E Extreme™
Customer-Driven Networking

Extreme SLX-OS MIB Reference, 18s.1.01

Supporting the ExtremeSwitching SLX 9140 and SLX 9240 Switches

Legal Notice

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.

The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.

For additional information on Extreme Networks trademarks, please see: www.extremenetworks.com/company/legal/trademarks

Open Source Declarations

Some software files have been licensed under certain open source or third-party licenses. End-user license agreements and open source declarations can be found at: www.extremenetworks.com/support/policies/software-licensing

Contents

Preface

This section discusses the conventions used in this guide, ways to provide feedback, additional help, and other Extreme Networks® publications.

Conventions

This section discusses the conventions used in this guide.

Notes, cautions, and warnings

Notes, cautions, and warning statements may be used in this document. They are listed in the order of increasing severity of potential hazards.

NOTE
A Note provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

ATTENTION
An Attention statement indicates a stronger note, for example, to alert you when traffic might be interrupted or the device might reboot.

CAUTION
A Caution statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.

DANGER
A Danger statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations.

Text formatting conventions

Text formatting conventions such as boldface, italic, or Courier font may be used to highlight specific words or phrases.

Format	Description
bold text	Identifies command names.
	Identifies keywords and operands.
	Identifies the names of GUI elements.
	Identifies text to enter in the GUI.
italic text	Identifies emphasis.
	Identifies variables.
	Identifies document titles.

Format	Description
Courier font	Identifies CLI output.
	Identifies command syntax examples.

Command syntax conventions

Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

Convention	Description
bold text	Identifies command names, keywords, and command options.
italic text	Identifies a variable.
[ ]	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, for example, passwords, are enclosed in angle brackets.
…	Repeat the previous element, for example, *member*[*member*…].
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

Documentation and Training

To find Extreme Networks product guides, visit our documentation pages at:

Current Product Documentation	www.extremenetworks.com/documentation/
Archived Documentation (for earlier versions and legacy products)	www.extremenetworks.com/support/documentation-archives/
Release Notes	www.extremenetworks.com/support/release-notes
Hardware/Software Compatibility Matrices	https://www.extremenetworks.com/support/compatibility-matrices/
White papers, data sheets, case studies, and other product resources	https://www.extremenetworks.com/resources/

Training

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For more information, visit www.extremenetworks.com/education/.

Getting Help

If you require assistance, contact Extreme Networks using one of the following methods:

Extreme Portal	Search the GTAC (Global Technical Assistance Center) knowledge base, manage support cases and service contracts, download software, and obtain product licensing, training, and certifications.
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: 1-800-998-2408 (toll-free in U.S. and Canada) or +1 408-579-2826. 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 and/or serial numbers for all involved Extreme Networks products

- A description of the failure

- A description of any action(s) 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

Subscribing to Service Notifications

You can subscribe to email notifications for product and software release announcements, Vulnerability Notices, and Service Notifications.

1. Go to www.extremenetworks.com/support/service-notification-form.

2. Complete the form with your information (all fields are required).

3. Select the products for which you would like to receive notifications.

    NOTE
    You can modify your product selections or unsubscribe at any time.

4. Click **Submit**.

Providing Feedback to Us

Quality is our first concern at Extreme Networks, and we have made every effort to ensure the accuracy and completeness of this document. We are always striving to improve our documentation and help you work better, so we want to hear from you! We welcome all feedback but especially want to know about:

- Content errors or confusing or conflicting information.

- Ideas for improvements to our documentation so you can find the information you need faster.

- Broken links or usability issues.

If you would like to provide feedback to the Extreme Networks Information Development team, you can do so in two ways:

- Use our short online feedback form at https://www.extremenetworks.com/documentation-feedback/.

- Email us at documentation@extremenetworks.com.

Please provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

About This Document

Supported hardware and software

In those instances in which procedures or parts of procedures documented here apply to some devices but not to others, this guide identifies exactly which devices are supported and which are not.

Although many different software and hardware configurations are tested and supported by Extreme Networks, Inc. for this SLX-OS release, documenting all possible configurations and scenarios is beyond the scope of this document.

The following hardware platforms are supported by this release:

* ExtremeSwitching SLX 9140
* ExtremeSwitching SLX 9240

   NOTE
   Some of the commands in this document use a slot/port designation. Because the SLX 9140 and the SLX 9240 do not contain line cards, the slot designation must always be "0" (for example, 0/1 for port 1).

What's new in this document

There has been no enhancement to this guide for the Extreme SLX-OS 18s.1.01 software release.

For the complete list of supported features and the summary of enhancements and configuration notes for this release, refer to the *Extreme SLX-OS Release Notes*.

