



MIBs Supported

This chapter describes those MIBs supported by AXSM Version 2.0. Existing MIBs include those public MIBs that are part of the Internet Official Protocol Standards and are published as Request for Comments (RFC) text files. Another category of existing MIBs are Cisco Enterprise MIBs, which are common for Cisco products. In both categories, AXSM implementation does not support all of the tables defined in a particular MIB.

This chapter includes the following sections:

- Standard MIBs
- Cisco Enterprise MIBs
- MIB Support Restrictions
- Interface Terminologies

Standard MIBs

The standard MIBs supported by AXSM are listed in Table 1-1.


Note

Not all of the objects in a MIB are supported by AXSM.

Support restrictions on the use of these MIBs are listed in Table 1-3 and Table 1-4.

Table 1-1 Standard MIBs in AXSM

MIB	RFC Number	MIB File Name	Supported Objects
IF MIB	RFC 2233	IF-MIB.my	ifTable ¹ , ifXTable ¹
SONET MIB	RFC 2558	SONET-MIB.my	sonetMediumTable ¹ sonetSectionCurrentTable sonetSectionIntervalTable sonetLineCurrentTable sonetLineIntervalTable sonetFarEndLineCurrentTable sonetPathCurrentTable ¹ sonetPathIntervalTable sonetFarEndPathCurrentTable sonetFarEndPathIntervalTable
DS3 MIB	RFC 2496	DS3-MIB.my	dsx3ConfigTable ¹ dsx3CurrentTable dsx3IntervalTable dsx3TotalTable
SNMP v2 SMI	RFC 2578	SNMPv2-SMI.my	Object Identifier Definitions
SNMP v2 TC	RFC 2579	SNMPv2-TC.my	Textual Conventions used in MIBs
SNMP v2 CONF	RFC 2580	SNMPv2-CONF.my	Conformance Statements used in MIBs

1. Usage is limited.

Cisco Enterprise MIBs

The Cisco Enterprise MIBs supported by AXSM are listed in Table 1-2. These MIBs are used in a wide variety of Cisco products. Some of the MIBs are under the StrataCom® enterprise, for example, enterprises.351.


Note

Not all of the objects in a MIB are supported by AXSM.

Table 1-2 Cisco Enterprise MIBs in AXSM

MIB	MIB File Name	Supported Objects
CISCO SMI	CISCO-SMI.my	CISCO-Specific Structure of Management Information
CISCO TC	CISCO-TC.my	CISCO-Specific Textual Conventions
CISCO SONET MIB	CISCO-SONET-MIB.my	CISCO-Specific extensions to SONET-MIB
RESOURCE PARTITION MIB	CISCO-WAN-RSRC-PART-MIB.my	Resource Partition MIB for the ATM Virtual Interfaces
CISCO DS3 MIB	CISCO-DS3-MIB.my	Cisco-Specific Extensions to DS3-MIB
ATM VIRTUAL IF MIB	CISCO-ATM-VIRTUAL-IF-MIB.my	All Objects
ATM PHYSICAL LAYER MIB	CISCO-ATM-CELL-LAYER-MIB.my	All Objects
ATM Connections MIB	CISCO-WAN-ATM-CONN-MIB.my	All Objects
Cisco WAN Feeder MIB	CISCO-WAN-FEEDER-MIB.my	All Objects
Cisco WAN Module MIB	CISCO-WAN-MODULE-MIB.my	All Objects

MIB Support Restrictions

Two kinds of MIB support restrictions exist. For certain standard MIB objects, the access defined in the MIB and the access as implemented in AXSM are different, with a different default value in certain cases. These constitute MIB support limitations.

There are also unsupported objects in certain standard MIBs. Certain tables or objects are unsupported.

MIB Support Limitations

Those objects with MIB support limitations are listed in Table 1-3. In all cases, the access defined by the MIB is for read-write, while AXSM implementation supports read-only. The MIB file can be identified by the first part of the object name; SONET refers to the file SONET-MIB.my, and dsx3 refers to the DS3-MIB.my file.

Table 1-3 MIB Support Limitations

Object Name	Access Defined in MIB	Access as Implemented in AXSM	Default Value/Equivalent Object
sonetPathCurrentWidth	read-write	read-only	csConfigType
sonetMediumType	read-write	read-only	N/A
sonetMediumLineCoding	read-write	read-only	N/A
sonetMediumLineType	read-write	read-only	N/A
sonetMediumCircuitIdentifier	read-write	read-only	N/A
sonetMediumLoopbackConfig	read-write	read-only	Not Supported
dsx3LineType	read-write	read-only	other (1)
dsx3LineCoding	read-write	read-only	N/A
dsx3LineStatusChangeTrapEnable	read-write	read-only	disabled (1)
dsx3Channelization	read-write	read-only	disabled (1)

Unsupported MIB Objects

Those tables or objects that are unsupported by AXSM in the standard MIB are listed in Table 1-4.

Table 1-4 *Unsupported MIB Objects*

Standard MIB File	Unsupported Table or Objects
IF-MIB.my	ifInNUcastPkts
	ifInOctets
	ifInUcastPkts
	ifInDiscards
	ifInErrors
	ifInUnknownProtos
	ifOutOctets
	ifOutUcastPkts
	ifOutNUcastPkts
	ifOutDiscards
	ifOutErrors
	ifInMulticastPkts
	ifOutQlen
	ifSpecific
	ifInMulticastPkts
	ifInBroadcastPkts
	ifOutMulticastPkts
	ifOutBroadcastPkts
	ifHCInOctets
	ifHCInUcastPkts
	ifHCInMulticastPkts
	ifHCInBroadcastPkts
	ifHCOctets
	ifHCOUcastPkts
	ifHCOmulticastPkts
	ifHCOBroadcastPkts
	ifTableLastChange
	ifStackTable
	ifRcvAddressTable

Table 1-4 *Unsupported MIB Objects (continued)*

Standard MIB File	Unsupported Table or Objects
IF-MIB.my	linkDownTRAP
(continued)	linkUpTrap
SONET-MIB.my	sonetMediumLoopbackConfig
	sonetVTCurrentTable
	sonetVTIntervalTable
	sonetFarEndVTCurrentTable
	sonetFarEndVTIntervalTable
DS3-MIB.my	dsx3FarEndConfigTable
	dsx3FracTable
	dsx3FarEndCurrentTable
	dsx3FarEndIntervalTable
	dsx3FarEndTotalTable
	dsx3LineStatusChange ¹

1. Denotes a Trap.

Interface Terminologies

The ifTable defined in IF-MIB has entries for the various physical and logical interfaces. The terminologies used for the various interfaces are listed in Table 1-5. These interfaces are identified by the ifType MIB object in ifTable.

Table 1-5 Interface Terminologies Used

Interface	Identification	ifType Values
physical interface	Identifies the interface for physical lines.	ds3(30), sonet (39), ds1 (18), ethernetCsmacd(6)
ATM physical interface (ATM Phy Interface)	Identifies the interface for the ATM Cell layer on a physical interface.	atm(37)
ATM virtual interface	Identifies the logical interface configured on a physical interface.	atmVirtual(14)

