolIE_Field_value
rnsap.wT  wT
    Unsigned 32-bit integer
    rnsap.INTEGER_1_4
rnsap.w_n_lsf_utc  w-n-lsf-utc
    Byte array
    rnsap.BIT_STRING_SIZE_8
rnsap.w_n_nav  w-n-nav
    Byte array
    rnsap.BIT_STRING_SIZE_10
rnsap.w_n_t_utc  w-n-t-utc
    Byte array
    rnsap.BIT_STRING_SIZE_8
rnsap.wna_alm  wna-alm
    Byte array
    rnsap.BIT_STRING_SIZE_8
```

**Unidirectional Link Detection (udld)**

```
udld.checksum  Checksum
    Unsigned 16-bit integer
udld.flags  Flags
    Unsigned 8-bit integer
udld.flags.rsy  ReSynch
    Unsigned 8-bit integer
udld.flags.rt  Recommended timeout
    Unsigned 8-bit integer
udld.opcode  Opcode
    Unsigned 8-bit integer
udld.tlv.len  Length
    Unsigned 16-bit integer
udld.tlv.type  Type
    Unsigned 16-bit integer
udld.version  Version
    Unsigned 8-bit integer
```

**Unisys Transmittal System (uts)**

```
uts.ack  Ack
    Boolean
    TRUE if Ack
```

uts.busy Busy  
Boolean  
TRUE if Busy

uts.data Data  
String  
User Data Message

uts.did DID  
Unsigned 8-bit integer  
Device Identifier address

uts.function Function  
Unsigned 8-bit integer  
Function Code value

uts.msgwaiting MsgWaiting  
Boolean  
TRUE if Message Waiting

uts.notbusy NotBusy  
Boolean  
TRUE if Not Busy

uts.replyrequest ReplyRequest  
Boolean  
TRUE if Reply Request

uts.retxrequest ReTxRequest  
Boolean  
TRUE if Re-transmit Request

uts.rid RID  
Unsigned 8-bit integer  
Remote Identifier address

uts.sid SID  
Unsigned 8-bit integer  
Site Identifier address

#### **Universal Computer Protocol (ucp)**

ucp.hdr.LEN Length  
Unsigned 16-bit integer  
Total number of characters between <stx>...<etx>.

ucp.hdr.OT Operation  
Unsigned 8-bit integer  
The operation that is requested with this message.

ucp.hdr.O\_R Type  
Unsigned 8-bit integer  
Your basic 'is a request or response'.

ucp.hdr.TRN Transaction Reference Number  
Unsigned 8-bit integer  
Transaction number for this command, used in windowing.

ucp.message Data  
No value  
The actual message or data.

ucp.parm.Data Data  
No value  
The actual content of the operation.

ucp.parm.AAC AAC  
String  
Accumulated charges.

ucp.parm.AC AC  
String  
Authentication code.

ucp.parm.ACK (N)Ack  
Unsigned 8-bit integer  
Positive or negative acknowledge of the operation.

ucp.parm.AMsg AMsg  
String  
The alphanumeric message that is being sent.

ucp.parm.A\_D A\_D  
Unsigned 8-bit integer  
Add to/delete from fixed subscriber address list record.

ucp.parm.AdC AdC  
String  
Address code recipient.

ucp.parm.BAS BAS  
Unsigned 8-bit integer  
Barring status flag.

ucp.parm.CPg CPg  
String  
Reserved for Code Page.

ucp.parm.CS CS  
Unsigned 8-bit integer  
Additional character set number.

ucp.parm.CT CT  
Date/Time stamp  
Accumulated charges timestamp.

ucp.parm.DAdC DAdC  
String  
Diverted address code.

ucp.parm.DCs DCs  
Unsigned 8-bit integer  
Data coding scheme (deprecated).

ucp.parm.DD DD  
Unsigned 8-bit integer  
Deferred delivery requested.

ucp.parm.DDT DDT  
Date/Time stamp  
Deferred delivery time.

ucp.parm.DSCTS DSCTS  
Date/Time stamp  
Delivery timestamp.

```
ucp.parm.Dst  Dst
    Unsigned 8-bit integer
    Delivery status.

ucp.parm.EC  Error code
    Unsigned 8-bit integer
    The result of the requested operation.

ucp.parm.GA  GA
    String
    GA?? haven't got a clue.

ucp.parm.GAdC  GAdC
    String
    Group address code.

ucp.parm.HPLMN  HPLMN
    String
    Home PLMN address.

ucp.parm.IVR5x  IVR5x
    String
    UCP release number supported/accepted.

ucp.parm.L1P  L1P
    String
    New leg. code for level 1 priority.

ucp.parm.L1R  L1R
    Unsigned 8-bit integer
    Leg. code for priority 1 flag.

ucp.parm.L3P  L3P
    String
    New leg. code for level 3 priority.

ucp.parm.L3R  L3R
    Unsigned 8-bit integer
    Leg. code for priority 3 flag.

ucp.parm.LAC  LAC
    String
    New leg. code for all calls.

ucp.parm.LAR  LAR
    Unsigned 8-bit integer
    Leg. code for all calls flag.

ucp.parm.LAdC  LAdC
    String
    Address for VSMSC list operation.

ucp.parm.LCR  LCR
    Unsigned 8-bit integer
    Leg. code for reverse charging flag.

ucp.parm.LMN  LMN
    Unsigned 8-bit integer
    Last message number.

ucp.parm.LNPI  LNPI
    Unsigned 8-bit integer
    Numbering plan id. list address.
```

ucp.parm.LNo LNo  
String  
Standard text list number requested by calling party.

ucp.parm.LPID LPID  
Unsigned 16-bit integer  
Last resort PID value.

ucp.parm.LPR LPR  
String  
Legitimation code for priority requested.

ucp.parm.LRAd LRAd  
String  
Last resort address.

ucp.parm.LRC LRC  
String  
Legitimation code for reverse charging.

ucp.parm.LRP LRP  
String  
Legitimation code for repetition.

ucp.parm.LRR LRR  
Unsigned 8-bit integer  
Leg. code for repetition flag.

ucp.parm.LRq LRq  
Unsigned 8-bit integer  
Last resort address request.

ucp.parm.LST LST  
String  
Legitimation code for standard text.

ucp.parm.LTON LTON  
Unsigned 8-bit integer  
Type of number list address.

ucp.parm.LUM LUM  
String  
Legitimation code for urgent message.

ucp.parm.LUR LUR  
Unsigned 8-bit integer  
Leg. code for urgent message flag.

ucp.parm.MCLs MCLs  
Unsigned 8-bit integer  
Message class.

ucp.parm.MMS MMS  
Unsigned 8-bit integer  
More messages to send.

ucp.parm.MNo MNo  
String  
Message number.

ucp.parm.MT MT  
Unsigned 8-bit integer  
Message type.

```
ucp.parm.MVP MVP
    Date/Time stamp
    Modified validity period.
ucp.parm.NAC NAC
    String
    New authentication code.
ucp.parm.NAdC NAdC
    String
    Notification address.
ucp.parm.NB NB
    String
    No. of bits in Transparent Data (TD) message.
ucp.parm.NMESS NMESS
    Unsigned 8-bit integer
    Number of stored messages.
ucp.parm.NMESS_str NMESS_str
    String
    Number of stored messages.
ucp.parm.NPID NPID
    Unsigned 16-bit integer
    Notification PID value.
ucp.parm.NPL NPL
    Unsigned 16-bit integer
    Number of parameters in the following list.
ucp.parm.NPWD NPWD
    String
    New password.
ucp.parm.NRq NRq
    Unsigned 8-bit integer
    Notification request.
ucp.parm.NT NT
    Unsigned 8-bit integer
    Notification type.
ucp.parm.NoA NoA
    Unsigned 16-bit integer
    Maximum number of alphanumerical characters accepted.
ucp.parm.NoB NoB
    Unsigned 16-bit integer
    Maximum number of data bits accepted.
ucp.parm.NoN NoN
    Unsigned 16-bit integer
    Maximum number of numerical characters accepted.
ucp.parm.OAC OAC
    String
    Authentication code, originator.
ucp.parm.OAdC OAdC
    String
    Address code originator.
```

```
ucp.parm.ONPI  ONPI
    Unsigned 8-bit integer
    Originator numbering plan id.

ucp.parm.OPID  OPID
    Unsigned 8-bit integer
    Originator protocol identifier.

ucp.parm.OTOA  OTOA
    String
    Originator Type Of Address.

ucp.parm.OTON  OTON
    Unsigned 8-bit integer
    Originator type of number.

ucp.parm.PID  PID
    Unsigned 16-bit integer
    SMT PID value.

ucp.parm.PNC  PNC
    Unsigned 8-bit integer
    Paging network controller.

ucp.parm.PR  PR
    Unsigned 8-bit integer
    Priority requested.

ucp.parm.PWD  PWD
    String
    Current password.

ucp.parm.RC  RC
    Unsigned 8-bit integer
    Reverse charging request.

ucp.parm.REQ_OT  REQ_OT
    Unsigned 8-bit integer
    UCP release number supported/accepted.

ucp.parm.RES1  RES1
    String
    Reserved for future use.

ucp.parm.RES2  RES2
    String
    Reserved for future use.

ucp.parm.RES4  RES4
    String
    Reserved for future use.

ucp.parm.RES5  RES5
    String
    Reserved for future use.

ucp.parm.RP  RP
    Unsigned 8-bit integer
    Repitition requested.

ucp.parm.RPI  RPI
    Unsigned 8-bit integer
    Reply path.
```

ucp.parm.RPID RPID  
String  
Replace PID

ucp.parm.RPLy RPLy  
String  
Reserved for Reply type.

ucp.parm.RT RT  
Unsigned 8-bit integer  
Receiver type.

ucp.parm.R\_T R\_T  
Unsigned 8-bit integer  
Message number.

ucp.parm.Rsn Rsn  
Unsigned 16-bit integer  
Reason code.

ucp.parm.SCTS SCTS  
Date/Time stamp  
Service Centre timestamp.

ucp.parm.SM SM  
String  
System message.

ucp.parm.SP SP  
Date/Time stamp  
Stop time.

ucp.parm.SSTAT SSTAT  
Unsigned 8-bit integer  
Supplementary services for which status is requested.

ucp.parm.ST ST  
Date/Time stamp  
Start time.

ucp.parm.STYP0 STYP0  
Unsigned 8-bit integer  
Subtype of operation.

ucp.parm.STYP1 STYP1  
Unsigned 8-bit integer  
Subtype of operation.

ucp.parm.STx STx  
No value  
Standard text.

ucp.parm.TNo TNo  
String  
Standard text number requested by calling party.

ucp.parm.UM UM  
Unsigned 8-bit integer  
Urgent message indicator.

ucp.parm.VERS VERS  
String  
Version number.



```
ucp.parm.VP  VP
             Date/Time stamp
             Validity period.

ucp.parm.XSer  Extra services:
             No value
             Extra services.

ucp.xser.service  Type of service
                 Unsigned 8-bit integer
                 The type of service specified.
```

#### Unlicensed Mobile Access (uma)

```
uma.ciphering_command_mac  Ciphering Command MAC (Message Authentication Code)
                           Byte array
                           Ciphering Command MAC (Message Authentication Code)

uma.ciphering_key_seq_num  Values for the ciphering key
                           Unsigned 8-bit integer
                           Values for the ciphering key

uma.li  Length Indicator
        Unsigned 16-bit integer
        Length Indicator

uma.pd  Protocol Discriminator
        Unsigned 8-bit integer
        Protocol Discriminator

uma.rand_val  Ciphering Command RAND value
              Byte array
              Ciphering Command RAND value

uma.sapi_id  SAPI ID
             Unsigned 8-bit integer
             SAPI ID

uma.skip.ind  Skip Indicator
             Unsigned 8-bit integer
             Skip Indicator

uma.urlc.msg.type  URLC Message Type
                  Unsigned 8-bit integer
                  URLC Message Type

uma.urlc.seq.nr  Sequence Number
                Byte array
                Sequence Number

uma.urlc.tlli  Temporary Logical Link Identifier
              Byte array
              Temporary Logical Link Identifier

uma.urr.3GECS  3GECS, 3G Early Classmark Sending Restriction
              Unsigned 8-bit integer
              3GECS, 3G Early Classmark Sending Restriction

uma.urr.CR  Cipher Response(CR)
            Unsigned 8-bit integer
            Cipher Response(CR)
```

```
uma.urr.ECMP  ECMP, Emergency Call Mode Preference
    Unsigned 8-bit integer
    ECMP, Emergency Call Mode Preference

uma.urr.GPRS_resumption  GPRS resumption ACK
    Unsigned 8-bit integer
    GPRS resumption ACK

uma.urr.L3_protocol_discriminator  Protocol discriminator
    Unsigned 8-bit integer
    Protocol discriminator

uma.urr.LBLI  LBLI, Location Black List indicator
    Unsigned 8-bit integer
    LBLI, Location Black List indicator

uma.urr.LS  Location Status(LS)
    Unsigned 8-bit integer
    Location Status(LS)

uma.urr.NMO  NMO, Network Mode of Operation
    Unsigned 8-bit integer
    NMO, Network Mode of Operation

uma.urr.PDU_in_error  PDU in Error,
    Byte array
    PDU in Error,

uma.urr.PFCFM  PFCFM, PFC_FEATURE_MODE
    Unsigned 8-bit integer
    PFCFM, PFC_FEATURE_MODE

uma.urr.RE  RE, Call reestablishment allowed
    Unsigned 8-bit integer
    RE, Call reestablishment allowed

uma.urr.RI  Reset Indicator(RI)
    Unsigned 8-bit integer
    Reset Indicator(RI)

uma.urr.SC  SC
    Unsigned 8-bit integer
    SC

uma.urr.SGSNR  SGSN Release
    Unsigned 8-bit integer
    SGSN Release

uma.urr.ULQI  ULQI, UL Quality Indication
    Unsigned 8-bit integer
    ULQI, UL Quality Indication

uma.urr.URLCcause  URLC Cause
    Unsigned 8-bit integer
    URLC Cause

uma.urr.algorithm_identifier  Algorithm identifier
    Unsigned 8-bit integer
    Algorithm_identifier

uma.urr.ap_location  AP Location
    Byte array
    AP Location
```

```
uma.urr.ap_service_name_type  AP Service Name type
    Unsigned 8-bit integer
    AP Service Name type

uma.urr.ap_service_name_value  AP Service Name Value
    String
    AP Service Name Value

uma.urr.att  ATT, Attach-detach allowed
    Unsigned 8-bit integer
    ATT, Attach-detach allowed

uma.urr.bcc  BCC
    Unsigned 8-bit integer
    BCC

uma.urr.cbs  CBS Cell Broadcast Service
    Unsigned 8-bit integer
    CBS Cell Broadcast Service

uma.urr.cell_id  Cell Identity
    Unsigned 16-bit integer
    Cell Identity

uma.urr.communication_port  Communication Port
    Unsigned 16-bit integer
    Communication Portt

uma.urr.dtm  DTM, Dual Transfer Mode of Operation by network
    Unsigned 8-bit integer
    DTM, Dual Transfer Mode of Operation by network

uma.urr.establishment_cause  Establishment Cause
    Unsigned 8-bit integer
    Establishment Cause

uma.urr.fqdn  Fully Qualified Domain/Host Name (FQDN)
    String
    Fully Qualified Domain/Host Name (FQDN)

uma.urr.gc  GC, GERAN Capable
    Unsigned 8-bit integer
    GC, GERAN Capable

uma.urr.gci  GCI, GSM Coverage Indicator
    Unsigned 8-bit integer
    GCI, GSM Coverage Indicator

uma.urr.gprs_port  UDP Port for GPRS user data transport
    Unsigned 16-bit integer
    UDP Port for GPRS user data transport

uma.urr.gprs_usr_data_ipv4  IP address for GPRS user data transport
    IPv4 address
    IP address for GPRS user data transport

uma.urr.gsmrrstate  GSM RR State value
    Unsigned 8-bit integer
    GSM RR State value

uma.urr.ie.len  URR Information Element length
    Unsigned 16-bit integer
    URR Information Element length
```

```
uma.urr.ie.mobileid.type  Mobile Identity Type
    Unsigned 8-bit integer
    Mobile Identity Type

uma.urr.ie.type  URR Information Element
    Unsigned 8-bit integer
    URR Information Element

uma.urr.ip_type  IP address type number value
    Unsigned 8-bit integer
    IP address type number value

uma.urr.is_rej_cau  Discovery Reject Cause
    Unsigned 8-bit integer
    Discovery Reject Cause

uma.urr.l3  L3 message contents
    Byte array
    L3 message contents

uma.urr.lac  Location area code
    Unsigned 16-bit integer
    Location area code

uma.urr.llc_pdu  LLC-PDU
    Byte array
    LLC-PDU

uma.urr.mcc  Mobile Country Code
    Unsigned 16-bit integer
    Mobile Country Code

uma.urr.mnc  Mobile network code
    Unsigned 16-bit integer
    Mobile network code

uma.urr.mps  UMPS, Manual PLMN Selection indicator
    Unsigned 8-bit integer
    MPS, Manual PLMN Selection indicator

uma.urr.ms_radio_id  MS Radio Identity
    6-byte Hardware (MAC) Address
    MS Radio Identity

uma.urr.msqr  MSCR, MSC Release
    Unsigned 8-bit integer
    MSCR, MSC Release

uma.urr.msg.type  URR Message Type
    Unsigned 16-bit integer
    URR Message Type

uma.urr.ncc  NCC
    Unsigned 8-bit integer
    NCC

uma.urr.num_of_cbs_frms  Number of CBS Frames
    Unsigned 8-bit integer
    Number of CBS Frames

uma.urr.num_of_plms  Number of PLMN:s
    Unsigned 8-bit integer
    Number of PLMN:s
```

```
uma.urr.oddevenind  Odd/even indication
    Unsigned 8-bit integer
    Mobile Identity

uma.urr.peak_tpt_cls  PEAK_THROUGHPUT_CLASS
    Unsigned 8-bit integer
    PEAK_THROUGHPUT_CLASS

uma.urr.rac  Routing Area Code
    Unsigned 8-bit integer
    Routing Area Code

uma.urr.radio_id  Radio Identity
    6-byte Hardware (MAC) Address
    Radio Identity

uma.urr.radio_pri  Radio Priority
    Unsigned 8-bit integer
    RADIO_PRIORITY

uma.urr.radio_type_of_id  Type of identity
    Unsigned 8-bit integer
    Type of identity

uma.urr.redirection_counter  Redirection Counter
    Unsigned 8-bit integer
    Redirection Counter

uma.urr.rrlc_mode  RLC mode
    Unsigned 8-bit integer
    RLC mode

uma.urr.rrs  RTP Redundancy Support(RRS)
    Unsigned 8-bit integer
    RTP Redundancy Support(RRS)

uma.urr.rtcp_port  RTCP UDP port
    Unsigned 16-bit integer
    RTCP UDP port

uma.urr.rtp_port  RTP UDP port
    Unsigned 16-bit integer
    RTP UDP port

uma.urr.rxlevel  RX Level
    Unsigned 8-bit integer
    RX Level

uma.urr.sample_size  Sample Size
    Unsigned 8-bit integer
    Sample Size

uma.urr.service_zone_str_len  Length of UMA Service Zone string
    Unsigned 8-bit integer
    Length of UMA Service Zone string

uma.urr.sgwipv4  SGW IPv4 address
    IPv4 address
    SGW IPv4 address

uma.urr.state  URR State
    Unsigned 8-bit integer
    URR State
```

```
uma.urr.t3212  T3212 Timer value(seconds)
  Unsigned 8-bit integer
  T3212 Timer value(seconds)

uma.urr.tu3902  TU3902 Timer value(seconds)
  Unsigned 16-bit integer
  TU3902 Timer value(seconds)

uma.urr.tu3906  TU3907 Timer value(seconds)
  Unsigned 16-bit integer
  TU3906 Timer value(seconds)

uma.urr.tu3907  TU3907 Timer value(seconds)
  Unsigned 16-bit integer
  TU3907 Timer value(seconds)

uma.urr.tu3910  TU3907 Timer value(seconds)
  Unsigned 16-bit integer
  TU3910 Timer value(seconds)

uma.urr.tu3920  TU3920 Timer value(seconds)
  Unsigned 16-bit integer
  TU3920 Timer value(hundreds of of ms)

uma.urr.tu4001  TU4001 Timer value(seconds)
  Unsigned 16-bit integer
  TU4001 Timer value(seconds)

uma.urr.tu4003  TU4003 Timer value(seconds)
  Unsigned 16-bit integer
  TU4003 Timer value(seconds)

uma.urr.tura   TURA, Type of Unlicensed Radio
  Unsigned 8-bit integer
  TURA, Type of Unlicensed Radio

uma.urr.uc    UC, UTRAN Capable
  Unsigned 8-bit integer
  GC, GERAN Capable

uma.urr.uma_UTRAN_cell_id_disc  UTRAN Cell Identification Discriminator
  Unsigned 8-bit integer
  UTRAN Cell Identification Discriminator

uma.urr.uma_codec_mode  Codec Mode
  Unsigned 8-bit integer
  Codec Mode

uma.urr.uma_service_zone_icon_ind  UMA Service Zone Icon Indicator
  Unsigned 8-bit integer
  UMA Service Zone Icon Indicator

uma.urr.uma_service_zone_str  UMA Service Zone string,
  String
  UMA Service Zone string,

uma.urr.uma_suti  SUTI, Serving UNC table indicator indicator
  Unsigned 8-bit integer
  SUTI, Serving UNC table indicator indicator

uma.urr.uma_window_size  Window Size
  Unsigned 8-bit integer
  Window Size
```

```

uma.urr.umaband  UMA Band
    Unsigned 8-bit integer
    UMA Band

uma.urr.unc_fqdn  UNC Fully Qualified Domain/Host Name (FQDN)
    String
    UNC Fully Qualified Domain/Host Name (FQDN)

uma.urr.uncipv4  UNC IPv4 address
    IPv4 address
    UNC IPv4 address

uma.urr.uri      UMA Release Indicator (URI)
    Unsigned 8-bit integer
    URI

uma_urr.imei     IMEI
    String
    IMEI

uma_urr.imeisv   IMEISV
    String
    IMEISV

uma_urr.imsi     IMSI
    String
    IMSI

uma_urr.tmsi_p_tmsi  TMSI/P-TMSI
    String
    TMSI/P-TMSI

```

### Unreassembled Fragmented Packet (unreassembled)

#### User Datagram Protocol (udp)

```

udp.checksum     Checksum
    Unsigned 16-bit integer
    Details at: http://www.wireshark.org/docs/wsug\_html\_chunked/ChAdvChecksums.h

udp.checksum_bad  Bad Checksum
    Boolean
    True: checksum doesn't match packet content; False: matches content or not c

udp.checksum_good  Good Checksum
    Boolean
    True: checksum matches packet content; False: doesn't match content or not c

udp.dstport      Destination Port
    Unsigned 16-bit integer

udp.length       Length
    Unsigned 16-bit integer

udp.port         Source or Destination Port
    Unsigned 16-bit integer

udp.srcport      Source Port
    Unsigned 16-bit integer

```

**V5.2–User Adaptation Layer (v5ua)**

v5ua.adaptation\_layer\_id Adaptation Layer ID  
String

v5ua.asp\_reason Reason  
Unsigned 32-bit integer

v5ua.channel\_id Channel Identifier  
Unsigned 8-bit integer

v5ua.diagnostic\_info Diagnostic Information  
Byte array

v5ua.dlci\_one\_bit One bit  
Boolean

v5ua.dlci\_sapi SAPI  
Unsigned 8-bit integer

v5ua.dlci\_spare\_bit Spare bit  
Boolean

v5ua.dlci\_tei TEI  
Unsigned 8-bit integer

v5ua.dlci\_zero\_bit Zero bit  
Boolean

v5ua.draft\_error\_code Error code (draft)  
Unsigned 32-bit integer

v5ua.efa Envelope Function Address  
Unsigned 16-bit integer

v5ua.error\_code Error code  
Unsigned 32-bit integer

v5ua.error\_reason Error Reason  
Unsigned 32-bit integer

v5ua.heartbeat\_data Heartbeat data  
Byte array

v5ua.info\_string Info String  
String

v5ua.interface\_range\_end Interface range End  
Unsigned 32-bit integer

v5ua.interface\_range\_start Interface range Start  
Unsigned 32-bit integer

v5ua.l3\_ack\_request\_indicator Ack request indicator  
Unsigned 8-bit integer

v5ua.l3\_address Layer3 address  
Unsigned 8-bit integer

v5ua.l3\_auto\_signalling\_sequence Autonomous signalling sequence  
Unsigned 8-bit integer

v5ua.l3\_bcc\_protocol\_cause BCC Protocol error cause type  
Unsigned 8-bit integer

v5ua.l3\_cad\_ringing Cadenced ringing type  
Unsigned 8-bit integer



```
v5ua.l3_cause_type Cause type
    Unsigned 8-bit integer
v5ua.l3_connection_incomplete_reason Reason
    Unsigned 8-bit integer
v5ua.l3_control_function Control function ID
    Unsigned 8-bit integer
v5ua.l3_control_function_element Control function element
    Unsigned 8-bit integer
v5ua.l3_cp_rejection_cause Rejection cause
    Unsigned 8-bit integer
v5ua.l3_digit_ack Digit ack request indication
    Unsigned 8-bit integer
v5ua.l3_digit_info Digit information
    Unsigned 8-bit integer
v5ua.l3_duration_type Duration Type
    Unsigned 8-bit integer
v5ua.l3_info_element Layer3 information element
    Unsigned 8-bit integer
v5ua.l3_interface_id Interface ID
    Unsigned 32-bit integer
v5ua.l3_isdn_user_port_id ISDN User Port Identification Value
    Unsigned 8-bit integer
v5ua.l3_isdn_user_port_ts_num ISDN user port time slot number
    Unsigned 8-bit integer
v5ua.l3_line_info Line_Information
    Unsigned 8-bit integer
v5ua.l3_link_control_function Link control function
    Unsigned 8-bit integer
v5ua.l3_link_id V5 2048 kbit/s Link Identifier
    Unsigned 8-bit integer
v5ua.l3_low_address Layer3 low address
    Unsigned 8-bit integer
v5ua.l3_msg_type Layer3 message type
    Unsigned 8-bit integer
v5ua.l3_number_of_pulses Number of pulses
    Unsigned 8-bit integer
v5ua.l3_override Override
    Boolean
v5ua.l3_performance_grading Performance grading
    Unsigned 8-bit integer
v5ua.l3_protocol_disc Protocol Discriminator
    Unsigned 8-bit integer
v5ua.l3_pstn_sequence_number Sequence number
    Unsigned 8-bit integer
```

```
v5ua.l3_pstn_user_port_id  PSTN User Port identification Value
    Unsigned 8-bit integer
v5ua.l3_pstn_user_port_id_lower  PSTN User Port Identification Value (lower)
    Unsigned 8-bit integer
v5ua.l3_pulse_duration  Pulse duration type
    Unsigned 8-bit integer
v5ua.l3_pulse_notification  Pulse notification
    Unsigned 8-bit integer
v5ua.l3_pulse_type  Pulse Type
    Unsigned 8-bit integer
v5ua.l3_reject_cause_type  Reject cause type
    Unsigned 8-bit integer
v5ua.l3_res_unavailable  Resource unavailable
    String
v5ua.l3_sequence_number  Sequence number
    Unsigned 8-bit integer
v5ua.l3_sequence_response  Sequence response
    Unsigned 8-bit integer
v5ua.l3_state  PSTN FSM state
    Unsigned 8-bit integer
v5ua.l3_steady_signal  Steady Signal
    Unsigned 8-bit integer
v5ua.l3_suppression_indicator  Suppression indicator
    Unsigned 8-bit integer
v5ua.l3_user_port_id_lower  ISDN User Port Identification Value (lower)
    Unsigned 8-bit integer
v5ua.l3_v5_time_slot  V5 Time Slot Number
    Unsigned 8-bit integer
v5ua.l3_variant  Variant
    Unsigned 8-bit integer
v5ua.link_id  Link Identifier
    Unsigned 32-bit integer
v5ua.link_status  Link Status
    Unsigned 32-bit integer
v5ua.msg_class  Message class
    Unsigned 8-bit integer
v5ua.msg_length  Message length
    Unsigned 32-bit integer
v5ua.msg_type  Message Type
    Unsigned 8-bit integer
v5ua.msg_type_id  Message Type ID
    Unsigned 8-bit integer
v5ua.parameter_length  Parameter length
    Unsigned 16-bit integer
```

```
v5ua.parameter_padding  Parameter padding
    Byte array
v5ua.parameter_tag      Parameter Tag
    Unsigned 16-bit integer
v5ua.parameter_value    Parameter value
    Byte array
v5ua.release_reason     Release Reason
    Unsigned 32-bit integer
v5ua.reserved           Reserved
    Unsigned 8-bit integer
v5ua.sa_bit_id          BIT ID
    Unsigned 16-bit integer
v5ua.sa_bit_value       Bit Value
    Unsigned 16-bit integer
v5ua.scn_protocol_id    SCN Protocol Identifier
    String
v5ua.status_id          Status identification
    Unsigned 16-bit integer
v5ua.status_type        Status type
    Unsigned 16-bit integer
v5ua.tei_draft_status   TEI status
    Unsigned 32-bit integer
v5ua.tei_status         TEI status
    Unsigned 32-bit integer
v5ua.text_interface_id  Text interface identifier
    String
v5ua.traffic_mode_type  Traffic mode type
    Unsigned 32-bit integer
v5ua.version            Version
    Unsigned 8-bit integer
```

**Veritas Low Latency Transport (LLT) (llt)**

```
llt.cluster_num         Cluster number
    Unsigned 8-bit integer
    Cluster number that this node belongs to
llt.message_time        Message time
    Unsigned 32-bit integer
    Number of ticks since this node was last rebooted
llt.message_type        Message type
    Unsigned 8-bit integer
    Type of LLT message contained in this frame
llt.node_id             Node ID
    Unsigned 8-bit integer
    Number identifying this node within the cluster
```

llt.sequence\_num Sequence number  
Unsigned 32-bit integer  
Sequence number of this frame

### Virtual Network Computing (vnc)

vnc.auth\_challenge Authentication challenge  
String  
Random authentication challenge from server to client

vnc.auth\_error Authentication error  
String  
Authentication error (present only if the authentication result is fail)

vnc.auth\_response Authentication response  
String  
Client's encrypted response to the server's authentication challenge

vnc.auth\_result Authentication result  
Unsigned 32-bit integer  
Authentication result

vnc.button\_1\_pos Mouse button #1 position  
Unsigned 8-bit integer  
Whether mouse button #1 is being pressed or not

vnc.button\_2\_pos Mouse button #2 position  
Unsigned 8-bit integer  
Whether mouse button #2 is being pressed or not

vnc.button\_3\_pos Mouse button #3 position  
Unsigned 8-bit integer  
Whether mouse button #3 is being pressed or not

vnc.button\_4\_pos Mouse button #4 position  
Unsigned 8-bit integer  
Whether mouse button #4 is being pressed or not

vnc.button\_5\_pos Mouse button #5 position  
Unsigned 8-bit integer  
Whether mouse button #5 is being pressed or not

vnc.button\_6\_pos Mouse button #6 position  
Unsigned 8-bit integer  
Whether mouse button #6 is being pressed or not

vnc.button\_7\_pos Mouse button #7 position  
Unsigned 8-bit integer  
Whether mouse button #7 is being pressed or not

vnc.button\_8\_pos Mouse button #8 position  
Unsigned 8-bit integer  
Whether mouse button #8 is being pressed or not

vnc.client\_big\_endian\_flag Big endian flag  
Boolean  
True if multi-byte pixels are interpreted as big endian by client

vnc.client\_bits\_per\_pixel Bits per pixel  
Unsigned 8-bit integer  
Number of bits used by server for each pixel value on the wire from the client

vnc.client\_blue\_max Blue maximum  
Unsigned 16-bit integer  
Maximum blue value on client as  $n: 2^n - 1$

vnc.client\_blue\_shift Blue shift  
Unsigned 8-bit integer  
Number of shifts needed to get the blue value in a pixel to the least significant bit

vnc.client\_cut\_text Text  
String  
Text string in the client's copy/cut text (clipboard)

vnc.client\_cut\_text\_len Length  
Unsigned 32-bit integer  
Length of client's copy/cut text (clipboard) string in bytes

vnc.client\_depth Depth  
Unsigned 8-bit integer  
Number of useful bits in the pixel value on client

vnc.client\_green\_max Green maximum  
Unsigned 16-bit integer  
Maximum green value on client as  $n: 2^n - 1$

vnc.client\_green\_shift Green shift  
Unsigned 8-bit integer  
Number of shifts needed to get the green value in a pixel to the least significant bit

vnc.client\_message\_type Client Message Type  
Unsigned 8-bit integer  
Message type from client

vnc.client\_proto\_ver Client protocol version  
String  
VNC protocol version on client

vnc.client\_red\_max Red maximum  
Unsigned 16-bit integer  
Maximum red value on client as  $n: 2^n - 1$

vnc.client\_red\_shift Red shift  
Unsigned 8-bit integer  
Number of shifts needed to get the red value in a pixel to the least significant bit

vnc.client\_set\_encodings\_encoding\_type Encoding type  
Signed 32-bit integer  
Type of encoding used to send pixel data from server to client

vnc.client\_true\_color\_flag True color flag  
Boolean  
If true, then the next six items specify how to extract the red, green and blue values from a pixel

vnc.colormap\_blue Blue  
Unsigned 16-bit integer  
Blue intensity

vnc.colormap\_first\_color First color  
Unsigned 16-bit integer  
First color that should be mapped to given RGB intensities

vnc.colormap\_green Green  
Unsigned 16-bit integer  
Green intensity

vnc.colormap\_groups Number of color groups  
Unsigned 16-bit integer  
Number of red/green/blue color groups

vnc.colormap\_red Red  
Unsigned 16-bit integer  
Red intensity

vnc.copyrect\_src\_x\_pos Source x position  
Unsigned 16-bit integer  
X position of the rectangle to copy from

vnc.copyrect\_src\_y\_pos Source y position  
Unsigned 16-bit integer  
Y position of the rectangle to copy from

vnc.cursor\_encoding\_bitmask Cursor encoding bitmask  
Byte array  
Cursor encoding pixel bitmask

vnc.cursor\_encoding\_pixels Cursor encoding pixels  
Byte array  
Cursor encoding pixel data

vnc.desktop\_name Desktop name  
String  
Name of the VNC desktop on the server

vnc.desktop\_name\_len Desktop name length  
Unsigned 32-bit integer  
Length of desktop name in bytes

vnc.fb\_update\_encoding\_type Encoding type  
Signed 32-bit integer  
Encoding type of this server framebuffer update

vnc.fb\_update\_width Width  
Unsigned 16-bit integer  
Width of this server framebuffer update

vnc.fb\_update\_x\_pos X position  
Unsigned 16-bit integer  
X position of this server framebuffer update

vnc.hextile\_anysubrects Any Subrects  
Unsigned 8-bit integer  
Any subrects subencoding is used in this tile

vnc.hextile\_bg Background Specified  
Unsigned 8-bit integer  
Background Specified subencoding is used in this tile

vnc.hextile\_bg\_value Background pixel value  
Byte array  
Background color for this tile

vnc.hextile\_fg Foreground Specified  
Unsigned 8-bit integer  
Foreground Specified subencoding is used in this tile

vnc.hextile\_fg\_value Foreground pixel value  
Byte array  
Foreground color for this tile

vnc.hextile\_num\_subrects Number of subrectangles  
Unsigned 8-bit integer  
Number of subrectangles that follow

vnc.hextile\_raw Raw  
Unsigned 8-bit integer  
Raw subencoding is used in this tile

vnc.hextile\_raw\_value Raw pixel values  
Byte array  
Raw subencoding pixel values

vnc.hextile\_subencoding Subencoding type  
Unsigned 8-bit integer  
Hextile subencoding type.

vnc.hextile\_subrect\_height Height  
Unsigned 8-bit integer  
Subrectangle height minus one

vnc.hextile\_subrect\_pixel\_value Pixel value  
Byte array  
Pixel value of this subrectangle

vnc.hextile\_subrect\_width Width  
Unsigned 8-bit integer  
Subrectangle width minus one

vnc.hextile\_subrect\_x\_pos X position  
Unsigned 8-bit integer  
X position of this subrectangle

vnc.hextile\_subrect\_y\_pos Y position  
Unsigned 8-bit integer  
Y position of this subrectangle

vnc.hextile\_subrectscolored Subrects Colored  
Unsigned 8-bit integer  
Subrects colored subencoding is used in this tile

vnc.key Key  
Unsigned 32-bit integer  
Key being pressed/depressed

vnc.key\_down Key down  
Unsigned 8-bit integer  
Specifies whether the key is being pressed or not

vnc.num\_client\_message\_types Client message types  
Unsigned 16-bit integer  
Unknown

vnc.num\_encoding\_types Encoding types  
Unsigned 16-bit integer  
Unknown

vnc.num\_security\_types Number of security types  
Unsigned 8-bit integer  
Number of security (authentication) types supported by the server

vnc.num\_server\_message\_types Server message types  
Unsigned 16-bit integer  
Unknown

vnc.padding Padding  
No value  
Unused space

vnc.pointer\_x\_pos X position  
Unsigned 16-bit integer  
Position of mouse cursor on the x-axis

vnc.pointer\_y\_pos Y position  
Unsigned 16-bit integer  
Position of mouse cursor on the y-axis

vnc.raw\_pixel\_data Pixel data  
Byte array  
Raw pixel data.

vnc.rre\_bg\_pixel Background pixel value  
Byte array  
Background pixel value

vnc.rre\_num\_subrects Number of subrectangles  
Unsigned 32-bit integer  
Number of subrectangles contained in this encoding type

vnc.rre\_subrect\_height Height  
Unsigned 16-bit integer  
Height of this subrectangle

vnc.rre\_subrect\_pixel Pixel value  
Byte array  
Subrectangle pixel value

vnc.rre\_subrect\_width Width  
Unsigned 16-bit integer  
Width of this subrectangle

vnc.rre\_subrect\_x\_pos X position  
Unsigned 16-bit integer  
Position of this subrectangle on the x axis

vnc.rre\_subrect\_y\_pos Y position  
Unsigned 16-bit integer  
Position of this subrectangle on the y axis

vnc.security\_type Security type  
Unsigned 8-bit integer  
Security types offered by the server (VNC versions => 3.007)

vnc.security\_type\_string Security type string  
String  
Security type being used

vnc.server\_big\_endian\_flag Big endian flag  
Boolean  
True if multi-byte pixels are interpreted as big endian by server

vnc.server\_bits\_per\_pixel Bits per pixel  
Unsigned 8-bit integer  
Number of bits used by server for each pixel value on the wire from the server

vnc.server\_blue\_max Blue maximum  
Unsigned 16-bit integer  
Maximum blue value on server as  $n: 2^n - 1$



vnc.server\_blue\_shift Blue shift  
Unsigned 8-bit integer  
Number of shifts needed to get the blue value in a pixel to the least significant bit

vnc.server\_cut\_text Text  
String  
Text string in the server's copy/cut text (clipboard)

vnc.server\_cut\_text\_len Length  
Unsigned 32-bit integer  
Length of server's copy/cut text (clipboard) string in bytes

vnc.server\_depth Depth  
Unsigned 8-bit integer  
Number of useful bits in the pixel value on server

vnc.server\_green\_max Green maximum  
Unsigned 16-bit integer  
Maximum green value on server as  $n: 2^n - 1$

vnc.server\_green\_shift Green shift  
Unsigned 8-bit integer  
Number of shifts needed to get the green value in a pixel to the least significant bit

vnc.server\_message\_type Server Message Type  
Unsigned 8-bit integer  
Message type from server

vnc.server\_proto\_ver Server protocol version  
String  
VNC protocol version on server

vnc.server\_red\_max Red maximum  
Unsigned 16-bit integer  
Maximum red value on server as  $n: 2^n - 1$

vnc.server\_red\_shift Red shift  
Unsigned 8-bit integer  
Number of shifts needed to get the red value in a pixel to the least significant bit

vnc.server\_security\_type Security type  
Unsigned 32-bit integer  
Security type mandated by the server

vnc.server\_true\_color\_flag True color flag  
Boolean  
If true, then the next six items specify how to extract the red, green and blue values from a pixel

vnc.share\_desktop\_flag Share desktop flag  
Unsigned 8-bit integer  
Client's desire to share the server's desktop with other clients

vnc.update\_req\_height Height  
Unsigned 16-bit integer  
Height of framebuffer (screen) update request

vnc.update\_req\_incremental Incremental update  
Boolean  
Specifies if the client wants an incremental update instead of a full one

vnc.update\_req\_width Width  
Unsigned 16-bit integer  
Width of framebuffer (screen) update request

vnc.update\_req\_x\_pos X position  
Unsigned 16-bit integer  
X position of framebuffer (screen) update requested

vnc.update\_req\_y\_pos Y position  
Unsigned 16-bit integer  
Y position of framebuffer (screen) update request

vnc.vendor\_code Vendor code  
String  
Identifies the VNC server software's vendor

vnc.width Framebuffer width  
Unsigned 16-bit integer  
Width of the framebuffer (screen) in pixels

vnc.zrle\_data ZRLE compressed data  
Byte array  
Compressed ZRLE data. Compiling with zlib support will uncompress and disse

vnc.zrle\_len ZRLE compressed length  
Unsigned 32-bit integer  
Length of compressed ZRLE data that follows

vnc.zrle\_palette Palette  
Byte array  
Palette pixel values

vnc.zrle\_palette\_size Palette size  
Unsigned 8-bit integer  
Palette size

vnc.zrle\_raw Pixel values  
Byte array  
Raw pixel values for this tile

vnc.zrle\_rle RLE  
Unsigned 8-bit integer  
Specifies that data is run-length encoded

vnc.zrle\_subencoding Subencoding type  
Unsigned 8-bit integer  
Subencoding type byte

#### **Virtual Router Redundancy Protocol (vrrp)**

vrrp.adver\_int Adver Int  
Unsigned 8-bit integer  
Time interval (in seconds) between ADVERTISEMENTS

vrrp.auth\_type Auth Type  
Unsigned 8-bit integer  
The authentication method being utilized

vrrp.count\_ip\_addrs Count IP Addrs  
Unsigned 8-bit integer  
The number of IP addresses contained in this VRRP advertisement

vrrp.ip\_addr IP Address  
IPv4 address  
IP address associated with the virtual router

vrrp.ipv6\_addr IPv6 Address  
IPv6 address  
IPv6 address associated with the virtual router

vrrp.prio Priority  
Unsigned 8-bit integer  
Sending VRRP router's priority for the virtual router

vrrp.type VRRP packet type  
Unsigned 8-bit integer  
VRRP type

vrrp.typever VRRP message version and type  
Unsigned 8-bit integer  
VRRP version and type

vrrp.version VRRP protocol version  
Unsigned 8-bit integer  
VRRP version

vrrp.virt\_rtr\_id Virtual Rtr ID  
Unsigned 8-bit integer  
Virtual router this packet is reporting status for

#### Virtual Trunking Protocol (vtp)

vtp.code Code  
Unsigned 8-bit integer

vtp.conf\_rev\_num Configuration Revision Number  
Unsigned 32-bit integer  
Revision number of the configuration information

vtp.followers Followers  
Unsigned 8-bit integer  
Number of following Subset-Advert messages

vtp.md Management Domain  
String  
Management domain

vtp.md5\_digest MD5 Digest  
Byte array

vtp.md\_len Management Domain Length  
Unsigned 8-bit integer  
Length of management domain string

vtp.seq\_num Sequence Number  
Unsigned 8-bit integer  
Order of this frame in the sequence of Subset-Advert frames

vtp.start\_value Start Value  
Unsigned 16-bit integer  
Virtual LAN ID of first VLAN for which information is requested

vtp.upd\_id Updater Identity  
IPv4 address  
IP address of the updater

vtp.upd\_ts Update Timestamp  
String  
Time stamp of the current configuration revision

```
vtp.version Version
  Unsigned 8-bit integer

vtp.vlan_info.802_10_index 802.10 Index
  Unsigned 32-bit integer
  IEEE 802.10 security association identifier for this VLAN

vtp.vlan_info.isl_vlan_id ISL VLAN ID
  Unsigned 16-bit integer
  ID of this VLAN on ISL trunks

vtp.vlan_info.len VLAN Information Length
  Unsigned 8-bit integer
  Length of the VLAN information field

vtp.vlan_info.mtu_size MTU Size
  Unsigned 16-bit integer
  MTU for this VLAN

vtp.vlan_info.status.vlan_susp VLAN suspended
  Boolean
  VLAN suspended

vtp.vlan_info.tlv_len Length
  Unsigned 8-bit integer

vtp.vlan_info.tlv_type Type
  Unsigned 8-bit integer

vtp.vlan_info.vlan_name VLAN Name
  String
  VLAN name

vtp.vlan_info.vlan_name_len VLAN Name Length
  Unsigned 8-bit integer
  Length of VLAN name string

vtp.vlan_info.vlan_type VLAN Type
  Unsigned 8-bit integer
  Type of VLAN
```

**WAP Binary XML (wbxml)**

```
wbxml.charset Character Set
  Unsigned 32-bit integer
  WBXML Character Set

wbxml.public_id.known Public Identifier (known)
  Unsigned 32-bit integer
  WBXML Known Public Identifier (integer)

wbxml.public_id.literal Public Identifier (literal)
  String
  WBXML Literal Public Identifier (text string)

wbxml.version Version
  Unsigned 8-bit integer
  WBXML Version
```

**WAP Session Initiation Request (wap-sir)**

```
wap.sir    Session Initiation Request
           No value
           Session Initiation Request content

wap.sir.app_id_list  Application-ID List
           No value
           Application-ID list

wap.sir.app_id_list.length  Application-ID List Length
           Unsigned 32-bit integer
           Length of the Application-ID list (bytes)

wap.sir.contact_points  Non-WSP Contact Points
           No value
           Non-WSP Contact Points list

wap.sir.contact_points.length  Non-WSP Contact Points Length
           Unsigned 32-bit integer
           Length of the Non-WSP Contact Points list (bytes)

wap.sir.cpi_tag    CPITag
           Byte array
           CPITag (OTA-HTTP)

wap.sir.cpi_tag.length  CPITag List Entries
           Unsigned 32-bit integer
           Number of entries in the CPITag list

wap.sir.protocol_options  Protocol Options
           Unsigned 16-bit integer
           Protocol Options list

wap.sir.protocol_options.length  Protocol Options List Entries
           Unsigned 32-bit integer
           Number of entries in the Protocol Options list

wap.sir.prov_url    X-Wap-ProvURL
           String
           X-Wap-ProvURL (Identifies the WAP Client Provisioning Context)

wap.sir.prov_url.length  X-Wap-ProvURL Length
           Unsigned 32-bit integer
           Length of the X-Wap-ProvURL (Identifies the WAP Client Provisioning Context)

wap.sir.version    Version
           Unsigned 8-bit integer
           Version of the Session Initiation Request document

wap.sir.wsp_contact_points  WSP Contact Points
           No value
           WSP Contact Points list

wap.sir.wsp_contact_points.length  WSP Contact Points Length
           Unsigned 32-bit integer
           Length of the WSP Contact Points list (bytes)
```

**WINS (Windows Internet Name Service) Replication (winsrepl)**

```
winsrepl.assoc_ctx  Assoc_Ctx
    Unsigned 32-bit integer
    WINS Replication Assoc_Ctx

winsrepl.initiator  Initiator
    IPv4 address
    WINS Replication Initiator

winsrepl.ip_address  IP Address
    IPv4 address
    WINS Replication IP Address

winsrepl.ip_owner   IP Owner
    IPv4 address
    WINS Replication IP Owner

winsrepl.major_version  Major Version
    Unsigned 16-bit integer
    WINS Replication Major Version

winsrepl.max_version  Max Version
    Unsigned 64-bit integer
    WINS Replication Max Version

winsrepl.message_type  Message_Type
    Unsigned 32-bit integer
    WINS Replication Message_Type

winsrepl.min_version  Min Version
    Unsigned 64-bit integer
    WINS Replication Min Version

winsrepl.minor_version  Minor Version
    Unsigned 16-bit integer
    WINS Replication Minor Version

winsrepl.name_flags  Name Flags
    Unsigned 32-bit integer
    WINS Replication Name Flags

winsrepl.name_flags.hosttype  Host Type
    Unsigned 32-bit integer
    WINS Replication Name Flags Host Type

winsrepl.name_flags.local  Local
    Boolean
    WINS Replication Name Flags Local Flag

winsrepl.name_flags.recstate  Record State
    Unsigned 32-bit integer
    WINS Replication Name Flags Record State

winsrepl.name_flags.rectype  Record Type
    Unsigned 32-bit integer
    WINS Replication Name Flags Record Type

winsrepl.name_flags.static  Static
    Boolean
    WINS Replication Name Flags Static Flag
```

```
winsrepl.name_group_flag  Name Group Flag
    Unsigned 32-bit integer
    WINS Replication Name Group Flag

winsrepl.name_len        Name Len
    Unsigned 32-bit integer
    WINS Replication Name Len

winsrepl.name_version_id  Name Version Id
    Unsigned 64-bit integer
    WINS Replication Name Version Id

winsrepl.num_ips         Num IPs
    Unsigned 32-bit integer
    WINS Replication Num IPs

winsrepl.num_names       Num Names
    Unsigned 32-bit integer
    WINS Replication Num Names

winsrepl.opcode          Opcode
    Unsigned 32-bit integer
    WINS Replication Opcode

winsrepl.owner_address   Owner Address
    IPv4 address
    WINS Replication Owner Address

winsrepl.owner_type      Owner Type
    Unsigned 32-bit integer
    WINS Replication Owner Type

winsrepl.partner_count   Partner Count
    Unsigned 32-bit integer
    WINS Replication Partner Count

winsrepl.reason          Reason
    Unsigned 32-bit integer
    WINS Replication Reason

winsrepl.repl_cmd        Replication Command
    Unsigned 32-bit integer
    WINS Replication Command

winsrepl.size            Packet Size
    Unsigned 32-bit integer
    WINS Replication Packet Size

winsrepl.unknown         Unknown IP
    IPv4 address
    WINS Replication Unknown IP
```

**Wake On LAN (wol)**

```
wol.mac  MAC
    6-byte Hardware (MAC) Address

wol.passwd  Password
    Byte array

wol.sync  Sync stream
    Byte array
```

**Web Cache Coordination Protocol (wccp)**

wccp.cache\_ip Web Cache IP address  
IPv4 address  
The IP address of a Web cache

wccp.change\_num Change Number  
Unsigned 32-bit integer  
The Web-Cache list entry change number

wccp.hash\_revision Hash Revision  
Unsigned 32-bit integer  
The cache hash revision

wccp.message WCCP Message Type  
Unsigned 32-bit integer  
The WCCP message that was sent

wccp.recvd\_id Received ID  
Unsigned 32-bit integer  
The number of I\_SEE\_YOU's that have been sent

wccp.version WCCP Version  
Unsigned 32-bit integer  
The WCCP version

**WebSphere MQ (mq)**

mq.api.completioncode Completion code  
Unsigned 32-bit integer  
API Completion code

mq.api.hobj Object handle  
Unsigned 32-bit integer  
API Object handle

mq.api.reasoncode Reason code  
Unsigned 32-bit integer  
API Reason code

mq.api.replylength Reply length  
Unsigned 32-bit integer  
API Reply length

mq.conn.acttoken Accounting token  
Byte array  
CONN accounting token

mq.conn.appname Application name  
String  
CONN application name

mq.conn.apptype Application type  
Signed 32-bit integer  
CONN application type

mq.conn.options Options  
Unsigned 32-bit integer  
CONN options

mq.conn.qm Queue manager  
String  
CONN queue manager



```
mq.conn.version  Version
    Unsigned 32-bit integer
    CONN version

mq.dh.flagspmr  Flags PMR
    Unsigned 32-bit integer
    DH flags PMR

mq.dh.nbrrec    Number of records
    Unsigned 32-bit integer
    DH number of records

mq.dh.offsetor  Offset of first OR
    Unsigned 32-bit integer
    DH offset of first OR

mq.dh.offsetpmr  Offset of first PMR
    Unsigned 32-bit integer
    DH offset of first PMR

mq.dlh.ccsid    Character set
    Signed 32-bit integer
    DLH character set

mq.dlh.destq    Destination queue
    String
    DLH destination queue

mq.dlh.destqmgr  Destination queue manager
    String
    DLH destination queue manager

mq.dlh.encoding  Encoding
    Unsigned 32-bit integer
    DLH encoding

mq.dlh.format    Format
    String
    DLH format

mq.dlh.putapplname  Put application name
    String
    DLH put application name

mq.dlh.putappltype  Put application type
    Signed 32-bit integer
    DLH put application type

mq.dlh.putdate    Put date
    String
    DLH put date

mq.dlh.puttime    Put time
    String
    DLH put time

mq.dlh.reason     Reason
    Unsigned 32-bit integer
    DLH reason

mq.dlh.structid   DLH structid
    String
    DLH structid
```

```
mq.dlh.version  Version
    Unsigned 32-bit integer
    DLH version

mq.gmo.grpstat  Group status
    Unsigned 8-bit integer
    GMO group status

mq.gmo.matchopt Match options
    Unsigned 32-bit integer
    GMO match options

mq.gmo.msgtoken Message token
    Byte array
    GMO message token

mq.gmo.options  Options
    Unsigned 32-bit integer
    GMO options

mq.gmo.reserved Reserved
    Unsigned 8-bit integer
    GMO reserved

mq.gmo.resolvq  Resolved queue name
    String
    GMO resolved queue name

mq.gmo.retlen   Returned length
    Signed 32-bit integer
    GMO returned length

mq.gmo.segmentation Segmentation
    Unsigned 8-bit integer
    GMO segmentation

mq.gmo.sgmtstat Segment status
    Unsigned 8-bit integer
    GMO segment status

mq.gmo.signal1  Signal 1
    Unsigned 32-bit integer
    GMO signal 1

mq.gmo.signal2  Signal 2
    Unsigned 32-bit integer
    GMO signal 2

mq.gmo.structid GMO structid
    String
    GMO structid

mq.gmo.version  Version
    Unsigned 32-bit integer
    GMO version

mq.gmo.waitint  Wait Interval
    Signed 32-bit integer
    GMO wait interval

mq.head.ccsid  Character set
    Signed 32-bit integer
    Header character set
```

```
mq.head.encoding  Encoding
    Unsigned 32-bit integer
    Header encoding

mq.head.flags     Flags
    Unsigned 32-bit integer
    Header flags

mq.head.format    Format
    String
    Header format

mq.head.length    Length
    Unsigned 32-bit integer
    Header length

mq.head.struct    Struct
    Byte array
    Header struct

mq.head.structid  Structid
    String
    Header structid

mq.head.version   Structid
    Unsigned 32-bit integer
    Header version

mq.id.capflags    Capability flags
    Unsigned 8-bit integer
    ID Capability flags

mq.id.ccsid       Character set
    Unsigned 16-bit integer
    ID character set

mq.id.channelname Channel name
    String
    ID channel name

mq.id.flags       Flags
    Unsigned 8-bit integer
    ID flags

mq.id.hbint       Heartbeat interval
    Unsigned 32-bit integer
    ID Heartbeat interval

mq.id.icf.convcap Conversion capable
    Boolean
    ID ICF Conversion capable

mq.id.icf.mqreq   MQ request
    Boolean
    ID ICF MQ request

mq.id.icf.msgseq  Message sequence
    Boolean
    ID ICF Message sequence

mq.id.icf.runtime Runtime application
    Boolean
    ID ICF Runtime application
```

```
mq.id.icf.splitmsg  Split messages
  Boolean
  ID ICF Split message
mq.id.icf.svrsec   Server connection security
  Boolean
  ID ICF Server connection security
mq.id.ief         Initial error flags
  Unsigned 8-bit integer
  ID initial error flags
mq.id.ief.ccsid   Invalid CCSID
  Boolean
  ID invalid CCSID
mq.id.ief.enc     Invalid encoding
  Boolean
  ID invalid encoding
mq.id.ief.fap     Invalid FAP level
  Boolean
  ID invalid FAP level
mq.id.ief.hbint   Invalid heartbeat interval
  Boolean
  ID invalid heartbeat interval
mq.id.ief.mxmsgpb Invalid maximum message per batch
  Boolean
  ID maximum message per batch
mq.id.ief.mxmsgsz Invalid message size
  Boolean
  ID invalid message size
mq.id.ief.mxtrsz  Invalid maximum transmission size
  Boolean
  ID invalid maximum transmission size
mq.id.ief.seqwrap Invalid sequence wrap value
  Boolean
  ID invalid sequence wrap value
mq.id.level       FAP level
  Unsigned 8-bit integer
  ID Formats And Protocols level
mq.id.maxmsgperbatch Maximum messages per batch
  Unsigned 16-bit integer
  ID max msg per batch
mq.id.maxmsgsize  Maximum message size
  Unsigned 32-bit integer
  ID max msg size
mq.id.maxtranssize Maximum transmission size
  Unsigned 32-bit integer
  ID max trans size
mq.id.qm          Queue manager
  String
  ID Queue manager
```

```
mq.id.seqwrap  Sequence wrap value
                Unsigned 32-bit integer
                ID seq wrap value
mq.id.structid ID structid
                String
                ID structid
mq.id.unknown2 Unknown2
                Unsigned 8-bit integer
                ID unknown2
mq.id.unknown4 Unknown4
                Unsigned 16-bit integer
                ID unknown4
mq.id.unknown5 Unknown5
                Unsigned 8-bit integer
                ID unknown5
mq.id.unknown6 Unknown6
                Unsigned 16-bit integer
                ID unknown6
mq.inq.charlen Character length
                Unsigned 32-bit integer
                INQ Character length
mq.inq.charvalues Char values
                String
                INQ Character values
mq.inq.intvalue Integer value
                Unsigned 32-bit integer
                INQ Integer value
mq.inq.nbint   Integer count
                Unsigned 32-bit integer
                INQ Integer count
mq.inq.nbsel  Selector count
                Unsigned 32-bit integer
                INQ Selector count
mq.inq.sel    Selector
                Unsigned 32-bit integer
                INQ Selector
mq.md.acttoken Accounting token
                Byte array
                MD accounting token
mq.md.appldata ApplicationId data
                String
                MD Put applicationId data
mq.md.applname Put Application Name
                String
                MD Put application name
mq.md.appltype Put Application Type
                Signed 32-bit integer
                MD Put application type
```

```
mq.md.backcount  Backcount count
                  Unsigned 32-bit integer
                  MD Backcount count

mq.md.ccsid      Character set
                  Signed 32-bit integer
                  MD character set

mq.md.correlid   CorrelationId
                  Byte array
                  MD Correlation Id

mq.md.date       Put date
                  String
                  MD Put date

mq.md.encoding   Encoding
                  Unsigned 32-bit integer
                  MD encoding

mq.md.expiry     Expiry
                  Signed 32-bit integer
                  MD expiry

mq.md.feedback   Feedback
                  Unsigned 32-bit integer
                  MD feedback

mq.md.format     Format
                  String
                  MD format

mq.md.groupid    GroupId
                  Byte array
                  MD GroupId

mq.md.lastformat Last format
                  String
                  MD Last format

mq.md.msgflags   Message flags
                  Unsigned 32-bit integer
                  MD Message flags

mq.md.msgid      MessageId
                  Byte array
                  MD Message Id

mq.md.msgseqnumber Message sequence number
                  Unsigned 32-bit integer
                  MD Message sequence number

mq.md.msgtype    Message type
                  Unsigned 32-bit integer
                  MD message type

mq.md.offset     Offset
                  Unsigned 32-bit integer
                  MD Offset

mq.md.origdata   Application original data
                  String
                  MD Application original data
```

```
mq.md.persistence Persistence
    Unsigned 32-bit integer
    MD persistence

mq.md.priority Priority
    Signed 32-bit integer
    MD priority

mq.md.report Report
    Unsigned 32-bit integer
    MD report

mq.md.structid MD structid
    String
    MD structid

mq.md.time Put time
    String
    MD Put time

mq.md.userid UserId
    String
    MD UserId

mq.md.version Version
    Unsigned 32-bit integer
    MD version

mq.msh.buflength Buffer length
    Unsigned 32-bit integer
    MSH buffer length

mq.msh.msghlength Message length
    Unsigned 32-bit integer
    MSH message length

mq.msh.seqnum Sequence number
    Unsigned 32-bit integer
    MSH sequence number

mq.msh.structid MSH structid
    String
    MSH structid

mq.msh.unknown1 Unknown1
    Unsigned 32-bit integer
    MSH unknown1

mq.od.addrord Address of first OR
    Unsigned 32-bit integer
    OD address of first OR

mq.od.addrordr Address of first RR
    Unsigned 32-bit integer
    OD address of first RR

mq.od.altsecid Alternate security id
    String
    OD alternate security id

mq.od.altuserid Alternate user id
    String
    OD alternate userid
```

mq.od.dynqname Dynamic queue name  
String  
OD dynamic queue name

mq.od.idestcount Invalid destination count  
Unsigned 32-bit integer  
OD invalid destination count

mq.od.kdestcount Known destination count  
Unsigned 32-bit integer  
OD known destination count

mq.od.nbrrec Number of records  
Unsigned 32-bit integer  
OD number of records

mq.od.objname Object name  
String  
OD object name

mq.od.objqmgrname Object queue manager name  
String  
OD object queue manager name

mq.od.objtype Object type  
Unsigned 32-bit integer  
OD object type

mq.od.offsetor Offset of first OR  
Unsigned 32-bit integer  
OD offset of first OR

mq.od.offsetrr Offset of first RR  
Unsigned 32-bit integer  
OD offset of first RR

mq.od.resolvq Resolved queue name  
String  
OD resolved queue name

mq.od.resolvqmgr Resolved queue manager name  
String  
OD resolved queue manager name

mq.od.structid OD structid  
String  
OD structid

mq.od.udestcount Unknown destination count  
Unsigned 32-bit integer  
OD unknown destination count

mq.od.version Version  
Unsigned 32-bit integer  
OD version

mq.open.options Options  
Unsigned 32-bit integer  
OPEN options

mq.ping.buffer Buffer  
Byte array  
PING buffer



```
mq.ping.length Length
    Unsigned 32-bit integer
    PING length

mq.ping.seqnum Sequence number
    Unsigned 32-bit integer
    RESET sequence number

mq.pmo.addrrec Address of first record
    Unsigned 32-bit integer
    PMO address of first record

mq.pmo.addrres Address of first response record
    Unsigned 32-bit integer
    PMO address of first response record

mq.pmo.context Context
    Unsigned 32-bit integer
    PMO context

mq.pmo.flagspmr Flags PMR fields
    Unsigned 32-bit integer
    PMO flags PMR fields

mq.pmo.idestcount Invalid destination count
    Unsigned 32-bit integer
    PMO invalid destination count

mq.pmo.kdstcount Known destination count
    Unsigned 32-bit integer
    PMO known destination count

mq.pmo.nbrrec Number of records
    Unsigned 32-bit integer
    PMO number of records

mq.pmo.offsetpmr Offset of first PMR
    Unsigned 32-bit integer
    PMO offset of first PMR

mq.pmo.offsetrr Offset of first RR
    Unsigned 32-bit integer
    PMO offset of first RR

mq.pmo.options Options
    Unsigned 32-bit integer
    PMO options

mq.pmo.resolvq Resolved queue name
    String
    PMO resolved queue name

mq.pmo.resolvqmgr Resolved queue name manager
    String
    PMO resolved queue manager name

mq.pmo.structid PMO structid
    String
    PMO structid

mq.pmo.timeout Timeout
    Signed 32-bit integer
    PMO time out
```

```
mq.pmo.udestcount  Unknown destination count
    Unsigned 32-bit integer
    PMO unknown destination count
mq.pmr.acttoken    Accounting token
    Byte array
    PMR accounting token
mq.pmr.correlid    Correlation Id
    Byte array
    PMR Correlation Id
mq.pmr.feedback    Feedback
    Unsigned 32-bit integer
    PMR Feedback
mq.pmr.groupid     GroupId
    Byte array
    PMR GroupId
mq.pmr.msgid       Message Id
    Byte array
    PMR Message Id
mq.put.length      Data length
    Unsigned 32-bit integer
    PUT Data length
mq.rr.completioncode  Completion code
    Unsigned 32-bit integer
    OR completion code
mq.rr.reasoncode   Reason code
    Unsigned 32-bit integer
    OR reason code
mq.spai.mode       Mode
    Unsigned 32-bit integer
    SPI Activate Input mode
mq.spai.msgid      Message Id
    String
    SPI Activate Input message id
mq.spai.unknown1   Unknown1
    String
    SPI Activate Input unknown1
mq.spai.unknown2   Unknown2
    String
    SPI Activate Input unknown2
mq.spgi.batchint   Batch interval
    Unsigned 32-bit integer
    SPI Get Input batch interval
mq.spgi.batchsize  Batch size
    Unsigned 32-bit integer
    SPI Get Input batch size
mq.spgi.maxmsgsize  Max message size
    Unsigned 32-bit integer
    SPI Get Input max message size
```

```
mq.spgo.options  Options
    Unsigned 32-bit integer
    SPI Get Output options
mq.spgo.size     Size
    Unsigned 32-bit integer
    SPI Get Output size
mq.spi.options.blank  Blank padded
    Boolean
    SPI Options blank padded
mq.spi.options.deferred  Deferred
    Boolean
    SPI Options deferred
mq.spi.options.sync  Syncpoint
    Boolean
    SPI Options syncpoint
mq.spi.replength  Max reply size
    Unsigned 32-bit integer
    SPI Max reply size
mq.spi.verb      SPI Verb
    Unsigned 32-bit integer
    SPI Verb
mq.spi.version   Version
    Unsigned 32-bit integer
    SPI Version
mq.spib.length  Length
    Unsigned 32-bit integer
    SPI Base Length
mq.spib.structid  SPI Structid
    String
    SPI Base structid
mq.spib.version  Version
    Unsigned 32-bit integer
    SPI Base Version
mq.spqo.flags    Flags
    Unsigned 32-bit integer
    SPI Query Output flags
mq.spqo.maxiov   Max InOut Version
    Unsigned 32-bit integer
    SPI Query Output Max InOut Version
mq.spqo.maxiv    Max In Version
    Unsigned 32-bit integer
    SPI Query Output Max In Version
mq.spqo.maxov    Max Out Version
    Unsigned 32-bit integer
    SPI Query Output Max Out Version
mq.spqo.nbverb   Number of verbs
    Unsigned 32-bit integer
    SPI Query Output Number of verbs
```

```
mq.spqo.verb  Verb
    Unsigned 32-bit integer
    SPI Query Output VerbId

mq.status.code  Code
    Unsigned 32-bit integer
    STATUS code

mq.status.length  Length
    Unsigned 32-bit integer
    STATUS length

mq.status.value  Value
    Unsigned 32-bit integer
    STATUS value

mq.tsh.byteorder  Byte order
    Unsigned 8-bit integer
    TSH Byte order

mq.tsh.ccsid  Character set
    Unsigned 16-bit integer
    TSH CCSID

mq.tsh.cflags  Control flags
    Unsigned 8-bit integer
    TSH Control flags

mq.tsh.encoding  Encoding
    Unsigned 32-bit integer
    TSH Encoding

mq.tsh.luwid  Logical unit of work identifier
    Byte array
    TSH logical unit of work identifier

mq.tsh.padding  Padding
    Unsigned 16-bit integer
    TSH Padding

mq.tsh.reserved  Reserved
    Unsigned 8-bit integer
    TSH Reserved

mq.tsh.seglength  MQ Segment length
    Unsigned 32-bit integer
    TSH MQ Segment length

mq.tsh.structid  TSH structid
    String
    TSH structid

mq.tsh.tcf.closechann  Close channel
    Boolean
    TSH TCF Close channel

mq.tsh.tcf.confirmreq  Confirm request
    Boolean
    TSH TCF Confirm request

mq.tsh.tcf.dlq  DLQ used
    Boolean
    TSH TCF DLQ used
```

```
mq.tsh.tcf.error    Error
    Boolean
    TSH TCF Error

mq.tsh.tcf.first    First
    Boolean
    TSH TCF First

mq.tsh.tcf.last     Last
    Boolean
    TSH TCF Last

mq.tsh.tcf.reqacc   Request accepted
    Boolean
    TSH TCF Request accepted

mq.tsh.tcf.reqclose Request close
    Boolean
    TSH TCF Request close

mq.tsh.type         Segment type
    Unsigned 8-bit integer
    TSH MQ segment type

mq.uid.longuserid   Long User ID
    String
    UID long user id

mq.uid.password     Password
    String
    UID password

mq.uid.securityid   Security ID
    Byte array
    UID security id

mq.uid.structid     UID structid
    String
    UID structid

mq.uid.userid       User ID
    String
    UID structid

mq.xa.length        Length
    Unsigned 32-bit integer
    XA Length

mq.xa.nbxid         Number of Xid
    Unsigned 32-bit integer
    XA Number of Xid

mq.xa.returnvalue   Return value
    Signed 32-bit integer
    XA Return Value

mq.xa.rmid          Resource manager ID
    Unsigned 32-bit integer
    XA Resource Manager ID

mq.xa.tmflags       Transaction Manager Flags
    Unsigned 32-bit integer
    XA Transaction Manager Flags
```

```
mq.xa.tmflags.endrscan  ENDRSCAN
    Boolean
    XA TM Flags ENDRSCAN
mq.xa.tmflags.fail     FAIL
    Boolean
    XA TM Flags FAIL
mq.xa.tmflags.join     JOIN
    Boolean
    XA TM Flags JOIN
mq.xa.tmflags.onephase ONEPHASE
    Boolean
    XA TM Flags ONEPHASE
mq.xa.tmflags.resume   RESUME
    Boolean
    XA TM Flags RESUME
mq.xa.tmflags.startscan STARTSCAN
    Boolean
    XA TM Flags STARTSCAN
mq.xa.tmflags.success  SUCCESS
    Boolean
    XA TM Flags SUCCESS
mq.xa.tmflags.suspend  SUSPEND
    Boolean
    XA TM Flags SUSPEND
mq.xa.xainfo.length    Length
    Unsigned 8-bit integer
    XA XA_info Length
mq.xa.xainfo.value     Value
    String
    XA XA_info Value
mq.xa.xid.bq           Branch Qualifier
    Byte array
    XA Xid Branch Qualifier
mq.xa.xid.bql          Branch Qualifier Length
    Unsigned 8-bit integer
    XA Xid Branch Qualifier Length
mq.xa.xid.formatid     Format ID
    Signed 32-bit integer
    XA Xid Format ID
mq.xa.xid.gxid          Global TransactionId
    Byte array
    XA Xid Global TransactionId
mq.xa.xid.gxidl         Global TransactionId Length
    Unsigned 8-bit integer
    XA Xid Global TransactionId Length
mq.xqh.remoteq         Remote queue
    String
    XQH remote queue
```

```
mq.xqh.remotemgr Remote queue manager
  String
  XQH remote queue manager
mq.xqh.structid XQH structid
  String
  XQH structid
mq.xqh.version Version
  Unsigned 32-bit integer
  XQH version
```

### **WebSphere MQ Programmable Command Formats (mqpcf)**

```
mqpcf.cfh.command Command
  Unsigned 32-bit integer
  CFH command
mqpcf.cfh.compcode Completion code
  Unsigned 32-bit integer
  CFH completion code
mqpcf.cfh.control Control
  Unsigned 32-bit integer
  CFH control
mqpcf.cfh.length Length
  Unsigned 32-bit integer
  CFH length
mqpcf.cfh.msgseqnumber Message sequence number
  Unsigned 32-bit integer
  CFH message sequence number
mqpcf.cfh.paramcount Parameter count
  Unsigned 32-bit integer
  CFH parameter count
mqpcf.cfh.reasoncode Reason code
  Unsigned 32-bit integer
  CFH reason code
mqpcf.cfh.type Type
  Unsigned 32-bit integer
  CFH type
mqpcf.cfh.version Version
  Unsigned 32-bit integer
  CFH version
```

### **Wellfleet Breath of Life (bofl)**

```
bofl.pdu PDU
  Unsigned 32-bit integer
  PDU; normally equals 0x01010000 or 0x01011111
bofl.sequence Sequence
  Unsigned 32-bit integer
  incremental counter
```

**Wellfleet Compression (wcp)**

```
wcp.alg Alg
  Unsigned 8-bit integer
  Algorithm

wcp.alg1 Alg 1
  Unsigned 8-bit integer
  Algorithm #1

wcp.alg2 Alg 2
  Unsigned 8-bit integer
  Algorithm #2

wcp.alg3 Alg 3
  Unsigned 8-bit integer
  Algorithm #3

wcp.alg4 Alg 4
  Unsigned 8-bit integer
  Algorithm #4

wcp.alg_cnt Alg Count
  Unsigned 8-bit integer
  Algorithm Count

wcp.checksum Checksum
  Unsigned 8-bit integer
  Packet Checksum

wcp.cmd Command
  Unsigned 8-bit integer
  Compression Command

wcp.ext_cmd Extended Command
  Unsigned 8-bit integer
  Extended Compression Command

wcp.flag Compress Flag
  Unsigned 8-bit integer
  Compressed byte flag

wcp.hist History
  Unsigned 8-bit integer
  History Size

wcp.init Initiator
  Unsigned 8-bit integer
  Initiator

wcp.long_comp Long Compression
  Unsigned 16-bit integer
  Long Compression type

wcp.long_len Compress Length
  Unsigned 8-bit integer
  Compressed length

wcp.mark Compress Marker
  Unsigned 8-bit integer
  Compressed marker
```



wcp.off Source offset  
Unsigned 16-bit integer  
Data source offset

wcp.pib PIB  
Unsigned 8-bit integer  
PIB

wcp.ppc PerPackComp  
Unsigned 8-bit integer  
Per Packet Compression

wcp.rev Revision  
Unsigned 8-bit integer  
Revision

wcp.rexmit Rexmit  
Unsigned 8-bit integer  
Retransmit

wcp.seq SEQ  
Unsigned 16-bit integer  
Sequence Number

wcp.seq\_size Seq Size  
Unsigned 8-bit integer  
Sequence Size

wcp.short\_comp Short Compression  
Unsigned 8-bit integer  
Short Compression type

wcp.short\_len Compress Length  
Unsigned 8-bit integer  
Compressed length

wcp.tid TID  
Unsigned 16-bit integer  
TID

**Wellfleet HDLC (whdlc)**

wfleet\_hdlc.address Address  
Unsigned 8-bit integer

wfleet\_hdlc.command Command  
Unsigned 8-bit integer

**Who (who)**

who.boottime Boot Time  
Date/Time stamp

who.hostname Hostname  
String

who.idle Time Idle  
Unsigned 32-bit integer

who.loadav\_10 Load Average Over Past 10 Minutes  
Double-precision floating point

```
who.loadav_15  Load Average Over Past 15 Minutes
                Double-precision floating point
who.loadav_5   Load Average Over Past 5 Minutes
                Double-precision floating point
who.rcvtime    Receive Time
                Date/Time stamp
who.sendtime   Send Time
                Date/Time stamp
who.timeon     Time On
                Date/Time stamp
who.tty        TTY Name
                String
who.type       Type
                Unsigned 8-bit integer
who.uid        User ID
                String
who.vers       Version
                Unsigned 8-bit integer
who.whoent     Who utmp Entry
                No value
```

#### **WiMAX ASN Control Plane Protocol (wimaxasncp)**

```
wimaxasncp.authentication_msg  Message Type
                                Unsigned 8-bit integer
wimaxasncp.context_delivery_msg Message Type
                                Unsigned 8-bit integer
wimaxasncp.data_path_control_msg Message Type
                                Unsigned 8-bit integer
wimaxasncp.flags               Flags
                                Unsigned 8-bit integer
wimaxasncp.function_type       Function Type
                                Unsigned 8-bit integer
wimaxasncp.ho_control_msg      Message Type
                                Unsigned 8-bit integer
wimaxasncp.length              Length
                                Unsigned 16-bit integer
wimaxasncp.message_type        Message Type
                                Unsigned 8-bit integer
wimaxasncp.ms_state_msg        Message Type
                                Unsigned 8-bit integer
wimaxasncp.msids               MSID
                                6-byte Hardware (MAC) Address
wimaxasncp.opid                OP ID
                                Unsigned 8-bit integer
```

```
wimaxasncp.paging_msg  Message Type
    Unsigned 8-bit integer
wimaxasncp.qos_msg  Message Type
    Unsigned 8-bit integer
wimaxasncp.r3_mobility_msg  Message Type
    Unsigned 8-bit integer
wimaxasncp.reauthentication_msg  Message Type
    Unsigned 8-bit integer
wimaxasncp.reserved1  Reserved
    Unsigned 32-bit integer
wimaxasncp.reserved2  Reserved
    Unsigned 16-bit integer
wimaxasncp.rrm_msg  Message Type
    Unsigned 8-bit integer
wimaxasncp.session_msg  Message Type
    Unsigned 8-bit integer
wimaxasncp.tlv  TLV
    Byte array
wimaxasncp.tlv.AK  AK
    Byte array
    type=5
wimaxasncp.tlv.AK.value  Value
    Byte array
    value for type=5
wimaxasncp.tlv.AK_Context  AK Context
    Byte array
    type=6, Compound
wimaxasncp.tlv.AK_ID  AK ID
    Byte array
    type=7
wimaxasncp.tlv.AK_ID.value  Value
    Byte array
    value for type=7
wimaxasncp.tlv.AK_Lifetime  AK Lifetime
    Byte array
    type=8
wimaxasncp.tlv.AK_Lifetime.value  Value
    Unsigned 16-bit integer
    value for type=8
wimaxasncp.tlv.AK_SN  AK SN
    Byte array
    type=9
wimaxasncp.tlv.AK_SN.value  Value
    Unsigned 8-bit integer
    value for type=9
```

```
wimaxasncp.tlv.Accept_Reject_Indicator  Accept/Reject Indicator
  Byte array
  type=1

wimaxasncp.tlv.Accept_Reject_Indicator.value  Value
  Unsigned 8-bit integer
  value for type=1

wimaxasncp.tlv.Accounting_Extension  Accounting Extension
  Byte array
  type=2

wimaxasncp.tlv.Accounting_Extension.value  Value
  Byte array
  value for type=2

wimaxasncp.tlv.Action_Code  Action Code
  Byte array
  type=3

wimaxasncp.tlv.Action_Code.value  Value
  Unsigned 16-bit integer
  value for type=3

wimaxasncp.tlv.Action_Time  Action Time
  Byte array
  type=4

wimaxasncp.tlv.Action_Time.value  Value
  Unsigned 32-bit integer
  value for type=4

wimaxasncp.tlv.Anchor_ASN_GW_ID_Anchor_DPF_Identifier  Anchor ASN GW ID / Anchor
  Byte array
  type=10

wimaxasncp.tlv.Anchor_ASN_GW_ID_Anchor_DPF_Identifier.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=10

wimaxasncp.tlv.Anchor_ASN_GW_ID_Anchor_DPF_Identifier.ipv4_value  IPv4 Address
  IPv4 address
  value for type=10

wimaxasncp.tlv.Anchor_ASN_GW_ID_Anchor_DPF_Identifier.ipv6_value  IPv6 Address
  IPv6 address
  value for type=10

wimaxasncp.tlv.Anchor_Authenticator_ID  Anchor Authenticator ID
  Byte array
  type=16

wimaxasncp.tlv.Anchor_Authenticator_ID.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=16

wimaxasncp.tlv.Anchor_Authenticator_ID.ipv4_value  IPv4 Address
  IPv4 address
  value for type=16

wimaxasncp.tlv.Anchor_Authenticator_ID.ipv6_value  IPv6 Address
  IPv6 address
  value for type=16
```