Overview

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 1 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
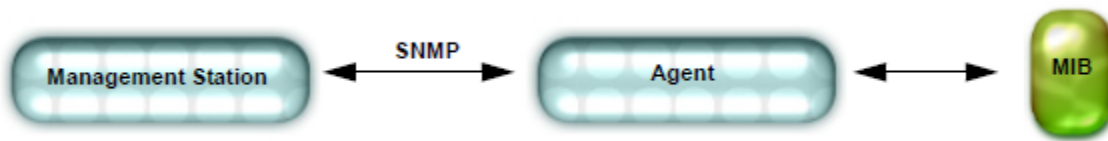
FIGURE 2 SNMP query
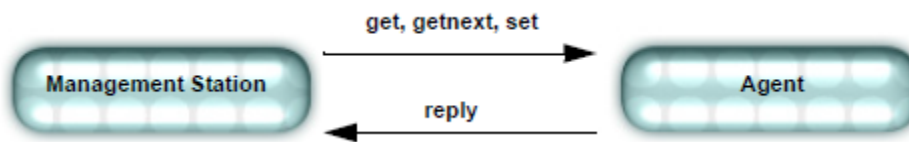
The management station can also receive traps, unsolicited messages from the switch agent, if an unusual event occurs.

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
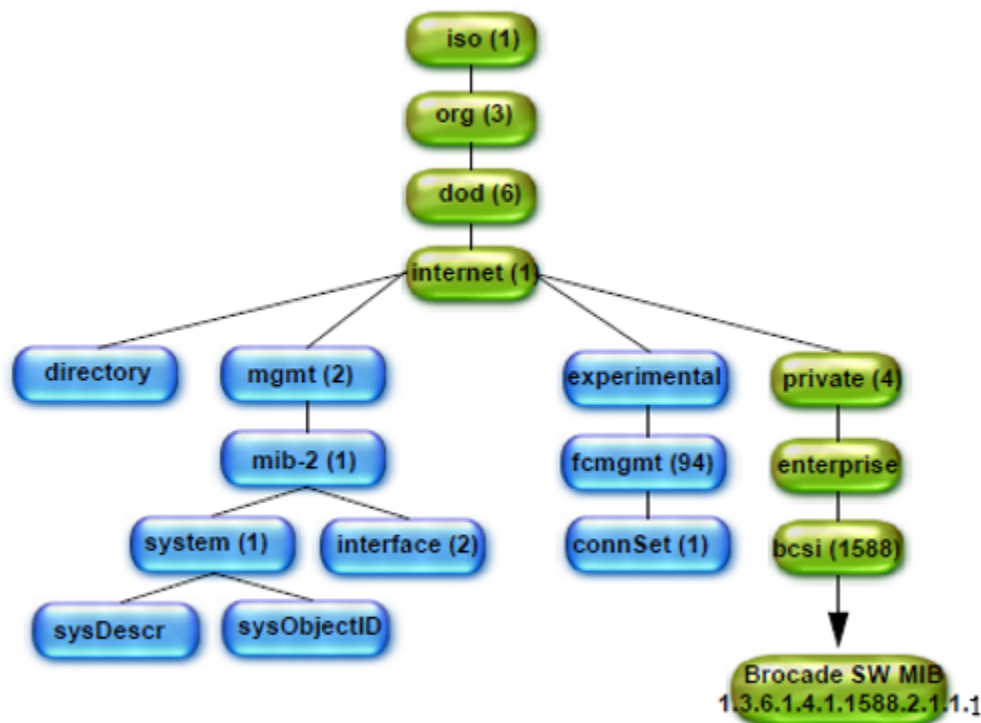
Access to MIB variables

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 2 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.
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:

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.

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:

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.

Supported Standard MIB Objects

802.3ah OAM MIB

The SNMP agent supports Get, Get-next, and Get-Bulk requests on the OAMDot3 MIB. SNMP Set requests is 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	This object is used to provision the default administrative OAM mode for this interface This	enabled(1), disabled(2)	Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
SYNTAX: INTEGER MAX-ACCESS: Read Only	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.		
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 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 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	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)
	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 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 Ethernet OAM is enabled (dot3OamAdminState is		

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	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
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 direction only). Setting 'loopbackSupport(1)' indicates that the OAM entity can initiate and respond to loopback commands.	unidirectionalSupport (0), loopbackSupport(1), eventSupport(2), variableSupport(3	Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	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
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
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
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)
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)

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
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
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)
dot3OamErrSymPeriodWindow Hi OID: dot3OamEventConfigEntry .1 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The two objects dot3OamErrSymPeriodWindow Hi 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 = $((2^{32})^*$dot3OamErrSymPeriod WindowHi)+		No

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	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.		
dot3OamErrSymPeriodWindowLo OID: dot3OamEventConfigEntry .2 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The two objects dot3OamErrSymPeriodWindowHi 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.		No
dot3OamErrSymPeriodThresholddHi OID: dot3OamEventConfigEntry .3 SYNTAX: Unsigned32 MAX-ACCESS: Read Only	The two objects dot3OamErrSymPeriodThresholddHi 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) *		No

