Extreme SLX-OS MIB Reference, 20.7.3

Supporting ExtremeRouting and ExtremeSwitching
SLX 9740, SLX 9640, SLX 9540, SLX 9250, SLX 9150,
Extreme 8820, Extreme 8720, and Extreme 8520

9039526-00 Rev AA
December 2025



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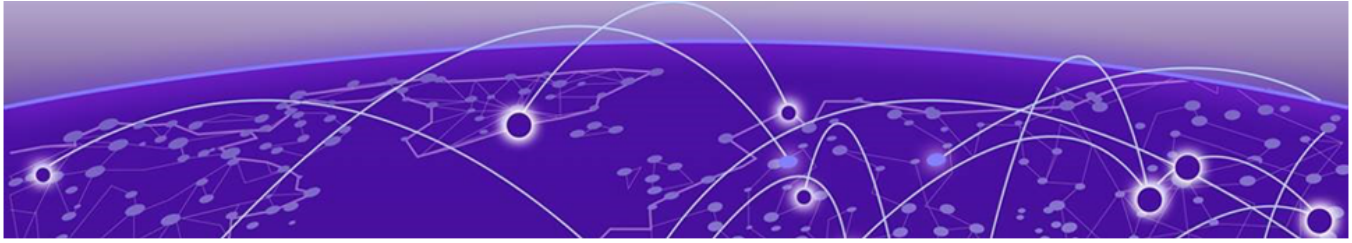

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Preface

Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.

Text Conventions

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as Extreme Networks switches, the product is referred to as *the switch*.

Table 1: Notes and warnings

Icon	Notice type	Alerts you to...
	Tip	Helpful tips and notices for using the product
	Note	Useful information or instructions
	Important	Important features or instructions
	Caution	Risk of personal injury, system damage, or loss of data
	Warning	Risk of severe personal injury

Table 2: Text

Convention	Description
`screen displays`	This typeface indicates command syntax, or represents information as it is displayed on the screen.
The words *enter* and *type*	When you see the word *enter* in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says *type*.
Key names	Key names are written in boldface, for example **Ctrl** or **Esc**. If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press **Ctrl**+**Alt**+**Del**
Words in italicized type	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
italic text	Italic text indicates variable content.
`[ ]`	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
`{ x | y | z }`	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
`x | y`	A vertical bar separates mutually exclusive elements.
`< >`	Nonprinting characters, such as passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, *member*`[`*member*`...]`.
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

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Find Extreme Networks product information at the following locations:

Current Product Documentation
Release Notes
Hardware and Software Compatibility for Extreme Networks products
Extreme Optics Compatibility
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If you require assistance, contact Extreme Networks using one of the following methods:

Extreme Portal

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The Hub

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2800. For the support phone number in your country, visit www.extremenetworks.com/support/contact.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

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3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

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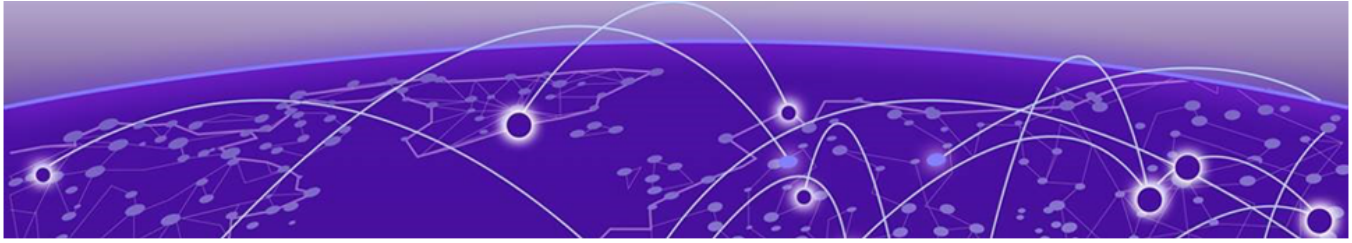
- Improvements that would help you find relevant information.
- Broken links or usability issues.

To send feedback, email us at Product-Documentation@extremenetworks.com.

Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.



About This Document

What's New in this Document on page 12
Supported Hardware on page 13

What's New in this Document

The following table includes descriptions of new information added to this document for the SLX-OS 20.7.3 software release.

Table 4: Changes for the current release

Feature	Description	Described in
Optical Monitoring Traps	New trap `bcsiIfOpticUnQualified` added for qualification status of optics.	`Optical Monitoring Traps`
Optical Lane Monitoring Table	New trap `bcsiOptMonLaneVoltageValue` added for storing the voltage value for the lane interface.	`Optical Lane Monitoring Table`
Optical Monitoring Information Table	New traps were added to this table: • `bcsiOptMonVoltageValue` • `bcsiOptMonTempratureEvent` • `bcsiOptMonVoltageEvent` • `bcsiOptMonTxPowerEvent` • `bcsiOptMonRxPowerEvent` • `bcsiOptMonTxBiasEvent` These traps enable monitoring of Optics parameters.	`Optical Monitoring Information Table`
Optical Media Information Table	New trap `bcsiIfIsMediaOpticQualifiedStatus` added for holding the value for the qualification status of an optic.	`Optical Media Information Table`

For additional information, refer to the *Extreme SLX-OS Release Notes* for this version.

Supported Hardware

For instances in which a topic or part of a topic applies to some devices but not to others, the topic specifically identifies the devices.

SLX-OS 20.7.3 supports the following hardware platforms.

- Extreme 8820
- Extreme 8720
- Extreme 8520
- ExtremeSwitching SLX 9540
- ExtremeSwitching SLX 9250
- ExtremeSwitching SLX 9150
- ExtremeRouting SLX 9740
- ExtremeRouting SLX 9640



Note

All configurations and software features that are applicable to SLX 9150 and SLX 9250 devices are also applicable for the Extreme 8520 and Extreme 8720 devices respectively.

All configurations and software features that are applicable to SLX 9740 devices are also applicable for the Extreme 8820 devices.

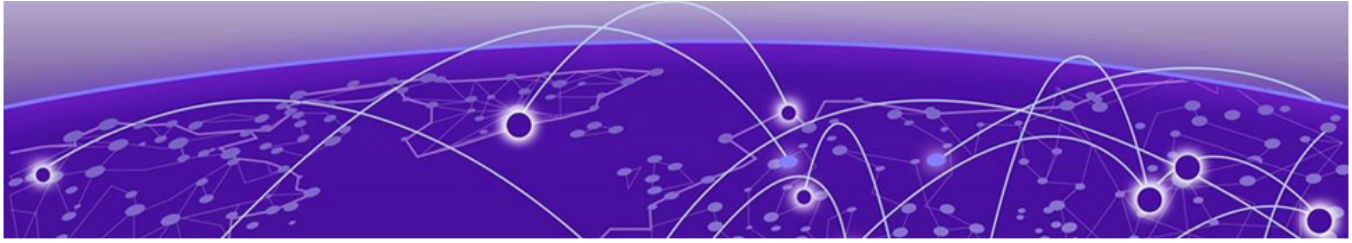
The "Measured Boot with Remote Attestation" feature is only applicable to the Extreme 8520, Extreme 8720, and Extreme 8820 devices. It is not supported on the SLX 9150 and SLX 9250 devices.



Note

Although many software and hardware configurations are tested and supported for this release, documenting all possible configurations and scenarios is beyond this document's scope.

For information about other releases, see the documentation for those releases.



Overview

Basic SNMP operation on page 15
Understanding MIBs on page 16
Standard MIBs on page 19
MIB loading order on page 21

Simple Network Management Protocol (SNMP) is a set of protocols for managing complex networks. SNMP protocols are application layer protocols. Using SNMP, devices within a network send messages, called protocol data units (PDUs), to different parts of a network. Network management using SNMP requires three components:

- SNMP Manager
- SNMP Agent
- Management Information Base (MIB)
- Port Information

SNMP Manager

The SNMP Manager can communicate to the devices within a network using SNMP. Typically, the SNMP Manager is a network management system (NMS) that manages networks by monitoring the network parameters, and optionally, setting parameters in managed devices. Normally, the SNMP Manager sends read requests to the devices that host the SNMP Agent, to which the SNMP Agent responds with the requested data. In some cases, the managed devices can initiate the communication, and send data to the SNMP Manager using asynchronous events called traps.

SNMP Agent

The SNMP Agent is a software that resides in the managed devices in the network, and collects data from these devices. Each device hosts an SNMP Agent. The SNMP Agent stores the data, and sends the data when requested by an SNMP Manager. In addition, the SNMP Agent can asynchronously alert the SNMP Manager about events by using special PDUs called traps.

Management information base

SNMP Agents in the managed devices store the data about these devices in a database called the management information base (MIB). The MIB is a hierarchical database,

which is structured on the standard specified in RFC 2578 (Structure of Management Information Version 2 [SMIv2]).

The MIB is a database of objects that can be used by a network management system to manage and monitor devices on the network. The MIB can be retrieved by a network management system that uses SNMP. The MIB structure determines the scope of management access allowed by a device. By using SNMP, a manager application can issue read or write operations within the scope of the MIB.

Port Information

The following table provides information on ports that the device uses. When configuring the switch for various policies, take into consideration firewalls and other devices that may sit between device and your network or between the managers and the device.

Table 5: Port Information

Port	Type	Common use	Comment
161	UDP	SNMP GET/SET/ GETNEXT/ BULK	Disable the SNMP service on the remote host if you do not use it, or filter incoming UDP packets going to this port.
162	UDP	SNMP TRAPS/INFORMS	Sends traps/informs. Uses CLI command “no snmp-server enable trap" to disable the SNMP trap service. For outgoing source port, the available port number is picked in the port range.

Basic SNMP operation

Every Extreme device carries an agent and management information base (MIB). The agent accesses information about a device and makes it available to an SNMP network management station.

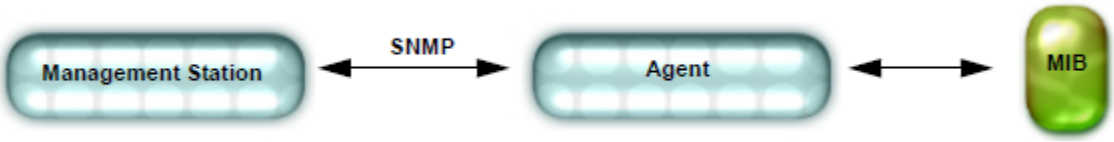


Figure 1: SNMP structure

When active, the management station can “get” information or “set” information when it queries an agent. SNMP commands, such as get, set, getnext, and getbulk, are sent from the management station, and the agent replies immediately and send traps/ notifications on any asynchronous events on the device. Agents use variables to report

such data as the number of bytes and packets in and out of the device, or the number of broadcast messages sent and received. These variables are also known as managed objects. All managed objects are contained in the MIB.

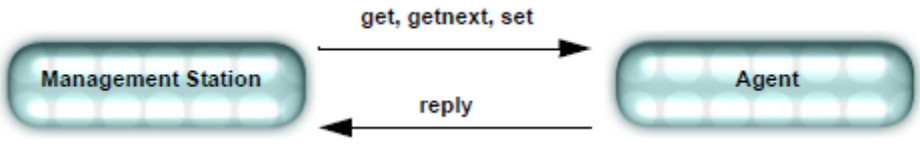


Figure 2: SNMP query

The management station can also receive traps, unsolicited messages from the switch agent, if an unusual event occurs.



Figure 3: SNMP trap

The agent can receive queries from one or more management stations and can send traps to up to six management stations.

Understanding MIBs

The management information base (MIB) is a database of monitored and managed information on an Extreme device. The MIB structure can be represented by a tree hierarchy. The root splits into three main branches: International Organization for Standardization (ISO), Consultative Committee for International Telegraph and Telephone (CCITT), and joint ISO/CCITT. These branches have short text strings and integers (OIDs) to identify them. Text strings describe object names, while integers allow software to create compact, encoded representations of the names.

Extreme MIB structure

Each MIB variable is assigned an object identifier (OID). The OID is the sequence of numeric labels on the nodes along a path from the root to the object. For example, as shown in the following figure, the sysDescr is:

```
1.3.6.1.2.1.1.1
```

The corresponding name is:

```
iso.org.dod.internet.mgmt.mib-2.system.sysDescr
```

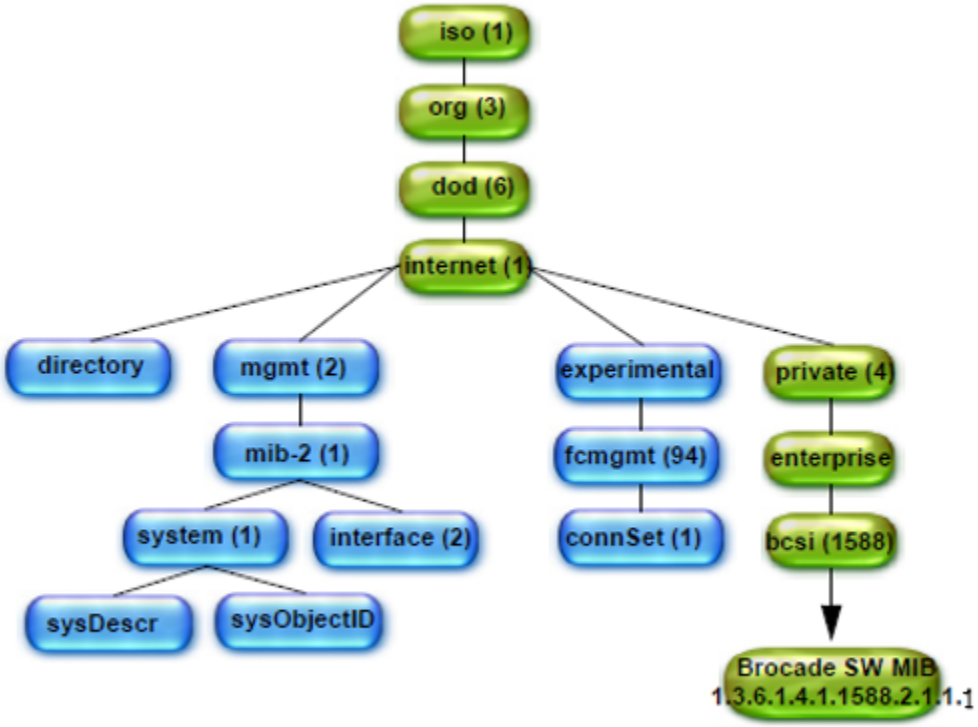
```
1.3.6.1.2.1.47
```

The corresponding name is:

```
iso.org.dod.internet.mgmt.mib-2.entityMIB
```

The other branches are part of the standard MIBs, and the portions relevant to configuring SNMP on an Extreme device are referenced in the remainder of this chapter.

Figure 4: Extreme MIB tree



Access to MIB variables

You can use a MIB browser to access the MIB variables. All MIB browsers load MIBs and perform queries.

Once loaded, MAX-ACCESS provides access levels between the agent and management station. The access levels are described in the following table.

Table 6: MIB access levels

Access level	Description
Not accessible/None	You cannot read or write to this variable.
Read-create	Specifies a tabular object that can be read, modified, or created as a new row in a table.
Read-only	You can only monitor information.

Table 6: MIB access levels (continued)

Access level	Description
Read-write	You can read or modify this variable.
Accessible-to-notify	You can read this information only through traps.

Extreme MIBs

The Extreme MIB is a set of variables that are private extensions to the Internet standard MIBs. The Extreme agents support many Internet-standard MIBs. These standard MIBs are defined in RFC publications. To find specific MIB information, examine the Extreme proprietary MIB structure and the standard RFC MIBs supported by Extreme.

Extreme MIB files

The Extreme MIB files are as follows:

- BRCD_TC.mib
- BROCADE-CONTEXT-MAPPING-MIB.mib
- BROCADE-IEEE8021-PAE-CAPABILITY-MIB.mib
- BROCADE-IEEE8023-LAG-CAPABILITY-MIB.mib
- BROCADE-LLDP-CAPABILITY-MIB.mib
- BROCADE-LLDP-EXT-DOT3-CAPABILITY-MIB.mib
- BROCADE-MPLS-MIB.mib
- BROCADE-OPTICAL-MONITORING-MIB.mib
- BROCADE-REG-MIB.mib
- BROCADE-UDLD-MIB.mib
- HA.mib
- SWBase.mib
- System.mib
- EXTREME-VLAN-MIB

Obtaining the Extreme MIBs

You can download the Extreme-specific MIB files required for this release from the downloads area of Extreme.com. To download the Extreme-specific MIBs from Extreme.com, you must have a user name and password. MIBs are located in the SLX-OS release folder on the portal.

Standard MIBs

Standard MIBs are distributed through Extreme by shipping a concatenated file for Standard MIBs and Enterprise MIBs. You can also download the following MIBs from http://www.oidview.com or http://www.ietf.org:

- BFD-MIB
- BGP4-MIB
- BRIDGE-MIB
- Brocade ACL MIB
- ENTITY-MIB
- HOST-RESOURCE-MIB
- IANA-ADDRESS-FAMILY-NUMBERS-MIB
- IANA-RTPROTO-MIB
- IANAifType-MIB
- LLDP-MIB
- LLDP-EXT-DOT3-MIB
- LLDP-EXT-DOT1-MIB
- OSPF-MIB
- PAE-MIB
- P-BRIDGE-MIB
- Q-BRIDGE-MIB
- RFC 2856: HCNUM-TC MIB
- RFC 2863: The Interfaces Group MIB
- RFC 3289: Management Information Base for the Differentiated Services Architecture
- RFC 3593: PerfHist-TC-MIB
- RFC 3705: HC-PerfHist-TC-MIB
- RFC 3811: MPLS-TC-STD-MIB DEFINITIONS
- RFC 3813: Multiprotocol Label Switching (MPLS) Label Switching Router (LSR) Management Information Base (MIB)
- RFC 3815: Definitions of Managed Objects for the Multiprotocol Label Switching (MPLS), Label Distribution Protocol (LDP)
- RFC 4001: INET-ADDRESS-MIB
- RFC 4292: IP Forwarding Table MIB
- RFC 4293: Management Information Base for the Internet Protocol (IP)
- RMON-MIB
- RSTP-MIB
- SFLOW-MIB
- SNMP CFMv1 and CFMv2 MIB
- SNMP-FRAMEWORK-MIB
- SNMP IP Tunnel MIB and RFC-2863 IF-MIB

- SNMP_MEF_SOAM_PM_MIB
- SNMPv2-MIB
- SNMPv2-TC
- SNMPv3-MIB
- SNMP-MPD-MIB
- SNMP-TARGET-MIB
- SNMP-NOTIFICATION-MIB
- SNMP-USER-BASED-SM-MIB
- SNMP-VIEW-BASED-ACM-MIB
- SNMP-COMMUNITY-MIB
- TCP-MIB
- UDP-MIB
- IF-MIB
- LLDP-MIB
- BRIDGE-MIB
- LLDP-EXT-DOT3-MIB
- LLDP-EXT-DOT1-MIB
- RSTP-MIB
- RFC1213-MIB
- IEEE8023-LAG-MIB
- Q-BRIDGE-MIB
- IEEE8021-PAE-MIB
- P-BRIDGE-MIB
- RMON-MIB
- SFlow-MIB
- ENTITY-MIB
- IP-FORWARD-MIB
- IP-MIB
- OSPF-MIB
- BGP4-MIB
- TCP-MIB
- UDP-MIB
- HOST-RESOURCE-MIB
- INET-ADDRESS-MIB
- IANAifType-MIB
- IANA-RTPROTO-MIB
- SNMPv2-PDU
- SNMPv2-TM
- SNMP-FRAMEWORK-MIB
- IANA-ADDRESS-FAMILY-NUMBERS-MIB

- FC-MGMT-MIB
- SNMP-COMMUNITY-MIB
- SNMP-MPD-MIB
- SNMP-TARGET-MIB
- SNMP-VIEW-BASED-ACM-MIB
- SNMP-NOTIFICATION-MIB
- SNMP-USER-BASED-SM-MIB

MIB loading order

Many MIBs use definitions that are defined in other MIBs. These definitions are listed in the IMPORTS section near the top of the MIB. When loading the Extreme MIBs, refer to the following table to ensure that any MIB dependencies are loading in the correct order. You can also go through the files in the . . . /mibs_loading/loading_order/ folder, which is obtained after the downoaded MIBs package file is unzipped.



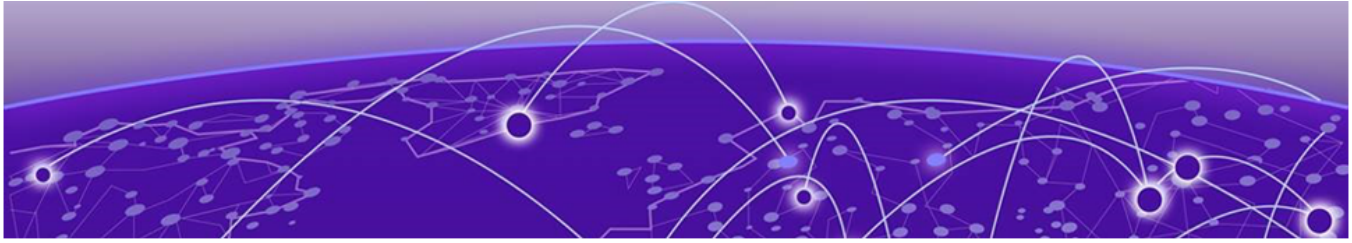
Note
Before loading the Extreme MIB files, ensure that you have the correct version of SNMP for the SLX-OS. All versions of SLX-OS support SNMPv1, SNMPv2c, and SNMPv3. SNMPv2c informs are not supported.

Table 7: Extreme SNMP MIB dependencies

MIB Name	Dependencies
Brocade-REG.mib	SNMPv2-SMI MIB
Brocade-TC.mib	Brocade-REG-MIB SNMPv2-TC SNMPv2-SMI
SWBASE-MIB.mib	SNMPv2-TC SNMPv2-SMI Brocade-REG-MIB
SYSTEM-MIB.mib	SNMPv2-TC Brocade-TC SWBASE-MIB
HA.mib	SNMPv2-SMI Brocade-REG-MIB SYSTEM-MIB ENTITY-MIB SNMPv2-TC
BROCADE-OPTICAL-MONITORING-MIB.mib	SNMPv2-SMI SNMPv2-CONF SNMPv2-TC SNMP-FRAMEWORK-MIB IF-MIB Brocade-REG-MIB

Table 7: Extreme SNMP MIB dependencies (continued)

MIB Name	Dependencies
BROCADE-UDLD-MIB.mib	SNMPv2-SMI SNMPv2-CONF SNMPv2-TC SNMP-FRAMEWORK-MIB IF-MIB Brocade-REG-MIB
BROCADE-CONTEXT-MAPPING-MIB.mib	SNMPv2-SMI SNMPv2-CONF SNMP-FRAMEWORK-MIB SNMPv2-TC Brocade-REG-MIB
BROCADE-MPLS-MIB.mib	SNMPv2-SMI SNMPv2-TC SNMPv2-TC MPLS-TC-STD-MIB Brocade-REG-MIB
BROCADE-INTERFACE-STATS-MIB.mib	SNMPv2-SMI SNMPv2-TC HCNUM-TC IF-MIB Brocade-REG-MIB
BROCADE-MODULE-CPU-UTIL-MIB.mib	SNMPv2-SMI Brocade-REG-MIB
BROCADE-MODULE-MEM-UTIL-MIB.mib	SNMPv2-SMI Brocade-REG-MIB
BROCADE-TCAM-MIB.mib	SNMPv2-SMI SNMPv2-TC Brocade-REG-MIB
BROCADE-TMSTATS-MIB.mib	SNMPv2-SMI IF-MIB Brocade-REG-MIB



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802.3ah OAM MIB on page 36
BFD MIB on page 79
Bridge MIB on page 82
Definitions of Managed Objects for BGP-4 on page 84
Entity MIB (Version 3) on page 88
Ethernet-like MIB on page 89
Host Resource MIB on page 92
IANA-ADDRESS-FAMILY-NUMBERS-MIB on page 93
IANAifType-MIB on page 94
IANA-RTPROTO-MIB on page 95
Interface group MIB on page 96
IP Forwarding MIB on page 97
IP MIB on page 98
IS-IS MIB on page 100
LAG MIB on page 102
LLDP MIB on page 103
LLDP-EXT-DOT1 MIB on page 104
LLDP-EXT-DOT3 MIB on page 105
MEF Service OAM PM MIB on page 106
MIB for the Transmission Control Protocol on page 137
MIB for the User Datagram Protocol on page 138
MPLS MIB on page 139
OSPF MIB on page 143
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RMON MIB on page 149
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OSPFv3 MIB

The SNMP agent supports Get, Get-next, and Get-Bulk requests on the OSPFv3 MIB. SNMP SET requests are not supported. The OSPFv3 MIB is based on RFC 5643.



Note
OSPFv3 MIB is VRF-aware.

ospfv3GeneralGroup

The SNMP agent supports GET, GET-NEXT, and GET-Bulk requests on the OSPFv3 MIB.

ospfv3GeneralGroup

Objects name	Object identifiers	Supported
ospfv3RouterId	1.3.6.1.2.1.191.1.1.1	Yes
ospfv3AdminStatus	1.3.6.1.2.1.191.1.1.2	Yes
ospfv3VersionNumber	1.3.6.1.2.1.191.1.1.3	Yes
ospfv3AreaBdrRtrStatus	1.3.6.1.2.1.191.1.1.4	Yes
ospfv3ASBdrRtrStatus	1.3.6.1.2.1.191.1.1.5	Yes
ospfv3AsScopeLsaCount	1.3.6.1.2.1.191.1.1.6	Yes
ospfv3AsScopeLsaCksumSum	1.3.6.1.2.1.191.1.1.7	Yes
ospfv3OriginateNewLsas	1.3.6.1.2.1.191.1.1.8	No
ospfv3RxNewLsas	1.3.6.1.2.1.191.1.1.9	No
ospfv3ExtLsaCount	1.3.6.1.2.1.191.1.1.10	Yes
ospfv3ExtAreaLsdbLimit	1.3.6.1.2.1.191.1.1.11	Yes
ospfv3ExitOverflowInterval	1.3.6.1.2.1.191.1.1.12	Yes
ospfv3DemandExtensions	1.3.6.1.2.1.191.1.1.13	No
ospfv3ReferenceBandwidth	1.3.6.1.2.1.191.1.1.14	Yes
ospfv3RestartSupport	1.3.6.1.2.1.191.1.1.15	No
ospfv3RestartInterval	1.3.6.1.2.1.191.1.1.16	No
ospfv3RestartStrictLsaChecking	1.3.6.1.2.1.191.1.1.17	No
ospfv3RestartStatus	1.3.6.1.2.1.191.1.1.18	No
ospfv3RestartAge	1.3.6.1.2.1.191.1.1.19	No

Objects name	Object identifiers	Supported
ospfv3RestartExitReason	1.3.6.1.2.1.191.1.1.20	No
ospfv3NotificationEnable	1.3.6.1.2.1.191.1.1.21	Yes
ospfv3StubRouterSupport	1.3.6.1.2.1.191.1.1.22	No
ospfv3StubRouterAdvertisement	1.3.6.1.2.1.191.1.1.23	No
ospfv3DiscontinuityTime	1.3.6.1.2.1.191.1.1.24	No
ospfv3RestartTime	1.3.6.1.2.1.191.1.1.25	No

ospfv3Area Table

This table contains information of various areas. The interfaces and virtual links are configured as part of these areas. Area 0, by definition, is the backbone area.

ospfv3Area Table

Objects name	Object identifiers	Supported
ospfv3AreaId	1.3.6.1.2.1.191.1.2.1.1	Yes (Index)
ospfv3AreaImportAsExtern	1.3.6.1.2.1.191.1.2.1.2	Yes
ospfv3AreaSpfRuns	1.3.6.1.2.1.191.1.2.1.3	Yes
ospfv3AreaBdrRtrCount	1.3.6.1.2.1.191.1.2.1.4	No
ospfv3AreaAsBdrRtrCount	1.3.6.1.2.1.191.1.2.1.5	No
ospfv3AreaScopeLsaCount	1.3.6.1.2.1.191.1.2.1.6	Yes
ospfv3AreaScopeLsaCksumSum	1.3.6.1.2.1.191.1.2.1.7	Yes
ospfv3AreaSummary	1.3.6.1.2.1.191.1.2.1.8	No
ospfv3AreaRowStatus	1.3.6.1.2.1.191.1.2.1.9	No
ospfv3AreaStubMetric	1.3.6.1.2.1.191.1.2.1.10	Yes
ospfv3AreaNssaTranslatorRole	1.3.6.1.2.1.191.1.2.1.11	Yes
ospfv3AreaNssaTranslatorState	1.3.6.1.2.1.191.1.2.1.12	Yes
ospfv3AreaNssaTranslatorStabInterval	1.3.6.1.2.1.191.1.2.1.13	No
ospfv3AreaNssaTranslatorEvents	1.3.6.1.2.1.191.1.2.1.14	No
ospfv3AreaStubMetricType	1.3.6.1.2.1.191.1.2.1.15	No
ospfv3AreaTEEnabled	1.3.6.1.2.1.191.1.2.1.16	No

ospfv3AsLsdb Table

This table contains information regarding AS-Scope Link State Database.

ospfv3AsLsdb Table

Objects name	Object identifiers	Supported
ospfv3AsLsdbType	1.3.6.1.2.1.191.1.3.1.1	Yes (Index)
ospfv3AsLsdbRouterId	1.3.6.1.2.1.191.1.3.1.2	Yes (Index)
ospfv3AsLsdbLsid	1.3.6.1.2.1.191.1.3.1.3	Yes (Index)
ospfv3AsLsdbSequence	1.3.6.1.2.1.191.1.3.1.4	Yes
ospfv3AsLsdbAge	1.3.6.1.2.1.191.1.3.1.5	Yes
ospfv3AsLsdbChecksum	1.3.6.1.2.1.191.1.3.1.6	Yes
ospfv3AsLsdbAdvertisement	1.3.6.1.2.1.191.1.3.1.7	Yes
ospfv3AsLsdbTypeKnown	1.3.6.1.2.1.191.1.3.1.8	Yes

ospfv3AreaLsdb Table

This table contains information regarding the Area-Scope Link State Database.

ospfv3AreaLsdb Table

Objects name	Object identifiers	Supported
ospfv3AreaLsdbAreaId	1.3.6.1.2.1.191.1.4.1.1	Yes (Index)
ospfv3AreaLsdbType	1.3.6.1.2.1.191.1.4.1.2	Yes (Index)
ospfv3AreaLsdbRouterId	1.3.6.1.2.1.191.1.4.1.3	Yes (Index)
ospfv3AreaLsdbLsid	1.3.6.1.2.1.191.1.4.1.4	Yes (Index)
ospfv3AreaLsdbSequence	1.3.6.1.2.1.191.1.4.1.5	Yes
ospfv3AreaLsdbAge	1.3.6.1.2.1.191.1.4.1.6	Yes
ospfv3AreaLsdbzCheckSum	1.3.6.1.2.1.191.1.4.1.7	Yes
ospfv3AreaLsdbAdvertisement	1.3.6.1.2.1.191.1.4.1.8	Yes
ospfv3AreaLsdbTypeKnown	1.3.6.1.2.1.191.1.4.1.9	Yes

ospfv3LinkLsdb Table

This table contains information regarding the Link-Scope Link State Database, for non-virtual interfaces.

ospfv3AreaLsdb Table

Objects name	Object identifiers	Supported
ospfv3LinkLsdbIfIndex	1.3.6.1.2.1.191.1.5.1.1	Yes (Index)
ospfv3LinkLsdbIfInstId	1.3.6.1.2.1.191.1.5.1.2	Yes (Index)
ospfv3LinkLsdbType	1.3.6.1.2.1.191.1.5.1.3	Yes (Index)
ospfv3LinkLsdbRouterId	1.3.6.1.2.1.191.1.5.1.4	Yes (Index)
ospfv3LinkLsdbLsid	1.3.6.1.2.1.191.1.5.1.5	Yes
ospfv3LinkLsdbSequence	1.3.6.1.2.1.191.1.5.1.6	Yes
ospfv3LinkLsdbAge	1.3.6.1.2.1.191.1.5.1.7	Yes
ospfv3LinkLsdbChecksum	1.3.6.1.2.1.191.1.5.1.8	Yes
ospfv3LinkLsdbAdvertisement	1.3.6.1.2.1.191.1.5.1.9	Yes
ospfv3LinkLsdbTypeKnown	1.3.6.1.2.1.191.1.5.1.10	Yes

ospfv3If Table

This table contains information regarding the OSPFv3-enabled interfaces of the router.

ospfv3If Table

Objects name	Object identifiers	Supported
ospfv3IfIndex	1.3.6.1.2.1.191.1.7.1.1	Yes (Index)
ospfv3IfInstId	1.3.6.1.2.1.191.1.7.1.2	Yes (Index)
ospfv3IfAreaId	1.3.6.1.2.1.191.1.7.1.3	Yes
ospfv3IfType	1.3.6.1.2.1.191.1.7.1.4	Yes
ospfv3IfAdminStatus	1.3.6.1.2.1.191.1.7.1.5	Yes
ospfv3IfRtrPriority	1.3.6.1.2.1.191.1.7.1.6	Yes
ospfv3IfTransitDelay	1.3.6.1.2.1.191.1.7.1.7	Yes
ospfv3IfRetransInterval	1.3.6.1.2.1.191.1.7.1.8	No
ospfv3IfHelloInterval	1.3.6.1.2.1.191.1.7.1.9	No
ospfv3IfRtrDeadInterval	1.3.6.1.2.1.191.1.7.1.10	Yes
ospfv3IfPollInterval	1.3.6.1.2.1.191.1.7.1.11	No
ospfv3IfState	1.3.6.1.2.1.191.1.7.1.12	Yes
ospfv3IfDesignatedRouter	1.3.6.1.2.1.191.1.7.1.13	No
ospfv3IfBackupDesignated Router	1.3.6.1.2.1.191.1.7.1.14	Yes
ospfv3IfEvents	1.3.6.1.2.1.191.1.7.1.15	No
ospfv3IfRowStatus	1.3.6.1.2.1.191.1.7.1.16	Yes
ospfv3IfDemand	1.3.6.1.2.1.191.1.7.1.17	No
ospfv3IfMetricValue	1.3.6.1.2.1.191.1.7.1.18	Yes
ospfv3IfLinkScopeLsaCount	1.3.6.1.2.1.191.1.7.1.19	Yes

Objects name	Object identifiers	Supported
ospfv3IfLinkLsaCksumSum	1.3.6.1.2.1.191.1.7.1.20	No
ospfv3IfDemandNbrProbe	1.3.6.1.2.1.191.1.7.1.21	Yes
ospfv3IfDemandNbrProbeRetransLimit	1.3.6.1.2.1.191.1.7.1.22	No
ospfv3IfDemandNbrProbeInterval	1.3.6.1.2.1.191.1.7.1.23	No
ospfv3IfTEDisabled	1.3.6.1.2.1.191.1.7.1.24	No
ospfv3IfLinkLSASuppression	1.3.6.1.2.1.191.1.7.1.25	Yes

ospfv3VirtIf Table

This table contains information regarding the router virtual interfaces for OSPFv3.

ospfv3VirtIf Table

Objects name	Object identifiers	Supported
ospfv3VirtIfAreaId	1.3.6.1.2.1.191.1.8.1.1	Yes (Index)
ospfv3VirtIfNeighbor	1.3.6.1.2.1.191.1.8.1.2	Yes
ospfv3VirtIfIndex	1.3.6.1.2.1.191.1.8.1.3	Yes
ospfv3VirtIfInstId	1.3.6.1.2.1.191.1.8.1.4	No
ospfv3VirtIfTransitDelay	1.3.6.1.2.1.191.1.8.1.5	No
ospfv3VirtIfRetransInterval	1.3.6.1.2.1.191.1.8.1.6	Yes
ospfv3VirtIfHelloInterval	1.3.6.1.2.1.191.1.8.1.7	Yes
ospfv3VirtIfRtrDeadInterval	1.3.6.1.2.1.191.1.8.1.8	No
ospfv3VirtIfState	1.3.6.1.2.1.191.1.8.1.9	No
ospfv3VirtIfEvents	1.3.6.1.2.1.191.1.8.1.10	No
ospfv3VirtIfRowStatus	1.3.6.1.2.1.191.1.8.1.11	Yes
ospfv3VirtIfLinkScopeLsaCount	1.3.6.1.2.1.191.1.8.1.12	Yes
ospfv3VirtIfLinkLsaCksumSum	1.3.6.1.2.1.191.1.8.1.13	No

ospfv3NbrTable

The following table lists the OSPFv3 neighbor MIBs.

Object	Object identifier	Supported?
ospfv3NbrIfIndex	1.3.6.1.2.1.191.1.9.1.1	Yes
ospfv3NbrIfInstId	1.3.6.1.2.1.191.1.9.1.2	Yes
ospfv3NbrRtrId	1.3.6.1.2.1.191.1.9.1.3	Yes
ospfv3NbrAddressType	1.3.6.1.2.1.191.1.9.1.4	Yes
ospfv3NbrAddress	1.3.6.1.2.1.191.1.9.1.5	Yes

Object	Object identifier	Supported?
ospfv3NbrOptions	1.3.6.1.2.1.191.1.9.1.6	Yes
ospfv3NbrPriority	1.3.6.1.2.1.191.1.9.1.7	Yes
ospfv3NbrState	1.3.6.1.2.1.191.1.9.1.8	Yes
ospfv3NbrEvents	1.3.6.1.2.1.191.1.9.1.9	Yes
ospfv3NbrLsRetransQLen	1.3.6.1.2.1.191.1.9.1.10	yes
ospfv3NbrHelloSuppressed	1.3.6.1.2.1.191.1.9.1.11	No
ospfv3NbrIfId	1.3.6.1.2.1.191.1.9.1.12	Yes
ospfv3NbrRestartHelperStatus	1.3.6.1.2.1.191.1.9.1.13	Yes
ospfv3NbrRestartHelperAge	1.3.6.1.2.1.191.1.9.1.14	No
ospfv3NbrRestartHelperExitReason	1.3.6.1.2.1.191.1.9.1.15	No

ospfv3VirtNbrTable

The following table lists the OSPFv3 Virtual Neighbor MIB objects.

Object	Object identifier	Supported?
ospfv3VirtNbrArea	1.3.6.1.2.1.191.1.11.1.1	Yes
ospfv3VirtNbrRtrId	1.3.6.1.2.1.191.1.11.1.2	Yes
ospfv3VirtNbrIfIndex	1.3.6.1.2.1.191.1.11.1.3	Yes
ospfv3VirtNbrIfInstId	1.3.6.1.2.1.191.1.11.1.4	Yes
ospfv3VirtNbrAddressType	1.3.6.1.2.1.191.1.11.1.5	Yes
ospfv3VirtNbrAddress	1.3.6.1.2.1.191.1.11.1.6	Yes
ospfv3VirtNbrOptions	1.3.6.1.2.1.191.1.11.1.7	Yes
ospfv3VirtNbrState	1.3.6.1.2.1.191.1.11.1.8	Yes
ospfv3VirtNbrEvents	1.3.6.1.2.1.191.1.11.1.9	No
ospfv3VirtNbrLsRetransQLen	1.3.6.1.2.1.191.1.11.1.10	yes
ospfv3VirtNbrHelloSuppressed	1.3.6.1.2.1.191.1.11.1.11	No
ospfv3VirtNbrIfId	1.3.6.1.2.1.191.1.11.1.12	Yes
ospfv3VirtNbrRestartHelperStatus	1.3.6.1.2.1.191.1.11.1.13	Yes
ospfv3VirtNbrRestartHelperAge	1.3.6.1.2.1.191.1.11.1.14	No
ospfv3VirtNbrRestartHelperExitReason	1.3.6.1.2.1.191.1.11.1.15	No

ospfv3AreaAggregateTable

The following table lists the OSPFv3 area aggregate table MIB objects.

Object	Object identifier	Supported?
ospfv3AreaAggregateAreaID	1.3.6.1.2.1.191.1.12.1.1	Yes
ospfv3AreaAggregateAreaLsdbType	1.3.6.1.2.1.191.1.12.1.2	Yes
ospfv3AreaAggregatePrefixType	1.3.6.1.2.1.191.1.12.1.3	Yes
ospfv3AreaAggregatePrefix	1.3.6.1.2.1.191.1.12.1.4	Yes
ospfv3AreaAggregatePrefixLength	1.3.6.1.2.1.191.1.12.1.5	Yes
ospfv3AreaAggregateRowStatus	1.3.6.1.2.1.191.1.12.1.6	Yes
ospfv3AreaAggregateEffect	1.3.6.1.2.1.191.1.12.1.7	Yes
ospfv3AreaAggregateRouteTag	1.3.6.1.2.1.191.1.12.1.8	No

ospfv3VirtLinkLsdbTable

The following table lists the OSPFv3 virtual link LSDB table MIB objects.