```
wimaxasncp.tlv.Anchor_MM_Context  Anchor MM Context
  Byte array
  type=11, Compound

wimaxasncp.tlv.Anchor_PCID_Anchor_Paging_Controller_ID  Anchor PCID - Anchor Pag
  Byte array
  type=12

wimaxasncp.tlv.Anchor_PCID_Anchor_Paging_Controller_ID.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=12

wimaxasncp.tlv.Anchor_PCID_Anchor_Paging_Controller_ID.ipv4_value  IPv4 Address
  IPv4 address
  value for type=12

wimaxasncp.tlv.Anchor_PCID_Anchor_Paging_Controller_ID.ipv6_value  IPv6 Address
  IPv6 address
  value for type=12

wimaxasncp.tlv.Anchor_PC_Relocation_Destination  Anchor PC Relocation Destinati
  Byte array
  type=13

wimaxasncp.tlv.Anchor_PC_Relocation_Destination.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=13

wimaxasncp.tlv.Anchor_PC_Relocation_Destination.ipv4_value  IPv4 Address
  IPv4 address
  value for type=13

wimaxasncp.tlv.Anchor_PC_Relocation_Destination.ipv6_value  IPv6 Address
  IPv6 address
  value for type=13

wimaxasncp.tlv.Anchor_PC_Relocation_Request_Response  Anchor PC Relocation Reque
  Byte array
  type=14

wimaxasncp.tlv.Anchor_PC_Relocation_Request_Response.value  Value
  Unsigned 8-bit integer
  value for type=14

wimaxasncp.tlv.Associated_PHSI  Associated PHSI
  Byte array
  type=15

wimaxasncp.tlv.Associated_PHSI.value  Value
  Unsigned 8-bit integer
  value for type=15

wimaxasncp.tlv.Auth_IND  Auth-IND
  Byte array
  type=20

wimaxasncp.tlv.Auth_IND.value  Value
  Unsigned 8-bit integer
  value for type=20

wimaxasncp.tlv.Authentication_Complete  Authentication Complete
  Byte array
  type=17, Compound
```

```
wimaxasncp.tlv.Authentication_Result  Authentication Result
  Byte array
  type=18

wimaxasncp.tlv.Authentication_Result.value  Value
  Unsigned 8-bit integer
  value for type=18

wimaxasncp.tlv.Authenticator_Identifier  Authenticator Identifier
  Byte array
  type=19

wimaxasncp.tlv.Authenticator_Identifier.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=19

wimaxasncp.tlv.Authenticator_Identifier.ipv4_value  IPv4 Address
  IPv4 address
  value for type=19

wimaxasncp.tlv.Authenticator_Identifier.ipv6_value  IPv6 Address
  IPv6 address
  value for type=19

wimaxasncp.tlv.Authorization_Policy  Authorization Policy
  Byte array
  type=21

wimaxasncp.tlv.Authorization_Policy.value  Value
  Unsigned 16-bit integer
  value for type=21

wimaxasncp.tlv.Available_Radio_Resource_DL  Available Radio Resource DL
  Byte array
  type=22

wimaxasncp.tlv.Available_Radio_Resource_DL.value  Value
  Unsigned 8-bit integer
  value for type=22

wimaxasncp.tlv.Available_Radio_Resource_UL  Available Radio Resource UL
  Byte array
  type=23

wimaxasncp.tlv.Available_Radio_Resource_UL.value  Value
  Unsigned 8-bit integer
  value for type=23

wimaxasncp.tlv.BE_Data_Delivery_Service  BE Data Delivery Service
  Byte array
  type=24, Compound

wimaxasncp.tlv.BS_ID  BS ID
  Byte array
  type=25

wimaxasncp.tlv.BS_ID.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=25

wimaxasncp.tlv.BS_ID.ipv4_value  IPv4 Address
  IPv4 address
  value for type=25
```

```
wimaxasncp.tlv.BS_ID.ipv6_value  IPv6 Address
    IPv6 address
    value for type=25
wimaxasncp.tlv.BS_Info  BS Info
    Byte array
    type=26, Compound
wimaxasncp.tlv.BS_originated_EAP_Start_Flag  BS-originated EAP-Start Flag
    Byte array
    type=27, Value = Null
wimaxasncp.tlv.CID  CID
    Byte array
    type=29
wimaxasncp.tlv.CID.value  Value
    Unsigned 16-bit integer
    value for type=29
wimaxasncp.tlv.CMAC_KEY_COUNT  CMAC_KEY_COUNT
    Byte array
    type=34
wimaxasncp.tlv.CMAC_KEY_COUNT.value  Value
    Unsigned 16-bit integer
    value for type=34
wimaxasncp.tlv.CS_Type  CS Type
    Byte array
    type=39
wimaxasncp.tlv.CS_Type.value  Value
    Unsigned 8-bit integer
    value for type=39
wimaxasncp.tlv.Care_Of_Address_CoA  Care-Of Address (CoA)
    Byte array
    type=28
wimaxasncp.tlv.Care_Of_Address_CoA.value  Value
    IPv4 address
    value for type=28
wimaxasncp.tlv.Classifier  Classifier
    Byte array
    type=30, Compound
wimaxasncp.tlv.Classifier_Action  Classifier Action
    Byte array
    type=31
wimaxasncp.tlv.Classifier_Action.value  Value
    Unsigned 8-bit integer
    value for type=31
wimaxasncp.tlv.Classifier_Rule_Priority  Classifier Rule Priority
    Byte array
    type=32
wimaxasncp.tlv.Classifier_Rule_Priority.value  Value
    Unsigned 8-bit integer
    value for type=32
```

```
wimaxasncp.tlv.Classifier_Type Classifier Type
  Byte array
  type=33

wimaxasncp.tlv.Classifier_Type.value Value
  Unsigned 8-bit integer
  value for type=33

wimaxasncp.tlv.Combined_Resources_Required Combined Resources Required
  Byte array
  type=35

wimaxasncp.tlv.Combined_Resources_Required.value Value
  Unsigned 16-bit integer
  value for type=35

wimaxasncp.tlv.Context_Purpose_Indicator Context Purpose Indicator
  Byte array
  type=36

wimaxasncp.tlv.Context_Purpose_Indicator.value Value
  Unsigned 32-bit integer
  value for type=36

wimaxasncp.tlv.Control_Plane_Indicator Control Plane Indicator
  Byte array
  type=1136

wimaxasncp.tlv.Control_Plane_Indicator.value Value
  Unsigned 8-bit integer
  value for type=1136

wimaxasncp.tlv.Correlation_ID Correlation ID
  Byte array
  type=37

wimaxasncp.tlv.Correlation_ID.value Value
  Unsigned 32-bit integer
  value for type=37

wimaxasncp.tlv.Cryptographic_Suite Cryptographic Suite
  Byte array
  type=38

wimaxasncp.tlv.Cryptographic_Suite.value Value
  Unsigned 32-bit integer
  value for type=38

wimaxasncp.tlv.DCD_Setting DCD Setting
  Byte array
  type=49, TBD

wimaxasncp.tlv.DCD_Setting.value Value
  Byte array
  value for type=49

wimaxasncp.tlv.DCD_UCD_Configuration_Change_Count DCD/UCD Configuration Change
  Byte array
  type=48, TBD

wimaxasncp.tlv.DCD_UCD_Configuration_Change_Count.value Value
  Byte array
  value for type=48
```



```
wimaxasncp.tlv.DHCP_Key    DHCP Key
    Byte array
    type=51

wimaxasncp.tlv.DHCP_Key.value  Value
    Byte array
    value for type=51

wimaxasncp.tlv.DHCP_Key_ID  DHCP Key ID
    Byte array
    type=52

wimaxasncp.tlv.DHCP_Key_ID.value  Value
    Unsigned 32-bit integer
    value for type=52

wimaxasncp.tlv.DHCP_Key_Lifetime  DHCP Key Lifetime
    Byte array
    type=53

wimaxasncp.tlv.DHCP_Key_Lifetime.value  Value
    Unsigned 32-bit integer
    value for type=53

wimaxasncp.tlv.DHCP_Proxy_Info  DHCP Proxy Info
    Byte array
    type=54, Compound

wimaxasncp.tlv.DHCP_Relay_Address  DHCP Relay Address
    Byte array
    type=55

wimaxasncp.tlv.DHCP_Relay_Address.value  Value
    IPv4 address
    value for type=55

wimaxasncp.tlv.DHCP_Relay_Info  DHCP Relay Info
    Byte array
    type=56, Compound

wimaxasncp.tlv.DHCP_Server_Address  DHCP Server Address
    Byte array
    type=57

wimaxasncp.tlv.DHCP_Server_Address.value  Value
    IPv4 address
    value for type=57

wimaxasncp.tlv.DHCP_Server_List  DHCP Server List
    Byte array
    type=58, Compound

wimaxasncp.tlv.DL_PHY_Quality_Info  DL PHY Quality Info
    Byte array
    type=60, TBD

wimaxasncp.tlv.DL_PHY_Quality_Info.value  Value
    Byte array
    value for type=60

wimaxasncp.tlv.DL_PHY_Service_Level  DL PHY Service Level
    Byte array
    type=61, TBD
```

```
wimaxasncp.tlv.DL_PHY_Service_Level.value  Value
  Byte array
  value for type=61

wimaxasncp.tlv.Data_Integrity  Data Integrity
  Byte array
  type=40

wimaxasncp.tlv.Data_Integrity.value  Value
  Unsigned 8-bit integer
  value for type=40

wimaxasncp.tlv.Data_Integrity_Info  Data Integrity Info
  Byte array
  type=41, TBD

wimaxasncp.tlv.Data_Integrity_Info.value  Value
  Byte array
  value for type=41

wimaxasncp.tlv.Data_Path_Encapsulation_Type  Data Path Encapsulation Type
  Byte array
  type=42

wimaxasncp.tlv.Data_Path_Encapsulation_Type.value  Value
  Unsigned 8-bit integer
  value for type=42

wimaxasncp.tlv.Data_Path_Establishment_Option  Data Path Establishment Option
  Byte array
  type=43

wimaxasncp.tlv.Data_Path_Establishment_Option.value  Value
  Unsigned 8-bit integer
  value for type=43

wimaxasncp.tlv.Data_Path_ID  Data Path ID
  Byte array
  type=44

wimaxasncp.tlv.Data_Path_ID.value  Value
  Unsigned 32-bit integer
  value for type=44

wimaxasncp.tlv.Data_Path_Info  Data Path Info
  Byte array
  type=45, Compound

wimaxasncp.tlv.Data_Path_Integrity_Mechanism  Data Path Integrity Mechanism
  Byte array
  type=46

wimaxasncp.tlv.Data_Path_Integrity_Mechanism.value  Value
  Unsigned 8-bit integer
  value for type=46

wimaxasncp.tlv.Data_Path_Type  Data Path Type
  Byte array
  type=47

wimaxasncp.tlv.Data_Path_Type.value  Value
  Unsigned 8-bit integer
  value for type=47
```

```
wimaxasncp.tlv.Destination_Identifier  Destination Identifier
    Byte array
    type=65282

wimaxasncp.tlv.Destination_Identifier.bsid_value  BS ID
    6-byte Hardware (MAC) Address
    value for type=65282

wimaxasncp.tlv.Destination_Identifier.ipv4_value  IPv4 Address
    IPv4 address
    value for type=65282

wimaxasncp.tlv.Destination_Identifier.ipv6_value  IPv6 Address
    IPv6 address
    value for type=65282

wimaxasncp.tlv.Device_Authentication_Indicator  Device Authentication Indicator
    Byte array
    type=50

wimaxasncp.tlv.Device_Authentication_Indicator.value  Value
    Unsigned 8-bit integer
    value for type=50

wimaxasncp.tlv.Direction  Direction
    Byte array
    type=59

wimaxasncp.tlv.Direction.value  Value
    Unsigned 16-bit integer
    value for type=59

wimaxasncp.tlv.EAP_Payload  EAP Payload
    Byte array
    type=62

wimaxasncp.tlv.EAP_Payload.value  Value
    Byte array
    EAP payload embedded in Value

wimaxasncp.tlv.EIK  EIK
    Byte array
    type=63

wimaxasncp.tlv.EIK.value  Value
    Byte array
    value for type=63

wimaxasncp.tlv.ERT_VR_Data_Delivery_Service  ERT-VR Data Delivery Service
    Byte array
    type=64, Compound

wimaxasncp.tlv.Exit_IDLE_Mode_Operation_Indication  Exit IDLE Mode Operation Ind
    Byte array
    type=65

wimaxasncp.tlv.Exit_IDLE_Mode_Operation_Indication.value  Value
    Unsigned 8-bit integer
    value for type=65

wimaxasncp.tlv.FA_HA_Key  FA-HA Key
    Byte array
    type=66
```

```
wimaxasncp.tlv.FA_HA_Key.value  Value
    Byte array
    value for type=66

wimaxasncp.tlv.FA_HA_Key_Lifetime  FA-HA Key Lifetime
    Byte array
    type=67

wimaxasncp.tlv.FA_HA_Key_Lifetime.value  Value
    Unsigned 32-bit integer
    value for type=67

wimaxasncp.tlv.FA_HA_Key_SPI  FA-HA Key SPI
    Byte array
    type=68

wimaxasncp.tlv.FA_HA_Key_SPI.value  Value
    Unsigned 32-bit integer
    value for type=68

wimaxasncp.tlv.FA_IP_Address  FA IP Address
    Byte array
    type=70

wimaxasncp.tlv.FA_IP_Address.value  Value
    IPv4 address
    value for type=70

wimaxasncp.tlv.FA_Relocation_Indication  FA Relocation Indication
    Byte array
    type=71

wimaxasncp.tlv.FA_Relocation_Indication.value  Value
    Unsigned 8-bit integer
    value for type=71

wimaxasncp.tlv.Failure_Indication  Failure Indication
    Byte array
    type=69

wimaxasncp.tlv.Failure_Indication.value  Value
    Unsigned 8-bit integer
    value for type=69

wimaxasncp.tlv.Full_DCD_Setting  Full DCD Setting
    Byte array
    type=72, TBD

wimaxasncp.tlv.Full_DCD_Setting.value  Value
    Byte array
    value for type=72

wimaxasncp.tlv.Full_UCD_Setting  Full UCD Setting
    Byte array
    type=73, TBD

wimaxasncp.tlv.Full_UCD_Setting.value  Value
    Byte array
    value for type=73

wimaxasncp.tlv.Global_Service_Class_Change  Global Service Class Change
    Byte array
    type=74, TBD
```

```
wimaxasncp.tlv.Global_Service_Class_Change.value  Value
  Byte array
  value for type=74
wimaxasncp.tlv.HA_IP_Address  HA IP Address
  Byte array
  type=75
wimaxasncp.tlv.HA_IP_Address.ipv4_value  IPv4 Address
  IPv4 address
  value for type=75
wimaxasncp.tlv.HA_IP_Address.ipv6_value  IPv6 Address
  IPv6 address
  value for type=75
wimaxasncp.tlv.HO_Confirm_Type  HO Confirm Type
  Byte array
  type=76
wimaxasncp.tlv.HO_Confirm_Type.value  Value
  Unsigned 8-bit integer
  value for type=76
wimaxasncp.tlv.HO_Process_Optimization  HO Process Optimization
  Byte array
  type=78, TBD
wimaxasncp.tlv.HO_Process_Optimization.value  Value
  Byte array
  value for type=78
wimaxasncp.tlv.HO_Type  HO Type
  Byte array
  type=79
wimaxasncp.tlv.HO_Type.value  Value
  Unsigned 32-bit integer
  value for type=79
wimaxasncp.tlv.Home_Address_HoA  Home Address (HoA)
  Byte array
  type=77
wimaxasncp.tlv.Home_Address_HoA.value  Value
  IPv4 address
  value for type=77
wimaxasncp.tlv.IDLE_Mode_Info  IDLE Mode Info
  Byte array
  type=80, Compound
wimaxasncp.tlv.IDLE_Mode_Retain_Info  IDLE Mode Retain Info
  Byte array
  type=81, TBD
wimaxasncp.tlv.IDLE_Mode_Retain_Info.value  Value
  Byte array
  value for type=81
wimaxasncp.tlv.IM_Auth_Indication  IM Auth Indication
  Byte array
  type=1228
```

```
wimaxasncp.tlv.IM_Auth_Indication.value  Value
    Unsigned 8-bit integer
    value for type=1228

wimaxasncp.tlv.IP_Destination_Address_and_Mask  IP Destination Address and Mask
    Byte array
    type=82

wimaxasncp.tlv.IP_Destination_Address_and_Mask.value  Value
    Byte array
    value for type=82

wimaxasncp.tlv.IP_Destination_Address_and_Mask.value.ipv4  IPv4 Address
    IPv4 address
    value component for type=82

wimaxasncp.tlv.IP_Destination_Address_and_Mask.value.ipv4_mask  IPv4 Mask
    IPv4 address
    value component for type=82

wimaxasncp.tlv.IP_Destination_Address_and_Mask.value.ipv6  IPv6 Address
    IPv6 address
    value component for type=82

wimaxasncp.tlv.IP_Destination_Address_and_Mask.value.ipv6_mask  IPv6 Mask
    IPv6 address
    value component for type=82

wimaxasncp.tlv.IP_Remained_Time  IP Remained Time
    Byte array
    type=83

wimaxasncp.tlv.IP_Remained_Time.value  Value
    Unsigned 32-bit integer
    value for type=83

wimaxasncp.tlv.IP_Source_Address_and_Mask  IP Source Address and Mask
    Byte array
    type=84

wimaxasncp.tlv.IP_Source_Address_and_Mask.value  Value
    Byte array
    value for type=84

wimaxasncp.tlv.IP_Source_Address_and_Mask.value.ipv4  IPv4 Address
    IPv4 address
    value component for type=84

wimaxasncp.tlv.IP_Source_Address_and_Mask.value.ipv4_mask  IPv4 Mask
    IPv4 address
    value component for type=84

wimaxasncp.tlv.IP_Source_Address_and_Mask.value.ipv6  IPv6 Address
    IPv6 address
    value component for type=84

wimaxasncp.tlv.IP_Source_Address_and_Mask.value.ipv6_mask  IPv6 Mask
    IPv6 address
    value component for type=84

wimaxasncp.tlv.IP_TOS_DSCP_Range_and_Mask  IP TOS/DSCP Range and Mask
    Byte array
    type=85, TBD
```

```
wimaxasncp.tlv.IP_TOS_DSCP_Range_and_Mask.value  Value
  Byte array
  value for type=85
wimaxasncp.tlv.Key_Change_Indicator  Key Change Indicator
  Byte array
  type=86
wimaxasncp.tlv.Key_Change_Indicator.value  Value
  Unsigned 8-bit integer
  value for type=86
wimaxasncp.tlv.LU_Result_Indicator  LU Result Indicator
  Byte array
  type=90
wimaxasncp.tlv.LU_Result_Indicator.value  Value
  Unsigned 8-bit integer
  value for type=90
wimaxasncp.tlv.L_BSID  L-BSID
  Byte array
  type=87
wimaxasncp.tlv.L_BSID.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=87
wimaxasncp.tlv.L_BSID.ipv4_value  IPv4 Address
  IPv4 address
  value for type=87
wimaxasncp.tlv.L_BSID.ipv6_value  IPv6 Address
  IPv6 address
  value for type=87
wimaxasncp.tlv.Location_Update_Status  Location Update Status
  Byte array
  type=88
wimaxasncp.tlv.Location_Update_Status.value  Value
  Unsigned 8-bit integer
  value for type=88
wimaxasncp.tlv.Location_Update_Success_Failure_Indication  Location Update Success/Failure Indication
  Byte array
  type=89
wimaxasncp.tlv.Location_Update_Success_Failure_Indication.value  Value
  Unsigned 8-bit integer
  value for type=89
wimaxasncp.tlv.MIP4_Info  MIP4 Info
  Byte array
  type=96, Compound
wimaxasncp.tlv.MIP4_Security_Info  MIP4 Security Info
  Byte array
  type=97, Compound
wimaxasncp.tlv.MN_FA_Key  MN-FA Key
  Byte array
  type=98
```

```
wimaxasncp.tlv.MN_FA_Key.value  Value
    Byte array
    value for type=98

wimaxasncp.tlv.MN_FA_SPI  MN-FA SPI
    Byte array
    type=99

wimaxasncp.tlv.MN_FA_SPI.value  Value
    Unsigned 32-bit integer
    value for type=99

wimaxasncp.tlv.MS_Authorization_Context  MS Authorization Context
    Byte array
    type=100, Compound

wimaxasncp.tlv.MS_FA_Context  MS FA Context
    Byte array
    type=101, Compound

wimaxasncp.tlv.MS_ID  MS ID
    Byte array
    type=102

wimaxasncp.tlv.MS_ID.value  Value
    6-byte Hardware (MAC) Address
    value for type=102

wimaxasncp.tlv.MS_Info  MS Info
    Byte array
    type=103, Compound

wimaxasncp.tlv.MS_Mobility_Mode  MS Mobility Mode
    Byte array
    type=104, TBD

wimaxasncp.tlv.MS_Mobility_Mode.value  Value
    Byte array
    value for type=104

wimaxasncp.tlv.MS_NAI  MS NAI
    Byte array
    type=105

wimaxasncp.tlv.MS_NAI.value  Value
    String
    value for type=105

wimaxasncp.tlv.MS_Networking_Context  MS Networking Context
    Byte array
    type=106, Compound

wimaxasncp.tlv.MS_Security_Context  MS Security Context
    Byte array
    type=107, Compound

wimaxasncp.tlv.MS_Security_History  MS Security History
    Byte array
    type=108, Compound

wimaxasncp.tlv.Maximum_Latency  Maximum Latency
    Byte array
    type=91
```



```
wimaxasncp.tlv.Maximum_Latency.value  Value
    Unsigned 32-bit integer
    value for type=91

wimaxasncp.tlv.Maximum_Sustained_Traffic_Rate  Maximum Sustained Traffic Rate
    Byte array
    type=92

wimaxasncp.tlv.Maximum_Sustained_Traffic_Rate.value  Value
    Unsigned 32-bit integer
    value for type=92

wimaxasncp.tlv.Maximum_Traffic_Burst  Maximum Traffic Burst
    Byte array
    type=93

wimaxasncp.tlv.Maximum_Traffic_Burst.value  Value
    Unsigned 32-bit integer
    value for type=93

wimaxasncp.tlv.Media_Flow_Type  Media Flow Type
    Byte array
    type=94, TBD

wimaxasncp.tlv.Media_Flow_Type.value  Value
    Byte array
    value for type=94

wimaxasncp.tlv.Minimum_Reserved_Traffic_Rate  Minimum Reserved Traffic Rate
    Byte array
    type=95

wimaxasncp.tlv.Minimum_Reserved_Traffic_Rate.value  Value
    Unsigned 32-bit integer
    value for type=95

wimaxasncp.tlv.NRT_VR_Data_Delivery_Service  NRT-VR Data Delivery Service
    Byte array
    type=111, Compound

wimaxasncp.tlv.Network_Exit_Indicator  Network Exit Indicator
    Byte array
    type=109

wimaxasncp.tlv.Network_Exit_Indicator.value  Value
    Unsigned 8-bit integer
    value for type=109

wimaxasncp.tlv.Newer_TEK_Parameters  Newer TEK Parameters
    Byte array
    type=110, Compound

wimaxasncp.tlv.Old_Anchor_PCID  Old Anchor PCID
    Byte array
    type=113

wimaxasncp.tlv.Old_Anchor_PCID.bsid_value  BS ID
    6-byte Hardware (MAC) Address
    value for type=113

wimaxasncp.tlv.Old_Anchor_PCID.ipv4_value  IPv4 Address
    IPv4 address
    value for type=113
```

```
wimaxasncp.tlv.Old_Anchor_PCID.ipv6_value  IPv6 Address
  IPv6 address
  value for type=113
wimaxasncp.tlv.Older_TEK_Parameters  Older TEK Parameters
  Byte array
  type=112, Compound
wimaxasncp.tlv.PC_Relocation_Indication  PC Relocation Indication
  Byte array
  type=122, TBD
wimaxasncp.tlv.PC_Relocation_Indication.value  Value
  Byte array
  value for type=122
wimaxasncp.tlv.PGID_Paging_Group_ID  PGID - Paging Group ID
  Byte array
  type=123
wimaxasncp.tlv.PGID_Paging_Group_ID.value  Value
  Unsigned 16-bit integer
  value for type=123
wimaxasncp.tlv.PHSF  PHSF
  Byte array
  type=124
wimaxasncp.tlv.PHSF.value  Value
  Byte array
  value for type=124
wimaxasncp.tlv.PHSI  PHSI
  Byte array
  type=125
wimaxasncp.tlv.PHSI.value  Value
  Unsigned 8-bit integer
  value for type=125
wimaxasncp.tlv.PHSM  PHSM
  Byte array
  type=126
wimaxasncp.tlv.PHSM.value  Value
  Byte array
  value for type=126
wimaxasncp.tlv.PHSS  PHSS
  Byte array
  type=129
wimaxasncp.tlv.PHSS.value  Value
  Unsigned 8-bit integer
  value for type=129
wimaxasncp.tlv.PHSV  PHSV
  Byte array
  type=130
wimaxasncp.tlv.PHSV.value  Value
  Unsigned 8-bit integer
  value for type=130
```

```
wimaxasncp.tlv.PHS_Rule    PHS Rule
    Byte array
    type=127, Compound

wimaxasncp.tlv.PHS_Rule_Action    PHS Rule Action
    Byte array
    type=128

wimaxasncp.tlv.PHS_Rule_Action.value    Value
    Unsigned 8-bit integer
    value for type=128

wimaxasncp.tlv.PKM2    PKM2
    Byte array
    type=134

wimaxasncp.tlv.PKM2.value    Value
    Unsigned 8-bit integer
    value for type=134

wimaxasncp.tlv.PKM_Context    PKM Context
    Byte array
    type=131

wimaxasncp.tlv.PKM_Context.value    Value
    Unsigned 8-bit integer
    value for type=131

wimaxasncp.tlv.PMIP4_Client_Location    PMIP4 Client Location
    Byte array
    type=132

wimaxasncp.tlv.PMIP4_Client_Location.value    Value
    IPv4 address
    value for type=132

wimaxasncp.tlv.PMK2_SN    PMK2 SN
    Byte array
    type=135

wimaxasncp.tlv.PMK2_SN.value    Value
    Unsigned 8-bit integer
    value for type=135

wimaxasncp.tlv.PMK_SN    PMK SN
    Byte array
    type=133

wimaxasncp.tlv.PMK_SN.value    Value
    Unsigned 8-bit integer
    value for type=133

wimaxasncp.tlv.PN_Counter    PN Counter
    Byte array
    type=136

wimaxasncp.tlv.PN_Counter.value    Value
    Unsigned 32-bit integer
    value for type=136

wimaxasncp.tlv.Packet_Classification_Rule_Media_Flow_Description    Packet Classif
    Byte array
    type=114, Compound
```

```
wimaxasncp.tlv.Paging_Announce_Timer  Paging Announce Timer
  Byte array
  type=115

wimaxasncp.tlv.Paging_Announce_Timer.value  Value
  Unsigned 16-bit integer
  value for type=115

wimaxasncp.tlv.Paging_Cause  Paging Cause
  Byte array
  type=116

wimaxasncp.tlv.Paging_Cause.value  Value
  Unsigned 8-bit integer
  value for type=116

wimaxasncp.tlv.Paging_Controller_Identifier  Paging Controller Identifier
  Byte array
  type=117

wimaxasncp.tlv.Paging_Controller_Identifier.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=117

wimaxasncp.tlv.Paging_Controller_Identifier.ipv4_value  IPv4 Address
  IPv4 address
  value for type=117

wimaxasncp.tlv.Paging_Controller_Identifier.ipv6_value  IPv6 Address
  IPv6 address
  value for type=117

wimaxasncp.tlv.Paging_Cycle  Paging Cycle
  Byte array
  type=118, TBD

wimaxasncp.tlv.Paging_Cycle.value  Value
  Byte array
  value for type=118

wimaxasncp.tlv.Paging_Information  Paging Information
  Byte array
  type=119, Compound

wimaxasncp.tlv.Paging_Offset  Paging Offset
  Byte array
  type=120

wimaxasncp.tlv.Paging_Offset.value  Value
  Unsigned 16-bit integer
  value for type=120

wimaxasncp.tlv.Paging_Start_Stop  Paging Start/Stop
  Byte array
  type=121, TBD

wimaxasncp.tlv.Paging_Start_Stop.value  Value
  Byte array
  value for type=121

wimaxasncp.tlv.Preamble_Index_Sub_channel_Index  Preamble Index/Sub-channel Index
  Byte array
  type=137
```

```
wimaxasncp.tlv.Preamble_Index_Sub_channel_Index.value  Value
  Unsigned 8-bit integer
  value for type=137
wimaxasncp.tlv.Protocol  Protocol
  Byte array
  type=138
wimaxasncp.tlv.Protocol.value  Value
  Byte array
  value for type=138
wimaxasncp.tlv.Protocol.value.protocol  Protocol
  Unsigned 16-bit integer
  value component for type=138
wimaxasncp.tlv.Protocol_Destination_Port_Range  Protocol Destination Port Range
  Byte array
  type=139
wimaxasncp.tlv.Protocol_Destination_Port_Range.value  Value
  Byte array
  value for type=139
wimaxasncp.tlv.Protocol_Destination_Port_Range.value.port_high  Port High
  Unsigned 16-bit integer
  value component for type=139
wimaxasncp.tlv.Protocol_Destination_Port_Range.value.port_low  Port Low
  Unsigned 16-bit integer
  value component for type=139
wimaxasncp.tlv.Protocol_Source_Port_Range  Protocol Source Port Range
  Byte array
  type=140
wimaxasncp.tlv.Protocol_Source_Port_Range.value  Value
  Byte array
  value for type=140
wimaxasncp.tlv.Protocol_Source_Port_Range.value.port_high  Port High
  Unsigned 16-bit integer
  value component for type=140
wimaxasncp.tlv.Protocol_Source_Port_Range.value.port_low  Port Low
  Unsigned 16-bit integer
  value component for type=140
wimaxasncp.tlv.QoS_Parameters  QoS Parameters
  Byte array
  type=141, Compound
wimaxasncp.tlv.R3_Operation_Status  R3 Operation Status
  Byte array
  type=167, TBD
wimaxasncp.tlv.R3_Operation_Status.value  Value
  Byte array
  value for type=167
wimaxasncp.tlv.R3_Release_Reason  R3 Release Reason
  Byte array
  type=168
```

```
wimaxasncp.tlv.R3_Release_Reason.value  Value
    Unsigned 8-bit integer
    value for type=168

wimaxasncp.tlv.REG_Context  REG Context
    Byte array
    type=144

wimaxasncp.tlv.REG_Context.value  Value
    Unsigned 8-bit integer
    value for type=144

wimaxasncp.tlv.ROHC_EC RTP_Context_ID  ROHC/EC RTP Context ID
    Byte array
    type=155, TBD

wimaxasncp.tlv.ROHC_EC RTP_Context_ID.value  Value
    Byte array
    value for type=155

wimaxasncp.tlv.RRM_Absolute_Threshold_Value_J  RRM Absolute Threshold Value J
    Byte array
    type=157

wimaxasncp.tlv.RRM_Absolute_Threshold_Value_J.value  Value
    Unsigned 8-bit integer
    value for type=157

wimaxasncp.tlv.RRM_Averaging_Time_T  RRM Averaging Time T
    Byte array
    type=158

wimaxasncp.tlv.RRM_Averaging_Time_T.value  Value
    Unsigned 16-bit integer
    value for type=158

wimaxasncp.tlv.RRM_BS_Info  RRM BS Info
    Byte array
    type=159, Compound

wimaxasncp.tlv.RRM_BS_MS_PHY_Quality_Info  RRM BS-MS PHY Quality Info
    Byte array
    type=160, Compound

wimaxasncp.tlv.RRM_Relative_Threshold_RT  RRM Relative Threshold RT
    Byte array
    type=161

wimaxasncp.tlv.RRM_Relative_Threshold_RT.value  Value
    Unsigned 8-bit integer
    value for type=161

wimaxasncp.tlv.RRM_Reporting_Characteristics  RRM Reporting Characteristics
    Byte array
    type=162

wimaxasncp.tlv.RRM_Reporting_Characteristics.value  Value
    Unsigned 32-bit integer
    value for type=162

wimaxasncp.tlv.RRM_Reporting_Period_P  RRM Reporting Period P
    Byte array
    type=163
```

```
wimaxasncp.tlv.RRM_Reporting_Period_P.value  Value
  Unsigned 16-bit integer
  value for type=163

wimaxasncp.tlv.RRM_Spare_Capacity_Report_Type  RRM Spare Capacity Report Type
  Byte array
  type=164

wimaxasncp.tlv.RRM_Spare_Capacity_Report_Type.value  Value
  Unsigned 8-bit integer
  value for type=164

wimaxasncp.tlv.RT_VR_Data_Delivery_Service  RT-VR Data Delivery Service
  Byte array
  type=165, Compound

wimaxasncp.tlv.Radio_Resource_Fluctuation  Radio Resource Fluctuation
  Byte array
  type=142

wimaxasncp.tlv.Radio_Resource_Fluctuation.value  Value
  Unsigned 8-bit integer
  value for type=142

wimaxasncp.tlv.Reduced_Resources_Code  Reduced Resources Code
  Byte array
  type=143, Value = Null

wimaxasncp.tlv.Registration_Type  Registration Type
  Byte array
  type=145

wimaxasncp.tlv.Registration_Type.value  Value
  Unsigned 32-bit integer
  value for type=145

wimaxasncp.tlv.Relative_Delay  Relative Delay
  Byte array
  type=146

wimaxasncp.tlv.Relative_Delay.value  Value
  Unsigned 8-bit integer
  value for type=146

wimaxasncp.tlv.Relocation_Destination_ID  Relocation Destination ID
  Byte array
  type=147

wimaxasncp.tlv.Relocation_Destination_ID.bsid_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=147

wimaxasncp.tlv.Relocation_Destination_ID.ipv4_value  IPv4 Address
  IPv4 address
  value for type=147

wimaxasncp.tlv.Relocation_Destination_ID.ipv6_value  IPv6 Address
  IPv6 address
  value for type=147

wimaxasncp.tlv.Relocation_Response  Relocation Response
  Byte array
  type=148, TBD
```

```
wimaxasncp.tlv.Relocation_Response.value  Value
  Byte array
  value for type=148
wimaxasncp.tlv.Relocation_Success_Indication  Relocation Success Indication
  Byte array
  type=149, TBD
wimaxasncp.tlv.Relocation_Success_Indication.value  Value
  Byte array
  value for type=149
wimaxasncp.tlv.Request_Transmission_Policy  Request/Transmission Policy
  Byte array
  type=150
wimaxasncp.tlv.Request_Transmission_Policy.value  Value
  Unsigned 32-bit integer
  value for type=150
wimaxasncp.tlv.Reservation_Action  Reservation Action
  Byte array
  type=151
wimaxasncp.tlv.Reservation_Action.value  Value
  Unsigned 16-bit integer
  value for type=151
wimaxasncp.tlv.Reservation_Result  Reservation Result
  Byte array
  type=152
wimaxasncp.tlv.Reservation_Result.value  Value
  Unsigned 16-bit integer
  value for type=152
wimaxasncp.tlv.Response_Code  Response Code
  Byte array
  type=153
wimaxasncp.tlv.Response_Code.value  Value
  Unsigned 8-bit integer
  value for type=153
wimaxasncp.tlv.Result_Code  Result Code
  Byte array
  type=154
wimaxasncp.tlv.Result_Code.value  Value
  Unsigned 8-bit integer
  value for type=154
wimaxasncp.tlv.Round_Trip_Delay  Round Trip Delay
  Byte array
  type=156
wimaxasncp.tlv.Round_Trip_Delay.value  Value
  Unsigned 8-bit integer
  value for type=156
wimaxasncp.tlv.RxPN_Counter  RxPN Counter
  Byte array
  type=166
```



```
wimaxasncp.tlv.RxPN_Counter.value  Value
    Unsigned 32-bit integer
    value for type=166
wimaxasncp.tlv.SAID  SAID
    Byte array
    type=169, TBD
wimaxasncp.tlv.SAID.value  Value
    Byte array
    value for type=169
wimaxasncp.tlv.SA_Descriptor  SA Descriptor
    Byte array
    type=170, Compound
wimaxasncp.tlv.SA_Index  SA Index
    Byte array
    type=171
wimaxasncp.tlv.SA_Index.value  Value
    Unsigned 32-bit integer
    value for type=171
wimaxasncp.tlv.SA_Service_Type  SA Service Type
    Byte array
    type=172
wimaxasncp.tlv.SA_Service_Type.value  Value
    Unsigned 8-bit integer
    value for type=172
wimaxasncp.tlv.SA_Type  SA Type
    Byte array
    type=173
wimaxasncp.tlv.SA_Type.value  Value
    Unsigned 8-bit integer
    value for type=173
wimaxasncp.tlv.SBC_Context  SBC Context
    Byte array
    type=174, TBD
wimaxasncp.tlv.SBC_Context.value  Value
    Byte array
    value for type=174
wimaxasncp.tlv.SDU_BSN_Map  SDU BSN Map
    Byte array
    type=175
wimaxasncp.tlv.SDU_BSN_Map.value  Value
    Byte array
    value for type=175
wimaxasncp.tlv.SDU_Info  SDU Info
    Byte array
    type=176, Compound
wimaxasncp.tlv.SDU_SN  SDU SN
    Byte array
    type=178
```

```
wimaxasncp.tlv.SDU_SN.value  Value
    Unsigned 32-bit integer
    value for type=178

wimaxasncp.tlv.SDU_Size  SDU Size
    Byte array
    type=177

wimaxasncp.tlv.SDU_Size.value  Value
    Unsigned 8-bit integer
    value for type=177

wimaxasncp.tlv.SFID  SFID
    Byte array
    type=184

wimaxasncp.tlv.SFID.value  Value
    Unsigned 32-bit integer
    value for type=184

wimaxasncp.tlv.SF_Classification  SF Classification
    Byte array
    type=183

wimaxasncp.tlv.SF_Classification.value  Value
    Unsigned 8-bit integer
    value for type=183

wimaxasncp.tlv.SF_Info  SF Info
    Byte array
    type=185, Compound

wimaxasncp.tlv.Service_Authorization_Code  Service Authorization Code
    Byte array
    type=181, TBD

wimaxasncp.tlv.Service_Authorization_Code.value  Value
    Byte array
    value for type=181

wimaxasncp.tlv.Service_Class_Name  Service Class Name
    Byte array
    type=179

wimaxasncp.tlv.Service_Class_Name.value  Value
    String
    value for type=179

wimaxasncp.tlv.Service_Level_Prediction  Service Level Prediction
    Byte array
    type=180

wimaxasncp.tlv.Service_Level_Prediction.value  Value
    Unsigned 8-bit integer
    value for type=180

wimaxasncp.tlv.Serving_Target_Indicator  Serving/Target Indicator
    Byte array
    type=182

wimaxasncp.tlv.Serving_Target_Indicator.value  Value
    Unsigned 8-bit integer
    value for type=182
```

```
wimaxasncp.tlv.Source_Identifier  Source Identifier
  Byte array
  type=65281

wimaxasncp.tlv.Source_Identifier.bsids_value  BS ID
  6-byte Hardware (MAC) Address
  value for type=65281

wimaxasncp.tlv.Source_Identifier.ipv4_value  IPv4 Address
  IPv4 address
  value for type=65281

wimaxasncp.tlv.Source_Identifier.ipv6_value  IPv6 Address
  IPv6 address
  value for type=65281

wimaxasncp.tlv.Spare_Capacity_Indicator  Spare Capacity Indicator
  Byte array
  type=186

wimaxasncp.tlv.Spare_Capacity_Indicator.value  Value
  Unsigned 16-bit integer
  value for type=186

wimaxasncp.tlv.TEK  TEK
  Byte array
  type=187

wimaxasncp.tlv.TEK.value  Value
  Byte array
  value for type=187

wimaxasncp.tlv.TEK_Lifetime  TEK Lifetime
  Byte array
  type=188

wimaxasncp.tlv.TEK_Lifetime.value  Value
  Unsigned 32-bit integer
  value for type=188

wimaxasncp.tlv.TEK_SN  TEK SN
  Byte array
  type=189

wimaxasncp.tlv.TEK_SN.value  Value
  Unsigned 8-bit integer
  value for type=189

wimaxasncp.tlv.Tolerated_Jitter  Tolerated Jitter
  Byte array
  type=190

wimaxasncp.tlv.Tolerated_Jitter.value  Value
  Unsigned 32-bit integer
  value for type=190

wimaxasncp.tlv.Total_Slots_DL  Total Slots DL
  Byte array
  type=191

wimaxasncp.tlv.Total_Slots_DL.value  Value
  Unsigned 16-bit integer
  value for type=191
```

```
wimaxasncp.tlv.Total_Slots_UL  Total Slots UL
    Byte array
    type=192

wimaxasncp.tlv.Total_Slots_UL.value  Value
    Unsigned 16-bit integer
    value for type=192

wimaxasncp.tlv.Traffic_Priority_QoS_Priority  Traffic Priority/QoS Priority
    Byte array
    type=193

wimaxasncp.tlv.Traffic_Priority_QoS_Priority.value  Value
    Unsigned 8-bit integer
    value for type=193

wimaxasncp.tlv.Tunnel_Endpoint  Tunnel Endpoint
    Byte array
    type=194

wimaxasncp.tlv.Tunnel_Endpoint.ipv4_value  IPv4 Address
    IPv4 address
    value for type=194

wimaxasncp.tlv.Tunnel_Endpoint.ipv6_value  IPv6 Address
    IPv6 address
    value for type=194

wimaxasncp.tlv.UCD_Setting  UCD Setting
    Byte array
    type=195, TBD

wimaxasncp.tlv.UCD_Setting.value  Value
    Byte array
    value for type=195

wimaxasncp.tlv.UGS_Data_Delivery_Service  UGS Data Delivery Service
    Byte array
    type=196, Compound

wimaxasncp.tlv.UL_PHY_Quality_Info  UL PHY Quality Info
    Byte array
    type=197, TBD

wimaxasncp.tlv.UL_PHY_Quality_Info.value  Value
    Byte array
    value for type=197

wimaxasncp.tlv.UL_PHY_Service_Level  UL PHY Service Level
    Byte array
    type=198, TBD

wimaxasncp.tlv.UL_PHY_Service_Level.value  Value
    Byte array
    value for type=198

wimaxasncp.tlv.Unknown  Unknown
    Byte array
    type=Unknown

wimaxasncp.tlv.Unknown.value  Value
    Byte array
    value for unknown type
```

```
wimaxasncp.tlv.Unsolicited_Grant_Interval  Unsolicited Grant Interval
  Byte array
  type=199

wimaxasncp.tlv.Unsolicited_Grant_Interval.value  Value
  Unsigned 16-bit integer
  value for type=199

wimaxasncp.tlv.Unsolicited_Polling_Interval  Unsolicited Polling Interval
  Byte array
  type=200

wimaxasncp.tlv.Unsolicited_Polling_Interval.value  Value
  Unsigned 16-bit integer
  value for type=200

wimaxasncp.tlv.VAAA_IP_Address  VAAA IP Address
  Byte array
  type=201

wimaxasncp.tlv.VAAA_IP_Address.ipv4_value  IPv4 Address
  IPv4 address
  value for type=201

wimaxasncp.tlv.VAAA_IP_Address.ipv6_value  IPv6 Address
  IPv6 address
  value for type=201

wimaxasncp.tlv.VAAA_Realm  VAAA Realm
  Byte array
  type=202

wimaxasncp.tlv.VAAA_Realm.value  Value
  String
  value for type=202

wimaxasncp.tlv.Vendor_Specific  Vendor Specific
  Byte array
  type=65535

wimaxasncp.tlv.Vendor_Specific.value  Value
  Byte array
  value for type=65535

wimaxasncp.tlv.Vendor_Specific.value.vendor_id  Vendor ID
  Unsigned 24-bit integer
  value component for type=65535

wimaxasncp.tlv.Vendor_Specific.value.vendor_rest_of_info  Rest of Info
  Byte array
  value component for type=65535

wimaxasncp.tlv.length  Length
  Unsigned 16-bit integer

wimaxasncp.tlv.type  Type
  Unsigned 16-bit integer

wimaxasncp.tlv_value_bitflags16  Value
  Unsigned 16-bit integer

wimaxasncp.tlv_value_bitflags32  Value
  Unsigned 32-bit integer
```

wimaxasncp.tlv\_value\_bytes Value  
Byte array

wimaxasncp.tlv\_value\_protocol Value  
Unsigned 16-bit integer

wimaxasncp.tlv\_value\_vendor\_id Vendor ID  
Unsigned 24-bit integer

wimaxasncp.transaction\_id Transaction ID  
Unsigned 16-bit integer

wimaxasncp.version Version  
Unsigned 8-bit integer

#### **WiMax AAS-FEEDBACK/BEAM Messages (wmx.aas)**

wmx.aas\_beam.aas\_beam\_index AAS Beam Index  
Unsigned 8-bit integer

wmx.aas\_beam.beam\_bit\_mask Beam Bit Mask  
Unsigned 8-bit integer

wmx.aas\_beam.cinr\_mean\_value CINR Mean Value  
Unsigned 8-bit integer

wmx.aas\_beam.feedback\_request\_number Feedback Request Number  
Unsigned 8-bit integer

wmx.aas\_beam.frame\_number Frame Number  
Unsigned 8-bit integer

wmx.aas\_beam.freq\_value\_im Frequency Value (imaginary part)  
Unsigned 8-bit integer

wmx.aas\_beam.freq\_value\_re Frequency Value (real part)  
Unsigned 8-bit integer

wmx.aas\_beam.measurement\_report\_type Measurement Report Type  
Unsigned 8-bit integer

wmx.aas\_beam.reserved Reserved  
Unsigned 8-bit integer

wmx.aas\_beam.resolution\_parameter Resolution Parameter  
Unsigned 8-bit integer

wmx.aas\_beam.rssi\_mean\_value RSSI Mean Value  
Unsigned 8-bit integer

wmx.aas\_beam.unknown\_type Unknown TLV type  
Byte array

wmx.aas\_fbck.cinr\_mean\_value CINR Mean Value  
Unsigned 8-bit integer

wmx.aas\_fbck.counter Feedback Request Counter  
Unsigned 8-bit integer

wmx.aas\_fbck.frame\_number Frame Number  
Unsigned 8-bit integer

wmx.aas\_fbck.freq\_value\_im Frequency Value (imaginary part)  
Unsigned 8-bit integer

```
wmx.aas_fbck.freq_value_re  Frequency Value (real part)
    Unsigned 8-bit integer
wmx.aas_fbck.number_of_frames  Number Of Frames
    Unsigned 8-bit integer
wmx.aas_fbck.resolution  Frequency Measurement Resolution
    Unsigned 8-bit integer
wmx.aas_fbck.rssi_mean_value  RSSI Mean Value
    Unsigned 8-bit integer
wmx.aas_fbck.unknown_type  Unknown TLV type
    Byte array
wmx.aas_fbck_req.data_type  Measurement Data Type
    Unsigned 8-bit integer
wmx.aas_fbck_req.reserved  Reserved
    Unsigned 8-bit integer
wmx.aas_fbck_rsp.counter  Feedback Request Counter
    Unsigned 8-bit integer
wmx.aas_fbck_rsp.data_type  Measurement Data Type
    Unsigned 8-bit integer
wmx.aas_fbck_rsp.reserved  Reserved
    Unsigned 8-bit integer
wmx.aas_fbck_rsp.resolution  Frequency Measurement Resolution
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.aas_beam  MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.aas_fbck  MAC Management Message Type
    Unsigned 8-bit integer
```

#### **WiMax ARQ Feedback/Discard/Reset Messages (wmx.arq)**

```
wmx.ack_type.reserved  Reserved
    Unsigned 8-bit integer
wmx.arq.ack_type  ACK Type
    Unsigned 8-bit integer
wmx.arq.bsn  BSN
    Unsigned 16-bit integer
wmx.arq.cid  Connection ID
    Unsigned 16-bit integer
    The ID of the connection being referenced
wmx.arq.discard_bsn  BSN
    Unsigned 16-bit integer
wmx.arq.discard_cid  Connection ID
    Unsigned 16-bit integer
wmx.arq.discard_reserved  Reserved
    Unsigned 8-bit integer
wmx.arq.last  LAST
    Boolean
```

wmx.arq.num\_maps Number of ACK Maps  
Unsigned 8-bit integer

wmx.arq.reserved Reserved  
Unsigned 8-bit integer

wmx.arq.reset\_cid Connection ID  
Unsigned 16-bit integer

wmx.arq.reset\_direction Direction  
Unsigned 8-bit integer

wmx.arq.reset\_reserved Reserved  
Unsigned 8-bit integer

wmx.arq.reset\_type Type  
Unsigned 8-bit integer

wmx.arq.selective\_map Selective ACK Map  
Unsigned 16-bit integer

wmx.arq.seq1\_len Sequence 1 Length  
Unsigned 16-bit integer

wmx.arq.seq2\_len Sequence 2 Length  
Unsigned 16-bit integer

wmx.arq.seq3\_len Sequence 3 Length  
Unsigned 8-bit integer

wmx.arq.seq\_ack\_map Sequence ACK Map  
Unsigned 8-bit integer

wmx.arq.seq\_format Sequence Format  
Unsigned 8-bit integer

wmx.macmgmtmsgtype.arq MAC Management Message Type  
Unsigned 8-bit integer

#### **WiMax CLK-CMP Message (wmx.clk)**

wmx.clk\_cmp.clock\_count Clock Count  
Unsigned 8-bit integer

wmx.clk\_cmp.clock\_id Clock ID  
Unsigned 8-bit integer

wmx.clk\_cmp.comparision\_value Comparision Value  
Signed 8-bit integer

wmx.clk\_cmp.invalid\_tlv Invalid TLV  
Byte array

wmx.clk\_cmp.seq\_number Sequence Number  
Unsigned 8-bit integer

wmx.macmgmtmsgtype.clk\_cmp MAC Management Message Type  
Unsigned 8-bit integer

#### **WiMax DCD/UCD Messages (wmx.cd)**

wimax.dcd.dl\_burst\_profile\_multiple\_fec\_types Downlink Burst Profile for Multip  
Unsigned 8-bit integer

wimax.dcd.asr ASR (Anchor Switch Report) Slot Length (M) and Switching Period (L)  
Unsigned 8-bit integer



```
wmx.dcd.asr.l ASR Switching Period (L)
    Unsigned 8-bit integer
wmx.dcd.asr.m ASR Slot Length (M)
    Unsigned 8-bit integer
wmx.dcd.bs_eirp BS EIRP
    Signed 16-bit integer
wmx.dcd.bs_id Base Station ID
    6-byte Hardware (MAC) Address
wmx.dcd.bs_restart_count BS Restart Count
    Unsigned 8-bit integer
wmx.dcd.burst.diuc DIUC
    Unsigned 8-bit integer
wmx.dcd.burst.diuc_entry_threshold DIUC Minimum Entry Threshold (in 0.25 dB uni
wmx.dcd.burst.diuc_exit_threshold DIUC Mandatory Exit Threshold (in 0.25 dB uni
wmx.dcd.burst.fec FEC Code Type
    Unsigned 8-bit integer
wmx.dcd.burst.freq Frequency
    Unsigned 8-bit integer
wmx.dcd.burst.reserved Reserved
    Unsigned 8-bit integer
wmx.dcd.burst.tcs TCS
    Unsigned 8-bit integer
wmx.dcd.channel_nr Channel Nr
    Unsigned 8-bit integer
wmx.dcd.config_change_count Configuration Change Count
    Unsigned 8-bit integer
wmx.dcd.default_physical_cinr_meas_averaging_parameter Default Averaging Parame
    Unsigned 8-bit integer
wmx.dcd.default_rssi_and_cinr_averaging_parameter Default RSSI and CINR Averagi
    Unsigned 8-bit integer
wmx.dcd.default_rssi_meas_averaging_parameter Default Averaging Parameter for R
    Unsigned 8-bit integer
wmx.dcd.dl_amc_allocated_phy_bands_bitmap DL AMC Allocated Physical Bands Bitma
    Byte array
wmx.dcd.dl_burst_profile_diuc DIUC
    Unsigned 8-bit integer
wmx.dcd.dl_burst_profile_rsv Reserved
    Unsigned 8-bit integer
wmx.dcd.dl_channel_id Reserved
    Unsigned 8-bit integer
wmx.dcd.dl_region_definition DL Region Definition
    Byte array
wmx.dcd.dl_region_definition.num_region Number of Regions
    Unsigned 8-bit integer
```

```
wmx.dcd.dl_region_definition.num_subchannels  Number of Subchannels
Unsigned 8-bit integer

wmx.dcd.dl_region_definition.num_symbols  Number of OFDMA Symbols
Unsigned 8-bit integer

wmx.dcd.dl_region_definition.reserved  Reserved
Unsigned 8-bit integer

wmx.dcd.dl_region_definition.subchannel_offset  Subchannel Offset
Unsigned 8-bit integer

wmx.dcd.dl_region_definition.symbol_offset  OFDMA Symbol Offset
Unsigned 8-bit integer

wmx.dcd.eirxp  EIRXP (IR, max)
Signed 16-bit integer

wmx.dcd.frame_duration  Frame Duration
Unsigned 32-bit integer

wmx.dcd.frame_duration_code  Frame Duration Code
Unsigned 8-bit integer

wmx.dcd.frame_nr  Frame Number
Unsigned 24-bit integer

wmx.dcd.frequency  Downlink Center Frequency
Unsigned 32-bit integer

wmx.dcd.h_add_threshold  H_add Threshold
Unsigned 8-bit integer

wmx.dcd.h_arq_ack_delay_ul_burst  H-ARQ ACK Delay for UL Burst
Unsigned 8-bit integer

wmx.dcd.h_delete_threshold  H_delete Threshold
Unsigned 8-bit integer

wmx.dcd.ho_type_support  HO Type Support
Unsigned 8-bit integer

wmx.dcd.ho_type_support.fbss_ho  FBSS HO
Unsigned 8-bit integer

wmx.dcd.ho_type_support.ho  HO
Unsigned 8-bit integer

wmx.dcd.ho_type_support.mdho  MDHO
Unsigned 8-bit integer

wmx.dcd.ho_type_support.reserved  Reserved
Unsigned 8-bit integer

wmx.dcd.hysteresis_margin  Hysteresis Margin
Unsigned 8-bit integer

wmx.dcd.invalid_tlv  Invalid TLV
Byte array

wmx.dcd.mac_version  MAC Version
Unsigned 8-bit integer

wmx.dcd.maximum_retransmission  Maximum Retransmission
Unsigned 8-bit integer
```

```
wmx.dcd.noise_interference  Noise and Interference
    Unsigned 8-bit integer
wmx.dcd.paging_group_id    Paging Group ID
    Unsigned 16-bit integer
wmx.dcd.paging_interval_length  Paging Interval Length
    Unsigned 8-bit integer
wmx.dcd.permutation_type_broadcast_region_in_harq_zone  Permutation Type for Bro
    Unsigned 8-bit integer
wmx.dcd.phy_type  PHY Type
    Unsigned 8-bit integer
wmx.dcd.power_adjustment  Power Adjustment Rule
    Unsigned 8-bit integer
wmx.dcd.rtg  RTG
    Unsigned 8-bit integer
wmx.dcd.switch_frame  Channel Switch Frame Number
    Unsigned 24-bit integer
wmx.dcd.time_trigger_duration  Time to Trigger Duration
    Unsigned 8-bit integer
wmx.dcd.trigger_averaging_duration  Trigger Averaging Duration
    Unsigned 8-bit integer
wmx.dcd.trigger_value  Trigger Value
    Unsigned 8-bit integer
wmx.dcd.ttg  TTG
    Unsigned 16-bit integer
wmx.dcd.tusc1  TUSC1 permutation active subchannels bitmap
    Unsigned 16-bit integer
wmx.dcd.tusc2  TUSC2 permutation active subchannels bitmap
    Unsigned 16-bit integer
wmx.dcd.type_function_action  Type/Function/Action
    Unsigned 8-bit integer
wmx.dcd.type_function_action.action  Action
    Unsigned 8-bit integer
wmx.dcd.type_function_action.function  Function
    Unsigned 8-bit integer
wmx.dcd.type_function_action.type  Type
    Unsigned 8-bit integer
wmx.dcd.unknown_tlv_value  Unknown DCD Type
    Byte array
wmx.macmgmtmsgtype.dcd  MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.ucd  MAC Management Message Type
    Unsigned 8-bit integer
wmx.ucd.allow_aas_beam_select_message  Allow AAS Beam Select Message
    Signed 8-bit integer
```

```
wmx.ucd.band_amc.allocation_threshold  Band AMC Allocation Threshold
    Unsigned 8-bit integer
wmx.ucd.band_amc.allocation_timer      Band AMC Allocation Timer
    Unsigned 8-bit integer
wmx.ucd.band_amc.release_threshold     Band AMC Release Threshold
    Unsigned 8-bit integer
wmx.ucd.band_amc.release_timer         Band AMC Release Timer
    Unsigned 8-bit integer
wmx.ucd.band_amc.retry_timer           Band AMC Retry Timer
    Unsigned 8-bit integer
wmx.ucd.band_status.report_max_period  Band Status Report MAC Period
    Unsigned 8-bit integer
wmx.ucd.bandwidth_request              Bandwidth Request Codes
    Unsigned 8-bit integer
wmx.ucd.burst.fec                      FEC Code Type
    Unsigned 8-bit integer
wmx.ucd.burst.ranging_data_ratio        Ranging Data Ratio
    Unsigned 8-bit integer
wmx.ucd.burst.reserved                 Reserved
    Unsigned 8-bit integer
wmx.ucd.burst.uiuc                     UIUC
    Unsigned 8-bit integer
wmx.ucd.bw_req_size                    Bandwidth Request Opportunity Size
    Unsigned 16-bit integer
wmx.ucd.cqich_band_amc_transition_delay CQICH Band AMC-Transition Delay
    Unsigned 8-bit integer
wmx.ucd.frequency                      Frequency
    Unsigned 32-bit integer
wmx.ucd.handover_ranging_codes         Handover Ranging Codes
    Signed 8-bit integer
wmx.ucd.harq_ack_delay_dl_burst         HARQ ACK Delay for DL Burst
    Unsigned 8-bit integer
wmx.ucd.initial_ranging_codes          Initial Ranging Codes
    Unsigned 8-bit integer
wmx.ucd.initial_ranging_interval       Number of Frames Between Initial Ranging Inter
    Signed 8-bit integer
wmx.ucd.invalid_tlv                   Invalid TLV
    Byte array
wmx.ucd.lower_bound_aas_preamble        Lower Bound AAS Preamble (in units of 0.25 dB)
    Signed 8-bit integer
wmx.ucd.max_level_power_offset_adjustm Maximum Level of Power Offset Adjustm
    Signed 8-bit integer
wmx.ucd.max_number_of_retransmission_in_ul_harq Maximum Number of Retransmissio
    Unsigned 8-bit integer
```

```

wmx.ucd.min_level_power_offset_adjustment  Minimum Level of Power Offset Adjustm
Signed 8-bit integer
wmx.ucd.ms_specific_down_power_offset_adjustment_step  MS-specific Down Power Of
Unsigned 8-bit integer
wmx.ucd.ms_specific_up_power_offset_adjustment_step  MS-specific Up Power Offset
Unsigned 8-bit integer
wmx.ucd.normalized_cn.channel_sounding  Normalized C/N for Channel Sounding
Unsigned 8-bit integer
wmx.ucd.normalized_cn.override_2  Normalized C/N Override 2
String
wmx.ucd.normalized_cn.override_first_line  Normalized C/N Value
Unsigned 8-bit integer
wmx.ucd.normalized_cn.override_list  Normalized C/N Value List
String
wmx.ucd.optional_permutation_ul_allocated_subchannels_bitmap  Optional permutati
Byte array
wmx.ucd.periodic_ranging_codes  Periodic Ranging Codes
Unsigned 8-bit integer
wmx.ucd.permutation_base  Permutation Base
Unsigned 8-bit integer
wmx.ucd.ranging_req_size  Ranging Request Opportunity Size
Unsigned 16-bit integer
wmx.ucd.res_timeout  Contention-based Reservation Timeout
Unsigned 8-bit integer
wmx.ucd.safety_channel_release_timer  Safety Channel Release Timer
Unsigned 8-bit integer
wmx.ucd.size_of_cqich_id_field  Size of CQICH_ID Field
Unsigned 8-bit integer
wmx.ucd.start_of_ranging_codes_group  Start of Ranging Codes Group
Unsigned 8-bit integer
wmx.ucd.subchan.bitmap  UL Allocated Subchannels Bitmap
Byte array
wmx.ucd.subchan.codes  Periodic Ranging Codes
Unsigned 8-bit integer
wmx.ucd.subchan.num_chan  Number of Subchannels
Unsigned 8-bit integer
wmx.ucd.subchan.num_sym  Number of OFDMA Symbols
Unsigned 8-bit integer
wmx.ucd.tx_power_report  Tx Power Report
Unsigned 24-bit integer
wmx.ucd.tx_power_report.a_p_avg  A p_avg (in multiples of 1/16)
Unsigned 8-bit integer
wmx.ucd.tx_power_report.a_p_avg_icqch  A p_avg (in multiples of 1/16) when ICQCH
Unsigned 8-bit integer

```

```

wmx.ucd.tx_power_report.interval  Interval (expressed as power of 2)
    Unsigned 8-bit integer
wmx.ucd.tx_power_report.interval_icqch  Interval When ICQCH is Allocated (expressed as power of 2)
    Unsigned 8-bit integer
wmx.ucd.tx_power_report.threshold  Threshold
    Unsigned 8-bit integer
wmx.ucd.tx_power_report.threshold_icqch  Threshold When ICQCH is Allocated to SSB
    Unsigned 8-bit integer
wmx.ucd.unknown_tlv_type  Unknown UCD Type
    Byte array
wmx.ucd.uplink_burst_profile.fast_feedback_region  Fast Feedback Region
    Byte array
wmx.ucd.uplink_burst_profile.harq_ack_region  HARQ ACK Region
    Byte array
wmx.ucd.uplink_burst_profile.multiple_fec_types  Uplink Burst Profile for Multiple FEC
    Unsigned 8-bit integer
wmx.ucd.uplink_burst_profile.ranging_region  Ranging Region
    Byte array
wmx.ucd.uplink_burst_profile.relative_power_offset_ul_burst_mac_mgmt_msg  Relative Power Offset UL Burst MAC Mgmt Msg
    Unsigned 8-bit integer
wmx.ucd.uplink_burst_profile.relative_power_offset_ul_harq_burst  Relative Power Offset UL HARQ Burst
    Unsigned 8-bit integer
wmx.ucd.uplink_burst_profile.sounding_region  Sounding Region
    Byte array
wmx.ucd.uplink_burst_profile.ul_initial_transmit_timing  UL Initial Transmit Timing
    Unsigned 8-bit integer
wmx.ucd.uplink_burst_profile.ul_pusc_subchannel_rotation  Uplink PUSC Subchannel Rotation
    Unsigned 8-bit integer
wmx.ucd.upper_bound_aas_preamble  Upper Bound AAS Preamble (in units of 0.25 dB)
    Signed 8-bit integer
wmx.ucd.use_cqich_indication_flag  Use CQICH Indication Flag
    Unsigned 8-bit integer

```

#### WiMax DLMAP/ULMAP Messages (wmx.map)

```

wmx.compress_dlmap_crc  CRC
    Unsigned 32-bit integer
wmx.dlmap.bsid  Base Station ID
    Byte array
wmx.dlmap.dcd  DCD Count
    Unsigned 8-bit integer
wmx.dlmap.fch_expected  FCH Expected
    Unsigned 16-bit integer
wmx.dlmap.ie  DL-MAP IE
    Unsigned 8-bit integer

```

```
wmx.dlmap.ie.boosting Boosting
    Unsigned 32-bit integer
wmx.dlmap.ie.cid CID
    Unsigned 16-bit integer
wmx.dlmap.ie.diuc DIUC
    Unsigned 8-bit integer
wmx.dlmap.ie.ncid N_CID
    Unsigned 8-bit integer
wmx.dlmap.ie.numsub Number of Subchannels
    Unsigned 32-bit integer
wmx.dlmap.ie.numsym Number of OFDMA Symbols
    Unsigned 32-bit integer
wmx.dlmap.ie.offsub Subchannel Offset
    Unsigned 32-bit integer
wmx.dlmap.ie.offsym OFDMA Symbol Offset
    Unsigned 32-bit integer
wmx.dlmap.ie.rep Repetition Coding Indication
    Unsigned 32-bit integer
wmx.dlmap.ofdma_sym Num OFDMA Symbols
    Unsigned 8-bit integer
wmx.dlmap.phy_fdur Frame Duration Code
    Unsigned 8-bit integer
wmx.dlmap.phy_fnum Frame Number
    Unsigned 24-bit integer
wmx.dlmap.reduced_aas_private.cmi Compressed map indicator
    Unsigned 8-bit integer
wmx.dlmap.reduced_aas_private.mult Multiple IE
    Unsigned 8-bit integer
wmx.dlmap.reduced_aas_private.rsv Reserved
    Unsigned 8-bit integer
wmx.dlmap.reduced_aas_private.type Compressed Map Type
    Unsigned 8-bit integer
wmx.dlmap.reduced_aas_private.ulmap UL-MAP appended
    Unsigned 8-bit integer
wmx.dlmapc.compr Compressed map indicator
    Unsigned 16-bit integer
wmx.dlmapc.count DL IE Count
    Unsigned 8-bit integer
wmx.dlmapc.len Map message length
    Unsigned 16-bit integer
wmx.dlmapc.opid Operator ID
    Unsigned 8-bit integer
wmx.dlmapc.rsv Reserved
    Unsigned 16-bit integer
```

```
wmx.dlmapc.secid  Sector ID
    Unsigned 8-bit integer
wmx.dlmapc.sync  PHY Synchronization Field
    Unsigned 32-bit integer
wmx.dlmapc.ulmap  UL-MAP appended
    Unsigned 16-bit integer
wmx.dlmapc.xie_diuc  Extended DIUC
    Unsigned 8-bit integer
wmx.dlmapc.xie_len  Length
    Unsigned 8-bit integer
wmx.dlul.cmi  SUB-DL-UL-MAP map indicator
    Unsigned 16-bit integer
wmx.dlul.dl  DL HARQ ACK offset
    Unsigned 8-bit integer
wmx.dlul.dlie  DL IE Count
    Unsigned 8-bit integer
wmx.dlul.haoi  HARQ ACK offset indicator
    Unsigned 16-bit integer
wmx.dlul.len  Map message length - The length is limited to 735 bytes at most
    Unsigned 16-bit integer
wmx.dlul.rcid  RCID_Type
    Unsigned 16-bit integer
wmx.dlul.rsv  Reserved
    Unsigned 8-bit integer
wmx.dlul.subofs  Subchannel offset
    Unsigned 8-bit integer
wmx.dlul.symofs  OFDMA Symbol offset of subsequent sub-bursts in this Sub-DL-UL-
    Unsigned 8-bit integer
wmx.dlul.ul  UL HARQ ACK offset
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dlmap  MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.ulmap  MAC Management Message Type
    Unsigned 8-bit integer
wmx.ulmap.fch.expected  FCH Expected
    Unsigned 16-bit integer
wmx.ulmap.ie  UL-MAP IE
    Unsigned 8-bit integer
wmx.ulmap.ie.cid  CID
    Unsigned 32-bit integer
wmx.ulmap.ie.uiuc  UIUC
    Unsigned 8-bit integer
wmx.ulmap.ofdma.sym  Num OFDMA Symbols
    Unsigned 8-bit integer
```



```
wmx.ulmap.rsv    Reserved
                 Unsigned 8-bit integer
wmx.ulmap.start  Uplink Channel ID
                 Unsigned 32-bit integer
wmx.ulmap.ucd    UCD Count
                 Unsigned 8-bit integer
wmx.ulmap.uiuc0.numsub  No. subchannels
                 Unsigned 32-bit integer
wmx.ulmap.uiuc0.numsym  No. OFDMA symbols
                 Unsigned 32-bit integer
wmx.ulmap.uiuc0.rsv    Reserved
                 Unsigned 32-bit integer
wmx.ulmap.uiuc0.subofs  Subchannel offset
                 Unsigned 32-bit integer
wmx.ulmap.uiuc0.symofs  OFDMA symbol offset
                 Unsigned 32-bit integer
wmx.ulmap.uiuc11.data  Data
                 Byte array
wmx.ulmap.uiuc11.ext  Extended 2 UIUC
                 Unsigned 8-bit integer
wmx.ulmap.uiuc11.len  Length
                 Unsigned 8-bit integer
wmx.ulmap.uiuc12.dri  Dedicated ranging indicator
                 Unsigned 32-bit integer
wmx.ulmap.uiuc12.dur  Duration
                 Unsigned 16-bit integer
wmx.ulmap.uiuc12.method  Ranging Method
                 Unsigned 32-bit integer
wmx.ulmap.uiuc12.numsub  No. Subchannels
                 Unsigned 32-bit integer
wmx.ulmap.uiuc12.numsym  No. OFDMA Symbols
                 Unsigned 32-bit integer
wmx.ulmap.uiuc12.rep  Repetition Coding indication
                 Unsigned 16-bit integer
wmx.ulmap.uiuc12.subofs  Subchannel Offset
                 Unsigned 32-bit integer
wmx.ulmap.uiuc12.symofs  OFDMA Symbol Offset
                 Unsigned 32-bit integer
wmx.ulmap.uiuc13.numsub  No. Subchannels/SZ Shift Value
                 Unsigned 32-bit integer
wmx.ulmap.uiuc13.numsym  No. OFDMA symbols
                 Unsigned 32-bit integer
wmx.ulmap.uiuc13.papr  PAPR Reduction/Safety Zone
                 Unsigned 32-bit integer
```

```
wmx.ulmap.uiuc13.rsv  Reserved
    Unsigned 32-bit integer
wmx.ulmap.uiuc13.subofs  Subchannel offset
    Unsigned 32-bit integer
wmx.ulmap.uiuc13.symofs  OFDMA symbol offset
    Unsigned 32-bit integer
wmx.ulmap.uiuc13.zone  Sounding Zone
    Unsigned 32-bit integer
wmx.ulmap.uiuc14.bwr  BW request mandatory
    Unsigned 8-bit integer
wmx.ulmap.uiuc14.code  Ranging code
    Unsigned 8-bit integer
wmx.ulmap.uiuc14.dur  Duration
    Unsigned 16-bit integer
wmx.ulmap.uiuc14.idx  Frame Number Index
    Unsigned 16-bit integer
wmx.ulmap.uiuc14.rep  Repetition Coding Indication
    Unsigned 16-bit integer
wmx.ulmap.uiuc14.sub  Ranging subchannel
    Unsigned 8-bit integer
wmx.ulmap.uiuc14.sym  Ranging symbol
    Unsigned 8-bit integer
wmx.ulmap.uiuc14.uiuc  UIUC
    Unsigned 16-bit integer
wmx.ulmap.uiuc15.data  Data
    Byte array
wmx.ulmap.uiuc15.ext  Extended UIUC
    Unsigned 8-bit integer
wmx.ulmap.uiuc15.len  Length
    Unsigned 8-bit integer
```

#### **WiMax DREG-REQ/CMD Messages (wmx.dreg)**

```
wmx.ack_type_reserved  Reserved
    Unsigned 8-bit integer
wmx.dreg.consider_paging_preference  Consider Paging Preference of each Service
    Unsigned 8-bit integer
wmx.dreg.invalid_tlv  Invalid TLV
    Byte array
wmx.dreg.mac_hash_skip_threshold  MAC Hash Skip Threshold
    Unsigned 16-bit integer
wmx.dreg.paging_controller_id  Paging Controller ID
    6-byte Hardware (MAC) Address
wmx.dreg.paging_cycle  PAGING CYCLE
    Unsigned 16-bit integer
```

wmx.dreg.paging\_cycle\_request Paging Cycle Request  
Unsigned 16-bit integer

wmx.dreg.paging\_group\_id Paging-group-ID  
Unsigned 16-bit integer

wmx.dreg.paging\_offset PAGING OFFSET  
Unsigned 8-bit integer

wmx.dreg.req\_duration REQ-duration (Waiting value for the DREG-REQ message re-t  
Unsigned 8-bit integer

wmx.dreg.retain\_ms\_full\_service Retain MS service and operation information ass  
Unsigned 8-bit integer

wmx.dreg.retain\_ms\_service\_network\_address Retain MS service and operational in  
Unsigned 8-bit integer

wmx.dreg.retain\_ms\_service\_pkm Retain MS service and operational information as  
Unsigned 8-bit integer

wmx.dreg.retain\_ms\_service\_reg Retain MS service and operational information as  
Unsigned 8-bit integer

wmx.dreg.retain\_ms\_service\_sbc Retain MS service and operational information as  
Unsigned 8-bit integer

wmx.dreg.retain\_ms\_service\_tftp Retain MS service and operational information a  
Unsigned 8-bit integer

wmx.dreg.retain\_ms\_service\_tod Retain MS service and operational information as  
Unsigned 8-bit integer

wmx.dreg.unknown\_tlv\_value Value  
Byte array

wmx.dreg\_cmd.action DREG-CMD Action code  
Unsigned 8-bit integer

wmx.dreg\_cmd.action\_reserved Reserved  
Unsigned 8-bit integer

wmx.dreg\_req.action DREG-REQ Action code  
Unsigned 8-bit integer

wmx.dreg\_req.action\_reserved Reserved  
Unsigned 8-bit integer

wmx.macmgmtmsgtype.dreg\_cmd MAC Management Message Type  
Unsigned 8-bit integer

wmx.macmgmtmsgtype.dreg\_req MAC Management Message Type  
Unsigned 8-bit integer

**WiMax DSA/C/D Messages (wmx.ds)**

wmx.dsa.confirmation\_code Confirmation code  
Unsigned 8-bit integer

wmx.dsa.transaction\_id Transaction ID  
Unsigned 16-bit integer

wmx.dsc.confirmation\_code Confirmation code  
Unsigned 8-bit integer

```
wmx.dsc.transaction_id Transaction ID
    Unsigned 16-bit integer
wmx.dsd.confirmation_code Confirmation code
    Unsigned 8-bit integer
wmx.dsd.service_flow_id Service Flow ID
    Unsigned 32-bit integer
wmx.dsd.transaction_id Transaction ID
    Unsigned 16-bit integer
wmx.macmgmtmsgtype.dsa_ack MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dsa_req MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dsa_rsp MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dsc_ack MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dsc_req MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dsc_rsp MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dsd_req MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.dsd_rsp MAC Management Message Type
    Byte array
```

#### **WiMax DSX-RVD Message (wmx.dsx)**

```
wmx.dsx_rvd.confirmation_code Confirmation code
    Unsigned 8-bit integer
wmx.dsx_rvd.transaction_id Transaction ID
    Unsigned 16-bit integer
wmx.macmgmtmsgtype.dsx_rvd MAC Management Message Type
    Unsigned 8-bit integer
```

#### **WiMax FPC Message (wmx.fpc)**

```
wmx.fpc.basic_cid Basic CID
    Unsigned 16-bit integer
wmx.fpc.invalid_tlv Invalid TLV
    Byte array
wmx.fpc.number_stations Number of stations
    Unsigned 8-bit integer
wmx.fpc.power_adjust Power Adjust. Signed change in power level (incr of 0.25d
wmx.fpc.power_measurement_frame Power measurement frame. The 8 LSB of the fram
    Signed 8-bit integer
wmx.macmgmtmsgtype.fpc MAC Management Message Type
    Unsigned 8-bit integer
```

**WiMax Generic/Type1/Type2 MAC Header Messages (wmx.hdr)**

```
wimax.genericGrantSubhd.Default  Scheduling Service Type (Default)
    Unsigned 16-bit integer
wimax.genericGrantSubhd.ExtendedRTPS  Scheduling Service Type (Extended rtPS)
    Unsigned 16-bit integer
wmx.genericArq.FbIeAckType  ACK Type
    Unsigned 16-bit integer
wmx.genericArq.FbIeBsn  BSN
    Unsigned 16-bit integer
wmx.genericArq.FbIeCid  CID
    Unsigned 16-bit integer
wmx.genericArq.FbIeLast  Last IE
    Unsigned 16-bit integer
wmx.genericArq.FbIeMaps  Number of ACK Maps
    Unsigned 16-bit integer
wmx.genericArq.FbIeRsv  Reserved
    Unsigned 16-bit integer
wmx.genericArq.FbIeRsvd  Reserved
    Unsigned 16-bit integer
wmx.genericArq.FbIeSelAckMap  Selective ACK Map
    Unsigned 16-bit integer
wmx.genericArq.FbIeSeq1Len  Sequence 1 Length
    Unsigned 16-bit integer
wmx.genericArq.FbIeSeq2Len  Sequence 2 Length
    Unsigned 16-bit integer
wmx.genericArq.FbIeSeq3Len  Sequence 3 Length
    Unsigned 16-bit integer
wmx.genericArq.FbIeSeqAckMap  Sequence ACK Map
    Unsigned 16-bit integer
wmx.genericArq.FbIeSeqAckMap2  Sequence ACK Map
    Unsigned 16-bit integer
wmx.genericArq.FbIeSeqFmt  Sequence Format
    Unsigned 16-bit integer
wmx.genericCi  CRC Indicator
    Unsigned 24-bit integer
wmx.genericCid  Connection ID
    Unsigned 16-bit integer
wmx.genericCrc  CRC
    Unsigned 32-bit integer
wmx.genericEc  MAC Encryption Control
    Unsigned 24-bit integer
wmx.genericEks  Encryption Key Sequence
    Unsigned 24-bit integer
wmx.genericEsf  Extended Sub-header Field
    Unsigned 24-bit integer
```

```
wmx.genericExtSubhd.Dl DL Extended Subheader Type
    Unsigned 8-bit integer
wmx.genericExtSubhd.DlSleepCtrlFSWB Final Sleep Window Base
    Unsigned 24-bit integer
wmx.genericExtSubhd.DlSleepCtrlFSWE Final Sleep Window Exponent
    Unsigned 24-bit integer
wmx.genericExtSubhd.DlSleepCtrlOP Operation
    Unsigned 24-bit integer
wmx.genericExtSubhd.DlSleepCtrlPSCID Power Saving Class ID
    Unsigned 24-bit integer
wmx.genericExtSubhd.DlSleepCtrlRsv Reserved
    Unsigned 24-bit integer
wmx.genericExtSubhd.FbReqFbType Feedback Type
    Unsigned 24-bit integer
wmx.genericExtSubhd.FbReqFrameOffset Frame Offset
    Unsigned 24-bit integer
wmx.genericExtSubhd.FbReqOfdmaSymbolOffset OFDMA Symbol Offset
    Unsigned 24-bit integer
wmx.genericExtSubhd.FbReqSlots Number of Slots
    Unsigned 24-bit integer
wmx.genericExtSubhd.FbReqSubchannelOffset Subchannel Offset
    Unsigned 24-bit integer
wmx.genericExtSubhd.FbReqUIUC UIUC
    Unsigned 24-bit integer
wmx.genericExtSubhd.MimoFbContent Feedback Content
    Unsigned 8-bit integer
wmx.genericExtSubhd.MimoFbType Feedback Type
    Unsigned 8-bit integer
wmx.genericExtSubhd.MiniFbContent Feedback Content
    Unsigned 16-bit integer
wmx.genericExtSubhd.MiniFbType Feedback Type
    Unsigned 16-bit integer
wmx.genericExtSubhd.PduSnLong PDU Sequence Number
    Unsigned 16-bit integer
wmx.genericExtSubhd.PduSnShort PDU Sequence Number
    Unsigned 8-bit integer
wmx.genericExtSubhd.Rsv Reserved
    Unsigned 8-bit integer
wmx.genericExtSubhd.SduSn SDU Sequence Number
    Unsigned 8-bit integer
wmx.genericExtSubhd.SnReqRepInd1 First SN Report Indication
    Unsigned 8-bit integer
wmx.genericExtSubhd.SnReqRepInd2 Second SN Report Indication
    Unsigned 8-bit integer
```