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

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	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
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
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
dot3OamErrFramePeriodEvNotifEnable OID: dot3OamEventConfigEntry .8	If true, the OAM entity should send an Event Notification OAMPDU when an Errored Frame Period Event occurs.By	True(1) False(2)	No- with default value False

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
SYNTAX: TruthValue MAX-ACCESS: Read Only	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		
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
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
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

MIB object , OID , Syntax , MAX-ACCESS	Description	Possible values	Supported (Yes/No)
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
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
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
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	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)
	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		
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, 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.	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

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,		Yes

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	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.		
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
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
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		No

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	seconds while the threshold was 10). The two objects are combined as: dot3OamEventLogWindow = ((2^32) * dot3OamEventLogWindowHi)+ dot3OamEventLogWindowLoOt herwise, this value is returned as all F's (2^32 - 1) and adds no useful information.		
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)+ dot3OamEventLogWindowLoOt herwise, this value is returned as all F's (2^32 - 1) and no useful information.		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) + dot3OamEventLogThresholdLo Otherwise, this value is returned as all F's (2^32 –1) and adds no useful information.		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		No

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values	Supported (Yes/No)
	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) + dot3OamEventLogThresholdLo Otherwise, this value is returned as all F's (2^32 – 1) and adds no useful information.		
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
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 SYNTAX:Unsigned32 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		Yes. Note: SLX-OS supports only non threshold events

MIB object , OID , Syntax, MAX-ACCESS	Description	Possible values		Supported (Yes/No)
	(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, dot3OamEventLogEventTotal	A dot3OamNonThresholdEvent notification is sent when a local or remote non-threshold crossing event is detected. A 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	Yes. SLX OS sends traps with the var binds mentioned in column 2 for only the below eventsremotelinkFault,remotedyingGaspEvent,remotecriticalLinkEventlocalDyingGaspEvent

Notification, OID	Object	Description	Supported (Yes/No)
		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 dot3OamEventLogTable.	

History

Release version	History
17r.2.00	This MIB was introduced.

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 request.

TABLE 3 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
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

TABLE 3 bfdSessTable (continued)

Object group name	OID
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 4 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
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 5 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 6 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

History

Release version	History
17s.1.00	This MIB was introduced.

BGP4 MIB

The MIB module for the BGP-4 protocol. 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.

Supported object groups

Object group name	OID	Supported?
bgpVersion	1.3.6.1.2.1.15.1	Yes
bgpLocalAs	1.3.6.1.2.1.15.2	Yes
bgpPeerEntry	1.3.6.1.2.1.15.3	Yes
bgpPeerIdentifier	1.3.6.1.2.1.15.4	Yes
bgpRcvdPathAttrTable	1.3.6.1.2.1.15.5	No
bgp4PathAttrTable	1.3.6.1.2.1.15.6	Yes
bgpMIBConformance	1.3.6.1.2.1.15.8	Yes

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.

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

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

History

Release version	History
17s.1.00	This MIB was introduced.

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.)

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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.

For ifTable and ifXTable, the SNMP counters do not clear when the **clear statistics** command is issued. The counters are cleared only when the device is reloaded. The cumulative counter is not affected by the clear command.

TABLE 7 ifMIB group

Object group name	Object Identifier
ifMIB	1.3.6.1.2.1.31
ifMIBObjects	1.3.6.1.2.1.31.1
ifXTable	1.3.6.1.2.1.31.1.1
ifXEntry	1.3.6.1.2.1.31.1.1.1
ifName	1.3.6.1.2.1.31.1.1.1.1
ifInMulticastPkts	1.3.6.1.2.1.31.1.1.1.2
ifInBroadcastPkts	1.3.6.1.2.1.31.1.1.1.3
ifOutMulticastPkts	1.3.6.1.2.1.31.1.1.1.4
ifOutBroadcastPkts	1.3.6.1.2.1.31.1.1.1.5
ifHCInOctets	1.3.6.1.2.1.31.1.1.1.6
ifHCInUcastPkts	1.3.6.1.2.1.31.1.1.1.7
ifHCInMulticastPkts	1.3.6.1.2.1.31.1.1.1.8
ifHCInBroadcastPkts	1.3.6.1.2.1.31.1.1.1.9
ifHCOutOctets	1.3.6.1.2.1.31.1.1.1.10
ifHCOutUcastPkts	1.3.6.1.2.1.31.1.1.1.11
ifHCOutMulticastPkts	1.3.6.1.2.1.31.1.1.1.12
ifHCOutBroadcastPkts	1.3.6.1.2.1.31.1.1.1.13
ifLinkUpDownTrapEnable	1.3.6.1.2.1.31.1.1.1.14
ifHighSpeed	1.3.6.1.2.1.31.1.1.1.15
ifPromiscuousMode	1.3.6.1.2.1.31.1.1.1.16
ifConnectorPresent	1.3.6.1.2.1.31.1.1.1.17
ifAlias	1.3.6.1.2.1.31.1.1.1.18