Object	Object identifier	Supported?
ospfv3VirtLinkLsdbIfAreaId	1.3.6.1.2.1.191.1.13.1.1	Yes
ospfv3VirtLinkLsdbIfNeighbor	1.3.6.1.2.1.191.1.13.1.2	Yes
ospfv3VirtLinkLsdbType	1.3.6.1.2.1.191.1.13.1.3	Yes
ospfv3VirtLinkLsdbRouterId	1.3.6.1.2.1.191.1.13.1.4	Yes
ospfv3VirtLinkLsdbLsid	1.3.6.1.2.1.191.1.13.1.5	Yes
ospfv3VirtLinkLsdbSequence	1.3.6.1.2.1.191.1.13.1.6	Yes
ospfv3VirtLinkLsdbAge	1.3.6.1.2.1.191.1.13.1.7	Yes
ospfv3VirtLinkLsdbChecksum	1.3.6.1.2.1.191.1.13.1.8	Yes
ospfv3VirtLinkLsdbAdvertisement	1.3.6.1.2.1.191.1.13.1.9	Yes
ospfv3VirtLinkLsdbTypeKnown	1.3.6.1.2.1.191.1.13.1.10	Yes

ospfv3Notifications

The following table lists the OSPFv3 notifications.

Object	Object identifier	Supported?
ospfv3VirtIfStateChange	1.3.6.1.2.1.191.0.1	Yes
ospfv3NbrStateChange	1.3.6.1.2.1.191.0.2	Yes
ospfv3VirtNbrStateChange	1.3.6.1.2.1.191.0.3	Yes
ospfv3IfConfigError	1.3.6.1.2.1.191.0.4	Yes
ospfv3VirtIfConfigError	1.3.6.1.2.1.191.0.5	Yes
ospfv3IfRxBadPacket	1.3.6.1.2.1.191.0.6	Yes
ospfv3VirtIfRxBadPacket	1.3.6.1.2.1.191.0.7	Yes
ospfv3LsdbOverflow	1.3.6.1.2.1.191.0.8	Yes
ospfv3LsdbApproachingOverflow	1.3.6.1.2.1.191.0.9	Yes
ospfv3IfStateChange	1.3.6.1.2.1.191.0.10	Yes
ospfv3NssaTranslatorStatusChange	1.3.6.1.2.1.191.0.11	Yes
ospfv3RestartStatusChange	1.3.6.1.2.1.191.0.12	No
ospfv3NbrRestartHelperStatusChange	1.3.6.1.2.1.191.0.13	No
ospfv3VirtNbrRestartHelperStatusChange	1.3.6.1.2.1.191.0.14	No

ospfv3NotificationEntry

The following table lists the objects used for notifications.

Object	Object identifier	Supported?
ospfv3ConfigErrorType	1.3.6.1.2.1.191.1.14.1	Yes
ospfv3PacketType	1.3.6.1.2.1.191.1.14.2	Yes
ospfv3PacketSrc	1.3.6.1.2.1.191.1.14.3	Yes

802.3ah OAM MIB

The SNMP agent supports Get, Get-next, and Get-Bulk requests on the OAMDot3 MIB. SNMP SET requests are not supported.

The 802.3ah OAM MIB is defined here: https://tools.ietf.org/html/rfc4878 . This MIB defines objects for managing This MIB defines objects for managing Operations, Administration, and Maintenance (OAM) capabilities on Ethernet-like interfaces.

dot3OamTable

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamAdminState OID: dot3OamEntry.1 SYNTAX: INTEGER MAX-ACCESS: Read Only	This object is used to provision the default administrative OAM mode for this interface This object represents the desired state of OAM for this interface. The dot3OamAdminState always starts in the disabled (2) state until an explicit management action or configuration information retained by the system causes a transition to the enabled (1) state. When enabled (1), Ethernet OAM will attempt to operate over this interface.	enabled(1), disabled(2)	Yes
dot3OamAdminState OID: dot3OamEntry.2 SYNTAX: INTEGER MAX-ACCESS: Read Only	At initialization and failure conditions, two OAM entities on the same full-duplex Ethernet link begin a discovery phase to determine what OAM capabilities may be used on that link. The progress of this initialization is controlled by the OAsublayer. This value is always disabled (1) if OAM is disabled on this interface via the dot3OamAdminState.If the link has detected a fault and is transmitting	disabled(1), linkFault(2), passiveWait(3), activeSendLocal(4), sendLocalAndRemote(5), sendLocalAndRemoteOk(6), oamPeeringLocallyRejected(7), oamPeeringRemotelyRejected(8), operational(9), nonOperHalfDuplex(10	Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	OAMPDUs with a link fault indication, the value is linkFault(2).Also, if the interface is not operational (ifOperStatus is not up(1)), linkFault(2) is returned. Note that the object ifOperStatus may not be up(1) as a result of link failure or administrative action (ifAdminState being down(2) ortesting(3)).The passiveWait(3) state is returned only by OAM entities in passive mode (dot3OamMode) and reflects the state in which the OAM entity is waiting to see if the peer device is OA capable. The activeSendLocal(4) value is used by active mode devices (dot3OamMode) and reflects the OAM entity actively trying to discover whether the peer has OAM capability but hasnot yet made that determination. The state sendLocalAndRemote(5) reflects that the local OAentity has discovered the peer but has not yet accepted or		

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	rejected the configuration of the peer. The local device can, for whatever reason, decide that the peer device is unacceptable and decline OAM peering. If the local OAM entity rejects the peer OAM entity, the state becomes oamPeeringLocallyRejected(7). If the OAM peering is allowed by the local device, the state moves to sendLocalAndRemoteOk(6). Note that both the sendLocalAndRemote(5) and oamPeeringLocallyRejected(7) states within the state SEND_LOCAL_REMOTE of the Discovery state diagram [802.3ah, Figure 57-5], with the difference beingwhether the local OAM client has actively rejected the peeringor has just not indicated any decision yet. Whether a peering decision has been made is indicated via the local flags field in the OAMPDU (reflected in the aOAMLocalFlagsField of 30.3.6.1.10). If the remote OAM entity rejects the peering, the state		

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	becomes oamPeeringRemotelyRejected(8)Note that both the sendLocalAndRemoteOk(6) and oamPeeringRemotelyRejected(8) states fall within the state SEND_LOCAL_REMOTE_OK of the Discovery state diagram [802.3ah, Figure 57-5], with the difference being whether the remote OAM client has rejectedthe peering or has just not yet decided. This is indicated via the remote flags field in the OAMPDU (reflected in the aOAMRemoteFlagsField of 30.3.6.1.11). When the local OAM entity learns that both it and the remote OAM entity have accepted the peering, the state moves to operational(9) corresponding to the SEND_ANY state of the Discovery state diagram [802.3ah, Figure 57-5].Since Ethernet OAM functions are not designed to work completely over half-duplex interfaces, the value nonOperHalfDuplex(10) is returned whenever		

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	Ethernet OAM is enabled (dot3OamAdminState is enabled(1)), but the interface is in half-duplex operation.		
dot3OamAdminState OID: dot3OamEntry.3 SYNTAX: INTEGER MAX-ACCESS: Read Only	This object configures the mode of OAM operation for this Ethernet-like interface. OAM on Ethernet interfaces may be in 'active' mode or 'passive' mode. These two modes differ in that active mode provides additional capabilities to initiate monitoring activities with the remote OAM peer entity, while passive mode generally waits for the peer to initiate OA actions with it.	passive(1), active(2)	Yes
dot3OamMaxOamPduSize OID: dot3OamEntry.4 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The largest OAMPDU that the OAM entity supports. OA entities exchange maximum OAMPDU sizes and negotiate to use the smaller of the two maximum OAMPDU sizes between the peers.	64..1518	Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamConfigRevision OID: dot3OamEntry.5 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The configuration revision of the OAM entity as reflected in the latest OAMPDU sent by the OAM entity. The configuration revision is used by OAM entities to indicate that configuration changes have occurred, which might require the peer OAM entity to re-evaluate whether OAM peering is allowed.	0..65535	Yes
dot3OamFunctionsSupported OID: dot3OamEntry.6 SYNTAX : BITS MAX-ACCESS: Read Only	The OAM functions supported on this Ethernet-like interface. OAM consists of separate functional sets beyond the basic discovery process that is always required. These functional groups can be supported independently by any implementation. These values are communicated to the peer via the local configuration field of Information OAMPDUs.Setting 'unidirectionalSupport(0)' indicates that the OA entity supports the transmission of OAMPDUs on links that are operating in unidirectional mode (traffic flowing in one	unidirectionalSupport (0), loopbackSupport(1), eventSupport(2), variableSupport(3	Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	direction only). Setting 'loopbackSupport(1)' indicates that the OAM entity can initiate and respond to loopback commands. Setting 'eventSupport(2)' indicates that the OAM entity can send and receive Event Notification OAMPDUs. Setting 'variableSupport(3)' indicates that the OAM entity can send and receive Variable Request and Response OAMPDUs.		

dot3OamPeerTable

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamPeerMacAddress OID: dot3OamPeerEntry.1 SYNTAX: MacAddress MAX-ACCESS: Read only	The MAC address of the peer OAM entity. The MAC address is derived from the most recently received OAMPDU		Yes
dot3OamPeerVendorOui OID: dot3OamPeerEntry.2 SYNTAX: EightOTwoOui MAX-ACCESS: Read only	The OUI of the OAM peer as reflected in the latest Information OAMPDU received with a Local Information TLV. The OUI can be used to identify the vendor of the remote OA entity. This value is initialized to three octets of zero before any Local Information TLV is received.	Read only	Yes

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamPeerVendorInfo OID: dot3OamPeerEntry.3 SYNTAX: Unsigned32 MAX-ACCESS: Read only	The Vendor Info of the OAM peer as reflected in the latest Information OAMPDU received with a Local Information TLV. The semantics of the Vendor Information field is proprietary and specific to the vendor (identified by the dot3OamPeerVendorOui). This information could, for example, be used to identify a specific product or product family. This value is initialized to zero before any Local Information TLV is received.	Read only	Yes
dot3OamPeerMode OID: dot3OamPeerEntry.4 SYNTAX: INTEGER MAX-ACCESS: Read only	The mode of the OAM peer as reflected in the latest Information OAMPDU received with a Local Information TLV. The mode of the peer can be determined from the Configuration field in the Local Information TLV of the last Information OAMPDU received from the peer.	passive(1), active(2), unknown(3)	Yes

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamPeerMaxOamPduSize OID: dot3OamPeerEntry.5 SYNTAX: Unsigned32 MAX-ACCESS: Read only	The maximum size of OAMPDU supported by the peer as reflected in the latest Information OAMPDU received with a Local Information TLV.	0 | 64..1518	Yes

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamPeerConfigRevision OID: dot3OamPeerEntry.6 SYNTAX: Unsigned32 MAX-ACCESS: Read only	The configuration revision of the OAM peer as reflected in latest OAMPDU	0..65535	Yes
dot3OamPeerFunctionsSupported OID: dot3OamPeerEntry.7 SYNTX: BITS MAX-ACCESS: Read only	If unidirectionalSupport(0) is set, then the peer OAM entity supports sending OAM frames on Ethernet interfaces when the receive path is known to be inoperable. If loopbackSupport(1) is set, then the peer OAM entity can send and receive OAM loopback commands. If eventSupport(2) is set, then the peer OAM entity can send and receive event OAMPDUs to signal various error conditions. If variableSupport(3) is set, then the peer OAM entity can send and receive variable requests to monitor the attribute value	unidirectionalSupport (0), loopbackSupport(1), eventSupport(2), variableSupport(3)	Yes

dot3OamLoopbackTable

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamLoopbackStatus OID: dot3OamLoopbackEntry.1 SYNTAX: INTEGER MAX-ACCESS: Read Only	The loopback status of the OAM entity	noLoopback (1) initiatingLoopback (2) remoteLoopback (3)terminatingLoopback (4) localLoopback (5) unknown (6)	Yes
dot3OamLoopbackIgnoreRx OID: dot3OamLoopbackEntry.2 SYNTAX: INTEGER MAX-ACCESS: RW	When the value is ignore (1), received loopback commands are ignored. When the value is process (2), OAM loopback commands are processed. The default value is to ignore loopback commands	ignore(1), process(2)	Yes

dot3OamStatsTable

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamInformationTx OID: dot3OamStatsEntry .1 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Information OAMPDUs transmitted on this interface		Yes
dot3OamInformationRx OID: dot3OamStatsEntry .2 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Information OAMPDUs received on this interface.		Yes

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamUniqueEventNotificationTx OID: dot3OamStatsEntry .3 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of unique Event OAMPDUs transmitted on this interface		No , SLX-OS as well as MLX doesn't support sending this
dot3OamUniqueEventNotificationRx OID: dot3OamStatsEntry .4SYNTAX: Counter32MAX-ACCESS: Read Only	A count of the number of unique Event OAMPDUs received on this interface		Yes (Though SLX-OS and MLX doesn't send this they are capable to receive such PDU and update the counter)
dot3OamDuplicateEventNotificationTx OID: dot3OamStatsEntry .5 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of duplicate Event OAMPDUs transmitted on this interface		No, SLX-OS as well as MLX doesn't support sending this
dot3OamDuplicateEventNotificationRx OID: dot3OamStatsEntry .6 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of duplicate Event OAMPDUs received on this interface		Yes (Though SLX-OS and MLX doesn't send this they are capable to receive such PDU and update the counter)
dot3OamLoopbackControlTx OID: dot3OamStatsEntry .7 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Loopback Control OAMPDUs transmitted onthis interface		No ,SLX-OS as well as also MLX doesn't support sending this
dot3OamLoopbackControlRx OID: dot3OamStatsEntry .8SYNTAX: Counter32MAX-ACCESS: Read Only	A count of the number of Loopback Control OAMPDUs received on this interface		Yes (Though SLX-OS and MLX doesn't send this they are capable to receive such PDU and update the counter)

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamVariableRequestTx OID: dot3OamStatsEntry .9 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Variable Request OAMPDUs transmitted on this interface		No, SLX-OS as well as MLX doesn't support sending this
dot3OamVariableRequestRx OID: dot3OamStatsEntry .10 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Variable Response OAMPDUs received on this interface		Yes (Though SLX-OS and MLX doesn't send this they are capable to receive such PDU and update the counter)
dot3OamVariableResponseTx OID: dot3OamStatsEntry .11 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Variable Response OAMPDUs transmitted on this interface		No, SLX OS as well as MLX doesn't support sending this
dot3OamVariableResponseRx OID: dot3OamStatsEntry .12 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Variable Response OAMPDUs received on this interface		Yes (Though SLX-OS and MLX doesn't send this they are capable to receive such PDU and update the counter)
dot3OamOrgSpecificTx OID: dot3OamStatsEntry .13 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Organization Specific OAMPDUs Transmitted on this interface		No, SLX OS as well as MLX doesn't support sending this

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamOrgSpecificRx OID: dot3OamStatsEntry .14 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of Organization Specific OAMPDUs received on this interface		Yes (Though SLX-OS and MLX doesn't send this they are capable to receive such PDU and update the counter)
dot3OamUnsupportedCodesTx OID: dot3OamStatsEntry .15 SYNTAX: Counter32MAX-ACCESS: Read Only	A count of the number of OAMPDUs transmitted on this interface with an unsupported op-code.		No , SLX-OS as well as MLX doesn't support sending this
dot3OamUnsupportedCodesRx OID: dot3OamStatsEntry .16 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of OAMPDUs received on this interface with an unsupported op-code.		Yes (Though SLX-OS and MLX doesn't send this they are capable to receive such PDU and update the counter)
dot3OamFramesLostDueToOam OID: dot3OamStatsEntry .17 SYNTAX: Counter32 MAX-ACCESS: Read Only	A count of the number of frames that were dropped by the OA multiplexer		Yes

dot3OamEventConfigTable

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrSymPeriodWindowHi OID: dot3OamEventConfigEntry .1 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The two objects dot3OamErrSymPeriodWindowHi anddot3OamErrSymPeriodLo together form an unsigned 64-bit integer representing the number of symbols over which this threshold event is defined. This is defined as dot3OamErrSymPeriodWindow = ((2^32)*dot3OamErrSymPeriodWindowHi)+ dot3OamErrSymPeriodWindowLoIf dot3OamErrSymPeriodThreshold symbol errors occur within a window of dot3OamErrSymPeriodWindow symbols, an Event Notification OAMPDU should be generated with an Errored SymbolPeriod Event TLV indicating that the threshold has been crossed in this window. The default value for dot3OamErrSymPeriodWindow is the number of symbols in one second for the underlying physical layer.		No
dot3OamErrSymPeriodWindowLo	The two objects dot3OamErrSymPeriodWindowHi		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
OID: dot3OamEventConfigEntry .2 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	anddot3OamErrSymPeriodWindowLo together form an unsigned 64-bit integer representing the number of symbols over which this threshold event is defined. This is defined asdot3OamErrSymPeriodWindow = ((2^32)*dot3OamErrSymPeriodWindowHi)+ dot3OamErrSymPeriodWindowLoIf dot3OamErrSymPeriodThreshold symbol errors occur within a window of dot3OamErrSymPeriodWindow symbols, an Event Notification OAMPDU should be generated with an Errored SymbolPeriod Event TLV indicating that the threshold has been crossed in this window. The default value for dot3OamErrSymPeriodWindow is the number of symbols in one second for the underlying physical layer.		

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrSymPeriodThresholdHi OID: dot3OamEventConfigEntry .3 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The two objects dot3OamErrSymPeriodThresholdHi anddot3OamErrSymPeriodThresholdLo together form an unsigned 64-bit integer representing the number of symbol errors that must occur within a given window to cause this event. This is defined asdot3OamErrSymPeriodThreshold =((2^32) * dot3OamErrSymPeriodThresholdHi)+ dot3OamErrSymPeriodThresholdLoIf dot3OamErrSymPeriodThreshold symbol errors occur within a window of dot3OamErrSymPeriodWindow symbols, an Event Notification OAMPDU should be generated with an Errored SymbolPeriod Event TLV indicating that the threshold has been crossed in this window. The default value for dot3OamErrSymPeriodThreshold is one symbol errors. If the threshold value is zero, then an Event Notification OAMPDU is sent periodically (at the end of every window). This can be used as an asynchronous		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	notification to the peer OAM entity of the statistics related to this threshold crossing alarm.		

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrSymPeriodThresholdLo OID: dot3OamEventConfigEntry .4 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The two objects dot3OamErrSymPeriodThresholdHi and dot3OamErrSymPeriodThresholdLo together form an unsigned 64-bit integer representing the number of symbol errors that must occur within a given window to cause this event. This is defined asdot3OamErrSymPeriodThreshold =((2^32) * dot3OamErrSymPeriodThresholdHi)+ dot3OamErrSymPeriodThresholdLoIf dot3OamErrSymPeriodThreshold symbol errors occur within a window of dot3OamErrSymPeriodWindow symbols, an Event Notification OAMPDU should be generated with an Errored SymbolPeriod Event TLV indicating that the threshold has been crossed in this window. The default value for dot3OamErrSymPeriodThreshold is one symbol error. If the threshold value is zero, then an Event Notification OAMPDU is sent periodically (at the end of every window). This can be used as an		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	asynchronous notification to the peer OAM entity of the statistics related to this threshold crossing alarm.		
dot3OamErrSymPeriodEvNotifEnable OID: dot3OamEventConfigEntry .5 SYNTAX: TruthValue MAX-ACCESS: Read Only	If true, the OAM entity should send an Event Notification OAMPDU when an Errored Symbol Period Event occurs.By default, this object should have the value true for Ethernet-like interfaces that support OAM. If the OAM layer does not support Event Notifications (as indicated via the dot3OamFunctionsSupported attribute), this value is ignored		No - with default value

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrFramePeriodWindow OID: dot3OamEventConfigEntry .6 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The number of frames over which the threshold is defined. The default value of the window is the number of minimum size Ethernet frames that can be received over the physical layer in one second. If dot3OamErrFramePeriodThreshold frame errors occur within a window of dot3OamErrFramePeriodWindow frames, an Event Notification OAMPDU should be generated with an Errored Frame Period Event TLV indicating that the threshold has been crossed in this window		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrFramePeriodThreshold OID: dot3OamEventConfigEntry .7 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The number of frame errors that must occur for this event to be triggered. The default value is one frame error. If the threshold value is zero, then an Event Notification OAMPDU is sent periodically (at the end of every window). This can be used as an asynchronous notification to the peer OAM entity of the statistics related to this threshold crossing alarm. If dot3OamErrFramePeriodThreshold frame errors occur within a window of dot3OamErrFramePeriodWindow frames, an Event Notification OAMPDU should be generated with an Errored Frame Period Event TLV indicating that the threshold has been crossed in this window.		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrFramePeriodEvNotifEnable OID: dot3OamEventConfigEntry .8 SYNTAX: TruthValue MAX-ACCESS: Read Only	If true, the OAM entity should send an Event Notification OAMPDU when an Errored Frame Period Event occurs.By default, this object should have the value true for Ethernet-like interfaces that support OAM. If the OAM layer not support Event Notifications (as indicated via the dot3OamFunctionsSupported attribute), this value is ignored	True(1) False(2)	No- with default value False
dot3OamErrFrameWindow OID: dot3OamEventConfigEntry .9 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The amount of time (in 100ms increments) over which the threshold is defined. The default value is 10 (1 second). If dot3OamErrFrameThreshold frame errors occur within a window of dot3OamErrFrameWindow seconds (measured in tenths of seconds), an Event Notification OAMPDU should be generated with an Errored Frame Event TLV indicating that the threshold has been crossed in this window		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrFrameThreshold OID: dot3OamEventConfigEntry .10 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	A count of the number of Variable Response OAMPDUs received on this interface The number of frame errors that must occur for this event to be triggered. The default value is one frame error. If the threshold value is zero, then an Event Notification OAMPDU is sent periodically (at the end of every window). This can be used as an asynchronous notification to the peer OAM entity of the statistics related to this threshold crossing alarm. If dot3OamErrFrameThreshold frame errors occur within a window of dot3OamErrFrameWindow (in tenths of seconds), an Event Notification OAMPDU should be generated with an Errored Frame Event TLV indicating the threshold has been crossed in this window.		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrFrameEvNotifEnable OID: dot3OamEventConfigEntry .11 SYNTAX: TruthValue MAX-ACCESS: Read Only	If true, the OAM entity should send an Event Notification OAMPDU when an Errored Frame Event occurs. By default, this object should have the value true fo rEthernet-like interfaces that support OAM. If the OAM layer does not support Event Notifications (as indicated via the dot3OamFunctionsSupported attribute), this value is ignored.	True(1) False(2)	No with default value false
dot3OamErrFrameSecsSummaryWindow OID: dot3OamEventConfigEntry .12 SYNTAX: Integer32 MAX-ACCESS: Read Only	The amount of time (in 100 ms intervals) over which the threshold is defined. The default value is 100 (10 seconds).If dot3OamErrFrameSecsSummaryThreshold frame errors occur within a window of dot3OamErrFrameSecsSummaryWindow (in tenths of seconds), an Event Notification OAMPDU should be generated with an Errored Frame Seconds Summary Event TLV indicating that the threshold has been crossed in this window		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrFrameSecsSummaryThreshold OID: dot3OamEventConfigEntry .13 SYNTAX: Integer32 MAX-ACCESS: Read Only	The number of errored frame seconds that must occur for this event to be triggered. The default value is one errored frame second. If the threshold value is zero, then an Event Notification OAMPDU is sent periodically (at the end of every window). This can be used as an asynchronous notification to the peer OAM entity of the statistics related to this threshold crossing alarm. If dot3OamErrFrameSecsSummaryThreshold frame errors occur within a window of dot3OamErrFrameSecsSummaryWindow (in tenths of seconds), an Event Notification OAMPDU should be generated with an Errored Frame Seconds Summary Event TLV indicating that the threshold has been crossed in this window		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamErrFrameSecsEvNotifEnable OID: dot3OamEventConfigEntry .14 SYNTAX: TruthValue MAX-ACCESS: Read Only	If true, the local OAM entity should send an Event Notification OAMPDU when an Errored Frame Seconds Event occurs. By default, this object should have the value true for Ethernet-like interfaces that support OAM. If the OAM layer does not support Event Notifications (as indicated via the dot3OamFunctionsSupported attribute), this value is ignored	True(1) False(2)	No -with default value false

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamDyingGaspEnable OID: dot3OamEventConfigEntry .15 SYNTAX: TruthValue MAX-ACCESS: Read Only	If true, the local OAM entity should attempt to indicate a dying gasp via the OAMPDU flags field to its peer OAM entity when a dying gasp event occurs. The exact definition of a dying gasp event is implementation dependent. If the system does not support dying gasp capability, setting this object has no effect, and reading the object should always result in 'false' By default, this object should have the value true for Ethernet-like interfaces that support OAM. If the OAM layer does not support Event Notifications (as indicated via thedot3OamFunctionsSupported attribute), this value is ignored	True(1) False(2)	Yes , and in the back end code its always set to True. There is no way to test False case of this
dot3OamCriticalEventEnable OID: dot3OamEventConfigEntry .16 SYNTAX: TruthValue MAX-ACCESS: Read Only	If true, the local OAM entity should attempt to indicate a critical event via the OAMPDU flags to its peer OAM entity when a critical event occurs. The exact definition of a critical event is implementation dependent. If the system does not support critical event capability,	True(1) False(2)	Yes , and in the back end code its always set to True.There is no way to test False case of this

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	setting this object has no effect, and reading the object should always result in 'false'. By default, this object should have the value true for Ethernet-like interfaces that support OAM. If the OAM layer does not support Event Notifications (as indicated via the dot3OamFunctionsSupported attribute), this value is ignored.		

dot3OamEventLogTable

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogIndex OID: dot3OamEventLogEntry .1 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	An arbitrary integer for identifying individual events within the event log	(1..4294967295)	Yes(Not Accessible)
dot3OamEventLogTimestamp OID: dot3OamEventLogEntry .2 SYNTAX: TIMESTAMP MAX-ACCESS: Read Only	The value of sysUpTime at the time of the logged event. For locally generated events, the time of the event can be accurately retrieved from sysUpTime .For remotely generated events, the time of the event is indicated by the reception of the Event Notification OAMPDU indicating that the event occurred on the peer. A system may attempt to adjust the timestamp value to more accurately reflect the time of the event at the peer OAM entity by using other information, such as that found in the timestamp found of the Event Notification TLVs, which provides an indication of the relative time between events at the peer entity.		Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogOui OID: dot3OamEventLogEntry .3 SYNTAX:EightOTwoOui MAX-ACCESS: Read Only	The OUI of the entity defining the object type. All IEEE.3 defined events (as appearing in [802.3ah] except for the Organizationally Unique Event TLVs) use the IEEE 802.3 OUI of0x0180C2. Organizations defining their own Event NotificationTLVs include their OUI in the Event Notification TLV that gets reflected here.		Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogType OID: dot3OamEventLogEntry .4 SYNTAX:Unsigned32 MAX-ACCESS: Read Only	The type of event that generated this entry in the event log. When the OUI is the IEEE 802.3 OUI of 0x0180C2, the following types are defined:erroredSymbolEvent(1),erroredFramePeriodEvent(2),erroredFrameEvent(3),erroredFrameSecondsEvent(4),linkFault(256),dyingGaspEvent(257),criticalLinkEvent(258)The first four are considered threshold crossing events, as they are generated when a metric exceeds a given value within a specified window. The other three are not threshold crossing events. When the OUI is not 71874 (0x0180C2 in hex), then some other organization has defined the event space. If event subtyping is known to the implementation, it may be reflected here. Otherwise, this value should return all F's (2^32 - 1).		Yes. SLX-OS supports only 3 events in this. linkFault(256), dyingGaspEvent(257), criticalLinkEvent(258)
dot3OamEventLogLocation OID: dot3OamEventLogEntry .5 SYNTAX:INTEGER MAX-ACCESS: Read Only	Whether this event occurred locally (local(1)), or was received from the OAM peer via Ethernet OAM (remote(2))	local(1), remote(2)	Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogWindowHi OID: dot3OamEventLogEntry .6 SYNTAX:Unsigned32 MAX-ACCESS: Read Only	If the event represents a threshold crossing event, the two objects dot3OamEventWindowHi and dot3OamEventWindowLo, form an unsigned 64-bit integer yielding the window over which the value was measured for the threshold crossing event (for example, 5, when 11 occurrences happened in 5 seconds while the threshold was 10). The two objects are combined as: dot3OamEventLogWindow = ((2^32) * dot3OamEventLogWindowHi)+ dot3OamEventLogWindowLoOtherwise, this value is returned as all F's (2^32 - 1) and adds no useful information.		No

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogWindowLo OID: dot3OamEventLogEntry .7 SYNTAX:Unsigned32 MAX-ACCESS: Read Only	If the event represents a threshold crossing event, the two objects dot3OamEventWindowHi and dot3OamEventWindowLo form an unsigned 64-bit integer yielding the window over which the value was measured for the threshold crossing event (for example, 5, when 11 occurrences happened in 5 seconds while the threshold was 10). The two objects are combined as:dot3OamEventLogWindow = ((2^32) * dot3OamEventLogWindowHi)+ dot3OamEventLogWindowLoOtherwise, this value is returned as all F's (2^32 - 1) and no useful information.		No

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogThresholdHi OID: dot3OamEventLogEntry .8 SYNTAX:Unsigned32 MAX-ACCESS: Read Only	If the event represents a threshold crossing event, the two objects dot3OamEventThresholdHi and dot3OamEventThresholdLo form an unsigned 64-bit integer yielding the value that was crossed for the threshold crossing event (for example, 10, when 11 occurrences happened in 5 seconds while the threshold was 10). The two objects are combined as:dot3OamEventLogThreshold = ((2^32) * dot3OamEventLogThresholdHi)+ dot3OamEventLogThresholdLoOtherwise, this value is returned as all F's (2^32 -1) and adds no useful information.		No

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogThresholdLo OID: dot3OamEventLogEntry .9 SYNTAX:Unsigned32 MAX-ACCESS: Read Only	If the event represents a threshold crossing event, the two objects dot3OamEventThresholdHi and dot3OamEventThresholdLo form an unsigned 64-bit integer yielding the value that was crossed for the threshold crossing event (for example, 10, when 11 occurrences happened in 5 seconds while the threshold was 10). The two objects are combined as:dot3OamEventLogThreshold = ((2^32) * dot3OamEventLogThresholdHi)+ dot3OamEventLogThresholdLoOtherwise, this value is returned as all F's (2^32 - 1) and adds no useful information.		No

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogValue OID: dot3OamEventLogEntry .10 SYNTAX:CounterBasedGauge64 MAX-ACCESS: Read Only	If the event represents a threshold crossing event, this value indicates the value of the parameter within the given window that generated this event (for example, 11, when 11Occurrences happened in 5 seconds while the threshold was 10).Otherwise, this value is returned as all F's (2^64 - 1) and adds no useful information		Yes. SLX-OS supports only non-threshold events .For such events this MIB objects expects 1's in all bits

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
dot3OamEventLogRunningTotal OID: dot3OamEventLogEntry .11 SYNTAX:CounterBasedGauge64 MAX-ACCESS: Read Only	Each Event Notification TLV contains a running total of the number of times an event has occurred, as well as the number of times an Event Notification for the event has been transmitted. For non-threshold crossing events, the number of events (dot3OamLogRunningTotal) and the number of resultant Event Notifications (dot3OamLogEventTotal) should be identical. For threshold crossing events, since multiple occurrences may be required to cross the threshold, these values are likely different. This value represents the total number of times this event has happened since the last reset (for example, 3253, when 3253 symbol errors have occurred since the last reset, which has resulted in 51 symbol error threshold crossing events since the last reset).		Yes. Note: SLX-OS supports only non threshold events
dot3OamEventLogEventTotal OID: dot3OamEventLogEntry .12	Each Event Notification TLV contains a running total of the number of times		Yes. Note: SLX-OS supports only non threshold events

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
SYNTAX:Unsigned32 MAX-ACCESS: Read Only	an event has occurred, as well as the number of times an Event Notification for the event has been transmitted. For non-threshold crossing events, the number of events (dot3OamLogRunningTotal) and the number of resultant Event Notifications (dot3OamLogEventTotal) should be identical. For threshold crossing events, since multiple occurrences may be required to cross the threshold, these values are likely different. This value represents the total number of timesone or more of these occurrences have resulted in an Event Notification (for example, 51 when 3253 symbol errors have occurred since the last reset, which has resulted in 51 symbolerror threshold crossing events since the last reset)		

Traps

Mib Information for mefSoamPmNotifications

Notification, OID	Object	Description	Supported (Yes/No)
dot3OamThresholdEvent OID: 1.3.6.1.2.1.158.0.1	dot3OamEventLogTimestamp, dot3OamEventLogOui, dot3OamEventLogType, dot3OamEventLogLocation, dot3OamEventLogWindowHi, dot3OamEventLogWindowLo, dot3OamEventLogThresholdHi, dot3OamEventLogThresholdLo, dot3OamEventLogValue, dot3OamEventLogRunningTotal, dot3OamEventLogEventTotal	A dot3OamThresholdEvent notification is sent when a local or remote threshold crossing event is detected. A local threshold crossing event is detected by the local entity, while a remote threshold crossing event is detected by the reception of an Ethernet OAM Event Notification OAMPDU that indicates a threshold event. This notification should not be sent more than once perSecond. The OAM entity can be derived from extracting the ifIndex from the variable bindings. The objects in the notification correspond to the values in a row instance in thedot3OamEventLogTable.	No
dot3OamNonThresholdEvent OID: 1.3.6.1.2.1.158.0.2	dot3OamEventLogTimestamp, dot3OamEventLogOui, dot3OamEventLogType, dot3OamEventLogLocation,	A dot3OamNonThresholdEvent notification is sent when a local or remote non-threshold crossing event is detected. A	Yes. SLX OS sends traps with the var binds mentioned in column 2 for only the below eventsremotelinkFault,remotedyingGaspEvent,r

Notification, OID	Object	Description	Supported (Yes/No)
	dot3OamEvent LogEventTotal	local event is detected by the local entity, while a remote event is detected by the reception of an Ethernet OAM Event Notification OAMPDU that indicates a non-threshold crossing event. This notification should not be sent more than once per second. The OAM entity can be derived from extracting the ifIndex from variable bindings. The objects in the notification correspond to the values in a row instance of the dot3OamEvent LogTable.	emotecriticalLinkEventlocalDyingGaspEvent

BFD MIB

The BFD MIB defines objects that help in modeling the Bidirectional Forwarding Detection protocol.

Supported object groups

Object group name	OID	Supported
bfdSessTable	1.3.6.1.2.1.222.1.2	Yes (read-only)
bfdSessPerfTable	1.3.6.1.2.1.222.1.3	Yes
bfdSessDiscMapTable	1.3.6.1.2.1.222.1.4	Yes
bfdSessIpMapTable	1.3.6.1.2.1.222.1.5	No
bfdAdminStatus	1.3.6.1.2.1.222.1.1.1	Yes (read-only)
bfdOperStatus	1.3.6.1.2.1.222.1.1.2	Yes
bfdNotificationsEnable	1.3.6.1.2.1.222.1.1.3	Yes (read-only)
bfdSessIndexNext	1.3.6.1.2.1.222.1.1.4	No



Note
BFD MIB does not support SNMP SET requests.

Table 8: bfdSessTable

Object group name	OID
bfdSessIndex	1.3.6.1.2.1.222.1.2.1.1
bfdSessVersionNumber	1.3.6.1.2.1.222.1.2.1.2
bfdSessType	1.3.6.1.2.1.222.1.2.1.3
bfdSessDiscriminator	1.3.6.1.2.1.222.1.2.1.4
bfdSessRemoteDiscr	1.3.6.1.2.1.222.1.2.1.5
bfdSessDestinationUdpPort	1.3.6.1.2.1.222.1.2.1.6
bfdSessSourceUdpPort	1.3.6.1.2.1.222.1.2.1.7
bfdSessEchoSourceUdpPort	1.3.6.1.2.1.222.1.2.1.8
bfdSessAdminStatus	1.3.6.1.2.1.222.1.2.1.9
bfdSessOperStatus	1.3.6.1.2.1.222.1.2.1.10
bfdSessState	1.3.6.1.2.1.222.1.2.1.11
bfdSessRemoteHeardFlag	1.3.6.1.2.1.222.1.2.1.12
bfdSessDiag	1.3.6.1.2.1.222.1.2.1.13
bfdSessOperMode	1.3.6.1.2.1.222.1.2.1.14
bfdSessDemandModeDesiredFlag	1.3.6.1.2.1.222.1.2.1.15
bfdSessControlPlaneIndepFlag	1.3.6.1.2.1.222.1.2.1.16

Table 8: bfdSessTable (continued)

Object group name	OID
bfdSessMultipointFlag	1.3.6.1.2.1.222.1.2.1.17
bfdSessInterface	1.3.6.1.2.1.222.1.2.1.18
bfdSessSrcAddrType	1.3.6.1.2.1.222.1.2.1.19
bfdSessSrcAddr	1.3.6.1.2.1.222.1.2.1.20
bfdSessDstAddrType	1.3.6.1.2.1.222.1.2.1.21
bfdSessDstAddr	1.3.6.1.2.1.222.1.2.1.22
bfdSessGTSM	1.3.6.1.2.1.222.1.2.1.23
bfdSessGTSMTTL	1.3.6.1.2.1.222.1.2.1.24
bfdSessDesiredMinTxIntervalrt	1.3.6.1.2.1.222.1.2.1.25
bfdSessReqMinRxInterval	1.3.6.1.2.1.222.1.2.1.26
bfdSessReqMinEchoRxInterval	1.3.6.1.2.1.222.1.2.1.27
bfdSessDetectMult	1.3.6.1.2.1.222.1.2.1.28
bfdSessNegotiatedInterval	1.3.6.1.2.1.222.1.2.1.29
bfdSessNegotiatedEchoInterval	1.3.6.1.2.1.222.1.2.1.30
bfdSessNegotiatedDetectMult	1.3.6.1.2.1.222.1.2.1.31
bfdSessAuthPresFlag	1.3.6.1.2.1.222.1.2.1.32
bfdSessAuthenticationType	1.3.6.1.2.1.222.1.2.1.33
bfdSessAuthenticationKeyID	1.3.6.1.2.1.222.1.2.1.34
bfdSessAuthenticationKey	1.3.6.1.2.1.222.1.2.1.35
bfdSessStorageType	1.3.6.1.2.1.222.1.2.1.36
bfdSessRowStatus	1.3.6.1.2.1.222.1.2.1.37

Table 9: bfdSessPerfTable

Object group name	OID
bfdSessPerfCtrlPktIn	1.3.6.1.2.1.222.1.3.1.1
bfdSessPerfCtrlPktOut	1.3.6.1.2.1.222.1.3.1.2
bfdSessPerfCtrlPktDrop	1.3.6.1.2.1.222.1.3.1.3
bfdSessPerfCtrlPktDropLastTime	1.3.6.1.2.1.222.1.3.1.4
bfdSessPerfEchoPktIn	1.3.6.1.2.1.222.1.3.1.5
bfdSessPerfEchoPktOut	1.3.6.1.2.1.222.1.3.1.6
bfdSessPerfEchoPktDrop	1.3.6.1.2.1.222.1.3.1.7
bfdSessPerfEchoPktDropLastTime	1.3.6.1.2.1.222.1.3.1.8
bfdSessUpTime	1.3.6.1.2.1.222.1.3.1.9
bfdSessPerfLastSessDownTime	1.3.6.1.2.1.222.1.3.1.10

Table 9: bfdSessPerfTable (continued)

Object group name	OID
bfdSessPerfLastCommLostDiag	1.3.6.1.2.1.222.1.3.1.11
bfdSessPerfSessUpCount	1.3.6.1.2.1.222.1.3.1.12
bfdSessPerfDiscTime	1.3.6.1.2.1.222.1.3.1.13
bfdSessPerfCtrlPktInHC	1.3.6.1.2.1.222.1.3.1.14
bfdSessPerfCtrlPktOutHC	1.3.6.1.2.1.222.1.3.1.15
bfdSessPerfCtrlPktDropHC	1.3.6.1.2.1.222.1.3.1.16
bfdSessPerfEchoPktInHC	1.3.6.1.2.1.222.1.3.1.17
bfdSessPerfEchoPktOutHC	1.3.6.1.2.1.222.1.3.1.18
bfdSessPerfEchoPktDropHC	1.3.6.1.2.1.222.1.3.1.19

Table 10: bfdSessDiscMapTable

Object group name	OID
bfdSessDiscriminator	1.3.6.1.2.1.222.1.2.1.4
bfdSessDiscMapIndex	1.3.6.1.2.1.222.1.4.1.1

Table 11: BFD notifications

Object group name	OID
bfdSessUp	1.3.6.1.2.1.222.0.1
bfdSessDown	1.3.6.1.2.1.222.0.2

Bridge MIB

The Bridge MIB module for managing devices that support IEEE 802.1D.

The Bridge-Identifier, as used in the Spanning Tree Protocol, to uniquely identify a bridge. Its first two octets (in network byte order) contain a priority value, and its last 6 octets contain the MAC address used to refer to a bridge in a unique fashion (typically, the numerically smallest MAC address of all ports on the bridge.

Supported object groups

The following groups from LLDP-EXT-DOT1-MIB are fully supported.

Object group name	OID	Supported?
dot1dBase	1.3.6.1.2.1.17.1	Yes
dot1dStp	1.3.6.1.2.1.17.2	Yes
dot1dTp	1.3.6.1.2.1.17.4	Yes
dot1dStatic	1.3.6.1.2.1.17.5	Yes

Note
The dot1dTpFdbTable (OID 1.3.6.1.2.1.17.4.4) in RFC 1493 is used to find dynamically learned MAC addresses. Statically configured MAC addresses are in the snFdbTable

Note
The SNMP MIB object dot1dStpPortTable (OID 1.3.6.1.2.1.17.2.15) does not display information for tagged ports that belong to an 802.1W RSTP configuration. The design of that MIB table is based on a Single STP standard, and does not accommodate Multiple STPs. Thus, the table displays information only for SSTP and for tagged and untagged ports.