```
wmx.genericExtSubhd.SnReqRsv  Reserved
    Unsigned 8-bit integer
wmx.genericExtSubhd.Ul  UL Extended Subheader Type
    Unsigned 8-bit integer
wmx.genericExtSubhd.UlTxPwr  UL TX Power
    Unsigned 8-bit integer
wmx.genericFastFbSubhd.AllocOffset  Allocation Offset
    Unsigned 8-bit integer
wmx.genericFastFbSubhd.FbType  Feedback Type
    Unsigned 8-bit integer
wmx.genericFragSubhd.Bsn  Block Sequence Number (BSN)
    Unsigned 16-bit integer
wmx.genericFragSubhd.Fc  Fragment Type
    Unsigned 8-bit integer
wmx.genericFragSubhd.FcExt  Fragment Type
    Unsigned 16-bit integer
wmx.genericFragSubhd.Fsn  Fragment Sequence Number (FSN)
    Unsigned 8-bit integer
wmx.genericFragSubhd.FsnExt  Fragment Sequence Number (FSN)
    Unsigned 16-bit integer
wmx.genericFragSubhd.Rsv  Reserved
    Unsigned 8-bit integer
wmx.genericFragSubhd.RsvExt  Reserved
    Unsigned 16-bit integer
wmx.genericGrantSubhd.ExtFl  Frame Latency
    Unsigned 16-bit integer
wmx.genericGrantSubhd.ExtFli  Frame Latency Indication
    Unsigned 16-bit integer
wmx.genericGrantSubhd.ExtPbr  Extended PiggyBack Request
    Unsigned 16-bit integer
wmx.genericGrantSubhd.Fl  Frame Latency
    Unsigned 16-bit integer
wmx.genericGrantSubhd.Fli  Frame Latency Indication
    Unsigned 16-bit integer
wmx.genericGrantSubhd.Pbr  PiggyBack Request
    Unsigned 16-bit integer
wmx.genericGrantSubhd.Pm  Poll-Me
    Unsigned 16-bit integer
wmx.genericGrantSubhd.Rsv  Reserved
    Unsigned 16-bit integer
wmx.genericGrantSubhd.Si  Slip Indicator
    Unsigned 16-bit integer
wmx.genericGrantSubhd.UGS  Scheduling Service Type (UGS)
    Unsigned 16-bit integer
```

```
wmx.genericHcs  Header Check Sequence
    Unsigned 8-bit integer
wmx.genericHt   MAC Header Type
    Unsigned 24-bit integer
wmx.genericLen  Length
    Unsigned 24-bit integer
wmx.genericMeshSubhd  Xmt Node Id
    Unsigned 16-bit integer
wmx.genericPackSubhd.Bsn  First Block Sequence Number
    Unsigned 24-bit integer
wmx.genericPackSubhd.Fc  Fragment Type
    Unsigned 16-bit integer
wmx.genericPackSubhd.FcExt  Fragment Type
    Unsigned 24-bit integer
wmx.genericPackSubhd.Fsn  Fragment Number
    Unsigned 16-bit integer
wmx.genericPackSubhd.FsnExt  Fragment Number
    Unsigned 24-bit integer
wmx.genericPackSubhd.Len  Length
    Unsigned 16-bit integer
wmx.genericPackSubhd.LenExt  Length
    Unsigned 24-bit integer
wmx.genericRsv  Reserved
    Unsigned 24-bit integer
wmx.genericType0  MAC Sub-type Bit 0
    Unsigned 24-bit integer
wmx.genericType1  MAC Sub-type Bit 1
    Unsigned 24-bit integer
wmx.genericType2  MAC Sub-type Bit 2
    Unsigned 24-bit integer
wmx.genericType3  MAC Sub-type Bit 3
    Unsigned 24-bit integer
wmx.genericType4  MAC Sub-type Bit 4
    Unsigned 24-bit integer
wmx.genericType5  MAC Sub-type Bit 5
    Unsigned 24-bit integer
wmx.genericValueBytes  Values
    Byte array
wmx.type1Br  Bandwidth Request
    Unsigned 24-bit integer
wmx.type1Br3  Bandwidth Request
    Unsigned 24-bit integer
wmx.type1Cid  Connection ID
    Unsigned 16-bit integer
```



```
wmx.type1Cinr  CINR Value
    Unsigned 24-bit integer
wmx.type1Dci   DCD Change Indication
    Unsigned 24-bit integer
wmx.type1Diuc  Preferred DIUC Index
    Unsigned 24-bit integer
wmx.type1Ec    MAC Encryption Control
    Unsigned 24-bit integer
wmx.type1FbType Feedback Type
    Unsigned 24-bit integer
wmx.type1Fbssi FBSS Indicator
    Unsigned 24-bit integer
wmx.type1Hcs   Header Check Sequence
    Unsigned 8-bit integer
wmx.type1HdRm  Headroom to UL Max Power Level
    Unsigned 24-bit integer
wmx.type1Ht    MAC Header Type
    Unsigned 24-bit integer
wmx.type1Last  Last ARQ BSN or SDU SN
    Unsigned 24-bit integer
wmx.type1Op    Operation
    Unsigned 24-bit integer
wmx.type1Period Preferred CQICH Allocation Period
    Unsigned 24-bit integer
wmx.type1PsCid Power Saving Class ID
    Unsigned 24-bit integer
wmx.type1Rsv2  Reserved
    Unsigned 24-bit integer
wmx.type1Rsv5  Reserved
    Unsigned 24-bit integer
wmx.type1Rsv7  Reserved
    Unsigned 24-bit integer
wmx.type1SduSn1 ARQ BSN or MAC SDU SN (1)
    Unsigned 24-bit integer
wmx.type1SduSn2 ARQ BSN or MAC SDU SN (2)
    Unsigned 24-bit integer
wmx.type1SduSn3 ARQ BSN or MAC SDU SN (3)
    Unsigned 24-bit integer
wmx.type1Type  MAC Sub-Type
    Unsigned 24-bit integer
wmx.type1ULTxPwr UL TX Power
    Unsigned 24-bit integer
wmx.type1ULTxPwr3 UL TX Power
    Unsigned 24-bit integer
```

```
wmx.type1ValueBytes  Values
    Byte array
wmx.type2AmcBitmap  AMC Band Indication Bitmap
    Unsigned 32-bit integer
wmx.type2AmcCqi1  CQI 1
    Unsigned 32-bit integer
wmx.type2AmcCqi2  CQI 2
    Unsigned 32-bit integer
wmx.type2AmcCqi3  CQI 3
    Unsigned 32-bit integer
wmx.type2AmcCqi4  CQI 4
    Unsigned 32-bit integer
wmx.type2Cid  Connection ID
    Unsigned 16-bit integer
wmx.type2Cii  CID Inclusion Indication
    Unsigned 8-bit integer
wmx.type2CinrDevi  CINR Standard Deviation
    Unsigned 8-bit integer
wmx.type2CinrMean  CINR Mean
    Unsigned 8-bit integer
wmx.type2ClMimoAntId  Antenna Grouping Index
    Unsigned 16-bit integer
wmx.type2ClMimoAntSel  Antenna Selection Option Index
    Unsigned 16-bit integer
wmx.type2ClMimoCodeBkId  Codebook Index
    Unsigned 16-bit integer
wmx.type2ClMimoCqi  Average CQI
    Unsigned 16-bit integer
wmx.type2ClMimoRsv  Reserved
    Unsigned 16-bit integer
wmx.type2ClMimoStreams  Number of Streams
    Unsigned 16-bit integer
wmx.type2ClMimoType  Closed-Loop MIMO Type
    Unsigned 16-bit integer
wmx.type2CombDlAve  Combined DL Average CINR of Active BSS
    Unsigned 16-bit integer
wmx.type2CombDlRsv  Reserved
    Unsigned 16-bit integer
wmx.type2DlAveCinr  DL Average CINR
    Unsigned 16-bit integer
wmx.type2DlAveRsv  Reserved
    Unsigned 16-bit integer
wmx.type2DlChanDcd  DCD Change Count
    Unsigned 16-bit integer
```

```
wmx.type2DlChanDiuc Preferred DIUC
    Unsigned 16-bit integer
wmx.type2DlChanRsv Reserved
    Unsigned 16-bit integer
wmx.type2Ec MAC Encryption Control
    Unsigned 8-bit integer
wmx.type2FbType Feedback Type
    Unsigned 8-bit integer
wmx.type2Hcs Header Check Sequence
    Unsigned 8-bit integer
wmx.type2Ht MAC Header Type
    Unsigned 8-bit integer
wmx.type2LifeSpan Life Span of Short-term
    Unsigned 16-bit integer
wmx.type2LifeSpanRsv Reserved
    Unsigned 16-bit integer
wmx.type2LtFbId Long-term Feedback Index
    Unsigned 16-bit integer
wmx.type2LtFecQam FEC and QAM
    Unsigned 16-bit integer
wmx.type2LtRank Rank of Precoding Codebook
    Unsigned 16-bit integer
wmx.type2MimoAi Antenna 0 Indication
    Unsigned 24-bit integer
wmx.type2MimoBpri Burst Profile Ranking Indicator without CID
    Unsigned 24-bit integer
wmx.type2MimoBpriCid Burst Profile Ranking Indicator with CID
    Unsigned 24-bit integer
wmx.type2MimoCid Connection ID
    Unsigned 24-bit integer
wmx.type2MimoCoef MIMO Coefficients
    Unsigned 16-bit integer
wmx.type2MimoCoefAi Occurences of Antenna Index
    Unsigned 16-bit integer
wmx.type2MimoCoefNi Number of Index
    Unsigned 16-bit integer
wmx.type2MimoCoefRsv Reserved
    Unsigned 16-bit integer
wmx.type2MimoCqi CQI Feedback
    Unsigned 24-bit integer
wmx.type2MimoCt CQI Type
    Unsigned 24-bit integer
wmx.type2MimoCti Coherent Time Index
    Unsigned 24-bit integer
```

```
wmx.type2MimoDiuc Preferred DIUC Index
    Unsigned 8-bit integer
wmx.type2MimoFbPayload CQI and Mimo Feedback Payload
    Unsigned 16-bit integer
wmx.type2MimoFbRsv Reserved
    Unsigned 16-bit integer
wmx.type2MimoFbType Mimo Feedback Type
    Unsigned 16-bit integer
wmx.type2MimoMi MS Matrix Indicator
    Unsigned 24-bit integer
wmx.type2MimoPbwi Preferred Bandwidth Index
    Unsigned 8-bit integer
wmx.type2MimoSlpb Starting Location of Preferred Bandwidth
    Unsigned 24-bit integer
wmx.type2MtNumFbTypes Number of Feedback Types
    Unsigned 32-bit integer
wmx.type2MtOccuFbType Occurrences of Feedback Type
    Unsigned 32-bit integer
wmx.type2NoCid Reserved
    Unsigned 16-bit integer
wmx.type2PhyDiuc Preferred DIUC Index
    Unsigned 24-bit integer
wmx.type2PhyHdRm UL Headroom
    Unsigned 24-bit integer
wmx.type2PhyRsv Reserved
    Unsigned 24-bit integer
wmx.type2PhyULTxPwr UL TX Power
    Unsigned 24-bit integer
wmx.type2Type MAC Sub-Type
    Unsigned 8-bit integer
wmx.type2UlTxPwr UL TX Power
    Unsigned 16-bit integer
wmx.type2UlTxPwrRsv Reserved
    Unsigned 16-bit integer
wmx.type2ValueBytes Values
    Byte array
```

**WiMax Mac to Mac Packet (m2m)**

```
m2m.burst_cinr_tlv_value Value
    Unsigned 16-bit integer
m2m.burst_num_tlv_value Value
    Unsigned 8-bit integer
m2m.burst_power_tlv_value Value
    Unsigned 16-bit integer
```

```
m2m.cdma_code_tlv_value  Value
    Unsigned 24-bit integer
m2m.crc16_status_tlv_value  Value
    Unsigned 8-bit integer
m2m.fast_fb_tlv_value  Value (hex)
    Byte array
m2m.fch_burst_tlv_value  Value
    Byte array
m2m.frag_num_tlv_value  Value
    Unsigned 8-bit integer
m2m.frag_type_tlv_value  Value
    Unsigned 8-bit integer
m2m.frame_number  Value
    Unsigned 24-bit integer
m2m.harq_ack_burst_tlv_value  Value (hex)
    Byte array
m2m.invalid_tlv  Invalid TLV (hex)
    Byte array
m2m.multibyte_tlv_value  Value (hex)
    Byte array
m2m.pdu_burst_tlv_value  Value (hex)
    Byte array
m2m.phy_attributes  Value (hex)
    Byte array
m2m.preamble_tlv_value  Value
    Unsigned 16-bit integer
m2m.protocol_vers_tlv_value  Value
    Unsigned 8-bit integer
m2m.seq_number  Packet Sequence Number
    Unsigned 16-bit integer
m2m.tlv_count  Number of TLVs in the packet
    Unsigned 16-bit integer
m2m.tlv_len  Length
    Unsigned 8-bit integer
m2m.tlv_len_size  Length Size
    Unsigned 8-bit integer
m2m.tlv_type  Type
    Unsigned 8-bit integer
```

**WiMax PKM-REQ/RSP Messages (wmx.pkm)**

```
wmx.macmgmtmsgtype.pkm_req  MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.pkm_rsp  MAC Management Message Type
    Unsigned 8-bit integer
```

wmx.pkm.msg\_code Code  
Unsigned 8-bit integer

wmx.pkm.msg\_pkm\_identifier PKM Identifier  
Unsigned 8-bit integer

#### WiMax PMC-REQ/RSP Messages (wmx.pmc)

wmx.macmgmtmsgtype.pmc\_req MAC Management Message Type  
Unsigned 8-bit integer

wmx.macmgmtmsgtype.pmc\_rsp MAC Management Message Type  
Unsigned 8-bit integer

wmx.pmc\_req.confirmation Confirmation  
Unsigned 16-bit integer

wmx.pmc\_req.power\_control\_mode Power control mode change  
Unsigned 16-bit integer

wmx.pmc\_req.reserved Reserved  
Unsigned 16-bit integer

wmx.pmc\_req.ul\_tx\_power\_level UL Tx power level for the burst that carries this  
Unsigned 16-bit integer

wmx.pmc\_rsp.offset\_BS\_per\_MS Offset\_BS per MS. Signed change in power level (i  
wmx.pmc\_rsp.power\_adjust Power adjust. Signed change in power level (incr of 0  
wmx.pmc\_rsp.start\_frame Start frame. Apply mode change from current frame when  
Unsigned 16-bit integer

#### WiMax PRC-LT-CTRL Message (wmx.prc)

wimax.prc\_lt\_ctrl.precoding Setup/Tear-down long-term precoding with feedback  
Unsigned 8-bit integer

wimax.prc\_lt\_ctrl.precoding\_delay BS precoding application delay  
Unsigned 8-bit integer

wmx.macmgmtmsgtype.prc\_lt\_ctrl MAC Management Message Type  
Unsigned 8-bit integer

wmx.prc\_lt\_ctrl.invalid\_tlv Invalid TLV  
Byte array

#### WiMax Protocol (wmx)

wmx.cdma.ranging\_code Ranging Code  
Unsigned 8-bit integer

wmx.cdma.ranging\_subchannel\_offset Ranging Sub-Channel Offset  
Unsigned 8-bit integer

wmx.cdma.ranging\_symbol\_offset Ranging Symbol Offset  
Unsigned 8-bit integer

wmx.cdma\_allocation.allocation\_repetition Repetition Coding Indication  
Unsigned 16-bit integer

wmx.cdma\_allocation.bw\_req BW Request Mandatory  
Unsigned 8-bit integer

wmx.cdma\_allocation.duration Duration  
Unsigned 16-bit integer

```
wmx.cdma_allocation.frame_number_index  Frame Number Index (LSBs of relevant fra
    Unsigned 16-bit integer
wmx.cdma_allocation.ranging_code  Ranging Code
    Unsigned 8-bit integer
wmx.cdma_allocation.ranging_subchannel  Ranging Subchannel
    Unsigned 8-bit integer
wmx.cdma_allocation.ranging_symbol  Ranging Symbol
    Unsigned 8-bit integer
wmx.cdma_allocation.uiuc  UIUC For Transmission
    Unsigned 16-bit integer
wmx.compact_dlmap.allocation_mode  Allocation Mode
    Unsigned 8-bit integer
wmx.compact_dlmap.allocation_mode_rsvd  Reserved
    Unsigned 8-bit integer
wmx.compact_dlmap.band_index  Band Index
    Byte array
wmx.compact_dlmap.bin_offset  BIN Offset
    Unsigned 8-bit integer
wmx.compact_dlmap.bit_map  BIT MAP
    Byte array
wmx.compact_dlmap.bit_map_length  BIT MAP Length
    Unsigned 8-bit integer
wmx.compact_dlmap.companded_sc  Companded SC
    Unsigned 8-bit integer
wmx.compact_dlmap.diuc  DIUC
    Unsigned 8-bit integer
wmx.compact_dlmap.diuc_num_of_subchannels  Number Of Subchannels
    Unsigned 8-bit integer
wmx.compact_dlmap.diuc_repetition_coding_indication  Repetition Coding Indicatio
    Unsigned 8-bit integer
wmx.compact_dlmap.diuc_reserved  Reserved
    Unsigned 8-bit integer
wmx.compact_dlmap.dl_map_type  DL-MAP Type
    Unsigned 8-bit integer
wmx.compact_dlmap.nb_bitmap  Number Of Bits For Band BITMAP
    Unsigned 8-bit integer
wmx.compact_dlmap.nep_code  Nep Code
    Unsigned 8-bit integer
wmx.compact_dlmap.nsch_code  Nsch Code
    Unsigned 8-bit integer
wmx.compact_dlmap.num_bands  Number Of Bands
    Unsigned 8-bit integer
wmx.compact_dlmap.num_subchannels  Number Of Subchannels
    Unsigned 8-bit integer
```

```
wmx.compact_dlmap.reserved    Reserved
    Unsigned 8-bit integer
wmx.compact_dlmap.reserved_type  DL-MAP Reserved Type
    Unsigned 8-bit integer
wmx.compact_dlmap.shortened_diuc  Shortened DIUC
    Unsigned 8-bit integer
wmx.compact_dlmap.shortened_uiuc  Shortened UIUC
    Unsigned 8-bit integer
wmx.compact_dlmap.ul_map_append  UL-MAP Append
    Unsigned 8-bit integer
wmx.compact_ulmap.allocation_mode  Allocation Mode
    Unsigned 8-bit integer
wmx.compact_ulmap.allocation_mode_rsvd  Reserved
    Unsigned 8-bit integer
wmx.compact_ulmap.band_index  Band Index
    Byte array
wmx.compact_ulmap.bin_offset  BIN Offset
    Unsigned 8-bit integer
wmx.compact_ulmap.companded_sc  Companded SC
    Unsigned 8-bit integer
wmx.compact_ulmap.cqi_region_change_indication  CQI Region Change Indication
    Boolean
wmx.compact_ulmap.harq_region_change_indication  HARQ Region Change Indication
    Boolean
wmx.compact_ulmap.nb_bitmap  Number Of Bits For Band BITMAP
    Unsigned 8-bit integer
wmx.compact_ulmap.nep_code  Nep Code
    Unsigned 8-bit integer
wmx.compact_ulmap.nsch_code  Nsch Code
    Unsigned 8-bit integer
wmx.compact_ulmap.num_bands  Number Of Bands
    Unsigned 8-bit integer
wmx.compact_ulmap.num_subchannels  Number Of Subchannels
    Unsigned 8-bit integer
wmx.compact_ulmap.reserved  Reserved
    Unsigned 8-bit integer
wmx.compact_ulmap.reserved_type  UL-MAP Reserved Type
    Unsigned 8-bit integer
wmx.compact_ulmap.shortened_uiuc  Shortened UIUC
    Unsigned 8-bit integer
wmx.compact_ulmap.uiuc  UIUC
    Unsigned 8-bit integer
wmx.compact_ulmap.uiuc_num_of_ofdma_symbols  Number Of OFDMA Symbols
    Unsigned 24-bit integer
```



```

wmx.compact_ulmap.uiuc_num_of_subchannels  Number Of Subchannels
    Unsigned 24-bit integer
wmx.compact_ulmap.uiuc_ofdma_symbol_offset  OFDMA Symbol Offset
    Unsigned 8-bit integer
wmx.compact_ulmap.uiuc_ranging_method      Ranging Method
    Unsigned 24-bit integer
wmx.compact_ulmap.uiuc_repetition_coding_indication  Repetition Coding Indication
    Unsigned 8-bit integer
wmx.compact_ulmap.uiuc_reserved            Reserved
    Unsigned 24-bit integer
wmx.compact_ulmap.uiuc_reserved1          Reserved
    Unsigned 8-bit integer
wmx.compact_ulmap.uiuc_subchannel_offset   Subchannel Offset
    Unsigned 24-bit integer
wmx.compact_ulmap.ul_map_type              UL-MAP Type
    Unsigned 8-bit integer
wmx.extended_diuc_dependent_ie.aas_dl      AAS_DL_IE (not implemented)
    Byte array
wmx.extended_diuc_dependent_ie.channel_measurement  Channel_Measurement_IE (not
    Byte array
wmx.extended_diuc_dependent_ie.cid_switch  CID_Switch_IE (not implemented)
    Byte array
wmx.extended_diuc_dependent_ie.data_location  Data_location_in_another_BS_IE (not
    Byte array
wmx.extended_diuc_dependent_ie.diuc        Extended DIUC
    Unsigned 8-bit integer
wmx.extended_diuc_dependent_ie.dl_pusc_burst_allocation  DL_PUSC_Burst_Allocation
    Byte array
wmx.extended_diuc_dependent_ie.harq_map_pointer  HARQ_Map_Pointer_IE (not implemented)
    Byte array
wmx.extended_diuc_dependent_ie.length      Length
    Unsigned 8-bit integer
wmx.extended_diuc_dependent_ie.mimo_dl_basic  MIMO_DL_Basic_IE (not implemented)
    Byte array
wmx.extended_diuc_dependent_ie.mimo_dl_enhanced  MIMO_DL_Enhanced_IE (not implemented)
    Byte array
wmx.extended_diuc_dependent_ie.phymod_dl    PHYMOD_DL_IE (not implemented)
    Byte array
wmx.extended_diuc_dependent_ie.stc_zone     STC_Zone_IE (not implemented)
    Byte array
wmx.extended_diuc_dependent_ie.ul_interference_and_noise_level  UL_interference_and_noise_level
    Byte array
wmx.extended_diuc_dependent_ie.unknown_diuc  Unknown Extended DIUC
    Byte array

```

```
wmx.extended_uiuc.unknown_uiuc   Unknown Extended UIUC
    Byte array
wmx.extended_uiuc_ie.aas_ul     AAS_UL_IE (not implemented)
    Byte array
wmx.extended_uiuc_ie.cqich_alloc CQICH Allocation IE (not implemented)
    Byte array
wmx.extended_uiuc_ie.fast_ranging Fast Ranging IE (not implemented)
    Byte array
wmx.extended_uiuc_ie.fast_tracking UL-MAP Fast Tracking IE (not implemented)
    Byte array
wmx.extended_uiuc_ie.length     Length
    Unsigned 8-bit integer
wmx.extended_uiuc_ie.mimo_ul_basic MIMO UL Basic IE (not implemented)
    Byte array
wmx.extended_uiuc_ie.mini_subchannel_alloc.cid CID
    Unsigned 24-bit integer
wmx.extended_uiuc_ie.mini_subchannel_alloc.ctype C Type
    Unsigned 8-bit integer
wmx.extended_uiuc_ie.mini_subchannel_alloc.duration Duration
    Unsigned 8-bit integer
wmx.extended_uiuc_ie.mini_subchannel_alloc.padding Padding
    Unsigned 8-bit integer
wmx.extended_uiuc_ie.mini_subchannel_alloc.repetition Repetition
    Unsigned 24-bit integer
wmx.extended_uiuc_ie.mini_subchannel_alloc.uiuc UIUC
    Unsigned 24-bit integer
wmx.extended_uiuc_ie.phymod_ul   UL-MAP Physical Modifier IE (not implemented)
    Byte array
wmx.extended_uiuc_ie.power_control Power Control
    Unsigned 8-bit integer
wmx.extended_uiuc_ie.power_measurement_frame Power Measurement Frame
    Unsigned 8-bit integer
wmx.extended_uiuc_ie.uiuc       Extended UIUC
    Unsigned 8-bit integer
wmx.extended_uiuc_ie.ul_allocation_start UL Allocation Start IE (not implemented)
    Byte array
wmx.extended_uiuc_ie.ul_pusc_burst_allocation UL_PUSC_Burst_Allocation_in_Other
    Byte array
wmx.extended_uiuc_ie.ul_zone     UL Zone IE (not implemented)
    Byte array
wmx.extension_type.dl_map_type   DL-MAP Type
    Unsigned 16-bit integer
wmx.extension_type.harq_mode     HARQ Mode Switch
    Unsigned 16-bit integer
```

```
wmx.extension_type.length  Extension Length
    Unsigned 16-bit integer
wmx.extension_type.subtype  Extension Subtype
    Unsigned 16-bit integer
wmx.extension_type.time_diversity_mbs  Time Diversity MBS
    Byte array
wmx.extension_type.ul_map_type  UL-MAP Type
    Unsigned 16-bit integer
wmx.extension_type.unknown_sub_type  Unknown Extension Subtype
    Byte array
wmx.fch.coding_indication  Coding Indication
    Unsigned 24-bit integer
wmx.fch.dl_map_length  DL Map Length
    Unsigned 24-bit integer
wmx.fch.repetition_coding_indication  Repetition Coding Indication
    Unsigned 24-bit integer
wmx.fch.reserved1  Reserved
    Unsigned 24-bit integer
wmx.fch.reserved2  Reserved
    Unsigned 24-bit integer
wmx.fch.subchannel_group0  Sub-Channel Group 0
    Unsigned 24-bit integer
wmx.fch.subchannel_group1  Sub-Channel Group 1
    Unsigned 24-bit integer
wmx.fch.subchannel_group2  Sub-Channel Group 2
    Unsigned 24-bit integer
wmx.fch.subchannel_group3  Sub-Channel Group 3
    Unsigned 24-bit integer
wmx.fch.subchannel_group4  Sub-Channel Group 4
    Unsigned 24-bit integer
wmx.fch.subchannel_group5  Sub-Channel Group 5
    Unsigned 24-bit integer
wmx.ffb.burst  Fast Feedback Burst
    Byte array
wmx.ffb.ffb_type  Fast Feedback Type
    Unsigned 8-bit integer
wmx.ffb.ffb_value  Fast Feedback Value
    Unsigned 8-bit integer
wmx.ffb.num_of_ffbs  Number Of Fast Feedback
    Unsigned 8-bit integer
wmx.ffb.subchannel  Physical Subchannel
    Unsigned 8-bit integer
wmx.ffb.symbol_offset  Symbol Offset
    Unsigned 8-bit integer
```

```
wmx.format_config_ie.dl_map_type  DL-MAP Type
    Unsigned 8-bit integer
wmx.format_config_ie.new_format_indication  New Format Indication
    Boolean
wmx.hack.burst  HARQ ACK Burst
    Byte array
wmx.hack.hack_value  ACK Value
    Unsigned 8-bit integer
wmx.hack.half_slot_flag  Half-Slot Flag
    Unsigned 8-bit integer
wmx.hack.num_of_hacks  Number Of HARQ ACKs/NACKs
    Unsigned 8-bit integer
wmx.hack.subchannel  Physical Subchannel
    Unsigned 8-bit integer
wmx.hack.symbol_offset  Symbol Offset
    Unsigned 8-bit integer
wmx.harq_map.cqich_control_ie.alloc_id  Allocation Index
    Unsigned 16-bit integer
wmx.harq_map.cqich_control_ie.cqi_rep_threshold  CQI Reporting Threshold
    Unsigned 16-bit integer
wmx.harq_map.cqich_control_ie.cqich_indicator  CQICH Indicator
    Boolean
wmx.harq_map.cqich_control_ie.duration  Duration
    Unsigned 16-bit integer
wmx.harq_map.cqich_control_ie.frame_offset  Frame Offset
    Unsigned 16-bit integer
wmx.harq_map.cqich_control_ie.period  PERIOD
    Unsigned 16-bit integer
wmx.harq_map.dl_ie_count  DL IE Count
    Unsigned 24-bit integer
wmx.harq_map.format_config_ie.cid_type  CID Type
    Unsigned 32-bit integer
wmx.harq_map.format_config_ie.indicator  HARQ MAP Indicator
    Unsigned 32-bit integer
wmx.harq_map.format_config_ie.max_logical_bands  Max Logical Bands
    Unsigned 32-bit integer
wmx.harq_map.format_config_ie.num_of_broadcast_symbol  Number Of Symbols for Bro
    Unsigned 32-bit integer
wmx.harq_map.format_config_ie.num_of_dl_band_amc_symbol  Number Of Symbols for B
    Unsigned 32-bit integer
wmx.harq_map.format_config_ie.num_of_ul_band_amc_symbol  Number Of Symbols for B
    Unsigned 32-bit integer
wmx.harq_map.format_config_ie.safety_pattern  Safety Pattern
    Unsigned 32-bit integer
```

```
wmx.harq_map.format_config_ie.subchannel_type  Subchannel Type For Band AMC
Unsigned 32-bit integer
wmx.harq_map.harq_control_ie.acid  HARQ CH ID (ACID)
Unsigned 8-bit integer
wmx.harq_map.harq_control_ie.ai_sn  HARQ ID Sequence Number(AI_SN)
Unsigned 8-bit integer
wmx.harq_map.harq_control_ie.prefix  Prefix
Boolean
wmx.harq_map.harq_control_ie.reserved  Reserved
Unsigned 8-bit integer
wmx.harq_map.harq_control_ie.spid  Subpacket ID (SPID)
Unsigned 8-bit integer
wmx.harq_map.indicator  HARQ MAP Indicator
Unsigned 24-bit integer
wmx.harq_map.msg_crc  HARQ MAP Message CRC
Unsigned 32-bit integer
wmx.harq_map.msg_length  Map Message Length
Unsigned 24-bit integer
wmx.harq_map.num_of_broadcast_symbol  Number Of Symbols for Broadcast
Unsigned 32-bit integer
wmx.harq_map.num_of_dl_band_amc_symbol  Number Of Symbols for Broadcast
Unsigned 32-bit integer
wmx.harq_map.num_of_ul_band_amc_symbol  Number Of Symbols for Broadcast
Unsigned 32-bit integer
wmx.harq_map.rcid_ie.cid11  11 LSB Of Basic CID
Unsigned 16-bit integer
wmx.harq_map.rcid_ie.cid3  3 LSB Of Basic CID
Unsigned 16-bit integer
wmx.harq_map.rcid_ie.cid7  7 LSB Of Basic CID
Unsigned 16-bit integer
wmx.harq_map.rcid_ie.normal_cid  Normal CID
Unsigned 16-bit integer
wmx.harq_map.rcid_ie.prefix  Prefix
Unsigned 16-bit integer
wmx.harq_map.reserved  Reserved
Unsigned 24-bit integer
wmx.harq_map.ul_map_appended  HARQ UL-MAP Appended
Unsigned 24-bit integer
wmx.pdu.value  Values
Byte array
wmx.phy_attributes.encoding_type  Encoding Type
Unsigned 8-bit integer
wmx.phy_attributes.modulation_rate  Modulation Rate
Unsigned 8-bit integer
```

```
wmx.phy_attributes.num_of_slots  Number Of Slots
    Unsigned 16-bit integer
wmx.phy_attributes.num_repeat    numRepeat
    Unsigned 8-bit integer
wmx.phy_attributes.permbase      Permbase
    Unsigned 8-bit integer
wmx.phy_attributes.subchannel    Subchannel
    Unsigned 8-bit integer
wmx.phy_attributes.subchannelization_type  Subchannelization Type
    Unsigned 8-bit integer
wmx.phy_attributes.symbol_offset  Symbol Offset
    Unsigned 8-bit integer
wmx.unknown_type                Unknown MAC Message Type
    Byte array
wmx.values                      Values
    Byte array
```

#### WiMax REG-REQ/RSP Messages (wmx.reg)

```
wimax.reg.bandwidth_request_ul_tx_pwr_report_header_support  Bandwidth request a
    Unsigned 24-bit integer
wmx.arq.block_lifetime  ARQ Block Lifetime (10us granularity)
    Unsigned 16-bit integer
wmx.arq.block_size      ARQ Block Size
    Unsigned 16-bit integer
wmx.arq.deliver_in_order  ARQ Deliver In Order
    Unsigned 8-bit integer
wmx.arq.enable            ARQ Enable
    Unsigned 8-bit integer
wmx.arq.max_block_size   ARQ Maximum Block Size
    Unsigned 8-bit integer
wmx.arq.min_block_size   ARQ Minumum Block Size
    Unsigned 8-bit integer
wmx.arq.receiver_delay   ARQ Receiver Delay (10us granularity)
    Unsigned 16-bit integer
wmx.arq.rx_purge_timeout  ARQ RX Purge Timeout (100us granularity)
    Unsigned 16-bit integer
wmx.arq.sync_loss_timeout  ARQ Sync Loss Timeout (10us granularity)
    Unsigned 16-bit integer
wmx.arq.transmitter_delay  ARQ Transmitter Delay (10us granularity)
    Unsigned 16-bit integer
wmx.arq.window_size      ARQ Window Size
    Unsigned 16-bit integer
wmx.macmgmtmsgtype.reg_req  MAC Management Message Type
    Unsigned 8-bit integer
```

```
wmx.macmgtmsgtype.reg_rsp  MAC Management Message Type
    Unsigned 8-bit integer
wmx.reg.alloc_sec_mgmt_dhcp  DHCP
    Boolean
wmx.reg.alloc_sec_mgmt_dhcpv6  DHCPv6
    Boolean
wmx.reg.alloc_sec_mgmt_ipv6  IPv6 Stateless Address Autoconfiguration
    Boolean
wmx.reg.alloc_sec_mgmt_mobile_ipv4  Mobile IPv4
    Boolean
wmx.reg.alloc_sec_mgmt_rsvd  Reserved
    Unsigned 8-bit integer
wmx.reg.arq  ARQ support
    Boolean
wmx.reg.arq_ack_type_cumulative_ack_entry  Cumulative ACK entry
    Unsigned 8-bit integer
wmx.reg.arq_ack_type_cumulative_ack_with_block_sequence_ack  Cumulative ACK with
    Unsigned 8-bit integer
wmx.reg.arq_ack_type_cumulative_with_selective_ack_entry  Cumulative with Select
    Unsigned 8-bit integer
wmx.reg.arq_ack_type_reserved  Reserved
    Unsigned 8-bit integer
wmx.reg.arq_ack_type_selective_ack_entry  Selective ACK entry
    Unsigned 8-bit integer
wmx.reg.bandwidth_request_cinr_report_header_support  Bandwidth request and CINR
    Unsigned 24-bit integer
wmx.reg.bandwidth_request_ul_sleep_control_header_support  Bandwidth request and
    Unsigned 24-bit integer
wmx.reg.cqich_allocation_request_header_support  CQICH Allocation Request header
    Unsigned 24-bit integer
wmx.reg.dl_cids_supported  Number of Downlink transport CIDs the SS can support
    Unsigned 16-bit integer
wmx.reg.dl_sleep_control_extended_subheader  Downlink sleep control extended sub
    Unsigned 24-bit integer
wmx.reg.dsx_flow_control  DSx flow control
    Unsigned 8-bit integer
wmx.reg.encap_802_1q  Packet, 802.1Q VLAN
    Unsigned 16-bit integer
wmx.reg.encap_802_3  Packet, 802.3/Ethernet
    Unsigned 16-bit integer
wmx.reg.encap_atm  ATM
    Unsigned 16-bit integer
wmx.reg.encap_ipv4  Packet, IPv4
    Unsigned 16-bit integer
```

```
wmx.reg.encap_ipv4_802_1q Packet, IPv4 over 802.1Q VLAN
    Unsigned 16-bit integer
wmx.reg.encap_ipv4_802_3 Packet, IPv4 over 802.3/Ethernet
    Unsigned 16-bit integer
wmx.reg.encap_ipv6 Packet, IPv6
    Unsigned 16-bit integer
wmx.reg.encap_ipv6_802_1q Packet, IPv6 over 802.1Q VLAN
    Unsigned 16-bit integer
wmx.reg.encap_ipv6_802_3 Packet, IPv6 over 802.3/Ethernet
    Unsigned 16-bit integer
wmx.reg.encap_packet_802_3_ethernet_and_ecrtp_header_compression Packet, 802.3/
    Unsigned 16-bit integer
wmx.reg.encap_packet_802_3_ethernet_and_rohc_header_compression Packet, 802.3/E
    Unsigned 16-bit integer
wmx.reg.encap_packet_ip_ecrtp_header_compression Packet, IP (v4 or v6) with ECR
    Unsigned 16-bit integer
wmx.reg.encap_packet_ip_rohc_header_compression Packet, IP (v4 or v6) with ROHC
    Unsigned 16-bit integer
wmx.reg.encap_rsvd Reserved
    Unsigned 16-bit integer
wmx.reg.ext_rtps_support MAC extended rtPS support
    Boolean
wmx.reg.fbss_mdho_dl_rf_combining FBSS/MDHO DL RF Combining with monitoring MAP
    Boolean
wmx.reg.fbss_mdho_ho_disable MDHO/FBSS HO. BS ignore all other bits when set to
    Boolean
wmx.reg.feedback_header_support Feedback header support
    Unsigned 24-bit integer
wmx.reg.feedback_request_extended_subheader Feedback request extended subheader
    Unsigned 24-bit integer
wmx.reg.handover_indication_readiness_timer Handover indication readiness timer
    Unsigned 8-bit integer
wmx.reg.handover_reserved Reserved
    Unsigned 8-bit integer
wmx.reg.ho_connections_param_processing_time MS HO connections parameters proce
    Unsigned 8-bit integer
wmx.reg.ho_process_opt_ms_timer HO Process Optimization MS Timer
    Unsigned 8-bit integer
wmx.reg.ho_tek_processing_time MS HO TEK processing time
    Unsigned 8-bit integer
wmx.reg.idle_mode_timeout Idle Mode Timeout
    Unsigned 16-bit integer
wmx.reg.ip_mgmt_mode IP management mode
    Boolean
```



wmx.reg.ip\_version IP version  
Unsigned 8-bit integer

wmx.reg.mac\_address MAC Address of the SS  
6-byte Hardware (MAC) Address

wmx.reg.mac\_crc\_support MAC CRC  
Boolean

wmx.reg.max\_classifiers Maximum number of classification rules  
Unsigned 16-bit integer

wmx.reg.max\_num\_bursts\_to\_ms Maximum number of bursts transmitted concurrently  
Unsigned 8-bit integer

wmx.reg.mca\_flow\_control MCA flow control  
Unsigned 8-bit integer

wmx.reg.mcast\_polling\_cids Multicast polling group CID support  
Unsigned 8-bit integer

wmx.reg.mdh\_ul\_multiple MDHO UL Multiple transmission  
Boolean

wmx.reg.mdho\_dl\_monitor\_maps MDHO DL soft combining with monitoring MAPs from a  
Boolean

wmx.reg.mdho\_dl\_monitor\_single\_map MDHO DL soft Combining with monitoring single  
Boolean

wmx.reg.mimo\_mode\_feedback\_request\_extended\_subheader MIMO mode feedback request  
Unsigned 24-bit integer

wmx.reg.mini\_feedback\_extended\_subheader Mini-feedback extended subheader  
Unsigned 24-bit integer

wmx.reg.mobility\_handover Mobility (handover)  
Boolean

wmx.reg.mobility\_idle\_mode Idle mode  
Boolean

wmx.reg.mobility\_sleep\_mode Sleep mode  
Boolean

wmx.reg.packing.support Packing support  
Boolean

wmx.reg.pdu\_sn\_long\_extended\_subheader PDU SN (long) extended subheader  
Unsigned 24-bit integer

wmx.reg.pdu\_sn\_short\_extended\_subheader PDU SN (short) extended subheader  
Unsigned 24-bit integer

wmx.reg.phs PHS support  
Unsigned 8-bit integer

wmx.reg.phy\_channel\_report\_header\_support PHY channel report header support  
Unsigned 24-bit integer

wmx.reg.reserved Reserved  
Unsigned 24-bit integer

wmx.reg.sdu\_sn\_extended\_subheader\_support SDU\_SN extended subheader support  
Unsigned 24-bit integer

```
wmx.reg.sdu_sn_parameter  SDU_SN parameter
    Unsigned 24-bit integer
wmx.reg.sn_report_header_support  SN report header support
    Unsigned 24-bit integer
wmx.reg.sn_request_extended_subheader  SN request extended subheader
    Unsigned 24-bit integer
wmx.reg.ss_mgmt_support  SS management support
    Boolean
wmx.reg.ul_cids_supported  Number of Uplink transport CIDs the SS can support
    Unsigned 16-bit integer
wmx.reg.ul_tx_power_report_extended_subheader  UL Tx power report extended subhe
    Unsigned 24-bit integer
wmx.reg.unknown_tlv_type  Unknown TLV Type
    Byte array
wmx.reg_req.invalid_tlv  Invalid TLV
    Byte array
wmx.reg_req.max_mac_dl_data  Maximum MAC level DL data per frame
    Unsigned 16-bit integer
wmx.reg_req.max_mac_ul_data  Maximum MAC level UL data per frame
    Unsigned 16-bit integer
wmx.reg_req.min_time_for_inter_fa  Minimum time for inter-FA HO, default=3
    Unsigned 8-bit integer
wmx.reg_req.min_time_for_intra_fa  Minimum time for intra-FA HO, default=2
    Unsigned 8-bit integer
wmx.reg_req.ms_periodic_ranging_timer_info  MS periodic ranging timer informatio
    Unsigned 8-bit integer
wmx.reg_req.ms_prev_ip_addr_v4  MS Previous IP address
    IPv4 address
wmx.reg_req.ms_prev_ip_addr_v6  MS Previous IP address
    IPv6 address
wmx.reg_req.secondary_mgmt_cid  Secondary Management CID
    Unsigned 16-bit integer
wmx.reg_req.sleep_recovery  Frames required for the MS to switch from sleep to a
    Unsigned 8-bit integer
wmx.reg_rsp.invalid_tlv  Invalid TLV
    Byte array
wmx.reg_rsp.new_cid_after_ho  New CID after handover to new BS
    Unsigned 16-bit integer
wmx.reg_rsp.response  Response
    Unsigned 8-bit integer
wmx.reg_rsp.secondary_mgmt_cid  Secondary Management CID
    Unsigned 16-bit integer
wmx.reg_rsp.service_flow_id  Service flow ID
    Unsigned 32-bit integer
```

```
wmx.reg_rsp.system_resource_retain_time  System Resource Retain Time
    Unsigned 16-bit integer
wmx.reg_rsp.tlv_value  Value
    Byte array
wmx.reg_rsp.unknown_tlv_type  Unknown TLV Type
    Byte array
wmx.sfe.authorization_token  Authorization Token
    Byte array
wmx.sfe.cid  CID
    Unsigned 16-bit integer
wmx.sfe.cid_alloc_for_active_bs  CID Allocation For Active BSs
    Byte array
wmx.sfe.cid_alloc_for_active_bs_cid  CID
    Unsigned 16-bit integer
wmx.sfe.cs_specification  CS Specification
    Unsigned 8-bit integer
wmx.sfe.fixed_len_sdu  Fixed/Variable Length SDU
    Unsigned 8-bit integer
wmx.sfe.fsn_size  FSN Size
    Unsigned 8-bit integer
wmx.sfe.global_service_class_name  Global Service Class Name
    String
wmx.sfe.harq_channel_mapping  HARQ Channel Mapping
    Byte array
wmx.sfe.harq_channel_mapping.index  HARQ Channel Index
    Unsigned 8-bit integer
wmx.sfe.harq_service_flows  HARQ Service Flows
    Unsigned 8-bit integer
wmx.sfe.jitter  Tolerated Jitter
    Unsigned 32-bit integer
wmx.sfe.max_latency  Maximum Latency
    Unsigned 32-bit integer
wmx.sfe.max_traffic_burst  Maximum Traffic Burst
    Unsigned 32-bit integer
wmx.sfe.mbs_contents_ids  MBS contents IDs
    Byte array
wmx.sfe.mbs_contents_ids_id  MBS Contents ID
    Unsigned 16-bit integer
wmx.sfe.mbs_service  MBS Service
    Unsigned 8-bit integer
wmx.sfe.mbs_zone_identifier  MBS Zone Identifier
    Byte array
wmx.sfe.mrr  Minimum Reserved Traffic Rate
    Unsigned 32-bit integer
```

wmx.sfe.msr Maximum Sustained Traffic Rate  
Unsigned 32-bit integer

wmx.sfe.paging\_preference Paging Preference  
Unsigned 8-bit integer

wmx.sfe.pdu\_sn\_ext\_subheader\_reorder PDU SN Extended Subheader For HARQ Reorder  
Unsigned 8-bit integer

wmx.sfe.policy.bit1 The Service Flow Shall Not Use Multicast Bandwidth Request  
Boolean

wmx.sfe.policy.broadcast\_bwr The Service Flow Shall Not Use Broadcast Bandwidth  
Boolean

wmx.sfe.policy.crc The Service Flow Shall Not Include CRC In The MAC PDU  
Boolean

wmx.sfe.policy.fragment The Service Flow Shall Not Fragment Data  
Boolean

wmx.sfe.policy.headers The Service Flow Shall Not Suppress Payload Headers  
Boolean

wmx.sfe.policy.packing The Service Flow Shall Not Pack Multiple SDUs (Or Fragme  
Boolean

wmx.sfe.policy.piggyback The Service Flow Shall Not Piggyback Requests With Dat  
Boolean

wmx.sfe.policy.rsvd1 Reserved  
Unsigned 8-bit integer

wmx.sfe.qos\_params\_set QoS Parameter Set Type  
Unsigned 8-bit integer

wmx.sfe.qos\_params\_set.active Active Set  
Boolean

wmx.sfe.qos\_params\_set.admitted Admitted Set  
Boolean

wmx.sfe.qos\_params\_set.provisioned Provisioned Set  
Boolean

wmx.sfe.qos\_params\_set.rsvd Reserved  
Unsigned 8-bit integer

wmx.sfe.req\_tx\_policy Request/Transmission Policy  
Unsigned 32-bit integer

wmx.sfe.reserved\_10 Reserved  
Unsigned 32-bit integer

wmx.sfe.reserved\_34 Reserved  
Unsigned 8-bit integer

wmx.sfe.reserved\_36 Reserved  
Unsigned 8-bit integer

wmx.sfe.sdu\_inter\_arrival\_interval SDU Inter-Arrival Interval (in the resolutio  
Unsigned 16-bit integer

wmx.sfe.sdu\_size SDU Size  
Unsigned 8-bit integer

```

wmx.sfe.service_class_name  Service Class Name
    String
wmx.sfe.sf_id               Service Flow ID
    Unsigned 32-bit integer
wmx.sfe.sn_feedback_enabled SN Feedback
    Unsigned 8-bit integer
wmx.sfe.target_said        SAID Onto Which SF Is Mapped
    Unsigned 16-bit integer
wmx.sfe.time_base          Time Base
    Unsigned 16-bit integer
wmx.sfe.traffic_priority   Traffic Priority
    Unsigned 8-bit integer
wmx.sfe.type_of_data_delivery_services  Type of Data Delivery Services
    Unsigned 8-bit integer
wmx.sfe.unknown_type       Unknown SFE TLV type
    Byte array
wmx.sfe.unsolicited_grant_interval  Unsolicited Grant Interval
    Unsigned 16-bit integer
wmx.sfe.unsolicited_polling_interval  Unsolicited Polling Interval
    Unsigned 16-bit integer
wmx.sfe.uplink_grant_scheduling  Uplink Grant Scheduling Type
    Unsigned 8-bit integer

```

#### WiMax REP-REQ/RSP Messages (wmx.rep)

```

wmx.macmgtmsgtype.rep_req  MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgtmsgtype.rep_rsp  MAC Management Message Type
    Unsigned 8-bit integer
wmx.rep.invalid_tlv        Invalid TLV
    Byte array
wmx.rep.unknown_tlv_type   Unknown TLV type
    Byte array
wmx.rep_req.channel_number  Channel Number
    Unsigned 8-bit integer
wmx.rep_req.channel_selectivity_report  Channel Selectivity Report
    Byte array
wmx.rep_req.channel_selectivity_report.bit0  Include Frequency Selectivity Report
    Boolean
wmx.rep_req.channel_selectivity_report.bit1_7  Reserved
    Unsigned 8-bit integer
wmx.rep_req.channel_type.request  Channel Type Request
    Unsigned 8-bit integer
wmx.rep_req.channel_type.reserved  Reserved
    Unsigned 8-bit integer

```

```

wmx.rep_req.preamble_effective_cinr_request  Preamble Effective CINR Request
  Byte array
wmx.rep_req.preamble_effective_cinr_request.bit0_1  Type Of Preamble Physical CINR Mea
  Unsigned 8-bit integer
wmx.rep_req.preamble_effective_cinr_request.bit2_7  Reserved
  Unsigned 8-bit integer
wmx.rep_req.preamble_phy_cinr_request  Preamble Physical CINR Request
  Byte array
wmx.rep_req.preamble_phy_cinr_request.bit0_1  Type Of Preamble Physical CINR Mea
  Unsigned 8-bit integer
wmx.rep_req.preamble_phy_cinr_request.bit2_5  Alpha (ave) in multiples of 1/16
  Unsigned 8-bit integer
wmx.rep_req.preamble_phy_cinr_request.bit6  CINR Report Type
  Unsigned 8-bit integer
wmx.rep_req.preamble_phy_cinr_request.bit7  Reserved
  Unsigned 8-bit integer
wmx.rep_req.report_request  Report Request
  Byte array
wmx.rep_req.report_type  Report Type
  Unsigned 8-bit integer
wmx.rep_req.report_type.bit0  Include DFS Basic Report
  Boolean
wmx.rep_req.report_type.bit1  Include CINR Report
  Boolean
wmx.rep_req.report_type.bit2  Include RSSI Report
  Boolean
wmx.rep_req.report_type.bit3_6  Alpha (ave) in multiples of 1/32
  Unsigned 8-bit integer
wmx.rep_req.report_type.bit7  Include Current Transmit Power Report
  Boolean
wmx.rep_req.zone_spec_effective_cinr_report.cqich_id  The 3 least significant bi
  Unsigned 8-bit integer
wmx.rep_req.zone_spec_effective_cinr_report.cqich_id_4  The 4 least significant
  Unsigned 8-bit integer
wmx.rep_req.zone_spec_effective_cinr_report.effective_cinr  Effective CINR
  Unsigned 8-bit integer
wmx.rep_req.zone_spec_effective_cinr_report.report_type  Effective CINR Report
  Unsigned 8-bit integer
wmx.rep_req.zone_spec_effective_cinr_request  Zone-specific Effective CINR Reque
  Byte array
wmx.rep_req.zone_spec_effective_cinr_request.bit0_2  Type Of Zone On Which CINR
  Unsigned 16-bit integer
wmx.rep_req.zone_spec_effective_cinr_request.bit14_15  Reserved
  Unsigned 16-bit integer

```

```
wmx.rep_req.zone_spec_effective_cinr_request.bit3  STC Zone
Boolean

wmx.rep_req.zone_spec_effective_cinr_request.bit4  AAS Zone
Boolean

wmx.rep_req.zone_spec_effective_cinr_request.bit5_6  PRBS ID
Unsigned 16-bit integer

wmx.rep_req.zone_spec_effective_cinr_request.bit7  CINR Measurement Report
Unsigned 16-bit integer

wmx.rep_req.zone_spec_effective_cinr_request.bit8_13  PUSC Major Group Map
Unsigned 16-bit integer

wmx.rep_req.zone_spec_phy_cinr_report.deviation  Standard Deviation of CINR
Unsigned 8-bit integer

wmx.rep_req.zone_spec_phy_cinr_report.mean  Mean of Physical CINR
Unsigned 8-bit integer

wmx.rep_req.zone_spec_phy_cinr_report.report_type  CINR Report Type
Unsigned 8-bit integer

wmx.rep_req.zone_spec_phy_cinr_report.reserved1  Reserved
Unsigned 8-bit integer

wmx.rep_req.zone_spec_phy_cinr_report.reserved2  Reserved
Unsigned 8-bit integer

wmx.rep_req.zone_spec_phy_cinr_request  Zone-specific Physical CINR Request
Byte array

wmx.rep_req.zone_spec_phy_cinr_request.bit0_2  Type Of Zone On Which CINR Is To
Unsigned 24-bit integer

wmx.rep_req.zone_spec_phy_cinr_request.bit14_17  Alpha (ave) in multiples of 1/1
Unsigned 24-bit integer

wmx.rep_req.zone_spec_phy_cinr_request.bit18  CINR Report Type
Unsigned 24-bit integer

wmx.rep_req.zone_spec_phy_cinr_request.bit19_23  Reserved
Unsigned 24-bit integer

wmx.rep_req.zone_spec_phy_cinr_request.bit3  STC Zone
Boolean

wmx.rep_req.zone_spec_phy_cinr_request.bit4  AAS Zone
Boolean

wmx.rep_req.zone_spec_phy_cinr_request.bit5_6  PRBS ID
Unsigned 24-bit integer

wmx.rep_req.zone_spec_phy_cinr_request.bit7  CINR Measurement Report
Unsigned 24-bit integer

wmx.rep_req.zone_spec_phy_cinr_request.bit8_13  PUSC Major Group Map
Unsigned 24-bit integer

wmx.rep_rsp.channel_selectivity_report  Channel Selectivity Report
Byte array

wmx.rep_rsp.channel_selectivity_report.frequency_a  Frequency Selectivity Report
Unsigned 8-bit integer
```

```

wmx.rep_rsp.channel_selectivity_report.frequency_b  Frequency Selectivity Report
  Unsigned 8-bit integer
wmx.rep_rsp.channel_selectivity_report.frequency_c  Frequency Selectivity Report
  Unsigned 8-bit integer
wmx.rep_rsp.channel_type_report  Channel Type Report
  Byte array
wmx.rep_rsp.channel_type_report.band_amc  Band AMC
  Unsigned 32-bit integer
wmx.rep_rsp.channel_type_report.enhanced_band_amc  Enhanced Band AMC
  Byte array
wmx.rep_rsp.channel_type_report.safety_channel  Safety Channel
  Byte array
wmx.rep_rsp.channel_type_report.sounding  Sounding
  Unsigned 8-bit integer
wmx.rep_rsp.channel_type_report.subchannel  Normal Subchannel
  Unsigned 8-bit integer
wmx.rep_rsp.current_transmitted_power  Current Transmitted Power
  Unsigned 8-bit integer
wmx.rep_rsp.preamble_effective_cinr_report  Preamble Effective CINR Report
  Byte array
wmx.rep_rsp.preamble_effective_cinr_report.configuration_1  The Estimation Of Ef
  Byte array
wmx.rep_rsp.preamble_effective_cinr_report.configuration_3  The Estimation Of Ef
  Byte array
wmx.rep_rsp.preamble_phy_cinr_report  Preamble Physical CINR Report
  Byte array
wmx.rep_rsp.preamble_phy_cinr_report.band_amc_zone  The Estimation Of Physical C
  Byte array
wmx.rep_rsp.preamble_phy_cinr_report.configuration_1  The Estimation Of Physical
  Byte array
wmx.rep_rsp.preamble_phy_cinr_report.configuration_3  The Estimation Of Physical
  Byte array
wmx.rep_rsp.report_type  Report Type
  Byte array
wmx.rep_rsp.report_type.basic_report  Basic Report
  Byte array
wmx.rep_rsp.report_type.basic_report.bit0  Wireless HUMAN Detected
  Boolean
wmx.rep_rsp.report_type.basic_report.bit1  Unknown Transmission Detected
  Boolean
wmx.rep_rsp.report_type.basic_report.bit2  Specific Spectrum User Detected
  Boolean
wmx.rep_rsp.report_type.basic_report.bit3  Channel Not Measured
  Boolean

```



```
wmx.rep_rsp.report_type.basic_report.reserved    Reserved
    Unsigned 8-bit integer
wmx.rep_rsp.report_type.channel_number    Channel Number
    Unsigned 8-bit integer
wmx.rep_rsp.report_type.cinr_report    CINR Report
    Byte array
wmx.rep_rsp.report_type.cinr_report_deviation    CINR Standard Deviation
    Unsigned 8-bit integer
wmx.rep_rsp.report_type.cinr_report_mean    CINR Mean
    Unsigned 8-bit integer
wmx.rep_rsp.report_type.duration    Duration
    Unsigned 24-bit integer
wmx.rep_rsp.report_type.frame_number    Start Frame
    Unsigned 16-bit integer
wmx.rep_rsp.report_type.rssi_report    RSSI Report
    Byte array
wmx.rep_rsp.report_type.rssi_report_deviation    RSSI Standard Deviation
    Unsigned 8-bit integer
wmx.rep_rsp.report_type.rssi_report_mean    RSSI Mean
    Unsigned 8-bit integer
wmx.rep_rsp.zone_spec_effective_cinr_report    Zone-specific Effective CINR Report
    Byte array
wmx.rep_rsp.zone_spec_effective_cinr_report.amc_aas    AMC AAS Zone
    Byte array
wmx.rep_rsp.zone_spec_effective_cinr_report.fusc    FUSC Zone
    Byte array
wmx.rep_rsp.zone_spec_effective_cinr_report.optional_fusc    Optional FUSC Zone
    Byte array
wmx.rep_rsp.zone_spec_effective_cinr_report.pusc_sc0    PUSC Zone (use all SC=0)
    Byte array
wmx.rep_rsp.zone_spec_effective_cinr_report.pusc_sc1    PUSC Zone (use all SC=1)
    Byte array
wmx.rep_rsp.zone_spec_phy_cinr_report    Zone-specific Physical CINR Report
    Byte array
wmx.rep_rsp.zone_spec_phy_cinr_report.amc    AMC Zone
    Byte array
wmx.rep_rsp.zone_spec_phy_cinr_report.fusc    FUSC Zone
    Byte array
wmx.rep_rsp.zone_spec_phy_cinr_report.optional_fusc    Optional FUSC Zone
    Byte array
wmx.rep_rsp.zone_spec_phy_cinr_report.pusc_sc0    PUSC Zone (use all SC=0)
    Byte array
wmx.rep_rsp.zone_spec_phy_cinr_report.pusc_sc1    PUSC Zone (use all SC=1)
    Byte array
```

wmx.rep\_rsp.zone\_spec\_phy\_cinr\_report.safety\_channel Safety Channel  
Byte array

#### WiMax RES-CMD Message (wmx.res)

wmx.macmgtmsgtype.res\_cmd MAC Management Message Type  
Unsigned 8-bit integer

wmx.res\_cmd.invalid\_tlv Invalid TLV  
Byte array

wmx.res\_cmd.unknown\_tlv\_type Unknown TLV type  
Byte array

#### WiMax RNG-REQ/RSP Messages (wmx.rng)

wmx.macmgtmsgtype.rng\_req MAC Management Message Type  
Unsigned 8-bit integer

wmx.macmgtmsgtype.rng\_rsp MAC Management Message Type  
Unsigned 8-bit integer

wmx.rng.power\_save.activate Activation of Power Saving Class (Types 1 and 2 onl  
Boolean

wmx.rng.power\_save.class\_id Power Saving Class ID  
Unsigned 8-bit integer

wmx.rng.power\_save.class\_type Power Saving Class Type  
Unsigned 8-bit integer

wmx.rng.power\_save.definition\_present Definition of Power Saving Class present  
Unsigned 8-bit integer

wmx.rng.power\_save.final\_sleep\_window\_base Final-sleep window base (measured in  
Unsigned 8-bit integer

wmx.rng.power\_save.final\_sleep\_window\_exp Final-sleep window exponent (measured  
Unsigned 8-bit integer

wmx.rng.power\_save.first\_sleep\_window\_frame Start frame number for first sleep  
Unsigned 8-bit integer

wmx.rng.power\_save.included\_cid CID of connection to be included into the Power  
Unsigned 16-bit integer

wmx.rng.power\_save.initial\_sleep\_window Initial-sleep window  
Unsigned 8-bit integer

wmx.rng.power\_save.listening\_window Listening window duration (measured in fram  
Unsigned 8-bit integer

wmx.rng.power\_save.mgmt\_connection\_direction Direction for management connectio  
Unsigned 8-bit integer

wmx.rng.power\_save.reserved Reserved  
Unsigned 8-bit integer

wmx.rng.power\_save.slpid SLPID assigned by the BS whenever an MS is instructed  
Unsigned 8-bit integer

wmx.rng.power\_save.trf\_ind\_required BS shall transmit at least one TRF-IND mess  
Boolean

wmx.rng\_req.aas\_broadcast AAS broadcast capability  
Boolean

```

wmx.rng_req.anomalies.max_power  Meaning
    Boolean

wmx.rng_req.anomalies.min_power  Meaning
    Boolean

wmx.rng_req.anomalies.timing_adj  Meaning
    Boolean

wmx.rng_req.cmac_key_count  CMAC Key Count
    Unsigned 16-bit integer

wmx.rng_req.dl_burst_profile.ccc  LSB of CCC of DCD associated with DIUC
    Unsigned 8-bit integer

wmx.rng_req.dl_burst_profile.diuc  DIUC
    Unsigned 8-bit integer

wmx.rng_req.ho_id  ID from the target BS for use in initial ranging during MS ha
    Unsigned 8-bit integer

wmx.rng_req.invalid_tlv  Invalid TLV
    Byte array

wmx.rng_req.power_down_indicator  Power down Indicator
    Unsigned 8-bit integer

wmx.rng_req.ranging_purpose.ho_indication  MS HO indication
    Unsigned 8-bit integer

wmx.rng_req.ranging_purpose.loc_update_req  Location Update Request
    Unsigned 8-bit integer

wmx.rng_req.ranging_purpose.reserved  Reserved
    Unsigned 8-bit integer

wmx.rng_req.repetition_coding_level  Repetition coding level
    Unsigned 8-bit integer

wmx.rng_req.reserved  Reserved
    Unsigned 8-bit integer

wmx.rng_req.serving_bs_id  Former serving BS ID
    6-byte Hardware (MAC) Address

wmx.rng_req.ss_mac_address  SS MAC Address
    6-byte Hardware (MAC) Address

wmx.rng_req.unknown_tlv_type  Unknown TLV Type
    Byte array

wmx.rng_rsp.aas_broadcast  AAS broadcast permission
    Boolean

wmx.rng_rsp.akid  AKId
    Byte array

wmx.rng_rsp.basic_cid  Basic CID
    Unsigned 16-bit integer

wmx.rng_rsp.bs_random  BS_Random
    Byte array

wmx.rng_rsp.config_change_count_of_dcd  Configuration Change Count value of DCD
    Unsigned 16-bit integer

```

wmx.rng\_rsp.dl\_freq\_override Downlink Frequency Override  
Unsigned 32-bit integer

wmx.rng\_rsp.dl\_op\_burst\_prof.ccc CCC value of DCD defining the burst profile as  
Unsigned 16-bit integer

wmx.rng\_rsp.dl\_op\_burst\_prof.diuc The least robust DIUC that may be used by the  
Unsigned 16-bit integer

wmx.rng\_rsp.dl\_op\_burst\_profile Downlink Operational Burst Profile  
Unsigned 16-bit integer

wmx.rng\_rsp.dl\_op\_burst\_profile\_ofdma Downlink Operational Burst Profile for OFDM  
Unsigned 16-bit integer

wmx.rng\_rsp.eight\_bit\_frame\_num The 8 least significant bits of the frame number  
Unsigned 32-bit integer

wmx.rng\_rsp.frame\_number Frame number  
Unsigned 24-bit integer

wmx.rng\_rsp.ho\_id HO ID  
Unsigned 8-bit integer

wmx.rng\_rsp.ho\_process\_optimization HO Process Optimization  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.omit\_network\_address Bit #3  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.omit\_reg\_req Bit #7  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.omit\_sbc\_req Bit #0  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.omit\_tftp Bit #5  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.omit\_time\_of\_day Bit #4  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.perform\_reauthentication Bits #1-2  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.post\_ho\_reentry Bit #9  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.reserved Bit #14: Reserved  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.send\_notification Bit #12  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.transfer\_or\_sharing Bit #6  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.trigger\_higher\_layer\_protocol Bit #13  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.unsolicited\_reg\_rsp Bit #10  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.unsolicited\_sbc\_rsp Bit #8  
Unsigned 16-bit integer

wmx.rng\_rsp.ho\_process\_optimization.virtual\_sdu\_sn Bit #11  
Unsigned 16-bit integer

wmx.rng\_rsp.invalid\_tlv Invalid TLV  
Byte array

wmx.rng\_rsp.least\_robust\_diuc Least Robust DIUC that may be used by the BS for  
Unsigned 16-bit integer

wmx.rng\_rsp.location\_update\_response Location Update Response  
Unsigned 8-bit integer

wmx.rng\_rsp.offset\_freq\_adjust Offset Frequency Adjust  
Signed 32-bit integer

wmx.rng\_rsp.opportunity\_number Initial ranging opportunity number  
Unsigned 8-bit integer

wmx.rng\_rsp.paging\_cycle Paging Cycle  
Unsigned 16-bit integer

wmx.rng\_rsp.paging\_group\_id Paging Group ID  
Unsigned 16-bit integer

wmx.rng\_rsp.paging\_information Paging Information  
Byte array

wmx.rng\_rsp.paging\_offset Paging Offset  
Unsigned 8-bit integer

wmx.rng\_rsp.power\_level\_adjust Power Level Adjust

wmx.rng\_rsp.primary\_mgmt\_cid Primary Management CID  
Unsigned 16-bit integer

wmx.rng\_rsp.ranging\_code\_index The ranging code index that was sent by the SS  
Unsigned 32-bit integer

wmx.rng\_rsp.ranging\_status Ranging status  
Unsigned 8-bit integer

wmx.rng\_rsp.ranging\_subchannel Ranging code attributes  
Unsigned 32-bit integer

wmx.rng\_rsp.repetition\_coding\_indication Repetition Coding Indication  
Unsigned 16-bit integer

wmx.rng\_rsp.reserved Reserved  
Unsigned 8-bit integer

wmx.rng\_rsp.resource\_retain\_flag The connection information for the MS is  
Boolean

wmx.rng\_rsp.service\_level\_prediction Service Level Prediction  
Unsigned 8-bit integer

wmx.rng\_rsp.ss\_mac\_address SS MAC Address  
6-byte Hardware (MAC) Address

wmx.rng\_rsp.subchannel\_reference OFDMA subchannel reference used to transmit th  
Unsigned 32-bit integer

wmx.rng\_rsp.time\_symbol\_reference OFDM time symbol reference used to transmit t  
Unsigned 32-bit integer

wmx.rng\_rsp.timing\_adjust Timing Adjust

```

wmx.rng_rsp.tlv_value  Value
    Byte array
wmx.rng_rsp.ul_chan_id  Uplink Channel ID
    Unsigned 8-bit integer
wmx.rng_rsp.ul_chan_id_override  Uplink channel ID Override
    Unsigned 8-bit integer
wmx.rng_rsp.unknown_tlv_type  Unknown TLV Type
    Byte array

```

#### WiMax SBC-REQ/RSP Messages (wmx.sbc)

```

wmx.macmgmtmsgtype.sbc_req  MAC Management Message Type
    Unsigned 8-bit integer
wmx.macmgmtmsgtype.sbc_rsp  MAC Management Message Type
    Unsigned 8-bit integer
wmx.sbc.association_type_support  Association Type Support
    Unsigned 8-bit integer
wmx.sbc.association_type_support.bit0  Scanning Without Association: association
    Boolean
wmx.sbc.association_type_support.bit1  Association Level 0: scanning or associat
    Boolean
wmx.sbc.association_type_support.bit2  Association Level 1: association with coo
    Boolean
wmx.sbc.association_type_support.bit3  Association Level 2: network assisted ass
    Boolean
wmx.sbc.association_type_support.bit4  Desired Association Support
    Boolean
wmx.sbc.association_type_support.reserved  Reserved
    Unsigned 8-bit integer
wmx.sbc.auth_policy  Authorization Policy Support
    Unsigned 8-bit integer
wmx.sbc.auth_policy.802_16  IEEE 802.16 Privacy
    Boolean
wmx.sbc.auth_policy.rsvd  Reserved
    Unsigned 8-bit integer
wmx.sbc.bw_alloc_support  Bandwidth Allocation Support
    Unsigned 8-bit integer
wmx.sbc.bw_alloc_support.duplex  Duplex
    Boolean
wmx.sbc.bw_alloc_support.rsvd0  Reserved
    Unsigned 8-bit integer
wmx.sbc.bw_alloc_support.rsvd1  Reserved
    Unsigned 8-bit integer
wmx.sbc.curr_transmit_power  Current transmitted power
    Unsigned 8-bit integer

```

```
wmx.sbc.effective_cinr_measure_permutation_zone.data_subcarriers Effective CINR
Boolean
wxm.sbc.effective_cinr_measure_permutation_zone.pilot_subcarriers Effective CINR
Boolean
wxm.sbc.effective_cinr_measure_permutation_zone.preamble Effective CINR Measure
Boolean
wxm.sbc.extension_capability Extension Capability
Unsigned 8-bit integer
wxm.sbc.extension_capability.bit0 Supported Extended Subheader Format
Boolean
wxm.sbc.extension_capability.reserved Reserved
Unsigned 8-bit integer
wxm.sbc.frequency_selectivity_characterization_report Frequency Selectivity Cha
Boolean
wxm.sbc.harq_chase_combining_and_cc_ir_buffer_capability HARQ Chase Combining A
Unsigned 16-bit integer
wxm.sbc.harq_chase_combining_and_cc_ir_buffer_capability.aggregation_flag_dl Ag
Unsigned 16-bit integer
wxm.sbc.harq_chase_combining_and_cc_ir_buffer_capability.aggregation_flag_ul Ag
Unsigned 16-bit integer
wxm.sbc.harq_chase_combining_and_cc_ir_buffer_capability.dl_harq_buffering_capab
Unsigned 16-bit integer
wxm.sbc.harq_chase_combining_and_cc_ir_buffer_capability.reserved1 Reserved
Unsigned 16-bit integer
wxm.sbc.harq_chase_combining_and_cc_ir_buffer_capability.reserved2 Reserved
Unsigned 16-bit integer
wxm.sbc.harq_chase_combining_and_cc_ir_buffer_capability.ul_harq_buffering_capab
Unsigned 16-bit integer
wxm.sbc.harq_incremental_redundancy_buffer_capability HARQ Incremental Buffer C
Unsigned 16-bit integer
wxm.sbc.harq_incremental_redundancy_buffer_capability.aggregation_flag_for_dl A
Unsigned 16-bit integer
wxm.sbc.harq_incremental_redundancy_buffer_capability.aggregation_flag_for_ul A
Unsigned 16-bit integer
wxm.sbc.harq_incremental_redundancy_buffer_capability.dl_incremental_redundancy_
Unsigned 16-bit integer
wxm.sbc.harq_incremental_redundancy_buffer_capability.reserved Reserved
Unsigned 16-bit integer
wxm.sbc.harq_incremental_redundancy_buffer_capability.reserved2 Reserved
Unsigned 16-bit integer
wxm.sbc.harq_incremental_redundancy_buffer_capability.ul_incremental_redundancy_
Unsigned 16-bit integer
wxm.sbc.harq_map_capability H-ARQ MAP Capability
Boolean
```

```

wmx.sbc.ho_trigger_metric_support  HO Trigger Metric Support
    Unsigned 8-bit integer
wmx.sbc.ho_trigger_metric_support.bit0  BS CINR Mean
    Boolean
wmx.sbc.ho_trigger_metric_support.bit1  BS RSSI Mean
    Boolean
wmx.sbc.ho_trigger_metric_support.bit2  BS Relative Delay
    Boolean
wmx.sbc.ho_trigger_metric_support.bit3  BS RTD
    Boolean
wmx.sbc.ho_trigger_metric_support.reserved  Reserved
    Unsigned 8-bit integer
wmx.sbc.invalid_tlv  Invalid TLV
    Byte array
wmx.sbc.mac_pdu  Capabilities For Construction And Transmission Of MAC PDUs
    Unsigned 8-bit integer
wmx.sbc.mac_pdu.bit0  Ability To Receive Requests Piggybacked With Data
    Boolean
wmx.sbc.mac_pdu.bit1  Ability To Use 3-bit FSN Values Used When Forming MAC PDUs
    Boolean
wmx.sbc.mac_pdu.rsvd  Reserved
    Unsigned 8-bit integer
wmx.sbc.max_num_bst_per_frm_capability_harq  Maximum Number Of Burst Per Frame C
    Unsigned 8-bit integer
wmx.sbc.max_num_bst_per_frm_capability_harq.max_num_dl_harq_bst_per_harq_per_frm
    Unsigned 8-bit integer
wmx.sbc.max_num_bst_per_frm_capability_harq.max_num_ul_harq_bst  Maximum Number
    Unsigned 8-bit integer
wmx.sbc.max_num_bst_per_frm_capability_harq.max_num_ul_harq_per_frm_include_one
    Boolean
wmx.sbc.max_security_associations  Maximum Number Of Security Association Support
    Unsigned 8-bit integer
wmx.sbc.max_transmit_power  Maximum Transmit Power
    Unsigned 32-bit integer
wmx.sbc.number_dl_arq_ack_channel  The Number Of DL HARQ ACK Channel
    Unsigned 8-bit integer
wmx.sbc.number_ul_arq_ack_channel  The Number Of UL HARQ ACK Channel
    Unsigned 8-bit integer
wmx.sbc.ofdma_aas_capabilities.rsvd  Reserved
    Unsigned 16-bit integer
wmx.sbc.ofdma_aas_capability  OFDMA AAS Capability
    Unsigned 16-bit integer
wmx.sbc.ofdma_aas_diversity_map_scan  AAS Diversity Map Scan (AAS DLFP)
    Boolean

```



wmx.sbc.ofdma\_aas\_fbck\_rsp\_support AAS-FBCK-RSP Support  
Boolean

wmx.sbc.ofdma\_aas\_zone AAS Zone  
Boolean

wmx.sbc.ofdma\_downlink\_aas\_preamble Downlink AAS Preamble  
Boolean

wmx.sbc.ofdma\_map\_capability.dl\_region\_definition\_support DL Region Definition  
Boolean

wmx.sbc.ofdma\_map\_capability.extended\_harq Support For Extended HARQ  
Unsigned 8-bit integer

wmx.sbc.ofdma\_map\_capability.extended\_harq\_ie\_capability Extended HARQ IE Capab  
Boolean

wmx.sbc.ofdma\_map\_capability.harq\_map\_capability HARQ MAP Capability  
Boolean

wmx.sbc.ofdma\_map\_capability.reserved Reserved  
Unsigned 8-bit integer

wmx.sbc.ofdma\_map\_capability.sub\_map\_capability\_first\_zone Sub MAP Capability F  
Boolean

wmx.sbc.ofdma\_map\_capability.sub\_map\_capability\_other\_zones Sub MAP Capability  
Boolean

wmx.sbc.ofdma\_ms\_csit\_capability OFDMA MS CSIT Capability  
Unsigned 8-bit integer

wmx.sbc.ofdma\_ms\_csit\_capability.csit\_compatibility\_type\_a CSIT Compatibility T  
Boolean

wmx.sbc.ofdma\_ms\_csit\_capability.csit\_compatibility\_type\_b CSIT Compatibility T  
Boolean

wmx.sbc.ofdma\_ms\_csit\_capability.max\_num\_simultaneous\_sounding\_instructions Max  
Unsigned 16-bit integer

wmx.sbc.ofdma\_ms\_csit\_capability.power\_assignment\_capability Power Assignment C  
Boolean

wmx.sbc.ofdma\_ms\_csit\_capability.reserved Reserved  
Unsigned 16-bit integer

wmx.sbc.ofdma\_ms\_csit\_capability.sounding\_response\_time\_capability Sounding Res  
Boolean

wmx.sbc.ofdma\_ms\_csit\_capability.type\_a\_support SS Does Not Support P Values Of  
Boolean

wmx.sbc.ofdma\_ms\_demodulator\_for\_mimo\_support\_in\_dl OFDMA MS Demodulator For MI  
Boolean

wmx.sbc.ofdma\_ms\_demodulator\_for\_mimo\_support\_in\_dl.bit0 2-antenna STC Matrix A  
Boolean

wmx.sbc.ofdma\_ms\_demodulator\_for\_mimo\_support\_in\_dl.bit1 2-antenna STC Matrix B  
Boolean

wmx.sbc.ofdma\_ms\_demodulator\_for\_mimo\_support\_in\_dl.bit10 3-antenna STC Matrix  
Boolean

wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit11	3-antenna STC Matrix
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit12	Capable Of Calculatin
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit13	Capable Of AdaptiveR
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit14	Capable Of Calculatin
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit15	Capable Of Antenna Gr
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit16	Capable Of Antenna Se
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit17	Capable Of Codebook B
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit18	Capable Of Long-term
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit19	Capable Of MIMO Midam
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit2	Four Receive Antennas
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit3	4-antenna STC Matrix A
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit4	4-antenna STC Matrix B
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit5	4-antenna STC Matrix B
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit6	4-antenna STC Matrix C
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit7	4-antenna STC Matrix C
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit8	3-antenna STC Matrix A
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.bit9	3-antenna STC Matrix B
Boolean	
wmx.sbc.ofdma_ms_demodulator_for_mimo_support_in_dl.reserved	Reserved
Unsigned 24-bit integer	
wmx.sbc.ofdma_multiple_dl_burst_profile_support	OFDMA Multiple Downlink Burst P
Unsigned 8-bit integer	
wmx.sbc.ofdma_multiple_dl_burst_profile_support.dl_bst_profile_for_multiple_fec	
Boolean	
wmx.sbc.ofdma_multiple_dl_burst_profile_support.reserved	Reserved
Unsigned 8-bit integer	
wmx.sbc.ofdma_multiple_dl_burst_profile_support.ul_burst_profile_for_multiple_fe	
Boolean	

```

wmx.sbc.ofdma_parameters_sets    OFDMA parameters sets
    Unsigned 8-bit integer
wmx.sbc.ofdma_parameters_sets.harq_parameters_set    HARQ parameters set
    Unsigned 8-bit integer
wmx.sbc.ofdma_parameters_sets.mac_set_a    Support OFDMA MAC parameters set A
    Unsigned 8-bit integer
wmx.sbc.ofdma_parameters_sets.mac_set_b    Support OFDMA MAC parameters set B
    Unsigned 8-bit integer
wmx.sbc.ofdma_parameters_sets.phy_set_a    Support OFDMA PHY parameter set A
    Unsigned 8-bit integer
wmx.sbc.ofdma_parameters_sets.phy_set_b    Support OFDMA PHY parameter set B
    Unsigned 8-bit integer
wmx.sbc.ofdma_parameters_sets.reserved    Reserved
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_cinr_measure_capability    OFDMA SS CINR Measurement Capability
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_mimo_uplink_support    OFDMA SS MIMO uplink support
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_mimo_uplink_support.2_antenna_sm_with_vertical_coding    2-antenna SM with vertical coding
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_mimo_uplink_support.2_antenna_sttd    2-antenna STTD
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_mimo_uplink_support.single_antenna_coop_sm    Single-antenna cooperative SM
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_modulator_for_mimo_support    OFDMA SS Modulator For MIMO Support
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_modulator_for_mimo_support.capable_adaptive_rate_control    Capable of adaptive rate control
    Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.capable_beamforming    Capable Of Beamforming
    Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.capable_of_spatial_multiplexing    Capable of spatial multiplexing
    Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.capable_of_transmit_diversity    Capable of transmit diversity
    Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.capable_of_two_antenna    Capable of two antenna
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_modulator_for_mimo_support.capable_single_antenna    Capable of single antenna
    Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.collaborative_sm_with_one_antenna    Collaborative SM with one antenna
    Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.collaborative_sm_with_two_antennas    Collaborative SM with two antennas
    Unsigned 8-bit integer
wmx.sbc.ofdma_ss_modulator_for_mimo_support.rsvd    Reserved
    Unsigned 8-bit integer

```