TABLE 8 iInterface group

Object group name	Object Identifier
ifNumber	1.3.6.1.2.1.2.1
ifTable	1.3.6.1.2.1.2.2
ifEntry	1.3.6.1.2.1.2.2.1
ifIndex	1.3.6.1.2.1.2.2.1.1
ifDescr	1.3.6.1.2.1.2.2.1.2
ifType	1.3.6.1.2.1.2.2.1.3
ifMtu	1.3.6.1.2.1.2.2.1.4
ifSpeed	1.3.6.1.2.1.2.2.1.5
ifPhysAddress	1.3.6.1.2.1.2.2.1.6

TABLE 8 iInterface group (continued)

Object group name	Object Identifier
ifAdminStatus	1.3.6.1.2.1.2.2.1.7
ifOperStatus	1.3.6.1.2.1.2.2.1.8
ifLastChange	1.3.6.1.2.1.2.2.1.9
ifInOctets	1.3.6.1.2.1.2.2.1.10
ifInUcastPkts	1.3.6.1.2.1.2.2.1.11
ifInNUcastPkts	1.3.6.1.2.1.2.2.1.12
ifInDiscards	1.3.6.1.2.1.2.2.1.13
ifInErrors	1.3.6.1.2.1.2.2.1.14
ifInUnknownProtos	1.3.6.1.2.1.2.2.1.15
ifOutOctets	1.3.6.1.2.1.2.2.1.16
ifOutUcastPkts	1.3.6.1.2.1.2.2.1.17
ifOutNUcastPkts	1.3.6.1.2.1.2.2.1.18
ifOutDiscards	1.3.6.1.2.1.2.2.1.19
ifOutErrors	1.3.6.1.2.1.2.2.1.20
ifOutQLen	1.3.6.1.2.1.2.2.1.21
ifSpecific	1.3.6.1.2.1.2.2.1.22

History

Release version	History
17s.1.00	This MIB was introduced.

IP Forward MIB

The IP Forward MIB module defines MIB objects for the management of Classless Inter-domain Routing (CIDR) multipath IP routes.

> **NOTE**
> Beginning with 17s.1.00 release, SNMP GET and SNMP SET operations are supported on the IP Forward MIB.

Object group name	Object Identifier	Supported?
inetCidrRouteNumber	1.3.6.1.2.1.4.24.6	Yes
inetCidrRouteTable	1.3.6.1.2.1.4.24.7	Yes
inetCidrRouteDiscards	1.3.6.1.2.1.4.24.8	Yes

History

Release version	History
17s.1.00	This MIB was introduced.

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.

> **NOTE**
> Beginning with 17s.1.00 release, SNMP GET and SNMP SET operations are supported on the IP-MIB.

Object group name	Object Identifier	Supported
ipForwarding	1.3.6.1.2.1.4.1	Yes (Read-only)
ipDefaultTTL	1.3.6.1.2.1.4.2	Yes (Read-only)
ipReasmTimeout	1.3.6.1.2.1.4.13	Yes
ipForward	1.3.6.1.2.1.4.24	Yes (Read-only)
ipAddressTable	1.3.6.1.2.1.4.34	Yes (Read-only)
ipNetToPhysicalTable	1.3.6.1.2.1.4.35	Yes

History

Release version	History
17s.1.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

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
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),	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)

MIB object , OID , Syntax	Description	Supported (Yes/No)
bFrameLossRatioBackwardMin(15), bFrameLossRatioBackwardMax(16), bFrameLossRatioBackwardAve(17) }		
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
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
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

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

MIB object , OID , Syntax	Description	Supported (Yes/No)
	deleted. When read the value always returns 'false'.	
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
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	This attribute contains the number of frames transmitted in the backward direction by this	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
Syntax: Gauge32	MEP. This attribute only applies when mefSoamLmType is lmLmm or lmSlm	
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
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
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	Yes. Supports version 0 only.

MIB object , OID , Syntax	Description	Supported (Yes/No)
	formats defined in Y.1731-20xx.The exact PDUs to use are specified by this object in combination with mefSoamDmCfgType.	
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
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
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	Yes

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

MIB object , OID , Syntax	Description	Supported (Yes/No)
	mefSoamDmStartTimeType is 'relative' and is ignored otherwise.	
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
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
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
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
mefSoamDmCurrentStatsFrameDelayRoundTrip Min 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
mefSoamDmCurrentStatsFrameDelayRoundTrip Max 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
mefSoamDmCurrentStatsFrameDelayRoundTrip Avg 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
mefSoamDmCurrentStatsInitiatedMeasurement s 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
mefSoamDmCurrentStatsCompletedMeasurem ents 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

MIB object , OID , Syntax	Description	Supported (Yes/No)
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
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	A vector of bits that indicates the type of SOAM DM threshold notifications that are enabled.A bit	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
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) }	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'.	
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
mefSoamDmThresholdMaxFrameDelayForward Threshold 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
mefSoamDmThresholdAveFrameDelayForward Threshold 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

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

MIB object , OID , Syntax	Description	Supported (Yes/No)
	direction calculated by this MEP for this measurement interval.	
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
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
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
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	Yes

Notification, OID	Object	Description	Supported (Yes/No)
		given time interval per LM session as specified by the mefSoamAlarmInterval.	
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
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

History

Release version	History
17r.2.00	This MIB was introduced.