Note
RFC 4188 has been converted to SMIv2 format. The object dot1dStpPortPathCost32 was added to support IEEE 802. The existing MIB dot1dStpPortPathCost has an upper range of 65535. Over that value, this MIB stays at the upper value and you should access dot1dStpPortPathCost32, which has a higher upper-range value.

Table 12: BRIDGE-MIB- Notifications

Object Name	OID	Description
newRoot	1.3.6.1.2.1.17.0.1	The newRoot trap indicates that the sending agent has become the new root of the Spanning Tree;the trap is sent by a bridge soon after its election as the new root, e.g., upon expiration of the Topology Change Timer, immediately subsequent to its election. Implementation of this trap is optional.
topologyChange	1.3.6.1.2.1.17.0.2	A topologyChange trap is sent by a bridge when any of its configured ports transitions from the Learning state to the Forwarding state, or from the Forwarding state to the Blocking state. The trap is not sent if a newRoot trap is sent for the same transition.

Definitions of Managed Objects for BGP-4

The BGP4 MIB module defines the MIB objects for management of Border Gateway Protocol Version 4 (BGPv4). Both read-only and read-write operations are supported on this MIB through SNMP. The definitions of managed objects for BGP-4 table is based on the RFC 4273. This RFC obsoletes RFC 1657.

Note
BGP-4 MIB is VRF-aware.

MIB objects

Objects and OID	Supported	Description
bgpVersion 1.3.6.1.2.1.15.1	Yes	The version of the BGP protocol.
bgpLocalAs 1.3.6.1.2.1.15.2	Yes	The local autonomous system number.
bgpPeerTable 1.3.6.1.2.1.15.3	Yes	This table contains information about BGP peers.
bgpIdentifier 1.3.6.1.2.1.15.4	Yes	The BGP identifier of the local system.
bgp4PathAttrTable 1.3.6.1.2.1.15.6	Yes	This table contains information about paths to destination networks received from all BGP peers.

Table 13: BGP-4 MIB Objects

Objects and OID	Supported	Description
bgpEstablishedNotification OID 1.3.6.1.2.1.15.0.1	Yes	The BGP Established event is generated whenthe BGP FSM enters the ESTABLISHED state. The objects that will be supported are: bgpPeerRemoteAddr, bgpPeerLastError, and bgpPeerState
bgpBackwardTransNotification OID 1.3.6.1.2.1.15.0.2	Yes	The bgpBackwardTransNotification event is generated when the BGP FSM moves from a higher numbered state to a lower numbered state. The objects that will be supported are: bgpPeerRemoteAddr, bgpPeerLastError, and bgpPeerState. This trap will be generated only when transition happened from established to any lower state.
bgpPeerRemoteAddr 1.3.6.1.2.1.15.3.1.7	Yes	The remote IP address of this entry's BGPpeer.

Table 13: BGP-4 MIB Objects (continued)

Objects and OID	Supported	Description
bgpPeerState 1.3.6.1.2.1.15.3.1.2	Yes	The BGP peer connection state.
bgpPeerLastError 1.3.6.1.2.1.15.3.1.14	Yes	The last error code and subcode seen by this peer on this connection. If no error has occurred, this field is zero.

Table 14: 1.3.6.1.2.1.15.3 (bgpPeerTable) MIB objects

Objects and OID	Supported	Description
bgpPeerEntry 1.3.6.1.2.1.15.3.1	yes	Entry containing information about the connection with a BGP peer.
bgpPeerIdentifier 1.3.6.1.2.1.15.3.1.1	yes	The BGP Identifier of this entry's BGP peer.
bgpPeerState 1.3.6.1.2.1.15.3.1.2	yes	The BGP peer connection state.
bgpPeerAdminStatus 1.3.6.1.2.1.15.3.1.3	yes	The desired state of the BGP connection.A transition from 'stop' to 'start' will cause the BGP Start Event to be generated.
bgpPeerNegotiatedVersion 1.3.6.1.2.1.15.3.1.4	yes	The negotiated version of BGP running between the two peers.
bgpPeerLocalAddr 1.3.6.1.2.1.15.3.1.5	yes	The local IP address of this entry's BGP connection.
bgpPeerLocalPort 1.3.6.1.2.1.15.3.1.6	yes	The local port for the TCP connection between the BGP peers.
bgpPeerRemoteAddr 1.3.6.1.2.1.15.3.1.7	yes	The remote IP address of this entry's BGP peer.
bgpPeerRemotePort 1.3.6.1.2.1.15.3.1.8	yes	The remote port for the TCP connection between the BGP peers. Note that the objects bgpPeerLocalAddr, bgpPeerLocalPort,
bgpPeerRemoteAs 1.3.6.1.2.1.15.3.1.9	yes	The remote autonomous system number.
bgpPeerInUpdates 1.3.6.1.2.1.15.3.1.10	yes	The number of BGP UPDATE messages received on this connection.
bgpPeerOutUpdates 1.3.6.1.2.1.15.3.1.11	yes	The number of BGP UPDATE messages transmitted on this connection.
bgpPeerInTotalMessages 1.3.6.1.2.1.15.3.1.12	yes	The total number of messages received from the remote peer on this connection.
bgpPeerOutTotalMessages 1.3.6.1.2.1.15.3.1.13	yes	The total number of messages transmitted to the remote peer on this connection.

Table 14: 1.3.6.1.2.1.15.3 (bgpPeerTable) MIB objects (continued)

Objects and OID	Supported	Description
bgpPeerLastError 1.3.6.1.2.1.15.3.1.14	yes	The last error code and sub-code seen by thispeer on this connection. If no error has occurred, this field is zero.
bgpPeerFsmEstablishedTransitions 1.3.6.1.2.1.15.3.1.15	yes	The total number of times the BGP FSM transitioned into the established state.
bgpPeerFsmEstablishedTime 1.3.6.1.2.1.15.3.1.16	yes	This timer indicates how long (in seconds) this peer has been in the Established state.
bgpPeerConnectRetryInterval 1.3.6.1.2.1.15.3.1.17	yes	Time interval in seconds for the ConnectRetry timer. The suggested value for this timer is 120 seconds.
bgpPeerHoldTime 1.3.6.1.2.1.15.3.1.18	yes	Time interval in seconds for the HoldTimer established with the peer.
bgpPeerKeepAlive 1.3.6.1.2.1.15.3.1.19	yes	Time interval in seconds for the KeepAlivetimer established with the peer.
bgpPeerHoldTimeConfigured 1.3.6.1.2.1.15.3.1.20	yes	Time interval in seconds for the Hold Timeconfigured for this BGP speaker with this peer.
bgpPeerKeepAliveConfigured 1.3.6.1.2.1.15.3.1.21	yes	Time interval in seconds for theKeepAlive timer configured for this BGPspeaker with this peer.
bgpPeerMinASOriginationInterval 1.3.6.1.2.1.15.3.1.22	yes	Time interval in seconds for theMinASOriginationInterval timer.The suggested value for this timer is 15seconds.
bgpPeerMinRouteAdvertisementInterval 1.3.6.1.2.1.15.3.1.23	yes	Time interval in seconds for the MinRouteAdvertisementInterval timer. The suggested value for this timer is 30seconds.
bgpPeerInUpdateElapsedTime 1.3.6.1.2.1.15.3.1.24	yes	Elapsed time in seconds since the last BGPUPDATE message was received from the peer.

Table 15: 1.3.6.1.2.1.15.6 (bgpPeerTable) MIB objects

Objects and OID	Supported	Description
bgp4PathAttrTable 1.3.6.1.2.1.15.6	yes	The BGP-4 Received Path Attribute Table contains information about paths todestination networks received from alBGP4 peers.
bgp4PathAttrEntry 1.3.6.1.2.1.15.6.1	yes	Information about a path to a network.
bgp4PathAttrPeer 1.3.6.1.2.1.15.6.1.1	yes	The IP address of the peer where the path information was learned.

Table 15: 1.3.6.1.2.1.15.6 (bgpPeerTable) MIB objects (continued)

Objects and OID	Supported	Description
bgp4PathAttrIpAddrPrefixLen 1.3.6.1.2.1.15.6.1.2	yes	Length in bits of the IP address prefix in the Network Layer Reachability Information field.
bgp4PathAttrIpAddrPrefix 1.3.6.1.2.1.15.6.1.3	yes	An IP address prefix in the Network Layer Reachability Information field.
bgp4PathAttrOrigin 1.3.6.1.2.1.15.6.1.4	yes	The ultimate origin of the path information.
bgp4PathAttrASPathSegment 1.3.6.1.2.1.15.6.1.5	yes	The sequence of AS path segments. Each ASpath segment is represented by a triple.
bgp4PathAttrNextHop 1.3.6.1.2.1.15.6.1.6	yes	The address of the border router that should be used for the destination network.
bgp4PathAttrMultiExitDisc 1.3.6.1.2.1.15.6.1.7	yes	This metric is used to discriminate between multiple exit points to an adjacent autonomous system.
bgp4PathAttrLocalPref 1.3.6.1.2.1.15.6.1.8	yes	The originating BGP4 speaker's degree of preference for an advertised route.
bgp4PathAttrAtomicAggregate 1.3.6.1.2.1.15.6.1.9	yes	Whether or not the local system has selected a less specific route without selecting a more specific route.
bgp4PathAttrAggregatorAS 1.3.6.1.2.1.15.6.1.10	yes	The AS number of the last BGP4 speaker that performed route aggregation.
bgp4PathAttrAggregatorAddr 1.3.6.1.2.1.15.6.1.11	yes	The IP address of the last BGP4 speaker that performed route aggregation.
bgp4PathAttrCalcLocalPref 1.3.6.1.2.1.15.6.1.12	yes	The degree of preference calculated by the receiving BGP4 speaker for an advertised route.
bgp4PathAttrBest 1.3.6.1.2.1.15.6.1.13	yes	An indication of whether or not this routewas chosen as the best BGP4 route.
bgp4PathAttrUnknown 1.3.6.1.2.1.15.6.1.14	yes	One or more path attributes not understoodby this BGP4 speaker. Size zero (0)indicates the absence of such attribute(s).

Entity MIB (Version 3)

The following objects from RFC 4133 Entity MIB are used for representing multiple physical and logical entities supported by a single SNMP agent. Only read-only operation is supported on this MIB through SNMP.

Supported object groups

Note
Entity MIB does not support SNMP SET requests.

Objects	OID	Supported
entityPhysical	1.3.6.1.2.1.47.1.1	Yes (read-only)
entPhysicalTable	1.3.6.1.2.1.47.1.1.1	Yes
entPhysicalEntry	1.3.6.1.2.1.47.1.1.1.1	Yes
entPhysicalIndex	1.3.6.1.2.1.47.1.1.1.1.1	Yes
entPhysicalDescr	1.3.6.1.2.1.47.1.1.1.1.2	Yes
entPhysicalVendorType	1.3.6.1.2.1.47.1.1.1.1.3	Yes
entPhysicalContainedIn	1.3.6.1.2.1.47.1.1.1.1.4	Yes
entPhysicalClass	1.3.6.1.2.1.47.1.1.1.1.5	Yes
entPhysicalParentRelPos	1.3.6.1.2.1.47.1.1.1.1.6	Yes
entPhysicalName	1.3.6.1.2.1.47.1.1.1.1.7	Yes
entPhysicalHardwareRev	1.3.6.1.2.1.47.1.1.1.1.8	Yes
entPhysicalFirmwareRev	1.3.6.1.2.1.47.1.1.1.1.9	Yes
entPhysicalSoftwareRev	1.3.6.1.2.1.47.1.1.1.1.10	Yes
entPhysicalSerialNum	1.3.6.1.2.1.47.1.1.1.1.11	Yes
entPhysicalMfgName	1.3.6.1.2.1.47.1.1.1.1.12	Yes
entPhysicalModelName	1.3.6.1.2.1.47.1.1.1.1.13	Yes
entPhysicalAlias	1.3.6.1.2.1.47.1.1.1.1.14	Yes
entPhysicalAssetID	1.3.6.1.2.1.47.1.1.1.1.15	Yes
entPhysicalIsFRU	1.3.6.1.2.1.47.1.1.1.1.16	Yes
entPhysicalMfgDate	1.3.6.1.2.1.47.1.1.1.1.17	Yes
entPhysicalUris	1.3.6.1.2.1.47.1.1.1.1.18	Yes
entPhysicalContainsTable	1.3.6.1.2.1.47.1.3.3	Yes
entLastChangeTime	1.3.6.1.2.1.47.1.4.1	Yes
entConfigChange	1.3.6.1.2.1.47.2.0.1	Yes
entityLogical	1.3.6.1.2.1.47.1.2	No
entityMapping	1.3.6.1.2.1.47.1.3	No

Ethernet-like MIB

The following groups from RFC 3635 are supported on the Extreme SLX router devices. RFC 3635 provides definitions of managed objects for the ethernet-like interface types.

Table 16: Supported list of tables

Objects group name & OID	Description	Supported
dot3StatsTable 1.3.6.1.2.1.10.7.2	Statistics for a collection of ethernet-like interfaces attached to a particular system	Partial
dot3CollTable 1.3.6.1.2.1.10.7.5	A collection of collision histograms for a particular set of interfaces	No
dot3ControlTable 1.3.6.1.2.1.10.7.9	A table of descriptive and status information about the MAC Control sublayer on the ethernet-like interfaces attached to a particular system.	Yes
dot3PauseTable 1.3.6.1.2.1.10.7.10	A table of descriptive and status information about the MAC Control PAUSE function on the ethernet-like interfaces attached to a particular system.	Yes
dot3HCStatsTable 1.3.6.1.2.1.10.7.11	A table containing 64-bit versions of error counters from the dot3StatsTable.	Partial

Table 17: dot3StatsTable

Object group name	Object identifier	Supported
dot3StatsIndex	1.3.6.1.2.1.10.7.2.1.1	Ifindex
dot3StatsAlignmentErrors	1.3.6.1.2.1.10.7.2.1.2	No
dot3StatsFCSErrors	1.3.6.1.2.1.10.7.2.1.3	Yes
dot3StatsSingleCollisionFrames	1.3.6.1.2.1.10.7.2.1.4	No
dot3StatsMultipleCollisionFrames	1.3.6.1.2.1.10.7.2.1.5	No
dot3StatsSQETestErrors	1.3.6.1.2.1.10.7.2.1.6	No

Table 17: dot3StatsTable (continued)

Object group name	Object identifier	Supported
dot3StatsDeferredTransmissions	1.3.6.1.2.1.10.7.2.1.7	No
dot3StatsLateCollisions	1.3.6.1.2.1.10.7.2.1.8	No
dot3StatsExcessiveCollisions	1.3.6.1.2.1.10.7.2.1.9	No
dot3StatsInternalMacTransmitErrors	1.3.6.1.2.1.10.7.2.1.10	Yes
dot3StatsCarrierSenseErrors	1.3.6.1.2.1.10.7.2.1.11	No
dot3StatsFrameTooLongs	1.3.6.1.2.1.10.7.2.1.13	Yes
dot3StatsInternalMacReceiveErrors	1.3.6.1.2.1.10.7.2.1.16	Yes
dot3StatsEtherChipSet	1.3.6.1.2.1.10.7.2.1.17	Deprecated
dot3StatsSymbolErrors	1.3.6.1.2.1.10.7.2.1.18	Yes
dot3StatsDuplexStatus	1.3.6.1.2.1.10.7.2.1.19	No
dot3StatsRateControlAbility	1.3.6.1.2.1.10.7.2.1.20	No
dot3StatsRateControlStatus	1.3.6.1.2.1.10.7.2.1.21	No

Table 18: dot3ControlTable

Object group name	Object identifier	Supported?
dot3ControlFunctionsSupported	1.3.6.1.2.1.10.7.9.1.1	Yes
dot3ControlInUnknownOpcodes	1.3.6.1.2.1.10.7.9.1.2	Yes
dot3HCControlInUnknownOpcodes	1.3.6.1.2.1.10.7.9.1.3	Yes

Table 19: dot3PauseTable

Object group name	Object identifier	Supported?
dot3PauseAdminMode	1.3.6.1.2.1.10.7.10.1.1	Yes
dot3PauseOperMode	1.3.6.1.2.1.10.7.10.1.2	Yes
dot3InPauseFrames	1.3.6.1.2.1.10.7.10.1.3	Yes
dot3OutPauseFrames	1.3.6.1.2.1.10.7.10.1.4	No

Table 19: dot3PauseTable (continued)

Object group name	Object identifier	Supported?
dot3HCInPauseFrames	1.3.6.1.2.1.10.7.10.1.5	Yes
dot3HCOutPauseFrames	1.3.6.1.2.1.10.7.10.1.6	No

Table 20: dot3HCStatsTable

Object group name	Object identifier	Supported?
dot3HCStatsAlignmentErrors	1.3.6.1.2.1.10.7.11.1.1	No
dot3HCStatsFCSErrors	1.3.6.1.2.1.10.7.11.1.2	Yes
dot3HCStatsInternalMacTransmitErrors	1.3.6.1.2.1.10.7.11.1.3	Yes
dot3HCStatsFrameTooLongs	1.3.6.1.2.1.10.7.11.1.4	Yes
dot3HCStatsInternalMacReceiveErrors	1.3.6.1.2.1.10.7.11.1.5	Yes
dot3HCStatsSymbolErrors	1.3.6.1.2.1.10.7.11.1.6	Yes

Host Resource MIB

The Host Resource MIB module defines a uniform set of MIB objects useful for the management of host computers. Only read-only operation is supported on this MIB through SNMP.

Supported object groups

Object group name	OID	Supported?
hrSystem	1.3.6.1.2.1.25.1	Yes
hrStorage	1.3.6.1.2.1.25.2	Yes
hrDevice	1.3.6.1.2.1.25.3	Yes
hrSWRun	1.3.6.1.2.1.25.4	Yes
hrSWRunPerf	1.3.6.1.2.1.25.5	Yes
hrSWInstalled	1.3.6.1.2.1.25.6	Yes
hrMIBAdminInfo	1.3.6.1.2.1.25.7	Yes

IANA-ADDRESS-FAMILY-NUMBERS-MIB

The ianaAddressFamilyNumbers MIB module defines the AddressFamilyNumbers textual convention.

Name	Description
AddressFamilyNumbers Syntax: Integer	The definition of this textual convention with the addition of newly assigned values is published periodically by the IANA, in either the Assigned Numbers RFC, or some derivative of it specific to Internet Network Management number assignments. (The latest arrangements can be obtained by contacting the IANA.)

IANAifType-MIB

The ianaifType MIB module defines the IANAifType textual convention, and thus the enumerated values of the ifType object defined in MIB-II's ifTable.

ianaifType textual convention

Name	Description
IANAifType Syntax: Integer	This data type is used as the syntax of the ifType object in the (updated) definition of MIB-II's ifTable. The definition of this textual convention with the addition of newly assigned values is published periodically by the IANA, in either the Assigned Numbers RFC, or some derivative of it specific to Internet Network Management number assignments. (The latest arrangements can be obtained by contacting the IANA.)
IANAtunnelType Syntax: Integer	The encapsulation method used by a tunnel.

IANA-RTPROTO-MIB

The ianaRtProtoMIB module defines the IANAipRouteProtocol and IANAipMRouteProtocol textual conventions for use in MIBs which need to identify unicast or multicast routing mechanisms. Any additions or changes to the contents of this MIB module require either publication of an RFC, or Designated Expert Review as defined in RFC 2434, Guidelines for Writing an IANA Considerations Section in RFCs. The Designated Expert will be selected by the IESG Area Director(s) of the Routing Area.

ianaRtProtoMIB textual convention

Name	Description
IANAipRouteProtocol Syntax: Integer	A mechanism for learning routes. Inclusion of values for routing protocols is not intended to imply that those protocols need be supported.
IANAipMRouteProtocol Syntax: Integer	The multicast routing protocol. Inclusion of values for multicast routing protocols is not intended to imply that those protocols need be supported.

Interface group MIB

The interface entry table is based on the RFC 2863 and it obsoletes RFC 2233. It contains information about the interfaces. Each sub-layer is considered to be an interface.

Table 21: MIB objects

Objects and OID	Supported	Description
ifTable 1.3.6.1.2.1.2.2	Yes (read-only)	An entry containing management information applicable to a particular interface.
ifXTable 1.3.6.1.2.1.31.1.1	Yes (read-only)	An entry containing additional management information applicable to a particular interface.
ifStackTable 1.3.6.1.2.1.31.1.2	No	Information on a particular relationship between two sub-layers, specifying that one sub-layer runs on 'top' of the other sub-layer. Each sub-layer corresponds to a conceptual row in the ifTable.
ifRcvAddressTable 1.3.6.1.2.1.31.1.4	No	This table contains an entry for each address (broadcast, multicast, or unicast) for which the system will receive packets or frames on a particular interface

IP Forwarding MIB

The IP Forwarding MIB module defines MIB objects for the management of Classless Inter-domain Routing (CIDR) multipath IP routes. The IP forwarding MIB is based on RFC 4292 and it obsoletes RFC 2096.

Note
IP Forwarding MIB is VRF-aware.

MIB objects

Objects and OID	Supported	Description
inetCidrRouterNumber 1.3.6.1.2.1.4.24.6	Yes	The number of valid entries in the inetCidrRouteTable.
inetCidrRouteTable 1.3.6.1.2.1.4.24.7	Yes	The IP routing table on a router.
inetCidrRouteDiscards 1.3.6.1.2.1.4.24.8	Yes	The number of valid route entries that have been discarded from the inetCidrRouteTable.

IP MIB

The Internet Protocol (IP) MIB module provides MIB objects for management of IP modules in an IP version-independent manner.

The IP MIB table is based on the RFC 4293.

Objects and OID	Supported	Description
ipForwarding 1.3.6.1.2.1.4.1	Yes (read-only)	The indication whether the entity is acting as a IPv4 router or not.
ipDefaultTTL 1.3.6.1.2.1.4.2	Yes (read-only)	The default value of TTL inserted into IPv4 datagrams.
ipReasmTimeout 1.3.6.1.2.1.4.13	Yes	The maximum number of seconds that received fragments are held before re-assembly.
ipv6IpForwarding 1.3.6.1.2.1.4.25	Yes (read-only)	The indication whether the entity is acting as a IPv6 router or not.
ipv6IpDefaultHopLimit 1.3.6.1.2.1.4.26	Yes (read-only)	The default value inserted in the hop limit field of the v6 header.
ipv4InterfaceTableLastChange 1.3.6.1.2.1.4.27	No	The value of sysUpTime at which a row in the IPv4 interface table was added, deleted, or updated.
ipv4InterfaceTable 1.3.6.1.2.1.4.28	Yes (read-only)	The table containing per-interface IPv4 specific information.
ipv6InterfaceTableLastChange 1.3.6.1.2.1.4.29	No	The value of sysUpTime at which a row in the IPv6 interface table was added, deleted, or updated.
ipv6InterfaceTable 1.3.6.1.2.1.4.30	Yes (read-only)	The table containing per-interface IPv6 specific information.
ipSystemStatsTable 1.3.6.1.2.1.4.31.1	No	The table containing system-wide IP version specific statistics.
ipIfStatsTableLastChange 1.3.6.1.2.1.4.31.2	No	The value of sysUpTime at which a row was added or deleted in the ipIfStatsTable.
ipIfStatsTable 1.3.6.1.2.1.4.31.3	No	The table containing per-interface traffic statistics.
ipAddressPrefixTable 1.3.6.1.2.1.4.32	No	The table allows the user to determine the source of an IP address or set of addresses and allows other tables to share the information.
ipAddressTable 1.3.6.1.2.1.4.34	Yes (read-only)	The table contains addressing information relevant to the entity's interfaces.
ipNetToPhysicalTable 1.3.6.1.2.1.4.35	Yes	The IP address translation table used for mapping between IP address to physical address.

Objects and OID	Supported	Description
ipv6ScopeZoneIndexTable 1.3.6.1.2.1.4.36	No	The table used to describe v6 unicast and multicast scope zones.
ipDefaultRouterTable 1.3.6.1.2.1.4.37	No	The table used to describe the default routers known to this entity.
ipv6RouterAdvertTable 1.3.6.1.2.1.4.39	Yes	The table containing information used to construct router advertisements.
icmpStatsTable 1.3.6.1.2.1.5.29	No	The table containing system-wide ICMP statistics.
icmpMsgStatsTable 1.3.6.1.2.1.5.30	No	The table containing per-version, per-message type counters.

IS-IS MIB

The MIB module contains managed object definitions that help in modeling the Intermediate System to Intermediate System (IS-IS) routing protocol. The definitions of managed objects for IS-IS table is based on the RFC 4444.

Supported MIB object groups

Note
IS-IS MIB does not support SNMP SET requests.

Objects group	OID	Supported
isisSysObject	1.3.6.1.2.1.138.1.1.1	Yes
isisManAreaAddrTable	1.3.6.1.2.1.138.1.1.2	Yes
isisAreaAddrTable	1.3.6.1.2.1.138.1.1.3	Yes
isisSummAddrTable	1.3.6.1.2.1.138.1.1.4	Yes
isisRedistributeAddrTable	1.3.6.1.2.1.138.1.1.5	Yes
isisRouterTable	1.3.6.1.2.1.138.1.1.6	No
isisSysLevelTable	1.3.6.1.2.1.138.1.2.1	Yes
isisNextCircIndex	1.3.6.1.2.1.138.1.3.1	Yes
isisCircTable	1.3.6.1.2.1.138.1.3.2	No
isisCircLevelTable	1.3.6.1.2.1.138.1.4.1	Yes
isisSystemCounterTable	1.3.6.1.2.1.138.1.5.1	Yes
isisCircuitCounterTable	1.3.6.1.2.1.138.1.5.2	Yes
isisPacketCounterTable	1.3.6.1.2.1.138.1.5.3	Yes
isisISAdjTable	1.3.6.1.2.1.138.1.6.1	Yes
isisISAdjAreaAddrTable	1.3.6.1.2.1.138.1.6.2	Yes
isisISAdjIPAddrTable	1.3.6.1.2.1.138.1.6.3	Yes
isisISAdjProtSuppTable	1.3.6.1.2.1.138.1.6.4	Yes
isisRATable	1.3.6.1.2.1.138.1.7.1	No
isisIPRATable	1.3.6.1.2.1.138.1.8.1	No
isisLSPSummaryTable	1.3.6.1.2.1.138.1.9.1	Yes
isisLSPTLVTable	1.3.6.1.2.1.138.1.9.2	Yes
isisNotificationEntry	1.3.6.1.2.1.138.1.10.1	Yes

Supported MIB notifications

Notification name	OID	Supported
isisDatabaseOverload	1.3.6.1.2.1.138.0.1	Yes
isisManualAddressDrops	1.3.6.1.2.1.138.0.2	No
isisCorruptedLSPDetected	1.3.6.1.2.1.138.0.3	No
isisAttemptToExceedMaxSequence	1.3.6.1.2.1.138.0.4	No
isisIDLenMismatch	1.3.6.1.2.1.138.0.5	Yes
isisMaxAreaAddressesMismatch	1.3.6.1.2.1.138.0.6	Yes
isisOwnLSPPurge	1.3.6.1.2.1.138.0.7	Yes
isisSequenceNumberSkip	1.3.6.1.2.1.138.0.8	Yes
isisAuthenticationTypeFailure	1.3.6.1.2.1.138.0.9	No
isisAuthenticationFailure	1.3.6.1.2.1.138.0.10	Yes
isisVersionSkew	1.3.6.1.2.1.138.0.11	No
isisAreaMismatch	1.3.6.1.2.1.138.0.12	Yes
isisRejectedAdjacency	1.3.6.1.2.1.138.0.13	No
isisLSPTooLargeToPropagate	1.3.6.1.2.1.138.0.14	No
isisOrigLSPBuffSizeMismatch	1.3.6.1.2.1.138.0.15	No
isisProtocolsSupportedMismatch	1.3.6.1.2.1.138.0.16	No
isisAdjacencyChange	1.3.6.1.2.1.138.0.17	Yes
isisLSPErrorDetected	1.3.6.1.2.1.138.0.18	Yes

LAG MIB

The Link Aggregation module for managing IEEE 802.3ad.

Supported object groups

Note
An Extreme device provides only read-only support to the following object groups listed here.

Object group name	OID
dot3adAggIndex	1.2.840.10006.300.43.1.1.1.1.1
dot3adAggMACAddress	1.2.840.10006.300.43.1.1.1.1.2
dot3adAggActorSystemPriority	1.2.840.10006.300.43.1.1.1.1.3
dot3adAggActorSystemID	1.2.840.10006.300.43.1.1.1.1.4
dot3adAggAggregateOrIndividual	1.2.840.10006.300.43.1.1.1.1.5
dot3adAggActorAdminKey	1.2.840.10006.300.43.1.1.1.1.6
dot3adAggActorOperKey	1.2.840.10006.300.43.1.1.1.1.7
dot3adAggPartnerSystemID	1.2.840.10006.300.43.1.1.1.1.8
dot3adAggPartnerSystemPriority	1.2.840.10006.300.43.1.1.1.1.9
dot3adAggPartnerOperKey	1.2.840.10006.300.43.1.1.1.1.10
dot3adAggCollectorMaxDelay	1.2.840.10006.300.43.1.1.1.1.11

LLDP MIB

The MIB module for LLDP configuration, statistics, local system data and remote systems data components.

Supported object groups

Object group name	OID	Supported?
lldpConfiguration	1.0.8802.1.1.2.1.1	Yes
lldpStatistics	1.0.8802.1.1.2.1.2	Yes
lldpLocalSystemData	1.0.8802.1.1.2.1.3	Yes
lldpRemoteSystemsData	1.0.8802.1.1.2.1.4	Yes
lldpExtensions	1.0.8802.1.1.2.1.5	Yes

Table 22: LLDP-MIB Notifications

Object Name	OID	Description
lldpRemTablesChange	1.0.8802.1.1.2.0.0.1	A lldpRemTablesChange notification is sent when the value of lldpStatsRemTableLastChangeTime changes. It can be utilized by an NMS to trigger LLDP remote systems table maintenance polls. Note that transmission of lldpRemTablesChange notifications are throttled by the agent, as specified by the 'lldpNotificationInterval' object.

LLDP-EXT-DOT1 MIB

The LLDP MIB extension module for IEEE 802.1 organizationally defined discovery information.

Supported object groups

Object group name	OID	Supported?
lldpXdot1Config	1.0.8802.1.1.2.1.5.32962.1.1	Yes
lldpXdot1LocalData	1.0.8802.1.1.2.1.5.32962.1.2	Yes
lldpXdot1RemoteData	1.0.8802.1.1.2.1.5.32962.1.3	Yes

LLDP-EXT-DOT3 MIB

The LLDP MIB extension module for IEEE 802.3 organizationally defined discovery information.

Supported object groups

Object group name	OID	Supported?
lldpXdot3Config	1.0.8802.1.1.2.1.5.4623.1.1	Yes
lldpXdot3LocalData	1.0.8802.1.1.2.1.5.4623.1.2	Yes
lldpXdot3RemoteData	1.0.8802.1.1.2.1.5.4623.1.3	Yes

MEF Service OAM PM MIB

The MEF_SOAM_PM MIB defines objects for managing Service Operations, Administration, and Maintenance (SOAM) capabilities on Ethernet-based interfaces.

mefSoamPmGlobalTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamPmGlobalOperNextIndex OID: 3.6.1.4.1.15007.1.3.1.1.1.1.1 Sytanx: Dot1afCfmIndexIntegerNextFree	This object contains an unused value for mefSoamPmOperIndex that is used in the mefSoamPmLm and mefSoamPmDm tables, or a zero to indicate that none exist. This value needs to be inspected in order to find an available index for row-creation of a PM session on a MEP. Referential integrity is required, i.e., the index needs to be persistent upon a reboot or restart of a device. The index can never be reused for other PM sessions on the same MEP. The index value should keep increasing up to the time that it wraps around. This is to facilitate access control based on OID. This object is an extension of the dot1agCfmMepTable and the object is automatically added or deleted based upon row creation and destruction of the dot1agCfmMepTable. This object needs to be persistent upon reboot or restart of a device	Yes
mefSoamPmGlobalLmSingleEndedResponder OID: 3.6.1.4.1.15007.1.3.1.1.1.1.2 Syntax: TruthValue	This attribute specifies whether the Loss Measurement (LMM) single ended responder is enabled. The value 'true' indicates the single ended Loss Measurement responder is enabled. The value 'false' indicates the single ended Loss Measurement responder is disabled.	Yes. (Always True)

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamPmGlobalSmSingleEndedResponder OID: 3.6.1.4.1.15007.1.3.1.1.1.1.3 Syntax: TruthValue	This attribute specifies whether the Synthetic Loss Measurement (SLM) single ended responder is enabled. The value 'true' indicates the single ended SLM responder is enabled. The value 'false' indicates the single ended SLM responder is disabled. This object needs to be persistent upon reboot or restart of a device.	Yes. (Always True)
mefSoamPmGlobalDmSingleEndedResponder OID: 3.6.1.4.1.15007.1.3.1.1.1.1.4 Syntax: TruthValue	This attribute specifies whether the Delay Measurement (DMM) single ended responder is enabled. The value 'true' indicates the single ended Delay Measurement responder is enabled. The value 'false' indicates the single ended Delay Measurement responder is disabled. This object needs to be persistent upon reboot or restart of a device.	Yes. (Always True)

mefSoamLmCfgTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCfgIndex OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.1 Syntax: Unsigned32(1..4294967295)	The index to the Loss Measurement Configuration table. mefSoamPmOperNextIndex needs to be inspected to find an available index for row-creation. Referential integrity is required, i.e., the index needs to be persistent upon a reboot or restart of a device.	Yes Not-accessible
mefSoamLmCfgType 1.3.6.1.4.1.15007.1.3.1.2.1.1.2 Syntax: Integer { lmLmm (1), lmSlm (2), lm1SlTx (3), lm1SlRx (4), lmCcm (5) }	This attribute specifies what type of Loss Measurement will be performed.lmLmm(1) LMM SOAM PDU generated and received LMR responses trackedlmSlm(2) SLM SOAM PDU generated and received SLR responses trackedlm1SlTx(3) 1SL SOAM PDU generatedlm1SlRx(4) 1SL SOAM PDU receivedlmCcm(5) CCM SOAM PDU generated and received CCM PDUs tracked	Partial. Only **lmSlm** will be supported. i.e Only 2-way LM is supported.
mefSoamLmCfgEnabled OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.3 Syntax: TruthValue	This attribute specifies whether the Loss Measurement session is enabled. The value 'true' indicates the Loss Measurement session is enabled. The value 'false' indicates the Loss Measurement session is disabled.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCfgCounterEnable OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.4 Syntax: BITS { bTimeOfDayTimestamp(0), bMeasurementIntervalElapsedTime(1), bInitiatedMeasurementCounter(2), bCompleteMeasurementCounter(3), bTransmitFrameCountForward(4), bReceiveFrameCountForward(5), bTransmitFrameCountBackward(6), bReceiveFrameCountBackward(7), bAvailabilityIndicatorForward(8), bAvailabilityIndicatorBackward(9), bUnavailabilityIndicatorForward(10), bUnavailabilityIndicatorBackward(11), bFrameLossRatioForwardMin(12), bFrameLossRatioForwardMax(13), bFrameLossRatioForwardAve(14), bFrameLossRatioBackwardMin(15), bFrameLossRatioBackwardMax(16), bFrameLossRatioBackwardAve(17) }	A vector of bits that indicates the type of SOAM LM counters that are enabled. A bit set to '1' enables the specific SOAM LM counter. A bit set to '0' disables the SOAM LM counter. If a particular SOAM LM counter is not supported the BIT value should be set to '0'.	Yes. Following values are not supported.bAvailabilityIndicatorForward(8), bAvailabilityIndicatorBackward(9), bUnavailabilityIndicatorForward(10), bUnavailabilityIndicatorBackward(11)
mefSoamLmCfgInterval OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.5 Syntax: MefSoamTcPerfMonIntervalType	This attribute specifies the Performance Monitoring OAM message transmission period. For Performance monitoring applications the default value is 1 sec.	Yes
mefSoamLmCfgPriority OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.6 IEEE8021 Syntax: PriorityValue	This attribute specifies the priority of frames with the Loss Measurement OAM message information. The default value MUST be the value which yields the lowest frame loss performance for this EVC.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCfgDropEligible OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.7 Syntax: TruthValue	This attribute specifies the Drop Eligible Indicator of Loss Measurement OAM frames. The value 'true' indicates frames are eligible to be discarded. The value 'false' indicates frames are not eligible to be discarded	Yes
mefSoamLmCfgFrameSize OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.8 Syntax: Unsigned32 (64..9600)	This attribute specifies the Loss Measurement frame size between 64 bytes and the maximum transmission unit of the EVC. The range of frame sizes from 64 through 2000 octets, in 4 octet increments, MUST be supported, and the range of frame sizes from 2004 through 9600 octets, in 4 octet increments, SHOULD be supported.	Yes
mefSoamLmCfgMeasurementInterval 1.3.6.1.4.1.15007.1.3.1.2.1.1.12 Syntax: Unsigned32 (1..1440)	This attribute specifies a measurement interval in minutes.	Yes
mefSoamLmCfgDestMacAddress OID 1.3.6.1.4.1.15007.1.3.1.2.1.1.13 Syntax: MacAddress	The Target or Destination MAC Address Field to be transmitted. If mefSoamLmType is lmLmm or lmSlm, the destination address must be the unicast address of the destination MEP. An error is returned if this object is set to a multicast address. This address will be used if the value of the object mefSoamLmDestIsMepId is 'false'. This object is only valid for the entity transmitting the SOAM LM frames and is ignored by the entity receiving SOAM LM frames.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCfgDestMepId OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.14 Dot1agCfmMepIdOrZero	The Maintenance Association End Point Identifier of another MEP in the same Maintenance Association to which the SOAM LM frame is to be sent. This address will be used if the value of the column mefSoamLmDestIsMepId is 'true'. A value of zero means that the destination MEP ID has not been configured.	Yes
mefSoamLmCfgDestIsMepId OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.15 Syntax: TruthValue	A value of 'true' indicates that MEPID of the target MEP is used for SOAM LM frame transmission. A value of 'false' indicates that the MAC address of the target MEP is used for SOAM LM frame transmission.	Yes
mefSoamLmCfgStartTimeType OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.17 Syntax: MefSoamTcOperationTimeType	This attribute specifies the type of start time of the SOAM LM session. The start time can be disabled (none), immediate, relative, or fixed.	Yes
mefSoamLmCfgFixedStartDateAndTime OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.18 Syntax: DateAndTime	This attribute specifies the fixed start date/time for the SOAM Loss Measurement session. This attribute is used only used if mefSoamLmStartTimeType is 'fixed' and is ignored otherwise.	Yes
mefSoamLmCfgRelativeStartTime OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.19 TimeInterval	This attribute specifies the relative start time, from the current system time, for the SOAM LM session. This attribute is used only if mefSoamLmStartTimeType is 'relative' and is ignored otherwise.	Yes
mefSoamLmCfgStopTimeType 1.3.6.1.4.1.15007.1.3.1.2.1.1.20 MefSoamTcOperationTimeType	This attribute specifies the type of stop time to terminate the SOAM LM session. The stop time can be forever (none), relative, or fixed.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCfgFixedStopDateAndTime OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.21 Syntax: DateAndTime	This attribute specifies the fixed stop date/time for the SOAM Loss Measurement session. This attribute is used only used if mefSoamLmStopTimeType is 'fixed' and is ignored otherwise.	Yes
mefSoamLmCfgRelativeStopTime OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.22 Syntax: TimeInterval	This attribute specifies the relative stop time, from the session start time, to stop the SOAM LM session. This attribute is used only if mefSoamLmStopTimeType is 'relative' and is ignored otherwise	Yes
mefSoamLmCfgPeriodicity OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.23 Syntax: TimeInterval	This attribute specifies a configurable periodicity time per Loss Measurement session. The periodicity time can be specified as none (value of 0) or in relative time (e.g., every given number of hours, minutes, and seconds from the start time). If the SOAM LM session stop time is 'none' (forever), then the periodicitytime must be none. If the SOAM LM session stop time is 'relative' and the periodicity timeis relative time (non-zero value), then the periodicity time must be equal to or greater than the duration time (mefSoamLmRelativeStopTime).	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCfgAlignMeasurementIntervals 1.3.OID: 6.1.4.1.15007.1.3.1.2.1.1.24 Syntax: TruthValue	This attribute specifies whether the measurement intervals for the Loss Measurement session are aligned with a zero offset to real time. The value 'true' indicates that each Measurement Interval starts at a time which is aligned to NE time source hour if the interval is a factor of an hour. The value 'false' indicates that each Measurement Interval starts at a time which is a whole number of measurement intervals after the session start time.	Yes
mefSoamLmCfgSessionStatus OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.29 Syntax: TruthValue	This object indicates the current status of the LM session. A value of 'true' indicates the current LM session is active. A value of 'false' indicates the current LM session is not active, has not started yet, or is currently in the stopped state between periods of activity. A session can become inactive due to it stopping based upon the stop time or the session being disabled.	Yes
mefSoamLmCfgHistoryClear OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.30 Syntax: TruthValue	This object when written clears the Loss Measurement history Table (mefSoamLmHistoricStatsTable) - all rows are deleted. When read the value always returns 'false'.	Yes
mefSoamLmCfgRowStatus OID: 1.3.6.1.4.1.15007.1.3.1.2.1.1.31 Syntax: RowStatus	The status of the row. The writable columns in a row cannot be changed if the row is active. All columns must have a valid value before a row can be activated.	Yes

mefSoamLmCurrentStatsTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCurrentStatsIndex OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.1 Syntax: Unsigned32	The index for the current measurement interval for this PM session. This value will become the value for mefSoamLmHistoricStatsIndex once the measurement interval is completed.	YesNot-accessible
mefSoamLmCurrentStatsStartTime OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.2 Syntax: DateAndTime	The time that the current measurement interval started. This object applies regardless of the value of mefSoamLmType.	Yes
mefSoamLmCurrentStatsElapsedTime OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.3 Syntax: TimeInterval	The time that the current measurement interval has been running, in 0.01 seconds.	Yes
mefSoamLmCurrentStatsSuspect OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.4 Syntax: TruthValue	Whether the measurement interval has been marked as suspect.	Yes
mefSoamLmCurrentStatsForwardTransmittedFrames OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.5 Syntax: Gauge32	This attribute contains the number of frames transmitted in the forward direction by this MEP.	Yes
mefSoamLmCurrentStatsForwardReceivedFrames OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.6 Syntax: Gauge32	This attribute contains the number of frames received in the forward direction by this MEP.	Yes
mefSoamLmCurrentStatsForwardMinFlr OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.7 Syntax: Unsigned32 (0..100000)	This attribute contains the minimum one-way frame loss ratio in the forward direction calculated by this MEP for this measurement interval. The FLR value is a ratio that is expressed as a percent with a value of 0 (ratio 0.00) through 100000 (ratio 1.00).Units are in percent, where 1 = 1/100000	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCurrentStatsForwardMaxFlr OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.8 Syntax: Unsigned32 (0..100000)	This attribute contains the maximum one-way frame loss ratio in the forward direction calculated by this MEP for this measurement interval.Units are in percent, where 1 = 1/100000	Yes
mefSoamLmCurrentStatsForwardAvgFlr OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.9 Syntax: Unsigned32 (0..100000)	This attribute contains the average one-way frame loss ratio in the forward direction calculated by this MEP for this measurement interval.Units are in percent, where 1 = 1/100000	Yes
mefSoamLmCurrentStatsBackwardTransmittedFrames OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.12 Syntax: Gauge32	This attribute contains the number of frames transmitted in the backward direction by this MEP. This attribute only applies when mefSoamLmType is lmLmm or lmSlm	Yes
mefSoamLmCurrentStatsBackwardReceivedFrames OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.13 Syntax: Gauge32	This attribute contains the number of frames received in the backward direction by this MEP. This attribute only applies when mefSoamLmType is lmLmm or lmSlm	Yes
mefSoamLmCurrentStatsBackwardMinFlr 1.3.6.1.4.1.15007.1.3.1.2.3.1.14 Unsigned32 (0..100000)	This attribute contains the minimum one-way frame loss ratio in the backward direction calculated by this MEP for this measurement interval. Units are in percent, where 1 = 1/100000. This attribute only applies when mefSoamLmType is lmLmm or lmSlm.	Yes
mefSoamLmCurrentStatsBackwardMaxFlr OID:1.3.6.1.4.1.15007.1.3.1.2.3.1.15 Syntax: Unsigned32 (0..100000)	This attribute contains the maximum one-way frame loss ratio in the backward direction calculated by this MEP for this measurement interval. Units are in percent, where 1 = 1/100000. This attribute only applies when mefSoamLmType is lmLmm or lmSlm.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmCurrentStatsBackwardAvgFlr OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.16 Syntax: Unsigned32 (0..100000)	This attribute contains the average one-way frame loss ratio in the backward direction calculated by this MEP for this measurement interval. Units are in percent, where 1 = 1/100000. This attribute only applies when mefSoamLmType is lmLmm or lmSlm.	Yes
mefSoamLmCurrentStatsInitiatedMeasurements OID: OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.19 Syntax: Gauge32	This attribute contains the count of the number of measurements initiated during this measurement interval.	Yes
mefSoamLmCurrentStatsCompletedMeasurements OID: 1.3.6.1.4.1.15007.1.3.1.2.3.1.20 Syntax: Gauge32	This attribute contains the count of the number of measurements initiated in this measurement interval that have completed.	Yes

mefSoamDmCfgTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgIndex OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.1 Syntax: Unsigned32	The index to the Delay Measurement Configuration table.mefSoamPmOperNextIndex needs to be inspected to find an available index for row-creation.	Yes. Not-accessible
mefSoamDmCfgType OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.2 Syntax: Integer { dmDmm (1), dm1DmTx (2), dm1DmRx (3) }	This attribute indicates what type of Delay Measurement to be performed. dmDmm(1) DMM SOAM PDU generated, DMR responses received (1-way or 2-way measurements)dm1DmTx(2) 1DM SOAM PDU generated (1-way measurements)dm1DmRx(3) 1DM SOAM PDU received and tracked (1-way measurements)The exact PDUs to use are specified by this object in combination with mefSoamDmCfgVersion.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgVersion OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.3 Syntax: Unsigned32	This attribute indicates the version of the PDUs used to perform Delay Measurement. Version 0 indicates the PDU formats defined in Y.1731-2008.Version 1 indicates the PDU formats defined in Y.1731-20xx.The exact PDUs to use are specified by this object in combination with mefSoamDmCfgType.	Yes. Supports version 0 only.
mefSoamDmCfgEnabled OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.4 Syntax: TruthValue	This attribute specifies whether the Delay Measurement session is enabled. The value 'true' indicates the Delay measurement session is enabled. The value 'false' indicates Delay Measurement session is disabled.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgCounterEnable OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.5 Syntax: BITS { bTimeOfDayTimestamp(0), bMeasurementIntervalElapsedTime(1), bInitiatedMeasurementCounter(2), bCompleteMeasurementCounter(3), bFrameDelayRoundTripBins(4), bFrameDelayRoundTripMin(5), bFrameDelayRoundTripMax(6), bFrameDelayRoundTripAve(7), bFrameDelayForwardBins(8), bFrameDelayForwardMin(9), bFrameDelayForwardMax(10), bFrameDelayForwardAve(11), bFrameDelayBackwardBins(12), bFrameDelayBackwardMin(13), bFrameDelayBackwardMax(14), bFrameDelayBackwardAve(15), bIFDVForwardBins(16), bIFDVForwardMin(17), bIFDVForwardMax(18), bIFDVForwardAve(19), bIFDVBackwardBins(20), bIFDVBackwardMin(21), bIFDVBackwardMax(22), bIFDVBackwardAve(23), bIFDVRoundTripBins(24), bIFDVRoundTripMin(25), bIFDVRoundTripMax(26), bIFDVRoundTripAve(27) }	A vector of bits that indicates the type of SOAM DM counters that are enabled. A bit set to '1' enables the specific SOAM DM counter. A bit set to '0' disables the SOAM DM counter.If a particular SOAM DM counter is not supported the BIT value should be set to '0'.	Yes. Only following are supported : bMeasurementIntervalElapsedTime(1), bInitiatedMeasurementCounter(2), bCompleteMeasurementCounter(3), bFrameDelayRoundTripBins(4), bFrameDelayRoundTripMin(5), bFrameDelayRoundTripMax(6), bFrameDelayRoundTripAve(7),
mefSoamDmCfgInterval OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.6 Syntax: MefSoamTcPerfMonIntervalType	This attribute specifies the Performance Monitoring OAM message transmission period. For Performance monitoring applications, the default value is 100ms.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgPriority 1.3.6.1.4.1.15007.1.3.1.3.1.1.7 Syntax: IEEE8021PriorityValue	This attribute specifies the priority of frames with Delay Measurement OAM message information. The default value MUST be the value which yields the lowest frame loss performance for this EVC.	Yes
mefSoamDmCfgDropEligible OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.8 Syntax: TruthValue	This attribute specifies the Drop Eligible Indicator of Delay Measurement OAM frames. The value 'true' indicates frames are eligible to be discarded. The value 'false' indicates frames are not eligible to be discarded.	Yes. Always True.
mefSoamDmCfgFrameSize OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.9 Syntax: Unsigned32	This attribute specifies the Delay Measurement frame size between 64 bytes and the maximum transmission unit of the EVC. The range of frame sizes from 64 through 2000 octets, in 4 octet increments, MUST be supported, and the range of frame sizes from 2004 through 9600 octets, in 4 octet increments, SHOULD be supported. The adjustment to the frame size of the standard frame size is accomplished by the addition of a Data or Test TLV. A Data or Test TLV is only added to the frame if the frame size is greater than 64 bytes. This object is only valid for the entity transmitting the Delay Measurement frames (dmDmm, dm1DmTx) and is ignored by the entity receiving frames.	Yes
mefSoamDmCfgMeasurementInterval OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.13 Syntax: Unsigned32 (1..1440)	This attribute specifies a measurement interval in minutes.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgDestMacAddress OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.14 Syntax: MacAddress	The Target or Destination MAC Address Field to be transmitted. If mefSoamDmType is dmDmm, the destination address must be the unicast address of the destination MEP. An error is returned if this object is set to a multicast address.If mefSoamDmType is dm1DmTx, the destination address is normally the unicast address of the destination MEP, but may be a multicast address indicating the level of the MEG: 01-80-c2-00-00-3y, where y is the level of the MEG. An error is returned if this object is set to any other multicast address. If mefSoamDmType is dm1DmRx, this object is ignored. This address will be used if the value of the object mefSoamDmDestIsMepId is 'false'.This object is only valid for the entity transmitting the SOAM DM frames and is ignored by the entity receiving SOAM DM frames.	Yes
mefSoamDmCfgDestMepId OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.15 Syntax: Dot1agCfmMepIdOrZero	The Maintenance Association End Point Identifier of another MEP in the same Maintenance Association to which the SOAM DM frame is to be sent.This address will be used if the value of the column mefSoamDmDestIsMepId is 'true'. A value of zero means that the destination MEP ID has not been configured. This object is only valid for the entity transmitting the SOAM DM frames and is ignored by the entity receiving SOAM DM frames.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgDestIsMepId OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.16 Syntax: TruthValue	A value of 'true' indicates that MEPID of the target MEP is used for SOAM DM frame transmission.A value of 'false' indicates that the destination MAC address of the target MEP is used for SOAM DM frame transmission.	Yes
mefSoamDmCfgStartTimeType OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.18 Syntax: MefSoamTcOperationTimeType	This attribute specifies the type of start time of the SOAM DM session. The start time can be disabled (none), immediate, relative, or fixed.	Yes
mefSoamDmCfgFixedStartDateAndTime 1.3.6.1.4.1.15007.1.3.1.3.1.1.19 Syntax: DateAndTime	This attribute specifies the fixed start date/time for the SOAM Delay Measurement session. This attribute is used only used if mefSoamDmStartTimeType is 'fixed' and is ignored otherwise.	Yes
mefSoamDmCfgRelativeStartTime OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.20 T Syntax: imeInterval	This attribute specifies the relative start time, from the current system time, for the SOAM DM session. This attribute is used only if mefSoamDmStartTimeType is 'relative' and is ignored otherwise.	Yes
mefSoamDmCfgStopTimeType OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.21 Syntax: MefSoamTcOperationTimeType	This attribute specifies the type of stop time to terminate the SOAM DM session. The stop time can be forever (none), relative, or fixed.	Yes
mefSoamDmCfgFixedStopDateAndTime 1.3.6.1.4.1.15007.1.3.1.3.1.1.22 DateAndTime	This attribute specifies the fixed stop date/time for the SOAM Delay Measurement session. This attribute is used only used if mefSoamDmStopTimeType is 'fixed' and is ignored otherwise.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgRelativeStopTime OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.23 Syntax: TimeInterval	This attribute specifies the relative stop time, from the session start time, to stop the SOAM DM session. This attribute is used only if mefSoamDmStopTimeType is 'relative' and is ignored otherwise.	Yes
mefSoamDmCfgPeriodicity OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.24 Syntax: TimeInterval	This attribute specifies a configurable periodicity time per Delay Measurement session. The periodicity time can be specified as none (value of 0) or in relative time (e.g., every given number of hours, minutes, and seconds from the start time).If the SOAM DM session stop time is none (forever), then the periodicity time must be none. If the SOAM DM session stop time is 'relative' and the periodicity time is relative time (non-zero value), then the periodicity time must be equal to or greater than the duration time (mefSoamDmRelativeStopTime).	Yes
mefSoamDmCfgAlignMeasurementInter vals OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.25 Syntax: TruthValue	This attribute specifies whether the measurement intervals for the Delay Measurement session are aligned with a zero offset to real time. The value 'true' indicates that each measurement Interval starts at a time which is aligned to NE time source hour if the interval is a factor of an hour.The value 'false' indicates that each Measurement Interval starts at a time which is a whole number of measurement intervals after the session start time.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCfgSessionStatus OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.30 Syntax: TruthValue	This object indicates the current status of the DM session. A value of 'true' indicates the current DM session is active. A value of 'false' indicates the current DM session is not active, has not started yet, or is currently in the stopped state between periods of activity. A session can become inactive due to it stopping based upon the stop time or the session being disabled.	Yes
mefSoamDmCfgHistoryClear OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.31 Syntax: TruthValue	This object when written clears the Delay Measurement history tables (mefSoamDmHistoricStatsTable and mefSoamDmHistoricStatsBinsTable)- all rows are deleted. When read the value always returns 'false'.Writing this value does not change the current stat table, nor any of the items in the configuration table.	Yes
mefSoamDmCfgRowStatus OID: 1.3.6.1.4.1.15007.1.3.1.3.1.1.32 Syntax: RowStatus	The status of the row.	Yes

mefSoamDmCurrentStatsTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCurrentStatsIndex OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.1 Syntax: Unsigned32	The index for the current measurement interval for this PM session. This value will become the value for mefSoamDmHistoricStatsIndex once the measurement interval is completed.	Yes
mefSoamDmCurrentStatsStartTime OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.2 Syntax: DateAndTime	The time that the current measurement interval started. This object applies regardless of the value of mefSoamDmType.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmCurrentStatsElapsedTime OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.3 Syntax: TimeInterval	The time that the current measurement interval has been running, in 0.01 seconds. This object applies regardless of the value of mefSoamDmType.	Yes
mefSoamDmCurrentStatsSuspect OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.4 Syntax: TruthValue	Whether the measurement interval has been marked as suspect.	Yes
mefSoamDmCurrentStatsFrameDelayRoundTripMin OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.5 Syntax:Unsigned32	This attribute contains the minimum round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmCurrentStatsFrameDelayRoundTripMax OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.6 Syntax:Unsigned32	This attribute contains the maximum round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmCurrentStatsFrameDelayRoundTripAvg OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.7 Syntax: Unsigned32	This attribute contains the average round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmCurrentStatsInitiatedMeasurements OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.23 Syntax: Gauge32	This attribute contains the count of the number of measurements initiated during this measurement interval. This attribute applies when mefSoamDmType is dmDmm, or dm1DmTx.	Yes
mefSoamDmCurrentStatsCompletedMeasurements OID: 1.3.6.1.4.1.15007.1.3.1.3.4.1.24 Syntax: Gauge32	This attribute contains the count of the number of measurements initiated in this measurement interval that have completed."	Yes

mefSoamDmHistoricStatsTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmHistoricStatsIndex OID: 1.3.6.1.4.1.15007.1.3.1.3.5.1.1 Syntax: Unsigned32	The index for the measurement interval within this PM session.	Yes. Not-accessible
mefSoamDmHistoricStatsEndTime OID: 3.6.1.4.1.15007.1.3.1.3.5.1.2 Syntax: DateAndTime	The time that the measurement interval ended.	Yes
mefSoamDmHistoricStatsElapsedTime OID: 3.6.1.4.1.15007.1.3.1.3.5.1.3 Syntax: TimeInterval	The length of time that the measurement interval ran for, in 0.01 seconds.	Yes
mefSoamDmHistoricStatsSuspect OID: 3.6.1.4.1.15007.1.3.1.3.5.1.4 Syntax: TruthValue	Whether the measurement interval has been marked as suspect.	Yes
mefSoamDmHistoricStatsFrameDelayRoundTripMin OID: 3.6.1.4.1.15007.1.3.1.3.5.1.5 Syntax: Unsigned32	This attribute contains the minimum round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayRoundTripMax OID: 3.6.1.4.1.15007.1.3.1.3.5.1.6 Syntax: Unsigned32	This attribute contains the maximum round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayRoundTripAvg OID: 3.6.1.4.1.15007.1.3.1.3.5.1.7 Syntax: Unsigned32	This attribute contains the average round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayForwardMin OID: 3.6.1.4.1.15007.1.3.1.3.5.1.8 Syntax: Unsigned32	This attribute contains the minimum one-way frame delay in the forward direction calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayForwardMax OID: 3.6.1.4.1.15007.1.3.1.3.5.1.9 Syntax: Unsigned32	This attribute contains the maximum one-way frame delay in the forward direction calculated by this MEP for this measurement interval.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmHistoricStatsFrameDelayForwardAvg OID: 3.6.1.4.1.15007.1.3.1.3.5.1.10 Syntax: Unsigned32	This attribute contains the average one-way frame delay in the forward direction calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsInitiatedMeasurements OID: 3.6.1.4.1.15007.1.3.1.3.5.1.23 Syntax: Unsigned32	This attribute contains the count of the number of measurements initiated during this measurement interval. This attribute applies when mefSoamDmType is dmDmm, or dm1DmTx.	Yes
mefSoamDmHistoricStatsCompletedMeasurements OID: 3.6.1.4.1.15007.1.3.1.3.5.1.24 Syntax: Unsigned32	This attribute contains the count of the number of measurements initiated in this measurement interval that have completed.	Yes

mefSoamDmThresholdTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmThresholdIndex OID: 1.3.6.1.4.1.15007.1.3.1.3.7.1.1 Syntax: Unsigned32	The index of the threshold number for the specific DM threshold entry.	Yes. Not-accessible
mefSoamDmThresholdEnable OID: 1.3.6.1.4.1.15007.1.3.1.3.7.1.2 Syntax: BITS { bMefSoamDmMaxFrameDelayRoundTripThreshold(0), bMefSoamDmAveFrameDelayRoundTripThreshold(1), bMefSoamDmMaxIFDVRoundTripThreshold(2), bMefSoamDmAveIFDVRoundTripThreshold(3), bMefSoamDmMaxFrameDelayForwardThreshold(4), bMefSoamDmAveFrameDelayForwardThreshold(5), bMefSoamDmMaxIFDVForwardThreshold(6), bMefSoamDmAveIFDVForwardThreshold(7), bMefSoamDmMaxFrameDelayBackwardThreshold(8), bMefSoamDmAveFrameDelayBackwardThreshold(9), bMefSoamDmMaxIFDVBackwardThreshold(10), bMefSoamDmAveIFDVBackwardThreshold(11) }	A vector of bits that indicates the type of SOAM DM threshold notifications that are enabled.A bit set to '1' enables the specific SOAM DM threshold notification and when the specific counter is enabled and the threshold is crossed a notification is generated. A bit set to '0' disables the specific SOAM DM threshold notification. If a particular SOAM DM threshold is not supported the BIT value should be set to '0'.	Yes
mefSoamDmThresholdMaxFrameDelayRoundTripThreshold OID: 1.3.6.1.4.1.15007.1.3.1.3.7.1.3 Syntax: Unsigned32	This object is used to set the maximum two-way round trip delay threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamDmThresholdAveFrameDelayRoundTripThreshold OID: 1.3.6.1.4.1.15007.1.3.1.3.7.1.4 Syntax: Unsigned32	This object is used to set the average two-way round trip delay threshold value that will be used to determine if a threshold notification should be generated.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmThresholdMaxFrameDelayForwardThreshold OID: 1.3.6.1.4.1.15007.1.3.1.3.7.1.7 Syntax: Unsigned32	This object is used to set the maximum forward delay threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamDmThresholdAveFrameDelayForwardThreshold OID: 1.3.6.1.4.1.15007.1.3.1.3.7.1.8 Syntax: Unsigned32	This object is used to set the average forward delay threshold value that will be used to determine if a threshold notification should be generated.	Yes

mefSoamDmHistoricStatsTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmHistoricStatsIndex 1.3.6.1.4.1.15007.1.3.1.3.5.1.1 Unsigned32	The index for the measurement interval within this PM session.	Yes. Not-accessible
mefSoamDmHistoricStatsEndTime 1.3.6.1.4.1.15007.1.3.1.3.5.1.2 DateAndTime	The time that the measurement interval ended.	Yes
mefSoamDmHistoricStatsElapsedTime 1.3.6.1.4.1.15007.1.3.1.3.5.1.3 TimeInterval	The length of time that the measurement interval ran for, in 0.01 seconds.	Yes
mefSoamDmHistoricStatsSuspect 1.3.6.1.4.1.15007.1.3.1.3.5.1.4 TruthValue	Whether the measurement interval has been marked as suspect.	Yes
mefSoamDmHistoricStatsFrameDelayRoundTripMin 1.3.6.1.4.1.15007.1.3.1.3.5.1.5 Unsigned32	This attribute contains the minimum round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayRoundTripMax 1.3.6.1.4.1.15007.1.3.1.3.5.1.6 Unsigned32	This attribute contains the maximum round-trip frame delay calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayRoundTripAvg 1.3.6.1.4.1.15007.1.3.1.3.5.1.7 Unsigned32	This attribute contains the average round-trip frame delay calculated by this MEP for this measurement interval.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmHistoricStatsFrameDelayForwardMin 1.3.6.1.4.1.15007.1.3.1.3.5.1.8 Unsigned32	This attribute contains the minimum one-way frame delay in the forward direction calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayForwardMax 1.3.6.1.4.1.15007.1.3.1.3.5.1.9 Unsigned32	This attribute contains the maximum one-way frame delay in the forward direction calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayForwardAvg 1.3.6.1.4.1.15007.1.3.1.3.5.1.10 Unsigned32	This attribute contains the average one-way frame delay in the forward direction calculated by this MEP for this measurement interval.	Yes
mefSoamDmHistoricStatsFrameDelayBackwardMin 1.3.6.1.4.1.15007.1.3.1.3.5.1.11 Unsigned32	This attribute contains the minimum one-way frame delay in the backward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsFrameDelayBackwardMax 1.3.6.1.4.1.15007.1.3.1.3.5.1.13 Unsigned32	This attribute contains the maximum one-way frame delay in the backward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsFrameDelayBackwardAvg 1.3.6.1.4.1.15007.1.3.1.3.5.1.13 Unsigned32	This attribute contains the average one-way frame delay in the backward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVForwardMin 1.3.6.1.4.1.15007.1.3.1.3.5.1.14 Unsigned32	This attribute contains the minimum one-way inter-frame delay interval in the forward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVForwardMax 1.3.6.1.4.1.15007.1.3.1.3.5.1.15 Unsigned32	This attribute contains the maximum one-way inter-frame delay interval in the forward direction calculated by this MEP for this measurement interval.	No

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmHistoricStatsIFDVForwardAvg 1.3.6.1.4.1.15007.1.3.1.3.5.1.16 Unsigned32	This attribute contains the average one-way inter-frame delay interval in the forward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVBackwardMin 1.3.6.1.4.1.15007.1.3.1.3.5.1.17 Unsigned32	This attribute contains the minimum one-way inter-frame delay interval in the backward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVBackwardMax 1.3.6.1.4.1.15007.1.3.1.3.5.1.18 Unsigned32	This attribute contains the maximum one-way inter-frame delay interval in the backward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVBackwardAvg 1.3.6.1.4.1.15007.1.3.1.3.5.1.19 Unsigned32	This attribute contains the average one-way inter-frame delay interval in the backward direction calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVRoundTripMin 1.3.6.1.4.1.15007.1.3.1.3.5.1.20 Unsigned32	This attribute contains the minimum round trip inter-frame delay interval calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVRoundTripMax 1.3.6.1.4.1.15007.1.3.1.3.5.1.21 Unsigned32	This attribute contains the maximum round trip inter-frame delay interval calculated by this MEP for this measurement interval.	No
mefSoamDmHistoricStatsIFDVRoundTripAvg 1.3.6.1.4.1.15007.1.3.1.3.5.1.22 Unsigned32	This attribute contains the average round trip inter-frame delay interval calculated by this MEP for this measurement interval.	No

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmHistoricStatsInitiatedMeasurements 1.3.6.1.4.1.15007.1.3.1.3.5.1.23 Unsigned32	This attribute contains the count of the number of measurements initiated during this measurement interval. This attribute applies when mefSoamDmType is dmDmm, or dm1DmTx.	Yes
mefSoamDmHistoricStatsCompletedMeasurements 1.3.6.1.4.1.15007.1.3.1.3.5.1.24 Unsigned32	This attribute contains the count of the number of measurements initiated in this measurement interval that have completed.	Yes

mefSoamDmThresholdTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmThresholdIndex 1.3.6.1.4.1.15007.1.3.1.3.7.1.1 Unsigned32	The index of the threshold number for the specific DM threshold entry.	Yes. Not-accessible
mefSoamDmThresholdEnable 1.3.6.1.4.1.15007.1.3.1.3.7.1.2 BITS { bMefSoamDmMaxFrameDelayRoundTripThreshold(0), bMefSoamDmAveFrameDelayRoundTripThreshold(1), bMefSoamDmMaxIFDVRoundTripThreshold(2), bMefSoamDmAveIFDVRoundTripThreshold(3), bMefSoamDmMaxFrameDelayForwardThreshold(4), bMefSoamDmAveFrameDelayForwardThreshold(5), bMefSoamDmMaxIFDVForwardThreshold(6), bMefSoamDmAveIFDVForwardThreshold(7), bMefSoamDmMaxFrameDelayBackwardThreshold(8), bMefSoamDmAveFrameDelayBackwardThreshold(9), bMefSoamDmMaxIFDVBackwardThreshold(10), bMefSoamDmAveIFDVBackwardThreshold(11) }	A vector of bits that indicates the type of SOAM DM threshold notifications that are enabled. A bit set to '1' enables the specific SOAM DM threshold notification and when the specific counter is enabled and the threshold is crossed a notification is generated. A bit set to '0' disables the specific SOAM DM threshold notification. If a particular SOAM DM threshold is not supported the BIT value should be set to '0'.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmThresholdMaxFrameDelayRoundTripThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.3 Unsigned32	This object is used to set the maximum two-way round trip delay threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamDmThresholdAveFrameDelayRoundTripThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.4 Unsigned32	This object is used to set the average two-way round trip delay threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamDmThresholdMaxIFDVRoundTripThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.5 Unsigned32	This object is used to set the maximum round trip IFDV threshold value that will be used to determine if a threshold notification should be generated.	No
mefSoamDmThresholdAveIFDVRoundTripThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.6 Unsigned32	This object is used to set the average round trip IFDV threshold value that will be used to determine if a threshold notification should be generated.	No
mefSoamDmThresholdMaxFrameDelayForwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.7 Unsigned32	This object is used to set the maximum forward delay threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamDmThresholdAveFrameDelayForwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.8 Unsigned32	This object is used to set the average forward delay threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamDmThresholdMaxIFDVForwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.9 Unsigned32	This object is used to set the maximum IFDV threshold value that will be used to determine if a threshold notification should be generated.	No
mefSoamDmThresholdAveIFDVForwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.10 Unsigned32	This object is used to set the average IFDV threshold value that will be used to determine if a threshold notification should be generated.	No

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamDmThresholdMaxFrameDelayBackwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.11 Unsigned32	This object is used to set the maximum backward delay threshold value that will be used to determine if a threshold notification should be generated.	No
mefSoamDmThresholdAveFrameDelayBackwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.12 Unsigned32	This object is used to set the average backward delay threshold value that will be used to determine if a threshold notification should be generated.	No
mefSoamDmThresholdMaxIFDVBackwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.13 Unsigned32	This object is used to set the maximum backward IFDV threshold value that will be used to determine if a threshold notification should be generated.	No
mefSoamDmThresholdAveIFDVBackwardThreshold 1.3.6.1.4.1.15007.1.3.1.3.7.1.14 Unsigned32	This object is used to set the average backward IFDV threshold value that will be used to determine if a threshold notification should be generated.	No

mefSoamLmThresholdTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmThresholdIndex 1.3.6.1.4.1.15007.1.3.1.2.5.1.1 Unsigned32	The index of the threshold number for the specific LM threshold entry. An index value of '1' must be supported. Other indexes values are also supported.	Yes.Not-accessbile
mefSoamLmThresholdEnable 1.3.6.1.4.1.15007.1.3.1.2.5.1.2 BITS { bMefSoamLmMaxFlrForwardThreshold(0), bMefSoamLmAveFlrForwardThreshold(1), bMefSoamLmMaxFlrBackwardThreshold(2), bMefSoamLmAveFlrBackwardThreshold(3), bMefSoamLmUnavailForwardThreshold(4), bMefSoamLmUnavailBackwardThreshold(5) }	A vector of bits that indicates the type of SOAM LM thresholds notifications that are enabled.A bit set to '1' enables the specific SOAM LM threshold notification and when the specific counter is enabled and the threshold is crossed a notification is generated. A bit set to '0' disables the specific SOAM LM threshold notification. If a particular SOAM LM threshold is not supported the BIT value should be set to '0'.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
mefSoamLmThresholdMaxFlrForwardThreshold 1.3.6.1.4.1.15007.1.3.1.2.5.1.3 Unsigned32	This object is used to set the maximum forward frame loss ratio threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamLmThresholdAveFlrForwardThreshold 1.3.6.1.4.1.15007.1.3.1.2.5.1.4 Unsigned32	This object is used to set the average forward frame loss ratio threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamLmThresholdMaxFlrBackwardThreshold 1.3.6.1.4.1.15007.1.3.1.2.5.1.5 Unsigned32	This object is used to set the maximum backward frame loss ratio threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamLmThresholdAveFlrBackwardThreshold 1.3.6.1.4.1.15007.1.3.1.2.5.1.6 Unsigned32	This object is used to set the average backward frame loss ratio threshold value that will be used to determine if a threshold notification should be generated.	Yes
mefSoamLmThresholdUnavailForwardThreshold 1.3.6.1.4.1.15007.1.3.1.2.5.1.7 Unsigned32	This object is used to set the forward unavailability threshold value that will be used to determine if a threshold notification should be generated.	No
mefSoamLmThresholdUnavailBackwardThreshold 1.3.6.1.4.1.15007.1.3.1.2.5.1.8 Unsigned32	This object is used to set the backward unavailability threshold value that will be used to determine if a threshold notification should be generated.	No

Traps

Mib Information for mefSoamPmNotifications

Notification, OID	Object	Description	Supported (Yes/No)
mefSoamLmSessionStartStop 1.3.6.1.4.1.15007.1.3.0.2	mefSoamLmCfgSessionStatus, mefSoamNotificationDateAndTime	An mefSoamLmSessionStartStop notification is sent when the state of the LM session changes. An agent should not generate more than one mefSoamLmSessionStartStop 'notification-event' in a given time interval per LM session as specified by the mefSoamAlarmInterval.	Yes
mefSoamDmSessionStartStop 1.3.6.1.4.1.15007.1.3.0.3	mefSoamDmCfgSessionStatus, mefSoamNotificationDateAndTime	An mefSoamDmSessionStartStop notification is sent when the state of the DM session changes.	Yes

Notification, OID	Object	Description	Supported (Yes/No)
mefSoamLmThresholdCrossing OID: 1.3.6.1.4.1.15007.1.3.0.4	mefSoamThresholdNotificationId, mefSoamThresholdNotificationCfg, mefSoamThresholdNotificationCount, mefSoamThresholdSuspect, mefSoamNotificationDateAndTime	An mefSoamLmThresholdCrossing notification is sent when the value of the crossing object from mefSoamLmThresholdTable as indicated by the mefSoamThresholdNotificationId is exceeded during the current measurement interval.	Yes
mefSoamDmThresholdCrossing OID: 1.3.6.1.4.1.15007.1.3.0.5	mefSoamThresholdNotificationId, mefSoamThresholdNotificationCfg, mefSoamThresholdNotificationCount, mefSoamThresholdSuspect, mefSoamNotificationDateAndTime	An mefSoamDmThresholdCrossing notification is sent when the value of the crossing object from mefSoamDmThresholdTable as indicated by the mefSoamThresholdNotificationId is exceeded during the current measurement interval.	Yes

MIB for the Transmission Control Protocol

The Extreme SLX devices support MIBs for Transmission Control Protocol (TCP). The MIB for the TCP table is based on the RFC 4022.

MIB objects

Objects and OID	Support	Description
tcpConnectionTable 1.3.6.1.2.1.6.19	Read-only	This table contains information about existing TCP connections.
tcpListenerTable 1.3.6.1.2.1.6.20	Read-only	This table contains information about TCP listeners.

MIB for the User Datagram Protocol

The ExteemeSwitching SLX devices support MIBs for Transmission Control Protocol (TCP). The MIB for the TCP table is based on the RFC 4113.

MIB objects

Objects and OID	Supported	Description
udpEndpointTable 1.3.6.1.2.1.7.7	Yes	This table contains information about the UDP endpoints on which a local application is currently sending or receiving datagrams.

MPLS MIB

The MIB module contains managed object definitions for Multiprotocol Label Switching (MPLS).

Supported object groups

Object group name	OID	Supported?
mplsLsrStdMIB	1.3.6.1.2.1.10.166.2	Yes
mplsInterfaceTable	1.3.6.1.2.1.10.166.2.1.1	Yes
mplsInterfacePerfTable	1.3.6.1.2.1.10.166.2.1.2	Yes
mplsInSegmentIndexNext	1.3.6.1.2.1.10.166.2.1.3	Yes
mplsInSegmentTable	1.3.6.1.2.1.10.166.2.1.4	Yes
mplsInSegmentPerfTable	1.3.6.1.2.1.10.166.2.1.5	Yes
mplsOutSegmentIndexNext	1.3.6.1.2.1.10.166.2.1.6	Yes
mplsOutSegmentTable	1.3.6.1.2.1.10.166.2.1.7	Yes
mplsOutSegmentPerfTable	1.3.6.1.2.1.10.166.2.1.8	Yes
mplsXCIndexNext	1.3.6.1.2.1.10.166.2.1.9	Yes
mplsXCTable	1.3.6.1.2.1.10.166.2.1.10	Yes
mplsMaxLabelStackDepth	1.3.6.1.2.1.10.166.2.1.11	Yes
mplsLabelStackIndexNext	1.3.6.1.2.1.10.166.2.1.12	Yes
mplsLabelStackTable	1.3.6.1.2.1.10.166.2.1.13	Yes
mplsInSegmentMapTable	1.3.6.1.2.1.10.166.2.1.14	Yes
mplsXCNotificationsEnable	1.3.6.1.2.1.10.166.2.1.15	Yes
mplsTeStdMIB	1.3.6.1.2.1.10.166.3	Yes
mplsTeScalars	1.3.6.1.2.1.10.166.3.1	Yes
mplsTeObjects	1.3.6.1.2.1.10.166.3.2	Yes
mplsLdpStdMIB	1.3.6.1.2.1.10.166.4	Yes

Object group name	OID	Supported?
mplsLdpObjects	1.3.6.1.2.1.10.166.4.1	Yes
mplsLdpConformance	1.3.6.1.2.1.10.166.4.2	Yes

Table 23: MPLS-LDP-STD-MIB Notifications

Object Name	OID	Description
mplsLdpPathVectorLimitMismatch	1.3.6.1.2.1.10.166.4.0.2	This notification is sent when the 'mplsLdpEntityPathVectorLimit' does NOT match the value of the 'mplsLdpPeerPathVectorLimit' for a specific Entity.
mplsLdpSessionUp	1.3.6.1.2.1.10.166.4.0.3	If this notification is sent when the value of 'mplsLdpSessionState' enters the 'operational(5)' state.
mplsLdpSessionDown	1.3.6.1.2.1.10.166.4.0.4	This notification is sent when the value of 'mplsLdpSessionState' leaves the 'operational(5)' state.

Table 24: MPLS-TE-STD-MIB Notifications

Object Name	OID	Description
mplsTunnelReoptimized	1.3.6.1.2.1.10.166.3.0.4	This notification is generated when a tunnel is reoptimized. If the mplsTunnelARHopTable is used, then this tunnel instance's entry in the mplsTunnelARHopTable MAY contain the new path for this tunnel sometime after this trap is issued by the agent.

Table 25: MPLS-LSR-STD-MIB Notifications

Object Name	OID	Description
mplsXCUp	1.3.6.1.2.1.10.166.2.0.1	This notification is generated when the mplsXCOperStatus object for one or more contiguous entries in mplsXCTable are about to enter the up(1) state from some other

Table 25: MPLS-LSR-STD-MIB Notifications (continued)

Object Name	OID	Description
		state. The included values of mplsXCOperStatus MUST both be set equal to this new state (i.e:up(1)). The two instances of mplsXCOperStatus in this notification indicate the range of indexes that are affected. Note that all the indexes of the two ends of the range can be derived from the instance identifiers of these two objects. For cases where a contiguous range of cross-connects have transitioned into the up(1) state at roughly the same time, the device SHOULD issue a single notification for each range of contiguous indexes in an effort to minimize the emission of a large number of notifications. If a notification has to be issued for just a single cross-connect entry, then the instance identifier (and values) of the two mplsXCOperStatus objects MUST be the identical.
mplsXCDown	1.3.6.1.2.1.10.166.2.0.2	This notification is generated when the mplsXCOperStatus object for one or more contiguous entries in mplsXCTable are about to enter the down(2) state from some other state. The included values of mplsXCOperStatus MUST both be set equal to this down(2) state. The two instances of mplsXCOperStatus in this notification indicate the range of indexes that are affected. Note that all the indexes of the two ends of the range can be derived from the instance identifiers of these two objects. For

Table 25: MPLS-LSR-STD-MIB Notifications (continued)

Object Name	OID	Description
		cases where a contiguous range of cross-connects have transitioned into the down(2) state at roughly the same time, the device SHOULD issue a single notification for each range of contiguous indexes in an effort to minimize the emission of a large number of notifications. If a notification has to be issued for just a single cross-connect entry, then the instance identifier (and values) of the two mplsXCOperStatus objects MUST be identical.

OSPF MIB

The OSPF MIB module defines the MIB objects for management of the Open Shortest Path First version 2 (OSPFv2) protocol. Both read-only and read-write operations are supported on this MIB through SNMP.

The OSPF MIB table is based on the RFC 4750 that obsoletes RFC 1850.

Note
OSPF MIB is VRF-aware.

Supported object groups

Objects group name	OID	Supported
ospfGeneralGroup	1.3.6.1.2.1.14.1	Yes
ospfAreaTable	1.3.6.1.2.1.14.2	Yes
ospfStubAreaTable	1.3.6.1.2.1.14.3	Yes
ospfLsdbTable	1.3.6.1.2.1.14.4	Yes
ospfAreaRangeTable	1.3.6.1.2.1.14.5	Yes
ospfHostTable	1.3.6.1.2.1.14.6	Yes
ospfIfTable	1.3.6.1.2.1.14.7	Yes
ospfIfMetricTable	1.3.6.1.2.1.14.8	Yes
ospfVirtIfTable	1.3.6.1.2.1.14.9	Yes
ospfNbrTable	1.3.6.1.2.1.14.10	Yes
ospfVirtNbrTable	1.3.6.1.2.1.14.11	Yes
ospfExtLsdbTable	1.3.6.1.2.1.14.12	Yes
ospfRouteGroup	1.3.6.1.2.1.14.13	Yes
ospfAreaAggregateTable	1.3.6.1.2.1.14.14	Yes
ospfConformance	1.3.6.1.2.1.14.15	Yes
ospfTrap	1.3.6.1.2.1.14.16	Yes
ospfAdminStat	1.3.6.1.2.1.14.1.2	Yes (read-only)
ospfAreaBdrRtrStatus	1.3.6.1.2.1.14.1.4	Yes
ospfAreaLsaCountTable	1.3.6.1.2.1.14.20	No
ospfASBdrRtrStatus	1.3.6.1.2.1.14.1.5	Yes (read-only)
ospfAsLsaCksumSum	1.3.6.1.2.1.14.1.25	Yes
ospfAsLsaCount	1.3.6.1.2.1.14.1.24	Yes
ospfAsLsdbTable	1.3.6.1.2.1.14.19	No
ospfDemandExtensions	1.3.6.1.2.1.14.1.14	No

Objects group name	OID	Supported
ospfDiscontinuityTime	1.3.6.1.2.1.14.1.28	No
ospfExitOverflowInterval	1.3.6.1.2.1.14.1.13	Yes
ospfExternLsaCksumSum	1.3.6.1.2.1.14.1.7	Yes
ospfExternLsaCount	1.3.6.1.2.1.14.1.6	Yes
ospfExtLsdbLimit	1.3.6.1.2.1.14.1.11	Yes
ospfLocalLsdbTable	1.3.6.1.2.1.14.17	No
ospfMulticastExtensions	1.3.6.1.2.1.14.1.12	No
ospfOpaqueLsaSupport	1.3.6.1.2.1.14.1.16	No
ospfOriginateNewLsas	1.3.6.1.2.1.14.1.9	Yes
ospfReferenceBandwidth	1.3.6.1.2.1.14.1.17	Yes
ospfRestartAge	1.3.6.1.2.1.14.1.22	No
ospfRestartExitReason	1.3.6.1.2.1.14.1.23	No
ospfRestartInterval	1.3.6.1.2.1.14.1.19	No
ospfRestartStatus	1.3.6.1.2.1.14.1.21	No
ospfRestartStrictLsaChecking	1.3.6.1.2.1.14.1.20	No
ospfRestartSupport	1.3.6.1.2.1.14.1.18	No
ospfRFC1583Compatibility	1.3.6.1.2.1.14.1.15	Yes
ospfRouterId	1.3.6.1.2.1.14.1.1	Yes (read-only)
ospfRxNewLsas	1.3.6.1.2.1.14.1.10	Yes
ospfStubRouterAdvertisement	1.3.6.1.2.1.14.1.27	Yes (read-only)
ospfStubRouterSupport	1.3.6.1.2.1.14.1.26	Yes
ospfTOSSupport	1.3.6.1.2.1.14.1.8	No
ospfVersionNumber	1.3.6.1.2.1.14.1.3	Yes
ospfVirtLocalLsdbTable	1.3.6.1.2.1.14.18	No

P-Bridge MIB

The P-Bridge MIB Extension module for managing Priority and Multicast Filtering, defined by IEEE 802.1D-1998, including Restricted Group Registration defined by IEEE 802.1t-2001.