```

wmx.sbc.ofdma_ss_modulator_for_mimo_support.stc_matrix_a    Capable of 2-antenna S
Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.stc_matrix_b_horizontal    Capable of
Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.stc_matrix_b_vertical    Capable of 2-
Boolean
wmx.sbc.ofdma_ss_modulator_for_mimo_support.two_transmit_antennas    Two transmit
Boolean
wmx.sbc.ofdma_ss_uplink_power_control_support    OFDMA SS uplink power control sup
Unsigned 8-bit integer
wmx.sbc.ofdma_ss_uplink_power_control_support.aas_preamble    AAS preamble
Unsigned 8-bit integer
wmx.sbc.ofdma_ss_uplink_power_control_support.minimum_num_of_frames    The Minimum
Unsigned 8-bit integer
wmx.sbc.ofdma_ss_uplink_power_control_support.open_loop    Open loop
Unsigned 8-bit integer
wmx.sbc.ofdma_ss_uplink_power_control_support.rsvd    Reserved
Unsigned 8-bit integer
wmx.sbc.ofdma_uplink_aas_preamble    Uplink AAS Preamble
Boolean
wmx.sbc.phy_cinr_measure_permutation_zone.data_subcarriers    Physical CINR Measur
Boolean
wmx.sbc.phy_cinr_measure_permutation_zone.pilot_subcarriers    Physical CINR Measu
Boolean
wmx.sbc.phy_cinr_measure_preamble    Physical CINR Measurement From The Preamble
Boolean
wmx.sbc.pkm_flow_control    PKM Flow Control
Unsigned 8-bit integer
wmx.sbc.power_save_class_types_capability    Power Save Class Types Capability
Unsigned 8-bit integer
wmx.sbc.power_save_class_types_capability.bit0    Power Save Class Type I
Boolean
wmx.sbc.power_save_class_types_capability.bit1    Power Save Class Type II
Boolean
wmx.sbc.power_save_class_types_capability.bit2    Power Save Class Type III
Boolean
wmx.sbc.power_save_class_types_capability.bits34    Number Of Power Save Class Typ
Unsigned 8-bit integer
wmx.sbc.power_save_class_types_capability.bits567    Number Of Power Save Class Ty
Unsigned 8-bit integer
wmx.sbc.private_chain_enable    Private Map Chain Enable
Boolean
wmx.sbc.private_map_concurrency    Private Map Chain Concurrency
Unsigned 8-bit integer

```

```
wmx.sbc.private_map_dl_frame_offset  Private Map DL Frame Offset
Boolean

wmx.sbc.private_map_support  Private Map Support
Boolean

wmx.sbc.private_map_support.ofdma_aas  OFDMA AAS Private Map Support
Unsigned 8-bit integer

wmx.sbc.private_map_support.reduced  Reduced Private Map Support
Boolean

wmx.sbc.private_ul_frame_offset  Private Map UL Frame Offset
Boolean

wmx.sbc.sdma_pilot_capability  SDMA Pilot Capability
Unsigned 8-bit integer

wmx.sbc.sdma_pilot_capability.reserved  Reserved
Unsigned 8-bit integer

wmx.sbc.sdma_pilot_capability.sdma_pilot_pattern_support_for_amc_zone  SDMA Pilot
Boolean

wmx.sbc.ss_demodulator  OFDMA SS Demodulator
Byte array

wmx.sbc.ss_demodulator.64qam  64-QAM
Boolean

wmx.sbc.ss_demodulator.btc  BTC
Boolean

wmx.sbc.ss_demodulator.cc_with_optional_interleaver  CC with Optional Interleaver
Boolean

wmx.sbc.ss_demodulator.ctc  CTC
Boolean

wmx.sbc.ss_demodulator.dedicated_pilots  Dedicated Pilots
Boolean

wmx.sbc.ss_demodulator.harq.cc.ir  HARQ CC_IR
Boolean

wmx.sbc.ss_demodulator.harq.chase  HARQ Chase
Boolean

wmx.sbc.ss_demodulator.harq.ctc.ir  HARQ CTC_IR
Boolean

wmx.sbc.ss_demodulator.ldpc  LDPC
Boolean

wmx.sbc.ss_demodulator.mimo.2.antenna.stc.matrix.a  2-antenna STC Matrix A
Boolean

wmx.sbc.ss_demodulator.mimo.2.antenna.stc.matrix.b.horizontal  2-antenna STC Matrix B Horizontal
Boolean

wmx.sbc.ss_demodulator.mimo.2.antenna.stc.matrix.b.vertical  2-antenna STC Matrix B Vertical
Boolean

wmx.sbc.ss_demodulator.mimo.4.antenna.stc.matrix.a  4-antenna STC Matrix A
Boolean
```

```

wmx.sbc.ss_demodulator.mimo.4.antenna.stc.matrix.b.horizontal  4-antenna STC Mat
Boolean
wmx.sbc.ss_demodulator.mimo.4.antenna.stc.matrix.b.vertical  4-antenna STC Matri
Boolean
wmx.sbc.ss_demodulator.mimo.4.antenna.stc.matrix.c.horizontal  4-antenna STC Mat
Boolean
wmx.sbc.ss_demodulator.mimo.4.antenna.stc.matrix.c.vertical  4-antenna STC Matri
Boolean
wmx.sbc.ss_demodulator.mimo.reserved  Reserved
Unsigned 16-bit integer
wmx.sbc.ss_demodulator.mimo.support  OFDMA SS Demodulator For MIMO Support
Unsigned 16-bit integer
wmx.sbc.ss_demodulator.reserved1  Reserved
Unsigned 8-bit integer
wmx.sbc.ss_demodulator.reserved2  Reserved
Unsigned 16-bit integer
wmx.sbc.ss_demodulator.stc  STC
Boolean
wmx.sbc.ss_fft_sizes  OFDMA SS FFT Sizes
Unsigned 8-bit integer
wmx.sbc.ss_fft_sizes.1024  FFT-1024
Boolean
wmx.sbc.ss_fft_sizes.128  FFT-128
Boolean
wmx.sbc.ss_fft_sizes.2048  FFT-2048
Boolean
wmx.sbc.ss_fft_sizes.256  FFT-256
Boolean
wmx.sbc.ss_fft_sizes.512  FFT-512
Boolean
wmx.sbc.ss_fft_sizes.rsvd2  Reserved
Unsigned 8-bit integer
wmx.sbc.ss_mimo_ul_support.rsvd  Reserved
Unsigned 8-bit integer
wmx.sbc.ss_minimum_num_of_frames  SS minimum number of frames
Unsigned 8-bit integer
wmx.sbc.ss_modulator  OFDMA SS Modulator
Unsigned 8-bit integer
wmx.sbc.ss_modulator.64qam  64-QAM
Boolean
wmx.sbc.ss_modulator.btc  BTC
Boolean
wmx.sbc.ss_modulator.cc_ir  CC_IR
Boolean

```

```
wmx.sbc.ss_modulator.ctc    CTC
    Boolean

wmx.sbc.ss_modulator.ctc_ir  CTC_IR
    Boolean

wmx.sbc.ss_modulator.harq_chase  HARQ Chase
    Boolean

wmx.sbc.ss_modulator.ldpc    LDPC
    Boolean

wmx.sbc.ss_modulator.stc    STC
    Boolean

wmx.sbc.ss_permutation_support  OFMDA SS Permutation Support
    Unsigned 8-bit integer

wmx.sbc.ss_permutation_support.amc_1x6  AMC 1x6
    Boolean

wmx.sbc.ss_permutation_support.amc_2x3  AMC 2x3
    Boolean

wmx.sbc.ss_permutation_support.amc_3x2  AMC 3x2
    Boolean

wmx.sbc.ss_permutation_support.amc_support_harq_map  AMC Support With H-ARQ Map
    Boolean

wmx.sbc.ss_permutation_support.optimal_fusc  Optional FUSC
    Boolean

wmx.sbc.ss_permutation_support.optimal_pusc  Optional PUSC
    Boolean

wmx.sbc.ss_permutation_support.tusc1_support  TUSC1
    Boolean

wmx.sbc.ss_permutation_support.tusc2_support  TUSC2
    Boolean

wmx.sbc.ssrtg  SSRTG
    Unsigned 8-bit integer

wmx.sbc.ssttg  SSTTG
    Unsigned 8-bit integer

wmx.sbc.support_2_concurrent_cqi_channels  Support for 2 Concurrent CQI Channels
    Boolean

wmx.sbc.transition_gaps  Subscriber Transition Gaps
    Unsigned 16-bit integer

wmx.sbc.ul_ctl_channel_support  Uplink Control Channel Support
    Unsigned 8-bit integer

wmx.sbc.ul_ctl_channel_support.3bit_mimo_fast_feedback  3-bit MIMO Fast-feedback
    Boolean

wmx.sbc.ul_ctl_channel_support.diuc_cqi_fast_feedback  DIUC-CQI Fast-feedback
    Boolean

wmx.sbc.ul_ctl_channel_support.enhanced_fast_feedback  Enhanced Fast-feedback
    Boolean
```

wmx.sbc.ul\_ctl\_channel\_support.measurement\_report A Measurement Report Shall Be  
Boolean

wmx.sbc.ul\_ctl\_channel\_support.primary\_secondary\_fast\_feedback Primary/Secondary  
Boolean

wmx.sbc.ul\_ctl\_channel\_support.reserved Reserved  
Unsigned 8-bit integer

wmx.sbc.ul\_ctl\_channel\_support.uep\_fast\_feedback UEP Fast-feedback  
Boolean

wmx.sbc.ul\_ctl\_channel\_support.ul\_ack UL ACK  
Boolean

wmx.sbc.unknown\_tlv\_type Unknown SBC type  
Byte array

wmx.sbc\_ss\_fft\_sizes\_rsvd1 Reserved  
Unsigned 8-bit integer

### WiMax Sub-TLV Messages (wmx.sub)

wmx.cmac\_tuple.bsid BSID  
6-byte Hardware (MAC) Address

wmx.cmac\_tuple.cmac.value CMAC Value  
Byte array

wmx.common\_tlv.mac\_version MAC Version  
Unsigned 8-bit integer

wmx.common\_tlv.unknown\_type Unknown Common TLV Type  
Byte array

wmx.common\_tlv.vendor\_id\_encoding Vendor ID Encoding  
Byte array

wmx.common\_tlv.vendor\_specific\_length Vendor Specific Length  
Unsigned 16-bit integer

wmx.common\_tlv.vendor\_specific\_length\_size Vendor Specific Length Size  
Unsigned 8-bit integer

wmx.common\_tlv.vendor\_specific\_type Vendor Specific Type  
Unsigned 8-bit integer

wmx.common\_tlv.vendor\_specific\_value Vendor Specific Value  
Byte array

wmx.csper.atm\_classifier ATM Classifier TLV  
Byte array

wmx.csper.atm\_classifier\_tlv Classifier ID  
Unsigned 16-bit integer

wmx.csper.atm\_classifier\_vci VCI Classifier  
Unsigned 16-bit integer

wmx.csper.atm\_classifier\_vpi VPI Classifier  
Unsigned 16-bit integer

wmx.csper.atm\_switching\_encoding ATM Switching Encoding  
Unsigned 8-bit integer



```
wmx.csper.unknown_type  Unknown CSPER TLV type
  Byte array
wmx.cst.classifier_action  Classifier DSC Action
  Unsigned 8-bit integer
wmx.cst.error_set.error_code  Error Code
  Unsigned 8-bit integer
wmx.cst.error_set.error_msg  Error Message
  String
wmx.cst.error_set.errored_param  Errored Parameter
  Byte array
wmx.cst.invalid_tlv  Invalid TLV
  Byte array
wmx.cst.large_context_id  Large Context ID
  Unsigned 16-bit integer
wmx.cst.phs.vendor_spec  Vendor-Specific PHS Parameters
  Byte array
wmx.cst.phs_dsc_action  PHS DSC action
  Unsigned 8-bit integer
wmx.cst.phs_rule  PHS Rule
  Byte array
wmx.cst.phs_rule.phsf  PHSF
  Byte array
wmx.cst.phs_rule.phsi  PHSI
  Unsigned 8-bit integer
wmx.cst.phs_rule.phsm  PHSM (bit x: 0-don't suppress the (x+1) byte; 1-suppress)
  Byte array
wmx.cst.phs_rule.phss  PHSS
  Unsigned 8-bit integer
wmx.cst.phs_rule.phsv  PHSV
  Unsigned 8-bit integer
wmx.cst.pkt_class_rule  Packet Classification Rule
  Byte array
wmx.cst.pkt_class_rule.classifier.action.rule  Classifier Action Rule
  Unsigned 8-bit integer
wmx.cst.pkt_class_rule.classifier.action.rule.bit0  Bit #0
  Unsigned 8-bit integer
wmx.cst.pkt_class_rule.classifier.action.rule.reserved  Reserved
  Unsigned 8-bit integer
wmx.cst.pkt_class_rule.dest_mac_address  802.3/Ethernet Destination MAC Address
  Byte array
wmx.cst.pkt_class_rule.dst_ipv4  IPv4 Destination Address
  IPv4 address
wmx.cst.pkt_class_rule.dst_ipv6  IPv6 Destination Address
  IPv6 address
```

wmx.cst.pkt\_class\_rule.dst\_mac Destination MAC Address  
6-byte Hardware (MAC) Address

wmx.cst.pkt\_class\_rule.dst\_port\_high Dst-Port High  
Unsigned 16-bit integer

wmx.cst.pkt\_class\_rule.dst\_port\_low Dst-Port Low  
Unsigned 16-bit integer

wmx.cst.pkt\_class\_rule.eprot1 Eprot1  
Unsigned 8-bit integer

wmx.cst.pkt\_class\_rule.eprot2 Eprot2  
Unsigned 8-bit integer

wmx.cst.pkt\_class\_rule.ethertype Ethertype/IEEE Std 802.2-1998 SAP  
Byte array

wmx.cst.pkt\_class\_rule.index Packet Classifier Rule Index (PCRI)  
Unsigned 16-bit integer

wmx.cst.pkt\_class\_rule.ip\_masked\_dest\_address IP Masked Destination Address  
Byte array

wmx.cst.pkt\_class\_rule.ip\_masked\_src\_address IP Masked Source Address  
Byte array

wmx.cst.pkt\_class\_rule.ipv6\_flow\_label IPv6 Flow Label  
Unsigned 24-bit integer

wmx.cst.pkt\_class\_rule.mask\_ipv4 IPv4 Mask  
IPv4 address

wmx.cst.pkt\_class\_rule.mask\_ipv6 IPv6 Mask  
IPv6 address

wmx.cst.pkt\_class\_rule.mask\_mac MAC Address Mask  
6-byte Hardware (MAC) Address

wmx.cst.pkt\_class\_rule.phsi Associated PHSI  
Unsigned 8-bit integer

wmx.cst.pkt\_class\_rule.pri-high Pri-High  
Unsigned 8-bit integer

wmx.cst.pkt\_class\_rule.pri-low Pri-Low  
Unsigned 8-bit integer

wmx.cst.pkt\_class\_rule.priority Classification Rule Priority  
Unsigned 8-bit integer

wmx.cst.pkt\_class\_rule.prot\_dest\_port\_range Protocol Destination Port Range  
Byte array

wmx.cst.pkt\_class\_rule.prot\_src\_port\_range Protocol Source Port Range  
Byte array

wmx.cst.pkt\_class\_rule.protocol Protocol  
Unsigned 8-bit integer

wmx.cst.pkt\_class\_rule.range\_mask ToS/Differentiated Services Codepoint (DSCP)  
Byte array

wmx.cst.pkt\_class\_rule.src\_ipv4 IPv4 Source Address  
IPv4 address

```
wmx.cst.pkt_class_rule.src_ipv6  IPv6 Source Address
    IPv6 address
wmx.cst.pkt_class_rule.src_mac   Source MAC Address
    6-byte Hardware (MAC) Address
wmx.cst.pkt_class_rule.src_mac_address  802.3/Ethernet Source MAC Address
    Byte array
wmx.cst.pkt_class_rule.src_port_high  Src-Port High
    Unsigned 16-bit integer
wmx.cst.pkt_class_rule.src_port_low   Src-Port Low
    Unsigned 16-bit integer
wmx.cst.pkt_class_rule.tos-high      ToS-High
    Unsigned 8-bit integer
wmx.cst.pkt_class_rule.tos-low       ToS-Low
    Unsigned 8-bit integer
wmx.cst.pkt_class_rule.tos-mask      ToS-Mask
    Unsigned 8-bit integer
wmx.cst.pkt_class_rule.user_priority  IEEE Std 802.1D-1998 User_Priority
    Byte array
wmx.cst.pkt_class_rule.vendor_spec   Vendor-Specific Classifier Parameters
    Byte array
wmx.cst.pkt_class_rule.vlan_id       IEEE Std 802.1Q-1998 VLAN_ID
    Byte array
wmx.cst.pkt_class_rule.vlan_id1      Vlan_Id1
    Unsigned 8-bit integer
wmx.cst.pkt_class_rule.vlan_id2      Vlan_Id2
    Unsigned 8-bit integer
wmx.cst.short_format_context_id      Short-Format Context ID
    Unsigned 16-bit integer
wmx.pkm.unknown.type                Unknown Type
    Byte array
wmx.pkm_msg.pkm_attr.akid            AKID
    Byte array
wmx.pkm_msg.pkm_attr.associated_gkek_seq_number  Associated GKEK Sequence Number
    Byte array
wmx.pkm_msg.pkm_attr.auth_key        Auth Key
    Byte array
wmx.pkm_msg.pkm_attr.auth_result_code  Auth Result Code
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.bs_certificate   BS Certificate
    Byte array
wmx.pkm_msg.pkm_attr.bs_random        BS_RANDOM
    Byte array
wmx.pkm_msg.pkm_attr.ca_certificate   CA Certificate
    Byte array
```

```
wmx.pkm_msg.pkm_attr.cbc_iv    CBC IV
    Byte array
wmx.pkm_msg.pkm_attr.cmac_digest  CMAC Digest
    Byte array
wmx.pkm_msg.pkm_attr.cmac_digest.pn  CMAC Packet Number counter, CMAC_PN_*
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.cmac_digest.value  CMAC Value
    Byte array
wmx.pkm_msg.pkm_attr.config_settings.authorize_reject_wait_timeout  Authorize Re
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.config_settings.authorize_waitout  Authorize Wait Timeout (
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.config_settings.grace_time  Authorization Grace Time (in se
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.config_settings.operational_wait_timeout  Operational Wait
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.config_settings.reauthorize_waitout  Reauthorize Wait Timeo
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.config_settings.rekey_wait_timeout  Rekey Wait Timeout (in
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.config_settings.tek_grace_time  TEK Grace Time (in seconds)
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.crypto_suite  Cryptography
    Byte array
wmx.pkm_msg.pkm_attr.crypto_suite.lsb  TEK Encryption Algorithm Identifiers
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.crypto_suite.middle  Data Authentication Algorithm Identifi
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.crypto_suite.msb  Data Encryption Algorithm Identifiers
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.display_string  Display String
    String
wmx.pkm_msg.pkm_attr.eap_payload  EAP Payload
    Byte array
wmx.pkm_msg.pkm_attr.error_code  Error Code
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.frame_number  Frame Number
    Unsigned 24-bit integer
wmx.pkm_msg.pkm_attr.gkek  GKEK
    Byte array
wmx.pkm_msg.pkm_attr.gkek_params  GKEK Parameters
    Byte array
wmx.pkm_msg.pkm_attr.hmac_digest  HMAC-Digest
    Byte array
```

```

wmx.pkm_msg.pkm_attr.key_life_time  Key Lifetime
    Unsigned 32-bit integer
wmx.pkm_msg.pkm_attr.key_push_counter  Key Push Counter
    Unsigned 16-bit integer
wmx.pkm_msg.pkm_attr.key_push_modes  Key Push Modes
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.key_seq_num  Key Sequence Number
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.ms_mac_address  MS-MAC Address
    6-byte Hardware (MAC) Address
wmx.pkm_msg.pkm_attr.nonce  Nonce
    Byte array
wmx.pkm_msg.pkm_attr.pak_ak_seq_number  PAK/AK Sequence Number
    Byte array
wmx.pkm_msg.pkm_attr.pre_pak  Pre-PAK
    Byte array
wmx.pkm_msg.pkm_attr.sa_service_type  SA Service Type
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.sa_type  SA Type
    Unsigned 8-bit integer
wmx.pkm_msg.pkm_attr.said  SAID
    Unsigned 16-bit integer
wmx.pkm_msg.pkm_attr.sig_bs  SigBS
    Byte array
wmx.pkm_msg.pkm_attr.sig_ss  SigSS
    Byte array
wmx.pkm_msg.pkm_attr.ss_certificate  SS Certificate
    Byte array
wmx.pkm_msg.pkm_attr.ss_random  SS_RANDOM
    Byte array
wmx.pkm_msg.pkm_attr.tek  TEK
    Byte array
wmx.security_negotiation_parameters.auth_policy_support  Authorization Policy Support
    Unsigned 8-bit integer
wmx.security_negotiation_parameters.auth_policy_support.bit0  RSA-based Authorization
    Boolean
wmx.security_negotiation_parameters.auth_policy_support.bit1  EAP-based Authorization
    Boolean
wmx.security_negotiation_parameters.auth_policy_support.bit2  Authenticated EAP-based Authorization
    Boolean
wmx.security_negotiation_parameters.auth_policy_support.bit3  Reserved
    Unsigned 8-bit integer
wmx.security_negotiation_parameters.auth_policy_support.bit4  RSA-based Authorization
    Boolean

```

```

wmx.security_negotiation_parameters.auth_policy_support.bit5  EAP-based Authoriz
Boolean
wmx.security_negotiation_parameters.auth_policy_support.bit6  Authenticated EAP-
Boolean
wmx.security_negotiation_parameters.auth_policy_support.bit7  Reserved
Unsigned 8-bit integer
wmx.security_negotiation_parameters.mac_mode  MAC (Message Authentication Code)
Unsigned 8-bit integer
wmx.security_negotiation_parameters.mac_mode.bit0  HMAC
Boolean
wmx.security_negotiation_parameters.mac_mode.bit1  CMAC
Boolean
wmx.security_negotiation_parameters.mac_mode.bit1_rsvd  Reserved
Boolean
wmx.security_negotiation_parameters.mac_mode.bit2  64-bit Short-HMAC
Boolean
wmx.security_negotiation_parameters.mac_mode.bit3  80-bit Short-HMAC
Boolean
wmx.security_negotiation_parameters.mac_mode.bit4  96-bit Short-HMAC
Boolean
wmx.security_negotiation_parameters.mac_mode.bit5  CMAC
Boolean
wmx.security_negotiation_parameters.mac_mode.reserved  Reserved
Unsigned 8-bit integer
wmx.security_negotiation_parameters.max_conc_transactions  Maximum concurrent tr
Unsigned 8-bit integer
wmx.security_negotiation_parameters.max_suppt_sec_assns  Maximum number of secur
Unsigned 8-bit integer
wmx.security_negotiation_parameters.pkm_version_support  PKM Version Support
Unsigned 8-bit integer
wmx.security_negotiation_parameters.pkm_version_support.bit0  PKM version 1
Boolean
wmx.security_negotiation_parameters.pkm_version_support.bit1  PKM version 2
Boolean
wmx.security_negotiation_parameters.pkm_version_support.reserved  Reserved
Unsigned 8-bit integer
wmx.security_negotiation_parameters.pn_window_size  PN Window Size
Unsigned 16-bit integer
wmx.security_negotiation_parameters.unknown.type  Unknown Security Negotiation P
Byte array
wmx.xmac_tuple.hmac_digest  HMAC Digest
Byte array
wmx.xmac_tuple.key_sn  Key Sequence Number
Unsigned 8-bit integer

```

wmx.xmac\_tuple.packet\_number\_count Packet Number Counter  
Unsigned 32-bit integer

wmx.xmac\_tuple.reserved Reserved  
Unsigned 8-bit integer

### Wifi Protected Setup (wps)

eap.wps.code Opcode  
Unsigned 8-bit integer  
WSC Message Type

eap.wps.flags Flags  
Unsigned 8-bit integer  
Flags

eap.wps.flags.length Length field present  
Boolean  
Length field present

eap.wps.flags.more More flag  
Boolean  
More flag

eap.wps.msglen Length field  
Unsigned 16-bit integer  
Length field

wps.8021x\_enabled 8021x Enabled  
Unsigned 16-bit integer  
8021x Enabled

wps.ap\_channel AP Channel  
Unsigned 16-bit integer  
AP Channel

wps.ap\_setup\_locked AP Setup Locked  
Unsigned 8-bit integer  
AP Setup Locked

wps.application\_extension Application Extension  
Byte array  
Application Extension

wps.appsessionkey AppSessionKey  
Byte array  
AppSessionKey

wps.association\_state Association State  
Unsigned 16-bit integer  
Association State

wps.authentication\_type Authentication Type  
Unsigned 16-bit integer  
Authentication Type

wps.authentication\_type.open Open  
Unsigned 16-bit integer  
Open

wps.authentication\_type.shared Shared  
Unsigned 16-bit integer  
Shared

```
wps.authentication_type.wpa    WPA
    Unsigned 16-bit integer
    WPA

wps.authentication_type.wpa2    WPA2
    Unsigned 16-bit integer
    WPA2

wps.authentication_type.wpa2psk WPA2PSK
    Unsigned 16-bit integer
    WPA2PSK

wps.authentication_type.wpapsk  WPA PSK
    Unsigned 16-bit integer
    WPA PSK

wps.authentication_type_flags  Authentication Type Flags
    Unsigned 16-bit integer
    Authentication Type Flags

wps.authenticator               Authenticator
    Byte array
    Authenticator

wps.config_methods              Configuration Methods
    Unsigned 16-bit integer
    Configuration Methods

wps.config_methods.display      Display
    Unsigned 16-bit integer
    Display

wps.config_methods.ethernet     Ethernet
    Unsigned 16-bit integer
    Ethernet

wps.config_methods.keypad       Keypad
    Unsigned 16-bit integer
    Keypad

wps.config_methods.label        Label
    Unsigned 16-bit integer
    Label

wps.config_methods.nfcext       External NFC
    Unsigned 16-bit integer
    External NFC

wps.config_methods.nfcinf       NFC Interface
    Unsigned 16-bit integer
    NFC Interface

wps.config_methods.nfcint       Internal NFC
    Unsigned 16-bit integer
    Internal NFC

wps.config_methods.pushbutton   Push Button
    Unsigned 16-bit integer
    Push Button

wps.config_methods.usba         USB
    Unsigned 16-bit integer
    USB
```



```
wps.configuration_error Configuration Error
    Unsigned 16-bit integer
    Configuration Error

wps.confirmation_url4 Confirmation URL4
    String
    Confirmation URL4

wps.confirmation_url6 Confirmation URL6
    String
    Confirmation URL6

wps.connection_type Connection Type
    Unsigned 8-bit integer
    Connection Type

wps.connection_type_flags Connection Types
    Unsigned 8-bit integer
    Connection Types

wps.connection_type_flags.ess ESS
    Unsigned 8-bit integer
    ESS

wps.connection_type_flags.ibss IBSS
    Unsigned 8-bit integer
    IBSS

wps.credential Credential
    Byte array
    Credential

wps.device_name Device Name
    String
    Device Name

wps.device_password_id Device Password ID
    Unsigned 16-bit integer
    Device Password ID

wps.e_hash1 Enrollee Hash 1
    Byte array
    Enrollee Hash 1

wps.e_hash2 Enrollee Hash 2
    Byte array
    Enrollee Hash 2

wps.e_snonce1 Enrollee SNounce 1
    Byte array
    Enrollee SNounce 1

wps.e_snonce2 Enrollee SNounce 2
    Byte array
    Enrollee SNounce 2

wps.eap_identity EAP Identity
    Byte array
    EAP Identity

wps.eap_type EAP Type
    Byte array
    EAP Type
```

```
wps.encrypted_settings  Encrypted Settings
    Byte array
    Encrypted Settings

wps.encryption_type      Encryption Type
    Unsigned 16-bit integer
    Encryption Type

wps.encryption_type_flags  Encryption Type Flags
    Unsigned 16-bit integer
    Encryption Type Flags

wps.encryption_type_flags.aes  AES
    Unsigned 16-bit integer
    AES

wps.encryption_type_flags.none  None
    Unsigned 16-bit integer
    None

wps.encryption_type_flags.tkip  TKIP
    Unsigned 16-bit integer
    TKIP

wps.encryption_type_flags.wep  WEP
    Unsigned 16-bit integer
    WEP

wps.enrollee_nonce       Enrollee Nonce
    Byte array
    Enrollee Nonce

wps.feature_id           Feature ID
    Unsigned 32-bit integer
    Feature ID

wps.identity             Identity
    String
    Identity

wps.identity_proof       Identity Proof
    Byte array
    Identity Proof

wps.initialization_vector  Initialization Vector
    Byte array
    Initialization Vector

wps.key_identifier       Key Identifier
    Byte array
    Key Identifier

wps.key_lifetime         Key Lifetime
    Unsigned 32-bit integer
    Key Lifetime

wps.key_provided_automatically  Key Provided Automatically
    Unsigned 16-bit integer
    Key Provided Automatically

wps.key_wrap_authenticator  Key Wrap Authenticator
    Byte array
    Key Wrap Authenticator
```

```
wps.length Data Element Length
    Unsigned 16-bit integer
    Data Element Length

wps.mac_address MAC
    6-byte Hardware (MAC) Address
    MAC

wps.manufacturer Manufacturer
    String
    Manufacturer

wps.message_counter Message Counter
    Unsigned 64-bit integer
    Message Counter

wps.message_type Message Type
    Unsigned 8-bit integer
    Message Type

wps.model_name Model Name
    String
    Model Name

wps.model_number Model Number
    String
    Model Number

wps.network_index Network Index
    Unsigned 8-bit integer
    Network Index

wps.network_key Network Key
    Byte array
    Network Key

wps.network_key_index Network Key Index
    Unsigned 8-bit integer
    Network Key Index

wps.new_device_name New Device Name
    Byte array
    New Device Name

wps.new_password New Password
    Byte array
    New Password

wps.oob_device_password OOB Device Password
    Byte array
    OOB Device Password

wps.os_version OS Version
    Unsigned 32-bit integer
    OS Version

wps.permitted_config_methods Permitted COnfig Methods
    Unsigned 16-bit integer
    Permitted COnfig Methods

wps.portable_device Portable Device
    Unsigned 8-bit integer
    Portable Device
```

```
wps.power_level  Power Level
    Unsigned 8-bit integer
    Power Level

wps.primary_device_type  Primary Device Type
    Byte array
    Primary Device Type

wps.primary_device_type.category  Category
    Unsigned 16-bit integer
    Category

wps.primary_device_type.oui  OUI
    Byte array
    OUI

wps.primary_device_type.subcategory  Subcategory
    Unsigned 16-bit integer
    Subcategory

wps.psk_current  PSK Current
    Unsigned 8-bit integer
    PSK Current

wps.psk_max  PSK Max
    Unsigned 8-bit integer
    PSK Max

wps.public_key  Public Key
    Byte array
    Public Key

wps.public_key_hash  Public Key Hash
    Byte array
    Public Key Hash

wps.r_hash1  Registrar Hash 1
    Byte array
    Registrar Hash 1

wps.r_hash2  Registrar Hash 2
    Byte array
    Registrar Hash 2

wps.r_snonce1  Registrar Snonce1
    Byte array
    Registrar Snonce1

wps.r_snonce2  Registrar Snonce 2
    Byte array
    Registrar Snonce 2

wps.radio_enabled  Radio Enabled
    Unsigned 16-bit integer
    Radio Enabled

wps.reboot  Reboot
    Unsigned 16-bit integer
    Reboot

wps.registrar_current  Registrar current
    Unsigned 8-bit integer
    Registrar current
```

```
wps.registrar_established Registrar established
    Unsigned 16-bit integer
    Registrar established

wps.registrar_list Registrar list
    Byte array
    Registrar list

wps.registrar_max Registrar max
    Unsigned 8-bit integer
    Registrar max

wps.registrar_nonce Registrar Nonce
    Byte array
    Registrar Nonce

wps.rekey_key Rekey Key
    Byte array
    Rekey Key

wps.request_type Request Type
    Unsigned 8-bit integer
    Request Type

wps.response_type Response Type
    Unsigned 8-bit integer
    Response Type

wps.rf_bands RF Bands
    Unsigned 8-bit integer
    RF Bands

wps.secondary_device_type_list Secondary Device Type List
    Byte array
    Secondary Device Type List

wps.selected_registrar Selected Registrar
    Unsigned 16-bit integer
    Selected Registrar

wps.selected_registrar_config_methods Selected Registrar Config Methods
    Unsigned 16-bit integer
    Selected Registrar Config Methods

wps.serial_number Serial Number
    Byte array
    Serial Number

wps.ssid SSID
    String
    SSID

wps.total_networks Total Networks
    Unsigned 8-bit integer
    Total Networks

wps.type Data Element Type
    Unsigned 16-bit integer
    Data Element Type

wps.uuid_e UUID Enrollee
    Byte array
    UUID Enrollee
```

```
wps.uuid_r    UUID Registrar
              Byte array
              UUID Registrar

wps.vendor_extension  Vendor Extension
              Byte array
              Vendor Extension

wps.version    Version
              Unsigned 8-bit integer
              Version

wps.weptransmitkey  WEP Transmit Key
              Unsigned 8-bit integer
              WEP Transmit Key

wps.wifi_protected_setup_state  Wifi Protected Setup State
              Unsigned 8-bit integer
              Wifi Protected Setup State

wps.x509_certificate  X509 Certificate
              Byte array
              X509 Certificate

wps.x509_certificate_request  X509 Certificate Request
              Byte array
              X509 Certificate Request
```

**Windows 2000 DNS (dnsserver)**

```
dnsserver.opnum  Operation
                 Unsigned 16-bit integer
                 Operation

dnsserver.rc     Return code
                 Unsigned 32-bit integer
                 Return code
```

**Wireless Configuration Service (wzcsvc)**

```
wzcsvc.opnum    Operation
                 Unsigned 16-bit integer
```

**Wireless Session Protocol (wsp)**

```
wsp.TID         Transaction ID
                 Unsigned 8-bit integer
                 WSP Transaction ID (for connectionless WSP)

wsp.address     Address Record
                 Unsigned 32-bit integer
                 Address Record

wsp.address.bearer_type  Bearer Type
                 Unsigned 8-bit integer
                 Bearer Type

wsp.address.flags  Flags/Length
                 Unsigned 8-bit integer
                 Address Flags/Length
```

```
wsp.address.flags.bearer_type_included  Bearer Type Included
Boolean
Address bearer type included

wsp.address.flags.length  Address Length
Unsigned 8-bit integer
Address Length

wsp.address.flags.port_number_included  Port Number Included
Boolean
Address port number included

wsp.address.ipv4  IPv4 Address
IPv4 address
Address (IPv4)

wsp.address.ipv6  IPv6 Address
IPv6 address
Address (IPv6)

wsp.address.port  Port Number
Unsigned 16-bit integer
Port Number

wsp.address.unknown  Address
Byte array
Address (unknown)

wsp.capabilities  Capabilities
No value
Capabilities

wsp.capabilities.length  Capabilities Length
Unsigned 32-bit integer
Length of Capabilities field (bytes)

wsp.capability.aliases  Aliases
Byte array
Aliases

wsp.capability.client_message_size  Client Message Size
Unsigned 8-bit integer
Client Message size (bytes)

wsp.capability.client_sdu_size  Client SDU Size
Unsigned 8-bit integer
Client Service Data Unit size (bytes)

wsp.capability.code_pages  Header Code Pages
String
Header Code Pages

wsp.capability.extended_methods  Extended Methods
String
Extended Methods

wsp.capability.method_mor  Method MOR
Unsigned 8-bit integer
Method MOR

wsp.capability.protocol_opt  Protocol Options
String
Protocol Options
```

wsp.capability.protocol\_option.ack\_headers Acknowledgement headers  
Boolean  
If set, this CO-WSP session supports Acknowledgement headers

wsp.capability.protocol\_option.confirmed\_push Confirmed Push facility  
Boolean  
If set, this CO-WSP session supports the Confirmed Push facility

wsp.capability.protocol\_option.large\_data\_transfer Large data transfer  
Boolean  
If set, this CO-WSP session supports Large data transfer

wsp.capability.protocol\_option.push Push facility  
Boolean  
If set, this CO-WSP session supports the Push facility

wsp.capability.protocol\_option.session\_resume Session Resume facility  
Boolean  
If set, this CO-WSP session supports the Session Resume facility

wsp.capability.push\_mor Push MOR  
Unsigned 8-bit integer  
Push MOR

wsp.capability.server\_message\_size Server Message Size  
Unsigned 8-bit integer  
Server Message size (bytes)

wsp.capability.server\_sdu\_size Server SDU Size  
Unsigned 8-bit integer  
Server Service Data Unit size (bytes)

wsp.code\_page Switching to WSP header code-page  
Unsigned 8-bit integer  
Header code-page shift code

wsp.header.accept Accept  
String  
WSP header Accept

wsp.header.accept\_application Accept-Application  
String  
WSP header Accept-Application

wsp.header.accept\_charset Accept-Charset  
String  
WSP header Accept-Charset

wsp.header.accept\_encoding Accept-Encoding  
String  
WSP header Accept-Encoding

wsp.header.accept\_language Accept-Language  
String  
WSP header Accept-Language

wsp.header.accept\_ranges Accept-Ranges  
String  
WSP header Accept-Ranges

wsp.header.age Age  
String  
WSP header Age



```
wsp.header.allow Allow
String
WSP header Allow

wsp.header.application_id Application-Id
String
WSP header Application-Id

wsp.header.authorization Authorization
String
WSP header Authorization

wsp.header.authorization.password Password
String
WSP header Authorization: password for basic authorization

wsp.header.authorization.scheme Authorization Scheme
String
WSP header Authorization: used scheme

wsp.header.authorization.user_id User-id
String
WSP header Authorization: user ID for basic authorization

wsp.header.bearer_indication Bearer-Indication
String
WSP header Bearer-Indication

wsp.header.cache_control Cache-Control
String
WSP header Cache-Control

wsp.header.connection Connection
String
WSP header Connection

wsp.header.content_base Content-Base
String
WSP header Content-Base

wsp.header.content_disposition Content-Disposition
String
WSP header Content-Disposition

wsp.header.content_encoding Content-Encoding
String
WSP header Content-Encoding

wsp.header.content_id Content-Id
String
WSP header Content-Id

wsp.header.content_language Content-Language
String
WSP header Content-Language

wsp.header.content_length Content-Length
String
WSP header Content-Length

wsp.header.content_location Content-Location
String
WSP header Content-Location
```

```
wsp.header.content_md5  Content-Md5
  String
  WSP header Content-Md5

wsp.header.content_range  Content-Range
  String
  WSP header Content-Range

wsp.header.content_range.entity_length  Entity-length
  Unsigned 32-bit integer
  WSP header Content-Range: length of the entity

wsp.header.content_range.first_byte_pos  First-byte-position
  Unsigned 32-bit integer
  WSP header Content-Range: position of first byte

wsp.header.content_type  Content-Type
  String
  WSP header Content-Type

wsp.header.content_uri  Content-Uri
  String
  WSP header Content-Uri

wsp.header.cookie  Cookie
  String
  WSP header Cookie

wsp.header.date  Date
  String
  WSP header Date

wsp.header.encoding_version  Encoding-Version
  String
  WSP header Encoding-Version

wsp.header.etag  ETag
  String
  WSP header ETag

wsp.header.expect  Expect
  String
  WSP header Expect

wsp.header.expires  Expires
  String
  WSP header Expires

wsp.header.from  From
  String
  WSP header From

wsp.header.host  Host
  String
  WSP header Host

wsp.header.if_match  If-Match
  String
  WSP header If-Match

wsp.header.if_modified_since  If-Modified-Since
  String
  WSP header If-Modified-Since
```

```
wsp.header.if_none_match  If-None-Match
    String
    WSP header If-None-Match
wsp.header.if_range      If-Range
    String
    WSP header If-Range
wsp.header.if_unmodified_since  If-Unmodified-Since
    String
    WSP header If-Unmodified-Since
wsp.header.initiator_uri  Initiator-Uri
    String
    WSP header Initiator-Uri
wsp.header.last_modified  Last-Modified
    String
    WSP header Last-Modified
wsp.header.location      Location
    String
    WSP header Location
wsp.header.max_forwards  Max-Forwards
    String
    WSP header Max-Forwards
wsp.header.name          Header name
    String
    Name of the WSP header
wsp.header.pragma        Pragma
    String
    WSP header Pragma
wsp.header.profile        Profile
    String
    WSP header Profile
wsp.header.profile_diff  Profile-Diff
    String
    WSP header Profile-Diff
wsp.header.profile_warning  Profile-Warning
    String
    WSP header Profile-Warning
wsp.header.proxy_authenticate  Proxy-Authenticate
    String
    WSP header Proxy-Authenticate
wsp.header.proxy_authenticate.realm  Authentication Realm
    String
    WSP header Proxy-Authenticate: used realm
wsp.header.proxy_authenticate.scheme  Authentication Scheme
    String
    WSP header Proxy-Authenticate: used scheme
wsp.header.proxy_authorization  Proxy-Authorization
    String
    WSP header Proxy-Authorization
```

```
wsp.header.proxy_authorization.password Password
String
WSP header Proxy-Authorization: password for basic authorization
wsp.header.proxy_authorization.scheme Authorization Scheme
String
WSP header Proxy-Authorization: used scheme
wsp.header.proxy_authorization.user_id User-id
String
WSP header Proxy-Authorization: user ID for basic authorization
wsp.header.public Public
String
WSP header Public
wsp.header.push_flag Push-Flag
String
WSP header Push-Flag
wsp.header.push_flag.authenticated Initiator URI is authenticated
Unsigned 8-bit integer
The X-Wap-Initiator-URI has been authenticated.
wsp.header.push_flag.last Last push message
Unsigned 8-bit integer
Indicates whether this is the last push message.
wsp.header.push_flag.trusted Content is trusted
Unsigned 8-bit integer
The push content is trusted.
wsp.header.range Range
String
WSP header Range
wsp.header.range.first_byte_pos First-byte-position
Unsigned 32-bit integer
WSP header Range: position of first byte
wsp.header.range.last_byte_pos Last-byte-position
Unsigned 32-bit integer
WSP header Range: position of last byte
wsp.header.range.suffix_length Suffix-length
Unsigned 32-bit integer
WSP header Range: length of the suffix
wsp.header.referer Referer
String
WSP header Referer
wsp.header.retry_after Retry-After
String
WSP header Retry-After
wsp.header.server Server
String
WSP header Server
wsp.header.set_cookie Set-Cookie
String
WSP header Set-Cookie
```

```
wsp.header.te      Te
  String
  WSP header Te

wsp.header.trailer Trailer
  String
  WSP header Trailer

wsp.header.transfer_encoding Transfer-Encoding
  String
  WSP header Transfer-Encoding

wsp.header.upgrade Upgrade
  String
  WSP header Upgrade

wsp.header.user_agent User-Agent
  String
  WSP header User-Agent

wsp.header.vary    Vary
  String
  WSP header Vary

wsp.header.via     Via
  String
  WSP header Via

wsp.header.warning Warning
  String
  WSP header Warning

wsp.header.warning.agent Warning agent
  String
  WSP header Warning agent

wsp.header.warning.code Warning code
  Unsigned 8-bit integer
  WSP header Warning code

wsp.header.warning.text Warning text
  String
  WSP header Warning text

wsp.header.www_authenticate Www-Authenticate
  String
  WSP header Www-Authenticate

wsp.header.www_authenticate.realm Authentication Realm
  String
  WSP header WWW-Authenticate: used realm

wsp.header.www_authenticate.scheme Authentication Scheme
  String
  WSP header WWW-Authenticate: used scheme

wsp.header.x_up_1.x_up_devcap_em_size x-up-devcap-em-size
  String
  WSP Openwave header x-up-devcap-em-size

wsp.header.x_up_1.x_up_devcap_gui x-up-devcap-gui
  String
  WSP Openwave header x-up-devcap-gui
```

```
wsp.header.x_up_1.x_up_devcap_has_color  x-up-devcap-has-color
String
WSP Openwave header x-up-devcap-has-color

wsp.header.x_up_1.x_up_devcap_immed_alert  x-up-devcap-immed-alert
String
WSP Openwave header x-up-devcap-immed-alert

wsp.header.x_up_1.x_up_devcap_num_softkeys  x-up-devcap-num-softkeys
String
WSP Openwave header x-up-devcap-num-softkeys

wsp.header.x_up_1.x_up_devcap_screen_chars  x-up-devcap-screen-chars
String
WSP Openwave header x-up-devcap-screen-chars

wsp.header.x_up_1.x_up_devcap_screen_depth  x-up-devcap-screen-depth
String
WSP Openwave header x-up-devcap-screen-depth

wsp.header.x_up_1.x_up_devcap_screen_pixels  x-up-devcap-screen-pixels
String
WSP Openwave header x-up-devcap-screen-pixels

wsp.header.x_up_1.x_up_devcap_softkey_size  x-up-devcap-softkey-size
String
WSP Openwave header x-up-devcap-softkey-size

wsp.header.x_up_1.x_up_proxy_ba_enable  x-up-proxy-ba-enable
String
WSP Openwave header x-up-proxy-ba-enable

wsp.header.x_up_1.x_up_proxy_ba_realm  x-up-proxy-ba-realm
String
WSP Openwave header x-up-proxy-ba-realm

wsp.header.x_up_1.x_up_proxy_bookmark  x-up-proxy-bookmark
String
WSP Openwave header x-up-proxy-bookmark

wsp.header.x_up_1.x_up_proxy_enable_trust  x-up-proxy-enable-trust
String
WSP Openwave header x-up-proxy-enable-trust

wsp.header.x_up_1.x_up_proxy_home_page  x-up-proxy-home-page
String
WSP Openwave header x-up-proxy-home-page

wsp.header.x_up_1.x_up_proxy_linger  x-up-proxy-linger
String
WSP Openwave header x-up-proxy-linger

wsp.header.x_up_1.x_up_proxy_net_ask  x-up-proxy-net-ask
String
WSP Openwave header x-up-proxy-net-ask

wsp.header.x_up_1.x_up_proxy_notify  x-up-proxy-notify
String
WSP Openwave header x-up-proxy-notify

wsp.header.x_up_1.x_up_proxy_operator_domain  x-up-proxy-operator-domain
String
WSP Openwave header x-up-proxy-operator-domain
```

```
wsp.header.x_up_1.x_up_proxy_push_accept  x-up-proxy-push-accept
String
WSP Openwave header x-up-proxy-push-accept
wsp.header.x_up_1.x_up_proxy_push_seq  x-up-proxy-push-seq
String
WSP Openwave header x-up-proxy-push-seq
wsp.header.x_up_1.x_up_proxy_redirect_enable  x-up-proxy-redirect-enable
String
WSP Openwave header x-up-proxy-redirect-enable
wsp.header.x_up_1.x_up_proxy_redirect_status  x-up-proxy-redirect-status
String
WSP Openwave header x-up-proxy-redirect-status
wsp.header.x_up_1.x_up_proxy_request_uri  x-up-proxy-request-uri
String
WSP Openwave header x-up-proxy-request-uri
wsp.header.x_up_1.x_up_proxy_tod  x-up-proxy-tod
String
WSP Openwave header x-up-proxy-tod
wsp.header.x_up_1.x_up_proxy_trans_charset  x-up-proxy-trans-charset
String
WSP Openwave header x-up-proxy-trans-charset
wsp.header.x_up_1.x_up_proxy_trust  x-up-proxy-trust
String
WSP Openwave header x-up-proxy-trust
wsp.header.x_up_1.x_up_proxy_uplink_version  x-up-proxy-uplink-version
String
WSP Openwave header x-up-proxy-uplink-version
wsp.header.x_wap_application_id  X-Wap-Application-Id
String
WSP header X-Wap-Application-Id
wsp.header.x_wap_security  X-Wap-Security
String
WSP header X-Wap-Security
wsp.header.x_wap_tod  X-Wap-Tod
String
WSP header X-Wap-Tod
wsp.headers  Headers
No value
Headers
wsp.headers_length  Headers Length
Unsigned 32-bit integer
Length of Headers field (bytes)
wsp.multipart  Part
Unsigned 32-bit integer
MIME part of multipart data.
wsp.multipart.data  Data in this part
No value
The data of 1 MIME-multipart part.
```

```
wsp.parameter.charset  Charset
    String
    Charset parameter

wsp.parameter.comment  Comment
    String
    Comment parameter

wsp.parameter.domain   Domain
    String
    Domain parameter

wsp.parameter.filename  Filename
    String
    Filename parameter

wsp.parameter.level    Level
    String
    Level parameter

wsp.parameter.mac      MAC
    String
    MAC parameter (Content-Type: application/vnd.wap.connectivity-wbxml)

wsp.parameter.name     Name
    String
    Name parameter

wsp.parameter.path     Path
    String
    Path parameter

wsp.parameter.q        Q
    String
    Q parameter

wsp.parameter.sec      SEC
    Unsigned 8-bit integer
    SEC parameter (Content-Type: application/vnd.wap.connectivity-wbxml)

wsp.parameter.size     Size
    Unsigned 32-bit integer
    Size parameter

wsp.parameter.start    Start
    String
    Start parameter

wsp.parameter.start_info  Start-info
    String
    Start-info parameter

wsp.parameter.type     Type
    Unsigned 32-bit integer
    Type parameter

wsp.parameter.upart.type  Type
    String
    Multipart type parameter

wsp.pdu_type           PDU Type
    Unsigned 8-bit integer
    PDU Type
```



wsp.post.data Data (Post)  
No value  
Post Data

wsp.push.data Push Data  
No value  
Push Data

wsp.redirect.addresses Redirect Addresses  
No value  
List of Redirect Addresses

wsp.redirect.flags Flags  
Unsigned 8-bit integer  
Redirect Flags

wsp.redirect.flags.permanent Permanent Redirect  
Boolean  
Permanent Redirect

wsp.redirect.flags.reuse\_security\_session Reuse Security Session  
Boolean  
If set, the existing Security Session may be reused

wsp.reply.data Data  
No value  
Data

wsp.reply.status Status  
Unsigned 8-bit integer  
Reply Status

wsp.server.session\_id Server Session ID  
Unsigned 32-bit integer  
Server Session ID

wsp.uri URI  
String  
URI

wsp.uri\_length URI Length  
Unsigned 32-bit integer  
Length of URI field

wsp.version.major Version (Major)  
Unsigned 8-bit integer  
Version (Major)

wsp.version.minor Version (Minor)  
Unsigned 8-bit integer  
Version (Minor)

#### **Wireless Transaction Protocol (wtp)**

wtp.RID Re-transmission Indicator  
Boolean  
Re-transmission Indicator

wtp.TID Transaction ID  
Unsigned 16-bit integer  
Transaction ID

```
wtp.TID.response  TID Response
  Boolean
  TID Response

wtp.abort.reason.provider  Abort Reason
  Unsigned 8-bit integer
  Abort Reason

wtp.abort.reason.user  Abort Reason
  Unsigned 8-bit integer
  Abort Reason

wtp.abort.type  Abort Type
  Unsigned 8-bit integer
  Abort Type

wtp.ack.tvetok  Tve/Tok flag
  Boolean
  Tve/Tok flag

wtp.continue_flag  Continue Flag
  Boolean
  Continue Flag

wtp.fragment  WTP Fragment
  Frame number
  WTP Fragment

wtp.fragment.error  Defragmentation error
  Frame number
  Defragmentation error due to illegal fragments

wtp.fragment.multipletails  Multiple tail fragments found
  Boolean
  Several tails were found when defragmenting the packet

wtp.fragment.overlap  Fragment overlap
  Boolean
  Fragment overlaps with other fragments

wtp.fragment.overlap.conflict  Conflicting data in fragment overlap
  Boolean
  Overlapping fragments contained conflicting data

wtp.fragment.toolongfragment  Fragment too long
  Boolean
  Fragment contained data past end of packet

wtp.fragments  WTP Fragments
  No value
  WTP Fragments

wtp.header.TIDNew  TIDNew
  Boolean
  TIDNew

wtp.header.UP  U/P flag
  Boolean
  U/P Flag

wtp.header.missing_packets  Missing Packets
  Unsigned 8-bit integer
  Missing Packets
```

```
wtp.header.sequence  Packet Sequence Number
    Unsigned 8-bit integer
    Packet Sequence Number

wtp.header.version  Version
    Unsigned 8-bit integer
    Version

wtp.header_data  Data
    Byte array
    Data

wtp.header_variable_part  Header: Variable part
    Byte array
    Variable part of the header

wtp.inv.reserved  Reserved
    Unsigned 8-bit integer
    Reserved

wtp.inv.transaction_class  Transaction Class
    Unsigned 8-bit integer
    Transaction Class

wtp.pdu_type  PDU Type
    Unsigned 8-bit integer
    PDU Type

wtp.reassembled.in  Reassembled in
    Frame number
    WTP fragments are reassembled in the given packet

wtp.sub_pdu_size  Sub PDU size
    Unsigned 16-bit integer
    Size of Sub-PDU (bytes)

wtp.tpi  TPI
    Unsigned 8-bit integer
    Identification of the Transport Information Item

wtp.tpi.info  Information
    No value
    The information being send by this TPI

wtp.tpi.opt  Option
    Unsigned 8-bit integer
    The given option for this TPI

wtp.tpi.opt.val  Option Value
    No value
    The value that is supplied with this option

wtp.tpi.psn  Packet sequence number
    Unsigned 8-bit integer
    Sequence number of this packet

wtp.trailer_flags  Trailer Flags
    Unsigned 8-bit integer
    Trailer Flags
```

**Wireless Transport Layer Security (wtls)**

```
wtls.alert Alert
  No value
  Alert

wtls.alert.description Description
  Unsigned 8-bit integer
  Description

wtls.alert.level Level
  Unsigned 8-bit integer
  Level

wtls.handshake Handshake
  Unsigned 8-bit integer
  Handshake

wtls.handshake.certificate Certificate
  No value
  Certificate

wtls.handshake.certificate.after Valid not after
  Date/Time stamp
  Valid not after

wtls.handshake.certificate.before Valid not before
  Date/Time stamp
  Valid not before

wtls.handshake.certificate.issuer.charset Charset
  Unsigned 16-bit integer
  Charset

wtls.handshake.certificate.issuer.name Name
  String
  Name

wtls.handshake.certificate.issuer.size Size
  Unsigned 8-bit integer
  Size

wtls.handshake.certificate.issuer.type Issuer
  Unsigned 8-bit integer
  Issuer

wtls.handshake.certificate.parameter Parameter Set
  String
  Parameter Set

wtls.handshake.certificate.parameter_index Parameter Index
  Unsigned 8-bit integer
  Parameter Index

wtls.handshake.certificate.public.type Public Key Type
  Unsigned 8-bit integer
  Public Key Type

wtls.handshake.certificate.rsa.exponent RSA Exponent Size
  Unsigned 32-bit integer
  RSA Exponent Size
```

```
wtls.handshake.certificate.rsa.modules  RSA Modulus Size
    Unsigned 32-bit integer
    RSA Modulus Size

wtls.handshake.certificate.signature.signature  Signature Size
    Unsigned 32-bit integer
    Signature Size

wtls.handshake.certificate.signature.type  Signature Type
    Unsigned 8-bit integer
    Signature Type

wtls.handshake.certificate.subject.charset  Charset
    Unsigned 16-bit integer
    Charset

wtls.handshake.certificate.subject.name  Name
    String
    Name

wtls.handshake.certificate.subject.size  Size
    Unsigned 8-bit integer
    Size

wtls.handshake.certificate.subject.type  Subject
    Unsigned 8-bit integer
    Subject

wtls.handshake.certificate.type  Type
    Unsigned 8-bit integer
    Type

wtls.handshake.certificate.version  Version
    Unsigned 8-bit integer
    Version

wtls.handshake.certificates  Certificates
    No value
    Certificates

wtls.handshake.client_hello  Client Hello
    No value
    Client Hello

wtls.handshake.client_hello.cipher  Cipher
    String
    Cipher

wtls.handshake.client_hello.ciphers  Cipher Suites
    No value
    Cipher Suite

wtls.handshake.client_hello.client_keys_id  Client Keys
    No value
    Client Keys

wtls.handshake.client_hello.client_keys_len  Length
    Unsigned 16-bit integer
    Length

wtls.handshake.client_hello.comp_methods  Compression Methods
    No value
    Compression Methods
```

```
wtls.handshake.client_hello.compression  Compression
    Unsigned 8-bit integer
    Compression

wtls.handshake.client_hello.gmt  Time GMT
    Date/Time stamp
    Time GMT

wtls.handshake.client_hello.ident_charset  Identifier CharSet
    Unsigned 16-bit integer
    Identifier CharSet

wtls.handshake.client_hello.ident_name  Identifier Name
    String
    Identifier Name

wtls.handshake.client_hello.ident_size  Identifier Size
    Unsigned 8-bit integer
    Identifier Size

wtls.handshake.client_hello.ident_type  Identifier Type
    Unsigned 8-bit integer
    Identifier Type

wtls.handshake.client_hello.identifier  Identifier
    No value
    Identifier

wtls.handshake.client_hello.key.key_exchange  Key Exchange
    Unsigned 8-bit integer
    Key Exchange

wtls.handshake.client_hello.key.key_exchange.suite  Suite
    Unsigned 8-bit integer
    Suite

wtls.handshake.client_hello.parameter  Parameter Set
    String
    Parameter Set

wtls.handshake.client_hello.parameter_index  Parameter Index
    Unsigned 8-bit integer
    Parameter Index

wtls.handshake.client_hello.random  Random
    No value
    Random

wtls.handshake.client_hello.refresh  Refresh
    Unsigned 8-bit integer
    Refresh

wtls.handshake.client_hello.sequence_mode  Sequence Mode
    Unsigned 8-bit integer
    Sequence Mode

wtls.handshake.client_hello.session.str  Session ID
    String
    Session ID

wtls.handshake.client_hello.sessionid  Session ID
    Unsigned 64-bit integer
    Session ID
```

```
wtls.handshake.client_hello.trusted_keys_id  Trusted Keys
  No value
  Trusted Keys

wtls.handshake.client_hello.version  Version
  Unsigned 8-bit integer
  Version

wtls.handshake.length  Length
  Unsigned 16-bit integer
  Length

wtls.handshake.server_hello  Server Hello
  No value
  Server Hello

wtls.handshake.server_hello.cipher  Cipher
  No value
  Cipher

wtls.handshake.server_hello.cipher.bulk  Cipher Bulk
  Unsigned 8-bit integer
  Cipher Bulk

wtls.handshake.server_hello.cipher.mac  Cipher MAC
  Unsigned 8-bit integer
  Cipher MAC

wtls.handshake.server_hello.compression  Compression
  Unsigned 8-bit integer
  Compression

wtls.handshake.server_hello.gmt  Time GMT
  Date/Time stamp
  Time GMT

wtls.handshake.server_hello.key  Client Key ID
  Unsigned 8-bit integer
  Client Key ID

wtls.handshake.server_hello.random  Random
  No value
  Random

wtls.handshake.server_hello.refresh  Refresh
  Unsigned 8-bit integer
  Refresh

wtls.handshake.server_hello.sequence_mode  Sequence Mode
  Unsigned 8-bit integer
  Sequence Mode

wtls.handshake.server_hello.session.str  Session ID
  String
  Session ID

wtls.handshake.server_hello.sessionid  Session ID
  Unsigned 64-bit integer
  Session ID

wtls.handshake.server_hello.version  Version
  Unsigned 8-bit integer
  Version
```

```

wtls.handshake.type  Type
    Unsigned 8-bit integer
    Type

wtls.rec_cipher      Record Ciphered
    No value
    Record Ciphered

wtls.rec_length      Record Length
    Unsigned 16-bit integer
    Record Length

wtls.rec_seq         Record Sequence
    Unsigned 16-bit integer
    Record Sequence

wtls.rec_type        Record Type
    Unsigned 8-bit integer
    Record Type

wtls.record          Record
    Unsigned 8-bit integer
    Record

```

**Wlan Certificate Extension (wlancertextn)**

```

wlancertextn.SSIDList  SSIDList
    Unsigned 32-bit integer
    wlancertextn.SSIDList

wlancertextn.SSIDList_item  Item
    Byte array
    wlancertextn.SSID

```

**Workstation Service (wkssvc)**

```

wkssvc.lsa_String.name  Name
    String

wkssvc.lsa_String.name_len  Name Len
    Unsigned 16-bit integer

wkssvc.lsa_String.name_size  Name Size
    Unsigned 16-bit integer

wkssvc.opnum            Operation
    Unsigned 16-bit integer

wkssvc.platform_id     Platform Id
    Unsigned 32-bit integer

wkssvc.werror           Windows Error
    Unsigned 32-bit integer

wkssvc.wkssvc_ComputerNamesCtr.computer_name  Computer Name
    String

wkssvc.wkssvc_ComputerNamesCtr.count          Count
    Unsigned 32-bit integer

wkssvc.wkssvc_NetWkstaEnumUsers.entries_read  Entries Read
    Unsigned 32-bit integer

```



```

wkssvc.wkssvc_NetWkstaEnumUsers.info Info
    No value
wkssvc.wkssvc_NetWkstaEnumUsers.prefmaxlen Prefmaxlen
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaEnumUsers.resume_handle Resume Handle
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaEnumUsers.server_name Server Name
    String
wkssvc.wkssvc_NetWkstaEnumUsersCtr.user0 User0
    No value
wkssvc.wkssvc_NetWkstaEnumUsersCtr.user1 User1
    No value
wkssvc.wkssvc_NetWkstaEnumUsersCtr0.entries_read Entries Read
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaEnumUsersCtr0.user0 User0
    No value
wkssvc.wkssvc_NetWkstaEnumUsersCtrl1.entries_read Entries Read
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaEnumUsersCtrl1.user1 User1
    No value
wkssvc.wkssvc_NetWkstaEnumUsersInfo.ctr Ctr
    No value
wkssvc.wkssvc_NetWkstaEnumUsersInfo.level Level
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaGetInfo.info Info
    No value
wkssvc.wkssvc_NetWkstaGetInfo.level Level
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaGetInfo.server_name Server Name
    String
wkssvc.wkssvc_NetWkstaInfo.info100 Info100
    No value
wkssvc.wkssvc_NetWkstaInfo.info101 Info101
    No value
wkssvc.wkssvc_NetWkstaInfo.info1010 Info1010
    No value
wkssvc.wkssvc_NetWkstaInfo.info1011 Info1011
    No value
wkssvc.wkssvc_NetWkstaInfo.info1012 Info1012
    No value
wkssvc.wkssvc_NetWkstaInfo.info1013 Info1013
    No value
wkssvc.wkssvc_NetWkstaInfo.info1018 Info1018
    No value

```

wkssvc.wkssvc_NetWkstaInfo.info102	Info102
No value	
wkssvc.wkssvc_NetWkstaInfo.info1023	Info1023
No value	
wkssvc.wkssvc_NetWkstaInfo.info1027	Info1027
No value	
wkssvc.wkssvc_NetWkstaInfo.info1028	Info1028
No value	
wkssvc.wkssvc_NetWkstaInfo.info1032	Info1032
No value	
wkssvc.wkssvc_NetWkstaInfo.info1033	Info1033
No value	
wkssvc.wkssvc_NetWkstaInfo.info1041	Info1041
No value	
wkssvc.wkssvc_NetWkstaInfo.info1042	Info1042
No value	
wkssvc.wkssvc_NetWkstaInfo.info1043	Info1043
No value	
wkssvc.wkssvc_NetWkstaInfo.info1044	Info1044
No value	
wkssvc.wkssvc_NetWkstaInfo.info1045	Info1045
No value	
wkssvc.wkssvc_NetWkstaInfo.info1046	Info1046
No value	
wkssvc.wkssvc_NetWkstaInfo.info1047	Info1047
No value	
wkssvc.wkssvc_NetWkstaInfo.info1048	Info1048
No value	
wkssvc.wkssvc_NetWkstaInfo.info1049	Info1049
No value	
wkssvc.wkssvc_NetWkstaInfo.info1050	Info1050
No value	
wkssvc.wkssvc_NetWkstaInfo.info1051	Info1051
No value	
wkssvc.wkssvc_NetWkstaInfo.info1052	Info1052
No value	
wkssvc.wkssvc_NetWkstaInfo.info1053	Info1053
No value	
wkssvc.wkssvc_NetWkstaInfo.info1054	Info1054
No value	
wkssvc.wkssvc_NetWkstaInfo.info1055	Info1055
No value	
wkssvc.wkssvc_NetWkstaInfo.info1056	Info1056
No value	

```

wkssvc.wkssvc_NetWkstaInfo.info1057  Info1057
    No value
wkssvc.wkssvc_NetWkstaInfo.info1058  Info1058
    No value
wkssvc.wkssvc_NetWkstaInfo.info1059  Info1059
    No value
wkssvc.wkssvc_NetWkstaInfo.info1060  Info1060
    No value
wkssvc.wkssvc_NetWkstaInfo.info1061  Info1061
    No value
wkssvc.wkssvc_NetWkstaInfo.info1062  Info1062
    No value
wkssvc.wkssvc_NetWkstaInfo.info502   Info502
    No value
wkssvc.wkssvc_NetWkstaInfo100.domain_name  Domain Name
    String
wkssvc.wkssvc_NetWkstaInfo100.platform_id  Platform Id
    No value
wkssvc.wkssvc_NetWkstaInfo100.server_name  Server Name
    String
wkssvc.wkssvc_NetWkstaInfo100.version_major  Version Major
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo100.version_minor  Version Minor
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo101.domain_name  Domain Name
    String
wkssvc.wkssvc_NetWkstaInfo101.lan_root  Lan Root
    String
wkssvc.wkssvc_NetWkstaInfo101.platform_id  Platform Id
    No value
wkssvc.wkssvc_NetWkstaInfo101.server_name  Server Name
    String
wkssvc.wkssvc_NetWkstaInfo101.version_major  Version Major
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo101.version_minor  Version Minor
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1010.char_wait  Char Wait
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1011.collection_time  Collection Time
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1012.maximum_collection_count  Maximum Collection Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1013.keep_connection  Keep Connection
    Unsigned 32-bit integer

```

```
wkssvc.wkssvc_NetWkstaInfo1018.session_timeout  Session Timeout
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo102.domain_name  Domain Name
    String
wkssvc.wkssvc_NetWkstaInfo102.lan_root  Lan Root
    String
wkssvc.wkssvc_NetWkstaInfo102.logged_on_users  Logged On Users
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo102.platform_id  Platform Id
    No value
wkssvc.wkssvc_NetWkstaInfo102.server_name  Server Name
    String
wkssvc.wkssvc_NetWkstaInfo102.version_major  Version Major
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo102.version_minor  Version Minor
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1023.size_char_buf  Size Char Buf
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1027.errorlog_sz  Errorlog Sz
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1028.print_buf_time  Print Buf Time
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1032.wrk_heuristics  Wrk Heuristics
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1033.max_threads  Max Threads
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1041.lock_quota  Lock Quota
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1042.lock_increment  Lock Increment
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1043.lock_maximum  Lock Maximum
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1044.pipe_increment  Pipe Increment
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1045.pipe_maximum  Pipe Maximum
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1046.dormant_file_limit  Dormant File Limit
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1047.cache_file_timeout  Cache File Timeout
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1048.use_opportunistic_locking  Use Opportunistic Lock
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1049.use_unlock_behind  Use Unlock Behind
    Unsigned 32-bit integer
```

```
wkssvc.wkssvc_NetWkstaInfo1050.use_close_behind  Use Close Behind
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1051.buf_named_pipes  Buf Named Pipes
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1052.use_lock_read_unlock  Use Lock Read Unlock
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1053.utilize_nt_caching  Utilize Nt Caching
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1054.use_raw_read  Use Raw Read
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1055.use_raw_write  Use Raw Write
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1056.use_write_raw_data  Use Write Raw Data
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1057.use_encryption  Use Encryption
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1058.buf_files_deny_write  Buf Files Deny Write
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1059.buf_read_only_files  Buf Read Only Files
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1060.force_core_create_mode  Force Core Create Mode
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1061.use_512_byte_max_transfer  Use 512 Byte Max Trans
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo1062.read_ahead_throughput  Read Ahead Throughput
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.buf_files_deny_write  Buf Files Deny Write
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.buf_named_pipes  Buf Named Pipes
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.buf_read_only_files  Buf Read Only Files
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.cache_file_timeout  Cache File Timeout
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.char_wait  Char Wait
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.collection_time  Collection Time
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.dgram_event_reset_freq  Dgram Event Reset Freq
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.dormant_file_limit  Dormant File Limit
Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.force_core_create_mode  Force Core Create Mode
Unsigned 32-bit integer
```

wkssvc.wkssvc\_NetWkstaInfo502.keep\_connection Keep Connection  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.lock\_increment Lock Increment  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.lock\_maximum Lock Maximum  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.lock\_quota Lock Quota  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.log\_election\_packets Log Election Packets  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.max\_commands Max Commands  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.max\_illegal\_dgram\_events Max Illegal Dgram Events  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.max\_threads Max Threads  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.maximum\_collection\_count Maximum Collection Count  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.num\_mailslot\_buffers Num Mailslot Buffers  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.num\_srv\_announce\_buffers Num Srv Announce Buffers  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.pipe\_increment Pipe Increment  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.pipe\_maximum Pipe Maximum  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.read\_ahead\_throughput Read Ahead Throughput  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.session\_timeout Session Timeout  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.size\_char\_buf Size Char Buf  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.use\_512\_byte\_max\_transfer Use 512 Byte Max Transf  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.use\_close\_behind Use Close Behind  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.use\_encryption Use Encryption  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.use\_lock\_read\_unlock Use Lock Read Unlock  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.use\_opportunistic\_locking Use Opportunistic Locki  
Unsigned 32-bit integer

wkssvc.wkssvc\_NetWkstaInfo502.use\_raw\_read Use Raw Read  
Unsigned 32-bit integer

```
wkssvc.wkssvc_NetWkstaInfo502.use_raw_write  Use Raw Write
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.use_unlock_behind  Use Unlock Behind
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.use_write_raw_data  Use Write Raw Data
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaInfo502.utilize_nt_caching  Utilize Nt Caching
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaSetInfo.info  Info
    No value
wkssvc.wkssvc_NetWkstaSetInfo.level  Level
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaSetInfo.parm_error  Parm Error
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaSetInfo.server_name  Server Name
    String
wkssvc.wkssvc_NetWkstaTransportCtr.ctr0  Ctr0
    No value
wkssvc.wkssvc_NetWkstaTransportCtr0.array  Array
    No value
wkssvc.wkssvc_NetWkstaTransportCtr0.count  Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaTransportEnum.info  Info
    No value
wkssvc.wkssvc_NetWkstaTransportEnum.max_buffer  Max Buffer
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaTransportEnum.resume_handle  Resume Handle
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaTransportEnum.server_name  Server Name
    String
wkssvc.wkssvc_NetWkstaTransportEnum.total_entries  Total Entries
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaTransportInfo.ctr  Ctr
    No value
wkssvc.wkssvc_NetWkstaTransportInfo.level  Level
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaTransportInfo0.address  Address
    String
wkssvc.wkssvc_NetWkstaTransportInfo0.name  Name
    String
wkssvc.wkssvc_NetWkstaTransportInfo0.quality_of_service  Quality Of Service
    Unsigned 32-bit integer
wkssvc.wkssvc_NetWkstaTransportInfo0.vc_count  Vc Count
    Unsigned 32-bit integer
```

```
wkssvc.wkssvc_NetWkstaTransportInfo0.wan_link  Wan Link
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrAddAlternateComputerName.Account  Account
    String
wkssvc.wkssvc_NetrAddAlternateComputerName.EncryptedPassword  Encryptedpassword
    No value
wkssvc.wkssvc_NetrAddAlternateComputerName.NewAlternateMachineName  Newalternate
    String
wkssvc.wkssvc_NetrAddAlternateComputerName.Reserved  Reserved
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrAddAlternateComputerName.server_name  Server Name
    String
wkssvc.wkssvc_NetrEnumerateComputerNames.Reserved  Reserved
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrEnumerateComputerNames.ctr  Ctr
    No value
wkssvc.wkssvc_NetrEnumerateComputerNames.name_type  Name Type
    Unsigned 16-bit integer
wkssvc.wkssvc_NetrEnumerateComputerNames.server_name  Server Name
    String
wkssvc.wkssvc_NetrGetJoinInformation.name_buffer  Name Buffer
    String
wkssvc.wkssvc_NetrGetJoinInformation.name_type  Name Type
    Unsigned 16-bit integer
wkssvc.wkssvc_NetrGetJoinInformation.server_name  Server Name
    String
wkssvc.wkssvc_NetrGetJoinableOus.Account  Account
    String
wkssvc.wkssvc_NetrGetJoinableOus.domain_name  Domain Name
    String
wkssvc.wkssvc_NetrGetJoinableOus.num_ous  Num Ous
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrGetJoinableOus.ous  Ous
    String
wkssvc.wkssvc_NetrGetJoinableOus.server_name  Server Name
    String
wkssvc.wkssvc_NetrGetJoinableOus.unknown  Unknown
    String
wkssvc.wkssvc_NetrGetJoinableOus2.Account  Account
    String
wkssvc.wkssvc_NetrGetJoinableOus2.EncryptedPassword  Encryptedpassword
    No value
wkssvc.wkssvc_NetrGetJoinableOus2.domain_name  Domain Name
    String
```



```
wkssvc.wkssvc_NetrGetJoinableOus2.num_ous  Num Ous
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrGetJoinableOus2.ous  Ous
    String
wkssvc.wkssvc_NetrGetJoinableOus2.server_name  Server Name
    String
wkssvc.wkssvc_NetrJoinDomain.Account  Account
    String
wkssvc.wkssvc_NetrJoinDomain.account_ou  Account Ou
    String
wkssvc.wkssvc_NetrJoinDomain.domain_name  Domain Name
    String
wkssvc.wkssvc_NetrJoinDomain.join_flags  Join Flags
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrJoinDomain.server_name  Server Name
    String
wkssvc.wkssvc_NetrJoinDomain.unknown  Unknown
    String
wkssvc.wkssvc_NetrJoinDomain2.account_name  Account Name
    String
wkssvc.wkssvc_NetrJoinDomain2.admin_account  Admin Account
    String
wkssvc.wkssvc_NetrJoinDomain2.domain_name  Domain Name
    String
wkssvc.wkssvc_NetrJoinDomain2.encrypted_password  Encrypted Password
    No value
wkssvc.wkssvc_NetrJoinDomain2.join_flags  Join Flags
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrJoinDomain2.server_name  Server Name
    String
wkssvc.wkssvc_NetrLogonDomainNameAdd.domain_name  Domain Name
    String
wkssvc.wkssvc_NetrLogonDomainNameDel.domain_name  Domain Name
    String
wkssvc.wkssvc_NetrMessageBufferSend.message_buffer  Message Buffer
    Unsigned 8-bit integer
wkssvc.wkssvc_NetrMessageBufferSend.message_name  Message Name
    String
wkssvc.wkssvc_NetrMessageBufferSend.message_sender_name  Message Sender Name
    String
wkssvc.wkssvc_NetrMessageBufferSend.message_size  Message Size
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrMessageBufferSend.server_name  Server Name
    String
```

```
wkssvc.wkssvc_NetrRemoveAlternateComputerName.Account Account
String
wkssvc.wkssvc_NetrRemoveAlternateComputerName.AlternateMachineNameToRemove Alte
String
wkssvc.wkssvc_NetrRemoveAlternateComputerName.EncryptedPassword Encryptedpassword
No value
wkssvc.wkssvc_NetrRemoveAlternateComputerName.Reserved Reserved
Unsigned 32-bit integer
wkssvc.wkssvc_NetrRemoveAlternateComputerName.server_name Server Name
String
wkssvc.wkssvc_NetrRenameMachineInDomain.Account Account
String
wkssvc.wkssvc_NetrRenameMachineInDomain.NewMachineName Newmachinename
String
wkssvc.wkssvc_NetrRenameMachineInDomain.RenameOptions Renameoptions
Unsigned 32-bit integer
wkssvc.wkssvc_NetrRenameMachineInDomain.password Password
String
wkssvc.wkssvc_NetrRenameMachineInDomain.server_name Server Name
String
wkssvc.wkssvc_NetrRenameMachineInDomain2.Account Account
String
wkssvc.wkssvc_NetrRenameMachineInDomain2.EncryptedPassword Encryptedpassword
No value
wkssvc.wkssvc_NetrRenameMachineInDomain2.NewMachineName Newmachinename
String
wkssvc.wkssvc_NetrRenameMachineInDomain2.RenameOptions Renameoptions
Unsigned 32-bit integer
wkssvc.wkssvc_NetrRenameMachineInDomain2.server_name Server Name
String
wkssvc.wkssvc_NetrSetPrimaryComputername.Account Account
String
wkssvc.wkssvc_NetrSetPrimaryComputername.EncryptedPassword Encryptedpassword
No value
wkssvc.wkssvc_NetrSetPrimaryComputername.Reserved Reserved
Unsigned 32-bit integer
wkssvc.wkssvc_NetrSetPrimaryComputername.primary_name Primary Name
String
wkssvc.wkssvc_NetrSetPrimaryComputername.server_name Server Name
String
wkssvc.wkssvc_NetrUnjoinDomain.Account Account
String
wkssvc.wkssvc_NetrUnjoinDomain.password Password
String
```

```
wkssvc.wkssvc_NetrUnjoinDomain.server_name  Server Name
String
wkssvc.wkssvc_NetrUnjoinDomain.unjoin_flags  Unjoin Flags
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUnjoinDomain2.account  Account
String
wkssvc.wkssvc_NetrUnjoinDomain2.encrypted_password  Encrypted Password
No value
wkssvc.wkssvc_NetrUnjoinDomain2.server_name  Server Name
String
wkssvc.wkssvc_NetrUnjoinDomain2.unjoin_flags  Unjoin Flags
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseAdd.ctr  Ctr
No value
wkssvc.wkssvc_NetrUseAdd.level  Level
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseAdd.parm_err  Parm Err
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseAdd.server_name  Server Name
String
wkssvc.wkssvc_NetrUseDel.force_cond  Force Cond
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseDel.server_name  Server Name
String
wkssvc.wkssvc_NetrUseDel.use_name  Use Name
String
wkssvc.wkssvc_NetrUseEnum.entries_read  Entries Read
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseEnum.info  Info
No value
wkssvc.wkssvc_NetrUseEnum.prefmaxlen  Prefmaxlen
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseEnum.resume_handle  Resume Handle
Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseEnum.server_name  Server Name
String
wkssvc.wkssvc_NetrUseEnumCtr.ctr0  Ctr0
No value
wkssvc.wkssvc_NetrUseEnumCtr.ctr1  Ctr1
No value
wkssvc.wkssvc_NetrUseEnumCtr.ctr2  Ctr2
No value
wkssvc.wkssvc_NetrUseEnumCtr0.array  Array
No value
```

```

wkssvc.wkssvc_NetrUseEnumCtr0.count  Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseEnumCtr1.array  Array
    No value
wkssvc.wkssvc_NetrUseEnumCtr1.count  Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseEnumCtr2.array  Array
    No value
wkssvc.wkssvc_NetrUseEnumCtr2.count  Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseEnumInfo.ctr    Ctr
    No value
wkssvc.wkssvc_NetrUseEnumInfo.level  Level
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseGetInfo.ctr     Ctr
    No value
wkssvc.wkssvc_NetrUseGetInfo.level   Level
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseGetInfo.server_name  Server Name
    String
wkssvc.wkssvc_NetrUseGetInfo.use_name  Use Name
    String
wkssvc.wkssvc_NetrUseGetInfoCtr.info0  Info0
    No value
wkssvc.wkssvc_NetrUseGetInfoCtr.info1  Info1
    No value
wkssvc.wkssvc_NetrUseGetInfoCtr.info2  Info2
    No value
wkssvc.wkssvc_NetrUseGetInfoCtr.info3  Info3
    No value
wkssvc.wkssvc_NetrUseInfo0.local       Local
    String
wkssvc.wkssvc_NetrUseInfo0.remote      Remote
    String
wkssvc.wkssvc_NetrUseInfo1.asg_type    Asg Type
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo1.local       Local
    String
wkssvc.wkssvc_NetrUseInfo1.password    Password
    String
wkssvc.wkssvc_NetrUseInfo1.ref_count   Ref Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo1.remote      Remote
    String

```

```
wkssvc.wkssvc_NetrUseInfo1.status    Status
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo1.use_count  Use Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo2.asg_type  Asg Type
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo2.domain_name  Domain Name
    String
wkssvc.wkssvc_NetrUseInfo2.local      Local
    String
wkssvc.wkssvc_NetrUseInfo2.password  Password
    String
wkssvc.wkssvc_NetrUseInfo2.ref_count  Ref Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo2.remote     Remote
    String
wkssvc.wkssvc_NetrUseInfo2.status     Status
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo2.use_count  Use Count
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrUseInfo2.user_name  User Name
    String
wkssvc.wkssvc_NetrUseInfo3.unknown1  Unknown1
    String
wkssvc.wkssvc_NetrUseInfo3.unknown2  Unknown2
    String
wkssvc.wkssvc_NetrValidateName.Account  Account
    String
wkssvc.wkssvc_NetrValidateName.Password  Password
    String
wkssvc.wkssvc_NetrValidateName.name     Name
    String
wkssvc.wkssvc_NetrValidateName.name_type  Name Type
    Unsigned 16-bit integer
wkssvc.wkssvc_NetrValidateName.server_name  Server Name
    String
wkssvc.wkssvc_NetrValidateName2.Account  Account
    String
wkssvc.wkssvc_NetrValidateName2.EncryptedPassword  Encryptedpassword
    No value
wkssvc.wkssvc_NetrValidateName2.name     Name
    String
wkssvc.wkssvc_NetrValidateName2.name_type  Name Type
    Unsigned 16-bit integer
```