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.

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	No
ospfHostTable	1.3.6.1.2.1.14.6	No
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	No
ospfRouteGroup	1.3.6.1.2.1.14.13	No
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

History

Release version	History
17s.1.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

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?	Access
dot1qBase	1.3.6.1.2.1.17.7.1.1	Yes	Read-Write
dot1qTp	1.3.6.1.2.1.17.7.1.2	Yes	Read-Write
dot1qStatic	1.3.6.1.2.1.17.7.1.3	Yes	Read-Write
dot1qVlan	1.3.6.1.2.1.17.7.1.4	Yes	Read-Write
dot1vProtocol	1.3.6.1.2.1.17.7.1.5	Yes	Read-Write

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

History

Release version	History
17s.1.00	This MIB was introduced.

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

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

History

Release version	History
17s.1.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

SNMP CFMv1 and CFMv2 MIB

The .

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)

MIB object , OID , Syntax	Description	Supported (Yes/No)
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 allowed. After this initialization, this object needs to be persistent upon reboot or restart of a device.	Yes. Returns fixed value: sendIdNone (1)

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)
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	The Maintenance Domain Level.	Yes.

MIB object , OID , Syntax	Description	Supported (Yes/No)
OID: .1.3.111.2.802.1.1.8.1.5.2.1.4 SYNTAX Dot1agCfmMDLevel MAX-ACCESS read–create STATUS current DEFVAL { 0 }		

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

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)
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	Type of the Service Selector identifiers indicated by ieee8021CfmMaCompPrimarySelectorOrNone.	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
SYNTAX IEEE8021ServiceSelectorType MAX-ACCESS read-create STATUS current	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.	
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
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
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

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

MIB object , OID , Syntax	Description	Supported (Yes/No)
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
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	The flags field for LTMs transmitted by the MEP.	Yes Returns fixed value: 0

MIB object , OID , Syntax	Description	Supported (Yes/No)
OID: .1.3.111.2.802.1.1.8.1.7.1.1.37 SYNTAX BITS { useFDBonly (0) } MAX-ACCESS read-create STATUS current		
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
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	The status of the row. The writable columns in a row can not be changed if the row is active. All	Yes Returns fixed value: active (1)

MIB object , OID , Syntax	Description	Supported (Yes/No)
SYNTAX RowStatus MAX-ACCESS read-create STATUS current	columns MUST have a valid value before a row can be activated.	

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
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	This object specifies the format of the Chassis ID returned in the Sender ID TLV of the LTR, if	Yes Return fixed value: local(7)

MIB object , OID , Syntax	Description	Supported (Yes/No)
SYNTAX LldpChassisIdSubtype MAX-ACCESS read-only STATUS current	any. This value is meaningless if the dot1agCfmLtrChassisId has a length of 0."	
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)
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)snmpleee802Domain (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
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 dot1agCfmLtrIngressPortIdSubtype 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	MAC address returned in the egress MAC address field. If the dot1agCfmLtrEgress object	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
SYNTAX MacAddress MAX-ACCESS read-only STATUS current	contains the value egrNoTlv(0), then the contents of this object are meaningless.	
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
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
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	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	Yes

MIB object , OID , Syntax	Description	Supported (Yes/No)
SYNTAX Dot1agCfmInterfaceStatus MAX-ACCESS read-only STATUS current	that no interface status TLV was received in the last CCM.	
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)
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)snmpleee802Domain (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	Yes

Notification, OID	Object	Description	Supported (Yes/No)
		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 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).	

History

Release version	History
17r.2.00	This MIB was introduced.

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

History

Release version	History
17s.1.00	This MIB was introduced.

SNMPv2 MIB

The MIB module for SNMP entities.

Supported object groups

NOTE
SNMPv2 MIB supports the SNMP SET request.