Supported object groups

Object group name	OID	Supported?
dot1dBase	1.3.6.1.2.1.17.1	Yes
dot1dExtBase	1.3.6.1.2.1.17.6.1.1	Yes
dot1dPortPriority	1.3.6.1.2.1.17.6.1.2	Yes

PAE MIB

The Port Access Entity module for managing IEEE 802.1X.

Supported object groups

Objects group name	OID	Supported
dot1xPaePortTable	1.0.8802.1.1.1.1.1.2	Yes
dot1xAuthConfigTable	1.0.8802.1.1.1.1.2.1	Yes

Q-Bridge MIB

The VLAN Bridge MIB module manages Virtual Bridged Local Area Networks, as defined by IEEE 802.1Q-2003, including Restricted VLAN Registration defined by IEEE 802.1u-2001 and VLAN Classification defined by IEEE 802.1v-2001.

Supported object groups

Object group name	OID	Supported?
dot1qBase	1.3.6.1.2.1.17.7.1.1	Yes
dot1qTp	1.3.6.1.2.1.17.7.1.2	Yes
dot1qStatic	1.3.6.1.2.1.17.7.1.3	Yes
dot1qVlan	1.3.6.1.2.1.17.7.1.4	Yes
dot1vProtocol	1.3.6.1.2.1.17.7.1.5	Yes

RIPv2-MIB

The MIB module to describe the RIP2 Version 2 Protocol.

Supported object groups

Objects group name	OID	Supported?
rip2Globals	1.3.6.1.2.1.23.1	Yes
rip2IfStatTable	1.3.6.1.2.1.23.2	Yes

RMON MIB

Remote network monitoring devices, often called monitors or probes, are instruments that exist for the purpose of managing a network. This MIB defines objects for managing remote network monitoring devices.

Supported object groups

Note
RMON MIB does not support SNMP SET requests.

Object group name	OID	Supported?
rmon	1.3.6.1.2.1.16	Yes
statistics	1.3.6.1.2.1.16.1	Yes
history	1.3.6.1.2.1.16.2	Yes
alarm	1.3.6.1.2.1.16.3	Yes
event	1.3.6.1.2.1.16.9	Yes

Table 26: RMON-MIB Notifications

Object Name	OID	Description
risingAlarm	1.3.6.1.2.1.16.0.1	The SNMP trap that is generated when an alarm entry crosses its rising threshold and generates an event that is configured for sending SNMP traps.
fallingAlarm	1.3.6.1.2.1.16.0.2	The SNMP trap that is generated when an alarm entry crosses its falling threshold and generates an event that is configured for sending SNMP traps.

RSTP MIB

The Bridge MIB Extension module for managing devices that support the Rapid Spanning Tree Protocol (RSTP) defined by IEEE 802.1w.

Supported object groups

Objects group name	OID	Supported?
dot1dStpVersion	1.3.6.1.2.1.17.2.16	Yes
dot1dStpTxHoldCount	1.3.6.1.2.1.17.2.17	Yes
dot1dStpExtPortTable	1.3.6.1.2.1.17.2.19	Yes

SFLOW MIB (Version 5)

The sFlowMIB module manages the generation and transportation of sFlow data records.

Supported object groups

Objects group name	OID	Supported?
sFlowVersion	1.3.6.1.4.1.14706.1.1.1	Yes
sFlowAgentAddressType	1.3.6.1.4.1.14706.1.1.2	Yes
sFlowAgentAddress	1.3.6.1.4.1.14706.1.1.3	Yes
sFlowRcvrTable	1.3.6.1.4.1.14706.1.1.4	Yes
sFlowFsTable	1.3.6.1.4.1.14706.1.1.5	Yes
sFlowCpTable	1.3.6.1.4.1.14706.1.1.6	Yes

SNMP CFMv1 and CFMv2 MIB

The SNMP agent supports Get, Get-next, and Get-Bulk requests on CFM v1 and v2. The CFM v1, v2 MIBs define objects for Connectivity Fault Management on point-to-point

and multipoint Ethernet Virtual Connections that span one or more links. That is, end-to-end within an Ethernet network.

MIB Information for dot1agCfmDefaultMd scalars

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmDefaultMdDefLevel OID: 1.3.111.2.802.1.1.8.1.2.1 SYNTAX Dot1agCfmMDLevel MAX-ACCESS read-write STATUS current DEFVAL {0}	A value indicating the MD Level at which MHFs is created, and Sender ID TLV transmission by those MHFs is controlled, for each dot1agCfmDefaultMdEntry whose dot1agCfmDefaultMdLevel object contains the value -1. After this initialization, this object needs to be persistent upon reboot or restart of a device.	Yes. Returns fixed value: 0
dot1agCfmDefaultMdDefMhfCreation OID: 1.3.111.2.802.1.1.8.1.2.2 SYNTAX Dot1agCfmMhfCreation { defMHFnone (1), defMHFdefault (2), defMHFexplicit (3) } MAX-ACCESS read-write STATUS current DEFVAL {defMHFnone}	A value indicating if the Management entity can create MHFs (MIP Half Function) for the VID, for each dot1agCfmDefaultMdEntry whose dot1agCfmDefaultMdMhfCreation object contains the value defMHFdefer. Since, in this variable, there is no encompassing Maintenance Domain, the value defMHFdefer is not allowed. After this initialization, this object needs to be persistent upon reboot or restart of a device.	Yes. Returns fixed value: defMHFdefault (2)
dot1agCfmDefaultMdDefIdPermission OID : 1.3.111.2.802.1.1.8.1.2.3 SYNTAX Dot1agCfmIdPermission { sendIdNone (1), sendIdChassis (2), sendIdManage (3), sendIdChassisManage (4) } MAX-ACCESS read-write STATUS current DEFVAL { sendIdNone }	Enumerated value indicating what, if anything, is to be included in the Sender ID TLV (21.5.3) transmitted by MHFs created by the Default Maintenance Domain, for each dot1agCfmDefaultMdEntry whose dot1agCfmDefaultMdIdPermission object contains the value sendIdDefer. Since, in this variable, there is no encompassing Maintenance Domain, the value sendIdDefer is not	Yes. Returns fixed value: sendIdNone (1)

MIB object , OID , Syntax	Description	Supported (Yes/No)
	allowed. After this initialization, this object needs to be persistent upon reboot or restart of a device.	

dot1agCfmMdTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMdTableNextIndex OID: 1.3.111.2.802.1.1.8.1.5.1 SYNTAX Dot1afCfmIndexIntegerNextFree MAX-ACCESS read-only STATUS current	This object contains an unused value for dot1agCfmMdIndex in the dot1agCfmMdTable, or a zero to indicate that none exist.	Yes
dot1agCfmMdIndex OID: 1.3.111.2.802.1.1.8.1.5.2.1.1 SYNTAX Unsigned32(1..4294967295) MAX-ACCESS not-accessible STATUS current	The index to the Maintenance Domain table.dot1agCfmMdTableNextIndex needs to be inspected to find an available index for row-creation. Referential integrity is required, i.e., the index needs to be persistent upon a reboot or restart of a device. The index can never be reused for other Maintenance Domain. The index value SHOULD keep increasing up to the time that they wrap around. This is to facilitate access control based on OID.	not-accessible
dot1agCfmMdFormat OID: 1.3.111.2.802.1.1.8.1.5.2.1.2 SYNTAX Dot1agCfmMaintDomainNameType MAX-ACCESS read-create STATUS current DEFVAL { charString }	The type (and thereby format) of the Maintenance Domain Name.	Yes. Returns fixed value: charString(4)

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMdName OID: 1.3.111.2.802.1.1.8.1.5.2.1.3 SYNTAX Dot1agCfmMaintDomainName MAX-ACCESS read-create STATUS current DEFVAL { "DEFAULT" }	The Maintenance Domain name. The type/format of this object is determined by the value of the dot1agCfmMdNameType object. Each Maintenance Domain has unique name amongst all those used or available to a service provider or operator. It facilitates easy identification of administrative responsibility for each Maintenance Domain. Clause 3.24 defines a Maintenance Domain name as the identifier, unique over the domain for which CFM is to protect against accidental concatenation of Service Instances, of a particular Maintenance Domain.	Yes
dot1agCfmMdMdLevel OID: 1.3.111.2.802.1.1.8.1.5.2.1.4 SYNTAX Dot1agCfmMDLevel MAX-ACCESS read-create STATUS current DEFVAL { 0 }	The Maintenance Domain Level.	Yes.

dot1agCfmMdMhfCreation
OID:1.3.111.2.802.1.1.8.1.5.2.1.5
SYNTAX Dot1agCfmMhfCreation {
defMHFnone (1),
defMHFdefault (2),
defMHFexplicit (3)
}
MAX-ACCESS read-create
STATUS current
DEFVAL { defMHFnone }
	Enumerated value indicating whether the management entity can create MHFs (MIP Half Function) for this Maintenance Domain.
	Since, in this variable, there is no encompassing Maintenance Domain, the value defMHFdefer is not allowed.
		Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)

dot1agCfmMdMhfIdPermission
OID: 1.3.111.2.802.1.1.8.1.5.2.1.6
SYNTAX Dot1agCfmIdPermission {
sendIdNone (1),
sendIdChassis (2),
sendIdManage (3),
sendIdChassisManage (4)
}
MAX-ACCESS read-create
STATUS current
DEFVAL { sendIdNone }
	Enumerated value indicating what, if anything, is to be included in the Sender ID TLV (21.5.3) transmitted by MPs configured in this Maintenance Domain. Since, in this variable, there is no encompassing Maintenance Domain, the value sendIdDefer is not allowed.	Yes
		Returns fixed value: sendIdNone (1)

dot1agCfmMdMaNextIndex 1.3.111.2.802.1.1.8.1.5.2.1.7 SYNTAX Dot1afCfmIndexIntegerNextFree MAX-ACCESS read-only STATUS current	Value to be used as the index of the MA table entries, both the dot1agCfmMaNetTable and the dot1agCfmMaCompTable, for this Maintenance Domain when the management entity wants to create a new row in those tables.	Yes
dot1agCfmMdRowStatus OID: 1.3.111.2.802.1.1.8.1.5.2.1.8 SYNTAX RowStatus MAX-ACCESS read-create STATUS current	The status of the row. The writable columns in a row can not be changed if the row is active. All columns MUST have a valid value before a row can be activated.	Yes Returns fixed value: active (1)

dot1agCfmMaNetTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
1 dot1agCfmMaIndex OID: 1.3.111.2.802.1.1.8.1.6.1.1.1 SYNTAX Unsigned32(1..4294967295) MAX-ACCESS not-accessible STATUS current	Index of the MA table dot1agCfmMdMaNextIndex needs to be inspected to find an available index for row-creation.	not-accessible
dot1agCfmMaNetFormat OID: 1.3.111.2.802.1.1.8.1.6.1.1.2 SYNTAX Dot1agCfmMaintAssocNameType MAX-ACCESS read-create STATUS current	The type (and thereby format) of the Maintenance Association Name.	Yes. Returns fixed value: charString(2)

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMaNetName OID: 1.3.111.2.802.1.1.8.1.6.1.1.3 SYNTAX Dot1agCfmMaintAssocName MAX-ACCESS read-create STATUS current	The Short Maintenance Association name. The type/format of this object is determined by the value of the dot1agCfmMaNetNameType object. This name MUST be unique within a maintenance domain.	Yes
dot1agCfmMaNetCcmInterval OID: 1.3.111.2.802.1.1.8.1.6.1.1.4 SYNTAX Dot1agCfmCcmInterval MAX-ACCESS read-create STATUS current	Interval between CCM transmissions to be used by all MEPs in the MA.	Yes
dot1agCfmMaNetRowStatus OID: 1.3.111.2.802.1.1.8.1.6.1.1.5 SYNTAX RowStatus MAX-ACCESS read-create STATUS current	The status of the row. The writable columns in a row can not be changed if the row is active. All columns MUST have a valid value before a row can be activated.	Yes. Returns fixed value: active (1)

dot1agCfmMaMepListTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMaMepListIdentifier OID: 1.3.111.2.802.1.1.8.1.6.3.1.1 SYNTAX Dot1agCfmMepId MAX-ACCESS not-accessible STATUS current	MEPID.	not-accessible
dot1agCfmMaMepListRowStatus OID: 1.3.111.2.802.1.1.8.1.6.3.1.2 SYNTAX RowStatus MAX-ACCESS read-create STATUS current	The status of the row. Read SNMPv2-TC (RFC1903) for an explanation of the possible values this object can take.	Yes. Returns fixed value: active (1)

ieee8021CfmMaCompTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
ieee8021CfmMaComponentId OID: 1.3.111.2.802.1.1.8.1.6.4.1.1 SYNTAX IEEE8021PbbComponentIdentifier MAX-ACCESS not-accessible STATUS current	The bridge component within the system to which the information in this ieee8021CfmMaCompEntry applies. If the system is not a Bridge, or if only one component is present in the Bridge, then this variable (index) MUST be equal to 1.	not-accessible
ieee8021CfmMaCompPrimarySelectorType OID: 1.3.111.2.802.1.1.8.1.6.4.1.2 SYNTAX IEEE8021ServiceSelectorType MAX-ACCESS read-create STATUS current	Type of the Service Selector identifiers indicated by ieee8021CfmMaCompPrimarySelectorOrNone. If the service instance is defined by more than one Service Selector, this parameter also indicates the type of the ieee8021CfmVlanPrimarySelector and ieee8021CfmVlanSelector in the ieee8021CfmVlanTable. In Services instances made of multiple Service Selector identifiers, ensures that the type of the Service selector identifiers is the same. See textual convention Dot1agCfmServiceSelectorType for details.	Yes
ieee8021CfmMaCompPrimarySelectorOrNone OID: 1.3.111.2.802.1.1.8.1.6.4.1.3 SYNTAX IEEE8021ServiceSelectorValueOrNone MAX-ACCESS read-create STATUS current	Service Selector identifier to which the MP is attached, or 0, if none. If the MA is associated with more than one Service Selectors Identifiers, the ieee8021CfmVlanTable lists them.	Yes
ieee8021CfmMaCompMhfCreation OID: 1.3.111.2.802.1.1.8.1.6.4.1.4 SYNTAX Dot1agCfmMhfCreation MAX-ACCESS read-create STATUS current	Indicates if the Management entity can create MHFs (MIP Half Function) for this MA.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
ieee8021CfmMaCompIdPermission OID: 1.3.111.2.802.1.1.8.1.6.4.1.5 SYNTAX Dot1agCfmIdPermission MAX-ACCESS read-create STATUS current	Enumerated value indicating what, if anything, is to be included in the Sender ID TLV (21.5.3) transmitted by MPs configured in this MA.	Yes. Returns fixed value: sendIdNone(1)
ieee8021CfmMaCompNumberOfVids OID: 1.3.111.2.802.1.1.8.1.6.4.1.6 SYNTAX Unsigned32 MAX-ACCESS read-create STATUS current	The number of VIDs associated with the MA.	Yes
ieee8021CfmMaCompRowStatus OID: 1.3.111.2.802.1.1.8.1.6.4.1.7 SYNTAX RowStatus MAX-ACCESS read-create STATUS current	The status of the row. The writable columns in a row can not be changed if the row is active. All columns MUST have a valid value before a row can be activated.	Yes. Returns fixed value: active (1)

dot1agCfmMepTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepIdentifier OID: 1.3.111.2.802.1.1.8.1.7.1.1.1 SYNTAX Dot1agCfmMepId MAX-ACCESS not-accessible STATUS current	Integer that is unique among all the MEPs in the same MA. Other definition is: a small integer, unique over a given Maintenance Association, identifying a specific Maintenance association End Point (3.19). MEP Identifier is also known as the MEPID.	not-accessible
dot1agCfmMepIfIndex OID: 1.3.111.2.802.1.1.8.1.7.1.1.2 SYNTAX InterfaceIndexOrZero MAX-ACCESS read-create STATUS current	This object is the interface index of the interface either a bridge port, or an aggregated IEEE 802.1 link within a bridge port, to which the MEP is attached. Upon a restart of the system, the system SHALL, if necessary, change the value of this variable so that it indexes the entry in the interface table with the same value of ifAlias that it indexed before the system restart. If no such entry exists, then the system SHALL set this variable to 0.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepDirection OID: 1.3.111.2.802.1.1.8.1.7.1.1.3 SYNTAX Dot1agCfmMpDirection MAX-ACCESS read-create STATUS current	The direction in which the MEP faces on the Bridge port.	Yes
dot1agCfmMepPrimaryVid OID: 1.3.111.2.802.1.1.8.1.7.1.1.4 SYNTAX Unsigned32(0..16777215) MAX-ACCESS read-create STATUS current	An integer indicating the Primary VID of the MEP, always one of the VIDs assigned to the MEP's MA. The value 0 indicates that either the Primary VID is that of the MEP's MA, or that the MEP's MA is associated with no VID.	Yes
dot1agCfmMepActive OID: 1.3.111.2.802.1.1.8.1.7.1.1.5 SYNTAX TruthValue MAX-ACCESS read-create STATUS current	Administrative state of the MEPA Boolean indicating the administrative state of the MEP. True indicates that the MEP is to function normally, and false that it is to cease functioning.	Yes
dot1agCfmMepFngState OID: 1.3.111.2.802.1.1.8.1.7.1.1.6 SYNTAX Dot1agCfmFngState MAX-ACCESS read-only STATUS current	Current state of the MEP Fault Notification Generator State Machine.	Yes
dot1agCfmMepCciEnabled OID: 1.3.111.2.802.1.1.8.1.7.1.1.7 SYNTAX TruthValue MAX-ACCESS read-create STATUS current	If set to true, the MEP will generate CCM messages.	Yes
dot1agCfmMepCcmLtmPriority OID: 1.3.111.2.802.1.1.8.1.7.1.1.8 SYNTAX Unsigned32 (0..7) MAX-ACCESS read-create STATUS current	The priority value for CCMs and LTMs transmitted by the MEP. Default Value is the highest priority value allowed to pass through the bridge port for any of this MEPs VIDs. The management entity can obtain the default value for this variable from the priority regeneration table by extracting the highest priority value in this table on this MEPs bridge port. (1 is lowest, then 2, then 0, then 3-7).	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepMacAddress OID: 1.3.111.2.802.1.1.8.1.7.1.1.9 SYNTAX MacAddress MAX-ACCESS read-only STATUS current	MAC address of the MEP.	Yes
dot1agCfmMepLowPrDef OID: 1.3.111.2.802.1.1.8.1.7.1.1.10 SYNTAX Dot1agCfmLowestAlarmPri MAX-ACCESS read-create STATUS current	An integer value specifying the lowest priority defect that is allowed to generate fault alarm.	Yes Returns fixed value: 0
dot1agCfmMepFngAlarmTime OID: 1.3.111.2.802.1.1.8.1.7.1.1.11 SYNTAX TimeInterval (250..1000) MAX-ACCESS read-create STATUS current	The time that defects MUST be present before a Fault Alarm is issued (fngAlarmTime. 20.33.3) (default 2.5s).	Yes
dot1agCfmMepFngResetTime OID: 1.3.111.2.802.1.1.8.1.7.1.1.12 SYNTAX TimeInterval (250..1000) MAX-ACCESS read-create STATUS current	The time that defects MUST be absent before resetting a Fault Alarm (fngResetTime, 20.33.4) (default 10s)..	Yes
dot1agCfmMepHighestPrDefec OID: 1.3.111.2.802.1.1.8.1.7.1.1.13 SYNTAX Dot1agCfmHighestDefectPri MAX-ACCESS read-only STATUS current	The highest priority defect that has been present since the MEPs Fault Notification Generator State Machine was last in the FNG_RESET state.	No Returns fixed value: 0
dot1agCfmMepDefects OID: 1.3.111.2.802.1.1.8.1.7.1.1.14 SYNTAX Dot1agCfmMepDefects MAX-ACCESS read-only STATUS current	A vector of Boolean error conditions from Table 20-1, any of which may be true:DefRDICCM(0)DefMACstatus(1)DefRemoteCCM(2)DefErrorCCM(3)DefXconCCM(4).	Yes
dot1agCfmMepErrorCcmLastFailure OID: 1.3.111.2.802.1.1.8.1.7.1.1.15 SYNTAX OCTET STRING (SIZE(1..1522)) MAX-ACCESS read-only STATUS current	The last-received CCM that triggered an DefErrorCCM fault.	Yes
dot1agCfmMepXconCcmLastFailure OID: 1.3.111.2.802.1.1.8.1.7.1.1.16 SYNTAX OCTET STRING (SIZE(1..1522)) MAX-ACCESS read-only STATUS current	The last-received CCM that triggered a DefXconCCM fault.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepCcmSequenceErrors OID: 1.3.111.2.802.1.1.8.1.7.1.1.17 SYNTAX Counter32 MAX-ACCESS read-only STATUS current	The total number of out-of-sequence CCMs received from all remote MEPs.	Yes
dot1agCfmMepCciSentCcms OID: 1.3.111.2.802.1.1.8.1.7.1.1.18 SYNTAX Counter32 MAX-ACCESS read-only STATUS current	Total number of Continuity Check messages transmitted.	Yes Returns fixed value: 0
dot1agCfmMepNextLbmTransId OID: 1.3.111.2.802.1.1.8.1.7.1.1.19 SYNTAX Unsigned32 MAX-ACCESS read-only STATUS current	Next sequence number/ transaction identifier to be sent in a Loopback message. This sequence number can be zero because it wraps around.	Yes
dot1agCfmMepLbrIn OID: 1.3.111.2.802.1.1.8.1.7.1.1.20 SYNTAX Counter32 MAX-ACCESS read-only STATUS current	Total number of valid, in-order Loopback Replies received.	Yes
dot1agCfmMepLbrInOutOfOrder OID: 1.3.111.2.802.1.1.8.1.7.1.1.21 SYNTAX Counter32 MAX-ACCESS read-only STATUS current	The total number of valid, out-of-order Loopback Replies received.	Yes
dot1agCfmMepLbrBadMsdu OID: 1.3.111.2.802.1.1.8.1.7.1.1.22 SYNTAX Counter32 MAX-ACCESS read-only STATUS current	The total number of LBRs received whose mac_service_data_unit did not match (except for the OpCode) that of the corresponding LBM (20.2.3).	Yes Returns fixed value: 0
dot1agCfmMepLtmNextSeqNumber OID: 1.3.111.2.802.1.1.8.1.7.1.1.23 SYNTAX Unsigned32 MAX-ACCESS read-only STATUS current	Next transaction identifier/ sequence number to be sent in a Linktrace message. This sequence number can be zero because it wraps around.	Yes
dot1agCfmMepUnexpLtrIn OID: 1.3.111.2.802.1.1.8.1.7.1.1.24 SYNTAX Counter32 MAX-ACCESS read-only STATUS current	The total number of unexpected LTRs received (20.39.1).	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepLbrOut OID: 1.3.111.2.802.1.1.8.1.7.1.1.25 SYNTAX Counter32 MAX-ACCESS read-only STATUS current	Total number of Loopback Replies transmitted.	Yes
dot1agCfmMepTransmitLbmStatus OID: 1.3.111.2.802.1.1.8.1.7.1.1.26 SYNTAX TruthValue MAX-ACCESS read-create STATUS current	A Boolean flag set to true by the MEP Loopback Initiator State Machine or an MIB manager to indicate that another LBM is being transmitted. Reset to false by the MEP Loopback Initiator State Machine.	Yes
dot1agCfmMepTransmitLbmDestMacAddress OID: 1.3.111.2.802.1.1.8.1.7.1.1.27 SYNTAX MacAddress MAX-ACCESS read-create STATUS current	The Target MAC Address Field to be transmitted: A unicast destination MAC address. This address will be used if the value of the column dot1agCfmMepTransmitLbmDestIsMepId is 'false'.	Yes
dot1agCfmMepTransmitLbmDestMepId OID: 1.3.111.2.802.1.1.8.1.7.1.1.28 SYNTAX Dot1agCfmMepIdOrZero MAX-ACCESS read-create STATUS current	The Maintenance association End Point Identifier of another MEP in the same Maintenance Association to which the LBM is to be sent. This address will be used if the value of the column dot1agCfmMepTransmitLbmDestIsMepId is 'true'.	Yes
dot1agCfmMepTransmitLbmDestIsMepId OID: 1.3.111.2.802.1.1.8.1.7.1.1.29 SYNTAX TruthValue MAX-ACCESS read-create STATUS current	True indicates that MEPID of the target MEP is used for Loopback transmission. False indicates that unicast destination MAC address of the target MEP is used for Loopback transmission..	Yes
dot1agCfmMepTransmitLbmMessages OID: 1.3.111.2.802.1.1.8.1.7.1.1.30 SYNTAX Integer32(1..1024) MAX-ACCESS read-create STATUS current	The number of Loopback messages to be transmitted.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepTransmitLbmDataTlv OID: 1.3.111.2.802.1.1.8.1.7.1.1.31 SYNTAX OCTET STRING MAX-ACCESS read-create STATUS current	An arbitrary amount of data to be included in the Data TLV, if the Data TLV is selected to be sent. The intent is to be able to fill the frame carrying the CFM PDU to its maximum length. This may lead to fragmentation in some cases.	Yes Returns fixed value: "" (empty string)
dot1agCfmMepTransmitLbmVlanPriority OID: 1.3.111.2.802.1.1.8.1.7.1.1.32 SYNTAX Integer32(0..7) MAX-ACCESS read-create STATUS current	Priority. 3 bit value to be used in the VLAN tag, if present in the transmitted frame. The default value is CCM priority.	Yes
dot1agCfmMepTransmitLbmVlanDropEnable OID: 1.3.111.2.802.1.1.8.1.7.1.1.33 SYNTAX TruthValue MAX-ACCESS read-create STATUS current	Drop Enable bit value to be used in the VLAN tag, if present in the transmitted frame. For more information about VLAN Drop Enable, please check IEEE 802.1ad.	Yes Returns fixed value: false (2)
dot1agCfmMepTransmitLbmResultOK OID: 1.3.111.2.802.1.1.8.1.7.1.1.34 SYNTAX TruthValue MAX-ACCESS read-only STATUS current	Indicates the result of the operation:- true The Loopback Message(s) will be(or has been) sent.- false The Loopback Message(s) will notbe sent.	Yes
dot1agCfmMepTransmitLbmSeqNumber OID: 1.3.111.2.802.1.1.8.1.7.1.1.35 SYNTAX Unsigned32 MAX-ACCESS read-only STATUS current	The Loopback Transaction Identifier (dot1agCfmMepNextLbmTransId) of the first LBM (to be) sent. The value returned is undefined if dot1agCfmMepTransmitLbmResultOK is false.	Yes
dot1agCfmMepTransmitLtmStatus OID: 1.3.111.2.802.1.1.8.1.7.1.1.36 SYNTAX TruthValue MAX-ACCESS read-create STATUS current	A Boolean flag set to true by the bridge port to indicate that another LTM may be transmitted. Reset to false by the MEP Linktrace Initiator State Machine.	Yes
dot1agCfmMepTransmitLtmFlags OID: 1.3.111.2.802.1.1.8.1.7.1.1.37 SYNTAX BITS { useFDBonly (0) } MAX-ACCESS read-create STATUS current	The flags field for LTMs transmitted by the MEP.	Yes Returns fixed value: 0

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepTransmitLtmTargetMacAddress OID: 1.3.111.2.802.1.1.8.1.7.1.1.38 SYNTAX MacAddress MAX-ACCESS read-create STATUS current	The Target MAC Address Field to be transmitted: A unicast destination MAC address.T his address will be used if the value of the column dot1agCfmMepTransmitLtmTargetIsMepId is 'false'.	Yes
dot1agCfmMepTransmitLtmTargetMepId OID: 1.3.111.2.802.1.1.8.1.7.1.1.39 SYNTAX Dot1agCfmMepIdOrZero MAX-ACCESS read-create STATUS current	An indication of the Target MAC Address Field to be transmitted. The Maintenance association End Point Identifier of another MEP in the same Maintenance Association. This address will be used if the value of the column dot1agCfmMepTransmitLtmTargetIsMepId is 'true'.	Yes
dot1agCfmMepTransmitLtmTargetIsMepId OID: 1.3.111.2.802.1.1.8.1.7.1.1.40 SYNTAX TruthValue MAX-ACCESS read-create STATUS current	True indicates that MEPID of the target MEP is used for Linktrace transmission. False indicates that unicast destination MAC address of the target MEP is used for Loopback transmission.	Yes
dot1agCfmMepTransmitLtmTtl OID: 1.3.111.2.802.1.1.8.1.7.1.1.41 SYNTAX Unsigned32 (0..255) MAX-ACCESS read-create STATUS current	The LTM TTL field. Default value, if not specified, is 64. The TTL field indicates the number of hops remaining to the LTM. Decremented by 1 by each Linktrace Responder that handles the LTM. The value returned in the LTR is one less than that received in the LTM. If the LTM TTL is 0 or 1, the LTM is not forwarded to the next hop, and if 0, no LTR is generated.	Yes
dot1agCfmMepTransmitLtmResult OID: 1.3.111.2.802.1.1.8.1.7.1.1.42 SYNTAX TruthValue MAX-ACCESS read-only STATUS current	Indicates the result of the operation:- true The Linktrace Message will be (or has been) sent.- false The Linktrace Message will not be sent.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepTransmitLtmSeqNumber OID: 1.3.111.2.802.1.1.8.1.7.1.1.43 SYNTAX Unsigned32 MAX-ACCESS read-only STATUS current	The LTM Transaction Identifier (dot1agCfmMepLtmNextSeqNumber) of the LTM sent. The value returned is undefined if dot1agCfmMepTransmitLtmResult is false.	Yes Returns fixed value: 0
dot1agCfmMepTransmitLtmEgressIdentifier OID: 1.3.111.2.802.1.1.8.1.7.1.1.44 SYNTAX OCTET STRING (SIZE(8)) MAX-ACCESS read-create STATUS current	Identifies the MEP Linktrace Initiator that is originating, or the Linktrace Responder that is forwarding, this LTM.The low-order six octets contain a 48-bit IEEE MAC address unique to the system in which the MEP Linktrace Initiator or Linktrace Responder resides. The high-order two octets contain a value sufficient to uniquely identify the MEP Linktrace Initiator or Linktrace Responder within that system. For most Bridges, the address of any MAC attached to the Bridge will suffice for the low-order six octets, and 0 for the high-order octets. In some situations, e.g., if multiple virtual Bridges utilizing emulated LANs are implemented in a single physical system, the high-order two octets can be used to differentiate among the transmitting entities. The value returned is undefined if dot1agCfmMepTransmitLtmResult is false.	Yes
dot1agCfmMepRowStatus OID: 1.3.111.2.802.1.1.8.1.7.1.1.45 SYNTAX RowStatus MAX-ACCESS read-create STATUS current	The status of the row. The writable columns in a row can not be changed if the row is active. All columns MUST have a valid value before a row can be activated.	Yes Returns fixed value: active (1)

dot1agCfmLtrTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmLtrSeqNumber 1.3.111.2.802.1.1.8.1.7.2.1.1 SYNTAX Unsigned32 (0..4294967295) MAX-ACCESS not-accessible STATUS current	Transaction identifier/ Sequence number returned by a previous transmit linktrace message command, indicating which LTM's response is going to be returned.	not-accessible
dot1agCfmLtrReceiveOrder OID: 1.3.111.2.802.1.1.8.1.7.2.1.2 SYNTAX Unsigned32(1..4294967295) MAX-ACCESS not-accessible STATUS current	An index to distinguish among multiple LTRs with the same LTR Transaction Identifier field value. dot1agCfmLtrReceiveOrder are assigned sequentially from 1, in the order that the Linktrace Initiator received the LTRs.	not-accessible
dot1agCfmLtrTtl 1.3.111.2.802.1.1.8.1.7.2.1.3 SYNTAX Unsigned32 (0..255) MAX-ACCESS read-only STATUS current	TTL field value for a returned LTR.	Yes
dot1agCfmLtrForwarded OID: 1.3.111.2.802.1.1.8.1.7.2.1.4 SYNTAX TruthValue MAX-ACCESS read-only STATUS current	Indicates if a LTM was forwarded by the responding MP, as returned in the 'FwdYes' flag of the flags field.	Yes
dot1agCfmLtrTerminalMep OID: 1.3.111.2.802.1.1.8.1.7.2.1.5 SYNTAX TruthValue MAX-ACCESS read-only STATUS current	A boolean value stating whether the forwarded LTM reached a MEP enclosing its MA, as returned in the Terminal MEP flag of the Flags field.	Yes
dot1agCfmLtrLastEgressIdentifier OID: 1.3.111.2.802.1.1.8.1.7.2.1.6 SYNTAX OCTET STRING (SIZE(8)) MAX-ACCESS read-only STATUS current	An octet field holding the Last Egress Identifier returned in the LTR Egress Identifier TLV of the LTR.The Last Egress Identifier identifies the MEP Linktrace Initiator that originated, or the Linktrace Responder that forwarded, the LTM to which this LTR is the response. This is the same value as the Egress Identifier TLV of that LTM.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmLtrNextEgressIdentifier OID: 1.3.111.2.802.1.1.8.1.7.2.1.7 SYNTAX OCTET STRING (SIZE(8)) MAX-ACCESS read-only STATUS current	An octet field holding the Next Egress Identifier returned in the LTR Egress Identifier TLV of the LTR. The Next Egress Identifier Identifies the Linktrace Responder that transmitted this LTR, and can forward the LTM to the next hop. This is the same value as the Egress Identifier TLV of the forwarded LTM, if any. If the FwdYes bit of the Flags field is false, the contents of this field are undefined, that is, any value can be transmitted, and the field is ignored by the receiver.	Yes
dot1agCfmLtrRelay OID: 1.3.111.2.802.1.1.8.1.7.2.1.8 SYNTAX Dot1agCfmRelayActionFieldValue MAX-ACCESS read-only STATUS current	Value returned in the Relay Action field.	Yes
dot1agCfmLtrChassisIdSubtype OID: 1.3.111.2.802.1.1.8.1.7.2.1.9 SYNTAX LldpChassisIdSubtype MAX-ACCESS read-only STATUS current	This object specifies the format of the Chassis ID returned in the Sender ID TLV of the LTR, if any. This value is meaningless if the dot1agCfmLtrChassisId has a length of 0."	Yes Return fixed value: local(7)
dot1agCfmLtrChassisId OID: 1.3.111.2.802.1.1.8.1.7.2.1.10 SYNTAX LldpChassisId MAX-ACCESS read-only STATUS current	The Chassis ID returned in the Sender ID TLV of the LTR, if any. The format of this object is determined by the value of the dot1agCfmLtrChassisIdSubtype object.	Yes Return fixed value: "" (empty string)

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmLtrManAddressDomain OID: 1.3.111.2.802.1.1.8.1.7.2.1.11 SYNTAX TDomain MAX-ACCESS read-only STATUS current	The TDomain that identifies the type and format of the related dot1agCfmMepDbManAddress object, used to access the SNMP agent of the system transmitting the LTR. Received in the LTR Sender ID TLV from that system. Typical values will be one of (not all inclusive) list:snmpUDPDomain (from SNMPv2-TM, RFC3417)snmpIeee802Domain (from SNMP-IEEE802-TM-MIB, RFC4789)The value 'zeroDotZero' (from RFC2578) indicates 'no management address was present in the LTR', in which case the related object dot1agCfmMepDbManAddress MUST have a zero-length OCTET STRING as a value.	Yes Returns fixed value: {0, 0}
dot1agCfmLtrManAddress OID: 1.3.111.2.802.1.1.8.1.7.2.1.12 SYNTAX TAddress MAX-ACCESS read-only STATUS current	The TAddress that can be used to access the SNMP agent of the system transmitting the CCM, received in the CCM Sender ID TLV from that system.If the related object dot1agCfmLtrManAddressDomain contains the value 'zeroDotZero', this object dot1agCfmLtrManAddress MUST have a zero-length OCTET STRING as a value.	Yes Returns fixed value: "" (empty string)
dot1agCfmLtrIngress OID: 1.3.111.2.802.1.1.8.1.7.2.1.13 SYNTAX Dot1agCfmIngressActionFieldValue MAX-ACCESS read-only STATUS current	The value returned in the Ingress Action Field of the LTM. The value ingNoTlv(0) indicates that no Reply Ingress TLV was returned in the LTM.	Yes
dot1agCfmLtrIngressMac OID: 1.3.111.2.802.1.1.8.1.7.2.1.14 SYNTAX MacAddress MAX-ACCESS read-only STATUS current	MAC address returned in the ingress MAC address field. If the dot1agCfmLtrIngress object contains the value ingNoTlv(0), then the contents of this object are meaningless	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmLtrIngressPortIdSubtype OID: 1.3.111.2.802.1.1.8.1.7.2.1.15 SYNTAX LldpPortIdSubtype MAX-ACCESS read-only STATUS current	Format of the Ingress Port ID.If the dot1agCfmLtrIngress object contains the value ingNoTlv(0), then the contents of this object are meaningless.	Yes
dot1agCfmLtrIngressPortId OID: 1.3.111.2.802.1.1.8.1.7.2.1.16 SYNTAX LldpPortId MAX-ACCESS read-only STATUS current	Ingress Port ID. The format of this object is determined by the value of the dot1agCfmLtrIngressPortId Subtype object. If the dot1agCfmLtrIngress object contains the value ingNoTlv(0), then the contents of this object are meaningless.	Yes
dot1agCfmLtrEgress OID: 1.3.111.2.802.1.1.8.1.7.2.1.17 SYNTAX Dot1agCfmEgressActionFieldValue MAX-ACCESS read-only STATUS current	The value returned in the Egress Action Field of the LTM. The value egrNoTlv(0) indicates that no Reply Egress TLV was returned in the LTM.	Yes
dot1agCfmLtrEgressMac OID: 1.3.111.2.802.1.1.8.1.7.2.1.18 SYNTAX MacAddress MAX-ACCESS read-only STATUS current	MAC address returned in the egress MAC address field. If the dot1agCfmLtrEgress object contains the value egrNoTlv(0), then the contents of this object are meaningless.	Yes
dot1agCfmLtrEgressPortIdSubtype OID: 1.3.111.2.802.1.1.8.1.7.2.1.19 SYNTAX LldpPortIdSubtype MAX-ACCESS read-only STATUS current	Format of the egress Port ID.If the dot1agCfmLtrEgress object contains the value egrNoTlv(0), then the contents of this object are meaningless.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmLtrEgressPortId OID: 1.3.111.2.802.1.1.8.1.7.2.1.20 SYNTAX LldpPortId MAX-ACCESS read-only STATUS current	Egress Port ID. The format of this object is determined by the value of the dot1agCfmLtrEgressPortIdSubtype object. If the dot1agCfmLtrEgress object contains the value egrNoTlv(0), then the contents of this object are meaningless.	Yes
dot1agCfmLtrOrganizationSpecificTlv OID: 1.3.111.2.802.1.1.8.1.7.2.1.21 SYNTAX OCTET STRING (SIZE(0|4..1500)) MAX-ACCESS read-only STATUS current	All Organization specific TLVs returned in the LTR, if any. Includes all octets including and following the TLV Length field of each TLV, concatenated together.	Yes Returns fixed value: "" (empty string)

dot1agCfmMepDbTable

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepDbRMepIdentifier OID: 1.3.111.2.802.1.1.8.1.7.3.1.1 SYNTAX Dot1agCfmMepId MAX-ACCESS not-accessible STATUS current	Maintenance association End Point Identifier of a remote MEP whose information from the MEP Database is to be returned.	not-accessible
dot1agCfmMepDbRMepState OID: 1.3.111.2.802.1.1.8.1.7.3.1.2 SYNTAX Dot1agCfmRemoteMepState MAX-ACCESS read-only STATUS current	The operational state of the remote MEP IFF State machines.	Yes
dot1agCfmMepDbRMepFailedOkTime OID: 1.3.111.2.802.1.1.8.1.7.3.1.3 SYNTAX TimeStamp MAX-ACCESS read-only STATUS current	The time (SysUpTime) at which the IFF Remote MEP state machine last entered either the RMEP_FAILED or RMEP_OK state.	Yes
dot1agCfmMepDbMacAddress OID: 1.3.111.2.802.1.1.8.1.7.3.1.4 SYNTAX MacAddress MAX-ACCESS read-only STATUS current	The MAC address of the remote MEP.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepDbRdi 1.3.111.2.802.1.1.8.1.7.3.1.5 SYNTAX TruthValue MAX-ACCESS read-only STATUS current	State of the RDI bit in the last received CCM (true for RDI=1), or false if none has been received.	Yes
dot1agCfmMepDbPortStatusTlv OID: 1.3.111.2.802.1.1.8.1.7.3.1.6 SYNTAX Dot1agCfmPortStatus MAX-ACCESS read-only STATUS current	An enumerated value of the Port status TLV received in the last CCM from the remote MEP or the default value psNoPortStateTLV indicating either no CCM has been received, or that nor port status TLV was received in the last CCM.	Yes
dot1agCfmMepDbInterfaceStatusTlv OID: 1.3.111.2.802.1.1.8.1.7.3.1.7 SYNTAX Dot1agCfmInterfaceStatus MAX-ACCESS read-only STATUS current	An enumerated value of the Interface status TLV received in the last CCM from the remote MEP or the default value isNoInterfaceStatus TLV indicating either no CCM has been received, or that no interface status TLV was received in the last CCM.	Yes
dot1agCfmMepDbChassisIdSubtype OID: 1.3.111.2.802.1.1.8.1.7.3.1.8 SYNTAX LldpChassisIdSubtype MAX-ACCESS read-only STATUS current	This object specifies the format of the Chassis ID received in the last CCM.	Yes Returns fixed value: local(7)
dot1agCfmMepDbChassisId OID: 1.3.111.2.802.1.1.8.1.7.3.1.9 SYNTAX LldpChassisId MAX-ACCESS read-only STATUS current	The Chassis ID. The format of this object is determined by the value of the dot1agCfmLtrChassisIdSubtype object.	Yes Returns fixed value: "" (empty string)

MIB object , OID , Syntax	Description	Supported (Yes/No)
dot1agCfmMepDbManAddressDomain OID: 1.3.111.2.802.1.1.8.1.7.3.1.10 SYNTAX TDomain MAX-ACCESS read-only STATUS current	The TDomain that identifies the type and format of the related dot1agCfmMepDbManAddress object, used to access the SNMP agent of the system transmitting the CCM. Received in the CCM Sender ID TLV from that system. Typical values will be one of (not all inclusive) list:snmpUDPDomain (from SNMPv2-TM, RFC3417)snmpIeee802Domain (from SNMP-IEEE802-TM-MIB, RFC4789)The value 'zeroDotZero' (from RFC2578) indicates 'no management address was present in the LTR', in which case the related object dot1agCfmMepDbManAddress MUST have a zero-length OCTET STRING as a value.	Yes Returns fixed value: {0,0}
dot1agCfmMepDbManAddress OID: 1.3.111.2.802.1.1.8.1.7.3.1.11 SYNTAX TAddress MAX-ACCESS read-only STATUS current	The TAddress that can be used to access the SNMP agent of the system transmitting the CCM, received in the CCM Sender ID TLV from that system.If the related object dot1agCfmMepDbManAddressDomain contains the value 'zeroDotZero', this object dot1agCfmMepDbManAddress MUST have a zero-length OCTET STRING as a value	Yes Returns fixed value: "" (empty string)

Traps

MIB Information for dot1agNotifications

Notification, OID	Object	Description	Supported (Yes/No)
dot1agCfmFaultAlarm OID: 1.3.111.2.802.1.1.8.0.1STATUS current	dot1agCfmMepHighestPrDefect	A MEP has a persistent defect condition. A notification (fault alarm) is sent to the management entity with the OID of the MEP that has detected the fault. Whenever a MEP has a persistent defect, it may or may not generate a Fault Alarm to warn the system administrator of the problem, as controlled by the MEP Fault Notification Generator State Machine and associated Managed Objects. Only the highest-priority defect, as shown in Table 20-1, is reported in the Fault Alarm. If a defect with a higher priority is raised after a Fault Alarm has been issued, another Fault Alarm is issued. The management entity receiving the notification can identify the system from the network source address of the	Yes

Notification, OID	Object	Description	Supported (Yes/No)
		notification, and can identify the MEP reporting the defect by the indices in the OID of the dot1agCfmMepHighestPrDefect variable in the notification:dot1agCfmMdIndex - Also the index of the MEP's Maintenance Domain table entry(dot1agCfmMdTable).dot1agCfmMaIndex - Also an index (with the MD table index) of the MEP's Maintenance Association network table entry (dot1agCfmMaNetTable), and (with the MD table index and component ID) of the MEP's MA component table entry(dot1agCfmMaCompTable).dot1agCfmMepIdentifier - MEP Identifier and final index into the MEP table (dot1agCfmMepTable).	