```
wkssvc.wkssvc_NetrValidateName2.server_name  Server Name
String
wkssvc.wkssvc_NetrWkstaTransportAdd.info0   Info0
No value
wkssvc.wkssvc_NetrWkstaTransportAdd.level   Level
Unsigned 32-bit integer
wkssvc.wkssvc_NetrWkstaTransportAdd.parm_err Parm Err
Unsigned 32-bit integer
wkssvc.wkssvc_NetrWkstaTransportAdd.server_name Server Name
String
wkssvc.wkssvc_NetrWkstaTransportDel.server_name Server Name
String
wkssvc.wkssvc_NetrWkstaTransportDel.transport_name Transport Name
String
wkssvc.wkssvc_NetrWkstaTransportDel.unknown3 Unknown3
Unsigned 32-bit integer
wkssvc.wkssvc_NetrWkstaUserGetInfo.info     Info
No value
wkssvc.wkssvc_NetrWkstaUserGetInfo.level   Level
Unsigned 32-bit integer
wkssvc.wkssvc_NetrWkstaUserGetInfo.unknown Unknown
String
wkssvc.wkssvc_NetrWkstaUserInfo.info0      Info0
No value
wkssvc.wkssvc_NetrWkstaUserInfo.info1      Info1
No value
wkssvc.wkssvc_NetrWkstaUserInfo.info1101   Info1101
No value
wkssvc.wkssvc_NetrWkstaUserInfo0.user_name User Name
String
wkssvc.wkssvc_NetrWkstaUserInfo1.logon_domain Logon Domain
String
wkssvc.wkssvc_NetrWkstaUserInfo1.logon_server Logon Server
String
wkssvc.wkssvc_NetrWkstaUserInfo1.other_domains Other Domains
String
wkssvc.wkssvc_NetrWkstaUserInfo1.user_name User Name
String
wkssvc.wkssvc_NetrWkstaUserInfo1101.other_domains Other Domains
String
wkssvc.wkssvc_NetrWkstaUserSetInfo.info     Info
No value
wkssvc.wkssvc_NetrWkstaUserSetInfo.level   Level
Unsigned 32-bit integer
```

```
wkssvc.wkssvc_NetrWkstaUserSetInfo.parm_err  Parm Err
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWkstaUserSetInfo.unknown  Unknown
    String
wkssvc.wkssvc_NetrWorkstationStatistics.unknown1  Unknown1
    Unsigned 64-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown10  Unknown10
    Unsigned 64-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown11  Unknown11
    Unsigned 64-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown12  Unknown12
    Unsigned 64-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown13  Unknown13
    Unsigned 64-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown14  Unknown14
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown15  Unknown15
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown16  Unknown16
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown17  Unknown17
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown18  Unknown18
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown19  Unknown19
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown2  Unknown2
    Unsigned 64-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown20  Unknown20
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown21  Unknown21
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown22  Unknown22
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown23  Unknown23
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown24  Unknown24
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown25  Unknown25
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown26  Unknown26
    Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatistics.unknown27  Unknown27
    Unsigned 32-bit integer
```

wkssvc.wkssvc_NetrWorkstationStatistics.unknown28	Unknown28
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown29	Unknown29
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown3	Unknown3
Unsigned 64-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown30	Unknown30
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown31	Unknown31
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown32	Unknown32
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown33	Unknown33
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown34	Unknown34
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown35	Unknown35
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown36	Unknown36
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown37	Unknown37
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown38	Unknown38
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown39	Unknown39
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown4	Unknown4
Unsigned 64-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown40	Unknown40
Unsigned 32-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown5	Unknown5
Unsigned 64-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown6	Unknown6
Unsigned 64-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown7	Unknown7
Unsigned 64-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown8	Unknown8
Unsigned 64-bit integer	
wkssvc.wkssvc_NetrWorkstationStatistics.unknown9	Unknown9
Unsigned 64-bit integer	
wkssvc.wkssvc_NetrWorkstationStatisticsGet.info	Info
No value	
wkssvc.wkssvc_NetrWorkstationStatisticsGet.server_name	Server Name
String	



```

wkssvc.wkssvc_NetrWorkstationStatisticsGet.unknown2  Unknown2
String
wkssvc.wkssvc_NetrWorkstationStatisticsGet.unknown3  Unknown3
Unsigned 32-bit integer
wkssvc.wkssvc_NetrWorkstationStatisticsGet.unknown4  Unknown4
Unsigned 32-bit integer
wkssvc.wkssvc_PasswordBuffer.data  Data
Unsigned 8-bit integer
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_ACCOUNT_CREATE  Wkssvc Join Flags Account Create
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_ACCOUNT_DELETE  Wkssvc Join Flags Account Delete
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_DEFER_SPN  Wkssvc Join Flags Defer Spn
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_DOMAIN_JOIN_IF_JOINED  Wkssvc Join Flags Domain Join If Joined
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_JOIN_DC_ACCOUNT  Wkssvc Join Flags Join Dc Account
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_JOIN_TYPE  Wkssvc Join Flags Join Type
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_JOIN_UNSECURE  Wkssvc Join Flags Join Unsecure
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_JOIN_WITH_NEW_NAME  Wkssvc Join Flags Join With New Name
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_MACHINE_PWD_PASSED  Wkssvc Join Flags Machine Pwd Passed
Boolean
wkssvc.wkssvc_joinflags.WKSSVC_JOIN_FLAGS_WIN9X_UPGRADE  Wkssvc Join Flags Win9x Upgrade
Boolean
wkssvc.wkssvc_renameflags.WKSSVC_JOIN_FLAGS_ACCOUNT_CREATE  Wkssvc Join Flags Account Create
Boolean

```

### **X Display Manager Control Protocol (xdmcp)**

```

xdmcp.authentication_name  Authentication name
String
Authentication name
xdmcp.authorization_name  Authorization name
String
Authorization name
xdmcp.display_number  Display number
Unsigned 16-bit integer
Display number
xdmcp.hostname  Hostname
String
Hostname

```

```
xmcp.length  Message length
             Unsigned 16-bit integer
             Length of the remaining message

xmcp.opcode  Opcode
             Unsigned 16-bit integer
             Opcode

xmcp.session_id  Session ID
                Unsigned 32-bit integer
                Session identifier

xmcp.status  Status
            String
            Status

xmcp.version  Version
             Unsigned 16-bit integer
             Protocol version
```

#### **X.228 OSI Reliable Transfer Service (rtse)**

```
rtse.abortReason  abortReason
                 Signed 32-bit integer
                 rtse.AbortReason

rtse.additionalReferenceInformation  additionalReferenceInformation
                                     String
                                     rtse.AdditionalReferenceInformation

rtse.applicationProtocol  applicationProtocol
                         Signed 32-bit integer
                         rtse.T_applicationProtocol

rtse.callingSSuserReference  callingSSuserReference
                            Unsigned 32-bit integer
                            rtse.CallingSSuserReference

rtse.checkpointSize  checkpointSize
                    Signed 32-bit integer
                    rtse.INTEGER

rtse.commonReference  commonReference
                     String
                     rtse.CommonReference

rtse.connectionDataAC  connectionDataAC
                      Unsigned 32-bit integer
                      rtse.ConnectionData

rtse.connectionDataRQ  connectionDataRQ
                      Unsigned 32-bit integer
                      rtse.ConnectionData

rtse.dialogueMode  dialogueMode
                  Signed 32-bit integer
                  rtse.T_dialogueMode

rtse.fragment  RTSE fragment
              Frame number
              Message fragment
```

```
rtse.fragment.error    RTSE defragmentation error
    Frame number
    Message defragmentation error
rtse.fragment.multiple_tails  RTSE has multiple tail fragments
    Boolean
    Message has multiple tail fragments
rtse.fragment.overlap  RTSE fragment overlap
    Boolean
    Message fragment overlap
rtse.fragment.overlap.conflicts  RTSE fragment overlapping with conflicting data
    Boolean
    Message fragment overlapping with conflicting data
rtse.fragment.too_long_fragment  RTSE fragment too long
    Boolean
    Message fragment too long
rtse.fragments        RTSE fragments
    No value
    Message fragments
rtse.octetString      octetString
    Byte array
    rtse.T_octetString
rtse.open             open
    No value
    rtse.T_open
rtse.reassembled.in  Reassembled RTSE in frame
    Frame number
    This RTSE packet is reassembled in this frame
rtse.recover         recover
    No value
    rtse.SessionConnectionIdentifier
rtse.reflectedParameter  reflectedParameter
    Byte array
    rtse.BIT_STRING
rtse.refuseReason    refuseReason
    Signed 32-bit integer
    rtse.RefuseReason
rtse.rtab_apdu       rtab-apdu
    No value
    rtse.RTABapdu
rtse.rtoac_apdu      rtoac-apdu
    No value
    rtse.RTOACapdu
rtse.rtorj_apdu      rtorj-apdu
    No value
    rtse.RTORJapdu
rtse.rtorq_apdu      rtorq-apdu
    No value
    rtse.RTORQapdu
```

```
rtse.rttp_apdu  rttp-apdu
    Signed 32-bit integer
    rtse.RTTPapdu

rtse.rtrr_apdu  rtrr-apdu
    Byte array
    rtse.RTTRapdu

rtse.t61String  t61String
    String
    rtse.T_t61String

rtse.userDataRJ  userDataRJ
    No value
    rtse.T_userDataRJ

rtse.userdataAB  userdataAB
    No value
    rtse.T_userdataAB

rtse.windowSize  windowSize
    Signed 32-bit integer
    rtse.INTEGER
```

**X.25 (x.25)**

```
x.25.a  A Bit
    Boolean
    Address Bit

x.25.d  D Bit
    Boolean
    Delivery Confirmation Bit

x.25.gfi  GFI
    Unsigned 16-bit integer
    General format identifier

x.25.lcn  Logical Channel
    Unsigned 16-bit integer
    Logical Channel Number

x.25.m  M Bit
    Boolean
    More Bit

x.25.mod  Modulo
    Unsigned 16-bit integer
    Specifies whether the frame is modulo 8 or 128

x.25.p_r  P(R)
    Unsigned 8-bit integer
    Packet Receive Sequence Number

x.25.p_s  P(S)
    Unsigned 8-bit integer
    Packet Send Sequence Number

x.25.q  Q Bit
    Boolean
    Qualifier Bit
```

x.25.type Packet Type  
Unsigned 8-bit integer  
Packet Type

x25.fragment X.25 Fragment  
Frame number  
X25 Fragment

x25.fragment.error Defragmentation error  
Frame number  
Defragmentation error due to illegal fragments

x25.fragment.multipletails Multiple tail fragments found  
Boolean  
Several tails were found when defragmenting the packet

x25.fragment.overlap Fragment overlap  
Boolean  
Fragment overlaps with other fragments

x25.fragment.overlap.conflict Conflicting data in fragment overlap  
Boolean  
Overlapping fragments contained conflicting data

x25.fragment.toolongfragment Fragment too long  
Boolean  
Fragment contained data past end of packet

x25.fragments X.25 Fragments  
No value  
X.25 Fragments

**X.25 over TCP (xot)**

xot.length Length  
Unsigned 16-bit integer  
Length of X.25 over TCP packet

xot.version Version  
Unsigned 16-bit integer  
Version of X.25 over TCP protocol

**X.29 (x.29)**

x29.error\_type Error type  
Unsigned 8-bit integer  
X.29 error PAD message error type

x29.inv\_msg\_code Invalid message code  
Unsigned 8-bit integer  
X.29 Error PAD message invalid message code

x29.msg\_code Message code  
Unsigned 8-bit integer  
X.29 PAD message code

**X.411 Message Transfer Service (x411)**

x411.AsymmetricToken AsymmetricToken  
No value  
x411.AsymmetricToken

```
x411.BindTokenEncryptedData BindTokenEncryptedData
  No value
  x411.BindTokenEncryptedData
x411.BindTokenSignedData BindTokenSignedData
  Byte array
  x411.BindTokenSignedData
x411.BuiltInDomainDefinedAttributes_item Item
  No value
  x411.BuiltInDomainDefinedAttribute
x411.CertificateSelectors CertificateSelectors
  No value
  x411.CertificateSelectors
x411.CommonName CommonName
  String
  x411.CommonName
x411.Content Content
  Byte array
  x411.Content
x411.ContentConfidentialityAlgorithmIdentifier ContentConfidentialityAlgorithmI
  No value
  x411.ContentConfidentialityAlgorithmIdentifier
x411.ContentCorrelator ContentCorrelator
  Unsigned 32-bit integer
  x411.ContentCorrelator
x411.ContentIdentifier ContentIdentifier
  String
  x411.ContentIdentifier
x411.ContentIntegrityCheck ContentIntegrityCheck
  No value
  x411.ContentIntegrityCheck
x411.ContentLength ContentLength
  Unsigned 32-bit integer
  x411.ContentLength
x411.ContentTypes_item Item
  Unsigned 32-bit integer
  x411.ContentType
x411.ConversionWithLossProhibited ConversionWithLossProhibited
  Unsigned 32-bit integer
  x411.ConversionWithLossProhibited
x411.DLExemptedRecipients DLExemptedRecipients
  Unsigned 32-bit integer
  x411.DLExemptedRecipients
x411.DLExemptedRecipients_item Item
  No value
  x411.ORAddressAndOrDirectoryName
x411.DLExpansion DLExpansion
  No value
  x411.DLExpansion
```

```
x411.DLExpansionHistory  DLExpansionHistory
    Unsigned 32-bit integer
    x411.DLExpansionHistory
x411.DLExpansionHistory_item  Item
    No value
    x411.DLExpansion
x411.DLExpansionProhibited  DLExpansionProhibited
    Unsigned 32-bit integer
    x411.DLExpansionProhibited
x411.DeferredDeliveryTime  DeferredDeliveryTime
    String
    x411.DeferredDeliveryTime
x411.DeliveryFlags  DeliveryFlags
    Byte array
    x411.DeliveryFlags
x411.ExtendedCertificates  ExtendedCertificates
    Unsigned 32-bit integer
    x411.ExtendedCertificates
x411.ExtendedCertificates_item  Item
    Unsigned 32-bit integer
    x411.ExtendedCertificate
x411.ExtendedContentType  ExtendedContentType
    x411.ExtendedContentType
x411.ExtendedEncodedInformationType  ExtendedEncodedInformationType
    x411.ExtendedEncodedInformationType
x411.ExtendedEncodedInformationTypes_item  Item
    x411.ExtendedEncodedInformationType
x411.ExtensionAttributes_item  Item
    No value
    x411.ExtensionAttribute
x411.ImproperlySpecifiedRecipients_item  Item
    No value
    x411.MTSRecipientName
x411.InternalTraceInformation  InternalTraceInformation
    Unsigned 32-bit integer
    x411.InternalTraceInformation
x411.InternalTraceInformationElement  InternalTraceInformationElement
    No value
    x411.InternalTraceInformationElement
x411.InternalTraceInformation_item  Item
    No value
    x411.InternalTraceInformationElement
x411.LatestDeliveryTime  LatestDeliveryTime
    String
    x411.LatestDeliveryTime
```

```
x411.MTABindArgument MTABindArgument
    Unsigned 32-bit integer
    x411.MTABindArgument

x411.MTABindError MTABindError
    Unsigned 32-bit integer
    x411.MTABindError

x411.MTABindResult MTABindResult
    Unsigned 32-bit integer
    x411.MTABindResult

x411.MTANameAndOptionalGDI MTANameAndOptionalGDI
    No value
    x411.MTANameAndOptionalGDI

x411.MTSIdentifier MTSIdentifier
    No value
    x411.MTSIdentifier

x411.MTSOriginatorRequestedAlternateRecipient MTSOriginatorRequestedAlternateRe
    No value
    x411.MTSOriginatorRequestedAlternateRecipient

x411.MTS_APDU MTS-APDU
    Unsigned 32-bit integer
    x411.MTS_APDU

x411.MessageDeliveryEnvelope MessageDeliveryEnvelope
    No value
    x411.MessageDeliveryEnvelope

x411.MessageDeliveryTime MessageDeliveryTime
    String
    x411.MessageDeliveryTime

x411.MessageOriginAuthenticationCheck MessageOriginAuthenticationCheck
    No value
    x411.MessageOriginAuthenticationCheck

x411.MessageSecurityLabel MessageSecurityLabel
    No value
    x411.MessageSecurityLabel

x411.MessageSubmissionEnvelope MessageSubmissionEnvelope
    No value
    x411.MessageSubmissionEnvelope

x411.MessageSubmissionTime MessageSubmissionTime
    String
    x411.MessageSubmissionTime

x411.MessageToken MessageToken
    No value
    x411.MessageToken

x411.MessageTokenEncryptedData MessageTokenEncryptedData
    No value
    x411.MessageTokenEncryptedData

x411.MessageTokenSignedData MessageTokenSignedData
    No value
    x411.MessageTokenSignedData
```



```
x411.ORAddress ORAddress
  No value
  x411.ORAddress
x411.ORName ORName
  No value
  x411.ORName
x411.OrganizationalUnitNames_item Item
  String
  x411.OrganizationalUnitName
x411.OriginatingMTACertificate OriginatingMTACertificate
  No value
  x411.OriginatingMTACertificate
x411.OriginatorAndDLExpansionHistory OriginatorAndDLExpansionHistory
  Unsigned 32-bit integer
  x411.OriginatorAndDLExpansionHistory
x411.OriginatorAndDLExpansionHistory_item Item
  No value
  x411.OriginatorAndDLExpansion
x411.OriginatorCertificate OriginatorCertificate
  No value
  x411.OriginatorCertificate
x411.OriginatorReportRequest OriginatorReportRequest
  Byte array
  x411.OriginatorReportRequest
x411.OriginatorReturnAddress OriginatorReturnAddress
  No value
  x411.OriginatorReturnAddress
x411.OtherRecipientNames_item Item
  No value
  x411.OtherRecipientName
x411.PDSName PDSName
  String
  x411.PDSName
x411.PerMessageIndicators PerMessageIndicators
  Byte array
  x411.PerMessageIndicators
x411.PerRecipientMessageSubmissionFields PerRecipientMessageSubmissionFields
  No value
  x411.PerRecipientMessageSubmissionFields
x411.PerRecipientProbeSubmissionFields PerRecipientProbeSubmissionFields
  No value
  x411.PerRecipientProbeSubmissionFields
x411.PerRecipientReportDeliveryFields PerRecipientReportDeliveryFields
  No value
  x411.PerRecipientReportDeliveryFields
x411.PhysicalDeliveryCountryName PhysicalDeliveryCountryName
  Unsigned 32-bit integer
  x411.PhysicalDeliveryCountryName
```

```
x411.PhysicalDeliveryModes PhysicalDeliveryModes
    Byte array
    x411.PhysicalDeliveryModes
x411.PhysicalDeliveryOfficeName PhysicalDeliveryOfficeName
    No value
    x411.PhysicalDeliveryOfficeName
x411.PhysicalDeliveryReportRequest PhysicalDeliveryReportRequest
    Signed 32-bit integer
    x411.PhysicalDeliveryReportRequest
x411.PhysicalForwardingAddress PhysicalForwardingAddress
    No value
    x411.PhysicalForwardingAddress
x411.PhysicalForwardingAddressRequest PhysicalForwardingAddressRequest
    Unsigned 32-bit integer
    x411.PhysicalForwardingAddressRequest
x411.PhysicalForwardingProhibited PhysicalForwardingProhibited
    Unsigned 32-bit integer
    x411.PhysicalForwardingProhibited
x411.PhysicalRenditionAttributes PhysicalRenditionAttributes
    x411.PhysicalRenditionAttributes
x411.PostalCode PostalCode
    Unsigned 32-bit integer
    x411.PostalCode
x411.Priority Priority
    Unsigned 32-bit integer
    x411.Priority
x411.ProbeOriginAuthenticationCheck ProbeOriginAuthenticationCheck
    No value
    x411.ProbeOriginAuthenticationCheck
x411.ProbeSubmissionEnvelope ProbeSubmissionEnvelope
    No value
    x411.ProbeSubmissionEnvelope
x411.ProofOfDelivery ProofOfDelivery
    No value
    x411.ProofOfDelivery
x411.ProofOfDeliveryRequest ProofOfDeliveryRequest
    Unsigned 32-bit integer
    x411.ProofOfDeliveryRequest
x411.ProofOfSubmission ProofOfSubmission
    No value
    x411.ProofOfSubmission
x411.ProofOfSubmissionRequest ProofOfSubmissionRequest
    Unsigned 32-bit integer
    x411.ProofOfSubmissionRequest
x411.RecipientCertificate RecipientCertificate
    No value
    x411.RecipientCertificate
```

```
x411.RecipientNumberForAdvice RecipientNumberForAdvice
String
x411.RecipientNumberForAdvice
x411.RecipientReassignmentProhibited RecipientReassignmentProhibited
Unsigned 32-bit integer
x411.RecipientReassignmentProhibited
x411.Redirection Redirection
No value
x411.Redirection
x411.RedirectionHistory RedirectionHistory
Unsigned 32-bit integer
x411.RedirectionHistory
x411.RedirectionHistory_item Item
No value
x411.Redirection
x411.Redirections_item Item
No value
x411.RecipientRedirection
x411.RegisteredMailType RegisteredMailType
Unsigned 32-bit integer
x411.RegisteredMailType
x411.ReportDeliveryArgument ReportDeliveryArgument
No value
x411.ReportDeliveryArgument
x411.ReportDeliveryEnvelope ReportDeliveryEnvelope
No value
x411.ReportDeliveryEnvelope
x411.ReportOriginAuthenticationCheck ReportOriginAuthenticationCheck
No value
x411.ReportOriginAuthenticationCheck
x411.ReportingDLName ReportingDLName
No value
x411.ReportingDLName
x411.ReportingMTACertificate ReportingMTACertificate
No value
x411.ReportingMTACertificate
x411.ReportingMTAName ReportingMTAName
No value
x411.ReportingMTAName
x411.RequestedDeliveryMethod RequestedDeliveryMethod
Unsigned 32-bit integer
x411.RequestedDeliveryMethod
x411.RequestedDeliveryMethod_item Item
Unsigned 32-bit integer
x411.RequestedDeliveryMethod_item
x411.RestrictedDelivery_item Item
No value
x411.Restriction
```

```
x411.SecurityCategories_item  Item
    No value
    x411.SecurityCategory
x411.SecurityClassification  SecurityClassification
    Unsigned 32-bit integer
    x411.SecurityClassification
x411.SecurityContext_item  Item
    No value
    x411.SecurityLabel
x411.SubjectSubmissionIdentifier  SubjectSubmissionIdentifier
    No value
    x411.SubjectSubmissionIdentifier
x411.TeletexCommonName  TeletexCommonName
    String
    x411.TeletexCommonName
x411.TeletexDomainDefinedAttributes_item  Item
    No value
    x411.TeletexDomainDefinedAttribute
x411.TeletexOrganizationName  TeletexOrganizationName
    String
    x411.TeletexOrganizationName
x411.TeletexOrganizationalUnitNames  TeletexOrganizationalUnitNames
    Unsigned 32-bit integer
    x411.TeletexOrganizationalUnitNames
x411.TeletexOrganizationalUnitNames_item  Item
    String
    x411.TeletexOrganizationalUnitName
x411.TeletexPersonalName  TeletexPersonalName
    No value
    x411.TeletexPersonalName
x411.TraceInformation  TraceInformation
    Unsigned 32-bit integer
    x411.TraceInformation
x411.TraceInformationElement  TraceInformationElement
    No value
    x411.TraceInformationElement
x411.UniversalCommonName  UniversalCommonName
    No value
    x411.UniversalCommonName
x411.UniversalDomainDefinedAttributes_item  Item
    No value
    x411.UniversalDomainDefinedAttribute
x411.UniversalOrganizationName  UniversalOrganizationName
    No value
    x411.UniversalOrganizationName
x411.UniversalOrganizationalUnitNames  UniversalOrganizationalUnitNames
    Unsigned 32-bit integer
    x411.UniversalOrganizationalUnitNames
```

```
x411.UniversalOrganizationalUnitNames_item  Item
    No value
    x411.UniversalOrganizationalUnitName
x411.UniversalPersonalName  UniversalPersonalName
    No value
    x411.UniversalPersonalName
x411._untag_item  Item
    No value
    x411.TraceInformationElement
x411.a3-width  a3-width
    Boolean
x411.acceptable_eits  acceptable-eits
    Unsigned 32-bit integer
    x411.ExtendedEncodedInformationTypes
x411.actual_recipient_name  actual-recipient-name
    No value
    x411.MTAActualRecipientName
x411.additional_information  additional-information
    No value
    x411.AdditionalInformation
x411.administration_domain_name  administration-domain-name
    Unsigned 32-bit integer
    x411.AdministrationDomainName
x411.algorithmIdentifier  algorithmIdentifier
    No value
    x509af.AlgorithmIdentifier
x411.algorithm_identifier  algorithm-identifier
    No value
    x509af.AlgorithmIdentifier
x411.alternate-recipient-allowed  alternate-recipient-allowed
    Boolean
x411.applies_only_to  applies-only-to
    Unsigned 32-bit integer
    x411.SEQUENCE_OF_Restriction
x411.applies_only_to_item  Item
    No value
    x411.Restriction
x411.arrival_time  arrival-time
    String
    x411.ArrivalTime
x411.asymmetric_token_data  asymmetric-token-data
    No value
    x411.AsymmetricTokenData
x411.attempted  attempted
    Unsigned 32-bit integer
    x411.T_attempted
```

```
x411.attempted_domain  attempted-domain
    No value
    x411.GlobalDomainIdentifier
x411.authenticated  authenticated
    No value
    x411.AuthenticatedArgument
x411.b4-length  b4-length
    Boolean
x411.b4-width  b4-width
    Boolean
x411.bft  bft
    Boolean
x411.bilateral_information  bilateral-information
    No value
    x411.T_bilateral_information
x411.bind_token  bind-token
    No value
    x411.Token
x411.bit-5  bit-5
    Boolean
x411.bit-6  bit-6
    Boolean
x411.built_in  built-in
    Signed 32-bit integer
    x411.BuiltInContentType
x411.built_in_argument  built-in-argument
    Unsigned 32-bit integer
    x411.RefusedArgument
x411.built_in_domain_defined_attributes  built-in-domain-defined-attributes
    Unsigned 32-bit integer
    x411.BuiltInDomainDefinedAttributes
x411.built_in_encoded_information_types  built-in-encoded-information-types
    Byte array
    x411.BuiltInEncodedInformationTypes
x411.built_in_standard_attributes  built-in-standard-attributes
    No value
    x411.BuiltInStandardAttributes
x411.bureau-fax-delivery  bureau-fax-delivery
    Boolean
x411.certificate  certificate
    No value
    x509af.Certificates
x411.certificate_selector  certificate-selector
    No value
    x509ce.CertificateAssertion
x411.character-mode  character-mode
    Boolean
```

```
x411.character_encoding  character-encoding
    Unsigned 32-bit integer
    x411.T_character_encoding
x411.content  content
    Byte array
    x411.Content
x411.content-return-request  content-return-request
    Boolean
x411.content_confidentiality_algorithm_identifier  content-confidentiality-algor
    No value
    x411.ContentConfidentialityAlgorithmIdentifier
x411.content_confidentiality_key  content-confidentiality-key
    Byte array
    x411.EncryptionKey
x411.content_identifier  content-identifier
    String
    x411.ContentIdentifier
x411.content_integrity_check  content-integrity-check
    No value
    x509ce.CertificateAssertion
x411.content_integrity_key  content-integrity-key
    Byte array
    x411.EncryptionKey
x411.content_length  content-length
    Unsigned 32-bit integer
    x411.ContentLength
x411.content_type  content-type
    Unsigned 32-bit integer
    x411.ContentType
x411.content_types  content-types
    Unsigned 32-bit integer
    x411.ContentTypes
x411.control_character_sets  control-character-sets
    String
    x411.TeletexString
x411.converted_encoded_information_types  converted-encoded-information-types
    No value
    x411.ConvertedEncodedInformationTypes
x411.counter-collection  counter-collection
    Boolean
x411.counter-collection-with-telephone-advice  counter-collection-with-telephone
    Boolean
x411.counter-collection-with-teletex-advice  counter-collection-with-teletex-adv
    Boolean
x411.counter-collection-with-telex-advice  counter-collection-with-telex-advice
    Boolean
```

```
x411.country_name    country-name
    Unsigned 32-bit integer
    x411.CountryName

x411.criticality     criticality
    Byte array
    x411.Criticality

x411.default-delivery-controls  default-delivery-controls
    Boolean

x411.default_delivery_controls  default-delivery-controls
    No value
    x411.DefaultDeliveryControls

x411.deferred_delivery_time     deferred-delivery-time
    String
    x411.DeferredDeliveryTime

x411.deferred_time             deferred-time
    String
    x411.DeferredTime

x411.deliverable-class         deliverable-class
    Boolean

x411.deliverable_class         deliverable-class
    Unsigned 32-bit integer
    x411.SET_OF_DeliverableClass

x411.deliverable_class_item    Item
    No value
    x411.DeliverableClass

x411.delivery                 delivery
    No value
    x411.DeliveryReport

x411.delivery_flags           delivery-flags
    Byte array
    x411.DeliveryFlags

x411.directory_entry          directory-entry
    Unsigned 32-bit integer
    x509if.Name

x411.directory_name           directory-name
    Unsigned 32-bit integer
    x509if.Name

x411.disclosure-of-other-recipients  disclosure-of-other-recipients
    Boolean

x411.dl                        dl
    No value
    x411.ORAddressAndOptionalDirectoryName

x411.dl-expanded-by           dl-expanded-by
    Boolean

x411.dl-operation             dl-operation
    Boolean
```



```
x411.dl_expansion_time  dl-expansion-time
    String
    x411.Time
x411.domain  domain
    Unsigned 32-bit integer
    x411.T_bilateral_domain
x411.domain_supplied_information  domain-supplied-information
    No value
    x411.DomainSuppliedInformation
x411.dtm  dtm
    Boolean
x411.e163_4_address  e163-4-address
    No value
    x411.T_e163_4_address
x411.edi  edi
    Boolean
x411.empty_result  empty-result
    No value
    x411.NULL
x411.encoded_information_types_constraints  encoded-information-types-constraint
    No value
    x411.EncodedInformationTypesConstraints
x411.encrypted  encrypted
    Byte array
    x411.BIT_STRING
x411.encrypted_data  encrypted-data
    Byte array
    x411.BIT_STRING
x411.encryption_algorithm_identifier  encryption-algorithm-identifier
    No value
    x509af.AlgorithmIdentifier
x411.encryption_originator  encryption-originator
    No value
    x509ce.CertificateAssertion
x411.encryption_recipient  encryption-recipient
    No value
    x509ce.CertificateAssertion
x411.envelope  envelope
    No value
    x411.MessageTransferEnvelope
x411.exact_match  exact-match
    No value
    x411.ORName
x411.exclusively_acceptable_eits  exclusively-acceptable-eits
    Unsigned 32-bit integer
    x411.ExtendedEncodedInformationTypes
```

```
x411.explicit_conversion  explicit-conversion
    Unsigned 32-bit integer
    x411.ExplicitConversion
x411.express-mail  express-mail
    Boolean
x411.extended  extended
    x411.ExtendedContentType
x411.extended_encoded_information_types  extended-encoded-information-types
    Unsigned 32-bit integer
    x411.ExtendedEncodedInformationTypes
x411.extension_attribute_type  extension-attribute-type
    Signed 32-bit integer
    x411.ExtensionAttributeType
x411.extension_attribute_value  extension-attribute-value
    No value
    x411.T_extension_attribute_value
x411.extension_attributes  extension-attributes
    Unsigned 32-bit integer
    x411.ExtensionAttributes
x411.extensions  extensions
    Unsigned 32-bit integer
    x411.SET_OF_ExtensionField
x411.extensions_item  Item
    No value
    x411.ExtensionField
x411.fine-resolution  fine-resolution
    Boolean
x411.for-delivery  for-delivery
    Boolean
x411.for-submission  for-submission
    Boolean
x411.for-transfer  for-transfer
    Boolean
x411.four_octets  four-octets
    String
    x411.UniversalString
x411.full-colour  full-colour
    Boolean
x411.g3-facsimile  g3-facsimile
    Boolean
x411.g3_facsimile  g3-facsimile
    Byte array
    x411.G3FacsimileNonBasicParameters
x411.g4-class-1  g4-class-1
    Boolean
```

```
x411.generation_qualifier  generation-qualifier
    String
    x411.T_printable_generation_qualifier
x411.given_name  given-name
    String
    x411.T_printable_given_name
x411.global_domain_identifier  global-domain-identifier
    No value
    x411.GlobalDomainIdentifier
x411.graphic_character_sets  graphic-character-sets
    String
    x411.TeletexString
x411.ia5-text  ia5-text
    Boolean
x411.ia5_string  ia5-string
    String
    x411.IA5String
x411.ia5text  ia5text
    String
    x411.IA5String
x411.implicit-conversion-prohibited  implicit-conversion-prohibited
    Boolean
x411.initials  initials
    String
    x411.T_printable_initials
x411.initiator_credentials  initiator-credentials
    Unsigned 32-bit integer
    x411.InitiatorCredentials
x411.initiator_name  initiator-name
    String
    x411.MTAName
x411.intended_recipient  intended-recipient
    No value
    x411.ORAddressAndOptionalDirectoryName
x411.intended_recipient_name  intended-recipient-name
    No value
    x411.IntendedRecipientName
x411.iso_3166_alpha2_code  iso-3166-alpha2-code
    String
    x411.AddrPrintableString
x411.iso_639_language_code  iso-639-language-code
    String
    x411.PrintableString
x411.jpeg  jpeg
    Boolean
```

```
x411.last_trace_information  last-trace-information
    No value
    x411.LastTraceInformation
x411.local_identifier  local-identifier
    String
    x411.LocalIdentifier
x411.long-content  long-content
    Boolean
x411.low-priority  low-priority
    Boolean
x411.mTA  mTA
    String
    x411.MTAName
x411.maximum_content_length  maximum-content-length
    Unsigned 32-bit integer
    x411.ContentLength
x411.message  message
    No value
    x411.Message
x411.message-submission-or-message-delivery  message-submission-or-message-deliv
    Boolean
x411.message_delivery_identifier  message-delivery-identifier
    No value
    x411.MessageDeliveryIdentifier
x411.message_delivery_time  message-delivery-time
    String
    x411.MessageDeliveryTime
x411.message_identifier  message-identifier
    No value
    x411.MessageIdentifier
x411.message_origin_authentication  message-origin-authentication
    No value
    x509ce.CertificateAssertion
x411.message_security_label  message-security-label
    No value
    x411.MessageSecurityLabel
x411.message_sequence_number  message-sequence-number
    Signed 32-bit integer
    x411.INTEGER
x411.message_store  message-store
    No value
    x411.ORAddressAndOptionalDirectoryName
x411.message_submission_identifier  message-submission-identifier
    No value
    x411.MessageSubmissionIdentifier
```

```
x411.message_submission_time  message-submission-time
    String
    x411.MessageSubmissionTime
x411.messages  messages
    Signed 32-bit integer
    x411.INTEGER
x411.messages_waiting  messages-waiting
    No value
    x411.MessagesWaiting
x411.miscellaneous_terminal_capabilities  miscellaneous-terminal-capabilities
    String
    x411.TeletexString
x411.mixed-mode  mixed-mode
    Boolean
x411.mta  mta
    String
    x411.MTAName
x411.mta_directory_name  mta-directory-name
    Unsigned 32-bit integer
    x509if.Name
x411.mta_name  mta-name
    String
    x411.MTAName
x411.mta_supplied_information  mta-supplied-information
    No value
    x411.MTASuppliedInformation
x411.name  name
    Unsigned 32-bit integer
    x411.T_name
x411.network_address  network-address
    String
    x411.NetworkAddress
x411.new_credentials  new-credentials
    Unsigned 32-bit integer
    x411.Credentials
x411.non-delivery-report  non-delivery-report
    Boolean
x411.non_delivery  non-delivery
    No value
    x411.NonDeliveryReport
x411.non_delivery_diagnostic_code  non-delivery-diagnostic-code
    Unsigned 32-bit integer
    x411.NonDeliveryDiagnosticCode
x411.non_delivery_reason_code  non-delivery-reason-code
    Unsigned 32-bit integer
    x411.NonDeliveryReasonCode
```

```
x411.non_empty_result  non-empty-result
    No value
    x411.T_non_empty_result
x411.non_urgent  non-urgent
    No value
    x411.DeliveryQueue
x411.normal  normal
    No value
    x411.DeliveryQueue
x411.number  number
    String
    x411.NumericString
x411.numeric  numeric
    String
    x411.AddrNumericString
x411.numeric_code  numeric-code
    String
    x411.AddrNumericString
x411.numeric_user_identifier  numeric-user-identifier
    String
    x411.NumericUserIdentifier
x411.objects  objects
    Unsigned 32-bit integer
    x411.T_objects
x411.octet_string  octet-string
    Byte array
    x411.OCTET_STRING
x411.octets  octets
    Signed 32-bit integer
    x411.INTEGER
x411.old_credentials  old-credentials
    Unsigned 32-bit integer
    x411.Credentials
x411.ordinary-mail  ordinary-mail
    Boolean
x411.organization_name  organization-name
    String
    x411.OrganizationName
x411.organizational_unit_names  organizational-unit-names
    Unsigned 32-bit integer
    x411.OrganizationalUnitNames
x411.original_encoded_information_types  original-encoded-information-types
    No value
    x411.OriginalEncodedInformationTypes
x411.originally_intended_recipient_name  originally-intended-recipient-name
    No value
    x411.MTAOriginallyIntendedRecipientName
```

```
x411.originally_specified_recipient_number  originally-specified-recipient-numbe
Signed 32-bit integer
x411.OriginallySpecifiedRecipientNumber
x411.originated-by  originated-by
Boolean
x411.originating-MTA-non-delivery-report  originating-MTA-non-delivery-report
Boolean
x411.originating-MTA-report  originating-MTA-report
Boolean
x411.origination_or_expansion_time  origination-or-expansion-time
String
x411.Time
x411.originator-non-delivery-report  originator-non-delivery-report
Boolean
x411.originator-report  originator-report
Boolean
x411.originator_name  originator-name
No value
x411.MTAOriginatorName
x411.originator_or_dl_name  originator-or-dl-name
No value
x411.ORAddressAndOptionalDirectoryName
x411.originator_report_request  originator-report-request
Byte array
x411.OriginatorReportRequest
x411.other-security-labels  other-security-labels
Boolean
x411.other_actions  other-actions
Byte array
x411.OtherActions
x411.other_fields  other-fields
No value
x411.OtherMessageDeliveryFields
x411.other_recipient_names  other-recipient-names
Unsigned 32-bit integer
x411.OtherRecipientNames
x411.page_formats  page-formats
Byte array
x411.OCTET_STRING
x411.pattern_match  pattern-match
No value
x411.ORName
x411.per_domain_bilateral_information  per-domain-bilateral-information
Unsigned 32-bit integer
x411.SEQUENCE_OF_PerDomainBilateralInformation
```

```
x411.per_domain_bilateral_information_item  Item
    No value
    x411.PerDomainBilateralInformation
x411.per_message_indicators  per-message-indicators
    Byte array
    x411.PerMessageIndicators
x411.per_recipient_fields  per-recipient-fields
    Unsigned 32-bit integer
    x411.SEQUENCE_OF_PerRecipientMessageTransferFields
x411.per_recipient_fields_item  Item
    No value
    x411.PerRecipientMessageTransferFields
x411.per_recipient_indicators  per-recipient-indicators
    Byte array
    x411.PerRecipientIndicators
x411.permissible_content_types  permissible-content-types
    Unsigned 32-bit integer
    x411.ContentTypes
x411.permissible_encoded_information_types  permissible-encoded-information-type
    No value
    x411.PermissibleEncodedInformationTypes
x411.permissible_lowest_priority  permissible-lowest-priority
    Unsigned 32-bit integer
    x411.Priority
x411.permissible_maximum_content_length  permissible-maximum-content-length
    Unsigned 32-bit integer
    x411.ContentLength
x411.permissible_operations  permissible-operations
    Byte array
    x411.Operations
x411.permissible_security_context  permissible-security-context
    Unsigned 32-bit integer
    x411.SecurityContext
x411.permitted  permitted
    Boolean
    x411.BOOLEAN
x411.personal_name  personal-name
    No value
    x411.PersonalName
x411.preferred-huffmann  preferred-huffmann
    Boolean
x411.presentation  presentation
    No value
    x411.PSAPAddress
x411.printable  printable
    String
    x411.AddrPrintableString
```



```
x411.printable_address  printable-address
    Unsigned 32-bit integer
    x411.T_printable_address
x411.printable_address_item  Item
    String
    x411.PrintableString
x411.printable_code  printable-code
    String
    x411.PrintableString
x411.printable_string  printable-string
    String
    x411.PrintableString
x411.priority  priority
    Unsigned 32-bit integer
    x411.Priority
x411.priority_item  Item
    Unsigned 32-bit integer
    x411.Priority
x411.privacy_mark  privacy-mark
    String
    x411.PrivacyMark
x411.private_domain  private-domain
    No value
    x411.T_private_domain
x411.private_domain_identifier  private-domain-identifier
    Unsigned 32-bit integer
    x411.PrivateDomainIdentifier
x411.private_domain_name  private-domain-name
    Unsigned 32-bit integer
    x411.PrivateDomainName
x411.private_extension  private-extension
    x411.T_private_extension
x411.private_use  private-use
    Byte array
    x411.OCTET_STRING
x411.probe  probe
    No value
    x411.Probe
x411.probe-submission-or-report-delivery  probe-submission-or-report-delivery
    Boolean
x411.probe_identifier  probe-identifier
    No value
    x411.ProbeIdentifier
x411.probe_submission_identifier  probe-submission-identifier
    No value
    x411.ProbeSubmissionIdentifier
```

```
x411.probe_submission_time  probe-submission-time
    String
    x411.ProbeSubmissionTime
x411.processable-mode-26  processable-mode-26
    Boolean
x411.proof_of_delivery  proof-of-delivery
    No value
    x411.ProofOfDelivery
x411.proof_of_delivery_request  proof-of-delivery-request
    Unsigned 32-bit integer
    x411.ProofOfDeliveryRequest
x411.protected  protected
    No value
    x411.ProtectedPassword
x411.psap_address  psap-address
    No value
    x509sat.PresentationAddress
x411.random1  random1
    Byte array
    x411.BIT_STRING
x411.random2  random2
    Byte array
    x411.BIT_STRING
x411.recipient_assigned_alternate_recipient  recipient-assigned-alternate-recipient
    No value
    x411.RecipientAssignedAlternateRecipient
x411.recipient_certificate  recipient-certificate
    No value
    x411.RecipientCertificate
x411.recipient_name  recipient-name
    No value
    x411.MTARecipientName
x411.redirected  redirected
    Boolean
x411.redirected-by  redirected-by
    Boolean
x411.redirection_classes  redirection-classes
    Unsigned 32-bit integer
    x411.SET_OF_RedirectionClass
x411.redirection_classes_item  Item
    No value
    x411.RedirectionClass
x411.redirection_reason  redirection-reason
    Unsigned 32-bit integer
    x411.RedirectionReason
```

```
x411.redirection_time  redirection-time
    String
    x411.Time

x411.redirections  redirections
    Unsigned 32-bit integer
    x411.Redirections

x411.refusal_reason  refusal-reason
    Unsigned 32-bit integer
    x411.RefusalReason

x411.refused_argument  refused-argument
    Unsigned 32-bit integer
    x411.T_refused_argument

x411.refused_extension  refused-extension
    No value
    x411.T_refused_extension

x411.registered_information  registered-information
    No value
    x411.RegisterArgument

x411.report  report
    No value
    x411.Report

x411.report_destination_name  report-destination-name
    No value
    x411.ReportDestinationName

x411.report_identifier  report-identifier
    No value
    x411.ReportIdentifier

x411.report_type  report-type
    Unsigned 32-bit integer
    x411.ReportType

x411.reserved  reserved
    Boolean

x411.reserved-5  reserved-5
    Boolean

x411.reserved-6  reserved-6
    Boolean

x411.reserved-7  reserved-7
    Boolean

x411.resolution-300x300  resolution-300x300
    Boolean

x411.resolution-400x400  resolution-400x400
    Boolean

x411.resolution-8x15  resolution-8x15
    Boolean

x411.resolution-type  resolution-type
    Boolean
```

```
x411.responder_credentials responder-credentials
    Unsigned 32-bit integer
    x411.ResponderCredentials
x411.responder_name responder-name
    String
    x411.MTAName
x411.responsibility responsibility
    Boolean
x411.restrict restrict
    Boolean
    x411.BOOLEAN
x411.restricted-delivery restricted-delivery
    Boolean
x411.restricted_delivery restricted-delivery
    Unsigned 32-bit integer
    x411.RestrictedDelivery
x411.retrieve_registrations retrieve-registrations
    No value
    x411.RegistrationTypes
x411.returned_content returned-content
    Byte array
    x411.Content
x411.routing_action routing-action
    Unsigned 32-bit integer
    x411.RoutingAction
x411.security_categories security-categories
    Unsigned 32-bit integer
    x411.SecurityCategories
x411.security_classification security-classification
    Unsigned 32-bit integer
    x411.SecurityClassification
x411.security_context security-context
    Unsigned 32-bit integer
    x411.SecurityContext
x411.security_labels security-labels
    Unsigned 32-bit integer
    x411.SecurityContext
x411.security_policy_identifier security-policy-identifier
    x411.SecurityPolicyIdentifier
x411.service-message service-message
    Boolean
x411.sfd sfd
    Boolean
x411.signature signature
    No value
    x411.Signature
```

```
x411.signature_algorithm_identifier  signature-algorithm-identifier
    No value
    x509af.AlgorithmIdentifier
x411.signed_data  signed-data
    No value
    x411.TokenData
x411.simple  simple
    Unsigned 32-bit integer
    x411.Password
x411.source_name  source-name
    Unsigned 32-bit integer
    x411.ExactOrPattern
x411.source_type  source-type
    Byte array
    x411.T_source_type
x411.special-delivery  special-delivery
    Boolean
x411.standard_extension  standard-extension
    Signed 32-bit integer
    x411.StandardExtension
x411.standard_parameters  standard-parameters
    Byte array
    x411.T_standard_parameters
x411.strong  strong
    No value
    x411.StrongCredentials
x411.sub_address  sub-address
    String
    x411.NumericString
x411.subject_identifier  subject-identifier
    No value
    x411.SubjectIdentifier
x411.subject_intermediate_trace_information  subject-intermediate-trace-informat
    Unsigned 32-bit integer
    x411.SubjectIntermediateTraceInformation
x411.subject_submission_identifier  subject-submission-identifier
    No value
    x411.SubjectSubmissionIdentifier
x411.supplementary_information  supplementary-information
    String
    x411.SupplementaryInformation
x411.surname  surname
    String
    x411.T_printable_surname
x411.t6-coding  t6-coding
    Boolean
```

```
x411.teletex teletex
    No value
    x411.TeletexNonBasicParameters
x411.teletex_string teletex-string
    String
    x411.TeletexString
x411.terminal_identifier terminal-identifier
    String
    x411.TerminalIdentifier
x411.this_recipient_name this-recipient-name
    No value
    x411.ThisRecipientName
x411.time time
    String
    x411.Time
x411.time1 time1
    String
    x411.UTCTime
x411.time2 time2
    String
    x411.UTCTime
x411.token token
    No value
    x411.TokenTypeData
x411.token_signature token-signature
    No value
    x509ce.CertificateAssertion
x411.token_type_identifier token-type-identifier
    x411.TokenTypeIdentifier
x411.trace_information trace-information
    Unsigned 32-bit integer
    x411.TraceInformation
x411.tsap_id tsap-id
    String
    x411.PrintableString
x411.twelve-bits twelve-bits
    Boolean
x411.two-dimensional two-dimensional
    Boolean
x411.two_octets two-octets
    String
    x411.BMPString
x411.type type
    Unsigned 32-bit integer
    x411.ExtensionType
```

```
x411.type_of_MTS_user  type-of-MTS-user
    Unsigned 32-bit integer
    x411.TypeOfMTSUser

x411.unacceptable_eits  unacceptable-eits
    Unsigned 32-bit integer
    x411.ExtendedEncodedInformationTypes

x411.unauthenticated  unauthenticated
    No value
    x411.NULL

x411.uncompressed  uncompressed
    Boolean

x411.unknown  unknown
    Boolean

x411.unlimited-length  unlimited-length
    Boolean

x411.urgent  urgent
    No value
    x411.DeliveryQueue

x411.user-address  user-address
    Boolean

x411.user-name  user-name
    Boolean

x411.user_address  user-address
    Unsigned 32-bit integer
    x411.UserAddress

x411.user_agent  user-agent
    No value
    x411.ORAddressAndOptionalDirectoryName

x411.user_name  user-name
    No value
    x411.UserName

x411.value  value
    No value
    x411.ExtensionValue

x411.videotex  videotex
    Boolean

x411.voice  voice
    Boolean

x411.waiting_content_types  waiting-content-types
    Unsigned 32-bit integer
    x411.SET_OF_ContentType

x411.waiting_content_types_item  Item
    Unsigned 32-bit integer
    x411.ContentType

x411.waiting_encoded_information_types  waiting-encoded-information-types
    No value
    x411.EncodedInformationTypes
```

```

x411.waiting_messages  waiting-messages
    Byte array
    x411.WaitingMessages

x411.waiting_operations  waiting-operations
    Byte array
    x411.Operations

x411.width-middle-1216-of-1728  width-middle-1216-of-1728
    Boolean

x411.width-middle-864-of-1728  width-middle-864-of-1728
    Boolean

x411.x121  x121
    No value
    x411.T_x121

x411.x121_address  x121-address
    String
    x411.AddrNumericString

x411.x121_dcc_code  x121-dcc-code
    String
    x411.AddrNumericString

```

#### **X.413 Message Store Service (p7)**

```

p7.AlertArgument  AlertArgument
    No value
    p7.AlertArgument

p7.AlertResult  AlertResult
    No value
    p7.AlertResult

p7.AutoActionError  AutoActionError
    No value
    p7.AutoActionError

p7.AutoActionType  AutoActionType
    p7.AutoActionType

p7.ChangeCredentialsAlgorithms_item  Item
    p7.OBJECT_IDENTIFIER

p7.CreationTime  CreationTime
    String
    p7.CreationTime

p7.DeferredDeliveryCancellationTime  DeferredDeliveryCancellationTime
    String
    p7.DeferredDeliveryCancellationTime

p7.DeleteArgument  DeleteArgument
    No value
    p7.DeleteArgument

p7.DeleteResult  DeleteResult
    Unsigned 32-bit integer
    p7.DeleteResult

```



```
p7.DeletionTime DeletionTime
    String
    p7.DeletionTime
p7.EntryClassErrorParameter EntryClassErrorParameter
    No value
    p7.EntryClassErrorParameter
p7.EntryInformationSelection_item Item
    No value
    p7.AttributeSelection
p7.EntryType EntryType
    Signed 32-bit integer
    p7.EntryType
p7.FetchArgument FetchArgument
    No value
    p7.FetchArgument
p7.FetchResult FetchResult
    No value
    p7.FetchResult
p7.ListArgument ListArgument
    No value
    p7.ListArgument
p7.ListResult ListResult
    No value
    p7.ListResult
p7.MSBindArgument MSBindArgument
    No value
    p7.MSBindArgument
p7.MSBindResult MSBindResult
    No value
    p7.MSBindResult
p7.MSExtensionErrorParameter MSExtensionErrorParameter
    Unsigned 32-bit integer
    p7.MSExtensionErrorParameter
p7.MSExtensions_item Item
    No value
    p7.MSExtensionItem
p7.MSMessageSubmissionArgument MSMessageSubmissionArgument
    No value
    p7.MSMessageSubmissionArgument
p7.MSMessageSubmissionResult MSMessageSubmissionResult
    Unsigned 32-bit integer
    p7.MSMessageSubmissionResult
p7.MSProbeSubmissionArgument MSProbeSubmissionArgument
    No value
    p7.MSProbeSubmissionArgument
p7.MSProbeSubmissionResult MSProbeSubmissionResult
    No value
    p7.MSProbeSubmissionResult
```

```
p7.MS_EIT MS-EIT
  p7.MS_EIT
p7.MS_EITs_item Item
  p7.MS_EIT
p7.MessageGroupErrorParameter MessageGroupErrorParameter
  No value
  p7.MessageGroupErrorParameter
p7.MessageGroupName MessageGroupName
  Unsigned 32-bit integer
  p7.MessageGroupName
p7.MessageGroupName_item Item
  String
  p7.GroupNamePart
p7.MessageGroupRegistrations_item Item
  Unsigned 32-bit integer
  p7.MessageGroupRegistrations_item
p7.ModifyArgument ModifyArgument
  No value
  p7.ModifyArgument
p7.ModifyErrorParameter ModifyErrorParameter
  No value
  p7.ModifyErrorParameter
p7.ModifyResult ModifyResult
  No value
  p7.ModifyResult
p7.PAR_attribute_error PAR-attribute-error
  No value
  p7.PAR_attribute_error
p7.PAR_auto_action_request_error PAR-auto-action-request-error
  No value
  p7.PAR_auto_action_request_error
p7.PAR_delete_error PAR-delete-error
  No value
  p7.PAR_delete_error
p7.PAR_fetch_restriction_error PAR-fetch-restriction-error
  No value
  p7.PAR_fetch_restriction_error
p7.PAR_invalid_parameters_error PAR-invalid-parameters-error
  No value
  p7.PAR_invalid_parameters_error
p7.PAR_ms_bind_error PAR-ms-bind-error
  Unsigned 32-bit integer
  p7.PAR_ms_bind_error
p7.PAR_range_error PAR-range-error
  No value
  p7.PAR_range_error
```

p7.PAR\_register\_ms\_error PAR-register-ms-error  
No value  
p7.PAR\_register\_ms\_error

p7.PAR\_sequence\_number\_error PAR-sequence-number-error  
No value  
p7.PAR\_sequence\_number\_error

p7.PerRecipientReport PerRecipientReport  
No value  
p7.PerRecipientReport

p7.Register\_MSArgument Register-MSArgument  
No value  
p7.Register\_MSArgument

p7.Register\_MSResult Register-MSResult  
Unsigned 32-bit integer  
p7.Register\_MSResult

p7.ReportLocation ReportLocation  
Unsigned 32-bit integer  
p7.ReportLocation

p7.ReportSummary ReportSummary  
Unsigned 32-bit integer  
p7.ReportSummary

p7.RetrievalStatus RetrievalStatus  
Signed 32-bit integer  
p7.RetrievalStatus

p7.SequenceNumber SequenceNumber  
Unsigned 32-bit integer  
p7.SequenceNumber

p7.ServiceErrorParameter ServiceErrorParameter  
No value  
p7.ServiceErrorParameter

p7.SignatureVerificationStatus SignatureVerificationStatus  
No value  
p7.SignatureVerificationStatus

p7.StoragePeriod StoragePeriod  
Signed 32-bit integer  
p7.StoragePeriod

p7.StorageTime StorageTime  
String  
p7.StorageTime

p7.SubmissionError SubmissionError  
Unsigned 32-bit integer  
p7.SubmissionError

p7.SummarizeArgument SummarizeArgument  
No value  
p7.SummarizeArgument

p7.SummarizeResult SummarizeResult  
No value  
p7.SummarizeResult

```
p7.abortReason abortReason
    Signed 32-bit integer
    p7.AbortReason

p7.absent absent
    Unsigned 32-bit integer
    p7.INTEGER_1_ub_messages

p7.add_attribute add-attribute
    No value
    p7.Attribute

p7.add_message_group_names add-message-group-names
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_message_groups_OF_MessageGroupName

p7.add_message_group_names_item Item
    Unsigned 32-bit integer
    p7.MessageGroupName

p7.add_values add-values
    No value
    p7.OrderedAttribute

p7.alert_indication alert-indication
    Boolean
    p7.BOOLEAN

p7.alert_registration_identifier alert-registration-identifier
    Unsigned 32-bit integer
    p7.INTEGER_1_ub_auto_actions

p7.algorithm_identifier algorithm-identifier
    p7.OBJECT_IDENTIFIER

p7.allowed_EITs allowed-EITs
    Unsigned 32-bit integer
    p7.MS_EITs

p7.allowed_content_types allowed-content-types
    Unsigned 32-bit integer
    p7.T_allowed_content_types

p7.allowed_content_types_item Item
    p7.OBJECT_IDENTIFIER

p7.and and
    Unsigned 32-bit integer
    p7.SET_OF_Filter

p7.and_item Item
    Unsigned 32-bit integer
    p7.Filter

p7.any any
    No value
    p7.T_any

p7.approximate_match approximate-match
    No value
    p7.AttributeValueAssertion
```

```
p7.attribute_length attribute-length
    Signed 32-bit integer
    p7.INTEGER

p7.attribute_type attribute-type
    p7.AttributeType

p7.attribute_value attribute-value
    No value
    p7.T_attribute_value

p7.attribute_values attribute-values
    Unsigned 32-bit integer
    p7.AttributeValues

p7.attribute_values_item Item
    No value
    p7.AttributeItem

p7.attributes attributes
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_per_entry_OF_Attribute

p7.attributes_item Item
    No value
    p7.Attribute

p7.auto-action-registrations auto-action-registrations
    Boolean

p7.auto_action_deregistrations auto-action-deregistrations
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_auto_registrations_OF_AutoActionDeregistration

p7.auto_action_deregistrations_item Item
    No value
    p7.AutoActionDeregistration

p7.auto_action_error_indication auto-action-error-indication
    Unsigned 32-bit integer
    p7.AutoActionErrorIndication

p7.auto_action_log_entry auto-action-log-entry
    Unsigned 32-bit integer
    p7.SequenceNumber

p7.auto_action_registrations auto-action-registrations
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_auto_registrations_OF_AutoActionRegistration

p7.auto_action_registrations_item Item
    No value
    p7.AutoActionRegistration

p7.auto_action_type auto-action-type
    p7.AutoActionType

p7.available_attribute_types available-attribute-types
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_attributes_supported_OF_AttributeType

p7.available_attribute_types_item Item
```

```
p7.AttributeType
p7.available_auto_actions  available-auto-actions
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_auto_actions_OF_AutoActionType
p7.available_auto_actions_item  Item
    p7.AutoActionType
p7.bind_extension_errors  bind-extension-errors
    Unsigned 32-bit integer
    p7.T_bind_extension_errors
p7.bind_extension_errors_item  Item
    p7.OBJECT_IDENTIFIER
p7.bind_extensions  bind-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.bind_problem  bind-problem
    Unsigned 32-bit integer
    p7.BindProblem
p7.bind_result_extensions  bind-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.change_credentials  change-credentials
    No value
    p7.T_change_credentials
p7.change_descriptors  change-descriptors
    No value
    p7.MessageGroupNameAndDescriptor
p7.child_entries  child-entries
    Boolean
    p7.BOOLEAN
p7.content  content
    Byte array
    x411.Content
p7.content_identifier  content-identifier
    String
    x411.ContentIdentifier
p7.content_integrity_check  content-integrity-check
    Signed 32-bit integer
    p7.SignatureStatus
p7.content_length  content-length
    Unsigned 32-bit integer
    x411.ContentLength
p7.content_specific_defaults  content-specific-defaults
    Unsigned 32-bit integer
    p7.MSExtensions
```

```
p7.content_type content-type
    Unsigned 32-bit integer
    x411.ContentType

p7.content_types_supported content-types-supported
    Unsigned 32-bit integer
    p7.T_content_types_supported

p7.content_types_supported_item Item
    p7.OBJECT_IDENTIFIER

p7.count count
    Unsigned 32-bit integer
    p7.INTEGER_0_ub_attribute_values

p7.created_entry created-entry
    Unsigned 32-bit integer
    p7.SequenceNumber

p7.creation_time_range creation-time-range
    No value
    p7.TimeRange

p7.delete_extensions delete-extensions
    Unsigned 32-bit integer
    p7.MSExtensions

p7.delete_result_88 delete-result-88
    No value
    p7.NULL

p7.delete_result_94 delete-result-94
    No value
    p7.T_delete_result_94

p7.delete_result_extensions delete-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions

p7.deregister_group deregister-group
    Unsigned 32-bit integer
    p7.MessageGroupName

p7.disable_auto_modify disable-auto-modify
    Boolean
    p7.BOOLEAN

p7.eit eit
    Unsigned 32-bit integer
    p7.MS_EITs

p7.element_of_service_not_subscribed element-of-service-not-subscribed
    No value
    p7.NULL

p7.entries entries
    Unsigned 32-bit integer
    p7.T_entries

p7.entries_deleted entries-deleted
    Unsigned 32-bit integer
    p7.SEQUENCE_SIZE_1_ub_messages_OF_SequenceNumber
```

```
p7.entries_deleted_item Item
    Unsigned 32-bit integer
    p7.SequenceNumber

p7.entries_modified entries-modified
    Unsigned 32-bit integer
    p7.SEQUENCE_SIZE_1_ub_messages_OF_SequenceNumber

p7.entries_modified_item Item
    Unsigned 32-bit integer
    p7.SequenceNumber

p7.entry_class_not_subscribed entry-class-not-subscribed
    Boolean

p7.entry_class entry-class
    Unsigned 32-bit integer
    p7.EntryClass

p7.entry_class_error entry-class-error
    No value
    p7.EntryClassErrorParameter

p7.entry_classes_supported entry-classes-supported
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_entry_classes_OF_EntryClass

p7.entry_classes_supported_item Item
    Unsigned 32-bit integer
    p7.EntryClass

p7.entry_information entry-information
    No value
    p7.EntryInformation

p7.envelope envelope
    No value
    x411.MessageSubmissionEnvelope

p7.equality equality
    No value
    p7.AttributeValueAssertion

p7.error_code error-code
    No value
    p7.T_error_code

p7.error_parameter error-parameter
    No value
    p7.T_error_parameter

p7.extended_registrations extended-registrations
    Unsigned 32-bit integer
    p7.T_extended_registrations

p7.extended_registrations_item Item
    No value
    p7.T_extended_registrations_item

p7.extensions extensions
    Unsigned 32-bit integer
    p7.SET_OF_ExtensionField
```



```
p7.extensions_item Item
    No value
    x411.ExtensionField
p7.failing_entry failing-entry
    Unsigned 32-bit integer
    p7.SequenceNumber
p7.fetch-attribute-defaults fetch-attribute-defaults
    Boolean
p7.fetch_attribute_defaults fetch-attribute-defaults
    Unsigned 32-bit integer
    p7.SET_SIZE_0_ub_default_registrations_OF_AttributeType
p7.fetch_attribute_defaults_item Item
    p7.AttributeType
p7.fetch_extensions fetch-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.fetch_restrictions fetch-restrictions
    No value
    p7.Restrictions
p7.fetch_result_extensions fetch-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.filter filter
    Unsigned 32-bit integer
    p7.Filter
p7.final final
    No value
    p7.T_final
p7.from from
    Unsigned 32-bit integer
    p7.T_from_number
p7.greater_or_equal greater-or-equal
    No value
    p7.AttributeValueAssertion
p7.highest highest
    Unsigned 32-bit integer
    p7.SequenceNumber
p7.immediate_descendants_only immediate-descendants-only
    Boolean
    p7.BOOLEAN
p7.inappropriate-entry-class inappropriate-entry-class
    Boolean
p7.inconsistent_request inconsistent-request
    No value
    p7.NULL
```

```
p7.indication_only  indication-only
    No value
    p7.NULL

p7.initial  initial
    No value
    p7.T_initial

p7.initiator_credentials  initiator-credentials
    Unsigned 32-bit integer
    x411.InitiatorCredentials

p7.initiator_name  initiator-name
    No value
    p7.T_initiator_name

p7.item  item
    Unsigned 32-bit integer
    p7.FilterItem

p7.items  items
    Unsigned 32-bit integer
    p7.T_items

p7.less_or_equal  less-or-equal
    No value
    p7.AttributeValueAssertion

p7.limit  limit
    Unsigned 32-bit integer
    p7.INTEGER_1_ub_messages

p7.list  list
    Unsigned 32-bit integer
    p7.SEQUENCE_SIZE_1_ub_messages_OF_SequenceNumber

p7.list-attribute-defaults  list-attribute-defaults
    Boolean

p7.list_attribute_defaults  list-attribute-defaults
    Unsigned 32-bit integer
    p7.SET_SIZE_0_ub_default_registrations_OF_AttributeType

p7.list_attribute_defaults_item  Item
    p7.AttributeType

p7.list_extensions  list-extensions
    Unsigned 32-bit integer
    p7.MSExtensions

p7.list_item  Item
    Unsigned 32-bit integer
    p7.SequenceNumber

p7.list_result_extensions  list-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions

p7.location  location
    Unsigned 32-bit integer
    p7.SEQUENCE_OF_PerRecipientReport
```

```
p7.location_item Item
    No value
    p7.PerRecipientReport
p7.lowest lowest
    Unsigned 32-bit integer
    p7.SequenceNumber
p7.match_value match-value
    No value
    p7.T_match_value
p7.matching_rule matching-rule
    p7.OBJECT_IDENTIFIER
p7.matching_rules_supported matching-rules-supported
    Unsigned 32-bit integer
    p7.T_matching_rules_supported
p7.matching_rules_supported_item Item
    p7.OBJECT_IDENTIFIER
p7.maximum_attribute_length maximum-attribute-length
    Signed 32-bit integer
    p7.INTEGER
p7.message-group-registrations message-group-registrations
    Boolean
p7.message_group_depth message-group-depth
    Unsigned 32-bit integer
    p7.INTEGER_1_ub_group_depth
p7.message_group_descriptor message-group-descriptor
    String
    p7.GeneralString_SIZE_1_ub_group_descriptor_length
p7.message_group_error message-group-error
    No value
    p7.MessageGroupErrorParameter
p7.message_group_name message-group-name
    Unsigned 32-bit integer
    p7.MessageGroupName
p7.message_group_registrations message-group-registrations
    Unsigned 32-bit integer
    p7.MessageGroupRegistrations
p7.message_group_registrations_item Item
    No value
    p7.MessageGroupNameAndDescriptor
p7.message_origin_authentication_check message-origin-authentication-check
    Signed 32-bit integer
    p7.SignatureStatus
p7.message_submission_identifier message-submission-identifier
    No value
    x411.MessageSubmissionIdentifier
```

```
p7.message_submission_time  message-submission-time
    String
    x411.MessageSubmissionTime
p7.message_token  message-token
    Signed 32-bit integer
    p7.SignatureStatus
p7.modification  modification
    Unsigned 32-bit integer
    p7.T_modification
p7.modification_number  modification-number
    Signed 32-bit integer
    p7.INTEGER
p7.modifications  modifications
    Unsigned 32-bit integer
    p7.SEQUENCE_SIZE_1_ub_modifications_OF_EntryModification
p7.modifications_item  Item
    No value
    p7.EntryModification
p7.modify_extensions  modify-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.modify_result_extensions  modify-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.ms_configuration_request  ms-configuration-request
    Boolean
    p7.BOOLEAN
p7.ms_extension_error  ms-extension-error
    Unsigned 32-bit integer
    p7.MSExtensionErrorParameter
p7.ms_extension_problem  ms-extension-problem
    No value
    p7.MSExtensionItem
p7.ms_message_result  ms-message-result
    No value
    p7.CommonSubmissionResults
p7.ms_probe_result  ms-probe-result
    No value
    p7.CommonSubmissionResults
p7.ms_submission_extensions  ms-submission-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.ms_submission_result_extensions  ms-submission-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.mts_result  mts-result
    No value
    p7.T_mts_result
```

```
p7.name name
    Unsigned 32-bit integer
    p7.MessageGroupName

p7.new_credentials new-credentials
    Unsigned 32-bit integer
    x411.Credentials

p7.new_entry new-entry
    No value
    p7.EntryInformation

p7.next next
    Unsigned 32-bit integer
    p7.SequenceNumber

p7.no_correlated_reports no-correlated-reports
    No value
    p7.NULL

p7.no_status_information no-status-information
    No value
    p7.NULL

p7.not not
    Unsigned 32-bit integer
    p7.Filter

p7.object_entry_class object-entry-class
    Unsigned 32-bit integer
    p7.EntryClass

p7.old_credentials old-credentials
    Unsigned 32-bit integer
    x411.Credentials

p7.omit_descriptors omit-descriptors
    Boolean
    p7.BOOLEAN

p7.or or
    Unsigned 32-bit integer
    p7.SET_OF_Filter

p7.or_item Item
    Unsigned 32-bit integer
    p7.Filter

p7.original_encoded_information_types original-encoded-information-types
    No value
    x411.OriginalEncodedInformationTypes

p7.originator_invalid originator-invalid
    No value
    p7.NULL

p7.originator_name originator-name
    No value
    x411.MTSOriginatorName

p7.other_match other-match
    No value
    p7.MatchingRuleAssertion
```

```
p7.override override
    Byte array
    p7.OverrideRestrictions
p7.override-EITs-restriction override-EITs-restriction
    Boolean
p7.override-attribute-length-restriction override-attribute-length-restriction
    Boolean
p7.override-content-types-restriction override-content-types-restriction
    Boolean
p7.parent_group parent-group
    Unsigned 32-bit integer
    p7.MessageGroupName
p7.password_delta password-delta
    Byte array
    p7.BIT_STRING
p7.per_message_indicators per-message-indicators
    Byte array
    x411.PerMessageIndicators
p7.per_recipient_fields per-recipient-fields
    Unsigned 32-bit integer
    p7.SEQUENCE_OF_PerRecipientProbeSubmissionFields
p7.per_recipient_fields_item Item
    No value
    x411.PerRecipientProbeSubmissionFields
p7.position position
    Unsigned 32-bit integer
    p7.INTEGER_1_ub_attribute_values
p7.precise precise
    Unsigned 32-bit integer
    p7.SequenceNumber
p7.present present
    p7.AttributeType
p7.present_item Item
    No value
    p7.T_summary_present_item
p7.probe_submission_identifier probe-submission-identifier
    No value
    x411.ProbeSubmissionIdentifier
p7.probe_submission_time probe-submission-time
    String
    x411.ProbeSubmissionTime
p7.problem problem
    Unsigned 32-bit integer
    p7.AttributeProblem
p7.problems problems
    Unsigned 32-bit integer
    p7.AttributeProblems
```

```
p7.problems_item Item
    No value
    p7.AttributeProblemItem
p7.proof_of_delivery proof-of-delivery
    Signed 32-bit integer
    p7.SignatureStatus
p7.proof_of_submission proof-of-submission
    Signed 32-bit integer
    p7.SignatureStatus
p7.qualified_error qualified-error
    No value
    p7.T_qualified_error
p7.range range
    Unsigned 32-bit integer
    p7.Range
p7.recipient_improperly_specified recipient-improperly-specified
    Unsigned 32-bit integer
    x411.ImproperlySpecifiedRecipients
p7.reflectedParameter reflectedParameter
    Byte array
    p7.BIT_STRING
p7.register_group register-group
    No value
    p7.MessageGroupNameAndDescriptor
p7.register_ms_extensions register-ms-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.register_ms_result_extensions register-ms-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.registered_information registered-information
    No value
    p7.T_registered_information
p7.registration_identifier registration-identifier
    Unsigned 32-bit integer
    p7.INTEGER_1_ub_per_auto_action
p7.registration_parameter registration-parameter
    No value
    p7.T_registration_parameter
p7.registration_status_request registration-status-request
    No value
    p7.RegistrationTypes
p7.registration_type registration-type
    No value
    p7.RegistrationTypes
p7.registrations registrations
    Byte array
    p7.T_registrations
```

```
p7.remote_bind_error  remote-bind-error
    No value
    p7.NULL

p7.remove_attribute  remove-attribute
    p7.AttributeType

p7.remove_values  remove-values
    No value
    p7.OrderedAttribute

p7.report_entry  report-entry
    Unsigned 32-bit integer
    p7.SequenceNumber

p7.report_origin_authentication_check  report-origin-authentication-check
    Signed 32-bit integer
    p7.SignatureStatus

p7.requested  requested
    Unsigned 32-bit integer
    p7.SEQUENCE_SIZE_1_ub_messages_OF_EntryInformation

p7.requested_attributes  requested-attributes
    Unsigned 32-bit integer
    p7.EntryInformationSelection

p7.requested_item  Item
    No value
    p7.EntryInformation

p7.responder_credentials  responder-credentials
    Unsigned 32-bit integer
    x411.ResponderCredentials

p7.restrict_message_groups  restrict-message-groups
    No value
    p7.MessageGroupsRestriction

p7.restriction  restriction
    Unsigned 32-bit integer
    p7.T_restriction

p7.rtab_apdu  rtab-apdu
    No value
    p7.RTABapdu

p7.rtoac_apdu  rtoac-apdu
    No value
    rtse.RTOACapdu

p7.rtorj_apdu  rtorj-apdu
    No value
    rtse.RTORJapdu

p7.rtorq_apdu  rtorq-apdu
    No value
    rtse.RTORQapdu

p7.rttp_apdu  rttp-apdu
    Signed 32-bit integer
    p7.RTTPapdu
```



```
p7.rttr_apdu rttr-apdu
  Byte array
  p7.RTTRapdu

p7.search search
  No value
  p7.Selector

p7.security_context security-context
  Unsigned 32-bit integer
  x411.SecurityContext

p7.security_error security-error
  Unsigned 32-bit integer
  x411.SecurityProblem

p7.selector selector
  No value
  p7.Selector

p7.sequence_number sequence-number
  Unsigned 32-bit integer
  p7.SequenceNumber

p7.sequence_number_range sequence-number-range
  No value
  p7.NumberRange

p7.sequence_numbers sequence-numbers
  Unsigned 32-bit integer
  p7.SET_SIZE_1_ub_messages_OF_SequenceNumber

p7.sequence_numbers_item Item
  Unsigned 32-bit integer
  p7.SequenceNumber

p7.service_error service-error
  No value
  p7.ServiceErrorParameter

p7.service_information service-information
  String
  p7.GeneralString_SIZE_1_ub_service_information_length

p7.span span
  No value
  p7.Span

p7.specific_entries specific-entries
  Unsigned 32-bit integer
  p7.SEQUENCE_SIZE_1_ub_messages_OF_SequenceNumber

p7.specific_entries_item Item
  Unsigned 32-bit integer
  p7.SequenceNumber

p7.store_draft_result store-draft-result
  No value
  p7.CommonSubmissionResults

p7.strict strict
  Boolean
  p7.BOOLEAN
```

```
p7.strings strings
    Unsigned 32-bit integer
    p7.T_strings
p7.strings_item Item
    Unsigned 32-bit integer
    p7.T_strings_item
p7.submission-defaults submission-defaults
    Boolean
p7.submission_control_violated submission-control-violated
    No value
    p7.NULL
p7.submission_defaults submission-defaults
    No value
    p7.MSSubmissionOptions
p7.submission_options submission-options
    No value
    p7.MSSubmissionOptions
p7.substrings substrings
    No value
    p7.T_substrings
p7.summaries summaries
    Unsigned 32-bit integer
    p7.SEQUENCE_SIZE_1_ub_summaries_OF_Summary
p7.summaries_item Item
    No value
    p7.Summary
p7.summarize_extensions summarize-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.summarize_result_extensions summarize-result-extensions
    Unsigned 32-bit integer
    p7.MSExtensions
p7.summary_requests summary-requests
    Unsigned 32-bit integer
    p7.SEQUENCE_SIZE_1_ub_summaries_OF_AttributeType
p7.summary_requests_item Item
    p7.AttributeType
p7.supplementary_information supplementary-information
    String
    p7.GeneralString_SIZE_1_ub_supplementary_info_length
p7.to to
    Unsigned 32-bit integer
    p7.T_to_number
p7.total total
    Signed 32-bit integer
    p7.INTEGER
p7.type type
```

```
p7.AttributeType
p7.ua-registrations ua-registrations
  Boolean
p7.ua_fetch_attribute_defaults ua-fetch-attribute-defaults
  Unsigned 32-bit integer
  p7.SET_SIZE_0_ub_default_registrations_OF_AttributeType
p7.ua_fetch_attribute_defaults_item Item
  p7.AttributeType
p7.ua_list_attribute_defaults ua-list-attribute-defaults
  Unsigned 32-bit integer
  p7.SET_SIZE_0_ub_default_registrations_OF_AttributeType
p7.ua_list_attribute_defaults_item Item
  p7.AttributeType
p7.ua_registration_id_unknown ua-registration-id-unknown
  Boolean
  p7.BOOLEAN
p7.ua_registration_identifier ua-registration-identifier
  String
  p7.RegistrationIdentifier
p7.ua_registrations ua-registrations
  Unsigned 32-bit integer
  p7.SET_SIZE_1_ub_ua_registrations_OF_UARegistration
p7.ua_registrations_item Item
  No value
  p7.UARegistration
p7.ua_submission_defaults ua-submission-defaults
  No value
  p7.MSSubmissionOptions
p7.unknown_ms_extension unknown-ms-extension
  p7.OBJECT_IDENTIFIER
p7.unqualified_error unqualified-error
  Unsigned 32-bit integer
  p7.BindProblem
p7.unsupported-entry-class unsupported-entry-class
  Boolean
p7.unsupported_critical_function unsupported-critical-function
  No value
  p7.NULL
p7.unsupported_extensions unsupported-extensions
  Unsigned 32-bit integer
  p7.T_unsupported_extensions
p7.unsupported_extensions_item Item
  p7.OBJECT_IDENTIFIER
```

```

p7.user_security_labels user-security-labels
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_labels_and_redirections_OF_SecurityLabel
p7.user_security_labels_item Item
    No value
    x411.SecurityLabel
p7.userdataAB userdataAB
    No value
    p7.T_userdataAB
p7.value value
    No value
    p7.SummaryPresentItemValue
p7.value_count_exceeded value-count-exceeded
    Unsigned 32-bit integer
    p7.SET_SIZE_1_ub_per_entry_OF_AttributeValueCount
p7.value_count_exceeded_item Item
    No value
    p7.AttributeValueCount

```

**X.420 Information Object (x420)**

```

x420.AbsenceAdvice AbsenceAdvice
    No value
    x420.AbsenceAdvice
x420.AuthorizationTime AuthorizationTime
    String
    x420.AuthorizationTime
x420.AuthorizingUsersField_item Item
    No value
    x420.AuthorizingUsersSubfield
x420.AuthorizingUsersSubfield AuthorizingUsersSubfield
    No value
    x420.AuthorizingUsersSubfield
x420.AutoForwardedField AutoForwardedField
    Boolean
    x420.AutoForwardedField
x420.AutoSubmitted AutoSubmitted
    Unsigned 32-bit integer
    x420.AutoSubmitted
x420.BilaterallyDefinedBodyPart BilaterallyDefinedBodyPart
    Byte array
    x420.BilaterallyDefinedBodyPart
x420.BlindCopyRecipientsField_item Item
    No value
    x420.BlindCopyRecipientsSubfield
x420.BlindCopyRecipientsSubfield BlindCopyRecipientsSubfield
    No value
    x420.BlindCopyRecipientsSubfield

```

```
x420.Body Body
    Unsigned 32-bit integer
    x420.Body

x420.BodyPartDescriptor BodyPartDescriptor
    No value
    x420.BodyPartDescriptor

x420.BodyPartReferences_item Item
    Unsigned 32-bit integer
    x420.BodyPartReference

x420.BodyPartSecurityLabel BodyPartSecurityLabel
    Unsigned 32-bit integer
    x420.BodyPartSecurityLabel

x420.BodyPartSignatureVerification BodyPartSignatureVerification
    Unsigned 32-bit integer
    x420.BodyPartSignatureVerification

x420.BodyPartSignatureVerification_item Item
    No value
    x420.BodyPartSignatureVerification_item

x420.BodyPartSignatures BodyPartSignatures
    Unsigned 32-bit integer
    x420.BodyPartSignatures

x420.BodyPartSignatures_item Item
    No value
    x420.BodyPartSignatures_item

x420.BodyPartTokens BodyPartTokens
    Unsigned 32-bit integer
    x420.BodyPartTokens

x420.BodyPartTokens_item Item
    No value
    x420.BodyPartTokens_item

x420.Body_item Item
    Unsigned 32-bit integer
    x420.BodyPart

x420.ChangeOfAddressAdvice ChangeOfAddressAdvice
    No value
    x420.ChangeOfAddressAdvice

x420.CirculationList CirculationList
    Unsigned 32-bit integer
    x420.CirculationList

x420.CirculationListIndicator CirculationListIndicator
    No value
    x420.CirculationListIndicator

x420.CirculationList_item Item
    No value
    x420.CirculationMember

x420.CirculationMember CirculationMember
    No value
    x420.CirculationMember
```