Object group name	OID	Supported?
sysDescr	1.3.6.1.2.1.1.1	Yes
sysObjectID	1.3.6.1.2.1.1.2	Yes
sysUpTime	1.3.6.1.2.1.1.3	Yes
sysContact	1.3.6.1.2.1.1.4	Yes
sysName	1.3.6.1.2.1.1.5	Yes
sysLocation	1.3.6.1.2.1.1.6	Yes
sysServices	1.3.6.1.2.1.1.7	Yes
sysORLastChange	1.3.6.1.2.1.1.8	Yes
sysORTable	1.3.6.1.2.1.1.9	Yes
sysORIndex	1.3.6.1.2.1.1.9.11	Yes
sysORID	1.3.6.1.2.1.1.9.12	Yes
sysORDescr	1.3.6.1.2.1.1.9.13	Yes
sysORUpTime	1.3.6.1.2.1.1.9.14	Yes

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

History

Release version	History
17s.1.00	This MIB was introduced.

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	No

MIB Object	Description	Supported (Yes/No)
	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.	
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
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
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	Yes

MIB Object	Description	Supported (Yes/No)
	other(3) }	
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
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
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	Yes Supported: Unknown(0) Ipv4(1)

MIB Object	Description	Supported (Yes/No)
	InetAddressDNS textual convention.	
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
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
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	Yes (not-accessible)

MIB Object	Description	Read-Write Supported (Yes/No)
	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}	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)
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
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.	Yes Since SET is not supported in this release, only 'active' is supported.

MIB Object	Description	Read-Write Supported (Yes/No)
	Deleting a row in this table will likewise delete the corresponding row in the ifTable and in the tunnelIfTable.	
tunnelInetConfigStorageType OID: 1.3.6.1.2.1.10.131.1.1.3.1. 8	The storage type of this row. If the row is permanent (4), no objects in the row need be writable other(1) volatile (2) nonVolatile (3) permanent(4) readOnly (5)	Yes 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
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	The current operational state of the interface. The testing(3) state indicates that no operational	Yes

MIB Object	Description	Supported (Yes/No)
OID: .1.3.6.1.2.1.2.2.1.8	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)}	
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
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	No

MIB Object	Description	Supported (Yes/No)
	address at this sub-layer, including those that were discarded or not sent.	
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
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

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

History

Release version	History
17r.2.00	This MIB was introduced.

TCP MIB

The TCP MIB module defines the MIB objects for management of Transmission Control Protocol (TCP). Only read-only operation is supported on this MIB through SNMP.

Supported object groups

Objects group name	OID	Supported?
tcpMIB	1.3.6.1.2.1.49	Yes
tcpRtoAlgorithm	1.3.6.1.2.1.6.1	Yes
tcpRtoMin	1.3.6.1.2.1.6.2	Yes
tcpRtoMax	1.3.6.1.2.1.6.3	Yes
tcpMaxConn	1.3.6.1.2.1.6.4	Yes
tcpActiveOpens	1.3.6.1.2.1.6.5	Yes
tcpPassiveOpens	1.3.6.1.2.1.6.6	Yes
tcpAttemptFails	1.3.6.1.2.1.6.7	Yes
tcpEstabResets	1.3.6.1.2.1.6.8	Yes
tcpEstabResets	1.3.6.1.2.1.6.9	Yes
tcpInSegs	1.3.6.1.2.1.6.10	Yes
tcpOutSegs	1.3.6.1.2.1.6.11	Yes
tcpRetransSegs	1.3.6.1.2.1.6.12	Yes
tcpConnTable	1.3.6.1.2.1.6.13	Yes
tcpInErrs	1.3.6.1.2.1.6.14	Yes
tcpOutRsts	1.3.6.1.2.1.6.15	Yes

History

Release version	History
17s.1.00	This MIB was introduced.

UDP MIB

Usage Guidelines

The UDP MIB module defines the MIB objects for management of User Datagram Protocol (UDP). Only read-only operation is supported on this MIB through SNMP.

Supported object groups

Object group name	OID	Supported?
udpMIB	1.3.6.1.2.1.50	Yes
udpInDatagrams	1.3.6.1.2.1.7.1	Yes
udpNoPorts	1.3.6.1.2.1.7.2	Yes
udpInErrors	1.3.6.1.2.1.7.3	Yes
udpOutDatagrams	1.3.6.1.2.1.7.4	Yes
udpTable	1.3.6.1.2.1.7.5	Yes

History

Release version	History
17s.1.00	This MIB was introduced.

Supported Enterprise MIB Objects

Brocade-ACL MIB

The SNMP agent supports Get, Get-next, and Get bulk requests for L2 ACLs on the BROCADE-ACL-MIB. The Brocade-ACL MIB defines support for SNMP MIB. In the SLX-OS 17r.2.00 release, the Brocade-ACL MIB supports only L2 ACL.

bcsiAclNametoAclIdMappingTable

> **NOTE**
> Only the table definition is supported in the current SLX-OS release.