SNMP Community MIB

The following lists the SNMP community MIB objects supported on the Extreme SLX devices.

The SNMP community MIB is based on the RFC 3584.

MIB objects

Objects and OID	Supported	Description
snmpCommunityTable 1.3.6.1.6.3.18.1.1	Yes	The table of community strings configured in the SNMP engine's Local Configuration Datastore (LCD).
snmpTargetAddrExtTable 1.3.6.1.6.3.18.1.2	Yes	The table of mask and maximum message size (mms) values associated with the snmpTargetAddrTable.

SNMP-FRAMEWORK MIB

The SNMP Management Architecture MIB.

Supported object group

Object group name	OID	Supported?
snmpFrameworkAdmin	1.3.6.1.6.3.10.1	Yes
snmpFrameworkMIBObjects	1.3.6.1.6.3.10.2	Yes
snmpFrameworkMIBConformance	1.3.6.1.6.3.10.3	Yes

SNMPv2 MIB

The MIB module for SNMP entities.

Supported object groups

Note
SNMPv2 MIBs do not support SNMP SET operations.

Object group name	OID	Supported?	Access
sysDescr	1.3.6.1.2.1.1.1	Yes	read-only
sysObjectID	1.3.6.1.2.1.1.2	Yes	read-only
sysUpTime	1.3.6.1.2.1.1.3	Yes	read-only
sysContact	1.3.6.1.2.1.1.4	Yes	read-write
sysName	1.3.6.1.2.1.1.5	Yes	read-write
sysLocation	1.3.6.1.2.1.1.6	Yes	read-write
sysServices	1.3.6.1.2.1.1.7	Yes	read-only

Note
The SNMPv2 MIB supports the SNMP message counters as well.

Table 27: SNMPv2-MIB- Notifications

Object Name	OID	Description
coldStart	1.3.6.1.6.3.1.1.5.1	A coldStart trap signifies that the SNMP entity, supporting a notification originator application, is reinitializing itself and that its configuration may have been altered.
warmStart	1.3.6.1.6.3.1.1.5.2	A warmStart trap signifies that the SNMP entity, supporting a notification originator application, is reinitializing itself such that its configuration is unaltered.

SNMP target MIB

The SNMP-TARGET-MIB defines MIB objects that enable remote configuration of parameters used by an SNMP entity to generate SNMP messages. The read and read-write operation on snmpTargetAddrTable and snmpTargetParamsTable are supported via SNMP.

The SNMP target MIB table is based on the RFC 3413.

MIB objects

Objects and OID	Supported	Description
snmpTargetAddrTable 1.3.6.1.6.3.12.1.2	Yes	A table of transport addresses that is used in the generation of SNMP messages.
snmpTargetParamsTable 1.3.6.1.6.3.12.1.3	Yes	A table of SNMP target information that is used in the generation of SNMP messages.
snmpProxyTable 1.3.6.1.6.3.14.1.2	No	The table of translation parameters used by proxy forwarder applications for forwarding SNMP messages.
snmpNotifyTable 1.3.6.1.6.3.13.1.1	Yes	This table is used to select management targets that should receive notifications, as well as the type of notification that should be sent to each selected management target.
snmpNotifyFilterProfileTable 1.3.6.1.6.3.13.1.2	Yes	This table is used to associate a notification filter profile with a particular set of target parameters.
snmpNotifyFilterTable 1.3.6.1.6.3.13.1.3	Yes	The table of filter profiles. Filter profiles are used to determine whether specific management targets should receive particular notifications.

SNMP Tunnel MIB

SNMP MIB support for RFC-4087 SNMP IP Tunnel MIB and RFC-2863 IF-MIB.

TunnelIfTable

MIB Object	Description	Supported (Yes/No)
tunnelIfEntry OID: 1.3.6.1.2.1.10.131.1.1.1.1	An entry (conceptual row) containing the information on a particular configured tunnel.	Yes
tunnelIfLocalAddress OID: 1.3.6.1.2.1.10.131.1.1.1.1.1	The address of the local endpoint of the tunnel that is, the source address used in the outer IP header), or 0.0.0.0 if unknown or if the tunnel is over IPv6. Since this object does not support IPv6, it is deprecated in favor of tunnelIfLocalInetAddress.	No
tunnelIfRemoteAddress OID: 1.3.6.1.2.1.10.131.1.1.1.1.2	The address of the remote endpoint of the tunnel that is, the destination address used in the outer IP header), or 0.0.0.0 if unknown, or an IPv6 address, or the tunnel is not a point-to-point link (e.g., if it is a 6to4 tunnel). Since this object does not support IPv6, it is deprecated in favor of tunnelIfRemoteInetAddress.	No

MIB Object	Description	Supported (Yes/No)
tunnelIfEncapsMethod OID: 1.3.6.1.2.1.10.131.1.1.1.1.3	The encapsulation method used by the tunnel . Integer { other(1), -- none of the following direct(2), -- no intermediate header gre(3), -- GRE encapsulation minimal(4), -- Minimal encapsulation l2tp(5), -- L2TP encapsulation pptp(6), -- PPTP encapsulation l2f(7), -- L2F encapsulation udp(8), -- UDP encapsulation atmp(9), -- ATMP encapsulation msdp(10), -- MSDP encapsulation sixToFour(11), -- 6to4 encapsulation sixOverFour(12), -- 6over4 encapsulation isatap(13), -- ISATAP encapsulation teredo(14), -- Teredo encapsulation ipHttps(15), -- IPHTTPS softwireMesh(16), -- softwire mesh tunnel dsLite(17) -- DS-Lite tunnel }	Yes Only GRE is supported.
tunnelIfHopLimit OID: 1.3.6.1.2.1.10.131.1.1.1.1.4	The IPv4 TTL or IPv6 Hop Limit to use in the outer IP header. A value of 0 indicates that the value is copied from the payload's header. That is of type Integer32 (0...255)	Yes

MIB Object	Description	Supported (Yes/No)

tunnelIfSecurity
OID: 1.3.6.1.2.1.10.131.1.1.1.1.5
	The method used by the tunnel to secure the outer IP header. The value ipsec indicates that IPsec is used between the tunnel endpoints for authentication or encryption or both. More specific security-related information may be available in a MIB module for the security protocol in use."
	INTEGER {
	none(1), -- no security
	ipsec(2), -- IPsec security
	other(3)
	}
		Yes

tunnelIfTOS OID : 1.3.6.1.2.1.10.131.1.1.1.1.6	The method used to set the high 6 bits (the differentiated services code point) of the IPv4 TOS or IPv6 Traffic Class in the outer IP header. A value of -1 indicates that the bits are copied from the payload's header. A value of -2 indicates that a traffic conditioner is invoked and more information may be available in a traffic conditioner MIB module. A value between 0 and 63 inclusive indicates that the bit field is set to the indicated value Integer32 (-2..63)	Yes

MIB Object	Description	Supported (Yes/No)
tunnelIfFlowLabel OID : 1.3.6.1.2.1.10.131.1.1.1.1.7	The method used to set the IPv6 Flow Label value. This object need not be present in rows where tunnelIfAddressType indicates the tunnel is not over IPv6. A value of -1 indicates that a traffic conditioner is invoked and more information may be available in a traffic conditioner MIB. Any other value indicates that the Flow Label field is set to the indicated value. Integer32 (-1 | 0..1048575)	Yes

MIB Object	Description	Supported (Yes/No)
tunnelIfAddressType OID : 1.3.6.1.2.1.10.131.1.1.1.1.8	The type of address in the corresponding tunnelIfLocalInetAddress and tunnelIfRemoteInetAddress objects. unknown(0) An unknown address type. This value MUST be used if the value of the corresponding InetAddress object is a zero-length string. It may also be used to indicate an IP address that is not in one of the formats defined below. ipv4(1) An IPv4 address as defined by the InetAddressIPv4 textual convention. ipv6(2) An IPv6 address as defined by the InetAddressIPv6 textual convention. ipv4z(3) A non-global IPv4 address including a zone index as defined by the InetAddressIPv4z textual convention. ipv6z(4) A non-global IPv6 address including a zone index as defined by the InetAddressIPv6z textual convention. dns(16) A DNS domain name as defined by the InetAddressDNS textual convention.	Yes Supported: Unknown(0) Ipv4(1)
tunnelIfLocalInetAddress OID: 1.3.6.1.2.1.10.131.1.1.1.1.9	The address of the local endpoint of the tunnel(i.e., the source address used in the outer IP header). If the address is unknown, the value is 0.0.0.0 for IPv4 or :: for IPv6. The type of this object is given by tunnelIfAddressType	Yes

MIB Object	Description	Supported (Yes/No)
tunnelIfRemoteInetAddress OID: 1.3.6.1.2.1.10.131.1.1.1.1.10	The address of the remote endpoint of the tunnel (i.e., the destination address used in the outer IP header). If the address is unknown or the tunnel is not a point-to-point link (e.g., if it is a 6to4 tunnel), the value is 0.0.0.0 for tunnels over IPv4 or :: for tunnels over IPv6. The type of this object is given by tunnelIfAddressType.	Yes
tunnelIfEncapsLimit OID: 1.3.6.1.2.1.10.131.1.1.1.1.11	The maximum number of additional encapsulations permitted for packets undergoing encapsulation at this node. A value of -1 indicates that no limit is present (except as a result of the packet size).	Yes

tunnelInetConfigTable

MIB Object	Description	Read-Write Supported (Yes/No)
tunnelInetConfigEntry OID: 1.3.6.1.2.1.10.131.1.1.3.1	An entry (conceptual row) containing the information on a particular configured tunnel. Note that there is a 128 subid maximum for object OIDs. Implementers need to be aware that if the total number of octets in tunnelInetConfigLocalAddress and tunnelInetConfigRemoteAddress exceeds 110 then OIDs of column instances in this table will have more than 128 sub-identifiers and cannot be accessed using SNMPv1, SNMPv2c, or SNMPv3. In practice this is not expected to be a problem since IPv4 and IPv6 addresses will not cause the limit to be reached, but if other types are supported by an agent, care must be taken to ensure that the sum of the lengths do not cause the limit to be exceeded.	yes
tunnelInetConfigAddressType OID: 1.3.6.1.2.1.10.131.1.1.3.1.1	The address type over which the tunnel encapsulates packetsunknown(0),ipv4(1),ipv6(2),ipv4z(3),ipv6z(4),	Yes (not-accessible) Supported:unknown(0),ipv4(1)
tunnelInetConfigLocalAddress OID: 1.3.6.1.2.1.10.131.1.1.3.1. 2	The address of the local endpoint of the tunnel, or 0.0.0.0 (for IPv4) or :: (for IPv6) if the device is free to choose any of its addresses at tunnel establishment time.	Yes (not-accessible)
tunnelInetConfigRemoteAddress OID: 1.3.6.1.2.1.10.131.1.1.3.1. 3	The address of the remote endpoint of the tunnel	Yes

MIB Object	Description	Read-Write Supported (Yes/No)
tunnelInetConfigEncapsMethod OID: 1.3.6.1.2.1.10.131.1.1.3.1. 4	The encapsulation method used by the tunnel other(1), -- none of the followingdirect (2), -- no intermediate headergre(3), -- GRE encapsulationminimal (4), -- Minimal encapsulationl2tp (5), -- L2TP encapsulationpptp (6), -- PPTP encapsulationl2f (7), -- L2F encapsulationudp (8), -- UDP encapsulationatmp (9), -- ATMP encapsulationmsdp (10), -- MSDP encapsulationsixToFour (11), -- 6to4 encapsulationsixOverFour (12), -- 6over4 encapsulationisatap (13), -- ISATAP encapsulationteredo (14), -- Teredo encapsulationipHttps (15), -- IPHTTPSsoftwireMesh(16), -- softwire mesh tunneldsLite (17) -- DS-Lite tunnel}	Yes (not-accessible) Only GRE is supported. For possible future support for MPLS, other(1) will be used.
tunnelInetConfigID OID: 1.3.6.1.2.1.10.131.1.1.3.1. 5	An identifier used to distinguish between multiple tunnels of the same encapsulation method, with the same endpoints. If the encapsulation protocol only allows one tunnel per set of endpoint addresses (such as for GRE or IP-in-IP), the value of this object is1. For encapsulation methods (such as L2F) which allow multiple parallel tunnels, the manager is responsible for choosing any ID which does not conflict with an existing row, such as choosing a random number.	Yes (not-accessible)

MIB Object	Description	Read-Write Supported (Yes/No)
tunnelInetConfigIfIndex OID: 1.3.6.1.2.1.10.131.1.1.3.1. 6	If the value of tunnelInetConfigStatus for this row is active, then this object contains the value of ifIndex corresponding to the tunnel interface. A value of 0 is not legal in the active state, and means that the interface index has not yet been assigned.	Yes

MIB Object	Description	Read-Write Supported (Yes/No)
tunnelInetConfigStatus OID: 1.3.6.1.2.1.10.131.1.1.3.1. 7	The status of this row, by which new entries may be created, or old entries deleted from this table. To create a row in this table for an encapsulation method which does not support multiple parallel tunnels with the same endpoints, the management station should simply use a tunnelInetConfigID of 1, and set tunnelInetConfigStatus to createAndGo. For encapsulation methods such as L2F which allow multiple parallel tunnels, the management station may select a pseudo-random number to use as the tunnelInetConfigID and set tunnelInetConfigStatus to createAndGo. In the event that this ID is already in use and an inconsistentValue is returned in response to the set operation, the management station should simply select a new pseudo-random number and retry the operation. Creating a row in this table will cause an interface index to be assigned by the agent in an implementation-dependent manner, and corresponding rows will be instantiated in the ifTable and the tunnelIfTable. The status of this row will become active as soon as the agent assigns the interface index, regardless of whether the interface is operationally up. Deleting a row in this table will likewise delete the corresponding row in the ifTable and in the tunnelIfTable.	Yes Since SET is not supported in this release, only 'active' is supported.
tunnelInetConfigStorageTy	The storage type of this row.	Yes

MIB Object	Description	Read-Write Supported (Yes/No)
pe OID: 1.3.6.1.2.1.10.131.1.1.3.1. 8	If the row is permanent (4), no objects in the row need be writable other(1) volatile (2) nonVolatile (3) permanent(4) readOnly (5)	only non Volatile(3) is supported

IfXTable

MIB Object	Description	Supported (Yes/No)
ifIndex OID: 1.3.6.1.2.1.2.2.1.1	A unique value, greater than zero, for each interface. It is recommended that values are assigned contiguously starting from 1. The value for each interface sub-layer must remain constant at least from one re-initialization of the entity's network management system to the next re-initialization.	Yes (not accessible)
ifDescr OID: 1.3.6.1.2.1.2.2.1.2	Textual string containing information about the interface. This string should include the name of the manufacturer, the product name and the version of the interface hardware/ software.	Yes
ifType OID: 1.3.6.1.2.1.2.2.1.3	The type of interface. Additional values for ifType are assigned by the Internet Assigned Numbers Authority (IANA), through updating the syntax of the IANAifType textual convention.	Yes
ifMtu OID: 1.3.6.1.2.1.2.2.1.4	The size of the largest packet which can be sent/ received on the interface, specified in octets. For interfaces that are used for transmitting network datagrams, this is the size of the largest network datagram that can be sent on the interface.	Yes

MIB Object	Description	Supported (Yes/No)
ifSpeed OID: 1.3.6.1.2.1.2.2.1.5	An estimate of the interface's current bandwidth in bits per second. For interfaces which do not vary in bandwidth or for those where no accurate estimation can be made, this object should contain the nominal bandwidth.	Partial
ifPhysAddressOID: 1.3.6.1.2.1.2.2.1.6	The interface's address at its protocol sub-layer. For interfaces which do not have such an address (e.g., a serial line), this object should contain an octet string of zero length."	No
ifAdminStatus OID: 1.3.6.1.2.1.2.2.1.7	The desired state of the interface. The testing(3) state indicates that no operational packets can be passed.SYNTAX INTEGER {up(1), -- ready to pass packetsdown(2),testing(3) -- in some test mode} **Note:** For ifAdminStatus, the these interfaces are supported: Physical interface, VE interface, port channel, and Loopback interface.	Yes
ifOperStatus OID: 1.3.6.1.2.1.2.2.1.8	The current operational state of the interface. The testing(3) state indicates that no operational packets can be passed.SYNTAX INTEGER {up(1), -- ready to pass packetsdown(2),testing(3), -- in some test modeunknown(4), -- status cannot be determined for some reason.dormant(5),notPresent(6), -- some component is missinglowerLayerDown(7) -- down due to state of lower-layer interface(s)}	Yes

MIB Object	Description	Supported (Yes/No)
ifLastChange OID: 1.3.6.1.2.1.2.2.1.9	The value of sysUpTime at the time the interface entered its current operational state.	No
ifInOctets OID: 1.3.6.1.2.1.2.2.1.10	The total number of octets received on the interface, including framing characters.	Partial
ifInUcastPkts OID: 1.3.6.1.2.1.2.2.1.11	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer.	Partial
ifInNUcastPkts OID: 1.3.6.1.2.1.2.2.1.12	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast or broadcast address at this sub-layer.	No
ifInDiscards OID: 1.3.6.1.2.1.2.2.1.13	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space.	No
ifInErrors OID: 1.3.6.1.2.1.2.2.1.14	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character-oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol.	No

MIB Object	Description	Supported (Yes/No)
ifInUnknownProtos OID: 1.3.6.1.2.1.2.2.1.15	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0.	No
ifOutOctets OID: 1.3.6.1.2.1.2.2.1.16	The total number of octets transmitted out of the interface, including framing characters.	Yes
ifOutUcastPkts OID: 1.3.6.1.2.1.2.2.1.17	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent.	Yes
ifOutNUcastPkts OID: 1.3.6.1.2.1.2.2.1.18	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent.	No
ifOutDiscards OID: 1.3.6.1.2.1.2.2.1.19	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted.	No

MIB Object	Description	Supported (Yes/No)
ifOutErrors OID: 1.3.6.1.2.1.2.2.1.20	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors.	No
ifOutQLen OID: 1.3.6.1.2.1.2.2.1.21	The length of the output packet queue (in packets).	No
ifSpecific OID: 1.3.6.1.2.1.2.2.1.22	A reference to MIB definitions specific to the particular media being used to realize the interface.	No

Table 28: if-mib-Notifications

Object Name	OID	Description
linkDown	1.3.6.1.6.3.1.1.5.3	A linkDown trap signifies that the SNMP entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links is about to enter the down state from some other state (but not from the notPresent state). This other state is indicated by the included value of ifOperStatus.
linkUp	1.3.6.1.6.3.1.1.5.4	A linkUp trap signifies that the SNMP entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links left the down state and transitioned into some other state (but not into the notPresent state). This other state is indicated by the included value of ifOperStatus.

ifNumber

MIB Object	Description	Supported (Yes/No)
ifNumber OID: 1.3.6.1.2.1.2.1	The number of network interfaces (regardless of their current state) present on this system.	Yes

SNMP view-based ACM MIB

The SNMP view-based ACM MIB defines the management information definitions for the view-based Access Control Model (ACM) for SNMP. The read and read-write operations on this MIB are supported via SNMP.

The SNMP view-based ACM MIB table is based on the RFC 3415.

MIB objects

Objects and OID	Supported	Description
vacmContextTable 1.3.6.1.6.3.16.1.1	Yes (read-only)	This table provides information to the SNMP command generator applications so that they can configure the vacmAccessTable to control access to all contexts at the SNMP entity.
vacmSecurityToGroupTable 1.3.6.1.6.3.16.1.2	Yes	This table maps a combination of securityModel and securityName into a groupName which is used to define an access control policy for a group of principals.
vacmAccessTable 1.3.6.1.6.3.16.1.4	Yes	The table of access rights for groups.

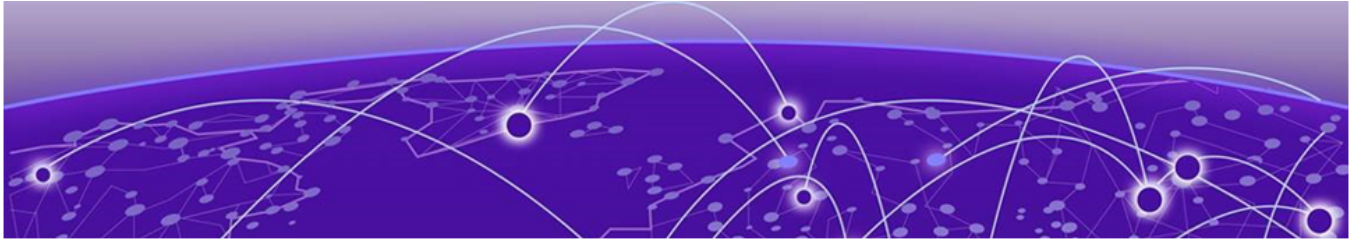
USM for SNMPv3 MIB

The USM for SNMPv3 MIB describes the User-based Security Model (USM) for SNMPv3 used in the SNMP architecture. The read and read-write operations on this MIB are supported via SNMP.

The USM for SNMPv3 MIB table is based on the RFC 3414.

MIB objects

Objects and OID	Access	Description
usmUserTable 1.3.6.1.6.3.15.1.2.2	Yes	The table of users configured in the SNMP engine's Local Configuration Datastore (LCD).



Supported Enterprise MIB Objects

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CPU utilization MIB

The CPU utilization MIB provides information about the statistical CPU utilization value within a module, in units of one hundredth of a percent.

The following table lists the slot number of module, CPU utilization interval, and CPU utilization 100th percent values.

Table 29: bcsiModuleCpuUtilTable

Objects and OID	Description
bcsiModuleCpuUtilTable 1.3.6.1.4.1.1588 .3.1.12.1.1	The table is to list utilization for all CPUs. Access Type: MAX-ACCESS not-accessible
bcsiModuleCpuUtilEntry 1.3.6.1.4.1.1588.3.1.12.1.1.1	A row in the CPU utilization table. Type: BcsiModuleCpuUtilEntry Access Type: MAX-ACCESS not-accessible
bcsiModuleCpuUtilSlotNum 1.3.6.1.4.1.1588.3.1.12.1.1.1.1	This object holds the slot number of the module that contains the CPU. Slot number in SLX are: MM1 = 1, MM2 = 2, LC1 = 3, LC2 = 4 and so on. Type: Integer32 Access Type: MAX-ACCESS not-accessible
bcsiModuleCpuUtilInterval 1.3.6.1.4.1.1588.3.1.12.1.1.1.2	This object holds the value, in seconds, for this CPU utilization. CPU utilizations for the last 60 sec, 300 sec and 900 sec intervals are supported. Type: Integer32 Access Type: MAX-ACCESS not-accessible
bcsiModuleCpuUtil100thPercent 1.3.6.1.4.1.1588.3.1.12.1.1.1.3	This object holds the statistical CPU utilization in units of one-hundredth of a percent. For example, a value of 200 indicates 2 percent utilization. Type: Gauge32 Access Type: MAX-ACCESS read-only

High Availability MIB overview

The HA-MIB provides information about the High Availability features of SLX-OS. The descriptions of each of the MIB variables in this chapter come directly from the HA-MIB itself.

The object types in HA-MIB are organized into the following groups:

- High Availability group
- HA-MIB traps

Objects and OID	Access	Description
haStatus 1.3.6.1.4.1.1588.2.1.2.1.1	None	Indicates whether the system is redundant.

High Availability - FRU table

Objects and OID	Access	Description
fruTable 1.3.6.1.4.1.1588.2.1.2.1.5	None	This table inventories the available FRU slots. This table contains an entry for each entry in the entPhysicalTable that has entPhysicalClass set to “Container (5)” and has a child entry having entPhysicalIsFRU set to “true (1)”.
fruClass 1.3.6.1.4.1.1588.2.1.2.1.5.1.1	Read-only	The type of the FRU object that this slot can hold.
fruStatus 1.3.6.1.4.1.1588.2.1.2.1.5.1.2	Read-only	The current status of the FRU object in the slot.
fruObjectNum 1.3.6.1.4.1.1588.2.1.2.1.5.1.3	Read-only	The slot number of the blade and the unit number for everything else.
fruSupplierId 1.3.6.1.4.1.1588.2.1.2.1.5.1.4	Read-only	The supplier ID.
fruSupplierPartNum 1.3.6.1.4.1.1588.2.1.2.1.5.1.5	Read-only	The supplier part number.
fruSupplierSerialNum 1.3.6.1.4.1.1588.2.1.2.1.5.1.6	Read-only	The supplier serial number.
fruSupplierRevCode 1.3.6.1.4.1.1588.2.1.2.1.5.1.7	Read-only	The supplier revision code.
fruPowerConsumption 1.3.6.1.4.1.1588.2.1.2.1.5.1.8	Read-only	The power consumption of the switch blades. This object has values only for core and switch blades. For other FRUs, this object returns zero.

High Availability - FRU history table

Objects and OID	Access	Description
fruHistoryTable 1.3.6.1.4.1.1588.2.1.2.1.6	None	This table gives the contents of the entire history log of the FRU events.
fruHistoryIndex 1.3.6.1.4.1.1588.2.1.2.1.6.1.1	Read-only	Index of the FRU event in the history table.
fruHistoryClass 1.3.6.1.4.1.1588.2.1.2.1.6.1.2	Read-only	The type of the FRU object related to the event.
fruHistoryObjectNum 1.3.6.1.4.1.1588.2.1.2.1.6.1.3	Read-only	The slot number of the blade and the unit number for everything else.
fruHistoryEvent 1.3.6.1.4.1.1588.2.1.2.1.6.1.4	Read-only	The type of the FRU event.
fruHistoryTime 1.3.6.1.4.1.1588.2.1.2.1.6.1.5	Read-only	The time this event happened.
fruHistoryFactoryPartNum 1.3.6.1.4.1.1588.2.1.2.1.6.1.6	Read-only	The factory part number of the FRU object.
fruHistoryFactorySerialNum 1.3.6.1.4.1.1588.2.1.2.1.6.1.7	Read-only	The factory serial number of the FRU object.

High Availability - CP table

Objects and OID	Access	Description
cpTable 1.3.6.1.4.1.1588.2.1.2.1.7	None	This table lists all the control cards in the system.
cpStatus 1.3.6.1.4.1.1588.2.1.2.1.7.1.1	Read-only	The current status of the control card.
cpIpAddress 1.3.6.1.4.1.1588.2.1.2.1.7.1.2	Read-only	The IP address of the Ethernet interface of this control card.
cpIpMask 1.3.6.1.4.1.1588.2.1.2.1.7.1.3	Read-only	The IP mask of the Ethernet interface of this control card.
cpIpGateway 1.3.6.1.4.1.1588.2.1.2.1.7.1.4	Read-only	The IP address of the IP gateway for this control card.
cpLastEvent 1.3.6.1.4.1.1588.2.1.2.1.7.1.5	Read-only	The last event related to this control card.

High Availability - MIB traps

Trap name and OID	Varbinds	Description
fruStatusChanged 1.3.6.1.4.1.1588.2.1.2.2.0.1	entPhysicalName fruStatus fruClass fruObjectNum sysName	This trap is sent when the status of any FRU object is changed. It is now enhanced to send the local host name configured on the switch in the `sysName` MIB.
cpStatusChanged 1.3.6.1.4.1.1588.2.1.2.2.0.2	cpStatus cpLastEvent swID swSsn	This trap is sent when the status of any control card object is changed.
fruHistoryTrap 1.3.6.1.4.1.1588.2.1.2.2.0.3	fruHistoryClass fruHistoryObjectNum fruHistoryEvent fruHistoryTime fruHistoryFactoryPartNum fruHistoryFactorySerialNum	This trap is sent when an FRU is added or removed.

Interface statistics and utilization

Interface statistics and utilization supports SNMP monitoring of additional interface statistics and interface utilization.

Usage Guidelines

The following table specifies all MIB objects that are supported for in and out interface statistics and interface utilization.

The table displays the following information:

- Traffic received on an interface in:
  - number of bits per second
  - number of packets per second
  - network utilization in the hundredth of a percent
- Total number of jumbo packets received on an interface.
- Traffic transmitted out of an interface in:
  - number of bits per second
  - number of packets per second
  - network utilization in the hundredth of a percent

MIB objects

Objects and OID	Access	Description
bcsiIfStatsTable 1.3.6.1.4.1.1588.3.1.11.1.1 Syntax: Sequence of BcsiIfStatsEntry	None	This table consists of in and out interface statistics value, and in and out interface utilization value.
bcsiIfStatsEntry 1.3.6.1.4.1.1588.3.1.11.1.1.1 Syntax: BcsiIfStatsEntry	None	An entry in the bcsiIfStats table that indicates the statistics and utilization on an interface.
bcsiIfStatsInBitsPerSec 1.3.6.1.4.1.1588.3.1.11.1.1.1.1 Syntax: CounterBasedGauge64	Read-only	This object holds the number of bits per second received on the interface.
bcsiIfStatsOutBitsPerSec 1.3.6.1.4.1.1588.3.1.11.1.1.1.2 Syntax: CounterBasedGauge64	Read-only	This object holds the number of bits per second transmitted out of the interface.
bcsiIfStatsInPktsPerSec 1.3.6.1.4.1.1588.3.1.11.1.1.1.3 Syntax: Gauge32	Read-only	This object holds the number of packets per second received on the interface.

Objects and OID	Access	Description
bcsiIfStatsOutPktsPerSec 1.3.6.1.4.1.1588.3.1.11.1.1.1.4 Syntax: Gauge32	Read-only	This object holds the number of packets per second transmitted out of the interface.
bcsiIfStatsInUtilization 1.3.6.1.4.1.1588.3.1.11.1.1.1.5 Syntax: Unsigned32	Read-only	This object holds the input network utilization in hundredths of a percent.
bcsiIfStatsOutUtilization 1.3.6.1.4.1.1588.3.1.11.1.1.1.6 Syntax: Unsigned32	Read-only	This object holds the output network utilization in hundredths of a percent.
bcsiIfStatsInJumboFrames 1.3.6.1.4.1.1588.3.1.11.1.1.1.7 Syntax:Counter64	Read-only	This object holds the total number of jumbo packets received on the interface.
bcsiIfWatermarkTable 1.3.6.1.4.1.1588.3.1.11.1.2 Syntax: Sequence of BcsiIfWatermarkEntry	None	It is the table to display the highest and lowest Tx/Rx BitRate and PktRate of a port for the current and previous 1 hour or 24 hour window.

Extreme Interface Statistics MIB

A set of MIBs to fetch the FEC statistics from supported devices.

MIB objects

Objects and OIDs	Access	Description
extremeInterfaceStatsMIB 1.3.6.1.4.1.1916.1.62	None	The OID subtree for the Extreme Interface Stats MIB.
extremeFecStatsObjects 1.3.6.1.4.1.1916.1.62.0	None	The OID subtree for the Extreme FEC Stats Objects.
extremeFecStatsTable 1.3.6.1.4.1.1916.1.62.0.1	None	The OID subtree for the Extreme FEC Stats Table.
extremeFecStatsEntry 1.3.6.1.4.1.1916.1.62.0.1.1	None	The OID subtree for the Extreme FEC Stats Table Entry.

Extreme FEC Stats Table MIBs

Object and OID	Access	Description
extremeFecMode 1.3.6.1.4.1.1916.1.62.0.1.1.1	Read Only	Displays the FEC mode. FEC Mode can be one of : • RS-FEC • FC-FEC • Auto negotiated • Disabled
extremeFecCorrectedBlocks 1.3.6.1.4.1.1916.1.62.0.1.1.2	Read Only	Displays the number of corrected Blocks.
extremeFecUncorrectedBlocks 1.3.6.1.4.1.1916.1.62.0.1.1.3	Read Only	Displays the number of uncorrected Blocks.

Memory utilization MIB

The memory utilization MIB provides information about the the dynamic memory that is currently utilized within this module, in units of one-hundredth of a percent. It also shows the available total memory in kilobytes and the total memory in kilobytes within this module.

The following table lists the slot number of module, total memory, available memory, and memory utilization 100th percent values.

Table 30: bcsiModuleMemUtilTable

Objects and OID	Description
bcsiModuleMemUtilTable 1.3.6.1.4.1.1588.3.1.13.1.1	The table is to list memory utilization of modules. Access Type: MAX-ACCESS not-accessible
bcsiModuleMemUtilEntry 1.3.6.1.4.1.1588.3.1.13.1.1.1	A row in the Memory utilization table. Type: BcsiModuleMemUtilEntry Access Type: MAX-ACCESS not-accessible
bcsiModuleMemUtilSlotNum 1.3.6.1.4.1.1588.3.1.13.1.1.1.1	This object holds the slot number of the module that contains the memory. Slot number are: MM1 = 1, MM2 = 2, LC1 = 3, LC2 = 4 and so on. Type: Integer32 Access Type: MAX-ACCESS not-accessible
bcsiModuleMemTotal 1.3.6.1.4.1.1588.3.1.13.1.1.1.2	This object holds the total memory in kilobytes within the module. Type: Unsigned32 Units: "kilo Bytes" Access Type: MAX-ACCESS read-only
bcsiModuleMemAvailable 1.3.6.1.4.1.1588.3.1.13.1.1.1.3	This object holds the available total memory in kilobytes within this module. Type: Gauge32 Units: "kilo Bytes" Access Type: MAX-ACCESS read-only
bcsiModuleMemUtil100thPercent 1.3.6.1.4.1.1588.3.1.13.1.1.1.4	This object holds the dynamic memory that is currently utilized within this module, in units of one-hundredth of a percent. Type: Gauge32 Access Type: MAX-ACCESS read-only

Optical monitoring

Optical Monitoring Traps

Table 31: Optical Monitoring Notification

Trap Name and OID	Description
bcsiIfTempThresholdValueChange 1.3.6.1.4.1.1588.3.1.8.0.1	This notification is generated whenever the Temperature threshold value changes between *Normal*, *HighAlarm*, *LowAlarm*, *HighWarning*, and *LowWarning*.
bcsiIfVoltThresholdValueChange 1.3.6.1.4.1.1588.3.1.8.0.2	This notification is generated whenever the Voltage threshold value changes between *Normal*, *HighAlarm*, *LowAlarm*, *HighWarning*, and *LowWarning*.
bcsiIfTxPowerThresoldValueChange 1.3.6.1.4.1.1588.3.1.8.0.3	This notification is generated whenever the TxPower threshold value changes between *Normal*, *HighAlarm*, *LowAlarm*, *HighWarning*, and *LowWarning*.
bcsiIfRxPowerThresoldValueChange 1.3.6.1.4.1.1588.3.1.8.0.4t	This notification is generated whenever the RxPower threshold value changes between *Normal*, *HighAlarm*, *LowAlarm*, *HighWarning*, and *LowWarning*.
bcsiIfTxBiasThresholdValueChange 1.3.6.1.4.1.1588.3.1.8.0.5	This notification is generated whenever the TxBias Value threshold value changes between *Normal*, *HighAlarm*, *LowAlarm*, *HighWarning*, and *LowWarning*.
bsciIfOpticUnQualified 1.3.6.1.4.1.1588.3.1.8.0.6	This notification is generated for the qualification status of the Optics. Can be `Yes` for *Qualified* optics or can be `No` for *Unqualified* optics. This notification is only generated for unqualified optics.

Optical Lane Monitoring Table

The following table displays the optical parameters table for Temperature, Tx Power, Rx Power, and Tx Bias Current values and the status for all lanes within a 40G Optic of type SR4 and LR4, 100G optic of type LR4 and LR10. LR4 and SR4 have 4 lanes per optic, LR10 has 10 lanes per optic.

Objects and OID	Access	Description
bcsiOptMonLaneTable 1.3.6.1.4.1.1588.3.1.8.1.1	None	This table lists the instrumented parameters of all lanes within a 40 G optic of type SR4 and LR4, 100G optic of type LR4 and LR10. LR4 and SR4 have 4 lanes per optic and LR10 has 10 lanes per optic.
bcsiOptMonLaneEntry 1.3.6.1.4.1.1588.3.1.8.1.1.1	None	Only the *ifIndices* of optical interfaces whose parameters need to be monitored will be used to index this table.
bcsiOptMonLaneNum 1.3.6.1.4.1.1588.3.1.8.1.1.1.1 Syntax: Unsigned32	None	This object is the lane number of the 40G and 100G optic. LR4 and SR4 have 4 lanes per optic and LR10 has 10 lanes per optic.