```
x420.CopyRecipientsField_item  Item
    No value
    x420.CopyRecipientsSubfield
x420.CopyRecipientsSubfield  CopyRecipientsSubfield
    No value
    x420.CopyRecipientsSubfield
x420.DistributionCode  DistributionCode
    No value
    x420.DistributionCode
x420.DistributionCodes  DistributionCodes
    Unsigned 32-bit integer
    x420.DistributionCodes
x420.DistributionCodes_item  Item
    No value
    x420.DistributionCode
x420.EncryptedData  EncryptedData
    Byte array
    x420.EncryptedData
x420.EncryptedParameters  EncryptedParameters
    No value
    x420.EncryptedParameters
x420.ExpiryTimeField  ExpiryTimeField
    String
    x420.ExpiryTimeField
x420.ExtendedSubject  ExtendedSubject
    No value
    x420.ExtendedSubject
x420.ExtensionsField_item  Item
    No value
    x420.IPMSExtension
x420.FileTransferData  FileTransferData
    Unsigned 32-bit integer
    x420.FileTransferData
x420.FileTransferData_item  Item
    No value
    x420.EXTERNAL
x420.FileTransferParameters  FileTransferParameters
    No value
    x420.FileTransferParameters
x420.ForwardedContentParameters  ForwardedContentParameters
    No value
    x420.ForwardedContentParameters
x420.ForwardedContentToken  ForwardedContentToken
    Unsigned 32-bit integer
    x420.ForwardedContentToken
x420.ForwardedContentToken_item  Item
    No value
    x420.ForwardedContentToken_item
```

```
x420.G3FacsimileData  G3FacsimileData
    Unsigned 32-bit integer
    x420.G3FacsimileData
x420.G3FacsimileData_item  Item
    Byte array
    x420.BIT_STRING
x420.G3FacsimileParameters  G3FacsimileParameters
    No value
    x420.G3FacsimileParameters
x420.G4Class1BodyPart  G4Class1BodyPart
    Unsigned 32-bit integer
    x420.G4Class1BodyPart
x420.G4Class1BodyPart_item  Item
    No value
    x420.Interchange_Data_Element
x420.GeneralTextData  GeneralTextData
    String
    x420.GeneralTextData
x420.GeneralTextParameters  GeneralTextParameters
    Unsigned 32-bit integer
    x420.GeneralTextParameters
x420.GeneralTextParameters_item  Item
    Unsigned 32-bit integer
    x420.CharacterSetRegistration
x420.Heading  Heading
    No value
    x420.Heading
x420.IA5TextData  IA5TextData
    String
    x420.IA5TextData
x420.IA5TextParameters  IA5TextParameters
    No value
    x420.IA5TextParameters
x420.IPMAsemblyInstructions  IPMAsemblyInstructions
    No value
    x420.IPMAsemblyInstructions
x420.IPEntryType  IPEntryType
    Unsigned 32-bit integer
    x420.IPEntryType
x420.IPMSecurityLabel  IPMSecurityLabel
    No value
    x420.IPMSecurityLabel
x420.IPMSynopsis  IPMSynopsis
    Unsigned 32-bit integer
    x420.IPMSynopsis
x420.IPMSynopsis_item  Item
    Unsigned 32-bit integer
    x420.BodyPartSynopsis
```

```
x420.IPN IPN
  No value
  x420.IPN

x420.ImportanceField ImportanceField
  Unsigned 32-bit integer
  x420.ImportanceField

x420.IncompleteCopy IncompleteCopy
  No value
  x420.IncompleteCopy

x420.InformationCategories InformationCategories
  Unsigned 32-bit integer
  x420.InformationCategories

x420.InformationCategories_item Item
  No value
  x420.InformationCategory

x420.InformationCategory InformationCategory
  No value
  x420.InformationCategory

x420.InformationObject InformationObject
  Unsigned 32-bit integer
  x420.InformationObject

x420.Language Language
  String
  x420.Language

x420.Languages Languages
  Unsigned 32-bit integer
  x420.Languages

x420.Languages_item Item
  String
  x420.Language

x420.ManualHandlingInstruction ManualHandlingInstruction
  No value
  x420.ManualHandlingInstruction

x420.ManualHandlingInstructions ManualHandlingInstructions
  Unsigned 32-bit integer
  x420.ManualHandlingInstructions

x420.ManualHandlingInstructions_item Item
  No value
  x420.ManualHandlingInstruction

x420.MessageData MessageData
  No value
  x420.MessageData

x420.MessageParameters MessageParameters
  No value
  x420.MessageParameters

x420.MixedModeBodyPart MixedModeBodyPart
  Unsigned 32-bit integer
  x420.MixedModeBodyPart
```



```
x420.MixedModeBodyPart_item  Item
    No value
    x420.Interchange_Data_Element
x420.NRNExtensionsField_item  Item
    No value
    x420.IPMSExtension
x420.NotificationExtensionsField_item  Item
    No value
    x420.IPMSExtension
x420.ORDescriptor  ORDescriptor
    No value
    x420.ORDescriptor
x420.ObsoleteIPMsField_item  Item
    No value
    x420.ObsoleteIPMsSubfield
x420.ObsoleteIPMsSubfield  ObsoleteIPMsSubfield
    No value
    x420.ObsoleteIPMsSubfield
x420.OriginatorField  OriginatorField
    No value
    x420.OriginatorField
x420.OriginatorsReference  OriginatorsReference
    No value
    x420.OriginatorsReference
x420.OtherNotificationTypeFields_item  Item
    No value
    x420.IPMSExtension
x420.Pass_Passwords_item  Item
    Unsigned 32-bit integer
    x420.Password
x420.Precedence  Precedence
    Unsigned 32-bit integer
    x420.Precedence
x420.PrecedencePolicyIdentifier  PrecedencePolicyIdentifier
    x420.PrecedencePolicyIdentifier
x420.PrimaryRecipientsField_item  Item
    No value
    x420.PrimaryRecipientsSubfield
x420.PrimaryRecipientsSubfield  PrimaryRecipientsSubfield
    No value
    x420.PrimaryRecipientsSubfield
x420.RNExtensionsField_item  Item
    No value
    x420.IPMSExtension
x420.RecipientExtensionsField_item  Item
    No value
    x420.IPMSExtension
```

```
x420.RelatedIPMsField_item  Item
    No value
    x420.RelatedIPMsSubfield
x420.RelatedIPMsSubfield  RelatedIPMsSubfield
    No value
    x420.RelatedIPMsSubfield
x420.RelatedStoredFile_item  Item
    No value
    x420.RelatedStoredFile_item
x420.RepliedToIPMField  RepliedToIPMField
    No value
    x420.RepliedToIPMField
x420.ReplyRecipientsField_item  Item
    No value
    x420.ReplyRecipientsSubfield
x420.ReplyRecipientsSubfield  ReplyRecipientsSubfield
    No value
    x420.ReplyRecipientsSubfield
x420.ReplyTimeField  ReplyTimeField
    String
    x420.ReplyTimeField
x420.SensitivityField  SensitivityField
    Unsigned 32-bit integer
    x420.SensitivityField
x420.SubjectField  SubjectField
    String
    x420.SubjectField
x420.TeletexData  TeletexData
    Unsigned 32-bit integer
    x420.TeletexData
x420.TeletexData_item  Item
    String
    x420.TeletexString
x420.TeletexParameters  TeletexParameters
    No value
    x420.TeletexParameters
x420.ThisIPMField  ThisIPMField
    No value
    x420.ThisIPMField
x420.VideotexData  VideotexData
    String
    x420.VideotexData
x420.VideotexParameters  VideotexParameters
    No value
    x420.VideotexParameters
x420.VoiceData  VoiceData
    Byte array
    x420.VoiceData
```

```
x420.VoiceParameters  VoiceParameters
    No value
    x420.VoiceParameters
x420.absent  absent
    No value
    x420.NULL
x420.abstract_syntax_name  abstract-syntax-name
    x420.Abstract_Syntax_Name
x420.access_control  access-control
    Unsigned 32-bit integer
    x420.Access_Control_Attribute
x420.acknowledgment_mode  acknowledgment-mode
    Unsigned 32-bit integer
    x420.AcknowledgmentModeField
x420.action_list  action-list
    Byte array
    x420.Access_Request
x420.actual_values  actual-values
    String
    x420.Account
x420.actual_values_item  Item
    No value
    x420.Access_Control_Element
x420.advice  advice
    Unsigned 32-bit integer
    x420.BodyPart
x420.ae_qualifier  ae-qualifier
    Unsigned 32-bit integer
    acse.AE_qualifier
x420.algorithmIdentifier  algorithmIdentifier
    No value
    x509af.AlgorithmIdentifier
x420.algorithm_identifier  algorithm-identifier
    No value
    x509af.AlgorithmIdentifier
x420.alphanumeric_code  alphanumeric-code
    No value
    x420.AlphaCode
x420.an-supported  an-supported
    Boolean
x420.ap_title  ap-title
    Unsigned 32-bit integer
    acse.AP_title
x420.application_cross_reference  application-cross-reference
    Byte array
    x420.OCTET_STRING
```

```
x420.application_reference  application-reference
    Unsigned 32-bit integer
    x420.GeneralIdentifier

x420.assembly_instructions  assembly-instructions
    Unsigned 32-bit integer
    x420.BodyPartReferences

x420.attribute_extensions  attribute-extensions
    Unsigned 32-bit integer
    ftam.Attribute_Extensions

x420.authorizing_users     authorizing-users
    Unsigned 32-bit integer
    x420.AuthorizingUsersField

x420.auto_forward_comment  auto-forward-comment
    String
    x420.AutoForwardCommentField

x420.auto_forwarded        auto-forwarded
    Boolean
    x420.AutoForwardedField

x420.basic                 basic
    Unsigned 32-bit integer
    x420.T_basic

x420.bilaterally_defined   bilaterally-defined
    Byte array
    x420.BilaterallyDefinedBodyPart

x420.blind_copy_recipients  blind-copy-recipients
    Unsigned 32-bit integer
    x420.BlindCopyRecipientsField

x420.body                  body
    Unsigned 32-bit integer
    x420.Body

x420.body_part_choice      body-part-choice
    Unsigned 32-bit integer
    x420.T_body_part_choice

x420.body_part_number      body-part-number
    Unsigned 32-bit integer
    x420.BodyPartNumber

x420.body_part_reference   body-part-reference
    Signed 32-bit integer
    x420.INTEGER

x420.body_part_security_label  body-part-security-label
    No value
    x411.SecurityLabel

x420.body_part_security_labels  body-part-security-labels
    Unsigned 32-bit integer
    x420.SEQUENCE_OF_BodyPartSecurityLabel

x420.body_part_security_labels_item  Item
    Unsigned 32-bit integer
    x420.BodyPartSecurityLabel
```

```
x420.body_part_sequence_number  body-part-sequence-number
    Unsigned 32-bit integer
    x420.BodyPartNumber

x420.body_part_signature  body-part-signature
    No value
    x420.BodyPartSignature

x420.body_part_unlabelled  body-part-unlabelled
    No value
    x420.NULL

x420.change_attribute  change-attribute
    Boolean

x420.change_attribute_password  change-attribute-password
    Unsigned 32-bit integer
    x420.Password

x420.checked  checked
    Unsigned 32-bit integer
    x420.Checkmark

x420.choice  choice
    Unsigned 32-bit integer
    x420.T_choice

x420.circulation_recipient  circulation-recipient
    No value
    x420.RecipientSpecifier

x420.circulation_signature_data  circulation-signature-data
    No value
    x420.CirculationSignatureData

x420.complete_pathname  complete-pathname
    Unsigned 32-bit integer
    ftam.Pathname

x420.compression  compression
    No value
    x420.CompressionParameter

x420.compression_algorithm_id  compression-algorithm-id
    No value
    x420.T_compression_algorithm_id

x420.compression_algorithm_param  compression-algorithm-param
    No value
    x420.T_compression_algorithm_param

x420.concurrency_access  concurrency-access
    No value
    ftam.Concurrency_Access

x420.constraint_set_and_abstract_syntax  constraint-set-and-abstract-syntax
    No value
    x420.T_constraint_set_and_abstract_syntax

x420.constraint_set_name  constraint-set-name
    x420.Constraint_Set_Name
```

```
x420.content-non-repudiation  content-non-repudiation
    Boolean
x420.content-proof  content-proof
    Boolean
x420.content_or_arguments  content-or-arguments
    Unsigned 32-bit integer
    x420.T_content_or_arguments
x420.content_security_label  content-security-label
    No value
    x411.SecurityLabel
x420.contents_type  contents-type
    Unsigned 32-bit integer
    x420.ContentsTypeParameter
x420.conversion_eits  conversion-eits
    No value
    x420.ConversionEITsField
x420.copy_recipients  copy-recipients
    Unsigned 32-bit integer
    x420.CopyRecipientsField
x420.cross_reference  cross-reference
    No value
    x420.CrossReference
x420.data  data
    No value
    x420.INSTANCE_OF
x420.date_and_time_of_creation  date-and-time-of-creation
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
x420.date_and_time_of_last_attribute_modification  date-and-time-of-last-attribute-modification
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
x420.date_and_time_of_last_modification  date-and-time-of-last-modification
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
x420.date_and_time_of_last_read_access  date-and-time-of-last-read-access
    Unsigned 32-bit integer
    ftam.Date_and_Time_Attribute
x420.delete-object  delete-object
    Boolean
x420.delete_password  delete-password
    Unsigned 32-bit integer
    x420.Password
x420.delivery_envelope  delivery-envelope
    No value
    x411.OtherMessageDeliveryFields
```

```
x420.delivery_time    delivery-time
    String
    x411.MessageDeliveryTime
x420.description      description
    No value
    x420.DescriptionString
x420.descriptive_identifier    descriptive-identifier
    Unsigned 32-bit integer
    x420.T_descriptive_identifier
x420.descriptive_identifier_item    Item
    String
    x420.GraphicString
x420.descriptive_relationship    descriptive-relationship
    String
    x420.GraphicString
x420.discard_reason    discard-reason
    Unsigned 32-bit integer
    x420.DiscardReasonField
x420.document_type    document-type
    No value
    x420.T_document_type
x420.document_type_name    document-type-name
    x420.Document_Type_Name
x420.effective_from    effective-from
    String
    x420.Time
x420.encrypted        encrypted
    No value
    x420.EncryptedBodyPart
x420.encrypted_key    encrypted-key
    Byte array
    x420.BIT_STRING
x420.encryption_algorithm_identifier    encryption-algorithm-identifier
    No value
    x509af.AlgorithmIdentifier
x420.encryption_token    encryption-token
    No value
    x420.EncryptionToken
x420.environment      environment
    No value
    x420.EnvironmentParameter
x420.erase            erase
    Boolean
x420.erase_password    erase-password
    Unsigned 32-bit integer
    x420.Password
```

```
x420.expiry_time  expiry-time
    String
    x420.ExpiryTimeField
x420.explicit_relationship  explicit-relationship
    Signed 32-bit integer
    x420.ExplicitRelationship
x420.extend  extend
    Boolean
x420.extend_password  extend-password
    Unsigned 32-bit integer
    x420.Password
x420.extended  extended
    No value
    x420.ExtendedBodyPart
x420.extensions  extensions
    Unsigned 32-bit integer
    x420.ExtensionsField
x420.file_attributes  file-attributes
    No value
    x420.FileAttributes
x420.file_identifier  file-identifier
    Unsigned 32-bit integer
    x420.FileIdentifier
x420.file_version  file-version
    String
    x420.GraphicString
x420.formal_name  formal-name
    No value
    x411.ORName
x420.forwarding_token  forwarding-token
    No value
    x411.MessageToken
x420.free_form_name  free-form-name
    String
    x420.FreeFormName
x420.future_object_size  future-object-size
    Unsigned 32-bit integer
    ftam.Object_Size_Attribute
x420.g3_facsimile  g3-facsimile
    No value
    x420.G3FacsimileBodyPart
x420.g4_class1  g4-class1
    Unsigned 32-bit integer
    x420.G4Class1BodyPart
x420.graphic_string  graphic-string
    String
    x420.GraphicString
```



```
x420.heading heading
    No value
    x420.Heading

x420.heading_security_label heading-security-label
    No value
    x411.SecurityLabel

x420.ia5_text ia5-text
    No value
    x420.IA5TextBodyPart

x420.identity identity
    String
    x420.User_Identity

x420.identity_of_creator identity-of-creator
    Unsigned 32-bit integer
    x420.User_Identity_Attribute

x420.identity_of_last_attribute_modifier identity-of-last-attribute-modifier
    Unsigned 32-bit integer
    x420.User_Identity_Attribute

x420.identity_of_last_modifier identity-of-last-modifier
    Unsigned 32-bit integer
    x420.User_Identity_Attribute

x420.identity_of_last_reader identity-of-last-reader
    Unsigned 32-bit integer
    x420.User_Identity_Attribute

x420.importance importance
    Unsigned 32-bit integer
    x420.ImportanceField

x420.incomplete_pathname incomplete-pathname
    Unsigned 32-bit integer
    ftam.Pathname

x420.insert insert
    Boolean

x420.insert_password insert-password
    Unsigned 32-bit integer
    x420.Password

x420.ipm ipm
    No value
    x420.IPM

x420.ipm-return ipm-return
    Boolean

x420.ipm_intended_recipient ipm-intended-recipient
    No value
    x420.IPMIntendedRecipientField

x420.ipn ipn
    No value
    x420.IPN
```

```
x420.ipn-non-repudiation ipn-non-repudiation
  Boolean
x420.ipn-proof ipn-proof
  Boolean
x420.ipn_originator ipn-originator
  No value
  x420.IPNOriginatorField
x420.ipns_received ipns-received
  Unsigned 32-bit integer
  x420.SEQUENCE_OF_SequenceNumber
x420.ipns_received_item Item
  Unsigned 32-bit integer
  p7.SequenceNumber
x420.legal_qualifications legal-qualifications
  Unsigned 32-bit integer
  ftam.Legal_Qualification_Attribute
x420.link_password link-password
  Unsigned 32-bit integer
  x420.Password
x420.location location
  No value
  x420.Application_Entity_Title
x420.machine machine
  Unsigned 32-bit integer
  x420.GeneralIdentifier
x420.message message
  No value
  x420.MessageBodyPart
x420.message_entry message-entry
  Unsigned 32-bit integer
  p7.SequenceNumber
x420.message_or_content_body_part message-or-content-body-part
  Unsigned 32-bit integer
  x420.BodyPartTokens
x420.message_reference message-reference
  No value
  x420.MessageReference
x420.message_submission_envelope message-submission-envelope
  No value
  x411.MessageSubmissionEnvelope
x420.mixed_mode mixed-mode
  Unsigned 32-bit integer
  x420.MixedModeBodyPart
x420.mts_identifier mts-identifier
  No value
  x411.MessageDeliveryIdentifier
```

```
x420.nationally_defined  nationally-defined
    No value
    x420.NationallyDefinedBodyPart
x420.new_address  new-address
    No value
    x420.ORDescriptor
x420.next_available  next-available
    String
    x420.Time
x420.no_ipn_received  no-ipn-received
    No value
    x420.NULL
x420.no_reply_received  no-reply-received
    No value
    x420.NULL
x420.no_value_available  no-value-available
    No value
    x420.NULL
x420.non_basic_parameters  non-basic-parameters
    Byte array
    x411.G3FacsimileNonBasicParameters
x420.non_message  non-message
    No value
    x420.NonMessageBodyPartSynopsis
x420.non_receipt_fields  non-receipt-fields
    No value
    x420.NonReceiptFields
x420.non_receipt_reason  non-receipt-reason
    Unsigned 32-bit integer
    x420.NonReceiptReasonField
x420.notification_extensions  notification-extensions
    Unsigned 32-bit integer
    x420.NotificationExtensionsField
x420.notification_requests  notification-requests
    Byte array
    x420.NotificationRequests
x420.nrn  nrn
    Boolean
x420.nrn_extensions  nrn-extensions
    Unsigned 32-bit integer
    x420.NRNExtensionsField
x420.number  number
    Unsigned 32-bit integer
    p7.SequenceNumber
x420.number_of_pages  number-of-pages
    Signed 32-bit integer
    x420.INTEGER
```

```
x420.object_availability  object-availability
    Unsigned 32-bit integer
    ftam.Object_Availability_Attribute

x420.object_size  object-size
    Unsigned 32-bit integer
    ftam.Object_Size_Attribute

x420.obsoleted_IPMs  obsoleted-IPMs
    Unsigned 32-bit integer
    x420.ObsoletedIPMsField

x420.octet_string  octet-string
    Byte array
    x420.OCTET_STRING

x420.oid_code  oid-code
    x420.OBJECT_IDENTIFIER

x420.operating_system  operating-system
    x420.OBJECT_IDENTIFIER

x420.or_descriptor  or-descriptor
    No value
    x420.ORDescriptor

x420.original_content  original-content
    Byte array
    x420.OriginalContent

x420.original_content_integrity_check  original-content-integrity-check
    No value
    x420.OriginalContentIntegrityCheck

x420.original_message_origin_authentication_check  original-message-origin-authen
    No value
    x420.OriginalMessageOriginAuthenticationCheck

x420.original_message_token  original-message-token
    No value
    x420.OriginalMessageToken

x420.original_security_arguments  original-security-arguments
    No value
    x420.T_original_security_arguments

x420.originating_MTA_certificate  originating-MTA-certificate
    No value
    x411.OriginatingMTACertificate

x420.originator  originator
    No value
    x420.OriginatorField

x420.originator_certificate_selector  originator-certificate-selector
    No value
    x509ce.CertificateAssertion

x420.originator_certificates  originator-certificates
    Unsigned 32-bit integer
    x411.ExtendedCertificates
```

```
x420.other_notification_type_fields  other-notification-type-fields
    Unsigned 32-bit integer
    x420.OtherNotificationTypeFields

x420.parameter  parameter
    No value
    x420.T_parameter

x420.parameters  parameters
    No value
    x420.INSTANCE_OF

x420.pass_passwords  pass-passwords
    Unsigned 32-bit integer
    x420.Pass_Passwords

x420.passwords  passwords
    No value
    x420.Access_Passwords

x420.pathname  pathname
    Unsigned 32-bit integer
    x420.Pathname_Attribute

x420.pathname_and_version  pathname-and-version
    No value
    x420.PathnameandVersion

x420.permitted_actions  permitted-actions
    Byte array
    ftam.Permitted_Actions_Attribute

x420.position  position
    Signed 32-bit integer
    x420.INTEGER

x420.primary_recipients  primary-recipients
    Unsigned 32-bit integer
    x420.PrimaryRecipientsField

x420.private_use  private-use
    Unsigned 32-bit integer
    ftam.Private_Use_Attribute

x420.processed  processed
    Boolean
    x420.BOOLEAN

x420.proof_of_submission  proof-of-submission
    No value
    x411.ProofOfSubmission

x420.read  read
    Boolean

x420.read-attribute  read-attribute
    Boolean

x420.read_attribute_password  read-attribute-password
    Unsigned 32-bit integer
    x420.Password
```

```
x420.read_password  read-password
    Unsigned 32-bit integer
    x420.Password

x420.receipt_fields  receipt-fields
    No value
    x420.ReceiptFields

x420.receipt_time    receipt-time
    String
    x420.ReceiptTimeField

x420.received_replies  received-replies
    Unsigned 32-bit integer
    x420.SEQUENCE_OF_SequenceNumber

x420.received_replies_item  Item
    Unsigned 32-bit integer
    p7.SequenceNumber

x420.recipient        recipient
    No value
    x420.ORDescriptor

x420.recipient_certificate  recipient-certificate
    No value
    x509af.Certificates

x420.recipient_certificate_selector  recipient-certificate-selector
    No value
    x509ce.CertificateAssertion

x420.recipient_extensions  recipient-extensions
    Unsigned 32-bit integer
    x420.RecipientExtensionsField

x420.reference        reference
    x420.OBJECT_IDENTIFIER

x420.registered_identifier  registered-identifier
    x420.OBJECT_IDENTIFIER

x420.related_IPMs     related-IPMs
    Unsigned 32-bit integer
    x420.RelatedIPMsField

x420.related_stored_file  related-stored-file
    Unsigned 32-bit integer
    x420.RelatedStoredFile

x420.relationship    relationship
    Unsigned 32-bit integer
    x420.Relationship

x420.repertoire       repertoire
    Unsigned 32-bit integer
    x420.Repertoire

x420.replace          replace
    Boolean
```

```
x420.replace_password  replace-password
    Unsigned 32-bit integer
    x420.Password

x420.replied_to_IPM  replied-to-IPM
    No value
    x420.RepliedToIPMField

x420.reply_recipients  reply-recipients
    Unsigned 32-bit integer
    x420.ReplyRecipientsField

x420.reply_requested  reply-requested
    Boolean
    x420.BOOLEAN

x420.reply_time  reply-time
    String
    x420.ReplyTimeField

x420.returned_ipm  returned-ipm
    No value
    x420.ReturnedIPMField

x420.rn  rn
    Boolean

x420.rn_extensions  rn-extensions
    Unsigned 32-bit integer
    x420.RNExtensionsField

x420.security_diagnostic_code  security-diagnostic-code
    Signed 32-bit integer
    x420.SecurityDiagnosticCode

x420.sensitivity  sensitivity
    Unsigned 32-bit integer
    x420.SensitivityField

x420.signed  signed
    No value
    x420.CirculationSignature

x420.simple  simple
    No value
    x420.NULL

x420.size  size
    Signed 32-bit integer
    x420.INTEGER

x420.storage_account  storage-account
    Unsigned 32-bit integer
    x420.Account_Attribute

x420.stored  stored
    Unsigned 32-bit integer
    x420.SET_OF_SequenceNumber

x420.stored_body_part  stored-body-part
    No value
    x420.T_stored_body_part
```

```
x420.stored_content  stored-content
    Unsigned 32-bit integer
    p7.SequenceNumber
x420.stored_entry  stored-entry
    Unsigned 32-bit integer
    p7.SequenceNumber
x420.stored_item  Item
    Unsigned 32-bit integer
    p7.SequenceNumber
x420.subject  subject
    String
    x420.SubjectField
x420.subject_ipm  subject-ipm
    No value
    x420.SubjectIPMField
x420.submission_proof  submission-proof
    No value
    x420.SubmissionProof
x420.submitted_body_part  submitted-body-part
    Unsigned 32-bit integer
    x420.INTEGER_1_MAX
x420.suppl_receipt_info  suppl-receipt-info
    String
    x420.SupplReceiptInfoField
x420.supplementary_information  supplementary-information
    String
    x420.IA5String
x420.suppress-an  suppress-an
    Boolean
x420.synopsis  synopsis
    Unsigned 32-bit integer
    x420.IPMSynopsis
x420.syntax  syntax
    Signed 32-bit integer
    x420.VideotexSyntax
x420.telephone_number  telephone-number
    String
    x420.TelephoneNumber
x420.teletex  teletex
    No value
    x420.TeletexBodyPart
x420.telex_compatible  telex-compatible
    Boolean
    x420.BOOLEAN
x420.this_IPM  this-IPM
    No value
    x420.ThisIPMField
```



```

x420.this_child_entry  this-child-entry
    Unsigned 32-bit integer
    p7.SequenceNumber
x420.timestamp  timestamp
    String
    x420.CirculationTime
x420.timestamped  timestamped
    String
    x420.CirculationTime
x420.type  type
    x420.T_type
x420.user  user
    No value
    x411.ORName
x420.user_relative_identifier  user-relative-identifier
    String
    x420.LocalIPMIdentifier
x420.user_visible_string  user-visible-string
    Unsigned 32-bit integer
    x420.T_user_visible_string
x420.user_visible_string_item  Item
    String
    x420.GraphicString
x420.value  value
    No value
    x420.T_value
x420.videotex  videotex
    No value
    x420.VideotexBodyPart
x420.voice_encoding_type  voice-encoding-type
    x420.OBJECT_IDENTIFIER
x420.voice_message_duration  voice-message-duration
    Signed 32-bit integer
    x420.INTEGER

```

### **X.501 Directory Operational Binding Management Protocol (dop)**

```

dop.ACIIItem  ACIIItem
    No value
    dop.ACIIItem
dop.ConsumerInformation  ConsumerInformation
    No value
    dop.ConsumerInformation
dop.DITcontext_item  Item
    No value
    dop.Vertex

```

```
dop.DSEType DSEType
  Byte array
  dop.DSEType

dop.HierarchicalAgreement HierarchicalAgreement
  No value
  dop.HierarchicalAgreement

dop.NHOBSubordinateToSuperior NHOBSubordinateToSuperior
  No value
  dop.NHOBSubordinateToSuperior

dop.NHOBSuperiorToSubordinate NHOBSuperiorToSubordinate
  No value
  dop.NHOBSuperiorToSubordinate

dop.NonSpecificHierarchicalAgreement NonSpecificHierarchicalAgreement
  No value
  dop.NonSpecificHierarchicalAgreement

dop.SubordinateToSuperior SubordinateToSuperior
  No value
  dop.SubordinateToSuperior

dop.SuperiorToSubordinate SuperiorToSubordinate
  No value
  dop.SuperiorToSubordinate

dop.SuperiorToSubordinateModification SuperiorToSubordinateModification
  No value
  dop.SuperiorToSubordinateModification

dop.SupplierAndConsumers SupplierAndConsumers
  No value
  dop.SupplierAndConsumers

dop.SupplierInformation SupplierInformation
  No value
  dop.SupplierInformation

dop.accessPoint accessPoint
  No value
  dsp.AccessPoint

dop.accessPoints accessPoints
  Unsigned 32-bit integer
  dsp.MasterAndShadowAccessPoints

dop.address address
  No value
  x509sat.PresentationAddress

dop.admPoint admPoint
  Boolean

dop.admPointInfo admPointInfo
  Unsigned 32-bit integer
  dop.SET_OF_Attribute

dop.admPointInfo_item Item
  No value
  x509if.Attribute
```

```
dop.ae_title ae-title
  Unsigned 32-bit integer
  x509if.Name

dop.agreement agreement
  No value
  dop.T_agreement

dop.agreementID agreementID
  No value
  dop.OperationalBindingID

dop.agreementProposal agreementProposal
  No value
  dop.T_agreementProposal

dop.algorithmIdentifier algorithmIdentifier
  No value
  x509af.AlgorithmIdentifier

dop.alias alias
  Boolean
  dop.BOOLEAN

dop.aliasDereferenced aliasDereferenced
  Boolean
  dop.BOOLEAN

dop.allAttributeValues allAttributeValues
  Unsigned 32-bit integer
  dop.SET_OF_AttributeType

dop.allAttributeValues_item Item
  x509if.AttributeType

dop.allUserAttributeTypes allUserAttributeTypes
  No value
  dop.NULL

dop.allUserAttributeTypesAndValues allUserAttributeTypesAndValues
  No value
  dop.NULL

dop.allUsers allUsers
  No value
  dop.NULL

dop.attributeType attributeType
  Unsigned 32-bit integer
  dop.SET_OF_AttributeType

dop.attributeType_item Item
  x509if.AttributeType

dop.attributeValue attributeValue
  Unsigned 32-bit integer
  dop.SET_OF_AttributeTypeAndValue

dop.attributeValue_item Item
  No value
  crmf.AttributeTypeAndValue
```

```
dop.authenticationLevel authenticationLevel
    Unsigned 32-bit integer
    dop.AuthenticationLevel

dop.basicLevels basicLevels
    No value
    dop.T_basicLevels

dop.bindingID bindingID
    No value
    dop.OperationalBindingID

dop.bindingType bindingType
    dop.BindingType

dop.classes classes
    Unsigned 32-bit integer
    x509if.Refinement

dop.consumers consumers
    Unsigned 32-bit integer
    dop.SET_OF_AccessPoint

dop.consumers_item Item
    No value
    dsp.AccessPoint

dop.contextPrefixInfo contextPrefixInfo
    Unsigned 32-bit integer
    dop.DITcontext

dop.contexts contexts
    Unsigned 32-bit integer
    dop.SET_OF_ContextAssertion

dop.contexts_item Item
    No value
    x509if.ContextAssertion

dop.cp cp
    Boolean

dop.denyAdd denyAdd
    Boolean

dop.denyBrowse denyBrowse
    Boolean

dop.denyCompare denyCompare
    Boolean

dop.denyDiscloseOnError denyDiscloseOnError
    Boolean

dop.denyExport denyExport
    Boolean

dop.denyFilterMatch denyFilterMatch
    Boolean

dop.denyImport denyImport
    Boolean
```

```
dop.denyInvoke    denyInvoke
                 Boolean

dop.denyModify    denyModify
                 Boolean

dop.denyRead      denyRead
                 Boolean

dop.denyRemove    denyRemove
                 Boolean

dop.denyRename    denyRename
                 Boolean

dop.denyReturnDN  denyReturnDN
                 Boolean

dop.dsSubentry    dsSubentry
                 Boolean

dop.encrypted     encrypted
                 Byte array
                 dop.BIT_STRING

dop.entry         entry
                 No value
                 dop.NULL

dop.entryInfo     entryInfo
                 Unsigned 32-bit integer
                 dop.SET_OF_Attribute

dop.entryInfo_item Item
                 No value
                 x509if.Attribute

dop.establishOperationalBindingArgument establishOperationalBindingArgument
                 No value
                 dop.EstablishOperationalBindingArgumentData

dop.explicitTermination explicitTermination
                 No value
                 dop.NULL

dop.familyMember  familyMember
                 Boolean

dop.generalizedTime generalizedTime
                 String
                 dop.GeneralizedTime

dop.glue          glue
                 Boolean

dop.grantAdd      grantAdd
                 Boolean

dop.grantBrowse   grantBrowse
                 Boolean

dop.grantCompare  grantCompare
                 Boolean
```

```
dop.grantDiscloseOnError grantDiscloseOnError
  Boolean

dop.grantExport grantExport
  Boolean

dop.grantFilterMatch grantFilterMatch
  Boolean

dop.grantImport grantImport
  Boolean

dop.grantInvoke grantInvoke
  Boolean

dop.grantModify grantModify
  Boolean

dop.grantRead grantRead
  Boolean

dop.grantRemove grantRemove
  Boolean

dop.grantRename grantRename
  Boolean

dop.grantReturnDN grantReturnDN
  Boolean

dop.grantsAndDenials grantsAndDenials
  Byte array
  dop.GrantsAndDenials

dop.identificationTag identificationTag
  Unsigned 32-bit integer
  x509sat.DirectoryString

dop.identifier identifier
  Signed 32-bit integer
  dop.T_identifier

dop.immSupr immSupr
  Boolean

dop.immediateSuperior immediateSuperior
  Unsigned 32-bit integer
  x509if.DistinguishedName

dop.immediateSuperiorInfo immediateSuperiorInfo
  Unsigned 32-bit integer
  dop.SET_OF_Attribute

dop.immediateSuperiorInfo_item Item
  No value
  x509if.Attribute

dop.info info
  Unsigned 32-bit integer
  dop.SET_OF_Attribute

dop.info_item Item
  No value
  x509if.Attribute
```

```
dop.initiator initiator
    Unsigned 32-bit integer
    dop.EstablishArgumentInitiator

dop.itemFirst itemFirst
    No value
    dop.T_itemFirst

dop.itemOrUserFirst itemOrUserFirst
    Unsigned 32-bit integer
    dop.T_itemOrUserFirst

dop.itemPermissions itemPermissions
    Unsigned 32-bit integer
    dop.SET_OF_ItemPermission

dop.itemPermissions_item Item
    No value
    dop.ItemPermission

dop.level level
    Unsigned 32-bit integer
    dop.T_level

dop.localQualifier localQualifier
    Signed 32-bit integer
    dop.INTEGER

dop.maxCount maxCount
    Signed 32-bit integer
    dop.INTEGER

dop.maxImmSub maxImmSub
    Signed 32-bit integer
    dop.INTEGER

dop.maxValueCount maxValueCount
    Unsigned 32-bit integer
    dop.SET_OF_MaxValueCount

dop.maxValueCount_item Item
    No value
    dop.MaxValueCount

dop.modifyOperationalBindingArgument modifyOperationalBindingArgument
    No value
    dop.ModifyOperationalBindingArgumentData

dop.modifyOperationalBindingResultData modifyOperationalBindingResultData
    No value
    dop.ModifyOperationalBindingResultData

dop.name name
    Unsigned 32-bit integer
    dop.SET_OF_NameAndOptionalUID

dop.name_item Item
    No value
    x509sat.NameAndOptionalUID

dop.newAgreement newAgreement
    No value
    dop.ArgumentNewAgreement
```

```
dop.newBindingID  newBindingID
  No value
  dop.OperationalBindingID

dop.non_supplying_master  non-supplying-master
  No value
  dsp.AccessPoint

dop.notification  notification
  Unsigned 32-bit integer
  dop.SEQUENCE_SIZE_1_MAX_OF_Attribute

dop.notification_item  Item
  No value
  x509if.Attribute

dop.now  now
  No value
  dop.NULL

dop.nssr  nssr
  Boolean

dop.null  null
  No value
  dop.NULL

dop.other  other
  No value
  dop.EXTERNAL

dop.performer  performer
  Unsigned 32-bit integer
  x509if.DistinguishedName

dop.precedence  precedence
  Signed 32-bit integer
  dop.Precedence

dop.problem  problem
  Unsigned 32-bit integer
  dop.T_problem

dop.protected  protected
  No value
  dop.ProtectedModifyResult

dop.protectedItems  protectedItems
  No value
  dop.ProtectedItems

dop.protocolInformation  protocolInformation
  Unsigned 32-bit integer
  dop.SET_OF_ProtocolInformation

dop.protocolInformation_item  Item
  No value
  x509sat.ProtocolInformation

dop.rangeOfValues  rangeOfValues
  Unsigned 32-bit integer
  dap.Filter
```



```
dop.rdn rdn
    Unsigned 32-bit integer
    x509if.RelativeDistinguishedName

dop.restrictedBy restrictedBy
    Unsigned 32-bit integer
    dop.SET_OF_RestrictedValue

dop.restrictedBy_item Item
    No value
    dop.RestrictedValue

dop.retryAt retryAt
    Unsigned 32-bit integer
    dop.Time

dop.rhob rhob
    Boolean

dop.roleA_initiates roleA-initiates
    No value
    dop.EstablishRoleAInitiates

dop.roleA_replies roleA-replies
    No value
    dop.T_roleA_replies

dop.roleB_initiates roleB-initiates
    No value
    dop.EstablishRoleBInitiates

dop.roleB_replies roleB-replies
    No value
    dop.T_roleB_replies

dop.root root
    Boolean

dop.sa sa
    Boolean

dop.securityParameters securityParameters
    No value
    dap.SecurityParameters

dop.selfValue selfValue
    Unsigned 32-bit integer
    dop.SET_OF_AttributeType

dop.selfValue_item Item
    x509if.AttributeType

dop.shadow shadow
    Boolean

dop.signed signed
    Boolean
    dop.BOOLEAN

dop.signedEstablishOperationalBindingArgument signedEstablishOperationalBindingArgument
    No value
    dop.T_signedEstablishOperationalBindingArgument
```

```

dop.signedModifyOperationalBindingArgument signedModifyOperationalBindingArgument
    No value
    dop.T_signedModifyOperationalBindingArgument
dop.signedTerminateOperationalBindingArgument signedTerminateOperationalBindingArgument
    No value
    dop.T_signedTerminateOperationalBindingArgument
dop.subentries subentries
    Unsigned 32-bit integer
    dop.SET_OF_SubentryInfo
dop.subentries_item Item
    No value
    dop.SubentryInfo
dop.subentry subentry
    Boolean
dop.subr subr
    Boolean
dop.subtree subtree
    Unsigned 32-bit integer
    dop.SET_OF_SubtreeSpecification
dop.subtree_item Item
    No value
    x509if.SubtreeSpecification
dop.supplier_is_master supplier-is-master
    Boolean
    dop.BOOLEAN
dop.supr supr
    Boolean
dop.symmetric symmetric
    No value
    dop.EstablishSymmetric
dop.terminateAt terminateAt
    Unsigned 32-bit integer
    dop.Time
dop.terminateOperationalBindingArgument terminateOperationalBindingArgument
    No value
    dop.TerminateOperationalBindingArgumentData
dop.terminateOperationalBindingResultData terminateOperationalBindingResultData
    No value
    dop.TerminateOperationalBindingResultData
dop.thisEntry thisEntry
    No value
    dop.NULL
dop.time time
    Unsigned 32-bit integer
    dop.Time
dop.type type
    x509if.AttributeType

```

```

dop.unsignedEstablishOperationalBindingArgument  unsignedEstablishOperationalBin
    No value
    dop.EstablishOperationalBindingArgumentData
dop.unsignedModifyOperationalBindingArgument  unsignedModifyOperationalBindingAr
    No value
    dop.ModifyOperationalBindingArgumentData
dop.unsignedTerminateOperationalBindingArgument  unsignedTerminateOperationalBin
    No value
    dop.TerminateOperationalBindingArgumentData
dop.userClasses  userClasses
    No value
    dop.UserClasses
dop.userFirst  userFirst
    No value
    dop.T_userFirst
dop.userGroup  userGroup
    Unsigned 32-bit integer
    dop.SET_OF_NameAndOptionalUID
dop.userGroup_item  Item
    No value
    x509sat.NameAndOptionalUID
dop.userPermissions  userPermissions
    Unsigned 32-bit integer
    dop.SET_OF_UserPermission
dop.userPermissions_item  Item
    No value
    dop.UserPermission
dop.utcTime  utcTime
    String
    dop.UTCTime
dop.valid  valid
    No value
    dop.Validity
dop.validFrom  validFrom
    Unsigned 32-bit integer
    dop.T_validFrom
dop.validUntil  validUntil
    Unsigned 32-bit integer
    dop.T_validUntil
dop.valuesIn  valuesIn
    x509if.AttributeType
dop.version  version
    Signed 32-bit integer
    dop.T_version
dop.xr  xr
    Boolean

```

**X.509 Authentication Framework (x509af)**

```
x509af.AttributeCertificate  AttributeCertificate
    No value
    x509af.AttributeCertificate
x509af.Certificate  Certificate
    No value
    x509af.Certificate
x509af.CertificateList  CertificateList
    No value
    x509af.CertificateList
x509af.CertificatePair  CertificatePair
    No value
    x509af.CertificatePair
x509af.CrossCertificates_item  Item
    No value
    x509af.Certificate
x509af.DSS_Params  DSS-Params
    No value
    x509af.DSS_Params
x509af.Extensions_item  Item
    No value
    x509af.Extension
x509af.ForwardCertificationPath_item  Item
    Unsigned 32-bit integer
    x509af.CrossCertificates
x509af.acPath  acPath
    Unsigned 32-bit integer
    x509af.SEQUENCE_OF_ACPATHData
x509af.acPath_item  Item
    No value
    x509af.ACPATHData
x509af.algorithm  algorithm
    No value
    x509af.AlgorithmIdentifier
x509af.algorithm.id  Algorithm Id
    Algorithm Id
x509af.algorithmId  algorithmId
    x509af.T_algorithmId
x509af.algorithmIdentifier  algorithmIdentifier
    No value
    x509af.AlgorithmIdentifier
x509af.attCertValidity  attCertValidity
    String
    x509af.GeneralizedTime
```

```
x509af.attCertValidityPeriod  attCertValidityPeriod
    No value
    x509af.AttCertValidityPeriod
x509af.attType  attType
    Unsigned 32-bit integer
    x509af.SET_OF_AttributeType
x509af.attType_item  Item
    x509if.AttributeType
x509af.attributeCertificate  attributeCertificate
    No value
    x509af.AttributeCertificate
x509af.attributes  attributes
    Unsigned 32-bit integer
    x509af.SEQUENCE_OF_Attribute
x509af.attributes_item  Item
    No value
    x509if.Attribute
x509af.baseCertificateID  baseCertificateID
    No value
    x509af.IssuerSerial
x509af.certificate  certificate
    No value
    x509af.Certificate
x509af.certificationPath  certificationPath
    Unsigned 32-bit integer
    x509af.ForwardCertificationPath
x509af.critical  critical
    Boolean
    x509af.BOOLEAN
x509af.crlEntryExtensions  crlEntryExtensions
    Unsigned 32-bit integer
    x509af.Extensions
x509af.crlExtensions  crlExtensions
    Unsigned 32-bit integer
    x509af.Extensions
x509af.encrypted  encrypted
    Byte array
    x509af.BIT_STRING
x509af.extension.id  Extension Id
    Extension Id
x509af.extensions  extensions
    Unsigned 32-bit integer
    x509af.Extensions
x509af.extnId  extnId
    x509af.T_extnId
```

```
x509af.extnValue  extnValue
    Byte array
    x509af.T_extnValue
x509af.g  g
    Signed 32-bit integer
    x509af.INTEGER
x509af.generalizedTime  generalizedTime
    String
    x509af.GeneralizedTime
x509af.issuedByThisCA  issuedByThisCA
    No value
    x509af.Certificate
x509af.issuedToThisCA  issuedToThisCA
    No value
    x509af.Certificate
x509af.issuer  issuer
    Unsigned 32-bit integer
    x509if.Name
x509af.issuerUID  issuerUID
    Byte array
    x509sat.UniqueIdentifier
x509af.issuerUniqueID  issuerUniqueID
    Byte array
    x509sat.UniqueIdentifier
x509af.issuerUniqueIdentifier  issuerUniqueIdentifier
    Byte array
    x509sat.UniqueIdentifier
x509af.nextUpdate  nextUpdate
    Unsigned 32-bit integer
    x509af.Time
x509af.notAfter  notAfter
    Unsigned 32-bit integer
    x509af.Time
x509af.notAfterTime  notAfterTime
    String
    x509af.GeneralizedTime
x509af.notBefore  notBefore
    Unsigned 32-bit integer
    x509af.Time
x509af.notBeforeTime  notBeforeTime
    String
    x509af.GeneralizedTime
x509af.p  p
    Signed 32-bit integer
    x509af.INTEGER
x509af.parameters  parameters
    No value
    x509af.T_parameters
```

```
x509af.q q
    Signed 32-bit integer
    x509af.INTEGER

x509af.rdnSequence rdnSequence
    Unsigned 32-bit integer
    x509if.RDNSequence

x509af.revocationDate revocationDate
    Unsigned 32-bit integer
    x509af.Time

x509af.revokedCertificates revokedCertificates
    Unsigned 32-bit integer
    x509af.T_revokedCertificates

x509af.revokedCertificates_item Item
    No value
    x509af.T_revokedCertificates_item

x509af.serial serial
    Signed 32-bit integer
    x509af.CertificateSerialNumber

x509af.serialNumber serialNumber
    Signed 32-bit integer
    x509af.CertificateSerialNumber

x509af.signature signature
    No value
    x509af.AlgorithmIdentifier

x509af.signedAttributeCertificateInfo signedAttributeCertificateInfo
    No value
    x509af.AttributeCertificateInfo

x509af.signedCertificate signedCertificate
    No value
    x509af.T_signedCertificate

x509af.signedCertificateList signedCertificateList
    No value
    x509af.T_signedCertificateList

x509af.subject subject
    Unsigned 32-bit integer
    x509af.SubjectName

x509af.subjectName subjectName
    Unsigned 32-bit integer
    x509ce.GeneralNames

x509af.subjectPublicKey subjectPublicKey
    Byte array
    x509af.BIT_STRING

x509af.subjectPublicKeyInfo subjectPublicKeyInfo
    No value
    x509af.SubjectPublicKeyInfo

x509af.subjectUniqueIdentifier subjectUniqueIdentifier
    Byte array
    x509sat.UniqueIdentifier
```

```
x509af.theCACertificates theCACertificates
    Unsigned 32-bit integer
    x509af.SEQUENCE_OF_CertificatePair
x509af.theCACertificates_item Item
    No value
    x509af.CertificatePair
x509af.thisUpdate thisUpdate
    Unsigned 32-bit integer
    x509af.Time
x509af.userCertificate userCertificate
    No value
    x509af.Certificate
x509af.utcTime utcTime
    String
    x509af.UTCTime
x509af.validity validity
    No value
    x509af.Validity
x509af.version version
    Signed 32-bit integer
    x509af.Version
```

#### **X.509 Certificate Extensions (x509ce)**

```
x509ce.AttributesSyntax AttributesSyntax
    Unsigned 32-bit integer
    x509ce.AttributesSyntax
x509ce.AttributesSyntax_item Item
    No value
    x509if.Attribute
x509ce.AuthorityKeyIdentifier AuthorityKeyIdentifier
    No value
    x509ce.AuthorityKeyIdentifier
x509ce.BaseCRLNumber BaseCRLNumber
    Unsigned 32-bit integer
    x509ce.BaseCRLNumber
x509ce.BasicConstraintsSyntax BasicConstraintsSyntax
    No value
    x509ce.BasicConstraintsSyntax
x509ce.CRLDistPointsSyntax CRLDistPointsSyntax
    Unsigned 32-bit integer
    x509ce.CRLDistPointsSyntax
x509ce.CRLDistPointsSyntax_item Item
    No value
    x509ce.DistributionPoint
x509ce.CRLNumber CRLNumber
    Unsigned 32-bit integer
    x509ce.CRLNumber
```



```
x509ce.CRLReason CRLReason
  Unsigned 32-bit integer
  x509ce.CRLReason

x509ce.CRLScopeSyntax CRLScopeSyntax
  Unsigned 32-bit integer
  x509ce.CRLScopeSyntax

x509ce.CRLScopeSyntax_item Item
  No value
  x509ce.PerAuthorityScope

x509ce.CRLStreamIdentifier CRLStreamIdentifier
  Unsigned 32-bit integer
  x509ce.CRLStreamIdentifier

x509ce.CertPolicySet_item Item
  x509ce.CertPolicyId

x509ce.CertificatePoliciesSyntax CertificatePoliciesSyntax
  Unsigned 32-bit integer
  x509ce.CertificatePoliciesSyntax

x509ce.CertificatePoliciesSyntax_item Item
  No value
  x509ce.PolicyInformation

x509ce.CertificateTemplate CertificateTemplate
  No value
  x509ce.CertificateTemplate

x509ce.DeltaInformation DeltaInformation
  No value
  x509ce.DeltaInformation

x509ce.GeneralNames GeneralNames
  Unsigned 32-bit integer
  x509ce.GeneralNames

x509ce.GeneralNames_item Item
  Unsigned 32-bit integer
  x509ce.GeneralName

x509ce.GeneralSubtrees_item Item
  No value
  x509ce.GeneralSubtree

x509ce.HoldInstruction HoldInstruction
  x509ce.HoldInstruction

x509ce.IPAddress iPAddress
  IPv4 address
  IP Address

x509ce.IssuingDistPointSyntax IssuingDistPointSyntax
  No value
  x509ce.IssuingDistPointSyntax

x509ce.KeyPurposeIDs KeyPurposeIDs
  Unsigned 32-bit integer
  x509ce.KeyPurposeIDs
```

```
x509ce.KeyPurposeIDs_item  Item
    x509ce.KeyPurposeId
x509ce.KeyUsage  KeyUsage
    Byte array
    x509ce.KeyUsage
x509ce.NameConstraintsSyntax  NameConstraintsSyntax
    No value
    x509ce.NameConstraintsSyntax
x509ce.OrderedListSyntax  OrderedListSyntax
    Unsigned 32-bit integer
    x509ce.OrderedListSyntax
x509ce.PolicyConstraintsSyntax  PolicyConstraintsSyntax
    No value
    x509ce.PolicyConstraintsSyntax
x509ce.PolicyMappingsSyntax  PolicyMappingsSyntax
    Unsigned 32-bit integer
    x509ce.PolicyMappingsSyntax
x509ce.PolicyMappingsSyntax_item  Item
    No value
    x509ce.PolicyMappingsSyntax_item
x509ce.PrivateKeyUsagePeriod  PrivateKeyUsagePeriod
    No value
    x509ce.PrivateKeyUsagePeriod
x509ce.SkipCerts  SkipCerts
    Unsigned 32-bit integer
    x509ce.SkipCerts
x509ce.StatusReferrals  StatusReferrals
    Unsigned 32-bit integer
    x509ce.StatusReferrals
x509ce.StatusReferrals_item  Item
    Unsigned 32-bit integer
    x509ce.StatusReferral
x509ce.SubjectKeyIdentifier  SubjectKeyIdentifier
    Byte array
    x509ce.SubjectKeyIdentifier
x509ce.aA  aA
    Boolean
x509ce.aACompromise  aACompromise
    Boolean
x509ce.affiliationChanged  affiliationChanged
    Boolean
x509ce.authorityCertIssuer  authorityCertIssuer
    Unsigned 32-bit integer
    x509ce.GeneralNames
x509ce.authorityCertSerialNumber  authorityCertSerialNumber
    Signed 32-bit integer
    x509af.CertificateSerialNumber
```

```
x509ce.authorityKeyIdentifier  authorityKeyIdentifier
    No value
    x509ce.AuthorityKeyIdentifier
x509ce.authorityName  authorityName
    Unsigned 32-bit integer
    x509ce.GeneralName
x509ce.base  base
    Unsigned 32-bit integer
    x509ce.GeneralName
x509ce.baseRevocationInfo  baseRevocationInfo
    No value
    x509ce.BaseRevocationInfo
x509ce.baseThisUpdate  baseThisUpdate
    String
    x509ce.GeneralizedTime
x509ce.builtinNameForm  builtinNameForm
    Unsigned 32-bit integer
    x509ce.T_builtinNameForm
x509ce.cA  cA
    Boolean
    x509ce.BOOLEAN
x509ce.cACompromise  cACompromise
    Boolean
x509ce.cRLIssuer  cRLIssuer
    Unsigned 32-bit integer
    x509ce.GeneralNames
x509ce.cRLNumber  cRLNumber
    Unsigned 32-bit integer
    x509ce.CRLNumber
x509ce.cRLReferral  cRLReferral
    No value
    x509ce.CRLReferral
x509ce.cRLScope  cRLScope
    Unsigned 32-bit integer
    x509ce.CRLScopeSyntax
x509ce.cRLSign  cRLSign
    Boolean
x509ce.cRLStreamIdentifier  cRLStreamIdentifier
    Unsigned 32-bit integer
    x509ce.CRLStreamIdentifier
x509ce.certificateHold  certificateHold
    Boolean
x509ce.cessationOfOperation  cessationOfOperation
    Boolean
x509ce.containsAACerts  containsAACerts
    Boolean
    x509ce.BOOLEAN
```

```
x509ce.containsCACerts  containsCACerts
  Boolean
  x509ce.BOOLEAN

x509ce.containsSOAPublicKeyCerts  containsSOAPublicKeyCerts
  Boolean
  x509ce.BOOLEAN

x509ce.containsUserAttributeCerts  containsUserAttributeCerts
  Boolean
  x509ce.BOOLEAN

x509ce.containsUserPublicKeyCerts  containsUserPublicKeyCerts
  Boolean
  x509ce.BOOLEAN

x509ce.dNSName  dNSName
  String
  x509ce.IA5String

x509ce.dataEncipherment  dataEncipherment
  Boolean

x509ce.decipherOnly  decipherOnly
  Boolean

x509ce.deltaLocation  deltaLocation
  Unsigned 32-bit integer
  x509ce.GeneralName

x509ce.deltaRefInfo  deltaRefInfo
  No value
  x509ce.DeltaRefInfo

x509ce.digitalSignature  digitalSignature
  Boolean

x509ce.directoryName  directoryName
  Unsigned 32-bit integer
  x509if.Name

x509ce.distributionPoint  distributionPoint
  Unsigned 32-bit integer
  x509ce.DistributionPointName

x509ce.ediPartyName  ediPartyName
  No value
  x509ce.EDIPartyName

x509ce.encipherOnly  encipherOnly
  Boolean

x509ce.endingNumber  endingNumber
  Signed 32-bit integer
  x509ce.INTEGER

x509ce.excludedSubtrees  excludedSubtrees
  Unsigned 32-bit integer
  x509ce.GeneralSubtrees

x509ce.firstIssuer  firstIssuer
  Unsigned 32-bit integer
  x509if.Name
```

```
x509ce.fullName  fullName
    Unsigned 32-bit integer
    x509ce.GeneralNames
x509ce.iPAddress  iPAddress
    Byte array
    x509ce.T_iPAddress
x509ce.id  Id
    Object identifier Id
x509ce.id_ce_baseUpdateTime  baseUpdateTime
    String
    baseUpdateTime
x509ce.id_ce_invalidDate  invalidDate
    String
    invalidDate
x509ce.indirectCRL  indirectCRL
    Boolean
    x509ce.BOOLEAN
x509ce.inhibitPolicyMapping  inhibitPolicyMapping
    Unsigned 32-bit integer
    x509ce.SkipCerts
x509ce.issuedByThisCAAssertion  issuedByThisCAAssertion
    No value
    x509ce.CertificateExactAssertion
x509ce.issuedToThisCAAssertion  issuedToThisCAAssertion
    No value
    x509ce.CertificateExactAssertion
x509ce.issuer  issuer
    Unsigned 32-bit integer
    x509ce.GeneralName
x509ce.issuerDomainPolicy  issuerDomainPolicy
    x509ce.CertPolicyId
x509ce.keyAgreement  keyAgreement
    Boolean
x509ce.keyCertSign  keyCertSign
    Boolean
x509ce.keyCompromise  keyCompromise
    Boolean
x509ce.keyEncipherment  keyEncipherment
    Boolean
x509ce.keyIdentifier  keyIdentifier
    Byte array
    x509ce.KeyIdentifier
x509ce.keyUsage  keyUsage
    Byte array
    x509ce.KeyUsage
```

```
x509ce.lastChangedCRL  lastChangedCRL
    String
    x509ce.GeneralizedTime
x509ce.lastDelta  lastDelta
    String
    x509ce.GeneralizedTime
x509ce.lastSubject  lastSubject
    Unsigned 32-bit integer
    x509if.Name
x509ce.lastUpdate  lastUpdate
    String
    x509ce.GeneralizedTime
x509ce.location  location
    Unsigned 32-bit integer
    x509ce.GeneralName
x509ce.maxCRLNumber  maxCRLNumber
    Unsigned 32-bit integer
    x509ce.CRLNumber
x509ce.maximum  maximum
    Unsigned 32-bit integer
    x509ce.BaseDistance
x509ce.minCRLNumber  minCRLNumber
    Unsigned 32-bit integer
    x509ce.CRLNumber
x509ce.minimum  minimum
    Unsigned 32-bit integer
    x509ce.BaseDistance
x509ce.modulus  modulus
    Signed 32-bit integer
    x509ce.INTEGER
x509ce.nameAssigner  nameAssigner
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509ce.nameConstraints  nameConstraints
    No value
    x509ce.NameConstraintsSyntax
x509ce.nameRelativeToCRLIssuer  nameRelativeToCRLIssuer
    Unsigned 32-bit integer
    x509if.RelativeDistinguishedName
x509ce.nameSubtrees  nameSubtrees
    Unsigned 32-bit integer
    x509ce.GeneralNames
x509ce.nextDelta  nextDelta
    String
    x509ce.GeneralizedTime
x509ce.nonRepudiation  nonRepudiation
    Boolean
```

```
x509ce.notAfter notAfter
    String
    x509ce.GeneralizedTime
x509ce.notBefore notBefore
    String
    x509ce.GeneralizedTime
x509ce.onlyContains onlyContains
    Byte array
    x509ce.OnlyCertificateTypes
x509ce.onlySomeReasons onlySomeReasons
    Byte array
    x509ce.ReasonFlags
x509ce.otherName otherName
    No value
    x509ce.OtherName
x509ce.otherNameForm otherNameForm
    x509ce.OBJECT_IDENTIFIER
x509ce.partyName partyName
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509ce.pathLenConstraint pathLenConstraint
    Signed 32-bit integer
    x509ce.INTEGER
x509ce.pathToName pathToName
    Unsigned 32-bit integer
    x509if.Name
x509ce.permittedSubtrees permittedSubtrees
    Unsigned 32-bit integer
    x509ce.GeneralSubtrees
x509ce.policy policy
    Unsigned 32-bit integer
    x509ce.CertPolicySet
x509ce.policyIdentifier policyIdentifier
    x509ce.CertPolicyId
x509ce.policyQualifierId policyQualifierId
    x509ce.PolicyQualifierId
x509ce.policyQualifiers policyQualifiers
    Unsigned 32-bit integer
    x509ce.SEQUENCE_SIZE_1_MAX_OF_PolicyQualifierInfo
x509ce.policyQualifiers_item Item
    No value
    x509ce.PolicyQualifierInfo
x509ce.privateKeyValid privateKeyValid
    String
    x509ce.GeneralizedTime
```

```
x509ce.privilegeWithdrawn  privilegeWithdrawn
    Boolean
x509ce.qualifier  qualifier
    No value
    x509ce.PolicyQualifierValue
x509ce.reasonFlags  reasonFlags
    Byte array
    x509ce.ReasonFlags
x509ce.reasons  reasons
    Byte array
    x509ce.ReasonFlags
x509ce.registeredID  registeredID
    x509ce.OBJECT_IDENTIFIER
x509ce.requireExplicitPolicy  requireExplicitPolicy
    Unsigned 32-bit integer
    x509ce.SkipCerts
x509ce.rfc822Name  rfc822Name
    String
    x509ce.IA5String
x509ce.soAPublicKey  soAPublicKey
    Boolean
x509ce.serialNumber  serialNumber
    Signed 32-bit integer
    x509af.CertificateSerialNumber
x509ce.serialNumberRange  serialNumberRange
    No value
    x509ce.NumberRange
x509ce.startingNumber  startingNumber
    Signed 32-bit integer
    x509ce.INTEGER
x509ce.subject  subject
    Unsigned 32-bit integer
    x509if.Name
x509ce.subjectAltName  subjectAltName
    Unsigned 32-bit integer
    x509ce.AltNameType
x509ce.subjectDomainPolicy  subjectDomainPolicy
    x509ce.CertPolicyId
x509ce.subjectKeyIdRange  subjectKeyIdRange
    No value
    x509ce.NumberRange
x509ce.subjectKeyIdentifier  subjectKeyIdentifier
    Byte array
    x509ce.SubjectKeyIdentifier
x509ce.subjectPublicKeyAlgID  subjectPublicKeyAlgID
    x509ce.OBJECT_IDENTIFIER
```



```

x509ce.superseded  superseded
    Boolean
x509ce.templateID  templateID
    x509ce.OBJECT_IDENTIFIER
x509ce.templateMajorVersion  templateMajorVersion
    Signed 32-bit integer
    x509ce.INTEGER
x509ce.templateMinorVersion  templateMinorVersion
    Signed 32-bit integer
    x509ce.INTEGER
x509ce.type_id  type-id
    x509ce.OtherNameType
x509ce.uniformResourceIdentifier  uniformResourceIdentifier
    String
    x509ce.T_uniformResourceIdentifier
x509ce.unused  unused
    Boolean
x509ce.userAttribute  userAttribute
    Boolean
x509ce.userPublicKey  userPublicKey
    Boolean
x509ce.value  value
    No value
    x509ce.OtherNameValue
x509ce.x400Address  x400Address
    No value
    x411.ORAddress

```

### **X.509 Information Framework (x509if)**

```

x509if.DistinguishedName  DistinguishedName
    Unsigned 32-bit integer
    x509if.DistinguishedName
x509if.Name  Name
    Unsigned 32-bit integer
    x509if.Name
x509if.RDNSequence_item  Item
    Unsigned 32-bit integer
    x509if.RDNSequence_item
x509if.RelativeDistinguishedName_item  Item
    No value
    x509if.RelativeDistinguishedName_item
x509if.SubtreeSpecification  SubtreeSpecification
    No value
    x509if.SubtreeSpecification

```

```
x509if.additionalControl additionalControl
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_AttributeType
x509if.additionalControl_item Item
    x509if.AttributeType
x509if.allContexts allContexts
    No value
    x509if.NULL
x509if.allowedSubset allowedSubset
    Byte array
    x509if.AllowedSubset
x509if.and and
    Unsigned 32-bit integer
    x509if.SET_OF_Refinement
x509if.and_item Item
    Unsigned 32-bit integer
    x509if.Refinement
x509if.any.String AnyString
    Byte array
    This is any String
x509if.assertedContexts assertedContexts
    Unsigned 32-bit integer
    x509if.T_assertedContexts
x509if.assertedContexts_item Item
    No value
    x509if.ContextAssertion
x509if.assertion assertion
    No value
    x509if.AttributeValue
x509if.attribute attribute
    x509if.AttributeType
x509if.attributeCombination attributeCombination
    Unsigned 32-bit integer
    x509if.AttributeCombination
x509if.attributeType attributeType
    x509if.AttributeId
x509if.auxiliaries auxiliaries
    Unsigned 32-bit integer
    x509if.T_auxiliaries
x509if.auxiliaries_item Item
    x509if.OBJECT_IDENTIFIER
x509if.base base
    Unsigned 32-bit integer
    x509if.LocalName
x509if.baseObject baseObject
    Boolean
```

```
x509if.basic basic
  No value
  x509if.MRMapping
x509if.chopAfter chopAfter
  Unsigned 32-bit integer
  x509if.LocalName
x509if.chopBefore chopBefore
  Unsigned 32-bit integer
  x509if.LocalName
x509if.context context
  x509if.OBJECT_IDENTIFIER
x509if.contextCombination contextCombination
  Unsigned 32-bit integer
  x509if.ContextCombination
x509if.contextList contextList
  Unsigned 32-bit integer
  x509if.SET_OF_Context
x509if.contextList_item Item
  No value
  x509if.Context
x509if.contextType contextType
  x509if.AttributeId
x509if.contextValue contextValue
  Unsigned 32-bit integer
  x509if.SEQUENCE_OF_AttributeValue
x509if.contextValue_item Item
  No value
  x509if.AttributeValue
x509if.contextValues contextValues
  Unsigned 32-bit integer
  x509if.SET_OF_AttributeValue
x509if.contextValues_item Item
  No value
  x509if.AttributeValue
x509if.contexts contexts
  Unsigned 32-bit integer
  x509if.SEQUENCE_OF_ContextProfile
x509if.contexts_item Item
  No value
  x509if.ContextProfile
x509if.default default
  Signed 32-bit integer
  x509if.INTEGER
x509if.defaultControls defaultControls
  No value
  x509if.ControlOptions
```

```
x509if.defaultValues defaultValues
    Unsigned 32-bit integer
    x509if.T_defaultValues
x509if.defaultValues_item Item
    No value
    x509if.T_defaultValues_item
x509if.description description
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509if.distingAttrValue distingAttrValue
    No value
    x509if.ValuesWithContextValue
x509if.dmdId dmdId
    x509if.OBJECT_IDENTIFIER
x509if.entryLimit entryLimit
    No value
    x509if.EntryLimit
x509if.entryType entryType
    x509if.DefaultValueType
x509if.fallback fallback
    Boolean
    x509if.BOOLEAN
x509if.id Id
    Object identifier Id
x509if.imposedSubset imposedSubset
    Unsigned 32-bit integer
    x509if.ImposedSubset
x509if.includeSubtypes includeSubtypes
    Boolean
    x509if.BOOLEAN
x509if.inputAttributeTypes inputAttributeTypes
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_RequestAttribute
x509if.inputAttributeTypes_item Item
    No value
    x509if.RequestAttribute
x509if.item item
    x509if.OBJECT_IDENTIFIER
x509if.level level
    Signed 32-bit integer
    x509if.INTEGER
x509if.mandatory mandatory
    Unsigned 32-bit integer
    x509if.SET_SIZE_1_MAX_OF_AttributeId
```

```
x509if.mandatoryContexts mandatoryContexts
    Unsigned 32-bit integer
    x509if.T_mandatoryContexts
x509if.mandatoryContexts_item Item
    x509if.OBJECT_IDENTIFIER
x509if.mandatoryControls mandatoryControls
    No value
    x509if.ControlOptions
x509if.mandatory_item Item
    x509if.AttributeId
x509if.mapping mapping
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_Mapping
x509if.mappingFunction mappingFunction
    x509if.OBJECT_IDENTIFIER
x509if.mapping_item Item
    No value
    x509if.Mapping
x509if.matchedValuesOnly matchedValuesOnly
    No value
    x509if.NULL
x509if.matchingUse matchingUse
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_MatchingUse
x509if.matchingUse_item Item
    No value
    x509if.MatchingUse
x509if.max max
    Signed 32-bit integer
    x509if.INTEGER
x509if.maximum maximum
    Signed 32-bit integer
    x509if.BaseDistance
x509if.minimum minimum
    Signed 32-bit integer
    x509if.BaseDistance
x509if.name name
    Unsigned 32-bit integer
    x509if.SET_OF_DirectoryString
x509if.nameForm nameForm
    x509if.OBJECT_IDENTIFIER
x509if.name_item Item
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509if.newMatchingRule newMatchingRule
```

```
x509if.OBJECT_IDENTIFIER
x509if.not not
    Unsigned 32-bit integer
    x509if.Refinement
x509if.obsolete obsolete
    Boolean
    x509if.BOOLEAN
x509if.oldMatchingRule oldMatchingRule
    x509if.OBJECT_IDENTIFIER
x509if.oneLevel oneLevel
    Boolean
x509if.optional optional
    Unsigned 32-bit integer
    x509if.SET_SIZE_1_MAX_OF_AttributeId
x509if.optionalContexts optionalContexts
    Unsigned 32-bit integer
    x509if.T_optionalContexts
x509if.optionalContexts_item Item
    x509if.OBJECT_IDENTIFIER
x509if.optional_item Item
    x509if.AttributeId
x509if.or or
    Unsigned 32-bit integer
    x509if.SET_OF_Refinement
x509if.or_item Item
    Unsigned 32-bit integer
    x509if.Refinement
x509if.outputAttributeTypes outputAttributeTypes
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_ResultAttribute
x509if.outputAttributeTypes_item Item
    No value
    x509if.ResultAttribute
x509if.outputValues outputValues
    Unsigned 32-bit integer
    x509if.T_outputValues
x509if.precluded precluded
    Unsigned 32-bit integer
    x509if.SET_SIZE_1_MAX_OF_AttributeId
x509if.precluded_item Item
    x509if.AttributeId
x509if.primaryDistinguished primaryDistinguished
    Boolean
    x509if.BOOLEAN
```

```
x509if.rdnSequence rdnSequence
    Unsigned 32-bit integer
    x509if.RDNSequence

x509if.relaxation relaxation
    No value
    x509if.RelaxationPolicy

x509if.relaxations relaxations
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_MRMapping

x509if.relaxations_item Item
    No value
    x509if.MRMapping

x509if.restrictionType restrictionType
    x509if.AttributeId

x509if.restrictionValue restrictionValue
    No value
    x509if.AttributeValue

x509if.ruleIdentifier ruleIdentifier
    Signed 32-bit integer
    x509if.RuleIdentifier

x509if.searchRuleControls searchRuleControls
    No value
    x509if.ControlOptions

x509if.selectedContexts selectedContexts
    Unsigned 32-bit integer
    x509if.SET_OF_ContextAssertion

x509if.selectedContexts_item Item
    No value
    x509if.ContextAssertion

x509if.selectedValues selectedValues
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_SelectedValues

x509if.selectedValues_item Item
    No value
    x509if.SelectedValues

x509if.serviceType serviceType
    x509if.OBJECT_IDENTIFIER

x509if.specificExclusions specificExclusions
    Unsigned 32-bit integer
    x509if.T_specificExclusions

x509if.specificExclusions_item Item
    Unsigned 32-bit integer
    x509if.T_specificExclusions_item

x509if.specificationFilter specificationFilter
    Unsigned 32-bit integer
    x509if.Refinement
```

```

x509if.structuralObjectClass structuralObjectClass
    x509if.OBJECT_IDENTIFIER
x509if.substitution substitution
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_MRSubstitution
x509if.substitution_item Item
    No value
    x509if.MRSubstitution
x509if.superiorStructureRules superiorStructureRules
    Unsigned 32-bit integer
    x509if.SET_OF_RuleIdentifier
x509if.superiorStructureRules_item Item
    Signed 32-bit integer
    x509if.RuleIdentifier
x509if.tightenings tightenings
    Unsigned 32-bit integer
    x509if.SEQUENCE_OF_MRMapping
x509if.tightenings_item Item
    No value
    x509if.MRMapping
x509if.type type
    x509if.AttributeId
x509if.userClass userClass
    Signed 32-bit integer
    x509if.INTEGER
x509if.value value
    No value
    x509if.ValuesWithContextValue
x509if.values values
    Unsigned 32-bit integer
    x509if.SET_OF_AttributeValue
x509if.valuesWithContext valuesWithContext
    Unsigned 32-bit integer
    x509if.T_valuesWithContext
x509if.valuesWithContext_item Item
    No value
    x509if.T_valuesWithContext_item
x509if.values_item Item
    No value
    x509if.AttributeValue
x509if.wholeSubtree wholeSubtree
    Boolean

```

#### **X.509 Selected Attribute Types (x509sat)**

```

x509sat.BitString BitString
    Byte array
    x509sat.BitString

```



```
x509sat.Boolean Boolean
  Boolean
  x509sat.Boolean

x509sat.CaseIgnoreListMatch CaseIgnoreListMatch
  Unsigned 32-bit integer
  x509sat.CaseIgnoreListMatch

x509sat.CaseIgnoreListMatch_item Item
  Unsigned 32-bit integer
  x509sat.DirectoryString

x509sat.CountryName CountryName
  String
  x509sat.CountryName

x509sat.Criteria Criteria
  Unsigned 32-bit integer
  x509sat.Criteria

x509sat.DayTime DayTime
  No value
  x509sat.DayTime

x509sat.DayTimeBand DayTimeBand
  No value
  x509sat.DayTimeBand

x509sat.DestinationIndicator DestinationIndicator
  String
  x509sat.DestinationIndicator

x509sat.DirectoryString DirectoryString
  Unsigned 32-bit integer
  x509sat.DirectoryString

x509sat.EnhancedGuide EnhancedGuide
  No value
  x509sat.EnhancedGuide

x509sat.FacsimileTelephoneNumber FacsimileTelephoneNumber
  No value
  x509sat.FacsimileTelephoneNumber

x509sat.Guide Guide
  No value
  x509sat.Guide

x509sat.Integer Integer
  Signed 32-bit integer
  x509sat.Integer

x509sat.InternationalISDNNumber InternationalISDNNumber
  String
  x509sat.InternationalISDNNumber

x509sat.NameAndOptionalUID NameAndOptionalUID
  No value
  x509sat.NameAndOptionalUID

x509sat.ObjectIdentifier ObjectIdentifier
  x509sat.ObjectIdentifier
```

```
x509sat.OctetString OctetString
    Byte array
    x509sat.OctetString
x509sat.OctetSubstringAssertion_item Item
    Unsigned 32-bit integer
    x509sat.OctetSubstringAssertion_item
x509sat.PostalAddress PostalAddress
    Unsigned 32-bit integer
    x509sat.PostalAddress
x509sat.PostalAddress_item Item
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509sat.PreferredDeliveryMethod PreferredDeliveryMethod
    Unsigned 32-bit integer
    x509sat.PreferredDeliveryMethod
x509sat.PreferredDeliveryMethod_item Item
    Signed 32-bit integer
    x509sat.PreferredDeliveryMethod_item
x509sat.PresentationAddress PresentationAddress
    No value
    x509sat.PresentationAddress
x509sat.ProtocolInformation ProtocolInformation
    No value
    x509sat.ProtocolInformation
x509sat.SubstringAssertion_item Item
    Unsigned 32-bit integer
    x509sat.SubstringAssertion_item
x509sat.SyntaxBMPString SyntaxBMPString
    String
    x509sat.SyntaxBMPString
x509sat.SyntaxGeneralString SyntaxGeneralString
    String
    x509sat.SyntaxGeneralString
x509sat.SyntaxGeneralizedTime SyntaxGeneralizedTime
    String
    x509sat.SyntaxGeneralizedTime
x509sat.SyntaxGraphicString SyntaxGraphicString
    String
    x509sat.SyntaxGraphicString
x509sat.SyntaxIA5String SyntaxIA5String
    String
    x509sat.SyntaxIA5String
x509sat.SyntaxISO646String SyntaxISO646String
    String
    x509sat.SyntaxISO646String
x509sat.SyntaxNumericString SyntaxNumericString
    String
    x509sat.SyntaxNumericString
```

```
x509sat.SyntaxPrintableString SyntaxPrintableString
String
x509sat.SyntaxPrintableString
x509sat.SyntaxT61String SyntaxT61String
String
x509sat.SyntaxT61String
x509sat.SyntaxTeletexString SyntaxTeletexString
String
x509sat.SyntaxTeletexString
x509sat.SyntaxUTCTime SyntaxUTCTime
String
x509sat.SyntaxUTCTime
x509sat.SyntaxUTF8String SyntaxUTF8String
String
x509sat.SyntaxUTF8String
x509sat.SyntaxUniversalString SyntaxUniversalString
String
x509sat.SyntaxUniversalString
x509sat.SyntaxVideotexString SyntaxVideotexString
String
x509sat.SyntaxVideotexString
x509sat.SyntaxVisibleString SyntaxVisibleString
String
x509sat.SyntaxVisibleString
x509sat.TelephoneNumber TelephoneNumber
String
x509sat.TelephoneNumber
x509sat.TelexNumber TelexNumber
No value
x509sat.TelexNumber
x509sat.UniqueIdentifier UniqueIdentifier
Byte array
x509sat.UniqueIdentifier
x509sat.X121Address X121Address
String
x509sat.X121Address
x509sat.ZonalSelect_item Item
x509if.AttributeType
x509sat.absolute absolute
No value
x509sat.T_absolute
x509sat.allMonths allMonths
No value
x509sat.NULL
x509sat.allWeeks allWeeks
No value
x509sat.NULL
```

```
x509sat.and and
    Unsigned 32-bit integer
    x509sat.SET_OF_Criteria
x509sat.and_item Item
    Unsigned 32-bit integer
    x509sat.Criteria
x509sat.answerback answerback
    String
    x509sat.PrintableString
x509sat.any any
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509sat.approximateMatch approximateMatch
    x509if.AttributeType
x509sat.april april
    Boolean
x509sat.at at
    String
    x509sat.GeneralizedTime
x509sat.attributeList attributeList
    Unsigned 32-bit integer
    x509sat.SEQUENCE_OF_AttributeValueAssertion
x509sat.attributeList_item Item
    No value
    x509if.AttributeValueAssertion
x509sat.august august
    Boolean
x509sat.between between
    No value
    x509sat.T_between
x509sat.bitDay bitDay
    Byte array
    x509sat.T_bitDay
x509sat.bitMonth bitMonth
    Byte array
    x509sat.T_bitMonth
x509sat.bitNamedDays bitNamedDays
    Byte array
    x509sat.T_bitNamedDays
x509sat.bitWeek bitWeek
    Byte array
    x509sat.T_bitWeek
x509sat.bmpString bmpString
    String
    x509sat.BMPString
```

```
x509sat.control control
    No value
    x509if.Attribute
x509sat.countryCode countryCode
    String
    x509sat.PrintableString
x509sat.criteria criteria
    Unsigned 32-bit integer
    x509sat.Criteria
x509sat.dayOf dayOf
    Unsigned 32-bit integer
    x509sat.XDayOf
x509sat.days days
    Unsigned 32-bit integer
    x509sat.T_days
x509sat.december december
    Boolean
x509sat.dn dn
    Unsigned 32-bit integer
    x509if.DistinguishedName
x509sat.endDayTime endDayTime
    No value
    x509sat.DayTime
x509sat.endTime endTime
    String
    x509sat.GeneralizedTime
x509sat.entirely entirely
    Boolean
    x509sat.BOOLEAN
x509sat.equality equality
    x509if.AttributeType
x509sat.february february
    Boolean
x509sat.fifth fifth
    Unsigned 32-bit integer
    x509sat.NamedDay
x509sat.final final
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509sat.first first
    Unsigned 32-bit integer
    x509sat.NamedDay
x509sat.fourth fourth
    Unsigned 32-bit integer
    x509sat.NamedDay
x509sat.friday friday
    Boolean
```