MIB Object	Description
bcsiAclNametoAclIdMappingAclName OID: .1.3.6.1.4.1.1588.3.1.16.1.1.1.1 syntax: OCTET STRING (SIZE (0..255))	Name of the ACL.
bcsiAclNametoAclIdMappingAclId OID: .1.3.6.1.4.1.1588.3.1.16.1.1.1.2 syntax: Unsigned32	Unique numeric ID for the given type (MAC or IP)of ACL.
bcsiAclNametoAclIdMappingAclType OID: .1.3.6.1.4.1.1588.3.1.16.1.1.1.3 syntax: integer	ACL are of two types namely, standard and extended ACL. They differ by the rules that are defined under each of these types.
bcsiAclNametoAclIdMappingAclLevel OID: .1.3.6.1.4.1.1588.3.1.16.1.1.1.4 syntax: integer	Level of ACL. Only L2 is supported.

bcsiL2NamedAclRuleTable

MIB Object	Description
bcsiL2NamedAclId OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.1 syntax: Unsigned32(1..65535)	Unique Numeric ID for given type(MAC or IP) of ACL. This object is the same as bcsiAclNametoAclIdMappingAclId ofbcsiAclNameToIdMappingTable
bcsiL2NamedAclSequenceNumber OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.2 syntax: Unsigned32(1..65535)	The rule number.
bcsiL2NamedAclName OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.3 syntax: OCTET STRING (SIZE (0..255))	Represents the Name of each configured L2 named ACL
bcsiL2NamedAclAction OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.4 syntax: integer {deny(1), permit(2), hardDrop(3) }	Action to take if the ingress L2 packet matches this ACL.

MIB Object	Description
bcsiL2NamedAclSourceType OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.5 syntax: integer { standardFormat(1), any(2), host(3) }	Source can be represented in three ways. • MAC address in HHHH.HHHH.HHHH format. • any source MAC address • Host specific MAC address bcsiL2NamedAclSourceMacMask is closely related to this field.
bcsiL2NamedAclSourceMac OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.6 syntax: MACAddress	Optional source MAC address. By default, it matches with any source MAC within a packet.
bcsiL2NamedAclSourceMacMask OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.7 syntax: MACAddress	Optional source MAC address mask. By default, it matches with any source MAC within a packet. It matches with any source MAC within a packet. To match on the first two bytes of the address, aabb.ccdd.eeff, use the mask ffff.0000.0000. In this case, the clause matches all source MAC addresses that contain 'aabb' as the first two bytes and any values in the remaining bytes of the MAC address. Supported for Extended ACL only.
bcsiL2NamedAclDestinationType OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.8 syntax: integer { standardFormat(1), any(2), host(3) }	Destination can be represented in three ways. • MAC address in HHHH.HHHH.HHHH format. • any source MAC address • Host specific MAC address bcsiL2NamedAclSourceMacMask is closely related to this field.
bcsiL2NamedAclDestinationMac OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.9 syntax: MACAddress	Optional destination MAC address. By default, it matches with any source MAC within a packet.
bcsiL2NamedAclDestinationMacMask OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.10 syntax: MACAddress	Optional destination MAC address mask. By default, it matches with any source MAC within a packet. It matches with any source MAC within a packet. To match on the first two bytes of the address, aabb.ccdd.eeff, use the mask ffff.0000.0000. In this case, the clause matches all destination MAC addresses that contain 'aabb' as the first two bytes and any values in the remaining bytes of the MAC address. Supported for Extended ACL only.
bcsiL2NamedAclCount OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.11 syntax: TruthValue	Indicates if the user has enabled/disabled count for number of packets against which the configured action is taken, for a given rule.
bcsiL2NamedAclCopySflow OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.12 syntax: TruthValue	"True" if defined ACL rule with copy–sflow option else represent "False".
bcsiL2NamedAclDropPrecedenceForce OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.13 syntax: syntax: integer { one(1), two(2), zero(3) }	Forces ingress drop precedence.
bcsiL2NamedAclV lanTagFormat	The VLAN format.