Objects and OID	Access	Description
bcsiOptMonLaneTemperature 1.3.6.1.4.1.1588.3.1.8.1.1.1.2 Syntax: SnmpAdminString	Read-only	This object holds the value of the transmitter laser diode temperature for the lane in the interface. Indicates the health of the transmitter. The format is xxx.yyyy C (Celsius), followed by whether the measured value is normal, high/low alarm, or high/low warning.
bcsiOptMonLaneTxPowerStatus 1.3.6.1.4.1.1588.3.1.8.1.1.1.3 Syntax: Integer	Read-only	This object holds the value of the transmitter optical signal power for the lane in the interface, measured in decibel-milliwatts (dBm), followed by whether this is a this is a normal value, or high or low warning or alarm. bcsiOptMonLaneTxPowerStatus is one of the following status: • notSupported (1) • notApplicable (2) • highAlarm (3) • highWarn (4) • normal (5) • lowWarn (6) • lowAlarm (7)
bcsiOptMonLaneTxPower 1.3.6.1.4.1.1588.3.1.8.1.1.1.4 Syntax: SnmpAdminString	Read-only	This object holds the value of the receiver optical signal power for the lane in the interface, measured in dBm, followed by whether this is a normal value, or high/low warning or alarm.
bcsiOptMonLaneTxPowerVal 1.3.6.1.4.1.1588.3.1.8.1.1.1.5 Syntax: Unsigned32	Read-only	The value of the transmitter optical signal power for the lane in the interface, measured in microwatt.
bcsiOptMonLaneRxPowerStatus 1.3.6.1.4.1.1588.3.1.8.1.1.1.6 Syntax: Integer	Read-only	The status of the receiver optical signal power for the lane in the interface, indicating whether this is normal or an alarm is present. bcsiOptMonLaneTxPowerStatus is one of the following status: • notSupported (1) • notApplicable (2) • highAlarm (3) • highWarn (4) • normal (5) • lowWarn (6) • lowAlarm (7)

Objects and OID	Access	Description
bcsiOptMonLaneRxPower 1.3.6.1.4.1.1588.3.1.8.1.1.1.7 Syntax: SnmpAdminString	Read-only	The value of the receiver optical signal power for the lane in the interface, measured in dBm, followed by whether this is a normal value, high/low warning, or an alarm.
bcsiOptMonLaneRxPowerVal 1.3.6.1.4.1.1588.3.1.8.1.1.1.8 Syntax: Unsigned32	Read-only	The value of the receiver optical signal power for the lane in the interface, measured in microwatt.
bcsiOptMonLaneTxBiasCurrent 1.3.6.1.4.1.1588.3.1.8.1.1.1.9 Syntax: SnmpAdminString	Read-only	The Tx Bias Current. It is measured in mA, and is followed by whether this is a normal value, high/low warning, or an alarm.
bcsiOptMonLaneVoltageValue 1.3.6.1.4.1.1588.3.1.8.1.1.1.10 Syntax: SnmpAdminString	Read-only	The Voltage value of the lane interface. The format of this voltage entry is xxx.yyy (mVolts). This is followed by the warning state for this value. The warning state can be one of *normal*, *high/low* alarms, or *high/low* warnings.

Optical Monitoring Information Table

The following table displays the optical monitoring information table for Temperature, Tx Power, Rx Power, and Tx Bias Current values and the status values.

Objects and OID	Access	Description
bcsiOptMonInfoTable 1.3.6.1.4.1.1588.3.1.8.1.2	None	This table lists the instrumented parameters of all optical interfaces.
bcsiOptMonInfoEntry 1.3.6.1.4.1.1588.3.1.8.1.2.1 Syntax: BcsiOptMonInfoEntry	None	Only the *ifIndices* of optical interfaces whose parameters need to be monitored will be used to index this table.
bcsiOptMonInfoTemperature 1.3.6.1.4.1.1588.3.1.8.1.2.1.1 Syntax: DisplayString	Read-only	This object holds the value of the transmitter laser diode temperature for the lane in the interface. It indicates the health of the transmitter. The format is xxx.yyyy C (Celsius), followed by whether the measured value is normal, high/low alarm, or high/low warning. For 100G LR4 and LR10 optic, this object returns the average temperature for all lanes.

Objects and OID	Access	Description
bcsiOptMonInfoTxPowerStatus 1.3.6.1.4.1.1588.3.1.8.1.2.1.2 Syntax: Integer	Read-only	This object holds the status of the transmitter optical signal power for the interface, indicating whether this is normal or an alarm is present. bcsiOptMonInfoTxPowerStatus is one of the following status: • notSupported (1) • notApplicable (2) • highAlarm (3) • highWarn (4) • normal (5) • lowWarn (6) • lowAlarm (7)
bcsiOptMonInfoTxPower 1.3.6.1.4.1.1588.3.1.8.1.2.1.3 Syntax: DisplayString	Read-only	This object holds the value of the transmitter optical signal power for the interface, measured in dBm, followed by whether this is a normal value, or high/low warning or alarm. For 100G LR4 and LR10 optic, this returns the aggregated Tx Power for all lanes.
bcsiOptMonInfoTxPowerVal 1.3.6.1.4.1.1588.3.1.8.1.2.1.4 Syntax: Unsigned32	Read-only	This object holds the value of the transmitter optical signal power for the interface, measured in microWatt. For 100G LR4 and LR10 optic, this returns the aggregated Tx Power for all lanes.
bcsiOptMonInfoRxPowerStatus 1.3.6.1.4.1.1588.3.1.8.1.2.1.5 Syntax: Integer	Read-only	This object holds the status of the receiver optical signal power for the interface, indicating whether this is normal or an alarm is present. bcsiOptMonLaneTxPowerStatus is one of the following status: • notSupported (1) • notApplicable (2) • highAlarm (3) • highWarn (4) • normal (5) • lowWarn (6) • lowAlarm (7)
bcsiOptMonInfoRxPower 1.3.6.1.4.1.1588.3.1.8.1.2.1.6 Syntax: DisplayString	Read-only	This object holds the value of the receiver optical Signal power for the interface, measured in dBm, followed by whether this is a normal value, or high/low warning or alarm. For 100G LR4 and LR10 optic, this returns the aggregated Rx Power for all lanes.

Objects and OID	Access	Description
bcsiOptMonInfoRxPowerVal 1.3.6.1.4.1.1588.3.1.8.1.2.1.7 Syntax: Unsigned32	Read-only	This object holds the value of the receiver optical signal power for the interface, measured in microWatt. For 100G LR4 and LR10 optic, this returns the aggregated Rx Power for all lanes.
bcsiOptMonInfoTxBiasCurrent 1.3.6.1.4.1.1588.3.1.8.1.2.1.8 Syntax: DisplayString	Read-only	This object holds the value of the Tx Bias Current. It is measured in mA, and is followed by whether this is a normal value, or high/low warning or alarm. For 100G LR4 and LR10 optic, this returns the aggregated Tx Bias Current for all lanes.
bcsiOptMonVoltageValue 1.3.6.1.4.1.1588.3.1.8.1.2.1.9 Syntax: DisplayString	None	This object holds the value of the voltage value of the lane interface. The format of this voltage entry is xxx.yyy (mVolts). This is followed by the warning state for this value. The warning state can be one of *normal*, *high/low* alarms, or *high/low* warnings.
bcsiOptMonTempratureEvent 1.3.6.1.4.1.1588.3.1.8.1.2.1.10 Syntax: Integer	Read-only	This object holds the value of the temperature state transition event. The state transition alarms can be: • normalToHighAlarm (1) • normalToLowAlarm (2) • normalToHighWarning (3) • normalToLowWarning (4) • highAlarmToNormal (5) • highAlarmToLowAlarm (6) • highAlarmToHighWarning(7) • highAlarmToLowWarning (8) • lowAlarmToNormal (9) • lowAlarmToHighAlarm (10) • lowAlarmToHighWarning (11) • lowAlarmToLowWarning (12) • highWarningToNormal (13) • highWarningToHighAlarm(14) • highWarningToLowAlarm (15) • highWarningToLowWarning(16) • lowWarningToNormal (17) • lowWarningToHighAlarm (18) • lowWarningToLowAlarm (19) • lowWarningToHighWarning (20)

Objects and OID	Access	Description
bcsiOptMonVoltageEvent 1.3.6.1.4.1.1588.3.1.8.1.2.1.11 Syntax: Integer	Read-only	This object holds the value of the voltage state transition events for the optic device. The state transition alarms can be: • normalToHighAlarm (1) • normalToLowAlarm (2) • normalToHighWarning (3) • normalToLowWarning (4) • highAlarmToNormal (5) • highAlarmToLowAlarm (6) • highAlarmToHighWarning(7) • highAlarmToLowWarning (8) • lowAlarmToNormal (9) • lowAlarmToHighAlarm (10) • lowAlarmToHighWarning (11) • lowAlarmToLowWarning (12) • highWarningToNormal (13) • highWarningToHighAlarm(14) • highWarningToLowAlarm (15) • highWarningToLowWarning(16) • lowWarningToNormal (17) • lowWarningToHighAlarm (18) • lowWarningToLowAlarm (19) • lowWarningToHighWarning (20)
bcsiOptMonTxPowerEvent 1.3.6.1.4.1.1588.3.1.8.1.2.1.12 Syntax: Integer	Read-only	This object holds the value of the voltage state transition events for TxPower. The state transition alarms can be: • normalToHighAlarm (1) • normalToLowAlarm (2) • normalToHighWarning (3) • normalToLowWarning (4) • highAlarmToNormal (5) • highAlarmToLowAlarm (6) • highAlarmToHighWarning(7) • highAlarmToLowWarning (8) • lowAlarmToNormal (9) • lowAlarmToHighAlarm (10) • lowAlarmToHighWarning (11) • lowAlarmToLowWarning (12) • highWarningToNormal (13) • highWarningToHighAlarm(14) • highWarningToLowAlarm (15) • highWarningToLowWarning(16) • lowWarningToNormal (17) • lowWarningToHighAlarm (18) • lowWarningToLowAlarm (19) • lowWarningToHighWarning (20)

Objects and OID	Access	Description
bcsiOptMonRxPowerEvent 1.3.6.1.4.1.1588.3.1.8.1.2.1.13 Syntax: Integer	Read-only	This object holds the value of the voltage state transition events for RxPower. The state transition alarms can be: • normalToHighAlarm (1) • normalToLowAlarm (2) • normalToHighWarning (3) • normalToLowWarning (4) • highAlarmToNormal (5) • highAlarmToLowAlarm (6) • highAlarmToHighWarning(7) • highAlarmToLowWarning (8) • lowAlarmToNormal (9) • lowAlarmToHighAlarm (10) • lowAlarmToHighWarning (11) • lowAlarmToLowWarning (12) • highWarningToNormal (13) • highWarningToHighAlarm(14) • highWarningToLowAlarm (15) • highWarningToLowWarning(16) • lowWarningToNormal (17) • lowWarningToHighAlarm (18) • lowWarningToLowAlarm (19) • lowWarningToHighWarning (20)
bcsiOptMonTxBiasEvent 1.3.6.1.4.1.1588.3.1.8.1.2.1.14 Syntax: Integer	Read-only	This object holds the value of the TxBias state transition events. The state transition alarms can be: • normalToHighAlarm (1) • normalToLowAlarm (2) • normalToHighWarning (3) • normalToLowWarning (4) • highAlarmToNormal (5) • highAlarmToLowAlarm (6) • highAlarmToHighWarning(7) • highAlarmToLowWarning (8) • lowAlarmToNormal (9) • lowAlarmToHighAlarm (10) • lowAlarmToHighWarning (11) • lowAlarmToLowWarning (12) • highWarningToNormal (13) • highWarningToHighAlarm(14) • highWarningToLowAlarm (15) • highWarningToLowWarning(16) • lowWarningToNormal (17) • lowWarningToHighAlarm (18) • lowWarningToLowAlarm (19) • lowWarningToHighWarning (20)

Optical Media Information table

The following table displays the optical media information for Type, Vendor Name, Version, Part Number, and Serial Number.

Objects and OID	Access	Description
bcsiIfMediaInfoTable 1.3.6.1.4.1.1588.3.1.8.1.3	None	This table lists the information of the media device (SFP/XFP/Copper) installed in the physical port. Only the ifIndices of Ethernet ports those are associated with the operational cards will be included in this table.
bcsiIfMediaInfoEntry 1.3.6.1.4.1.1588.3.1.8.1.3.1	None	The *ifIndices* of ethernet interfaces will be used to index this table.
bcsiIfMediaType 1.3.6.1.4.1.1588.3.1.8.1.3.1.1 Syntax: DisplayString	Read-only	This objects holds the type of the media installed in the physical port.
bcsiIfMediaVendorName .1.3.6.1.4.1.1588.3.1.8.1.3.1.2 Syntax: Integer	Read-only	This object holds the name of the vendor of the media and the full name of the corporation.
bcsiIfMediaVersion 1.3.6.1.4.1.1588.3.1.8.1.3.1.3 Syntax: DisplayString	Read-only	This object holds the media vendor product version number
bcsiIfMediaPartNumber 1.3.6.1.4.1.1588.3.1.8.1.3.1.4 Syntax: DisplayString	Read-only	This object holds the media vendor part number.
bcsiIfMediaSerialNumber 1.3.6.1.4.1.1588.3.1.8.1.3.1.5 Syntax: DisplayString	Read-only	This object holds the vendor serial number of the media device.
bcsiIfIsMediaOpticQualified Status 1.3.6.1.4.1.1588.3.1.8.1.3.1.6 Syntax: Integer	Read-only	This object holds the value of the qualification status of the optic. Can be one of *Yes* (for qualified optic) or *No* (for unqualified optic).

SW-MIB overview

The descriptions of the MIB variables in this chapter come directly from the Switch MIB. The notes that follow the descriptions typically pertain to Extreme-specific information as provided by Extreme.

Table 32: Switch base MIB

Objects and OID	Access	Description
sw 1.3.6.1.4.1.1588.2.1.1.1	None	The OID sub-tree for the Brocade Silkworm Series of Fibre Channel Switches.

Table 33: Switch system group MIBs

Objects and OID	Access	Description
swSystem 1.3.6.1.4.1.1588.2.1.1.1.1	None	The MIB module is for system information.
swCurrentDate 1.3.6.1.4.1.1588.2.1.1.1.1.1	Read-only	The object displays the current date in textual format.
swBootDate 1.3.6.1.4.1.1588.2.1.1.1.1.2	Read-only	The date and time when the system last booted.
swFWLastUpdated 1.3.6.1.4.1.1588.2.1.1.1.1.3	Read-only	The date when the firmware was last updated to the switch.
swFlashLastUpdated 1.3.6.1.4.1.1588.2.1.1.1.1.4	Read-only	The date and time when the flash was last updated.
swBootPromLastUpdated 1.3.6.1.4.1.1588.2.1.1.1.1.5	Read-only	The date and time when the Boot PROM was last updated.
swFirmwareVersion 1.3.6.1.4.1.1588.2.1.1.1.1.6	Read-only	The current version of the firmware.
swOperStatus 1.3.6.1.4.1.1588.2.1.1.1.1.7	Read-only	The current operational status of the switch. Possible values: • online (1) - The switch is accessible by an external FC port. • offline (2) - The switch is not accessible. • testing (3) - The switch is in a built-in test mode and is not accessible by an external Fibre Channel port. • faulty (4) - The switch is not operational.

Table 33: Switch system group MIBs (continued)

Objects and OID	Access	Description
swFlashDLOperStatus 1.3.6.1.4.1.1588.2.1.1.1.1.11	Read-only	The operational status of the flash. Possible values: • unknown (0) - Indicates that the operational status of the flash is unknown. • swCurrent (1) - Indicates that the flash contains the current firmware image or configuration file. • swFwUpgraded (2) - Indicates that the flash contains the upgraded image from the swFlashDLHost.0. • swCfUploaded (3) - Indicates that the switch configuration file has been uploaded to the host. • swCfDownloaded (4) - Indicates that the switch configuration file has been downloaded from the host. • swFwCorrupted (5) - Indicates that the firmware in the flash of the switch is corrupted.
swFlashDLAdmStatus 1.3.6.1.4.1.1588.2.1.1.1.1.12	Read-write	The state of the flash. Possible values: • swCurrent (1) - The flash contains the current firmware image or configuration file. • swFwUpgrade (2) - The firmware in the flash is to be upgraded from the host specified. • swCfUpload (3) - The switch configuration file is to be uploaded to the host specified. • swCfDownload (4) - The switch configuration file is to be downloaded from the host specified. • swFwCorrupted (5) - The firmware in the flash is corrupted. This value is for informational purposes only; however, setting swFlashDLAdmStatus to this value is not allowed.
swBeaconOperStatus 1.3.6.1.4.1.1588.2.1.1.1.1.18	Read-only	The current operational status of the switch beacon. Possible values: • on (1) - The LEDs on the front panel of the switch run alternately from left to right and right to left. The color is yellow. • off (2) - Each LED is in its regular status, indicating color and state.

Table 33: Switch system group MIBs (continued)

Objects and OID	Access	Description
swBeaconAdmStatus 1.3.6.1.4.1.1588.2.1.1.1.1.19	Read-write	The desired status of the switch beacon. Possible values: • on (1) - The LEDs on the front panel of the switch run alternately from left to right and right to left. Set the color to yellow. • off (2) - Set each LED to its regular status, indicating color and state.
swDiagResult 1.3.6.1.4.1.1588.2.1.1.1.1.20	Read-only	The result of the power-on self-test (POST) diagnostics. Possible values: • sw-ok (1) - The switch is okay. • sw-faulty (2) - The switch has experienced an unknown fault. • sw-embedded-port-fault (3) - The switch has experienced an embedded port fault.
swNumSensors 1.3.6.1.4.1.1588.2.1.1.1.1.21	Read-only	The number of sensors inside the switch.
swEtherIPAddress 1.3.6.1.4.1.1588.2.1.1.1.1.25	Read-only	The IP address of the Ethernet interface of this logical switch.
swEtherIPMask 1.3.6.1.4.1.1588.2.1.1.1.1.26	Read-only	The IP mask of the Ethernet interface of this logical switch.
swIPv6Address 1.3.6.1.4.1.1588.2.1.1.1.1.29	None	The IPv6 address.
swIPv6Status 1.3.6.1.4.1.1588.2.1.1.1.1.30	None	The current status of the IPv6 address. Possible values: • tentative (1) • preferred (2) • ipdeprecated (3) • inactive (4)

swEventTable

Objects and OID	Access	Description
swEvent 1.3.6.1.4.1.1588.2.1.1.1.8	None	The OID sub-tree for the switch event group.
swEventTable 1.3.6.1.4.1.1588.2.1.1.1.8.5	Read-only	The table of event entries.
swEventIndex 1.3.6.1.4.1.1588.2.1.1.1.8.5.1.1	Read-only	This object identifies the event entry.
swEventTimeInfo 1.3.6.1.4.1.1588.2.1.1.1.8.5.1.2	Read-only	The date and time that this event occurred.
swEventLevel 1.3.6.1.4.1.1588.2.1.1.1.8.5.1.3	Read-only	The severity level of this event entry. Possible values: • critical (1) • error (2) • warning (3) • informational (4) • debug (5)
swEventRepeatCount 1.3.6.1.4.1.1588.2.1.1.1.8.5.1.4	Read-only	This object indicates the number of times this particular event has occurred.
swEventDescr 1.3.6.1.4.1.1588.2.1.1.1.8.5.1.5	Read-only	A textual description of the event.
swEventVfid 1.3.6.1.4.1.1588.2.1.1.1.8.5.1.6	Read-only	This object identifies the Virtual Fabric ID.

swSensorTable

Objects and OID	Access	Description
swSensorTable 1.3.6.1.4.1.1588.2.1.1.1.1.22	None	The table of sensor entries.
swSensorIndex 1.3.6.1.4.1.1588.2.1.1.1.1.22.1.1	Read-only	The index of the sensor.
swSensorType 1.3.6.1.4.1.1588.2.1.1.1.1.22.1.2	Read-only	The type of sensor. Possible values: • temperature (1) • fan (2) • power-supply (3)
swSensorStatus 1.3.6.1.4.1.1588.2.1.1.1.1.22.1.3	Read-only	The current status of the sensor. Possible values: • unknown (1) • faulty (2) • below-min (3) - The sensor value is below the minimal threshold. • nominal (4) • above-max (5) - The sensor value is above the maximum threshold. • absent (6) - The sensor is missing.
swSensorValue 1.3.6.1.4.1.1588.2.1.1.1.1.22.1.4	Read-only	The current value (reading) of the sensor. The unknown value -2147483648 indicates the maximum value of integer value; it also means that the sensor does not have the capability to measure the actual value. The temperature sensor value is in Celsius, the fan value is in RPM (revolutions per minute), and the power supply sensor reading is unknown.
swSensorInfo 1.3.6.1.4.1.1588.2.1.1.1.1.22.1.5	Read-only	Additional information on the sensor. It contains the sensor type and number, in textual format; for example: Temp 3, Fan 6, and so on.

TCAM MIB

TCAM profile

The following object identifies the Ternary Content-Addressable Memory (TCAM) partition profiles.

MIB objects

Object and OID	Access	Description
bcsiTCAMProfile 1.3.6.1.4.1.1588.3.1.14.1.1.1	Read-only	This object identifies TCAM partition profile. Each profile adjusts the partitions to optimize the device for corresponding applications.

TCAM usage table

The following table contains information about the CAM usage of the entity.

MIB objects

Object and OID	Access	Description
bcsiTCAMUsageTable 1.3.6.1.4.1.1588.3.1.14.1.2.1	None	This table contains information of the entity's TCAM usage.
bcsiTCAMUsageEntry 1.3.6.1.4.1.1588.3.1.14.1.2.1.1	None	An entry containing management information applicable to TCAM usage.
bcsiTCAMUsageContainerId 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.4	Read-only	This object identifies the bank container which can refer to a single bank or multiple TCAM banks.
bcsiTCAMUsageDBId 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.5	Read-only	This object identifies the logical database.
bcsiTCAMUsageSize 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.6	Read-only	This object indicates if the size for this feature in the current profile is fixed or dynamic.
bcsiTCAMUsageCurrentUsage 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.7	Read-only	This object indicates the current usage of TCAM entries by this feature.
bcsiTCAMUsageMaxLimit 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.8	Read-only	This object indicates the maximum Limit of TCAM entries available for this feature.
bcsiTCAMUsageFreeCountContainer 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.9	Read-only	This object indicates the number of free entries in the container that is associated with the TCAM logical database used by this feature. Used for debugging purpose.

Object and OID	Access	Description
bcsiTCAMUsageFreeCountDB 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.10	Read-only	This object indicates the number of free entries in the TCAM logical database used by this feature. Used for debugging purpose.
bcsiTCAMUsageFreeCountFeature 1.3.6.1.4.1.1588.3.1.14.1.2.1.1.11	Read-only	This object indicates the number of free entries available for this feature. Used for debugging purpose.

Traffic Manager MIB

Traffic Manager statistics table

The following table contains the Traffic Manager-related statistics. Use the **show tm statistics** command to display information about the Traffic Manager-related statistics.

MIB objects

Objects and OID	Access	Description
bcsiTMStatsTable (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2)	None	Table contains information of Traffic Manager(TM) counters.
bcsiTMStatsEntry (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1)	None	An entry containing TM counter information.
bcsiTMStatsDescription (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.3)	Read-only	This object gives the description of this entry.
bcsiTMStatsTotalIngressPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.4)	Read-only	A count of all packets entering into this TM.
bcsiTMStatsIngressCPUPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.5)	Read-only	A count of all packets entering into this TM destined for the CPU.
bcsiTMStatsIngressEnquePkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.6)	Read-only	A count of all packets entering ingress queues on this TM.
bcsiTMStatsIngressDequePkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.7)	Read-only	A count of all packets de-queued from ingress queues and forwarded on this TM.
bcsiTMStatsIngressTotalDiscardPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.8)	Read-only	A count of all packets failing to enter ingress queues on this TM.
bcsiTMStatsIngressOldestDiscardPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.9)	Read-only	A count of all packets entering ingress queues on this TM, but deleted later due to buffer being full.
bcsiTMStatsIngressResolvedToBeDropped (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.10)	Read-only	A count of all packets entering ingress queues on this TM, but resolved to be dropped.
bcsiTMStatsIngressCRCErrorCount (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.11)	Read-only	A count of all packets entering ingress queues on this TM, but found to have bad CRC.
bcsiTMStatsEgressREDiscardPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.12)	Read-only	A count of all packets entering egress queues on this TM and discarded due to reassembly errors.
bcsiTMStatsEgressFilterDiscardPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.13)	Read-only	A count of all packets entering egress queues on this TM and discarded due to filtering.

Objects and OID	Access	Description
bcsiTMStatsEgressDiscardUCPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.14)	Read-only	A count of all unicast packets failing to enter egress queues on this TM.
bcsiTMStatsEgressDiscardMCPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.15)	Read-only	A count of all multicast packets failing to enter egress queues on this TM.
bcsiTMStatsEgressUnicastPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.16)	Read-only	A count of all unicast packets entering egress queues and forwarded out on this TM.
bcsiTMStatsEgressMulticastPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.17)	Read-only	A count of all multicast packets entering egress queues and forwarded out on this TM.
bcsiTMStatsEgressFQPPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.2.2.1.18)	Read-only	A count of all FQP packets entering egress queues and forwarded out on this TM.

Traffic Manager CPU VOQ statistics table

The bcsiTMVOQCPUGroupStatsTable contains information about the Traffic Manager(TM) VOQ (Virtual Output Queue) counters for CPU groups. Use the **`show tm voq-statistics cpu-group`** command to display information about the TM counters for the CPU groups.

MIB objects

Objects and OID	Access	Description
bcsiTMVOQCPUGroupStatsTable (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2)	None	Table contains information about TM VOQ counters for CPU groups.
bcsiTMVOQCPUGroupStatsEntry (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1)	None	An entry containing TM VOQ counter information for CPU groups.
bcsiTMVOQCPUGroupStatsGroup (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.2)	None	The CPU group of the packets stored in this queue. The CPU group value lies between 0 and 12.
bcsiTMVOQCPUGroupStatsPriority (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.3)	None	The priority of the packets stored in this queue. The priority value lies between 0 and 7.
bcsiTMVOQCPUGroupStatsDescription (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.4)	Read-only	This object gives the description of this entry.
bcsiTMVOQCPUGroupStatsEnQPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.5)	Read-only	A count of all packets entering ingress queues for this priority in this CPU group.
bcsiTMVOQCPUGroupStatsEnQBytes (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.6)	Read-only	A count of bytes entering ingress queues for this priority in this CPU group.

Objects and OID	Access	Description
bcsiTMVOQCPUGroupStatsTotalDiscardPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.7)	Read-only	A count of all packets failing to enter ingress queues for this priority in this CPU group.
bcsiTMVOQCPUGroupStatsTotalDiscardBytes (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.8)	Read-only	A count of bytes failing to enter ingress queues for this priority in this CPU group.
bcsiTMVOQCPUGroupStatsCurrQDepth (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.9)	Read-only	The current queue depth for this priority in this CPU group.
bcsiTMVOQCPUGroupStatsMaxQDepth (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.2.1.10)	Read-only	The maximum queue depth for this priority in this CPU group, since last read by any entity.

Traffic Manager VOQ ingress statistics table

The bcsiTMVOQIngressStatsTable contains information Traffic Manager(TM) VOQ (Virtual Output Queue) counters for ingress tower for an egress port and priority. Use the **`show tm voq-statistics ingress-device`** command to display information about the TM VOQ counters for the ingress tower. The GET-NEXT request is not fully functional in this table.

MIB objects

Objects and OID	Access	Description
bcsiTMVOQIngressStatsTable (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3)	None	Table contains information TM VOQ counters for ingress tower for an egress port and priority.
bcsiTMVOQIngressStatsEntry (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1)	None	An entry containing TM VOQ counter information for ingress tower for an egress port and priority.
bcsiTMVOQIngressStatsEgressPort (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1.3)	None	The value of ifIndex corresponding to the egress port.
bcsiTMVOQIngressStatsPriority (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1.4)	None	The priority of the packets stored in this queue. The priority value lies between 0 and 7.
bcsiTMVOQIngressStatsDescription (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1.5)	Read-only	This object gives the description of this entry.
bcsiTMVOQIngressStatsEnQPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1.6)	Read-only	A count of all packets entering ingress queues for this priority, destined for the specified egress port.
bcsiTMVOQIngressStatsEnQBytes (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1.7)	Read-only	A count of bytes entering ingress queues for this priority, destined for the specified egress port.

Objects and OID	Access	Description
bcsiTMVOQIngressStatsTotalDiscardPkts (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1.8)	Read-only	A count of all packets failing to enter ingress queues for this priority, destined for the specified egress port.
bcsiTMVOQIngressStatsTotalDiscardBytes (OID: 1.3.6.1.4.1.1588.3.1.15.1.3.3.1.9)	Read-only	A count of bytes failing to enter ingress queues for this priority, destined for the specified egress port.
bcsiTMVOQIngressStatsCurrQDepth (OID:1.3.6.1.4.1.1588.3.1.15.1.3.3.1.10)	Read-only	The current queue depth for this priority, destined for the specified egress port.
bcsiTMVOQIngressStatsMaxQDepth (OID:1.3.6.1.4.1.1588.3.1.15.1.3.3.1.11)	Read-only	The maximum queue depth for this, destined for the specified egress port, since last read by any entity.

VPLS MIB

The VPLS MIB defines objects that help in modeling the Virtual Private LAN Service (VPLS) protocol.

The following table lists the MIB modules that are part of the VPLS MIB.

Table 34: VPLS MIB

MIB name and OID	Supported	Description
VPLS-GENERIC-MIB 1.3.6.1.2.1.10.274	Partial (read-only)	Contains generic managed object definitions for VPLS.
VPLS-LDP-MIB 1.3.6.1.2.1.10.275	No	Contains managed object definitions for LDP-signaled VPLS.
VPLS-BGP-MIB 1.3.6.1.2.1.10.276	No	Contains managed object definitions for BGP signaled VPLS.

The following objects listed support VPLS-GENERIC-MIB.

Table 35: VPLS-GENERIC-MIB objects

Object group name and OID	Supported	Description
vplsConfigTable 1.3.6.1.2.1.10.274.1.2	Yes	This table specifies information for configuring and monitoring VPLS.
vplsStatusTable 1.3.6.1.2.1.10.274.1.3	Yes	This table provides information for monitoring VPLS.

Note
None of the traps are supported.

VPLS configuration table

The following table lists the objects that are supported for the vplsConfigTable.

Table 36: vplsConfigTable

Object name, OID, and syntax	Supported	Description
vplsConfigIndex 1.3.6.1.2.1.10.274.1.2.1.1 Syntax: Unsigned 32	Read-only	Unique index for the conceptual row identifying a VPLS.
vplsConfigName 1.3.6.1.2.1.10.274.1.2.1.2 Syntax: SnmpAdminString	Read-only	Name of the VPLS. If there is no local name for this object, then this object should contain a zero-length octet string.
vplsConfigDescr 1.3.6.1.2.1.10.274.1.2.1.3 Syntax: SnmpAdminString	Read-only	A text string containing information about the VPLS. If there is no information for this VPLS, then this object should contain a zero-length octet string.
vplsConfigAdminStatus 1.3.6.1.2.1.10.274.1.2.1.4 Syntax: INTEGER	Read-only	The desired administrative state of the VPLS.
vplsConfigMacLearning 1.3.6.1.2.1.10.274.1.2.1.6 Syntax: TruthValue	Read-only	This object specifies if MAC learning is enabled in the VPLS. If this object is true, then MAC learning is enabled. If it is false, then MAC learning is disabled.
vplsConfigDiscardUnknownDest 1.3.6.1.2.1.10.274.1.2.1.7 Syntax: TruthValue	Read-only	If the value of this object is true, then those frames received with an unknown destination MAC are discarded in this VPLS. If it is false, then the packets are processed.
vplsConfigMacAging 1.3.6.1.2.1.10.274.1.2.1.8 Syntax: TruthValue	Read-only	If the value of this object is 'true', then the MAC aging process is enabled in this VPLS. If it is false, then the MAC aging process is disabled.
vplsConfigFwdFullHighWatermark 1.3.6.1.2.1.10.274.1.2.1.10 Syntax: Unsigned 32	No	This object specifies the utilization of the forwarding database for a specific VPLS instance at which the vplsFwdFullAlarmRaised notification is sent. The value of this object must be higher than vplsConfigFwdFullLowWatermark. This object returns a value of 0.
vplsConfigFwdFullLowWatermark 1.3.6.1.2.1.10.274.1.2.1.11 Syntax: Unsigned 32	No	This object specifies the utilization of the forwarding database for a specific VPLS instance at which the vplsFwdFullAlarmCleared notification is sent. The value of this object must be less than vplsConfigFwdFullHighWatermark. This object returns a value of 0.

Table 36: vplsConfigTable (continued)

Object name, OID, and syntax	Supported	Description
vplsConfigRowStatus 1.3.6.1.2.1.10.274.1.2.1.12 Syntax: RowStatus	Read-only	This object is for creating, modifying, and deleting this row.
vplsConfigMtu 1.3.6.1.2.1.10.274.1.2.1.13 Syntax: Unsigned 32	Read-only	The value of this object specifies the MTU of the specific VPLS instance. This can be used to limit the MTU to a value lower than the MTU supported by the associated pseudo wires.
vplsConfigVpnId 1.3.6.1.2.1.10.274.1.2.1.14 Syntax: VPNIdOrZero	Read-only	This objects indicates the IEEE 802-1990 VPN ID of the associated VPLS.
vplsConfigStorageType 1.3.6.1.2.1.10.274.1.2.1.15 Syntax: StorageType	Read-only	This variable indicates the storage type for this row.
vplsConfigSignalingType 1.3.6.1.2.1.10.274.1.2.1.16 Syntax: INTEGER	Read-only	Desired signaling type of the VPLS. If the value of this object is ldp (1), then a corresponding entry in vplsLdpConfigTable is required. If the value of this object is bgp(2), then a corresponding entry in vplsBgpConfigTable is required. If the value of this object is none (3), then it indicates a static configuration of pseudo wire labels.

VPLS status table

The following table lists the objects that are supported for the vplsStatusTable.

Table 37: vplsStatusTable

Object name, OID, and syntax	Supported	Description
vplsStatusOperStatus 1.3.6.1.2.1.10.274.1.3.1.1 Syntax: INTEGER	Yes	The current operational state of this VPLS.
vplsStatusPeerCount 1.3.6.1.2.1.10.274.1.3.1.2 Syntax: Counter32	Yes	This objects specifies the number of peers (pseudo wires) present in this VPLS instance.

Extreme VLAN MIB

The Extreme VLAN MIB provides information about VLAN features available for SLX-OS.

MIB objects

Objects and OID	Supported (Yes/No)	Description
extremeStatsPortIfIndex 1.3.6.1.4.1.1916.1.2.8.2.1.1	Yes	A unique value, greater than zero, for each interface. It is recommended that values are assigned contiguously starting from 1. The value for each interface sub-layer must remain constant at least from one re-initialization of the entity's network management system to the next re-initialization.
extremeStatsVlanNameIndex 1.3.6.1.4.1.1916.1.2.8.2.1.2	Yes	Vlan name string
extremePortVlanStatsCntrType 1.3.6.1.4.1.1916.1.2.8.2.1.3	No	The flag to decide what fields to display, basic or extended. Currently, it is read-only and will reflect only extended statistics.
extremePortVlanUnicastReceivedPacketsCounter 1.3.6.1.4.1.1916.1.2.8.2.1.4	No	The number of Unicast packets received by a port for a given VLAN.
extremePortVlanMulticastReceivedPacketsCounter 1.3.6.1.4.1.1916.1.2.8.2.1.5	No	The number of Multicast packets received by a port for a given VLAN.
extremePortVlanBroadcastReceivedPacketsCounter 1.3.6.1.4.1.1916.1.2.8.2.1.6	No	The number of Broadcast packets received by a port for a given VLAN.
extremePortVlanTotalReceivedBytesCounter 1.3.6.1.4.1.1916.1.2.8.2.1.7	Yes	The total number of bytes received by a port for a given VLAN.
extremePortVlanTotalReceivedFramesCounter 1.3.6.1.4.1.1916.1.2.8.2.1.8	Yes	The total number of frames received by a port for a given VLAN.
extremePortVlanUnicastTransmittedPacketsCounter 1.3.6.1.4.1.1916.1.2.8.2.1.9	No	The number of Unicast packets transmitted by a port for a given VLAN.
extremePortVlanMulticastTransmittedPacketsCounter 1.3.6.1.4.1.1916.1.2.8.2.1.10	No	The number of Multicast packets transmitted by a port for a given VLAN.
extremePortVlanBroadcastTransmittedPacketsCounter 1.3.6.1.4.1.1916.1.2.8.2.1.11	No	The number of Broadcast packets transmitted by a port for a given VLAN.

Objects and OID	Supported (Yes/No)	Description
extremePortVlanTotalTransmittedBytesCounter 1.3.6.1.4.1.1916.1.2.8.2.1.12	Yes	The total number of bytes transmitted by a port for a given VLAN.
extremePortVlanTotalTransmittedFramesCounter 1.3.6.1.4.1.1916.1.2.8.2.1.13	Yes	The total number of frames transmitted by a port for a given VLAN.
extremePortConfigureVlanStatus 1.3.6.1.4.1.1916.1.2.8.2.1.14	No	The row status variable, used according to row installation and removal conventions.

BROCADE-UDLD-MIB

Table 38: BROCADE-UDLD-MIB Notifications

Object Name	OID	Description
bcsiUdldNotifLinkDown	1.3.6.1.4.1.1588.3.1.9.0.1	The SNMP trap that is generated when UDLD port link status has changed to down.
bcsiUdldNotifLinkUp	1.3.6.1.4.1.1588.3.1.9.0.2	The SNMP trap that is generated when UDLD port link status has changed to up.

BROCADE-MPLS-MIB

Table 39: BROCADE-MPLS-MIB- Notifications

Object Name	OID	Description
bcsiMplsLspUpNotification	1.3.6.1.4.1.1588.3.1.10.0.1	bcsiMplsLspUpNotification trap signifies that the specified LSP is up. The current active path for the LSP is bcsiMplsLspPathName.
bcsiMplsLspDownNotification	1.3.6.1.4.1.1588.3.1.10.0.2	bcsiMplsLspDownNotification trap signifies that the specified LSP is down, because the current active path bcsiMplsLspPathName went down.
bcsiMplsLspChangeNotification	1.3.6.1.4.1.1588.3.1.10.0.3	bcsiMplsLspChangeNotification trap signifies that the the specified LSP has switched traffic to the new active path 'toLspPath'. The LSP maintains up state before and after the switch over

Extreme BGP4 v2 MIBs

The descriptions of the MIB variables in this chapter come directly from the BGP4 v2 MIB. The notes that follow the descriptions typically pertain to Extreme-specific information as provided by Extreme Networks.

Extreme BGP4 v2 MIBs

Objects and OID	Access	Description
extremeBgp4V2 1.3.6.1.4.1.1916.1.51	None	The OID subtree for the Extreme BGP4 v2 MIBs.
extremeBgp4V2Objects 1.3.6.1.4.1.1916.1.51.1	None	The OID subtree for the Extreme BGP4 v2 MIB objects.
extremeBgp4V2Notifications 1.3.6.1.4.1.1916.1.51.0	None	The OID subtree for Extreme BGP4 v2 MIB Notifications.

Extreme BGP4 v2 MIBs

The following table contains information about the supported MIB Object Groups for Extreme BGP4 v2 MIBS.

Supported Object Groups

Objects group name	OID	Supported
ExtremeBgp4V2EstablishedNotification	1.3.6.1.4.1.1916.1.51.0.1	Yes
extremeBgp4V2BackwardTransitionNotification	1.3.6.1.4.1.1916.1.51.0.2	Yes
ExtremeBgp4V2PeerTable	1.3.6.1.4.1.1916.1.51.1.2	Yes
ExtremeBgp4V2PeerErrorsTable	1.3.6.1.4.1.1916.1.51.1.3	Yes
ExtremeBgp4V2PeerEventTimesTable	1.3.6.1.4.1.1916.1.51.1.4	Yes
extBgp4gau	1.3.6.1.4.1.1916.1.51.1.8	Yes
ExtremeBgp4V2NlriTable	1.3.6.1.4.1.1916.1.51.1.9	Yes
extBgp6gau	1.3.6.1.4.1.1916.1.51.1.11	Yes

Extreme BGP4 V2 Peer Table

The following table contains information about the usage of the Extreme BGP4 v2 Peer Table entity. This table is capable of representing IPv6 and other address-family independent peering sessions.

MIB objects

Object and OID	Access	Description
extremeBgp4V2PeerTable 1.3.6.1.4.1.1916.1.51.1.2	None	This entity contains information of the BGP4 peer table.
extremeBgp4V2PeerEntry 1.3.6.1.4.1.1916.1.51.1.2.1	None	An entry containing information about the BGP4 peer.
extremeBgp4V2PeerInstance 1.3.6.1.4.1.1916.1.51.1.2.1.1	None	The Routing Instance Index. Some BGP implementations permit the creation of multiple instances of a BGP routing process. An example includes routers running BGP/MPLS IP Virtual Private Networks Implementations that do not support multiple routing instances should return 1 for this object.
extremeBgp4V2PeerLocalAddrType 1.3.6.1.4.1.1916.1.51.1.2.1.2	Read-Only	The address family of the local end of the peering session. The possible values are: • unknown (0) • ipv4 (1) • ipv6 (2)
extremeBgp4V2PeerLocalAddr 1.3.6.1.4.1.1916.1.51.1.2.1.3	Read-Only	The local IPv6 address of this entry's BGP connection
extremeBgp4V2PeerRemoteAddrType 1.3.6.1.4.1.1916.1.51.1.2.1.4	None	The address family of the remote end of the peering session. The possible values are: • unknown (0) • ipv4 (1) • ipv6 (2)
extremeBgp4V2PeerRemoteAddr 1.3.6.1.4.1.1916.1.51.1.2.1.5	None	The remote IPV6 address of this entry's BGP peer.
extremeBgp4V2PeerLocalPort 1.3.6.1.4.1.1916.1.51.1.2.1.6	Read-Only	The local port for the TCP connection between the BGP peers.
extremeBgp4V2PeerLocalAs 1.3.6.1.4.1.1916.1.51.1.2.1.7	Read-Only	Some implementations of BGP can represent themselves as multiple ASes. This is the AS that this peering session is representing itself as to the remote peer.