```
x509sat.greaterOrEqual  greaterOrEqual
    x509if.AttributeType
x509sat.hour  hour
    Signed 32-bit integer
    x509sat.INTEGER
x509sat.initial  initial
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509sat.intDay  intDay
    Unsigned 32-bit integer
    x509sat.T_intDay
x509sat.intDay_item  Item
    Signed 32-bit integer
    x509sat.INTEGER
x509sat.intMonth  intMonth
    Unsigned 32-bit integer
    x509sat.T_intMonth
x509sat.intMonth_item  Item
    Signed 32-bit integer
    x509sat.INTEGER
x509sat.intNamedDays  intNamedDays
    Unsigned 32-bit integer
    x509sat.T_intNamedDays
x509sat.intWeek  intWeek
    Unsigned 32-bit integer
    x509sat.T_intWeek
x509sat.intWeek_item  Item
    Signed 32-bit integer
    x509sat.INTEGER
x509sat.january  january
    Boolean
x509sat.july  july
    Boolean
x509sat.june  june
    Boolean
x509sat.lessOrEqual  lessOrEqual
    x509if.AttributeType
x509sat.localeID1  localeID1
    x509sat.OBJECT_IDENTIFIER
x509sat.localeID2  localeID2
    Unsigned 32-bit integer
    x509sat.DirectoryString
x509sat.march  march
    Boolean
x509sat.matchingRuleUsed  matchingRuleUsed
```

```
x509sat.OBJECT_IDENTIFIER
x509sat.may may
    Boolean
x509sat.minute minute
    Signed 32-bit integer
    x509sat.INTEGER
x509sat.monday monday
    Boolean
x509sat.months months
    Unsigned 32-bit integer
    x509sat.T_months
x509sat.nAddress nAddress
    Byte array
    x509sat.OCTET_STRING
x509sat.nAddresses nAddresses
    Unsigned 32-bit integer
    x509sat.T_nAddresses
x509sat.nAddresses_item Item
    Byte array
    x509sat.OCTET_STRING
x509sat.not not
    Unsigned 32-bit integer
    x509sat.Criteria
x509sat.notThisTime notThisTime
    Boolean
    x509sat.BOOLEAN
x509sat.november november
    Boolean
x509sat.now now
    No value
    x509sat.NULL
x509sat.objectClass objectClass
    x509sat.OBJECT_IDENTIFIER
x509sat.october october
    Boolean
x509sat.or or
    Unsigned 32-bit integer
    x509sat.SET_OF_Criteria
x509sat.or_item Item
    Unsigned 32-bit integer
    x509sat.Criteria
x509sat.pSelector pSelector
    Byte array
    x509sat.OCTET_STRING
```

```
x509sat.periodic periodic
    Unsigned 32-bit integer
    x509sat.SET_OF_Period
x509sat.periodic_item Item
    No value
    x509sat.Period
x509sat.printableString printableString
    String
    x509sat.PrintableString
x509sat.profiles profiles
    Unsigned 32-bit integer
    x509sat.T_profiles
x509sat.profiles_item Item
    x509sat.OBJECT_IDENTIFIER
x509sat.sSelector sSelector
    Byte array
    x509sat.OCTET_STRING
x509sat.saturday saturday
    Boolean
x509sat.second second
    Unsigned 32-bit integer
    x509sat.NamedDay
x509sat.september september
    Boolean
x509sat.startDayTime startDayTime
    No value
    x509sat.DayTime
x509sat.startTime startTime
    String
    x509sat.GeneralizedTime
x509sat.subset subset
    Signed 32-bit integer
    x509sat.T_subset
x509sat.substrings substrings
    x509if.AttributeType
x509sat.sunday sunday
    Boolean
x509sat.tSelector tSelector
    Byte array
    x509sat.OCTET_STRING
x509sat.telephoneNumber telephoneNumber
    String
    x509sat.TelephoneNumber
x509sat.teletexString teletexString
    String
    x509sat.TeletexString
```



```
x509sat.telexNumber  telexNumber
    String
    x509sat.PrintableString
x509sat.third  third
    Unsigned 32-bit integer
    x509sat.NamedDay
x509sat.thursday  thursday
    Boolean
x509sat.time  time
    Unsigned 32-bit integer
    x509sat.T_time
x509sat.timeZone  timeZone
    Signed 32-bit integer
    x509sat.TimeZone
x509sat.timesOfDay  timesOfDay
    Unsigned 32-bit integer
    x509sat.SET_OF_DayTimeBand
x509sat.timesOfDay_item  Item
    No value
    x509sat.DayTimeBand
x509sat.tuesday  tuesday
    Boolean
x509sat.type  type
    Unsigned 32-bit integer
    x509sat.CriteriaItem
x509sat.uTF8String  uTF8String
    String
    x509sat.UTF8String
x509sat.uid  uid
    Byte array
    x509sat.UniqueIdentifier
x509sat.universalString  universalString
    String
    x509sat.UniversalString
x509sat.wednesday  wednesday
    Boolean
x509sat.week1  week1
    Boolean
x509sat.week2  week2
    Boolean
x509sat.week3  week3
    Boolean
x509sat.week4  week4
    Boolean
x509sat.week5  week5
    Boolean
```

```
x509sat.weeks  weeks
    Unsigned 32-bit integer
    x509sat.T_weeks

x509sat.years  years
    Unsigned 32-bit integer
    x509sat.T_years

x509sat.years_item  Item
    Signed 32-bit integer
    x509sat.INTEGER
```

### **X.519 Directory Access Protocol (dap)**

```
dap.AbandonArgument  AbandonArgument
    Unsigned 32-bit integer
    dap.AbandonArgument

dap.AbandonFailedError  AbandonFailedError
    Unsigned 32-bit integer
    dap.AbandonFailedError

dap.AbandonResult  AbandonResult
    Unsigned 32-bit integer
    dap.AbandonResult

dap.Abandoned  Abandoned
    Unsigned 32-bit integer
    dap.Abandoned

dap.AddEntryArgument  AddEntryArgument
    Unsigned 32-bit integer
    dap.AddEntryArgument

dap.AddEntryResult  AddEntryResult
    Unsigned 32-bit integer
    dap.AddEntryResult

dap.AttributeError  AttributeError
    Unsigned 32-bit integer
    dap.AttributeError

dap.CompareArgument  CompareArgument
    Unsigned 32-bit integer
    dap.CompareArgument

dap.CompareResult  CompareResult
    Unsigned 32-bit integer
    dap.CompareResult

dap.DirectoryBindArgument  DirectoryBindArgument
    No value
    dap.DirectoryBindArgument

dap.DirectoryBindError  DirectoryBindError
    Unsigned 32-bit integer
    dap.DirectoryBindError

dap.DirectoryBindResult  DirectoryBindResult
    No value
    dap.DirectoryBindResult
```

```
dap.ListArgument ListArgument
    Unsigned 32-bit integer
    dap.ListArgument

dap.ListResult ListResult
    Unsigned 32-bit integer
    dap.ListResult

dap.ModifyDNArgument ModifyDNArgument
    No value
    dap.ModifyDNArgument

dap.ModifyDNResult ModifyDNResult
    Unsigned 32-bit integer
    dap.ModifyDNResult

dap.ModifyEntryArgument ModifyEntryArgument
    Unsigned 32-bit integer
    dap.ModifyEntryArgument

dap.ModifyEntryResult ModifyEntryResult
    Unsigned 32-bit integer
    dap.ModifyEntryResult

dap.ModifyRights_item Item
    No value
    dap.ModifyRights_item

dap.NameError NameError
    Unsigned 32-bit integer
    dap.NameError

dap.ReadArgument ReadArgument
    Unsigned 32-bit integer
    dap.ReadArgument

dap.ReadResult ReadResult
    Unsigned 32-bit integer
    dap.ReadResult

dap.Referral Referral
    Unsigned 32-bit integer
    dap.Referral

dap.RemoveEntryArgument RemoveEntryArgument
    Unsigned 32-bit integer
    dap.RemoveEntryArgument

dap.RemoveEntryResult RemoveEntryResult
    Unsigned 32-bit integer
    dap.RemoveEntryResult

dap.SearchArgument SearchArgument
    Unsigned 32-bit integer
    dap.SearchArgument

dap.SearchResult SearchResult
    Unsigned 32-bit integer
    dap.SearchResult

dap.SecurityError SecurityError
    Unsigned 32-bit integer
    dap.SecurityError
```

```
dap.ServiceError  ServiceError
  Unsigned 32-bit integer
  dap.ServiceError

dap.SetOfFilter_item  Item
  Unsigned 32-bit integer
  dap.Filter

dap.UpdateError  UpdateError
  Unsigned 32-bit integer
  dap.UpdateError

dap.abandonArgument  abandonArgument
  No value
  dap.AbandonArgumentData

dap.abandonFailedError  abandonFailedError
  No value
  dap.AbandonFailedErrorData

dap.abandonResult  abandonResult
  No value
  dap.AbandonResultData

dap.abandoned  abandoned
  No value
  dap.AbandonedData

dap.add  add
  Boolean

dap.addAttribute  addAttribute
  No value
  x509if.Attribute

dap.addEntryArgument  addEntryArgument
  No value
  dap.AddEntryArgumentData

dap.addEntryResult  addEntryResult
  No value
  dap.AddEntryResultData

dap.addValue  addValues
  No value
  x509if.Attribute

dap.agreementID  agreementID
  No value
  disp.AgreementID

dap.algorithm  algorithm
  No value
  x509af.AlgorithmIdentifier

dap.algorithmIdentifier  algorithmIdentifier
  No value
  x509af.AlgorithmIdentifier

dap.algorithm_identifier  algorithm-identifier
  No value
  x509af.AlgorithmIdentifier
```

```
dap.aliasDereferenced aliasDereferenced
  Boolean
  dap.BOOLEAN

dap.aliasEntry aliasEntry
  Boolean
  dap.BOOLEAN

dap.aliasedRDNs aliasedRDNs
  Signed 32-bit integer
  dap.INTEGER

dap.all all
  Unsigned 32-bit integer
  dap.SET_OF_ContextAssertion

dap.allContexts allContexts
  No value
  dap.NULL

dap.allOperationalAttributes allOperationalAttributes
  No value
  dap.NULL

dap.allUserAttributes allUserAttributes
  No value
  dap.NULL

dap.all_item Item
  No value
  x509if.ContextAssertion

dap.altMatching altMatching
  Boolean
  dap.BOOLEAN

dap.alterValues alterValues
  No value
  crmf.AttributeTypeAndValue

dap.and and
  Unsigned 32-bit integer
  dap.SetOfFilter

dap.any any
  No value
  dap.T_any

dap.approximateMatch approximateMatch
  No value
  x509if.AttributeValueAssertion

dap.attribute attribute
  No value
  x509if.Attribute

dap.attributeCertificationPath attributeCertificationPath
  No value
  x509af.AttributeCertificationPath

dap.attributeError attributeError
  No value
  dap.AttributeErrorData
```

```
dap.attributeInfo attributeInfo
    Unsigned 32-bit integer
    dap.T_attributeInfo

dap.attributeInfo_item Item
    Unsigned 32-bit integer
    dap.T_attributeInfo_item

dap.attributeSizeLimit attributeSizeLimit
    Signed 32-bit integer
    dap.INTEGER

dap.attributeType attributeType
    x509if.AttributeType

dap.attributes attributes
    Unsigned 32-bit integer
    dap.T_attributes

dap.baseAtt baseAtt
    x509if.AttributeType

dap.baseObject baseObject
    Unsigned 32-bit integer
    dap.Name

dap.bestEstimate bestEstimate
    Signed 32-bit integer
    dap.INTEGER

dap.bindConfAlgorithm bindConfAlgorithm
    Unsigned 32-bit integer
    dap.SEQUENCE_SIZE_1_MAX_OF_AlgorithmIdentifier

dap.bindConfAlgorithm_item Item
    No value
    x509af.AlgorithmIdentifier

dap.bindConfKeyInfo bindConfKeyInfo
    Byte array
    dap.BindKeyInfo

dap.bindIntAlgorithm bindIntAlgorithm
    Unsigned 32-bit integer
    dap.SEQUENCE_SIZE_1_MAX_OF_AlgorithmIdentifier

dap.bindIntAlgorithm_item Item
    No value
    x509af.AlgorithmIdentifier

dap.bindIntKeyInfo bindIntKeyInfo
    Byte array
    dap.BindKeyInfo

dap.bind_token bind-token
    No value
    dap.Token

dap.candidate candidate
    No value
    dsp.ContinuationReference
```

```
dap.certification_path  certification-path
    No value
    x509af.CertificationPath
dap.chainingProhibited  chainingProhibited
    Boolean
dap.changes  changes
    Unsigned 32-bit integer
    dap.SEQUENCE_OF_EntryModification
dap.changes_item  Item
    Unsigned 32-bit integer
    dap.EntryModification
dap.checkOverspecified  checkOverspecified
    Boolean
    dap.BOOLEAN
dap.children  children
    Boolean
dap.compareArgument  compareArgument
    No value
    dap.CompareArgumentData
dap.compareResult  compareResult
    No value
    dap.CompareResultData
dap.contextAssertions  contextAssertions
    Unsigned 32-bit integer
    dap.T_contextAssertions
dap.contextPresent  contextPresent
    No value
    x509if.AttributeTypeAssertion
dap.contextSelection  contextSelection
    Unsigned 32-bit integer
    dap.ContextSelection
dap.control  control
    No value
    x509if.Attribute
dap.copyShallDo  copyShallDo
    Boolean
dap.countFamily  countFamily
    Boolean
dap.credentials  credentials
    Unsigned 32-bit integer
    dap.Credentials
dap.criticalExtensions  criticalExtensions
    Byte array
    dap.BIT_STRING
dap.deleteOldRDN  deleteOldRDN
    Boolean
    dap.BOOLEAN
```

```
dap.derivedEntry  derivedEntry
  Boolean
  dap.BOOLEAN

dap.directoryBindError  directoryBindError
  No value
  dap.DirectoryBindErrorData

dap.dnAttribute  dnAttribute
  Boolean

dap.dnAttributes  dnAttributes
  Boolean
  dap.BOOLEAN

dap.domainLocalID  domainLocalID
  Unsigned 32-bit integer
  dap.DomainLocalID

dap.dontDereferenceAliases  dontDereferenceAliases
  Boolean

dap.dontUseCopy  dontUseCopy
  Boolean

dap.dsaName  dsaName
  Unsigned 32-bit integer
  dap.Name

dap.encrypted  encrypted
  Byte array
  dap.BIT_STRING

dap.entries  entries
  Unsigned 32-bit integer
  dap.SET_OF_EntryInformation

dap.entries_item  Item
  No value
  dap.EntryInformation

dap.entry  entry
  No value
  dap.EntryInformation

dap.entryCount  entryCount
  Unsigned 32-bit integer
  dap.T_entryCount

dap.entryOnly  entryOnly
  Boolean
  dap.BOOLEAN

dap.entry_item  Item
  No value
  x509if.Attribute

dap.equality  equality
  No value
  x509if.AttributeValueAssertion
```



```
dap.error error
  Unsigned 32-bit integer
  dap.T_error

dap.errorCode errorCode
  Unsigned 32-bit integer
  ros.Code

dap.errorProtection errorProtection
  Signed 32-bit integer
  dap.ErrorProtectionRequest

dap.extendedArea extendedArea
  Signed 32-bit integer
  dap.INTEGER

dap.extendedFilter extendedFilter
  Unsigned 32-bit integer
  dap.Filter

dap.extensibleMatch extensibleMatch
  No value
  dap.MatchingRuleAssertion

dap.externalProcedure externalProcedure
  No value
  dap.EXTERNAL

dap.extraAttributes extraAttributes
  Unsigned 32-bit integer
  dap.T_extraAttributes

dap.familyEntries familyEntries
  Unsigned 32-bit integer
  dap.SEQUENCE_OF_FamilyEntry

dap.familyEntries_item Item
  No value
  dap.FamilyEntry

dap.familyGrouping familyGrouping
  Unsigned 32-bit integer
  dap.FamilyGrouping

dap.familyReturn familyReturn
  No value
  dap.FamilyReturn

dap.familySelect familySelect
  Unsigned 32-bit integer
  dap.T_familySelect

dap.familySelect_item Item
  dap.OBJECT_IDENTIFIER

dap.family_class family-class
  dap.OBJECT_IDENTIFIER

dap.family_info family-info
  Unsigned 32-bit integer
  dap.SEQUENCE_SIZE_1_MAX_OF_FamilyEntries
```

```
dap.family_info_item  Item
    No value
    dap.FamilyEntries

dap.filter  filter
    Unsigned 32-bit integer
    dap.Filter

dap.final  final
    No value
    dap.T_final

dap.fromEntry  fromEntry
    Boolean
    dap.BOOLEAN

dap.generalizedTime  generalizedTime
    String
    dap.GeneralizedTime

dap.greaterOrEqual  greaterOrEqual
    No value
    x509if.AttributeValueAssertion

dap.gt  gt
    String
    dap.GeneralizedTime

dap.hierarchy  hierarchy
    Boolean

dap.hierarchySelections  hierarchySelections
    Byte array
    dap.HierarchySelections

dap.includeAllAreas  includeAllAreas
    Boolean

dap.incompleteEntry  incompleteEntry
    Boolean
    dap.BOOLEAN

dap.infoTypes  infoTypes
    Signed 32-bit integer
    dap.T_infoTypes

dap.information  information
    Unsigned 32-bit integer
    dap.T_entry_information

dap.information_item  Item
    Unsigned 32-bit integer
    dap.EntryInformationItem

dap.initial  initial
    No value
    dap.T_initial

dap.invokeID  invokeID
    Unsigned 32-bit integer
    ros.InvokeId
```

```
dap.item item
  Unsigned 32-bit integer
  dap.FilterItem

dap.joinArguments joinArguments
  Unsigned 32-bit integer
  dap.SEQUENCE_SIZE_1_MAX_OF_JoinArgument

dap.joinArguments_item Item
  No value
  dap.JoinArgument

dap.joinAtt joinAtt
  x509if.AttributeType

dap.joinAttributes joinAttributes
  Unsigned 32-bit integer
  dap.SEQUENCE_SIZE_1_MAX_OF_JoinAttPair

dap.joinAttributes_item Item
  No value
  dap.JoinAttPair

dap.joinBaseObject joinBaseObject
  Unsigned 32-bit integer
  dap.Name

dap.joinContext joinContext
  Unsigned 32-bit integer
  dap.SEQUENCE_SIZE_1_MAX_OF_JoinContextType

dap.joinContext_item Item
  dap.JoinContextType

dap.joinFilter joinFilter
  Unsigned 32-bit integer
  dap.Filter

dap.joinSelection joinSelection
  No value
  dap.EntryInformationSelection

dap.joinSubset joinSubset
  Unsigned 32-bit integer
  dap.T_joinSubset

dap.joinType joinType
  Unsigned 32-bit integer
  dap.T_joinType

dap.lessOrEqual lessOrEqual
  No value
  x509if.AttributeValueAssertion

dap.limitProblem limitProblem
  Signed 32-bit integer
  dap.LimitProblem

dap.listArgument listArgument
  No value
  dap.ListArgumentData
```

```
dap.listFamily listFamily
  Boolean
  dap.BOOLEAN

dap.listInfo listInfo
  No value
  dap.T_listInfo

dap.listResult listResult
  Unsigned 32-bit integer
  dap.ListResultData

dap.localScope localScope
  Boolean

dap.lowEstimate lowEstimate
  Signed 32-bit integer
  dap.INTEGER

dap.managedDSAIT managedDSAIT
  Boolean

dap.managedDSAITPlaneRef managedDSAITPlaneRef
  No value
  dap.T_managedDSAITPlaneRef

dap.matchOnResidualName matchOnResidualName
  Boolean

dap.matchValue matchValue
  No value
  dap.T_matchValue

dap.matched matched
  Boolean
  dap.BOOLEAN

dap.matchedSubtype matchedSubtype
  x509if.AttributeType

dap.matchedValuesOnly matchedValuesOnly
  Boolean
  dap.BOOLEAN

dap.matchingRule matchingRule
  Unsigned 32-bit integer
  dap.T_matchingRule

dap.matchingRule_item Item
  dap.OBJECT_IDENTIFIER

dap.memberSelect memberSelect
  Unsigned 32-bit integer
  dap.T_memberSelect

dap.modifyDNResult modifyDNResult
  No value
  dap.ModifyDNResultData

dap.modifyEntryArgument modifyEntryArgument
  No value
  dap.ModifyEntryArgumentData
```

```
dap.modifyEntryResult  modifyEntryResult
    No value
    dap.ModifyEntryResultData
dap.modifyRights  modifyRights
    Unsigned 32-bit integer
    dap.ModifyRights
dap.modifyRightsRequest  modifyRightsRequest
    Boolean
    dap.BOOLEAN
dap.move  move
    Boolean
dap.name  name
    Unsigned 32-bit integer
    dap.Name
dap.nameError  nameError
    No value
    dap.NameErrorData
dap.nameResolveOnMaster  nameResolveOnMaster
    Boolean
    dap.BOOLEAN
dap.newRDN  newRDN
    Unsigned 32-bit integer
    x509if.RelativeDistinguishedName
dap.newRequest  newRequest
    No value
    dap.T_newRequest
dap.newSuperior  newSuperior
    Unsigned 32-bit integer
    x509if.DistinguishedName
dap.noSubtypeMatch  noSubtypeMatch
    Boolean
dap.noSubtypeSelection  noSubtypeSelection
    Boolean
dap.noSystemRelaxation  noSystemRelaxation
    Boolean
dap.not  not
    Unsigned 32-bit integer
    dap.Filter
dap.notification  notification
    Unsigned 32-bit integer
    dap.SEQUENCE_SIZE_1_MAX_OF_Attribute
dap.notification_item  Item
    No value
    x509if.Attribute
dap.null  null
    No value
    dap.NULL
```

```
dap.object object
  Unsigned 32-bit integer
  dap.Name

dap.operation operation
  Unsigned 32-bit integer
  ros.InvokeId

dap.operationCode operationCode
  Unsigned 32-bit integer
  ros.Code

dap.operationContexts operationContexts
  Unsigned 32-bit integer
  dap.ContextSelection

dap.operationProgress operationProgress
  No value
  dsp.OperationProgress

dap.options options
  Byte array
  dap.ServiceControlOptions

dap.or or
  Unsigned 32-bit integer
  dap.SetOfFilter

dap.orderingRule orderingRule
  dap.OBJECT_IDENTIFIER

dap.overspecFilter overspecFilter
  Unsigned 32-bit integer
  dap.Filter

dap.pageSize pageSize
  Signed 32-bit integer
  dap.INTEGER

dap.pagedResults pagedResults
  Unsigned 32-bit integer
  dap.PagedResultsRequest

dap.parent parent
  Boolean

dap.partialName partialName
  Boolean
  dap.BOOLEAN

dap.partialNameResolution partialNameResolution
  Boolean

dap.partialOutcomeQualifier partialOutcomeQualifier
  No value
  dap.PartialOutcomeQualifier

dap.password password
  Unsigned 32-bit integer
  dap.T_password

dap.performExactly performExactly
  Boolean
```

```
dap.performer performer
    Unsigned 32-bit integer
    x509if.DistinguishedName

dap.permission permission
    Byte array
    dap.T_permission

dap.preferChaining preferChaining
    Boolean

dap.preference preference
    Unsigned 32-bit integer
    dap.SEQUENCE_OF_ContextAssertion

dap.preference_item Item
    No value
    x509if.ContextAssertion

dap.present present
    x509if.AttributeType

dap.priority priority
    Signed 32-bit integer
    dap.T_priority

dap.problem problem
    Signed 32-bit integer
    dap.AbandonProblem

dap.problems problems
    Unsigned 32-bit integer
    dap.T_problems

dap.problems_item Item
    No value
    dap.T_problems_item

dap.protected protected
    No value
    dap.T_protected

dap.protectedPassword protectedPassword
    Byte array
    dap.OCTET_STRING

dap.purported purported
    No value
    x509if.AttributeValueAssertion

dap.queryReference queryReference
    Byte array
    dap.T_pagedResultsQueryReference

dap.random random
    Byte array
    dap.BIT_STRING

dap.random1 random1
    Byte array
    dap.BIT_STRING
```

```
dap.random2 random2
    Byte array
    dap.BIT_STRING

dap.rdn rdn
    Unsigned 32-bit integer
    x509if.RelativeDistinguishedName

dap.rdnSequence rdnSequence
    Unsigned 32-bit integer
    x509if.RDNSequence

dap.readArgument readArgument
    No value
    dap.ReadArgumentData

dap.readResult readResult
    No value
    dap.ReadResultData

dap.referenceType referenceType
    Unsigned 32-bit integer
    dsp.ReferenceType

dap.referral referral
    No value
    dap.ReferralData

dap.relaxation relaxation
    No value
    x509if.RelaxationPolicy

dap.remove remove
    Boolean

dap.removeAttribute removeAttribute
    x509if.AttributeType

dap.removeEntryArgument removeEntryArgument
    No value
    dap.RemoveEntryArgumentData

dap.removeEntryResult removeEntryResult
    No value
    dap.RemoveEntryResultData

dap.removeValues removeValues
    No value
    x509if.Attribute

dap.rename rename
    Boolean

dap.rep rep
    No value
    dap.T_rep

dap.req req
    No value
    dap.T_req
```



```
dap.requestor requestor
    Unsigned 32-bit integer
    x509if.DistinguishedName
dap.resetValue resetValue
    x509if.AttributeType
dap.response response
    Byte array
    dap.BIT_STRING
dap.returnContexts returnContexts
    Boolean
    dap.BOOLEAN
dap.reverse reverse
    Boolean
    dap.BOOLEAN
dap.scopeOfReferral scopeOfReferral
    Signed 32-bit integer
    dap.T_scopeOfReferral
dap.searchAliases searchAliases
    Boolean
    dap.BOOLEAN
dap.searchArgument searchArgument
    No value
    dap.SearchArgumentData
dap.searchControlOptions searchControlOptions
    Byte array
    dap.SearchControlOptions
dap.searchFamily searchFamily
    Boolean
dap.searchInfo searchInfo
    No value
    dap.T_searchInfo
dap.searchResult searchResult
    Unsigned 32-bit integer
    dap.SearchResultData
dap.securityError securityError
    Signed 32-bit integer
    dap.SecurityProblem
dap.securityParameters securityParameters
    No value
    dap.SecurityParameters
dap.select select
    Unsigned 32-bit integer
    dap.SET_OF_AttributeType
dap.select_item Item
    x509if.AttributeType
```

```
dap.selectedContexts  selectedContexts
    Unsigned 32-bit integer
    dap.SET_SIZE_1_MAX_OF_TypeAndContextAssertion
dap.selectedContexts_item  Item
    No value
    dap.TypeAndContextAssertion
dap.selection  selection
    No value
    dap.EntryInformationSelection
dap.self  self
    Boolean
dap.separateFamilyMembers  separateFamilyMembers
    Boolean
dap.serviceControls  serviceControls
    No value
    dap.ServiceControls
dap.serviceError  serviceError
    Signed 32-bit integer
    dap.ServiceProblem
dap.serviceType  serviceType
    dap.OBJECT_IDENTIFIER
dap.siblingChildren  siblingChildren
    Boolean
dap.siblingSubtree  siblingSubtree
    Boolean
dap.siblings  siblings
    Boolean
dap.signedAbandonArgument  signedAbandonArgument
    No value
    dap.T_signedAbandonArgument
dap.signedAbandonFailedError  signedAbandonFailedError
    No value
    dap.T_signedAbandonFailedError
dap.signedAbandonResult  signedAbandonResult
    No value
    dap.T_signedAbandonResult
dap.signedAbandoned  signedAbandoned
    No value
    dap.T_signedAbandoned
dap.signedAddEntryArgument  signedAddEntryArgument
    No value
    dap.T_signedAddEntryArgument
dap.signedAddEntryResult  signedAddEntryResult
    No value
    dap.T_signedAddEntryResult
```

```
dap.signedAttributeError signedAttributeError
  No value
  dap.T_signedAttributeError
dap.signedCompareArgument signedCompareArgument
  No value
  dap.T_signedCompareArgument
dap.signedCompareResult signedCompareResult
  No value
  dap.T_signedCompareResult
dap.signedDirectoryBindError signedDirectoryBindError
  No value
  dap.T_signedDirectoryBindError
dap.signedListArgument signedListArgument
  No value
  dap.T_signedListArgument
dap.signedListResult signedListResult
  No value
  dap.T_signedListResult
dap.signedModifyDNResult signedModifyDNResult
  No value
  dap.T_signedModifyDNResult
dap.signedModifyEntryArgument signedModifyEntryArgument
  No value
  dap.T_signedModifyEntryArgument
dap.signedModifyEntryResult signedModifyEntryResult
  No value
  dap.T_signedModifyEntryResult
dap.signedNameError signedNameError
  No value
  dap.T_signedNameError
dap.signedReadArgument signedReadArgument
  No value
  dap.T_signedReadArgument
dap.signedReadResult signedReadResult
  No value
  dap.T_signedReadResult
dap.signedReferral signedReferral
  No value
  dap.T_signedReferral
dap.signedRemoveEntryArgument signedRemoveEntryArgument
  No value
  dap.T_signedRemoveEntryArgument
dap.signedRemoveEntryResult signedRemoveEntryResult
  No value
  dap.T_signedRemoveEntryResult
dap.signedSearchArgument signedSearchArgument
  No value
  dap.T_signedSearchArgument
```

```
dap.signedSearchResult signedSearchResult
    No value
    dap.T_signedSearchResult
dap.signedSecurityError signedSecurityError
    No value
    dap.T_signedSecurityError
dap.signedServiceError signedServiceError
    No value
    dap.T_signedServiceError
dap.signedUpdateError signedUpdateError
    No value
    dap.T_signedUpdateError
dap.simple simple
    No value
    dap.SimpleCredentials
dap.sizeLimit sizeLimit
    Signed 32-bit integer
    dap.INTEGER
dap.sortKeys sortKeys
    Unsigned 32-bit integer
    dap.SEQUENCE_SIZE_1_MAX_OF_SortKey
dap.sortKeys_item Item
    No value
    dap.SortKey
dap.spkm spkm
    Unsigned 32-bit integer
    dap.SpkmCredentials
dap.spkmInfo spkmInfo
    No value
    dap.T_spkmInfo
dap.strings strings
    Unsigned 32-bit integer
    dap.T_strings
dap.strings_item Item
    Unsigned 32-bit integer
    dap.T_strings_item
dap.strong strong
    No value
    dap.StrongCredentials
dap.subentries subentries
    Boolean
dap.subordinates subordinates
    Unsigned 32-bit integer
    dap.T_subordinates
dap.subordinates_item Item
    No value
    dap.T_subordinates_item
```

```
dap.subset subset
Signed 32-bit integer
dap.T_subset

dap.substrings substrings
No value
dap.T_substrings

dap.subtree subtree
Boolean

dap.target target
Signed 32-bit integer
dap.ProtectionRequest

dap.targetSystem targetSystem
No value
dsp.AccessPoint

dap.time time
Unsigned 32-bit integer
dap.Time

dap.time1 time1
Unsigned 32-bit integer
dap.T_time1

dap.time2 time2
Unsigned 32-bit integer
dap.T_time2

dap.timeLimit timeLimit
Signed 32-bit integer
dap.INTEGER

dap.token_data token-data
No value
dap.TokenData

dap.top top
Boolean

dap.type type
x509if.AttributeType

dap.unavailableCriticalExtensions unavailableCriticalExtensions
Boolean
dap.BOOLEAN

dap.uncorrelatedListInfo uncorrelatedListInfo
Unsigned 32-bit integer
dap.SET_OF_ListResult

dap.uncorrelatedListInfo_item Item
Unsigned 32-bit integer
dap.ListResult

dap.uncorrelatedSearchInfo uncorrelatedSearchInfo
Unsigned 32-bit integer
dap.SET_OF_SearchResult
```

```
dap.uncorrelatedSearchInfo_item  Item
    Unsigned 32-bit integer
    dap.SearchResult

dap.unexplored  unexplored
    Unsigned 32-bit integer
    dap.SET_SIZE_1_MAX_OF_ContinuationReference

dap.unexplored_item  Item
    No value
    dsp.ContinuationReference

dap.unknownErrors  unknownErrors
    Unsigned 32-bit integer
    dap.T_unknownErrors

dap.unknownErrors_item  Item
    dap.OBJECT_IDENTIFIER

dap.unmerged  unmerged
    Boolean
    dap.BOOLEAN

dap.unprotected  unprotected
    Byte array
    dap.OCTET_STRING

dap.unsignedAbandonArgument  unsignedAbandonArgument
    No value
    dap.AbandonArgumentData

dap.unsignedAbandonFailedError  unsignedAbandonFailedError
    No value
    dap.AbandonFailedErrorData

dap.unsignedAbandonResult  unsignedAbandonResult
    No value
    dap.AbandonResultData

dap.unsignedAbandoned  unsignedAbandoned
    No value
    dap.AbandonedData

dap.unsignedAddEntryArgument  unsignedAddEntryArgument
    No value
    dap.AddEntryArgumentData

dap.unsignedAddEntryResult  unsignedAddEntryResult
    No value
    dap.AddEntryResultData

dap.unsignedAttributeError  unsignedAttributeError
    No value
    dap.AttributeErrorData

dap.unsignedCompareArgument  unsignedCompareArgument
    No value
    dap.CompareArgumentData

dap.unsignedCompareResult  unsignedCompareResult
    No value
    dap.CompareResultData
```

```
dap.unsignedDirectoryBindError  unsignedDirectoryBindError
    No value
    dap.DirectoryBindErrorData

dap.unsignedListArgument  unsignedListArgument
    No value
    dap.ListArgumentData

dap.unsignedListResult  unsignedListResult
    Unsigned 32-bit integer
    dap.ListResultData

dap.unsignedModifyDNResult  unsignedModifyDNResult
    No value
    dap.ModifyDNResultData

dap.unsignedModifyEntryArgument  unsignedModifyEntryArgument
    No value
    dap.ModifyEntryArgumentData

dap.unsignedModifyEntryResult  unsignedModifyEntryResult
    No value
    dap.ModifyEntryResultData

dap.unsignedNameError  unsignedNameError
    No value
    dap.NameErrorData

dap.unsignedReadArgument  unsignedReadArgument
    No value
    dap.ReadArgumentData

dap.unsignedReadResult  unsignedReadResult
    No value
    dap.ReadResultData

dap.unsignedReferral  unsignedReferral
    No value
    dap.ReferralData

dap.unsignedRemoveEntryArgument  unsignedRemoveEntryArgument
    No value
    dap.RemoveEntryArgumentData

dap.unsignedRemoveEntryResult  unsignedRemoveEntryResult
    No value
    dap.RemoveEntryResultData

dap.unsignedSearchArgument  unsignedSearchArgument
    No value
    dap.SearchArgumentData

dap.unsignedSearchResult  unsignedSearchResult
    Unsigned 32-bit integer
    dap.SearchResultData

dap.unsignedSecurityError  unsignedSecurityError
    No value
    dap.SecurityErrorData

dap.unsignedServiceError  unsignedServiceError
    No value
    dap.ServiceErrorData
```

```

dap.unsignedUpdateError  unsignedUpdateError
    No value
    dap.UpdateErrorData
dap.updateError  updateError
    No value
    dap.UpdateErrorData
dap.useSubset  useSubset
    Boolean
dap.userClass  userClass
    Signed 32-bit integer
    dap.INTEGER
dap.utc  utc
    String
    dap.UTCTime
dap.utctime  utctime
    String
    dap.UTCTime
dap.v1  v1
    Boolean
dap.v2  v2
    Boolean
dap.validity  validity
    No value
    dap.T_validity
dap.value  value
    No value
    x509if.AttributeValueAssertion
dap.versions  versions
    Byte array
    dap.Versions

```

#### **X.519 Directory Information Shadowing Protocol (disp)**

```

disp.AttributeSelection_item  Item
    No value
    disp.ClassAttributeSelection
disp.AttributeTypes_item  Item
    x509if.AttributeType
disp.EstablishParameter  EstablishParameter
    No value
    disp.EstablishParameter
disp.IncrementalRefresh_item  Item
    No value
    disp.IncrementalStepRefresh
disp.ModificationParameter  ModificationParameter
    No value
    disp.ModificationParameter

```



```
disp.ShadowingAgreementInfo ShadowingAgreementInfo
  No value
  disp.ShadowingAgreementInfo
disp.add add
  No value
  disp.SDSEContent
disp.agreementID agreementID
  No value
  disp.AgreementID
disp.algorithmIdentifier algorithmIdentifier
  No value
  x509af.AlgorithmIdentifier
disp.aliasDereferenced aliasDereferenced
  Boolean
  disp.BOOLEAN
disp.allAttributes allAttributes
  No value
  disp.NULL
disp.allContexts allContexts
  No value
  disp.NULL
disp.area area
  No value
  disp.AreaSpecification
disp.attComplete attComplete
  Boolean
  disp.BOOLEAN
disp.attValIncomplete attValIncomplete
  Unsigned 32-bit integer
  disp.SET_OF_AttributeType
disp.attValIncomplete_item Item
  x509if.AttributeType
disp.attributeChanges attributeChanges
  Unsigned 32-bit integer
  disp.T_attributeChanges
disp.attributes attributes
  Unsigned 32-bit integer
  disp.AttributeSelection
disp.attributes_item Item
  No value
  x509if.Attribute
disp.beginTime beginTime
  String
  disp.Time
disp.changes changes
  Unsigned 32-bit integer
  disp.SEQUENCE_OF_EntryModification
```

```
disp.changes_item  Item
    Unsigned 32-bit integer
    dap.EntryModification

disp.class  class
    disp.OBJECT_IDENTIFIER

disp.classAttributes  classAttributes
    Unsigned 32-bit integer
    disp.ClassAttributes

disp.consumerInitiated  consumerInitiated
    No value
    disp.ConsumerUpdateMode

disp.contextPrefix  contextPrefix
    Unsigned 32-bit integer
    x509if.DistinguishedName

disp.contextSelection  contextSelection
    Unsigned 32-bit integer
    dap.ContextSelection

disp.coordinateShadowUpdateArgument  coordinateShadowUpdateArgument
    No value
    disp.CoordinateShadowUpdateArgumentData

disp.encrypted  encrypted
    Byte array
    disp.BIT_STRING

disp.exclude  exclude
    Unsigned 32-bit integer
    disp.AttributeTypes

disp.extendedKnowledge  extendedKnowledge
    Boolean
    disp.BOOLEAN

disp.include  include
    Unsigned 32-bit integer
    disp.AttributeTypes

disp.incremental  incremental
    Unsigned 32-bit integer
    disp.IncrementalRefresh

disp.information  information
    Unsigned 32-bit integer
    disp.Information

disp.knowledge  knowledge
    No value
    disp.Knowledge

disp.knowledgeType  knowledgeType
    Unsigned 32-bit integer
    disp.T_knowledgeType

disp.lastUpdate  lastUpdate
    String
    disp.Time
```

```
disp.master master
    No value
    dsp.AccessPoint
disp.modify modify
    No value
    disp.ContentChange
disp.newDN newDN
    Unsigned 32-bit integer
    x509if.DistinguishedName
disp.newRDN newRDN
    Unsigned 32-bit integer
    x509if.RelativeDistinguishedName
disp.noRefresh noRefresh
    No value
    disp.NULL
disp.notification notification
    Unsigned 32-bit integer
    disp.SEQUENCE_OF_Attribute
disp.notification_item Item
    No value
    x509if.Attribute
disp.null null
    No value
    disp.NULL
disp.onChange onChange
    Boolean
    disp.BOOLEAN
disp.other other
    No value
    disp.EXTERNAL
disp.otherStrategy otherStrategy
    No value
    disp.EXTERNAL
disp.othertimes othertimes
    Boolean
    disp.BOOLEAN
disp.performer performer
    Unsigned 32-bit integer
    x509if.DistinguishedName
disp.periodic periodic
    No value
    disp.PeriodicStrategy
disp.problem problem
    Signed 32-bit integer
    disp.ShadowProblem
disp.rdn rdn
    Unsigned 32-bit integer
    x509if.RelativeDistinguishedName
```

```
disp.remove remove
    No value
    disp.NULL

disp.rename rename
    Unsigned 32-bit integer
    disp.T_rename

disp.replace replace
    Unsigned 32-bit integer
    disp.SET_OF_Attribute

disp.replace_item Item
    No value
    x509if.Attribute

disp.replicationArea replicationArea
    No value
    x509if.SubtreeSpecification

disp.requestShadowUpdateArgument requestShadowUpdateArgument
    No value
    disp.RequestShadowUpdateArgumentData

disp.requestedStrategy requestedStrategy
    Unsigned 32-bit integer
    disp.T_requestedStrategy

disp.sDSE sDSE
    No value
    disp.SDSEContent

disp.sDSEChanges sDSEChanges
    Unsigned 32-bit integer
    disp.T_sDSEChanges

disp.sDSEType sDSEType
    Byte array
    disp.SDSEType

disp.scheduled scheduled
    No value
    disp.SchedulingParameters

disp.secondaryShadows secondaryShadows
    Unsigned 32-bit integer
    disp.SET_OF_SupplierAndConsumers

disp.secondaryShadows_item Item
    No value
    dop.SupplierAndConsumers

disp.securityParameters securityParameters
    No value
    dap.SecurityParameters

disp.selectedContexts selectedContexts
    Unsigned 32-bit integer
    disp.T_selectedContexts

disp.selectedContexts_item Item
    disp.OBJECT_IDENTIFIER
```

```
disp.shadowError shadowError
    No value
    disp.ShadowErrorData

disp.shadowSubject shadowSubject
    No value
    disp.UnitOfReplication

disp.signedCoordinateShadowUpdateArgument signedCoordinateShadowUpdateArgument
    No value
    disp.T_signedCoordinateShadowUpdateArgument

disp.signedInformation signedInformation
    No value
    disp.T_signedInformation

disp.signedRequestShadowUpdateArgument signedRequestShadowUpdateArgument
    No value
    disp.T_signedRequestShadowUpdateArgument

disp.signedShadowError signedShadowError
    No value
    disp.T_signedShadowError

disp.signedUpdateShadowArgument signedUpdateShadowArgument
    No value
    disp.T_signedUpdateShadowArgument

disp.standard standard
    Unsigned 32-bit integer
    disp.StandardUpdate

disp.start start
    String
    disp.Time

disp.stop stop
    String
    disp.Time

disp.subComplete subComplete
    Boolean
    disp.BOOLEAN

disp.subordinate subordinate
    Unsigned 32-bit integer
    x509if.RelativeDistinguishedName

disp.subordinateUpdates subordinateUpdates
    Unsigned 32-bit integer
    disp.SEQUENCE_OF_SubordinateChanges

disp.subordinateUpdates_item Item
    No value
    disp.SubordinateChanges

disp.subordinates subordinates
    Boolean
    disp.BOOLEAN

disp.subtree subtree
    Unsigned 32-bit integer
    disp.SET_OF_Subtree
```

```
disp.subtree_item  Item
    No value
    disp.Subtree

disp.supplierInitiated  supplierInitiated
    Unsigned 32-bit integer
    disp.SupplierUpdateMode

disp.supplyContexts  supplyContexts
    Unsigned 32-bit integer
    disp.T_supplyContexts

disp.total  total
    No value
    disp.TotalRefresh

disp.unsignedCoordinateShadowUpdateArgument  unsignedCoordinateShadowUpdateArgument
    No value
    disp.CoordinateShadowUpdateArgumentData

disp.unsignedInformation  unsignedInformation
    No value
    disp.InformationData

disp.unsignedRequestShadowUpdateArgument  unsignedRequestShadowUpdateArgument
    No value
    disp.RequestShadowUpdateArgumentData

disp.unsignedShadowError  unsignedShadowError
    No value
    disp.ShadowErrorData

disp.unsignedUpdateShadowArgument  unsignedUpdateShadowArgument
    No value
    disp.UpdateShadowArgumentData

disp.updateInterval  updateInterval
    Signed 32-bit integer
    disp.INTEGER

disp.updateMode  updateMode
    Unsigned 32-bit integer
    disp.UpdateMode

disp.updateShadowArgument  updateShadowArgument
    No value
    disp.UpdateShadowArgumentData

disp.updateStrategy  updateStrategy
    Unsigned 32-bit integer
    disp.T_updateStrategy

disp.updateTime  updateTime
    String
    disp.Time

disp.updateWindow  updateWindow
    No value
    disp.UpdateWindow

disp.updatedInfo  updatedInfo
    Unsigned 32-bit integer
    disp.RefreshInformation
```

```
disp.windowSize  windowSize
  Signed 32-bit integer
disp.INTEGER
```

### X.519 Directory System Protocol (dsp)

```
dsp.AccessPoint  AccessPoint
  No value
  dsp.AccessPoint

dsp.Exclusions_item  Item
  Unsigned 32-bit integer
  x509if.RDNSequence

dsp.MasterAndShadowAccessPoints  MasterAndShadowAccessPoints
  Unsigned 32-bit integer
  dsp.MasterAndShadowAccessPoints

dsp.MasterAndShadowAccessPoints_item  Item
  No value
  dsp.MasterOrShadowAccessPoint

dsp.TraceInformation_item  Item
  No value
  dsp.TraceItem

dsp.accessPoint  accessPoint
  No value
  dsp.AccessPointInformation

dsp.accessPoints  accessPoints
  Unsigned 32-bit integer
  dsp.SET_OF_AccessPointInformation

dsp.accessPoints_item  Item
  No value
  dsp.AccessPointInformation

dsp.addEntryArgument  addEntryArgument
  Unsigned 32-bit integer
  dap.AddEntryArgument

dsp.addEntryResult  addEntryResult
  Unsigned 32-bit integer
  dap.AddEntryResult

dsp.additionalPoints  additionalPoints
  Unsigned 32-bit integer
  dsp.MasterAndShadowAccessPoints

dsp.address  address
  No value
  x509sat.PresentationAddress

dsp.ae_title  ae-title
  Unsigned 32-bit integer
  x509if.Name

dsp.algorithmIdentifier  algorithmIdentifier
  No value
  x509af.AlgorithmIdentifier
```

```
dsp.aliasDereferenced  aliasDereferenced
  Boolean
  dsp.BOOLEAN

dsp.aliasedRDNs  aliasedRDNs
  Signed 32-bit integer
  dsp.INTEGER

dsp.alreadySearched  alreadySearched
  Unsigned 32-bit integer
  dsp.Exclusions

dsp.authenticationLevel  authenticationLevel
  Unsigned 32-bit integer
  dsp.AuthenticationLevel

dsp.basicLevels  basicLevels
  No value
  dsp.T_basicLevels

dsp.category  category
  Unsigned 32-bit integer
  dsp.APCategory

dsp.chainedAddEntryArgument  chainedAddEntryArgument
  No value
  dsp.ChainedAddEntryArgumentData

dsp.chainedAddEntryResult  chainedAddEntryResult
  No value
  dsp.ChainedAddEntryResultData

dsp.chainedArgument  chainedArgument
  No value
  dsp.ChainingArguments

dsp.chainedCompareArgument  chainedCompareArgument
  No value
  dsp.ChainedCompareArgumentData

dsp.chainedCompareResult  chainedCompareResult
  No value
  dsp.ChainedCompareResultData

dsp.chainedListArgument  chainedListArgument
  No value
  dsp.ChainedListArgumentData

dsp.chainedListResult  chainedListResult
  No value
  dsp.ChainedListResultData

dsp.chainedModifyDNArgument  chainedModifyDNArgument
  No value
  dsp.ChainedModifyDNArgumentData

dsp.chainedModifyDNResult  chainedModifyDNResult
  No value
  dsp.ChainedModifyDNResultData

dsp.chainedModifyEntryArgument  chainedModifyEntryArgument
  No value
  dsp.ChainedModifyEntryArgumentData
```



```
dsp.chainedModifyEntryResult  chainedModifyEntryResult
    No value
    dsp.ChainedModifyEntryResultData
dsp.chainedReadArgument  chainedReadArgument
    No value
    dsp.ChainedReadArgumentData
dsp.chainedReadResult  chainedReadResult
    No value
    dsp.ChainedReadResultData
dsp.chainedRelaxation  chainedRelaxation
    No value
    x509if.MRMapping
dsp.chainedRemoveEntryArgument  chainedRemoveEntryArgument
    No value
    dsp.ChainedRemoveEntryArgumentData
dsp.chainedRemoveEntryResult  chainedRemoveEntryResult
    No value
    dsp.ChainedRemoveEntryResultData
dsp.chainedResults  chainedResults
    No value
    dsp.ChainingResults
dsp.chainedSearchArgument  chainedSearchArgument
    No value
    dsp.ChainedSearchArgumentData
dsp.chainedSearchResult  chainedSearchResult
    No value
    dsp.ChainedSearchResultData
dsp.chainingRequired  chainingRequired
    Boolean
    dsp.BOOLEAN
dsp.compareArgument  compareArgument
    Unsigned 32-bit integer
    dap.CompareArgument
dsp.compareResult  compareResult
    Unsigned 32-bit integer
    dap.CompareResult
dsp.contextPrefix  contextPrefix
    Unsigned 32-bit integer
    x509if.DistinguishedName
dsp.crossReferences  crossReferences
    Unsigned 32-bit integer
    dsp.SEQUENCE_OF_CrossReference
dsp.crossReferences_item  Item
    No value
    dsp.CrossReference
dsp.dsa  dsa
    Unsigned 32-bit integer
    x509if.Name
```

```
dsp.dsaReferral  dsaReferral
    No value
    dsp.DSAReferralData
dsp.encrypted  encrypted
    Byte array
    dsp.BIT_STRING
dsp.entryOnly  entryOnly
    Boolean
    dsp.BOOLEAN
dsp.excludeShadows  excludeShadows
    Boolean
    dsp.BOOLEAN
dsp.exclusions  exclusions
    Unsigned 32-bit integer
    dsp.Exclusions
dsp.generalizedTime  generalizedTime
    String
    dsp.GeneralizedTime
dsp.info  info
    dsp.DomainInfo
dsp.level  level
    Unsigned 32-bit integer
    dsp.T_level
dsp.listArgument  listArgument
    Unsigned 32-bit integer
    dap.ListArgument
dsp.listResult  listResult
    Unsigned 32-bit integer
    dap.ListResult
dsp.localQualifier  localQualifier
    Signed 32-bit integer
    dsp.INTEGER
dsp.modifyDNArgument  modifyDNArgument
    No value
    dap.ModifyDNArgument
dsp.modifyDNResult  modifyDNResult
    Unsigned 32-bit integer
    dap.ModifyDNResult
dsp.modifyEntryArgument  modifyEntryArgument
    Unsigned 32-bit integer
    dap.ModifyEntryArgument
dsp.modifyEntryResult  modifyEntryResult
    Unsigned 32-bit integer
    dap.ModifyEntryResult
dsp.nameResolutionPhase  nameResolutionPhase
    Unsigned 32-bit integer
    dsp.T_nameResolutionPhase
```

```
dsp.nameResolveOnMaster  nameResolveOnMaster
  Boolean
  dsp.BOOLEAN

dsp.nextRDNTToBeResolved  nextRDNTToBeResolved
  Signed 32-bit integer
  dsp.INTEGER

dsp.notification  notification
  Unsigned 32-bit integer
  dsp.SEQUENCE_OF_Attribute

dsp.notification_item  Item
  No value
  x509if.Attribute

dsp.operationIdentifier  operationIdentifier
  Signed 32-bit integer
  dsp.INTEGER

dsp.operationProgress  operationProgress
  No value
  dsp.OperationProgress

dsp.originator  originator
  Unsigned 32-bit integer
  x509if.DistinguishedName

dsp.other  other
  No value
  dsp.EXTERNAL

dsp.performer  performer
  Unsigned 32-bit integer
  x509if.DistinguishedName

dsp.protocolInformation  protocolInformation
  Unsigned 32-bit integer
  dsp.SET_OF_ProtocolInformation

dsp.protocolInformation_item  Item
  No value
  x509sat.ProtocolInformation

dsp.rdnsResolved  rdnsResolved
  Signed 32-bit integer
  dsp.INTEGER

dsp.readArgument  readArgument
  Unsigned 32-bit integer
  dap.ReadArgument

dsp.readResult  readResult
  Unsigned 32-bit integer
  dap.ReadResult

dsp.reference  reference
  No value
  dsp.ContinuationReference

dsp.referenceType  referenceType
  Unsigned 32-bit integer
  dsp.ReferenceType
```

```
dsp.relatedEntry relatedEntry
Signed 32-bit integer
dsp.INTEGER

dsp.removeEntryArgument removeEntryArgument
Unsigned 32-bit integer
dap.RemoveEntryArgument

dsp.removeEntryResult removeEntryResult
Unsigned 32-bit integer
dap.RemoveEntryResult

dsp.returnCrossRefs returnCrossRefs
Boolean
dsp.BOOLEAN

dsp.returnToDUA returnToDUA
Boolean
dsp.BOOLEAN

dsp.searchArgument searchArgument
Unsigned 32-bit integer
dap.SearchArgument

dsp.searchResult searchResult
Unsigned 32-bit integer
dap.SearchResult

dsp.searchRuleId searchRuleId
No value
x509if.SearchRuleId

dsp.securityParameters securityParameters
No value
dap.SecurityParameters

dsp.signed signed
Boolean
dsp.BOOLEAN

dsp.signedChainedAddEntryArgument signedChainedAddEntryArgument
No value
dsp.T_signedChainedAddEntryArgument

dsp.signedChainedAddEntryResult signedChainedAddEntryResult
No value
dsp.T_signedChainedAddEntryResult

dsp.signedChainedCompareArgument signedChainedCompareArgument
No value
dsp.T_signedChainedCompareArgument

dsp.signedChainedCompareResult signedChainedCompareResult
No value
dsp.T_signedChainedCompareResult

dsp.signedChainedListArgument signedChainedListArgument
No value
dsp.T_signedChainedListArgument

dsp.signedChainedListResult signedChainedListResult
No value
dsp.T_signedChainedListResult
```

```
dsp.signedChainedModifyDNArgument  signedChainedModifyDNArgument
  No value
  dsp.T_signedChainedModifyDNArgument
dsp.signedChainedModifyDNResult  signedChainedModifyDNResult
  No value
  dsp.T_signedChainedModifyDNResult
dsp.signedChainedModifyEntryArgument  signedChainedModifyEntryArgument
  No value
  dsp.T_signedChainedModifyEntryArgument
dsp.signedChainedModifyEntryResult  signedChainedModifyEntryResult
  No value
  dsp.T_signedChainedModifyEntryResult
dsp.signedChainedReadArgument  signedChainedReadArgument
  No value
  dsp.T_signedChainedReadArgument
dsp.signedChainedReadResult  signedChainedReadResult
  No value
  dsp.T_signedChainedReadResult
dsp.signedChainedRemoveEntryArgument  signedChainedRemoveEntryArgument
  No value
  dsp.T_signedChainedRemoveEntryArgument
dsp.signedChainedRemoveEntryResult  signedChainedRemoveEntryResult
  No value
  dsp.T_signedChainedRemoveEntryResult
dsp.signedChainedSearchArgument  signedChainedSearchArgument
  No value
  dsp.T_signedChainedSearchArgument
dsp.signedChainedSearchResult  signedChainedSearchResult
  No value
  dsp.T_signedChainedSearchResult
dsp.signedDSAReferral  signedDSAReferral
  No value
  dsp.T_signedDSAReferral
dsp.targetObject  targetObject
  Unsigned 32-bit integer
  x509if.DistinguishedName
dsp.timeLimit  timeLimit
  Unsigned 32-bit integer
  dsp.Time
dsp.traceInformation  traceInformation
  Unsigned 32-bit integer
  dsp.TraceInformation
dsp.uniqueIdentifier  uniqueIdentifier
  Byte array
  x509sat.UniqueIdentifier
dsp.unsignedChainedAddEntryArgument  unsignedChainedAddEntryArgument
  No value
  dsp.ChainedAddEntryArgumentData
```

```
dsp.unsignedChainedAddEntryResult  unsignedChainedAddEntryResult
  No value
  dsp.ChainedAddEntryResultData

dsp.unsignedChainedCompareArgument  unsignedChainedCompareArgument
  No value
  dsp.ChainedCompareArgumentData

dsp.unsignedChainedCompareResult  unsignedChainedCompareResult
  No value
  dsp.ChainedCompareResultData

dsp.unsignedChainedListArgument  unsignedChainedListArgument
  No value
  dsp.ChainedListArgumentData

dsp.unsignedChainedListResult  unsignedChainedListResult
  No value
  dsp.ChainedListResultData

dsp.unsignedChainedModifyDNArgument  unsignedChainedModifyDNArgument
  No value
  dsp.ChainedModifyDNArgumentData

dsp.unsignedChainedModifyDNResult  unsignedChainedModifyDNResult
  No value
  dsp.ChainedModifyDNResultData

dsp.unsignedChainedModifyEntryArgument  unsignedChainedModifyEntryArgument
  No value
  dsp.ChainedModifyEntryArgumentData

dsp.unsignedChainedModifyEntryResult  unsignedChainedModifyEntryResult
  No value
  dsp.ChainedModifyEntryResultData

dsp.unsignedChainedReadArgument  unsignedChainedReadArgument
  No value
  dsp.ChainedReadArgumentData

dsp.unsignedChainedReadResult  unsignedChainedReadResult
  No value
  dsp.ChainedReadResultData

dsp.unsignedChainedRemoveEntryArgument  unsignedChainedRemoveEntryArgument
  No value
  dsp.ChainedRemoveEntryArgumentData

dsp.unsignedChainedRemoveEntryResult  unsignedChainedRemoveEntryResult
  No value
  dsp.ChainedRemoveEntryResultData

dsp.unsignedChainedSearchArgument  unsignedChainedSearchArgument
  No value
  dsp.ChainedSearchArgumentData

dsp.unsignedChainedSearchResult  unsignedChainedSearchResult
  No value
  dsp.ChainedSearchResultData

dsp.unsignedDSAReferral  unsignedDSAReferral
  No value
  dsp.DSAReferralData
```

```
dsp.utctime    utctime
String
dsp.UTCTime
```

#### **X.880 OSI Remote Operations Service (ros)**

```
ros.absent    absent
No value
ros.NULL

ros.argument  argument
No value
ros.T_argument

ros.bind_error bind-error
No value
ros.T_bind_error

ros.bind_invoke bind-invoke
No value
ros.T_bind_invoke

ros.bind_result bind-result
No value
ros.T_bind_result

ros.errcode   errcode
Signed 32-bit integer
ros.ErrorCode

ros.general   general
Signed 32-bit integer
ros.GeneralProblem

ros.global    global
ros.OBJECT_IDENTIFIER

ros.invoke    invoke
No value
ros.Invoke

ros.invokeId  invokeId
Unsigned 32-bit integer
ros.InvokeId

ros.linkedId  linkedId
Signed 32-bit integer
ros.INTEGER

ros.local     local
Signed 32-bit integer
ros.INTEGER

ros.opcode    opcode
Signed 32-bit integer
ros.OperationCode

ros.parameter parameter
No value
ros.T_parameter
```

```
ros.present present
    Signed 32-bit integer
    ros.T_present

ros.problem problem
    Unsigned 32-bit integer
    ros.T_problem

ros.reject reject
    No value
    ros.Reject

ros.response_in Response In
    Frame number
    The response to this remote operation invocation is in this frame

ros.response_to Response To
    Frame number
    This is a response to the remote operation invocation in this frame

ros.result result
    No value
    ros.T_result

ros.returnError returnError
    No value
    ros.ReturnError

ros.returnResult returnResult
    No value
    ros.ReturnResult

ros.time Time
    Time duration
    The time between the Invoke and the Response

ros.unbind_error unbind-error
    No value
    ros.T_unbind_error

ros.unbind_invoke unbind-invoke
    No value
    ros.T_unbind_invoke

ros.unbind_result unbind-result
    No value
    ros.T_unbind_result
```

**X11 (x11)**

```
x11.above-sibling above-sibling
    Unsigned 32-bit integer

x11.acceleration-denominator acceleration-denominator
    Signed 16-bit integer

x11.acceleration-numerator acceleration-numerator
    Signed 16-bit integer

x11.access-mode access-mode
    Unsigned 8-bit integer
```



```
x11.address address
    Byte array
x11.address-length address-length
    Unsigned 16-bit integer
x11.alloc alloc
    Unsigned 8-bit integer
x11.allow-events-mode allow-events-mode
    Unsigned 8-bit integer
x11.allow-exposures allow-exposures
    Unsigned 8-bit integer
x11.arc arc
    No value
x11.arc-mode arc-mode
    Unsigned 8-bit integer
    Tell us if we're drawing an arc or a pie
x11.arc.angle1 angle1
    Signed 16-bit integer
x11.arc.angle2 angle2
    Signed 16-bit integer
x11.arc.height height
    Unsigned 16-bit integer
x11.arc.width width
    Unsigned 16-bit integer
x11.arc.x x
    Signed 16-bit integer
x11.arc.y y
    Signed 16-bit integer
x11.arcs arcs
    No value
x11.atom atom
    Unsigned 32-bit integer
x11.authorization-protocol-data authorization-protocol-data
    String
x11.authorization-protocol-data-length authorization-protocol-data-length
    Unsigned 16-bit integer
x11.authorization-protocol-name authorization-protocol-name
    String
x11.authorization-protocol-name-length authorization-protocol-name-length
    Unsigned 16-bit integer
x11.auto-repeat-mode auto-repeat-mode
    Unsigned 8-bit integer
x11.back-blue back-blue
    Unsigned 16-bit integer
    Background blue value for a cursor
```

```
x11.back-green  back-green
    Unsigned 16-bit integer
    Background green value for a cursor
x11.back-red    back-red
    Unsigned 16-bit integer
    Background red value for a cursor
x11.background  background
    Unsigned 32-bit integer
    Background color
x11.background-pixel  background-pixel
    Unsigned 32-bit integer
    Background color for a window
x11.background-pixmap  background-pixmap
    Unsigned 32-bit integer
    Background pixmap for a window
x11.backing-pixel  backing-pixel
    Unsigned 32-bit integer
x11.backing-planes  backing-planes
    Unsigned 32-bit integer
x11.backing-store  backing-store
    Unsigned 8-bit integer
x11.bell-duration  bell-duration
    Signed 16-bit integer
x11.bell-percent  bell-percent
    Signed 8-bit integer
x11.bell-pitch  bell-pitch
    Signed 16-bit integer
x11.bit-gravity  bit-gravity
    Unsigned 8-bit integer
x11.bit-plane  bit-plane
    Unsigned 32-bit integer
x11.bitmap-format-bit-order  bitmap-format-bit-order
    Unsigned 8-bit integer
x11.bitmap-format-scanline-pad  bitmap-format-scanline-pad
    Unsigned 8-bit integer
    bitmap format scanline-pad
x11.bitmap-format-scanline-unit  bitmap-format-scanline-unit
    Unsigned 8-bit integer
    bitmap format scanline unit
x11.blue  blue
    Unsigned 16-bit integer
x11.blues  blues
    Unsigned 16-bit integer
x11.border-pixel  border-pixel
    Unsigned 32-bit integer
```

```
x11.border-pixmap border-pixmap
    Unsigned 32-bit integer
x11.border-width border-width
    Unsigned 16-bit integer
x11.button button
    Unsigned 8-bit integer
x11.byte-order byte-order
    Unsigned 8-bit integer
x11.bytes-after bytes-after
    Unsigned 32-bit integer
    bytes after
x11.cap-style cap-style
    Unsigned 8-bit integer
x11.change-host-mode change-host-mode
    Unsigned 8-bit integer
x11.childwindow childwindow
    Unsigned 32-bit integer
    childwindow
x11.cid cid
    Unsigned 32-bit integer
x11.class class
    Unsigned 8-bit integer
x11.clip-mask clip-mask
    Unsigned 32-bit integer
x11.clip-x-origin clip-x-origin
    Signed 16-bit integer
x11.clip-y-origin clip-y-origin
    Signed 16-bit integer
x11.close-down-mode close-down-mode
    Unsigned 8-bit integer
x11.cmap cmap
    Unsigned 32-bit integer
x11.color-items color-items
    No value
x11.coloritem coloritem
    No value
x11.coloritem.blue blue
    Unsigned 16-bit integer
x11.coloritem.flags flags
    Unsigned 8-bit integer
x11.coloritem.flags.do-blue do-blue
    Boolean
x11.coloritem.flags.do-green do-green
    Boolean
```

```
x11.coloritem.flags.do-red  do-red
    Boolean
x11.coloritem.flags.unused  unused
    Boolean
x11.coloritem.green  green
    Unsigned 16-bit integer
x11.coloritem.pixel  pixel
    Unsigned 32-bit integer
x11.coloritem.red  red
    Unsigned 16-bit integer
x11.coloritem.unused  unused
    No value
x11.colormap  colormap
    Unsigned 32-bit integer
x11.colormap-state  colormap-state
    Unsigned 8-bit integer
x11.colors  colors
    Unsigned 16-bit integer
    The number of color cells to allocate
x11.configure-window-mask  configure-window-mask
    Unsigned 16-bit integer
x11.configure-window-mask.border-width  border-width
    Boolean
x11.configure-window-mask.height  height
    Boolean
x11.configure-window-mask.sibling  sibling
    Boolean
x11.configure-window-mask.stack-mode  stack-mode
    Boolean
x11.configure-window-mask.width  width
    Boolean
x11.configure-window-mask.x  x
    Boolean
x11.configure-window-mask.y  y
    Boolean
x11.confine-to  confine-to
    Unsigned 32-bit integer
x11.contiguous  contiguous
    Boolean
x11.coordinate-mode  coordinate-mode
    Unsigned 8-bit integer
x11.count  count
    Unsigned 8-bit integer
x11.cursor  cursor
    Unsigned 32-bit integer
```

```
x11.dash-offset dash-offset
    Unsigned 16-bit integer
x11.dashes dashes
    Byte array
x11.dashes-length dashes-length
    Unsigned 16-bit integer
x11.data data
    Byte array
x11.data-length data-length
    Unsigned 32-bit integer
x11.delete delete
    Boolean
    Delete this property after reading
x11.delta delta
    Signed 16-bit integer
x11.depth depth
    Unsigned 8-bit integer
x11.destination destination
    Unsigned 8-bit integer
x11.detail detail
    Unsigned 8-bit integer
    detail
x11.direction direction
    Unsigned 8-bit integer
x11.do-acceleration do-acceleration
    Boolean
x11.do-not-propagate-mask do-not-propagate-mask
    Unsigned 32-bit integer
x11.do-not-propagate-mask.Button1Motion Button1Motion
    Boolean
x11.do-not-propagate-mask.Button2Motion Button2Motion
    Boolean
x11.do-not-propagate-mask.Button3Motion Button3Motion
    Boolean
x11.do-not-propagate-mask.Button4Motion Button4Motion
    Boolean
x11.do-not-propagate-mask.Button5Motion Button5Motion
    Boolean
x11.do-not-propagate-mask.ButtonMotion ButtonMotion
    Boolean
x11.do-not-propagate-mask.ButtonPress ButtonPress
    Boolean
x11.do-not-propagate-mask.ButtonRelease ButtonRelease
    Boolean
```

```
x11.do-not-propagate-mask.KeyPress  KeyPress
    Boolean
x11.do-not-propagate-mask.KeyRelease  KeyRelease
    Boolean
x11.do-not-propagate-mask.PointerMotion  PointerMotion
    Boolean
x11.do-not-propagate-mask.erroneous-bits  erroneous-bits
    Boolean
x11.do-threshold  do-threshold
    Boolean
x11.drawable  drawable
    Unsigned 32-bit integer
x11.dst-drawable  dst-drawable
    Unsigned 32-bit integer
x11.dst-gc  dst-gc
    Unsigned 32-bit integer
x11.dst-window  dst-window
    Unsigned 32-bit integer
x11.dst-x  dst-x
    Signed 16-bit integer
x11.dst-y  dst-y
    Signed 16-bit integer
x11.error  error
    Unsigned 8-bit integer
    error
x11.error-badvalue  error-badvalue
    Unsigned 32-bit integer
    error badvalue
x11.error_sequencenumber  error_sequencenumber
    Unsigned 16-bit integer
    error sequencenumber
x11.errorcode  errorcode
    Unsigned 8-bit integer
    errorcode
x11.event-detail  event-detail
    Unsigned 8-bit integer
x11.event-mask  event-mask
    Unsigned 32-bit integer
x11.event-mask.Button1Motion  Button1Motion
    Boolean
x11.event-mask.Button2Motion  Button2Motion
    Boolean
x11.event-mask.Button3Motion  Button3Motion
    Boolean
x11.event-mask.Button4Motion  Button4Motion
    Boolean
```

```
x11.event-mask.Button5Motion  Button5Motion
    Boolean
x11.event-mask.ButtonMotion  ButtonMotion
    Boolean
x11.event-mask.ButtonPress  ButtonPress
    Boolean
x11.event-mask.ButtonRelease  ButtonRelease
    Boolean
x11.event-mask.ColormapChange  ColormapChange
    Boolean
x11.event-mask.EnterWindow  EnterWindow
    Boolean
x11.event-mask.Exposure  Exposure
    Boolean
x11.event-mask.FocusChange  FocusChange
    Boolean
x11.event-mask.KeyPress  KeyPress
    Boolean
x11.event-mask.KeyRelease  KeyRelease
    Boolean
x11.event-mask.KeymapState  KeymapState
    Boolean
x11.event-mask.LeaveWindow  LeaveWindow
    Boolean
x11.event-mask.OwnerGrabButton  OwnerGrabButton
    Boolean
x11.event-mask.PointerMotion  PointerMotion
    Boolean
x11.event-mask.PointerMotionHint  PointerMotionHint
    Boolean
x11.event-mask.PropertyChange  PropertyChange
    Boolean
x11.event-mask.ResizeRedirect  ResizeRedirect
    Boolean
x11.event-mask.StructureNotify  StructureNotify
    Boolean
x11.event-mask.SubstructureNotify  SubstructureNotify
    Boolean
x11.event-mask.SubstructureRedirect  SubstructureRedirect
    Boolean
x11.event-mask.VisibilityChange  VisibilityChange
    Boolean
x11.event-mask.erroneous-bits  erroneous-bits
    Boolean
```

```
x11.event-sequencenumber  event-sequencenumber
    Unsigned 16-bit integer
    event sequencenumber

x11.event-x  event-x
    Unsigned 16-bit integer
    event x

x11.event-y  event-y
    Unsigned 16-bit integer
    event y

x11.eventbutton  eventbutton
    Unsigned 8-bit integer
    eventbutton

x11.eventcode  eventcode
    Unsigned 8-bit integer
    eventcode

x11.eventwindow  eventwindow
    Unsigned 32-bit integer
    eventwindow

x11.exact-blue  exact-blue
    Unsigned 16-bit integer

x11.exact-green  exact-green
    Unsigned 16-bit integer

x11.exact-red  exact-red
    Unsigned 16-bit integer

x11.exposures  exposures
    Boolean

x11.family  family
    Unsigned 8-bit integer

x11.fid  fid
    Unsigned 32-bit integer
    Font id

x11.fill-rule  fill-rule
    Unsigned 8-bit integer

x11.fill-style  fill-style
    Unsigned 8-bit integer

x11.first-error  first-error
    Unsigned 8-bit integer

x11.first-event  first-event
    Unsigned 8-bit integer

x11.first-keycode  first-keycode
    Unsigned 8-bit integer

x11.focus  focus
    Unsigned 8-bit integer

x11.focus-detail  focus-detail
    Unsigned 8-bit integer
```



```
x11.focus-mode focus-mode
    Unsigned 8-bit integer
x11.font font
    Unsigned 32-bit integer
x11.fore-blue fore-blue
    Unsigned 16-bit integer
x11.fore-green fore-green
    Unsigned 16-bit integer
x11.fore-red fore-red
    Unsigned 16-bit integer
x11.foreground foreground
    Unsigned 32-bit integer
x11.format format
    Unsigned 8-bit integer
x11.from-configure from-configure
    Boolean
x11.function function
    Unsigned 8-bit integer
x11.gc gc
    Unsigned 32-bit integer
x11.gc-dashes gc-dashes
    Unsigned 8-bit integer
x11.gc-value-mask gc-value-mask
    Unsigned 32-bit integer
x11.gc-value-mask.arc-mode arc-mode
    Boolean
x11.gc-value-mask.background background
    Boolean
x11.gc-value-mask.cap-style cap-style
    Boolean
x11.gc-value-mask.clip-mask clip-mask
    Boolean
x11.gc-value-mask.clip-x-origin clip-x-origin
    Boolean
x11.gc-value-mask.clip-y-origin clip-y-origin
    Boolean
x11.gc-value-mask.dash-offset dash-offset
    Boolean
x11.gc-value-mask.fill-rule fill-rule
    Boolean
x11.gc-value-mask.fill-style fill-style
    Boolean
x11.gc-value-mask.font font
    Boolean
```

```
x11.gc-value-mask.foreground foreground
    Boolean
x11.gc-value-mask.function function
    Boolean
x11.gc-value-mask.gc-dashes gc-dashes
    Boolean
x11.gc-value-mask.graphics-exposures graphics-exposures
    Boolean
x11.gc-value-mask.join-style join-style
    Boolean
x11.gc-value-mask.line-style line-style
    Boolean
x11.gc-value-mask.line-width line-width
    Boolean
x11.gc-value-mask.plane-mask plane-mask
    Boolean
x11.gc-value-mask.stipple stipple
    Boolean
x11.gc-value-mask.subwindow-mode subwindow-mode
    Boolean
x11.gc-value-mask.tile tile
    Boolean
x11.gc-value-mask.tile-stipple-x-origin tile-stipple-x-origin
    Boolean
x11.gc-value-mask.tile-stipple-y-origin tile-stipple-y-origin
    Boolean
x11.get-property-type get-property-type
    Unsigned 32-bit integer
x11.grab-mode grab-mode
    Unsigned 8-bit integer
x11.grab-status grab-status
    Unsigned 8-bit integer
x11.grab-window grab-window
    Unsigned 32-bit integer
x11.graphics-exposures graphics-exposures
    Boolean
x11.green green
    Unsigned 16-bit integer
x11.greens greens
    Unsigned 16-bit integer
x11.height height
    Unsigned 16-bit integer
x11.image-byte-order image-byte-order
    Unsigned 8-bit integer
```

```
x11.image-format image-format
    Unsigned 8-bit integer
x11.image-pixmap-format image-pixmap-format
    Unsigned 8-bit integer
x11.initial-connection initial-connection
    No value
    undecoded
x11.interval interval
    Signed 16-bit integer
x11.ip-address ip-address
    IPv4 address
x11.items items
    No value
x11.join-style join-style
    Unsigned 8-bit integer
x11.key key
    Unsigned 8-bit integer
x11.key-click-percent key-click-percent
    Signed 8-bit integer
x11.keyboard-key keyboard-key
    Unsigned 8-bit integer
x11.keyboard-mode keyboard-mode
    Unsigned 8-bit integer
x11.keyboard-value-mask keyboard-value-mask
    Unsigned 32-bit integer
x11.keyboard-value-mask.auto-repeat-mode auto-repeat-mode
    Boolean
x11.keyboard-value-mask.bell-duration bell-duration
    Boolean
x11.keyboard-value-mask.bell-percent bell-percent
    Boolean
x11.keyboard-value-mask.bell-pitch bell-pitch
    Boolean
x11.keyboard-value-mask.key-click-percent key-click-percent
    Boolean
x11.keyboard-value-mask.keyboard-key keyboard-key
    Boolean
x11.keyboard-value-mask.led led
    Boolean
x11.keyboard-value-mask.led-mode led-mode
    Boolean
x11.keybut-mask-erroneous-bits keybut-mask-erroneous-bits
    Boolean
    keybut mask erroneous bits
```

```
x11.keycode  keycode
    Unsigned 8-bit integer
    keycode

x11.keycode-count  keycode-count
    Unsigned 8-bit integer

x11.keycodes  keycodes
    No value

x11.keycodes-per-modifier  keycodes-per-modifier
    Unsigned 8-bit integer

x11.keycodes.item  item
    Byte array

x11.keys  keys
    Byte array

x11.keysyms  keysyms
    No value

x11.keysyms-per-keycode  keysyms-per-keycode
    Unsigned 8-bit integer

x11.keysyms.item  item
    No value

x11.keysyms.item.keysym  keysym
    Unsigned 32-bit integer

x11.led  led
    Unsigned 8-bit integer

x11.led-mode  led-mode
    Unsigned 8-bit integer

x11.left-pad  left-pad
    Unsigned 8-bit integer

x11.length-of-reason  length-of-reason
    Unsigned 8-bit integer
    length of reason

x11.length-of-vendor  length-of-vendor
    Unsigned 16-bit integer
    length of vendor

x11.line-style  line-style
    Unsigned 8-bit integer

x11.line-width  line-width
    Unsigned 16-bit integer

x11.long-length  long-length
    Unsigned 32-bit integer
    The maximum length of the property in bytes

x11.long-offset  long-offset
    Unsigned 32-bit integer
    The starting position in the property bytes array

x11.major-opcode  major-opcode
    Unsigned 16-bit integer
    major opcode
```

```
x11.map map
    Byte array
x11.map-length map-length
    Unsigned 8-bit integer
x11.mask mask
    Unsigned 32-bit integer
x11.mask-char mask-char
    Unsigned 16-bit integer
x11.mask-font mask-font
    Unsigned 32-bit integer
x11.max-keycode max-keycode
    Unsigned 8-bit integer
    max keycode
x11.max-names max-names
    Unsigned 16-bit integer
x11.maximum-request-length maximum-request-length
    Unsigned 16-bit integer
    maximum request length
x11.mid mid
    Unsigned 32-bit integer
x11.min-keycode min-keycode
    Unsigned 8-bit integer
    min keycode
x11.minor-opcode minor-opcode
    Unsigned 16-bit integer
    minor opcode
x11.mode mode
    Unsigned 8-bit integer
x11.modifiers-mask modifiers-mask
    Unsigned 16-bit integer
x11.modifiers-mask.AnyModifier AnyModifier
    Unsigned 16-bit integer
x11.modifiers-mask.Button1 Button1
    Boolean
x11.modifiers-mask.Button2 Button2
    Boolean
x11.modifiers-mask.Button3 Button3
    Boolean
x11.modifiers-mask.Button4 Button4
    Boolean
x11.modifiers-mask.Button5 Button5
    Boolean
x11.modifiers-mask.Control Control
    Boolean
x11.modifiers-mask.Lock Lock
    Boolean
```

```
x11.modifiers-mask.Mod1  Mod1
    Boolean
x11.modifiers-mask.Mod2  Mod2
    Boolean
x11.modifiers-mask.Mod3  Mod3
    Boolean
x11.modifiers-mask.Mod4  Mod4
    Boolean
x11.modifiers-mask.Mod5  Mod5
    Boolean
x11.modifiers-mask.Shift  Shift
    Boolean
x11.modifiers-mask.erroneous-bits  erroneous-bits
    Boolean
x11.motion-buffer-size  motion-buffer-size
    Unsigned 16-bit integer
    motion buffer size
x11.name  name
    String
x11.name-length  name-length
    Unsigned 16-bit integer
x11.new  new
    Boolean
x11.number-of-formats-in-pixmap-formats  number-of-formats-in-pixmap-formats
    Unsigned 8-bit integer
    number of formats in pixmap formats
x11.number-of-screens-in-roots  number-of-screens-in-roots
    Unsigned 8-bit integer
    number of screens in roots
x11.odd-length  odd-length
    Boolean
x11.only-if-exists  only-if-exists
    Boolean
x11.opcode  opcode
    Unsigned 8-bit integer
x11.ordering  ordering
    Unsigned 8-bit integer
x11.override-redirect  override-redirect
    Boolean
    Window manager doesn't manage this window when true
x11.owner  owner
    Unsigned 32-bit integer
x11.owner-events  owner-events
    Boolean
x11.parent  parent
    Unsigned 32-bit integer
```