MIB Object	Description
OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.14 syntax: integer; { single-tagged(1), double-tagged(2), untagged(3) }	
bcsiL2NamedAclInnerVlanId OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.15 syntax: Unsigned32 (0 | 1..4090)	The VLAN ID of the tagged inner VLAN. 0 indicates 'any'
bcsiL2NamedAclOuterVlanId OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.16 syntax: Unsigned32 (0 | 1..4090)	The VLAN ID of the tagged outer VLAN. 0 indicates 'any'.
bcsiL2NamedAclVlanId OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.17 syntax: Unsigned32 (0 | 1..4090)	Optional VLAN ID to match against that of the incoming packet. By default, the VLAN ID field is ignored during the match. In this case, value 0 is returned. Supported for Extended ACL only
bcsiL2NamedAclEthernetType OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.18 syntax: Unsigned32	Optional Ethernet Type to match against the etype field of the incoming packet. Supported for Extended ACL only. By default, etype field is ignored during the match(none). DEFVAL { None }
bcsiL2NamedAclArpGuard OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.19 syntax: TruthValue	Represents enabling/disabling of arp-gurad for a given ACL.
bcsiL2NamedAclDot1Priority OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.20 syntax: integer { level1(1), level2(2), level3(3), level4(4), level5(5), level6(6), level7(7), level0(8), invalid(127) }; 0 is lowest priority, 7 is the highest."	The priority option assigns traffic that matches the ACL to a hardware forwarding queue. In addition to changing the internal forwarding priority, if the outgoing interface is an 802.1q interface, this option maps the specified priority to its equivalent 802.1p (QoS) priority and marks the packet with the new 802.1p priority. This option is applicable for inbound ACLs only. NOTE:bcsiL2NamedAclDot1Priority following bcsiL2NamedAclDot1PriorityForce cannot be used together in an ACL entry. Supported for Extended ACL only
bcsiL2NamedAclDot1PriorityForce OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.21 syntax: integer { level1(1), level2(2), level3(3), level4(4), level5(5), level6(6), level7(7), level0(8), invalid(127) }; 0 is lowest priority, 7 is the highest."	The priority-force option assigns packets of outgoing traffic that match the ACL to a specific hardware forwarding queue, even though the incoming packet may be assigned to another queue. This option is applicable for inbound ACLs only. NOTE:bcsiL2NamedAclDot1Priority following bcsiL2NamedAclDot1PriorityForce cannot be used together in an ACL entry. Supported for Extended ACL only
bcsiL2NamedAclMirrorPackets OID: . 1.3.6.1.4.1.1588.3.1.16.1.2.1.22 syntax: TruthValue	Mirror packets matching ACL permit clause. Supported for Extended ACL only.
bcsiL2NamedAclLogEnable OID: .1.3.6.1.4.1.1588.3.1.16.1.2.1.23	Optional parameter to enable logging only when deny clause is specified. Note that traffic denied by implicit

MIB Object	Description
syntax: TruthValue	deny mechanism is not subject to logging. The implicit deny kicks in when the traffic does not match any of the clauses and there is no 'permit any any' clause specified at the end.

bcsiAclIfBindTable

MIB Object	Description
bcsiAclIfBindDirection OID: .1.3.6.1.4.1.1588.3.1.16.1.3.1.1 syntax: integer {inbound(1), outbound(2) }	Direction in which this ACL should be applied on this port.
bcsiAclIfBindAclName OID: .1.3.6.1.4.1.1588.3.1.16.1.3.1.2 syntax: OCTET STRING (SIZE (0..255))	Represents the Name of each configured L2 ACL only.

History

Release version	History
17r.2.00	This MIB was introduced.

CONTEXT–MAPPING–MIB overview

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

The MIB module is for VRF Context Mapping feature.

Objects and OID	Access	Description
BcmContextMappingMIB 1.3.6.1.4.1.1588.3.1.5	None	This MIB module represents the VRF Context Mapping feature.
bcmContextMappingTable 1.3.6.1.4.1.1588.3.1.5.1	Not accessible	This table provides mapping of SNMP context (represented by the value of 'vacmContextName') to various entities within entities contained within the managed device.
bcmContextMappingEntry 1.3.6.1.4.1.1588.3.1.5.1.1	Not accessible	This MIB module represents the VRF Context Mapping feature. An entry in this table represents a conceptual entry (row). Each entry represents a Context and has all the mapping information of the managed device.
bcmContextMappingVacmContextName 1.3.6.1.4.1.1588.3.1.5.1.1.1	Not accessible	This MIB module represents the VRF Context Mapping feature. This object is a human readable name identifying a specific SNMP VACM context of a specific SNMP entity.
bcmContextMappingVrfName 1.3.6.1.4.1.1588.3.1.5.1.1.2	Read-only	This MIB module represents the VRF Context Mapping feature. The value of an instance of this object identifies the name given to the VRF to which the SNMP context is mapped.

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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	This trap is sent when the status of any FRU object is changed.
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.

History

Release version	History
17s.1.00	This MIB was introduced.

Optical monitoring

Optical lane monitoring table

The following table displays the optical parameters table per lane for a 100G LR4 and LR10 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.
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.
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.
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.
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.

History

Release version	History
17s.1.00	This MIB was introduced.

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 9 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 10 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.
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.

TABLE 10 Switch system group MIBs (continued)

Objects and OID	Access	Description
		• 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.
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)

TABLE 10 Switch system group MIBs (continued)

Objects and OID	Access	Description
		• inactive (4)

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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.

History

Release version	History
17s.1.00	This MIB was introduced.

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 11 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.

TABLE 11 VPLS MIB (continued)

MIB name and OID	Supported	Description
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 12 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 13 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.

TABLE 13 vplsConfigTable (continued)

Object name, OID, and syntax	Supported	Description
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.
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 14 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.

History

Release version	History
17r.1.00	This MIB was introduced.