Object and OID	Access	Description
extremeBgp4V2PeerLocalIdentifier 1.3.6.1.4.1.1916.1.51.1.2.1.8	Read-Only	The BGP Identifier of the local system for this peering session. It is REQUIRED that all *extremeBgp4V2PeerLocalIdentifier* values for the same *extremeBgp4V2PeerInstance* be identical. This is the Router ID.
extremeBgp4V2PeerRemotePort 1.3.6.1.4.1.1916.1.51.1.2.1.9	Read-Only	The remote port for the TCP connection between the BGP peers. Note that the objects *extremeBgp4V2PeerLocalAddr*, *extremeBgp4V2PeerLocalPort*, *extremeBgp4V2PeerRemoteAddr*, and *extremeBgp4V2PeerRemotePort* provide the appropriate reference to the standard MIB TCP connection table, or even the IPv6 TCP MIB as in RFC 4022.
extremeBgp4V2PeerRemoteAs 1.3.6.1.4.1.1916.1.51.1.2.1.10	Read-Only	The remote autonomous system number received in the BGP OPEN message.
extremeBgp4V2PeerRemoteIdentifier 1.3.6.1.4.1.1916.1.51.1.2.1.11	Read-Only	The BGP Identifier of this entry's remote BGP peer. This entry should be **0:0:0:0:0:0:0:0** unless the *extremeBgp4V2PeerState* is in the *openconfirm* or the *established* state.
extremeBgp4V2PeerAdminStatus 1.3.6.1.4.1.1916.1.51.1.2.1.12	Read-Only	Whether the BGP FSM for this remote peer is halted or running. The BGP FSM for a remote peer is halted after processing a *Stop* event. Similarly, it is in the running state after a *Start* event. The *extremeBgp4V2PeerState* will generally be in the idle state when the FSM is halted, although some extensions such as Graceful Restart will leave the peer in the Idle state but with the FSM running. The supported values are: • halted (1) • running (2)
extremeBgp4V2PeerState 1.3.6.1.4.1.1916.1.51.1.2.1.13	Read-Only	The BGP peer connection state.
extremeBgp4V2PeerDescription 1.3.6.1.4.1.1916.1.51.1.2.1.14	Read-Only	A user configured description identifying this peer. When this object is not an empty string, this object SHOULD contain a description that is unique within a given BGP instance for this peer.

Extreme BGP v2 Peer Error Table

The following table contains information about the usage of the Extreme BGP4 v2 Peer Error Table entity. This is a table of peering session errors.

MIB objects

Object and OID	Access	Description
extremeBgp4V2PeerErrorTable 1.3.6.1.4.1.1916.1.51.1.3	None	This entity contains information of the BGP4 v2 Peer Error Table.
extremeBgp4V2PeerEntry 1.3.6.1.4.1.1916.1.51.1.2.1	None	An entity containing information of the BGP4 v2 Peer Error.
extremeBgp4V2PeerLastErrorCodeReceived 1.3.6.1.4.1.1916.1.51.1.3.1.1	Read-Only	The last error code received from this peer via NOTIFICATION message on this connection. If no error has occurred, this field is zero.
extremeBgp4V2PeerLastErrorSubCodeReceived 1.3.6.1.4.1.1916.1.51.1.3.1.2	Read-Only	The last subcode received from this peer via NOTIFICATION message on this connection. If no error has occurred, this field is zero.
extremeBgp4V2PeerLastErrorReceivedTime 1.3.6.1.4.1.1916.1.51.1.3.1.3	Read-Only	The timestamp that the last NOTIFICATION was received from this peer.
extremeBgp4V2PeerLastErrorReceivedText 1.3.6.1.4.1.1916.1.51.1.3.1.4	Read-Only	This object contains an implementation specific explanation of the error that was reported.
extremeBgp4V2PeerLastErrorCodeSent 1.3.6.1.4.1.1916.1.51.1.3.1.6	Read-Only	The last error code sent to this peer via NOTIFICATION message on this connection. If no error has occurred, this field is zero.
extremeBgp4V2PeerLastErrorSubCodeSent 1.3.6.1.4.1.1916.1.51.1.3.1.7	Read-Only	The last subcode sent to this peer via NOTIFICATION message on this connection. If no error has occurred, this field is zero.
extremeBgp4V2PeerLastErrorSentTime 1.3.6.1.4.1.1916.1.51.1.3.1.8	Read-Only	The timestamp that the last NOTIFICATION was sent to this peer.
extremeBgp4V2PeerLastErrorSentText 1.3.6.1.4.1.1916.1.51.1.3.1.9	Read-Only	This object contains an implementation specific explanation of the error that is being reported.

ExtremeBgp4V2PeerEventTimesTable

The following table contains information about the usage of the Extreme BGP4 v2 Peer Event Times Table entity. This table is capable of representing peer-specific event timers.

MIB objects

Objects and OID	Access	Description
extremeBgp4V2PeerEventTimesTable 1.3.6.1.4.1.1916.1.51.1.4	None	This entity contains information of the BGP4 Peer Event Times Table.
extremeBgp4V2PeerEventTimesEntry 1.3.6.1.4.1.1916.1.51.1.4 1	None	An entry containing information about the BGP4 Peer Event Times.
extremeBgp4V2PeerFsmEstablishedTime 1.3.6.1.4.1.1916.1.51.1.4.1.1	Read-Only	This timer indicates how long (in seconds) this peer has been in the *established* state or how long since this peer was last in the *established* state. It is set to zero (0) when a new peer is configured or when the router is booted. If the peer has never reached the established state, the value remains zero.
extremeBgp4V2PeerInUpdatesElapsedTime 1.3.6.1.4.1.1916.1.51.1.4.1.2	Read-Only	Elapsed time (in seconds) since the last BGP UPDATE message was received from the peer. Each time *bgpPeerInUpdates* is incremented, the value of this object is set to zero (0).

ExtremeBgp4V2Nlri Table

The following table contains information about the usage of the Extreme BGP4 v2 Peer Table entity. A table of per-peer per AFI-SAFI prefix data. This table covers information previously present in *bgp4PathAttr* Table.

MIB objects

Objects and OID	Access	Description
extremeBgp4V2NlriTable 1.3.6.1.4.1.1916.1.51.1.9	None	This entity contains information of the bgp4PathAttr Table.
extremeBgp4V2NlriEntry 1.3.6.1.4.1.1916.1.51.1.9.1	None	An entry containing information about the bgp4PathAttr.

Objects and OID	Access	Description
extremeBgp4V2NlriIndex 1.3.6.1.4.1.1916.1.51.1.9.1.1	None	This index allows for multiple instances of a base prefix for a certain AFI-SAFI from a given peer. This is currently useful for two things: 1. Allowing for a peer in future implementations to send more than a single route instance. 2. Allow for extensions which extend the NLRI field to send the same prefix while utilizing other extension specific information. An example of this is RFC 3107 - Carrying MPLS labels in BGP.
extremeBgp4V2NlriAfi 1.3.6.1.4.1.1916.1.51.1.9.1.2	None	The address family of the prefix for this NLRI. Note that the AFI is not necessarily equivalent to the *InetAddressType*.
extremeBgp4V2NlriSafi 1.3.6.1.4.1.1916.1.51.1.9.1.3	None	The subsequent address family of the prefix for this NLRI.
extremeBgp4V2NlriPrefixType 1.3.6.1.4.1.1916.1.51.1.9.1.4	None	The type of the IP address prefix in the Network Layer Reachability Information field. The value of this object is derived from the appropriate value from the *extremeBgp4V2NlriAfi* field. Where an appropriate *InetAddressType* is not available, the value of the object must be unknown (0).
extremeBgp4V2NlriPrefix 1.3.6.1.4.1.1916.1.51.1.9.1.5	None	An IP address prefix in the Network Layer Reachability Information field. This object is an IP address containing the prefix with length specified by *extremeBgp4V2NlriPrefixLen*. Any bits beyond the length specified by *extremeBgp4V2NlriPrefixLen* are zeroed.
extremeBgp4V2NlriPrefixLen 1.3.6.1.4.1.1916.1.51.1.9.1.6	None	Length in bits of the address prefix in the Network Layer Reachability Information field.
extremeBgp4V2NlriBest 1.3.6.1.4.1.1916.1.51.1.9.1.7	Read-Only	An indication of whether or not this route was chosen as the best BGP4 route for this destination.
extremeBgp4V2NlriCalcLocalPref 1.3.6.1.4.1.1916.1.51.1.9.1.8	Read-Only	The degree of preference calculated by the receiving BGP4 speaker for an advertised route. In the case where this prefix is ineligible, the value of this object will be zero (0).
extremeBgp4V2NlriOrigin 1.3.6.1.4.1.1916.1.51.1.9.1.9	Read-Only	The ultimate origin of the path information.

Objects and OID	Access	Description
extremeBgp4V2NIrinext-hopAddrType 1.3.6.1.4.1.1916.1.51.1.9.1.10	Read-Only	The address family of the address for the border router that should be used to access the destination network.
extremeBgp4V2NIrinext-hopAddr 1.3.6.1.4.1.1916.1.51.1.9.1.11	Read-Only	The address of the border router that should be used to access the destination network. This address is the next-hop address received in the UPDATE packet associated with this prefix. **Note:** For RFC2545 style double next-hops, this object will always contain the global scope next-hop. *bgpPathAttrLinkLocalnext-hop* will contain the link-local scope next-hop, if it is present. In the case a mechanism is developed to use only a link local next-hop, *extremeBgp4V2NIrinext-hopAddr* will contain the link local next-hop.
extremeBgp4V2NIriLinkLocalnext-hopAddrType 1.3.6.1.4.1.1916.1.51.1.9.1.12	Read-Only	The address type for IPv6 link local addresses. This is present only when receiving RFC 2545 style double next-hops. This object is optionally present in BGP implementations that do not support IPv6. When no IPv6 link local next-hop is present, the value of this object should be unknown(0).
extremeBgp4V2NIriLinkLocalnext-hopAddr 1.3.6.1.4.1.1916.1.51.1.9.1.13	Read-Only	This value contains an IPv6 link local address and is present only when receiving RFC 2545 style double next-hops. This object is optionally present in BGP implementations that do not support IPv6 When no IPv6 link local next-hop is present, the length of this object should be zero.
extremeBgp4V2NIriLocalPrefPresent 1.3.6.1.4.1.1916.1.51.1.9.1.14	Read-Only	This value is true when the LOCAL_PREF value was sent in the UPDATE message.
extremeBgp4V2NIriLocalPref 1.3.6.1.4.1.1916.1.51.1.9.1.15	Read-Only	The originating BGP4 speaker's degree of preference for an advertised route.
extremeBgp4V2NIriMedPresent 1.3.6.1.4.1.1916.1.51.1.9.1.16	Read-Only	This value is true when the MED value was sent in the UPDATE message.

Objects and OID	Access	Description
extremeBgp4V2NlriMed 1.3.6.1.4.1.1916.1.51.1.9.1.17	Read-Only	This metric is used to discriminate between multiple exit points to an adjacent autonomous system. When the MED value is absent but has a calculated default value, this object will contain the calculated value.
extremeBgp4V2NlriAtomicAggregate 1.3.6.1.4.1.1916.1.51.1.9.1.18	Read-Only	This value is true when the ATOMIC_AGGREGATE Path Attribute is present and indicates that the NLRI MUST NOT be made more specific.
extremeBgp4V2NlriAggregatorPresent 1.3.6.1.4.1.1916.1.51.1.9.1.19	Read-Only	This value is true when the AGGREGATOR path attribute was sent in the UPDATE message.
extremeBgp4V2NlriAggregatorAS 1.3.6.1.4.1.1916.1.51.1.9.1.20	Read-Only	The AS number of the last BGP4 speaker that performed route aggregation. When *extremeBgp4V2NlriAggregatorPresent* is false, the value of this object should be zero (0).
extremeBgp4V2NlriAggregatorAddr 1.3.6.1.4.1.1916.1.51.1.9.1.21	Read-Only	The IP address of the last BGP4 speaker that performed route aggregation. When *extremeBgp4V2NlriAggregatorPresent* is false, the value of this object should be a default value.
extremeBgp4V2NlriAsPathCalcLength 1.3.6.1.4.1.1916.1.51.1.9.1.22	Read-Only	This value represents the calculated length of the AS Path according to the rules of the BGP specification. This value is used in route selection.
extremeBgp4V2NlriAsPathString 1.3.6.1.4.1.1916.1.51.1.9.1.23	Read-Only	This is a string depicting the autonomous system path to this network which was received from the peer which advertised it. The format of the string is implementation-dependent, and should be designed for operator readability. **Note:** *SnmpAdminString* is only capable of representing a maximum of 255 characters. This may lead to the string being truncated in the presence of a large AS Path. It is RECOMMENDED that when this object's contents will be truncated that the final 3 octets be reserved for the ellipses string, '...'. *extremeBgp4V2NlriAsPath* may give access to the full AS Path.

Objects and OID	Access	Description
extremeBgp4V2NIriAsPath 1.3.6.1.4.1.1916.1.51.1.9.1.24	Read-Only	In order to provide a canonicalized form of the BGP-4 AS_PATH along with the human-readable *extremeBgp4V2NIriAsPathString*, which may be truncated, this object contains the contents of the BGP-4 AS_PATH Path Attribute. This object may be parsed using the rules defined for Four-octet ASes as defined in RFC 4893. RFC 4271, Section 4.3, 'Path Attributes: b) AS_PATH' as amended by RFC 5065, Section 3 defines the general format of the AS_PATH path attribute and its code points. In brief, the AS_PATH is composed of a sequence of AS Segments. Each AS Segment is represented by a triple: <path segment type, path segment length, path segment value>. The path segment type and path segment length fields are one octet in length each. The path segment type field may be one of: • AS_SET (RFC 4721, Section 4.3) • AS_SEQUENCE (RFC 4721,Section 4.3) • AS_CONFED_SEQUENCE(RFC 3065,Section 5) • AS_CONFED_SET (RFC 3065,Section 5) The path segment length field contains the number of ASes(not the number of octets) in the path segment value field. The path segment value field contains one or more AS numbers, each encoded as a 4-octet length field in network byte order. **Note:** Since an SNMP agent may truncate this object to less than its maximum theoretical length of 4072 octets users of this object should be prepared to deal with a truncated and thus malformed AS_PATH. It is RECOMMENDED that when such truncation would occur on the boundary of an encoded AS that the partial AS be discarded from this object and the object's size be adjusted accordingly. Further, it is also RECOMMENDED that when such truncation, either alone or in conjunction with the truncation of a partially encoded AS described previously, would yield an empty path segment value

Objects and OID	Access	Description
		field that the path segment type and path segment length components of the truncated AS_PATH also be discarded and the object's size be adjusted accordingly.
extremeBgp4V2NlriPathAttrUnknown 1.3.6.1.4.1.1916.1.51.1.9.1.25	Read-Only	Path Attributes not understood by this implementation SHOULD be, be presented in this object. Those Path Attributes use the type, length, value encoding documented in RFC 4271, Section 4.3, 'Path Attributes'. Note that since an SNMP agent may truncate this object to less than its maximum theoretical length of 4072 octets users of this object should be prepared to deal with a truncated and thus malformed Path Attribute.

extBgp4gau Table

The following table contains information about the usage of the extBgp4gau Table entity. This table contain per-peer per Address Family Identifier-Subsequent Address Family Identifier (AFI-SAFI) for IPV4 address family.

MIB objects

Object and OID	Access	Description
extremeBgp4V2PrefixGaugesTable 1.3.6.1.4.1.1916.1.51.1.8	None	This entity contains information of the BGP4 Prefix Gauges Table for IPv4.
extremeBgp4V2PrefixGaugesEntry 1.3.6.1.4.1.1916.1.51.1.8.1	None	An entry containing information in the BGP4 Prefix Gauges Table for IPv4.
extremeBgp4V2PrefixGaugesAfi 1.3.6.1.4.1.1916.1.51.1.8.1.1	None	The AFI index of the per-peer, per prefix counters for IPV4 address family.
extremeBgp4V2PrefixGaugesSafi 1.3.6.1.4.1.1916.1.51.1.8.1.2	None	The SAFI index of the per-peer, per prefix counters for IPV4 address family
extremeBgp4V2PrefixInPrefixes 1.3.6.1.4.1.1916.1.51.1.8.1.3	Read-Only	The number of prefixes received from a peer and are stored in the Adj- Ribs- In for that peer and of IPv4 type.

Object and OID	Access	Description
extremeBgp4V2PrefixInPrefixesAccepted 1.3.6.1.4.1.1916.1.51.1.8.1.4	Read-Only	The number of prefixes for a peer that are installed in the Adj-Ribs-In and are eligible to become active in the Loc-Rib.
extremeBgp4V2PrefixOutPrefixes 1.3.6.1.4.1.1916.1.51.1.8.1.5	Read-Only	The number of prefixes for a peer that are installed in that peer's Adj-Ribs-Out.

extBgp6gau Table

The following table contains information about the usage of the extBgp6gau Table entity. This table contain per-peer per Address Family Identifier-Subsequent Address Family Identifier (AFI-SAFI) for IPv6 address family.

MIB objects

Object and OID	Access	Description
extremeBgpv6PrefixGaugesTable 1.3.6.1.4.1.1916.1.51.1.11	None	This entity contains information of the BGP Prefix Gauges Table for IPv6.
extremeBgpv6PrefixGaugesEntry 1.3.6.1.4.1.1916.1.51.1.11.1	None	An entry containing information in the BGP Prefix Gauges Table for IPv6.
extremeBgpv6PrefixGaugesAfi 1.3.6.1.4.1.1916.1.51.1.11.1.1	None	The AFI index of the per-peer, per prefix counters for IPv6 address family.
extremeBgpv6PrefixGaugesSafi 1.3.6.1.4.1.1916.1.51.1.11.1.2	None	The SAFI index of the per-peer, per prefix counters for IPv6 address family
extremeBgpv6PrefixInPrefixes 1.3.6.1.4.1.1916.1.51.1.11.1.3	Read-Only	The number of prefixes received from a peer and are stored in the Adj- Ribs- In for that peer and of IPv6 type.
extremeBgpv6PrefixInPrefixesAccepted 1.3.6.1.4.1.1916.1.51.1.11.1.4	Read-Only	The number of prefixes for a IPv6 peer that are installed in the Adj-Ribs-In and are eligible to become active in the Loc-Rib.
extremeBgpv6PrefixOutPrefixes 1.3.6.1.4.1.1916.1.51.1.11.1.5	Read-Only	The number of prefixes for a peer that are installed in that peer's Adj-Ribs-Out.

BFD Enterprise Notifications - MIB Traps

Table 40: BFD Enterprise-MIB Notifications

Trap Name and OID	Varbind	Description
`extremeBfdSessUp` 1.3.6.1.4.1.1916.1.55.0.1	bfdSessDiag bfdSessInterface bfdSessSrcAddrType bfdSessSrcAddr bfdSessDstAddrType bfdSessDstAddr ifName extremeBfdVrfName	This notification is generated when the `bfdSessState` object for one of the entries in `bfdSessTable` is about to enter the up (4) state from some other state. The value of `bfdSessDiag` is set equal to `noDiagnostic` (0).
`extrmeBfdSessDown` 1.3.6.1.4.1.1916.1.55.0.2	bfdSessDiag bfdSessInterface bfdSessSrcAddrType bfdSessSrcAddr bfdSessDstAddrType bfdSessDstAddr ifName extremeBfdVrfName	This notification is generated when the `bfdSessState` object for one of the entries in `bfdSessTable` is about to enter the down (2) or adminDown (1) state from some other state. The values of `bfdSessDiag` returns the Diagnostic code providing the reason for this new state (that is, for example, pathDown (5)).

Table 41: BFD Enterprise-MIB Object

Object Name and OID	Access	Description
`extremeBfdVrfName` 1.3.6.1.4.1.1916.1.55.1	accessible-for-notify	This object specifies the human-readable name of the VRF instance. This name uniquely identifies the VRF instance in which this BFD session is running.

A single notification is sent for every BFD session entry for the state transition event. The range mode for this trap is not supported since it has variable binds specifically to a particular BFD session entry. Therefore, only a single notification is sent for one of the bfdSessTable entries represented in this session.

From SLXOS 20.4.1 release, BFD enterprise trap is sent by default. The CLI **`snmp-server trap bfd-std-mib`** can be used to switch between the BFD Enterprise trap and BFD Standard trap. Based on the configuration, either Enterprise trap or Standard trap is sent out. They cannot be sent at the same time.

MCT Cluster Enterprise Notifications

Defines MCT cluster notifications for events - Cluster Up & Down and the trap will have information on local host name, MCT Peer IP Address type and MCT Peer address.

Table 42: MCT Cluster enterprise - MIB Objects

Trap Name and OID	Varbind Objects List	Description
`extremeMctClusterDownTrap` 1.3.6.1.4.1.1916.1.56.0.1	extremeMctClusterPeerAddr, extremeMctClusterPeerAddrType, sysName	This notification is generated when the Cluster Control plane session between MCT nodes is down.
`extremeMctClusterUpTrap` 1.3.6.1.4.1.1916.1.56.0.2	extremeMctClusterPeerAddr, extremeMctClusterPeerAddrType, sysName	This notification is generated when the Cluster Control plane session between MCT nodes is up.
`extremeMctClusterPeerAddrType` 1.3.6.1.4.1.1916.1.56.1	NA	This object specifies the IP address type of the peer.
`extremeMctClusterPeerAddr` 1.3.6.1.4.1.1916.1.56.2	NA	This object specifies the peer IP address.

Maintenance Mode Notifications

These notifications contain information on the operational status of entry/exit from the maintenance mode for the following reasons.

The Convergence Status can be either `completed`(1) or `timed out`(2).

- `completed` (1) is generated when the maintenance mode entry/exit transition is complete within the expected convergence time. Default is 300 secs, which is configurable.
- `timed-out`(2) is generated when the maintenance mode entry/exit transition is complete but not within the expected convergence time. It has taken more time to complete than the expected convergence time out.

The Reason code can be either `userAction`(1) or `onSwitchReboot`(2).

- `userAction`(1) is generated when immediate maintenance mode transition is triggered by the user either by configuring enable/no enable in system maintenance mode or by using exec command **`turn-off`**.
- `onSwitchReboot`(2) is generated when the switch is entering maintenance mode during reboot, where the startup configuration contains `maintenance mode enable-on-reboot`.

A MIB is generated whenever the switch transitions from normal-mode to maintenance-mode, namely `MM Enter` and when exiting from the maintenance-mode, namely `MM Exit`.

The trap has the following information, local host name, maintenance-mode operational status - completed and timed-out, maintenance-mode transition reason code - user action, SLX reboot.

Table 43: Maintenance Mode-MIB Notifications

Trap Name and OID	Varbind	Description
`extremeMaintenanceModeEntryTrap` 1.3.6.1.4.1.1916.1.57.0.1	extremeMaintenanceModeConvergenceStatus, extremeMaintModeReasonCode, sysName	This trap is generated when the switch exits from the maintenance mode.
`extremeMaintenanceModeExitTrap` 1.3.6.1.4.1.1916.1.57.0.2	extremeMaintenanceModeConvergenceStatus, extremeMaintModeReasonCode, sysName	This trap is generated when the switch exits from the maintenance mode.

Table 44: Maintenance Mode-MIB Objects

Trap Name and OID	Access	Description
`extremeMaintenanceModeConvergenceStatus` 1.3.6.1.4.1.1916.1.57.1	Accessible-for-notify	This object gives the convergence status at the time of trap generation. The states are as follows: a) completed (1) means convergence completed within expected time. b) timedout (2) means convergence is taking more time than expected convergence-time
`extremeMaintModeReasonCode` 1.3.6.1.4.1.1916.1.57.2	Accessible-for-notify	This object specifies the reason for entering/exiting the maintenance mode. The states are as follows: a) userAction (1) means immediate maintenance mode transition is triggered by user. b) onSwitchReboot (2) means switch is entering maintenance mode during reboot and the startup configuration contains maintenance mode enable-on-reboot.

CPU and Memory Utilization - MIB Traps

The CPU and Memory Utilization Notifications MIBs includes four notification entries.

Table 45: CPU and Memory Utilization - MIB Traps

Object Name and OID	Varbind	Description
swCpuRisingThresholdNotification 1.3.6.1.4.1.1588.2.1.1.1.0.16	swCpuUsage swCpuUsageLimit swCpuNoOfRetries swCpuPollingInterval	This notification is generated when the switch CPU utilization exceeds the predefined 'CPU usage limit' for the configured 'number of retries' and 'polling interval'.
swCpuFallingThresholdNotification 1.3.6.1.4.1.1588.2.1.1.1.0.17	swCpuUsage swCpuUsageLimit swCpuNoOfRetries swCpuPollingInterval	This notification is generated when the switch CPU utilization comes down to or below the predefined CPU usage limit for the configured number of retries and polling interval.
swMemRisingThresholdNotification 1.3.6.1.4.1.1588.2.1.1.1.0.18	swMemUsage swMemUsageLimit swMemNoOfRetries swMemPollingInterval	This notification is generated when the switch memory utilization exceeds the predefined memory usage limit for the configured number of retries and polling interval.
swMemFallingThresholdNotification 1.3.6.1.4.1.1588.2.1.1.1.0.19	swMemUsage swMemUsageLimit swMemNoOfRetries swMemPollingInterval	This notification is generated when the switch memory utilization comes down to/below the predefined memory usage limit for the configured number of retries and polling interval.

NTP Status Change Notifications

The NTP status change notification gives the current operational status of the NTP entity that contains the following new entry.

Table 46: NTP status change-MIB Objects

Trap Name and OID	Varbind	Description
`ntpEntNotifModeChange` 1.3.6.1.2.1.197.0.1	ntpEntStatusCurrentMode	This notification is generated when the NTP entity changes mode such as not running, not synchronised.
`ntpEntStatusCurrentMode` 1.3.6.1.2.1.197.1.2.1	NA	The current mode of the NTP. The definition of each possible value is: notRunning(1) - NTP is not running. notSynchronized(2) - NTP is not synchronized to any time source (stratum =16). noneConfigured(3) - NTP is not synchronized and does not have a reference configured (stratum =16). syncToLocal(4) - NTP is distributing time based on its local clock (degraded accuracy and/or reliability). syncToRefclock(5) - NTP is synchronized to a local hardware refclock (e.g., GPS). syncToRemoteServer(6) - NTP is synchronized to a remote NTP server ('upstream' server). unknown(99) - The state of NTP is unknown.

BGP IPV6 Notifications

The BGP IPv6 Notifications are existing traps enhanced with additional OID for remote peer address.

Table 47: BGP IPV6-MIB Notifications

Trap Name and OID	Varbind	Description
`extremeBgp4V2EstablishedNotification` 1.3.6.1.4.1.1916.1.51.0.1	extremeBgp4V2PeerState extremeBgp4V2PeerLocalPort extremeBgp4V2PeerRemotePort extremeBgp4V2PeerRemoteAddr	This trap gets generated when the BGP FSM enters the established state.
`extremeBgp4V2BackwardTransitionNotificatio` 1.3.6.1.4.1.1916.1.51.0.2	extremeBgp4V2PeerState extremeBgp4V2PeerLocalPort extremeBgp4V2PeerRemotePort extremeBgp4V2PeerLastErrorCodeReceived extremeBgp4V2PeerLastErrorSubCodeReceived extremeBgp4V2PeerLastErrorReceivedText extremeBgp4V2PeerRemoteAddr	This trap gets generated when the BGP FSM moves out of the established state.

Threshold Monitoring

Notification traps generated when certain preconfigured thresholds are crossed.

Table 48: SNMP Threshold Monitoring-MIB Notifications

Trap Name and OID	Varbinds	Description
ExtremeHWResourceUsageAlert 1.3.6.1.4.1.1916.1.58.0.2	extremeHWResourceOverallUsage	This notification is generated when the monitored resource usages exceeds the configured high threshold level or falls below the low threshold level. The number of notifications that are generated for a particular time period is configured globally. The total number of generated notifications cannot exceed this configuration.

Table 49: SNMP Threshold Monitoring-MIB Objects

Trap Name and OID	Access	Description
extremeHWResourceOverallUsage 1.3.6.1.4.1.1916.1.58.4.1	read-only	A bitmap of status, where each bit represents an individual resource being monitored. Resource usage status for monitored resources is indicated as 0 (zero) when the usage falls below the configured low threshold for that resource and 1 (one) when the usage exceeds the configured high threshold. If a resource is not supported, its bit value is 0 (zero). The mapping of hex values to bits is per RFC 3417 sec 8.
extremeHWResourceUsageTable 1.3.6.1.4.1.1916.1.58.4.2	not-accessible	A table of L2/L3 hardware resources monitored for utilization.
extremeHWResourceUsageTableEntry 1.3.6.1.4.1.1916.1.58.4.2.1	not-accessible	The conceptual row of extremeHWResourceUsageTable

Table 49: SNMP Threshold Monitoring-MIB Objects (continued)

Trap Name and OID	Access	Description
`extremeHWResourceID 1.3.6.1.4.1.1916.1.58.4.2.1.1`	not-accessible	Resource ID of the monitored Layer 2/Layer 3 hardware resource. Syntax - INTEGER • macAddressTable (0) • vxlanTunnelTable (1) • lifTable (2) • bfdSession (3) • bfdIPv4Session (4) • bfdIPv6Session (5) • ipv4Route (6) • ipv6Route (7) • routeTable (8) • ipv4Host (9) • ipv6Host (10) • hostTable (11) • nextHop (12) • nextHopTable (13) • ecmp (14) • ecmpTable (15) • routeHostTable (16) • encapTable (17) • resilientHashing (18) • tcamMacIngress (19) • tcamMacEgress (20) • tcamIPv4Ingress (21) • tcamIPv4Egress (22) • tcamIPv6Ingress (23) • tcamIPv6Egress (24)
`extremeHWResourceUsageHighLimit 1.3.6.1.4.1.1916.1.58.4.2.1.2`	read-only	High threshold limit of hardware resource usage in percentage.
`extremeHWResourceUsageLowLimit 1.3.6.1.4.1.1916.1.58.4.2.1.3`	read-only	Low threshold limit of hardware resource usage in percentage.
`extremeHWResourceUsage 1.3.6.1.4.1.1916.1.58.4.2.1.4`	read-only	Hardware resource usage status. It is *normal (0)* if the usage falls below low threshold limit and *high (1)* if the usage goes to or above high threshold limit. If a resource does not support monitoring, then the status is 0 (zero).

Extreme Certificate MIB

The Extreme Certificate MIB configures the traps that can be generated when a Crypto Certificate is due to expire. Four categories of severity of traps can be generated. Traps are generated when any certificate stored on the device is due to expire within a configured number of days.

Table 50: Extreme Certificate MIB Notifications

Trap Names and OIDs	Varbinds	Descriptoin
extremeCertExpiryWarning .1.3.6.1.4.1.1916.1.59.0.1	extremeCertSubject, extremeCertIssuerName, extremeCertSerialNumber, extremeCertValidNotAfterTime, extremeCertExpiryPendingDays, extremeCertExpiryAlertLevel	An *extremeCertExpiryWarning* notification is sent before a certificate expiry based on the certification expiry alert configuration. The certificate *(extremeCertName)* for which this notification is sent can be identified from INDEX part of this notification *varbinds* belonging to the *extremeCertTable*.
extremeCertExpired .1.3.6.1.4.1.1916.1.59.0.2	extremeCertSubject, extremeCertIssuerName, extremeCertSerialNumber, extremeCertValidNotAfterTime, extremeCertExpiryExpiredDays	An *extremeCertExpired* notification is sent if the certificate has expired. The certificate *(extremeCertName)* for which this notification is sent can be identified from INDEX part of this notification *varbinds* belonging to the *extremeCertTable*.

Table 51: Extreme Certificate MIB Objects

Objects and OID	Access	Description
extremeCertTable .1.3.6.1.4.1.1916.1.59.1.1	None	A table of certificates present in the system. Instances of this managed object are created automatically when certificates are imported into the system.
extremeCertEntry .1.3.6.1.4.1.1916.1.59.1.1.1	None	The conceptual row of extremeCertTable.
extremeCertName .1.3.6.1.4.1.1916.1.59.1.1.1.1	not-accessible	Certificate's name which uniquely identifies a certificate on this system.

Table 51: Extreme Certificate MIB Objects (continued)

Objects and OID	Access	Description
extremeCertIssuerName .1.3.6.1.4.1.1916.1.59.1.1.1.2	read-only	Certificate's issuer name.
extremeCertSerialNumber .1.3.6.1.4.1.1916.1.59.1.1.1.3	read-only	Certificate's serial number (in decimal format).
extremeCertSubject .1.3.6.1.4.1.1916.1.59.1.1.1.4	read-only	Identifying information about the entity to which the certificate is issued.
extremeCertValidNotBefore .1.3.6.1.4.1.1916.1.59.1.1.1.5	read-only	Date and time before which the certificate is not valid.
extremeCertValidNotAfter .1.3.6.1.4.1.1916.1.59.1.1.1.6	read-only	Date and time after which the certificate is not valid.
extremeCertStatus .1.3.6.1.4.1.1916.1.59.1.1.1.7	read-only	Certificate's current status.
extremeCertExpiryAlertLevel .1.3.6.1.4.1.1916.1.59.1.2	accessible-for-notify	Alert level of certificate expiry can be one of expiry levels *info*, *minor*, *major* and *critical*.
extremeCertExpiryPendingDays .1.3.6.1.4.1.1916.1.59.1.3	accessible-for-notify	Number of days remaining for the certificate to expire.
extremeCertExpiryExpiredDays .1.3.6.1.4.1.1916.1.59.1.4	accessible-for-notify	Number of days since the certificate expired.

Supported Certificates

The following certificates are monitored for expiry:

- gnmi-server
- gnmiclient-ca
- https
- https-trustpoint
- httpsclient-ca
- ldap-ca
- ldap-client
- oauth2pkicert
- radius-ca
- radius-client
- sshx509v3
- sshx509v3-ca
- sshx509v3-trustpoint
- syslog-ca
- syslog-client

Extreme User MIB

Extreme User MIB lists the traps generated for notifying about user account's status including its date of expiry and early notifications of expiry of the user account.

Extreme User MIB

Objects and OIDs	Access	Description
extremeUserMIB 1.3.6.1.4.1.1916.1.61	None	The OID subtree for the Extreme User MIB.
extremeUserNotifications 1.3.6.1.4.1.1916.1.61.0	None	The OID subtree for the Extreme User MIB Notifications.
extremeUserObjects 1.3.6.1.4.1.1916.1.61.1	None	The OID subtree for the Extreme User MIB Objects.

Extreme User MIB Notifications

Extreme User MIB Notifications

Object and OID	Varbinds	Description
extremePaswdExpiryWarning 1.3.6.1.4.1.1916.1.61.0.1	extremeUserName extremePasswdExpiryDate extremePasswdExpiryPendingDays extremePasswdExpiryAlertLevel	This notification is sent before a user account's password expires. This is based on the global password expiry alert configuration. It contains the following information: • extremeUserName - Contains the name of the user account that is going to expire. • extremePasswdExpiryDate - Contains the date on which the user account's password is going to expire. • extremePasswdExpiryPendingDays - Contains the number of days till the account's password expires. • extremePasswdExpiryAlertLevel - The type of alert. Can be one of the following: ◦ 1 - Critical ◦ 2 - Major ◦ 3 - Minor ◦ 4 - Info
extremePasswdExpiringToday 1.3.6.1.4.1.1916.1.61.0.2	extremeUserName extremePasswdExpiryDate	This notification is sent if the user account's password is expiring today. It contains the following information: • extremeUserName - Contains the name of the user account that is expiring today. • extremePasswdExpiryDate - Contains the date on which the password expires.
extremePasswdExpired 1.3.6.1.4.1.1916.1.61.0.3	extremeUserName extremePasswdExpiryDate extremePasswdExpiryExpiredDays	This notification is sent if the user account's password has already expired. It contains the following information: • extremeUserName - Contains the name of the user account that has expired. • extremePasswdExpiryDate - Contains the date on which the password expired. • extremePasswdExpiryExpiredDays - Contains the number of

Object and OID	Varbinds	Description
		days since the password expired.

Extreme User MIB Objects

MIB objects

Object and OID	Access	Description
extremeUserObjects 1.3.6.1.4.1.1916.1.61.1	Not Accessible	The OID subtree for Extreme User MIB Objects.
extremeUserName 1.3.6.1.4.1.1916.1.1	Accessible-for-Notify	Name of the user account in the device.
extremePasswdExpiryDate 1.3.6.1.4.1.1916.1.2	Accessible-for-Notify	The date and time after which the user account's password expires.
extremePasswdExpiryAlertLevel 1.3.6.1.4.1.1916.1.3	Accessible-for-Notify	The alert level of this particular alert.
extremePasswdExpiryPendingDays 1.3.6.1.4.1.1916.1.4	Accessible-for-Notify	The number of days remaining till the date the user account's password expires.
extremePasswdExpiryExpiredDays 1.3.6.1.4.1.1916.1.5	Accessible-for-Notify	The number of days since the date the user account's password expired.

Extreme System Sensor MIB

The Extreme System Sensor MIB adds support to retrieve information about the temperature sensors. This MIB also adds support for temperature sensor status change notification when any temperature sensor changes its state.

Table 52: Extreme System Sensor MIBs

Objects and OIDs	Access	Description
extremeSystemSensor 1.3.6.1.4.1.1916.1.60	None	The OID subtree for the Extreme System Sensor MIBs.
extremeSystemSensorNotifications 1.3.6.1.4.1.1916.1.60.0	None	The OID subtree for Extreme System Sensor MIB Notifications.
extremeSystemSensorObjects 1.3.6.1.4.1.1916.1.60.1	None	The OID subtree for Extreme System Sensor MIB Objects.

Extreme System Sensor Notification MIB Objects

Table 53: Extreme System Sensor Notification MIB Objects

Trap name and OID	Varbinds	Description
extremeTempSensorStatusChange 1.3.6.1.4.1.1916.1.60.0.1	extremeTempSensorTransitionEvent extremeTempSensorAggrStatus	This notification is generated whenever the status of any temperature sensor changes state between *normal*, *alarm*, and *critical*.

Table 54: extremeTempSensorObjects

MIB object name and OID	Access	Description
extremeTempSensorAggrStatus 1.3.6.1.4.1.1916.60.1.1	Accessible for Notify	The aggregate status of the various temperature sensors. Each sensor state is encoded within this value and occupies four (4) bits. The most significant nibble in the first byte encodes the state of the sensor with index 1 and the least significant nibble, the sensor with index 2. In the second byte, the most significant nibble encodes the state of the sensor with index 3 and the least significant nibble, the sensor with index 4. If there are odd number of sensors, the last nibble will always be zero (0x0000). The nibbles are set as follows: • 0x0000 - for normal state • 0x0001 - for alarm state • 0x0010 - for critical state
extremeTempSensorTransitionEvent 1.3.6.1.4.1.1916.60.1.3	Accessible for Notify	This MIB identifies the actual temperature sensor state transition that triggers the generation of the *extremeTempSensorStatusChange* notification. The values for each state change are: • 1 - Normal to Alarm • 2 - Alarm to Critical • 3 - Normal to Critical • 4 - Critical to Alarm • 5 - Alarm to Normal • 6 - Critical to Normal

Extreme Temperature Sensor Table MIB Objects

Table 55: Extreme Temperature Sensor Table MIB Objects

Object and OID	Access	Description
extremeTempSensorTable 1.3.6.1.4.1.1916.1.60.1.2	Not Accessible	The OID subtree for Extreme Temperature Sensor Table MIB Objects.
extremeTempSensorEntry 1.3.6.1.4.1.1961.1.60.1.2.1	Not Accessible	The OID subtree for each entry in the Extreme Temperature Sensor Table.
extremeTempSensorDesc 1.3.6.1.4.1.1961.1.60.1.2.1.1	Read Only	The description of the temperature sensor.
extremeTempSensorGrid 1.3.6.1.4.1.1961.1.60.1.2.1.2	Read Only	Identifies the actual location of the temperature sensor on the grid.
extremeTempSensorStatus 1.3.6.1.4.1.1961.1.60.1.2.1.3	Read Only	Displays the current state of the temperature sensor. The states are as follows: • 0 - for normal state • 1 - for alarm state • 2 - for critical state
extremeTempSensorALThreshold 1.3.6.1.4.1.1961.1.60.1.2.1.4	Read Only	The alarm threshold configured for the sensor. If alarm threshold is not configured, this returns -1.
extremeTempSensorCRThreshold 1.3.6.1.4.1.1961.1.60.1.2.1.5	Read Only	The critical threshold configured for the sensor. If critical threshold is not configured, this returns -1.