```
x11.path path
    No value
x11.path.string string
    String
x11.pattern pattern
    String
x11.pattern-length pattern-length
    Unsigned 16-bit integer
x11.percent percent
    Unsigned 8-bit integer
x11.pid pid
    Unsigned 32-bit integer
x11.pixel pixel
    Unsigned 32-bit integer
x11.pixels pixels
    No value
x11.pixels_item pixels_item
    Unsigned 32-bit integer
x11.pixmap pixmap
    Unsigned 32-bit integer
x11.place place
    Unsigned 8-bit integer
x11.plane-mask plane-mask
    Unsigned 32-bit integer
x11.planes planes
    Unsigned 16-bit integer
x11.point point
    No value
x11.point-x point-x
    Signed 16-bit integer
x11.point-y point-y
    Signed 16-bit integer
x11.pointer-event-mask pointer-event-mask
    Unsigned 16-bit integer
x11.pointer-event-mask.Button1Motion Button1Motion
    Boolean
x11.pointer-event-mask.Button2Motion Button2Motion
    Boolean
x11.pointer-event-mask.Button3Motion Button3Motion
    Boolean
x11.pointer-event-mask.Button4Motion Button4Motion
    Boolean
x11.pointer-event-mask.Button5Motion Button5Motion
    Boolean
```

```
x11.pointer-event-mask.ButtonMotion  ButtonMotion
    Boolean
x11.pointer-event-mask.ButtonPress    ButtonPress
    Boolean
x11.pointer-event-mask.ButtonRelease  ButtonRelease
    Boolean
x11.pointer-event-mask.EnterWindow    EnterWindow
    Boolean
x11.pointer-event-mask.KeymapState    KeymapState
    Boolean
x11.pointer-event-mask.LeaveWindow   LeaveWindow
    Boolean
x11.pointer-event-mask.PointerMotion  PointerMotion
    Boolean
x11.pointer-event-mask.PointerMotionHint  PointerMotionHint
    Boolean
x11.pointer-event-mask.erroneous-bits  erroneous-bits
    Boolean
x11.pointer-mode  pointer-mode
    Unsigned 8-bit integer
x11.points  points
    No value
x11.prefer-blanking  prefer-blanking
    Unsigned 8-bit integer
x11.present  present
    Boolean
x11.propagate  propagate
    Boolean
x11.properties  properties
    No value
x11.properties.item  item
    Unsigned 32-bit integer
x11.property  property
    Unsigned 32-bit integer
x11.property-number  property-number
    Unsigned 16-bit integer
x11.property-state  property-state
    Unsigned 8-bit integer
x11.protocol-major-version  protocol-major-version
    Unsigned 16-bit integer
x11.protocol-minor-version  protocol-minor-version
    Unsigned 16-bit integer
x11.reason  reason
    String
    reason
```



```
x11.rectangle rectangle
    No value
x11.rectangle-height rectangle-height
    Unsigned 16-bit integer
x11.rectangle-width rectangle-width
    Unsigned 16-bit integer
x11.rectangle-x rectangle-x
    Signed 16-bit integer
x11.rectangle-y rectangle-y
    Signed 16-bit integer
x11.rectangles rectangles
    No value
x11.red red
    Unsigned 16-bit integer
x11.reds reds
    Unsigned 16-bit integer
x11.release-number release-number
    Unsigned 32-bit integer
    release number
x11.reply reply
    Unsigned 8-bit integer
    reply
x11.reply-sequencenumber reply-sequencenumber
    Unsigned 16-bit integer
x11.replylength replylength
    Unsigned 32-bit integer
    replylength
x11.replyopcode replyopcode
    Unsigned 8-bit integer
x11.request request
    Unsigned 8-bit integer
x11.request-length request-length
    Unsigned 16-bit integer
    Request length
x11.requestor requestor
    Unsigned 32-bit integer
x11.resource resource
    Unsigned 32-bit integer
x11.resource-id-base resource-id-base
    Unsigned 32-bit integer
    resource id base
x11.resource-id-mask resource-id-mask
    Unsigned 32-bit integer
    resource id mask
x11.revert-to revert-to
    Unsigned 8-bit integer
```

```
x11.root-x    root-x
              Unsigned 16-bit integer
              root x

x11.root-y    root-y
              Unsigned 16-bit integer
              root y

x11.rootwindow  rootwindow
              Unsigned 32-bit integer
              rootwindow

x11.same-screen  same-screen
              Boolean
              same screen

x11.same-screen-focus-mask  same-screen-focus-mask
              Unsigned 8-bit integer

x11.same-screen-focus-mask.focus  focus
              Boolean

x11.same-screen-focus-mask.same-screen  same-screen
              Boolean

x11.save-set-mode  save-set-mode
              Unsigned 8-bit integer

x11.save-under  save-under
              Boolean

x11.screen-saver-mode  screen-saver-mode
              Unsigned 8-bit integer

x11.segment  segment
              No value

x11.segment_x1  segment_x1
              Signed 16-bit integer

x11.segment_x2  segment_x2
              Signed 16-bit integer

x11.segment_y1  segment_y1
              Signed 16-bit integer

x11.segment_y2  segment_y2
              Signed 16-bit integer

x11.segments  segments
              No value

x11.selection  selection
              Unsigned 32-bit integer

x11.shape  shape
              Unsigned 8-bit integer

x11.sibling  sibling
              Unsigned 32-bit integer

x11.source-char  source-char
              Unsigned 16-bit integer

x11.source-font  source-font
              Unsigned 32-bit integer
```

```
x11.source-pixmap source-pixmap
    Unsigned 32-bit integer
x11.src-cmap src-cmap
    Unsigned 32-bit integer
x11.src-drawable src-drawable
    Unsigned 32-bit integer
x11.src-gc src-gc
    Unsigned 32-bit integer
x11.src-height src-height
    Unsigned 16-bit integer
x11.src-width src-width
    Unsigned 16-bit integer
x11.src-window src-window
    Unsigned 32-bit integer
x11.src-x src-x
    Signed 16-bit integer
x11.src-y src-y
    Signed 16-bit integer
x11.stack-mode stack-mode
    Unsigned 8-bit integer
x11.start start
    Unsigned 32-bit integer
x11.stipple stipple
    Unsigned 32-bit integer
x11.stop stop
    Unsigned 32-bit integer
x11.str-number-in-path str-number-in-path
    Unsigned 16-bit integer
x11.string string
    String
x11.string-length string-length
    Unsigned 32-bit integer
x11.string16 string16
    String
x11.string16.bytes bytes
    Byte array
x11.subwindow-mode subwindow-mode
    Unsigned 8-bit integer
x11.success success
    Unsigned 8-bit integer
    success
x11.target target
    Unsigned 32-bit integer
x11.textitem textitem
    No value
```

```
x11.textitem.font font
    Unsigned 32-bit integer
x11.textitem.string string
    No value
x11.textitem.string.delta delta
    Signed 8-bit integer
x11.textitem.string.string16 string16
    String
x11.textitem.string.string16.bytes bytes
    Byte array
x11.textitem.string.string8 string8
    String
x11.threshold threshold
    Signed 16-bit integer
x11.tile tile
    Unsigned 32-bit integer
x11.tile-stipple-x-origin tile-stipple-x-origin
    Signed 16-bit integer
x11.tile-stipple-y-origin tile-stipple-y-origin
    Signed 16-bit integer
x11.time time
    Unsigned 32-bit integer
x11.timeout timeout
    Signed 16-bit integer
x11.type type
    Unsigned 32-bit integer
x11.undecoded undecoded
    No value
    Yet undecoded by dissector
x11.unused unused
    No value
x11.valuelength valuelength
    Unsigned 32-bit integer
    valuelength
x11.vendor vendor
    String
    vendor
x11.visibility-state visibility-state
    Unsigned 8-bit integer
x11.visual visual
    Unsigned 32-bit integer
x11.visual-blue visual-blue
    Unsigned 16-bit integer
x11.visual-green visual-green
    Unsigned 16-bit integer
```

```
x11.visual-red visual-red
    Unsigned 16-bit integer
x11.visualid visualid
    Unsigned 32-bit integer
x11.warp-pointer-dst-window warp-pointer-dst-window
    Unsigned 32-bit integer
x11.warp-pointer-src-window warp-pointer-src-window
    Unsigned 32-bit integer
x11.wid wid
    Unsigned 32-bit integer
    Window id
x11.width width
    Unsigned 16-bit integer
x11.win-gravity win-gravity
    Unsigned 8-bit integer
x11.win-x win-x
    Signed 16-bit integer
x11.win-y win-y
    Signed 16-bit integer
x11.window window
    Unsigned 32-bit integer
x11.window-class window-class
    Unsigned 16-bit integer
    Window class
x11.window-value-mask window-value-mask
    Unsigned 32-bit integer
x11.window-value-mask.background-pixel background-pixel
    Boolean
x11.window-value-mask.background-pixmap background-pixmap
    Boolean
x11.window-value-mask.backing-pixel backing-pixel
    Boolean
x11.window-value-mask.backing-planes backing-planes
    Boolean
x11.window-value-mask.backing-store backing-store
    Boolean
x11.window-value-mask.bit-gravity bit-gravity
    Boolean
x11.window-value-mask.border-pixel border-pixel
    Boolean
x11.window-value-mask.border-pixmap border-pixmap
    Boolean
x11.window-value-mask.colormap colormap
    Boolean
```

```

x11.window-value-mask.cursor    cursor
    Boolean
x11.window-value-mask.do-not-propagate-mask  do-not-propagate-mask
    Boolean
x11.window-value-mask.event-mask  event-mask
    Boolean
x11.window-value-mask.override-redirect  override-redirect
    Boolean
x11.window-value-mask.save-under  save-under
    Boolean
x11.window-value-mask.win-gravity  win-gravity
    Boolean
x11.x  x
    Signed 16-bit integer
x11.y  y
    Signed 16-bit integer

```

**X711 CMIP (cmip)**

```

cmip.ActiveDestination  ActiveDestination
    Unsigned 32-bit integer
    cmip.ActiveDestination
cmip.AdditionalInformation  AdditionalInformation
    Unsigned 32-bit integer
    cmip.AdditionalInformation
cmip.AdditionalInformation_item  Item
    No value
    cmip.ManagementExtension
cmip.AdditionalText  AdditionalText
    String
    cmip.AdditionalText
cmip.AdministrativeState  AdministrativeState
    Unsigned 32-bit integer
    cmip.AdministrativeState
cmip.AlarmStatus  AlarmStatus
    Unsigned 32-bit integer
    cmip.AlarmStatus
cmip.AlarmStatus_item  Item
    Signed 32-bit integer
    cmip.AlarmStatus_item
cmip.Allomorphs  Allomorphs
    Unsigned 32-bit integer
    cmip.Allomorphs
cmip.Allomorphs_item  Item
    Unsigned 32-bit integer
    cmip.ObjectClass

```

```
cmip.AttributeIdentifierList  AttributeIdentifierList
    Unsigned 32-bit integer
    cmip.AttributeIdentifierList

cmip.AttributeIdentifierList_item  Item
    Unsigned 32-bit integer
    cmip.AttributeId

cmip.AttributeList  AttributeList
    Unsigned 32-bit integer
    cmip.AttributeList

cmip.AttributeList_item  Item
    No value
    cmip.Attribute

cmip.AttributeValueChangeDefinition  AttributeValueChangeDefinition
    Unsigned 32-bit integer
    cmip.AttributeValueChangeDefinition

cmip.AttributeValueChangeDefinition_item  Item
    No value
    cmip.AttributeValueChangeDefinition_item

cmip.AvailabilityStatus  AvailabilityStatus
    Unsigned 32-bit integer
    cmip.AvailabilityStatus

cmip.AvailabilityStatus_item  Item
    Signed 32-bit integer
    cmip.AvailabilityStatus_item

cmip.BackUpDestinationList  BackUpDestinationList
    Unsigned 32-bit integer
    cmip.BackUpDestinationList

cmip.BackUpDestinationList_item  Item
    Unsigned 32-bit integer
    acse.AE_title

cmip.BackUpRelationshipObject  BackUpRelationshipObject
    Unsigned 32-bit integer
    cmip.BackUpRelationshipObject

cmip.BackedUpStatus  BackedUpStatus
    Boolean
    cmip.BackedUpStatus

cmip.BaseManagedObjectId  BaseManagedObjectId
    No value
    cmip.BaseManagedObjectId

cmip.CapacityAlarmThreshold  CapacityAlarmThreshold
    Unsigned 32-bit integer
    cmip.CapacityAlarmThreshold

cmip.CapacityAlarmThreshold_item  Item
    Unsigned 32-bit integer
    cmip.INTEGER_0_100

cmip.ConfirmedMode  ConfirmedMode
    Boolean
    cmip.ConfirmedMode
```

```
cmip.ControlStatus ControlStatus
    Unsigned 32-bit integer
    cmip.ControlStatus

cmip.ControlStatus_item Item
    Signed 32-bit integer
    cmip.ControlStatus_item

cmip.CorrelatedNotifications CorrelatedNotifications
    Unsigned 32-bit integer
    cmip.CorrelatedNotifications

cmip.CorrelatedNotifications_item Item
    No value
    cmip.CorrelatedNotifications_item

cmip.CurrentLogSize CurrentLogSize
    Signed 32-bit integer
    cmip.CurrentLogSize

cmip.Destination Destination
    Unsigned 32-bit integer

cmip.DiscriminatorConstruct DiscriminatorConstruct
    Unsigned 32-bit integer

cmip.EventTime EventTime
    String
    cmip.EventTime

cmip.EventTypeId EventTypeId
    Unsigned 32-bit integer
    cmip.EventTypeId

cmip.GroupObjects GroupObjects
    Unsigned 32-bit integer
    cmip.GroupObjects

cmip.GroupObjects_item Item
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.IntervalsOfDay IntervalsOfDay
    Unsigned 32-bit integer
    cmip.IntervalsOfDay

cmip.IntervalsOfDay_item Item
    No value
    cmip.IntervalsOfDay_item

cmip.InvokeId_present InvokeId.present
    Signed 32-bit integer
    cmip.InvokeId_present

cmip.LifecycleState LifecycleState
    Unsigned 32-bit integer
    cmip.LifecycleState

cmip.LogFullAction LogFullAction
    Unsigned 32-bit integer
    cmip.LogFullAction
```



```
cmip.LogRecordId  LogRecordId
    Unsigned 32-bit integer
    cmip.LogRecordId

cmip.LoggingTime  LoggingTime
    String
    cmip.LoggingTime

cmip.MaxLogSize  MaxLogSize
    Signed 32-bit integer
    cmip.MaxLogSize

cmip.MonitoredAttributes  MonitoredAttributes
    Unsigned 32-bit integer
    cmip.MonitoredAttributes

cmip.MonitoredAttributes_item  Item
    No value
    cmip.Attribute

cmip.NameBinding  NameBinding
    String

cmip.NotificationIdentifier  NotificationIdentifier
    Signed 32-bit integer
    cmip.NotificationIdentifier

cmip.NumberOfRecords  NumberOfRecords
    Signed 32-bit integer
    cmip.NumberOfRecords

cmip.ObjectClass  ObjectClass
    Unsigned 32-bit integer

cmip.OperationalState  OperationalState
    Unsigned 32-bit integer
    cmip.OperationalState

cmip.PAR_missingAttributeValue_item  Item
    Unsigned 32-bit integer
    cmip.AttributeId

cmip.Packages  Packages
    Unsigned 32-bit integer
    cmip.Packages

cmip.Packages_item  Item
    cmip.OBJECT_IDENTIFIER

cmip.PerceivedSeverity  PerceivedSeverity
    Unsigned 32-bit integer
    cmip.PerceivedSeverity

cmip.PrioritisedObject  PrioritisedObject
    Unsigned 32-bit integer
    cmip.PrioritisedObject

cmip.PrioritisedObject_item  Item
    No value
    cmip.PrioritisedObject_item
```

```
cmip.ProbableCause ProbableCause
    Unsigned 32-bit integer
    cmip.ProbableCause

cmip.ProceduralStatus ProceduralStatus
    Unsigned 32-bit integer
    cmip.ProceduralStatus

cmip.ProceduralStatus_item Item
    Signed 32-bit integer
    cmip.ProceduralStatus_item

cmip.ProposedRepairActions ProposedRepairActions
    Unsigned 32-bit integer
    cmip.ProposedRepairActions

cmip.ProposedRepairActions_item Item
    Unsigned 32-bit integer
    cmip.SpecificIdentifier

cmip.RDNSequence_item Item
    Unsigned 32-bit integer
    cmip.RelativeDistinguishedName

cmip.RelativeDistinguishedName_item Item
    No value
    cmip.AttributeValueAssertion

cmip.SecurityAlarmCause SecurityAlarmCause
    cmip.SecurityAlarmCause

cmip.SecurityAlarmDetector SecurityAlarmDetector
    Unsigned 32-bit integer
    cmip.SecurityAlarmDetector

cmip.SecurityAlarmSeverity SecurityAlarmSeverity
    Unsigned 32-bit integer
    cmip.SecurityAlarmSeverity

cmip.ServiceProvider ServiceProvider
    No value
    cmip.ServiceProvider

cmip.ServiceUser ServiceUser
    No value
    cmip.ServiceUser

cmip.SimpleNameType SimpleNameType
    Unsigned 32-bit integer
    cmip.SimpleNameType

cmip.SourceIndicator SourceIndicator
    Unsigned 32-bit integer
    cmip.SourceIndicator

cmip.SpecificProblems SpecificProblems
    Unsigned 32-bit integer
    cmip.SpecificProblems

cmip.SpecificProblems_item Item
    Unsigned 32-bit integer
    cmip.SpecificIdentifier
```

```
cmip.StandbyStatus  StandbyStatus
    Signed 32-bit integer
    cmip.StandbyStatus

cmip.StartTime  StartTime
    String
    cmip.StartTime

cmip.StopTime  StopTime
    Unsigned 32-bit integer
    cmip.StopTime

cmip.SupportedFeatures  SupportedFeatures
    Unsigned 32-bit integer
    cmip.SupportedFeatures

cmip.SupportedFeatures_item  Item
    No value
    cmip.SupportedFeatures_item

cmip.SystemId  SystemId
    Unsigned 32-bit integer
    cmip.SystemId

cmip.SystemTitle  SystemTitle
    Unsigned 32-bit integer
    cmip.SystemTitle

cmip.ThresholdInfo  ThresholdInfo
    No value
    cmip.ThresholdInfo

cmip.TrendIndication  TrendIndication
    Unsigned 32-bit integer
    cmip.TrendIndication

cmip.UnknownStatus  UnknownStatus
    Boolean
    cmip.UnknownStatus

cmip.UsageState  UsageState
    Unsigned 32-bit integer
    cmip.UsageState

cmip.WeekMask  WeekMask
    Unsigned 32-bit integer
    cmip.WeekMask

cmip.WeekMask_item  Item
    No value
    cmip.WeekMask_item

cmip.abortSource  abortSource
    Unsigned 32-bit integer
    cmip.CMIPAbortSource

cmip.absent  absent
    No value
    cmip.NULL

cmip.accessControl  accessControl
    No value
    cmip.AccessControl
```

```
cmip.actionArgument  actionArgument
    Unsigned 32-bit integer
    cmip.NoSuchArgument

cmip.actionError  actionError
    No value
    cmip.ActionError

cmip.actionErrorInfo  actionErrorInfo
    No value
    cmip.ActionErrorInfo

cmip.actionId  actionId
    No value
    cmip.T_actionId

cmip.actionInfo  actionInfo
    No value
    cmip.ActionInfo

cmip.actionInfoArg  actionInfoArg
    No value
    cmip.T_actionInfoArg

cmip.actionReply  actionReply
    No value
    cmip.ActionReply

cmip.actionReplyInfo  actionReplyInfo
    No value
    cmip.T_actionReplyInfo

cmip.actionResult  actionResult
    No value
    cmip.ActionResult

cmip.actionType  actionType
    Unsigned 32-bit integer
    cmip.ActionTypeId

cmip.actionType_OID  actionType
    String
    actionType

cmip.actionValue  actionValue
    No value
    cmip.ActionInfo

cmip.and  and
    Unsigned 32-bit integer
    cmip.SET_OF_CMISFilter

cmip.and_item  Item
    Unsigned 32-bit integer
    cmip.CMISFilter

cmip.anyString  anyString
    No value
    cmip.Attribute

cmip.application  application
    Unsigned 32-bit integer
    acse.AE_title
```

```
cmip.argument    argument
    No value
    cmip.InvokeArgument

cmip.argumentValue  argumentValue
    Unsigned 32-bit integer
    cmip.InvalidArgumentValue

cmip.armTime    armTime
    String
    cmip.GeneralizedTime

cmip.attribute    attribute
    No value
    cmip.Attribute

cmip.attributeError  attributeError
    No value
    cmip.AttributeError

cmip.attributeId    attributeId
    Unsigned 32-bit integer
    cmip.AttributeId

cmip.attributeIdError  attributeIdError
    No value
    cmip.AttributeIdError

cmip.attributeIdList  attributeIdList
    Unsigned 32-bit integer
    cmip.SET_OF_AttributeId

cmip.attributeIdList_item  Item
    Unsigned 32-bit integer
    cmip.AttributeId

cmip.attributeId_OID  attributeId
    String
    attributeId

cmip.attributeList  attributeList
    Unsigned 32-bit integer
    cmip.SET_OF_Attribute

cmip.attributeList_item  Item
    No value
    cmip.Attribute

cmip.attributeValue  attributeValue
    No value
    cmip.T_attributeValue

cmip.baseManagedObjectClass  baseManagedObjectClass
    Unsigned 32-bit integer
    cmip.ObjectClass

cmip.baseManagedObjectInstance  baseManagedObjectInstance
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.baseToNthLevel  baseToNthLevel
    Signed 32-bit integer
    cmip.INTEGER
```

```
cmip.cancelGet    cancelGet
                  Boolean

cmip.continual    continual
                  No value
                  cmip.NULL

cmip.correlatedNotifications    correlatedNotifications
                  Unsigned 32-bit integer
                  cmip.SET_OF_NotificationIdentifier

cmip.correlatedNotifications_item    Item
                  Signed 32-bit integer
                  cmip.NotificationIdentifier

cmip.currentTime    currentTime
                  String
                  cmip.GeneralizedTime

cmip.daysOfWeek    daysOfWeek
                  Byte array
                  cmip.T_daysOfWeek

cmip.deleteError    deleteError
                  No value
                  cmip.DeleteError

cmip.deleteErrorInfo    deleteErrorInfo
                  Unsigned 32-bit integer
                  cmip.T_deleteErrorInfo

cmip.deleteResult    deleteResult
                  No value
                  cmip.DeleteResult

cmip.details    details
                  No value
                  cmip.T_details

cmip.distinguishedName    distinguishedName
                  Unsigned 32-bit integer
                  cmip.DistinguishedName

cmip.down    down
                  No value
                  cmip.T_down

cmip.equality    equality
                  No value
                  cmip.Attribute

cmip.errcode    errcode
                  Unsigned 32-bit integer
                  cmip.Code

cmip.errorId    errorId
                  cmip.T_errorId

cmip.errorId_OID    errorId
                  String
                  errorId
```

```
cmip.errorInfo  errorInfo
    Unsigned 32-bit integer
    cmip.T_actionErrorInfo

cmip.errorStatus  errorStatus
    Unsigned 32-bit integer
    cmip.T_actionErrorInfo_errorStatus

cmip.eventId  eventId
    No value
    cmip.T_eventId

cmip.eventInfo  eventInfo
    No value
    cmip.EventReportArgumentEventInfo

cmip.eventReply  eventReply
    No value
    cmip.EventReply

cmip.eventReplyInfo  eventReplyInfo
    No value
    cmip.T_eventReplyInfo

cmip.eventTime  eventTime
    String
    cmip.GeneralizedTime

cmip.eventType  eventType
    Unsigned 32-bit integer
    cmip.EventTypeId

cmip.eventType_OID  eventType
    String
    eventType

cmip.eventValue  eventValue
    No value
    cmip.T_eventValue

cmip.extendedService  extendedService
    Boolean

cmip.featureIdentifier  featureIdentifier
    cmip.T_featureIdentifier

cmip.featureInfo  featureInfo
    No value
    cmip.T_featureInfo

cmip.filter  filter
    Unsigned 32-bit integer
    cmip.CMISFilter

cmip.finalString  finalString
    No value
    cmip.Attribute

cmip.friday  friday
    Boolean
```

```
cmip.functionalUnits functionalUnits
    Byte array
    cmip.FunctionalUnits

cmip.general general
    Signed 32-bit integer
    cmip.GeneralProblem

cmip.getInfoList getInfoList
    Unsigned 32-bit integer
    cmip.SET_OF_GetInfoStatus

cmip.getInfoList_item Item
    Unsigned 32-bit integer
    cmip.GetInfoStatus

cmip.getListError getListError
    No value
    cmip.GetListError

cmip.getResult getResult
    No value
    cmip.GetResult

cmip.global global
    cmip.OBJECT_IDENTIFIER

cmip.globalForm globalForm
    cmip.T_actionTypeId_globalForm

cmip.globalValue globalValue
    cmip.OBJECT_IDENTIFIER

cmip.greaterOrEqual greaterOrEqual
    No value
    cmip.Attribute

cmip.high high
    Unsigned 32-bit integer
    cmip.ObservedValue

cmip.hour hour
    Unsigned 32-bit integer
    cmip.INTEGER_0_23

cmip.id id
    Unsigned 32-bit integer
    cmip.AttributeId

cmip.identifier identifier
    cmip.T_managementExtensionidentifier

cmip.individualLevels individualLevels
    Signed 32-bit integer
    cmip.INTEGER

cmip.information information
    No value
    cmip.T_information
```



```
cmip.initialString  initialString
    No value
    cmip.Attribute

cmip.int  int
    Signed 32-bit integer
    cmip.INTEGER

cmip.integer  integer
    Signed 32-bit integer
    cmip.INTEGER

cmip.intervalEnd  intervalEnd
    No value
    cmip.Time24

cmip.intervalStart  intervalStart
    No value
    cmip.Time24

cmip.intervalsOfDay  intervalsOfDay
    Unsigned 32-bit integer
    cmip.IntervalsOfDay

cmip.invoke  invoke
    No value
    cmip.Invoke

cmip.invokeId  invokeId
    Unsigned 32-bit integer
    cmip.InvokeId

cmip.item  item
    Unsigned 32-bit integer
    cmip.FilterItem

cmip.lessOrEqual  lessOrEqual
    No value
    cmip.Attribute

cmip.linkedId  linkedId
    Unsigned 32-bit integer
    cmip.T_linkedId

cmip.local  local
    Signed 32-bit integer
    cmip.T_local

cmip.localDistinguishedName  localDistinguishedName
    Unsigned 32-bit integer
    cmip.RDNSequence

cmip.localForm  localForm
    Signed 32-bit integer
    cmip.INTEGER

cmip.localValue  localValue
    Signed 32-bit integer
    cmip.INTEGER

cmip.low  low
    Unsigned 32-bit integer
    cmip.ObservedValue
```

```
cmip.managedObjectClass managedObjectClass
    Unsigned 32-bit integer
    cmip.ObjectClass

cmip.managedObjectInstance managedObjectInstance
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.managedOrSuperiorObjectInstance managedOrSuperiorObjectInstance
    Unsigned 32-bit integer
    cmip.T_managedOrSuperiorObjectInstance

cmip.mechanism mechanism
    cmip.OBJECT_IDENTIFIER

cmip.minute minute
    Unsigned 32-bit integer
    cmip.INTEGER_0_59

cmip.modificationList modificationList
    Unsigned 32-bit integer
    cmip.T_modificationList

cmip.modificationList_item Item
    No value
    cmip.T_modificationList_item

cmip.modifyOperator modifyOperator
    Signed 32-bit integer
    cmip.ModifyOperator

cmip.monday monday
    Boolean

cmip.multiple multiple
    Unsigned 32-bit integer
    cmip.SET_OF_AE_title

cmip.multipleObjectSelection multipleObjectSelection
    Boolean

cmip.multipleReply multipleReply
    Boolean

cmip.multiple_item Item
    Unsigned 32-bit integer
    acse.AE_title

cmip.name name
    String
    cmip.GraphicString

cmip.namedNumbers namedNumbers
    Signed 32-bit integer
    cmip.T_namedNumbers

cmip.newAttributeValue newAttributeValue
    No value
    cmip.T_newAttributeValue

cmip.noObject noObject
    No value
    cmip.NULL
```

```
cmip.nonNullSetIntersection  nonNullSetIntersection
    No value
    cmip.Attribute

cmip.nonSpecificForm  nonSpecificForm
    Byte array
    cmip.OCTET_STRING

cmip.not  not
    Unsigned 32-bit integer
    cmip.CMISFilter

cmip.nothing  nothing
    No value
    cmip.NULL

cmip.number  number
    Signed 32-bit integer
    cmip.INTEGER

cmip.object  object
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.objectName  objectName
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.observedValue  observedValue
    Unsigned 32-bit integer
    cmip.ObservedValue

cmip.oi  oi
    cmip.OBJECT_IDENTIFIER

cmip.oid  oid
    cmip.OBJECT_IDENTIFIER

cmip.oldAttributeValue  oldAttributeValue
    No value
    cmip.T_oldAttributeValue

cmip.opcode  opcode
    Unsigned 32-bit integer
    cmip.Code

cmip.or  or
    Unsigned 32-bit integer
    cmip.SET_OF_CMISFilter

cmip.or_item  Item
    Unsigned 32-bit integer
    cmip.CMISFilter

cmip.parameter  parameter
    No value
    cmip.T_parameter

cmip.present  present
    Unsigned 32-bit integer
    cmip.AttributeId
```

```
cmip.priority priority
    Signed 32-bit integer
    cmip.T_priority

cmip.problem problem
    Unsigned 32-bit integer
    cmip.T_problem

cmip.processingFailure processingFailure
    No value
    cmip.ProcessingFailure

cmip.protocolVersion protocolVersion
    Byte array
    cmip.ProtocolVersion

cmip.real real
    Double-precision floating point
    cmip.REAL

cmip.referenceObjectInstance referenceObjectInstance
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.reject reject
    No value
    cmip.Reject

cmip.result result
    No value
    cmip.T_result

cmip.returnValue returnValue
    No value
    cmip.ReturnError

cmip.returnValue returnValue
    No value
    cmip.ReturnResult

cmip.saturday saturday
    Boolean

cmip.scope scope
    Unsigned 32-bit integer
    cmip.Scope

cmip.setInfoList setInfoList
    Unsigned 32-bit integer
    cmip.SET_OF_SetInfoStatus

cmip.setInfoList_item Item
    Unsigned 32-bit integer
    cmip.SetInfoStatus

cmip.setListError setListError
    No value
    cmip.SetListError

cmip.setResult setResult
    No value
    cmip.SetResult
```

```
cmip.significance  significance
    Boolean
    cmip.BOOLEAN

cmip.single  single
    Unsigned 32-bit integer
    acse.AE_title

cmip.sourceObjectInst  sourceObjectInst
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.specific  specific
    String
    cmip.GeneralizedTime

cmip.specificErrorInfo  specificErrorInfo
    No value
    cmip.SpecificErrorInfo

cmip.string  string
    String
    cmip.GraphicString

cmip.subsetOf  subsetOf
    No value
    cmip.Attribute

cmip.substrings  substrings
    Unsigned 32-bit integer
    cmip.T_substrings

cmip.substrings_item  Item
    Unsigned 32-bit integer
    cmip.T_substrings_item

cmip.sunday  sunday
    Boolean

cmip.superiorObjectInstance  superiorObjectInstance
    Unsigned 32-bit integer
    cmip.ObjectInstance

cmip.supersetOf  supersetOf
    No value
    cmip.Attribute

cmip.sync  sync
    Unsigned 32-bit integer
    cmip.CMISSync

cmip.synchronization  synchronization
    Unsigned 32-bit integer
    cmip.CMISSync

cmip.thresholdLevel  thresholdLevel
    Unsigned 32-bit integer
    cmip.ThresholdLevelInd

cmip.thursday  thursday
    Boolean
```

```
cmip.triggeredThreshold  triggeredThreshold
    Unsigned 32-bit integer
    cmip.AttributeId
cmip.tuesday  tuesday
    Boolean
cmip.up  up
    No value
    cmip.T_up
cmip.userInfo  userInfo
    No value
    cmip.EXTERNAL
cmip.value  value
    No value
    cmip.AttributeValue
cmip.version1  version1
    Boolean
cmip.version2  version2
    Boolean
cmip.wednesday  wednesday
    Boolean
```

**XCAP Error XML doc (RFC 4825) (xcap-error)**

```
xcap-error.alt-value  alt-value
    String
xcap-error.ancestor  ancestor
    String
xcap-error.cannot-delete  cannot-delete
    String
xcap-error.cannot-delete.phrase  phrase
    String
xcap-error.cannot-insert  cannot-insert
    String
xcap-error.cannot-insert.phrase  phrase
    String
xcap-error.constraint-failure  constraint-failure
    String
xcap-error.constraint-failure.phrase  phrase
    String
xcap-error.exists  exists
    String
xcap-error.exists.alt-value  alt-value
    String
xcap-error.exists.field  field
    String
xcap-error.no-parent  no-parent
    String
```

```
xcap-error.no-parent.ancestor ancestor
String
xcap-error.no-parent.phrase phrase
String
xcap-error.not-utf-8 not-utf-8
String
xcap-error.not-utf-8.phrase phrase
String
xcap-error.not-well-formed not-well-formed
String
xcap-error.not-well-formed.phrase phrase
String
xcap-error.not-xml-att-value not-xml-att-value
String
xcap-error.not-xml-att-value.phrase phrase
String
xcap-error.not-xml-frag not-xml-frag
String
xcap-error.not-xml-frag.phrase phrase
String
xcap-error.schema-validation-error schema-validation-error
String
xcap-error.schema-validation-error.phrase phrase
String
xcap-error.uniqueness-failure uniqueness-failure
String
xcap-error.uniqueness-failure.exists exists
String
xcap-error.uniqueness-failure.exists.alt-value alt-value
String
xcap-error.uniqueness-failure.exists.field field
String
xcap-error.uniqueness-failure.phrase phrase
String
xcap-error.xmlns xmlns
String
```

#### **XML Configuration Access Protocol Server Capabilities (xcap-caps)**

```
xcap-caps.auid auid
String
xcap-caps.extension extension
String
xcap-caps.namespace namespace
String
```

**Xyplex (xyplex)**

```
xyplex.pad  Pad
  Unsigned 8-bit integer
  Padding

xyplex.reply  Registration Reply
  Unsigned 16-bit integer
  Registration reply

xyplex.reserved  Reserved field
  Unsigned 16-bit integer
  Reserved field

xyplex.return_port  Return Port
  Unsigned 16-bit integer
  Return port

xyplex.server_port  Server Port
  Unsigned 16-bit integer
  Server port

xyplex.type  Type
  Unsigned 8-bit integer
  Protocol type
```

**Yahoo Messenger Protocol (yhoo)**

```
yhoo.connection_id  Connection ID
  Unsigned 32-bit integer
  Connection ID

yhoo.content  Content
  String
  Data portion of the packet

yhoo.len  Packet Length
  Unsigned 32-bit integer
  Packet Length

yhoo.magic_id  Magic ID
  Unsigned 32-bit integer
  Magic ID

yhoo.msgtype  Message Type
  Unsigned 32-bit integer
  Message Type Flags

yhoo.nick1  Real Nick (nick1)
  String
  Real Nick (nick1)

yhoo.nick2  Active Nick (nick2)
  String
  Active Nick (nick2)

yhoo.service  Service Type
  Unsigned 32-bit integer
  Service Type

yhoo.unknown1  Unknown 1
  Unsigned 32-bit integer
  Unknown 1
```



```
yhoo.version  Version
              String
              Packet version identifier
```

#### **Yahoo YMSG Messenger Protocol (ymsg)**

```
ymsg.content  Content
              String
              Data portion of the packet

ymsg.content-line  Content-line
                  String
                  Data portion of the packet

ymsg.content-line.key  Key
                       String
                       Content line key

ymsg.content-line.value  Value
                          String
                          Content line value

ymsg.len  Packet Length
          Unsigned 16-bit integer
          Packet Length

ymsg.service  Service
              Unsigned 16-bit integer
              Service Type

ymsg.session_id  Session ID
                 Unsigned 32-bit integer
                 Connection ID

ymsg.status  Status
             Unsigned 32-bit integer
             Message Type Flags

ymsg.version  Version
              Unsigned 16-bit integer
              Packet version identifier
```

#### **Yellow Pages Bind (ypbind)**

```
ypbind.addr  IP Addr
             IPv4 address
             IP Address of server

ypbind.domain  Domain
              String
              Name of the NIS/YP Domain

ypbind.error  Error
              Unsigned 32-bit integer
              YPBIND Error code

ypbind.port  Port
            Unsigned 32-bit integer
            Port to use
```

```
yplibind.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

yplibind.procedure_v2  V2 Procedure
    Unsigned 32-bit integer
    V2 Procedure

yplibind.resp_type     Response Type
    Unsigned 32-bit integer
    Response type

yplibind.setdom.version Version
    Unsigned 32-bit integer
    Version of setdom
```

### **Yellow Pages Passwd (yppasswd)**

```
yppasswd.newpw  newpw
    No value
    New passwd entry

yppasswd.newpw.dir  dir
    String
    Home Directory

yppasswd.newpw.gecos  gecos
    String
    In real life name

yppasswd.newpw.gid  gid
    Unsigned 32-bit integer
    GroupID

yppasswd.newpw.name  name
    String
    Username

yppasswd.newpw.passwd  passwd
    String
    Encrypted passwd

yppasswd.newpw.shell  shell
    String
    Default shell

yppasswd.newpw.uid  uid
    Unsigned 32-bit integer
    UserID

yppasswd.oldpass  oldpass
    String
    Old encrypted password

yppasswd.procedure_v1  V1 Procedure
    Unsigned 32-bit integer
    V1 Procedure

yppasswd.status  status
    Unsigned 32-bit integer
    YPPasswd update status
```

**Yellow Pages Service (ypserv)**

```
ypserv.domain  Domain
  String
  Domain

ypserv.key     Key
  String
  Key

ypserv.map     Map Name
  String
  Map Name

ypserv.map_parms  YP Map Parameters
  No value
  YP Map Parameters

ypserv.more    More
  Boolean
  More

ypserv.ordernum  Order Number
  Unsigned 32-bit integer
  Order Number for XFR

ypserv.peer    Peer Name
  String
  Peer Name

ypserv.port     Port
  Unsigned 32-bit integer
  Port to use for XFR Callback

ypserv.procedure_v1  V1 Procedure
  Unsigned 32-bit integer
  V1 Procedure

ypserv.procedure_v2  V2 Procedure
  Unsigned 32-bit integer
  V2 Procedure

ypserv.prog     Program Number
  Unsigned 32-bit integer
  Program Number to use for XFR Callback

ypserv.servesdomain  Serves Domain
  Boolean
  Serves Domain

ypserv.status   Status
  Signed 32-bit integer
  Status

ypserv.transid  Host Transport ID
  IPv4 address
  Host Transport ID to use for XFR Callback

ypserv.value    Value
  String
  Value
```

```
ypserv.xfrstat  Xfrstat
                Signed 32-bit integer
                Xfrstat
```

**Yellow Pages Transfer (ypxfr)**

```
ypxfr.procedure_v1  V1 Procedure
                   Unsigned 32-bit integer
                   V1 Procedure
```

**Zebra Protocol (zebra)**

```
zebra.bandwidth  Bandwidth
                 Unsigned 32-bit integer
                 Bandwidth of interface

zebra.command    Command
                 Unsigned 8-bit integer
                 ZEBRA command

zebra.dest4      Destination
                 IPv4 address
                 Destination IPv4 field

zebra.dest6      Destination
                 IPv6 address
                 Destination IPv6 field

zebra.distance   Distance
                 Unsigned 8-bit integer
                 Distance of route

zebra.family     Family
                 Unsigned 32-bit integer
                 Family of IP address

zebra.index      Index
                 Unsigned 32-bit integer
                 Index of interface

zebra.indexnum   Index Number
                 Unsigned 8-bit integer
                 Number of indices for route

zebra.interface  Interface
                 String
                 Interface name of ZEBRA request

zebra.intflags   Flags
                 Unsigned 32-bit integer
                 Flags of interface

zebra.len        Length
                 Unsigned 16-bit integer
                 Length of ZEBRA request

zebra.message    Message
                 Unsigned 8-bit integer
                 Message type of route
```

```
zebra.message.distance  Message Distance
    Boolean
    Message contains distance
zebra.message.index    Message Index
    Boolean
    Message contains index
zebra.message.metric   Message Metric
    Boolean
    Message contains metric
zebra.message.nexthop  Message Nexthop
    Boolean
    Message contains nexthop
zebra.metric           Metric
    Unsigned 32-bit integer
    Metric of interface or route
zebra.mtu             MTU
    Unsigned 32-bit integer
    MTU of interface
zebra.nexthop4        Nexthop
    IPv4 address
    Nethop IPv4 field of route
zebra.nexthop6        Nexthop
    IPv6 address
    Nethop IPv6 field of route
zebra.nexthopnum      Nexthop Number
    Unsigned 8-bit integer
    Number of nexthops in route
zebra.prefix4         Prefix
    IPv4 address
    Prefix IPv4
zebra.prefix6         Prefix
    IPv6 address
    Prefix IPv6
zebra.prefixlen       Prefix length
    Unsigned 32-bit integer
    Prefix length
zebra.request         Request
    Boolean
    TRUE if ZEBRA request
zebra.rtflags         Flags
    Unsigned 8-bit integer
    Flags of route
zebra.type            Type
    Unsigned 8-bit integer
    Type of route
```

**Zone Information Protocol (zip)**

```
zip.atp_function  Function
    Unsigned 8-bit integer

zip.count  Count
    Unsigned 16-bit integer

zip.default_zone  Default zone
    String

zip.flags  Flags
    Boolean

zip.flags.only_one_zone  Only one zone
    Boolean

zip.flags.use_broadcast  Use broadcast
    Boolean

zip.flags.zone_invalid  Zone invalid
    Boolean

zip.function  Function
    Unsigned 8-bit integer
    ZIP function

zip.last_flag  Last Flag
    Boolean
    Non zero if contains last zone name in the zone list

zip.multicast_address  Multicast address
    Byte array
    Multicast address

zip.multicast_length  Multicast length
    Unsigned 8-bit integer
    Multicast address length

zip.network  Network
    Unsigned 16-bit integer

zip.network_count  Count
    Unsigned 8-bit integer

zip.network_end  Network end
    Unsigned 16-bit integer

zip.network_start  Network start
    Unsigned 16-bit integer

zip.start_index  Start index
    Unsigned 16-bit integer

zip.zero_value  Pad (0)
    Byte array
    Pad

zip.zone_name  Zone
    String
```

**eDonkey Protocol (edonkey)**

```
edonkey.client_hash  Client Hash
  Byte array
  eDonkey Client Hash

edonkey.clientid    Client ID
  IPv4 address
  eDonkey Client ID

edonkey.clientinfo  eDonkey Client Info
  No value
  eDonkey Client Info

edonkey.directory  Directory
  String
  eDonkey Directory

edonkey.emule.aich_hash  AICH Hash
  Byte array
  eMule AICH Hash

edonkey.emule.aich_hash_id  AICH Hash ID
  Unsigned 16-bit integer
  eMule AICH Hash ID

edonkey.emule.aich_partnum  Part Number
  Unsigned 16-bit integer
  eMule AICH Part Number

edonkey.emule.aich_root_hash  AICH Root Hash
  Byte array
  eMule AICH Root Hash

edonkey.emule.multipacket_entry  eMule MultiPacket Entry
  No value
  eMule MultiPacket Entry

edonkey.emule.multipacket_opcode  MultiPacket Opcode
  Unsigned 8-bit integer
  eMule MultiPacket Opcode

edonkey.emule.public_key  Public Key
  Byte array
  eMule Public Key

edonkey.emule.signature  Signature
  Byte array
  eMule Signature

edonkey.emule.source_count  Completed Sources Count
  Unsigned 16-bit integer
  eMule Completed Sources Count

edonkey.emule.zlib  Compressed Data
  No value
  eMule Compressed Data

edonkey.file_hash  File Hash
  Byte array
  eDonkey File Hash
```

```
edonkey.file_status  File Status
    Byte array
    eDonkey File Status

edonkey.fileinfo    eDonkey File Info
    No value
    eDonkey File Info

edonkey.hash        Hash
    Byte array
    eDonkey Hash

edonkey.ip          IP
    IPv4 address
    eDonkey IP

edonkey.kademlia    Kademlia Packet
    Unsigned 8-bit integer
    Kademlia Packet Type

edonkey.kademlia.hash  Kademlia Hash
    Byte array
    Kademlia Hash

edonkey.kademlia.ip  IP
    IPv4 address
    eDonkey IP

edonkey.kademlia.peer  Kademlia Peer
    No value
    Kademlia Peer

edonkey.kademlia.peer.hash  Peer Hash
    Byte array
    Kademlia Peer Hash

edonkey.kademlia.peer.type  Kademlia PeerType
    Unsigned 8-bit integer
    Kademlia Peer Type

edonkey.kademlia.search.condition  Search Condition
    Unsigned 8-bit integer
    Kademlia Search Condition

edonkey.kademlia.search.condition.argument.uint32  32bit Argument
    Unsigned 32-bit integer
    Kademlia Search Condition Argument 32bit Value

edonkey.kademlia.search.condition.argument.uint64  64bit Argument
    Unsigned 64-bit integer
    Kademlia Search Condition Argument 64bit Value

edonkey.kademlia.tag.name  Tag Name
    String
    Kademlia Tag Name String

edonkey.kademlia.tag.name.length  Tag Name Length
    Unsigned 16-bit integer
    Kademlia Tag Name String Length

edonkey.kademlia.tag.type  Tag Type
    Unsigned 8-bit integer
    Kademlia Tag Type
```



```
edonkey.kademlia.tag.value.bsob  Tag Value (BSOB)
    Byte array
    BSOB Tag Value

edonkey.kademlia.tag.value.float  Tag Value (Float)
    Float Tag Value

edonkey.kademlia.tag.value.hash  Tag Value (HASH)
    Byte array
    HASH Tag Value

edonkey.kademlia.tag.value.string  Tag Value (String)
    String
    String Tag Value

edonkey.kademlia.tag.value.uint16  Tag Value (UINT16)
    Unsigned 16-bit integer
    UINT16 Tag Value

edonkey.kademlia.tag.value.uint32  Tag Value (UINT32)
    Unsigned 32-bit integer
    UINT32 Tag Value

edonkey.kademlia.tag.value.uint64  Tag Value (UINT64)
    Unsigned 64-bit integer
    UINT64 Tag Value

edonkey.kademlia.tag.value.uint8   Tag Value (UINT8)
    Unsigned 8-bit integer
    UINT8 Tag Value

edonkey.kademlia.tcp_port  TCP Port
    Unsigned 16-bit integer
    Kademlia TCP Port

edonkey.kademlia.udp_port  UDP Port
    Unsigned 16-bit integer
    Kademlia UDP Port

edonkey.kademlia.unparsed  Kademlia unparsed data length
    Unsigned 16-bit integer
    Kademlia trailing data length

edonkey.message  eDonkey Message
    No value
    eDonkey Message

edonkey.message.length  Message Length
    Unsigned 32-bit integer
    eDonkey Message Length

edonkey.message.type  Message Type
    Unsigned 8-bit integer
    eDonkey Message Type

edonkey.metatag  eDonkey Meta Tag
    No value
    eDonkey Meta Tag

edonkey.metatag.id  Meta Tag ID
    Unsigned 8-bit integer
    eDonkey Meta Tag ID
```

```
edonkey.metatag.name  Meta Tag Name
String
eDonkey Meta Tag Name

edonkey.metatag.namesize  Meta Tag Name Size
Unsigned 16-bit integer
eDonkey Meta Tag Name Size

edonkey.metatag.type  Meta Tag Type
Unsigned 8-bit integer
eDonkey Meta Tag Type

edonkey.overnet.peer  Overnet Peer
No value
Overnet Peer

edonkey.part_count  Part Count
Unsigned 16-bit integer
eDonkey Part Count

edonkey.port  Port
Unsigned 16-bit integer
eDonkey Port

edonkey.protocol  Protocol
Unsigned 8-bit integer
eDonkey Protocol

edonkey.search  eDonkey Search
No value
eDonkey Search

edonkey.server_hash  Server Hash
Byte array
eDonkey Server Hash

edonkey.serverinfo  eDonkey Server Info
No value
eDonkey Server Info

edonkey.source  Source
No value
eDonkey File Source

edonkey.string  String
String
eDonkey String

edonkey.string_length  String Length
Unsigned 16-bit integer
eDonkey String Length

edonkey.unparsed  eDonkey unparsed data length
Unsigned 32-bit integer
eDonkey trailing or unparsed data length

emule_aich_hash_entry  AICH Hash Entry
No value
eMule AICH Hash Entry
```

**eXtensible Markup Language (xml)**

```
xml.attribute  Attribute
               String

xml.cdata      CDATA
               String

xml.comment    Comment
               String

xml.doctype    Doctype
               String

xml.dtdtag     DTD Tag
               String

xml.tag        Tag
               String

xml.unknown    Unknown
               String

xml.xmlpi      XMLPI
               String

xml.xmlpi.xml  xml.xmlpi.xml
               String

xml.xmlpi.xml.encoding  encoding
               String

xml.xmlpi.xml.standalone  standalone
               String

xml.xmlpi.xml.version  version
               String
```

**giFT Internet File Transfer (gift)**

```
gift.request   Request
               Boolean
               TRUE if giFT request

gift.response  Response
               Boolean
               TRUE if giFT response
```

**iFCP (ifcp)**

```
fcencap.crc    CRC
               Unsigned 32-bit integer

fcencap.framelen  Frame Length (in Words)
               Unsigned 16-bit integer

fcencap.framelenc  Frame Length (1's Complement)
               Unsigned 16-bit integer

fcencap.proto   Protocol
               Unsigned 8-bit integer
               Protocol
```

```
fcencap.protoc Protocol (1's Complement)
    Unsigned 8-bit integer
    Protocol (1's Complement)
fcencap.tsec Time (secs)
    Unsigned 32-bit integer
fcencap.tusec Time (fraction)
    Unsigned 32-bit integer
fcencap.version Version
    Unsigned 8-bit integer
fcencap.versionc Version (1's Complement)
    Unsigned 8-bit integer
ifcp.common_flags Flags
    Unsigned 8-bit integer
ifcp.common_flags.crcv CRCV
    Boolean
    Is the CRC field valid?
ifcp.encap_flagsc iFCP Encapsulation Flags (1's Complement)
    Unsigned 8-bit integer
ifcp.eof EOF
    Unsigned 8-bit integer
ifcp.eof_c EOF Compliment
    Unsigned 8-bit integer
ifcp.flags iFCP Flags
    Unsigned 8-bit integer
ifcp.flags.ses SES
    Boolean
    Is this a Session control frame
ifcp.flags.spc SPC
    Boolean
    Is frame part of link service
ifcp.flags.trp TRP
    Boolean
    Is address transparent mode enabled
ifcp.ls_command_acc Ls Command Acc
    Unsigned 8-bit integer
ifcp.sof SOF
    Unsigned 8-bit integer
ifcp.sof_c SOF Compliment
    Unsigned 8-bit integer
```

**iSCSI (iscsi)**

```
iscsi.I I
    Boolean
    Immediate delivery
```

```
iscsi.X X
  Boolean
  Command Retry

iscsi.ahs AHS
  Byte array
  Additional header segment

iscsi.ahs.bidir.length Bidirectional Read Data Length
  Unsigned 32-bit integer

iscsi.ahs.extended_cdb AHS Extended CDB
  Byte array

iscsi.ahs.length AHS Length
  Unsigned 16-bit integer
  Length of Additional header segment

iscsi.ahs.type AHS Type
  Unsigned 8-bit integer
  Type of Additional header segment

iscsi.ahs.unknown_blob Unknown AHS blob
  Byte array

iscsi.asyncevent AsyncEvent
  Unsigned 8-bit integer
  Async event type

iscsi.asynceventdata AsyncEventData
  Byte array
  Async Event Data

iscsi.bufferOffset BufferOffset
  Unsigned 32-bit integer
  Buffer offset

iscsi.cid CID
  Unsigned 16-bit integer
  Connection identifier

iscsi.cmdsn CmdSN
  Unsigned 32-bit integer
  Sequence number for this command

iscsi.data_in_frame Data In in
  Frame number
  The Data In for this transaction is in this frame

iscsi.data_out_frame Data Out in
  Frame number
  The Data Out for this transaction is in this frame

iscsi.datadigest DataDigest
  Byte array
  Data Digest

iscsi.datadigest32 DataDigest
  Unsigned 32-bit integer
  Data Digest
```

```
iscsi.datasegmentlength  DataSegmentLength
    Unsigned 32-bit integer
    Data segment length (bytes)

iscsi.datasn  DataSN
    Unsigned 32-bit integer
    Data sequence number

iscsi.desireddatalength  DesiredDataLength
    Unsigned 32-bit integer
    Desired data length (bytes)

iscsi.errorpdudata  ErrorPDUData
    Byte array
    Error PDU Data

iscsi.eventvendorcode  EventVendorCode
    Unsigned 8-bit integer
    Event vendor code

iscsi.expcmdsn  ExpCmdSN
    Unsigned 32-bit integer
    Next expected command sequence number

iscsi.expdatasn  ExpDataSN
    Unsigned 32-bit integer
    Next expected data sequence number

iscsi.expstatsn  ExpStatSN
    Unsigned 32-bit integer
    Next expected status sequence number

iscsi.flags  Flags
    Unsigned 8-bit integer
    Opcode specific flags

iscsi.headerdigest32  HeaderDigest
    Unsigned 32-bit integer
    Header Digest

iscsi.immediatedata  ImmediateData
    Byte array
    Immediate Data

iscsi.initcmdsn  InitCmdSN
    Unsigned 32-bit integer
    Initial command sequence number

iscsi.initiatorortasktag  InitiatorTaskTag
    Unsigned 32-bit integer
    Initiator's task tag

iscsi.initstatsn  InitStatSN
    Unsigned 32-bit integer
    Initial status sequence number

iscsi.isid  ISID
    Unsigned 16-bit integer
    Initiator part of session identifier

iscsi.isid.a  ISID_a
    Unsigned 8-bit integer
    Initiator part of session identifier - a
```

```
iscsi.isid.b  ISID_b
  Unsigned 16-bit integer
  Initiator part of session identifier - b
iscsi.isid.c  ISID_c
  Unsigned 8-bit integer
  Initiator part of session identifier - c
iscsi.isid.d  ISID_d
  Unsigned 16-bit integer
  Initiator part of session identifier - d
iscsi.isid.namingauthority  ISID_NamingAuthority
  Unsigned 24-bit integer
  Initiator part of session identifier - naming authority
iscsi.isid.qualifier  ISID_Qualifier
  Unsigned 8-bit integer
  Initiator part of session identifier - qualifier
iscsi.isid.t  ISID_t
  Unsigned 8-bit integer
  Initiator part of session identifier - t
iscsi.isid.type  ISID_Type
  Unsigned 8-bit integer
  Initiator part of session identifier - type
iscsi.keyvalue  KeyValue
  String
  Key/value pair
iscsi.login.C  C
  Boolean
  Text incomplete
iscsi.login.T  T
  Boolean
  Transit to next login stage
iscsi.login.X  X
  Boolean
  Restart Connection
iscsi.login.csg  CSG
  Unsigned 8-bit integer
  Current stage
iscsi.login.nsg  NSG
  Unsigned 8-bit integer
  Next stage
iscsi.login.status  Status
  Unsigned 16-bit integer
  Status class and detail
iscsi.logout.reason  Reason
  Unsigned 8-bit integer
  Reason for logout
iscsi.logout.response  Response
  Unsigned 8-bit integer
  Logout response
```

```
iscsi.lun    LUN
             Byte array
             Logical Unit Number

iscsi.maxcmdsn  MaxCmdSN
             Unsigned 32-bit integer
             Maximum acceptable command sequence number

iscsi.opcode  Opcode
             Unsigned 8-bit integer
             Opcode

iscsi.padding  Padding
             Byte array
             Padding to 4 byte boundary

iscsi.parameter1  Parameter1
             Unsigned 16-bit integer
             Parameter 1

iscsi.parameter2  Parameter2
             Unsigned 16-bit integer
             Parameter 2

iscsi.parameter3  Parameter3
             Unsigned 16-bit integer
             Parameter 3

iscsi.pingdata  PingData
             Byte array
             Ping Data

iscsi.r2tsn    R2TSN
             Unsigned 32-bit integer
             R2T PDU Number

iscsi.readdata  ReadData
             Byte array
             Read Data

iscsi.refcmdsn  RefCmdSN
             Unsigned 32-bit integer
             Command sequence number for command to be aborted

iscsi.reject.reason  Reason
             Unsigned 8-bit integer
             Reason for command rejection

iscsi.request_frame  Request in
                    Frame number
                    The request to this transaction is in this frame

iscsi.response_frame  Response in
                    Frame number
                    The response to this transaction is in this frame

iscsi.scsicommand.F  F
                    Boolean
                    PDU completes command

iscsi.scsicommand.R  R
                    Boolean
                    Command reads from SCSI target
```



```
iscsi.scsicommand.W W
  Boolean
  Command writes to SCSI target
iscsi.scsicommand.addcdb AddCDB
  Unsigned 8-bit integer
  Additional CDB length (in 4 byte units)
iscsi.scsicommand.attr Attr
  Unsigned 8-bit integer
  SCSI task attributes
iscsi.scsicommand.crn CRN
  Unsigned 8-bit integer
  SCSI command reference number
iscsi.scsicommand.expecteddatatransferlength ExpectedDataTransferLength
  Unsigned 32-bit integer
  Expected length of data transfer
iscsi.scsidata.A A
  Boolean
  Acknowledge Requested
iscsi.scsidata.F F
  Boolean
  Final PDU
iscsi.scsidata.O O
  Boolean
  Residual overflow
iscsi.scsidata.S S
  Boolean
  PDU Contains SCSI command status
iscsi.scsidata.U U
  Boolean
  Residual underflow
iscsi.scsidata.readresidualcount ResidualCount
  Unsigned 32-bit integer
  Residual count
iscsi.scsiresponse.O O
  Boolean
  Residual overflow
iscsi.scsiresponse.U U
  Boolean
  Residual underflow
iscsi.scsiresponse.bidireadresidualcount BidiReadResidualCount
  Unsigned 32-bit integer
  Bi-directional read residual count
iscsi.scsiresponse.o o
  Boolean
  Bi-directional read residual overflow
iscsi.scsiresponse.residualcount ResidualCount
  Unsigned 32-bit integer
  Residual count
```

```
iscsi.scsiresponse.response  Response
    Unsigned 8-bit integer
    SCSI command response value

iscsi.scsiresponse.senselength  SenseLength
    Unsigned 16-bit integer
    Sense data length

iscsi.scsiresponse.status  Status
    Unsigned 8-bit integer
    SCSI command status value

iscsi.scsiresponse.u  u
    Boolean
    Bi-directional read residual underflow

iscsi.snack.begrun  BegRun
    Unsigned 32-bit integer
    First missed DataSN or StatSN

iscsi.snack.runlength  RunLength
    Unsigned 32-bit integer
    Number of additional missing status PDUs in this run

iscsi.snack.type  S
    Unsigned 8-bit integer
    Type of SNACK requested

iscsi.statsn  StatSN
    Unsigned 32-bit integer
    Status sequence number

iscsi.targettransferstag  TargetTransferTag
    Unsigned 32-bit integer
    Target transfer tag

iscsi.taskmanfun.function  Function
    Unsigned 8-bit integer
    Requested task function

iscsi.taskmanfun.referencedtasktag  ReferencedTaskTag
    Unsigned 32-bit integer
    Referenced task tag

iscsi.taskmanfun.response  Response
    Unsigned 8-bit integer
    Response

iscsi.text.C  C
    Boolean
    Text incomplete

iscsi.text.F  F
    Boolean
    Final PDU in text sequence

iscsi.time  Time from request
    Time duration
    Time between the Command and the Response

iscsi.time2retain  Time2Retain
    Unsigned 16-bit integer
    Time2Retain
```

```
iscsi.time2wait  Time2Wait
                 Unsigned 16-bit integer
                 Time2Wait

iscsi.totalahslength  TotalAHSLength
                 Unsigned 8-bit integer
                 Total additional header segment length (4 byte words)

iscsi.tsid  TSID
           Unsigned 16-bit integer
           Target part of session identifier

iscsi.tsih  TSIH
           Unsigned 16-bit integer
           Target session identifying handle

iscsi.vendorspecificdata  VendorSpecificData
                         Byte array
                         Vendor Specific Data

iscsi.versionactive  VersionActive
                   Unsigned 8-bit integer
                   Negotiated protocol version

iscsi.versionmax  VersionMax
                 Unsigned 8-bit integer
                 Maximum supported protocol version

iscsi.versionmin  VersionMin
                 Unsigned 8-bit integer
                 Minimum supported protocol version

iscsi.writedata  WriteData
                Byte array
                Write Data
```

**iSNS (isns)**

```
isns.PVer  iSNSP Version
          Unsigned 16-bit integer
          iSNS Protocol Version

isns.assigned_id  Assigned ID
                 Unsigned 32-bit integer
                 Assigned ID

isns.attr.len  Attribute Length
              Unsigned 32-bit integer
              iSNS Attribute Length

isns.attr.tag  Attribute Tag
              Unsigned 32-bit integer
              iSNS Attribute Tag

isns.dd.member_portal.ip_address  DD Member Portal IP Address
                                  IPv6 address
                                  DD Member Portal IPv4/IPv6 Address

isns.dd.symbolic_name  DD Symbolic Name
                      String
                      Symbolic name of this DD
```

```
isns.dd_id DD ID
    Unsigned 32-bit integer
    DD ID

isns.dd_member.iscsi_name DD Member iSCSI Name
    String
    DD Member iSCSI Name of device

isns.dd_member_portal_port DD Member Portal Port
    Unsigned 32-bit integer
    TCP/UDP DD Member Portal Port

isns.dd_set.symbolic_name DD Set Symbolic Name
    String
    Symbolic name of this DD Set

isns.dd_set_id DD Set ID
    Unsigned 32-bit integer
    DD Set ID

isns.dd_set_next_id DD Set Next ID
    Unsigned 32-bit integer
    DD Set Next ID

isns.delimiter Delimiter
    No value
    iSNS Delimiter

isns.entity.index Entity Index
    Unsigned 32-bit integer
    Entity Index

isns.entity.next_index Entity Next Index
    Unsigned 32-bit integer
    Next Entity Index

isns.entity_identifier Entity Identifier
    String
    Entity Identifier of this object

isns.entity_protocol Entity Protocol
    Unsigned 32-bit integer
    iSNS Entity Protocol

isns.errorcode ErrorCode
    Unsigned 32-bit integer
    iSNS Response Error Code

isns.esi_interval ESI Interval
    Unsigned 32-bit integer
    ESI Interval in Seconds

isns.esi_port ESI Port
    Unsigned 32-bit integer
    TCP/UDP ESI Port

isns.fabric_port_name Fabric Port Name
    Unsigned 64-bit integer
    Fabric Port Name

isns.fc4_descriptor FC4 Descriptor
    String
    FC4 Descriptor of this device
```

```
isns.fc_node_name_wwnn  FC Node Name WWNN
    Unsigned 64-bit integer
    FC Node Name WWNN

isns.fc_port_name_wwpn  FC Port Name WWPN
    Unsigned 64-bit integer
    FC Port Name WWPN

isns.flags  Flags
    Unsigned 16-bit integer
    iSNS Flags

isns.flags.authentication_block  Auth
    Boolean
    is iSNS Authentication Block present?

isns.flags.client  Client
    Boolean
    iSNS Client

isns.flags.firstpdu  First PDU
    Boolean
    iSNS First PDU

isns.flags.lastpdu  Last PDU
    Boolean
    iSNS Last PDU

isns.flags.replace  Replace
    Boolean
    iSNS Replace

isns.flags.server  Server
    Boolean
    iSNS Server

isns.functionid  Function ID
    Unsigned 16-bit integer
    iSNS Function ID

isns.hard_address  Hard Address
    Unsigned 24-bit integer
    Hard Address

isns.heartbeat.address  Heartbeat Address (ipv6)
    IPv6 address
    Server IPv6 Address

isns.heartbeat.counter  Heartbeat counter
    Unsigned 32-bit integer
    Server Heartbeat Counter

isns.heartbeat.interval  Heartbeat Interval (secs)
    Unsigned 32-bit integer
    Server Heartbeat interval

isns.heartbeat.tcport  Heartbeat TCP Port
    Unsigned 16-bit integer
    Server TCP Port

isns.heartbeat.udport  Heartbeat UDP Port
    Unsigned 16-bit integer
    Server UDP Port
```

```
isns.index DD ID Next ID
  Unsigned 32-bit integer
  DD ID Next ID

isns.iscsi.node_type iSCSI Node Type
  Unsigned 32-bit integer
  iSCSI Node Type

isns.iscsi_alias iSCSI Alias
  String
  iSCSI Alias of device

isns.iscsi_auth_method iSCSI Auth Method
  String
  Authentication Method required by this device

isns.iscsi_name iSCSI Name
  String
  iSCSI Name of device

isns.isnt.control Control
  Boolean
  Control

isns.isnt.initiator Initiator
  Boolean
  Initiator

isns.isnt.target Target
  Boolean
  Target

isns.member_fc_port_name Member FC Port Name
  Unsigned 32-bit integer
  Member FC Port Name

isns.member_iscsi_index Member iSCSI Index
  Unsigned 32-bit integer
  Member iSCSI Index

isns.member_portal_index Member Portal Index
  Unsigned 32-bit integer
  Member Portal Index

isns.mgmt.ip_address Management IP Address
  IPv6 address
  Management IPv4/IPv6 Address

isns.node.index Node Index
  Unsigned 32-bit integer
  Node Index

isns.node.ip_address Node IP Address
  IPv6 address
  Node IPv4/IPv6 Address

isns.node.next_index Node Next Index
  Unsigned 32-bit integer
  Node INext ndex

isns.node.symbolic_name Symbolic Node Name
  String
  Symbolic name of this node
```

```
isns.node_ipa  Node IPA
  Unsigned 64-bit integer
  Node IPA

isns.not_decoded_yet  Not Decoded Yet
  No value
  This tag is not yet decoded by wireshark

isns.payload  Payload
  Byte array
  Payload

isns.pdulength  PDU Length
  Unsigned 16-bit integer
  iSNS PDU Length

isns.permanent_port_name  Permanent Port Name
  Unsigned 64-bit integer
  Permanent Port Name

isns.pg.portal_port  PG Portal Port
  Unsigned 32-bit integer
  PG Portal TCP/UDP Port

isns.pg_index  PG Index
  Unsigned 32-bit integer
  PG Index

isns.pg_iscsi_name  PG iSCSI Name
  String
  PG iSCSI Name

isns.pg_next_index  PG Next Index
  Unsigned 32-bit integer
  PG Next Index

isns.pg_portal.ip_address  PG Portal IP Address
  IPv6 address
  PG Portal IPv4/IPv6 Address

isns.port.ip_address  Port IP Address
  IPv6 address
  Port IPv4/IPv6 Address

isns.port.port_type  Port Type
  Boolean
  Port Type

isns.port.symbolic_name  Symbolic Port Name
  String
  Symbolic name of this port

isns.port_id  Port ID
  Unsigned 24-bit integer
  Port ID

isns.portal.index  Portal Index
  Unsigned 32-bit integer
  Portal Index

isns.portal.ip_address  Portal IP Address
  IPv6 address
  Portal IPv4/IPv6 Address
```

```
isns.portal.next_index  Portal Next Index
    Unsigned 32-bit integer
    Portal Next Index

isns.portal.symbolic_name  Portal Symbolic Name
    String
    Symbolic name of this portal

isns.portal_group_tag  PG Tag
    Unsigned 32-bit integer
    Portal Group Tag

isns.portal_port  Portal Port
    Unsigned 32-bit integer
    TCP/UDP Portal Port

isns.preferred_id  Preferred ID
    Unsigned 32-bit integer
    Preferred ID

isns.proxy_iscsi_name  Proxy iSCSI Name
    String
    Proxy iSCSI Name

isns.psb  Portal Security Bitmap
    Unsigned 32-bit integer
    Portal Security Bitmap

isns.psb.aggressive_mode  Aggressive Mode
    Boolean
    Aggressive Mode

isns.psb.bitmap  Bitmap
    Boolean
    Bitmap

isns.psb.ike_ipsec  IKE/IPSec
    Boolean
    IKE/IPSec

isns.psb.main_mode  Main Mode
    Boolean
    Main Mode

isns.psb.pfs  PFS
    Boolean
    PFS

isns.psb.transport  Transport Mode
    Boolean
    Transport Mode

isns.psb.tunnel  Tunnel Mode
    Boolean
    Tunnel Mode Preferred

isns.registration_period  Registration Period
    Unsigned 32-bit integer
    Registration Period in Seconds

isns.scn_bitmap  iSCSI SCN Bitmap
    Unsigned 32-bit integer
    iSCSI SCN Bitmap
```



```
isns.scn_bitmap.dd_dds_member_added  DD/DDS Member Added (Mgmt Reg/SCN only)
  Boolean
  DD/DDS Member Added (Mgmt Reg/SCN only)
isns.scn_bitmap.dd_dds_member_removed  DD/DDS Member Removed (Mgmt Reg/SCN only)
  Boolean
  DD/DDS Member Removed (Mgmt Reg/SCN only)
isns.scn_bitmap.initiator_and_self_information_only  Initiator And Self Informat
  Boolean
  Initiator And Self Information Only
isns.scn_bitmap.management_registration_scn  Management Registration/SCN
  Boolean
  Management Registration/SCN
isns.scn_bitmap.object_added  Object Added
  Boolean
  Object Added
isns.scn_bitmap.object_removed  Object Removed
  Boolean
  Object Removed
isns.scn_bitmap.object_updated  Object Updated
  Boolean
  Object Updated
isns.scn_bitmap.target_and_self_information_only  Target And Self Information On
  Boolean
  Target And Self Information Only
isns.scn_port  SCN Port
  Unsigned 32-bit integer
  TCP/UDP SCN Port
isns.sequenceid  Sequence ID
  Unsigned 16-bit integer
  iSNS sequence ID
isns.switch_name  Switch Name
  Unsigned 64-bit integer
  Switch Name
isns.timestamp  Timestamp
  Unsigned 64-bit integer
  Timestamp in Seconds
isns.transactionid  Transaction ID
  Unsigned 16-bit integer
  iSNS transaction ID
isns.virtual_fabric_id  Virtual Fabric ID
  String
  Virtual fabric ID
isns.wwnn_token  WWNN Token
  Unsigned 64-bit integer
  WWNN Token
```

**iTunes podCast rss elements (itunes)**

```
itunes.author    author
                String
itunes.block     block
                String
itunes.category  category
                String
itunes.category.text  text
                String
itunes.duration  duration
                String
itunes.explicit  explicit
                String
itunes.keywords  keywords
                String
itunes.owner     owner
                String
itunes.subtitle  subtitle
                String
itunes.summary   summary
                String
```

**poc-settings XML doc (RFC 4354) (poc-settings)**

```
poc-settings.am-settings  am-settings
                          String
poc-settings.am-settings.answer-mode  answer-mode
                          String
poc-settings.answer-mode  answer-mode
                          String
poc-settings.entity       entity
                          String
poc-settings.entity.am-settings  am-settings
                          String
poc-settings.entity.am-settings.answer-mode  answer-mode
                          String
poc-settings.entity.id      id
                          String
poc-settings.entity.ipab-settings  ipab-settings
                          String
poc-settings.entity.ipab-settings.incoming-personal-alert-barring  incoming-pers
                          String
poc-settings.entity.ipab-settings.incoming-personal-alert-barring.active  active
                          String
poc-settings.entity.isb-settings  isb-settings
                          String
```

```
poc-settings.entity.isb-settings.incoming-session-barring incoming-session-barr  
String  
poc-settings.entity.isb-settings.incoming-session-barring.active active  
String  
poc-settings.entity.sss-settings sss-settings  
String  
poc-settings.entity.sss-settings.simultaneous-sessions-support simultaneous-ses  
String  
poc-settings.entity.sss-settings.simultaneous-sessions-support.active active  
String  
poc-settings.incoming-personal-alert-barring incoming-personal-alert-barring  
String  
poc-settings.incoming-personal-alert-barring.active active  
String  
poc-settings.incoming-session-barring incoming-session-barring  
String  
poc-settings.incoming-session-barring.active active  
String  
poc-settings.ipab-settings ipab-settings  
String  
poc-settings.ipab-settings.incoming-personal-alert-barring incoming-personal-al  
String  
poc-settings.ipab-settings.incoming-personal-alert-barring.active active  
String  
poc-settings.isb-settings isb-settings  
String  
poc-settings.isb-settings.incoming-session-barring incoming-session-barring  
String  
poc-settings.isb-settings.incoming-session-barring.active active  
String  
poc-settings.simultaneous-sessions-support simultaneous-sessions-support  
String  
poc-settings.simultaneous-sessions-support.active active  
String  
poc-settings.sss-settings sss-settings  
String  
poc-settings.sss-settings.simultaneous-sessions-support simultaneous-sessions-s  
String  
poc-settings.sss-settings.simultaneous-sessions-support.active active  
String  
poc-settings.xmlns xmlns  
String
```

**presence XML doc (RFC 3863) (presence)**

```
presence.basic basic
  String
presence.contact contact
  String
presence.contact.priority priority
  String
presence.entity entity
  String
presence.note note
  String
presence.note.lang lang
  String
presence.status status
  String
presence.status.basic basic
  String
presence.timestamp timestamp
  String
presence.tuple tuple
  String
presence.tuple.contact contact
  String
presence.tuple.contact.priority priority
  String
presence.tuple.id id
  String
presence.tuple.note note
  String
presence.tuple.note.lang lang
  String
presence.tuple.status status
  String
presence.tuple.status.basic basic
  String
presence.tuple.timestamp timestamp
  String
presence.xmlns xmlns
  String
```

**rss (rss)**

```
rss.author author
  String
rss.category category
  String
```

```
rss.category.domain domain
    String
rss.channel channel
    String
rss.channel.cloud cloud
    String
rss.channel.cloud.domain domain
    String
rss.channel.cloud.path path
    String
rss.channel.cloud.port port
    String
rss.channel.cloud.protocol protocol
    String
rss.channel.cloud.registerprocedure registerprocedure
    String
rss.channel.copyright copyright
    String
rss.channel.description description
    String
rss.channel.docs docs
    String
rss.channel.image image
    String
rss.channel.image.description description
    String
rss.channel.image.height height
    String
rss.channel.image.link link
    String
rss.channel.image.title title
    String
rss.channel.image.url url
    String
rss.channel.image.width width
    String
rss.channel.item item
    String
rss.channel.item.author author
    String
rss.channel.item.category category
    String
rss.channel.item.category.domain domain
    String
```

```
rss.channel.item.comments  comments
    String
rss.channel.item.description  description
    String
rss.channel.item.enclosure  enclosure
    String
rss.channel.item.enclosure.length  length
    String
rss.channel.item.enclosure.type  type
    String
rss.channel.item.enclosure.url  url
    String
rss.channel.item.guid  guid
    String
rss.channel.item.guid.ispermalink  ispermalink
    String
rss.channel.item.link  link
    String
rss.channel.item.pubdate  pubdate
    String
rss.channel.item.source  source
    String
rss.channel.item.source.url  url
    String
rss.channel.item.title  title
    String
rss.channel.language  language
    String
rss.channel.lastbuilddate  lastbuilddate
    String
rss.channel.link  link
    String
rss.channel.managingeditor  managingeditor
    String
rss.channel.pubdate  pubdate
    String
rss.channel.rating  rating
    String
rss.channel.skipdays  skipdays
    String
rss.channel.skipdays.day  day
    String
rss.channel.skiphours  skiphours
    String
```

```
rss.channel.skiphours.hour  hour
    String
rss.channel.textinput  textinput
    String
rss.channel.textinput.description  description
    String
rss.channel.textinput.link  link
    String
rss.channel.textinput.name  name
    String
rss.channel.textinput.title  title
    String
rss.channel.title  title
    String
rss.channel.ttl  ttl
    String
rss.channel.webmaster  webmaster
    String
rss.cloud  cloud
    String
rss.cloud.domain  domain
    String
rss.cloud.path  path
    String
rss.cloud.port  port
    String
rss.cloud.protocol  protocol
    String
rss.cloud.registerprocedure  registerprocedure
    String
rss.comments  comments
    String
rss.copyright  copyright
    String
rss.day  day
    String
rss.description  description
    String
rss.docs  docs
    String
rss.enclosure  enclosure
    String
rss.enclosure.length  length
    String
```

```
rss.enclosure.type  type
    String
rss.enclosure.url  url
    String
rss.guid  guid
    String
rss.guid.ispermalink  ispermalink
    String
rss.height  height
    String
rss.hour  hour
    String
rss.image  image
    String
rss.image.description  description
    String
rss.image.height  height
    String
rss.image.link  link
    String
rss.image.title  title
    String
rss.image.url  url
    String
rss.image.width  width
    String
rss.item  item
    String
rss.item.author  author
    String
rss.item.category  category
    String
rss.item.category.domain  domain
    String
rss.item.comments  comments
    String
rss.item.description  description
    String
rss.item.enclosure  enclosure
    String
rss.item.enclosure.length  length
    String
rss.item.enclosure.type  type
    String
```



```
rss.item.enclosure.url url
    String
rss.item.guid guid
    String
rss.item.guid.ispermalink ispermalink
    String
rss.item.link link
    String
rss.item.pubdate pubdate
    String
rss.item.source source
    String
rss.item.source.url url
    String
rss.item.title title
    String
rss.language language
    String
rss.lastbuilddate lastbuilddate
    String
rss.link link
    String
rss.managingeditor managingeditor
    String
rss.name name
    String
rss.pubdate pubdate
    String
rss.rating rating
    String
rss.skipdays skipdays
    String
rss.skipdays.day day
    String
rss.skipthours skiphours
    String
rss.skipthours.hour hour
    String
rss.source source
    String
rss.source.url url
    String
rss.textinput textinput
    String
```

```
rss.textinput.description  description
    String
rss.textinput.link        link
    String
rss.textinput.name        name
    String
rss.textinput.title       title
    String
rss.title                 title
    String
rss.ttl                   ttl
    String
rss.url                   url
    String
rss.version               version
    String
rss.webmaster             webmaster
    String
rss.width                 width
    String
```

**watcherinfo XML doc (RFC 3858) (watcherinfo)**

```
watcherinfo.state        state
    String
watcherinfo.version      version
    String
watcherinfo.watcher      watcher
    String
watcherinfo.watcher-list watcher-list
    String
watcherinfo.watcher-list.package package
    String
watcherinfo.watcher-list.resource resource
    String
watcherinfo.watcher-list.watcher watcher
    String
watcherinfo.watcher-list.watcher.display-name display-name
    String
watcherinfo.watcher-list.watcher.duration-subscribed duration-subscribed
    String
watcherinfo.watcher-list.watcher.event event
    String
watcherinfo.watcher-list.watcher.expiration expiration
    String
```

```
watcherinfo.watcher-list.watcher.id id
    String
watcherinfo.watcher-list.watcher.status status
    String
watcherinfo.watcher.display-name display-name
    String
watcherinfo.watcher.duration-subscribed duration-subscribed
    String
watcherinfo.watcher.event event
    String
watcherinfo.watcher.expiration expiration
    String
watcherinfo.watcher.id id
    String
watcherinfo.watcher.status status
    String
watcherinfo.xmlns xmlns
    String
```

## NOTES

The **wireshark-filters** manpage is part of the **Wireshark** distribution. The latest version of **Wireshark** can be found at <<http://www.wireshark.org>>.

Regular expressions in the “matches” operator are provided with **libpcre**, the Perl-Compatible Regular Expressions library: see <http://www.pcre.org/>.

This manpage does not describe the capture filter syntax, which is different. See the manual page of *pcap-filter*(4) or, if that doesn't exist, *tcpdump*(8) for a description of capture filters. Microsoft Windows versions use WinPcap from <<http://www.winpcap.org/>> for which the capture filter syntax is described in <[http://www.winpcap.org/docs/man/html/group\\_\\_language.html](http://www.winpcap.org/docs/man/html/group__language.html)>.

## SEE ALSO

*wireshark*(1), *tshark*(1), *editcap*(1), *pcap-filter*(4), *tcpdump*(8), *pcap*(3)

## AUTHORS

See the list of authors in the **Wireshark** man page for a list of authors of that code.