



## MIBs Supported

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This chapter describes those Management Information Base (MIBs) supported by PXM45 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, PXM45 implementation does not support all of the tables defined in a particular MIB.

This chapter includes the following sections:

- Standard MIBs
- Cisco Enterprise MIBs
- StrataCom<sup>®</sup> Enterprise MIBs
- MIB Support Restrictions
- OID Assignments
- Cisco Products MIB

# Standard MIBs

Note that not all of the objects in a MIB are supported by PXM45. Table 1-1 shows the standard MIBs supported by PXM45. Restrictions on the use of these MIBs are listed in Table 1-4.

**Table 1-1** *Standard MIBs in PXM45*

<b>MIB</b>	<b>RFC Number</b>	<b>MIB File Name</b>	<b>Supported Objects</b>
IF MIB	RFC 2233	IF-MIB.my	ifTable, ifXTable
ENTITY MIB	RFC2 737	ENTITY-MIB.my	entPhysicalTable entPhysicalContainsTable entLastChangeTime
RS 232 MIB	RFC 1659	RS-232-MIB.my	rs232Number rs232PortTable rs232AsyncPortTable
SNMP v2 MIB	RFC 1907	SNMPv2-MIB.my	All the objects
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

# Cisco Enterprise MIBs

Table 1-2 lists the Cisco Enterprise MIBs supported by PXM45.



**Note**

Not all of the objects in a MIB are supported by PXM45.

**Table 1-2 Cisco Enterprise MIBs in PXM45**

MIB	MIB File Name	Supported Objects
CISCO FRU CONTROL MIB	CISCO-ENTITY-FRU-CONTROL-MIB.my	cefcModuleTable
SENSOR MIB	CISCO-ENTITY-SENSOR-MIB.my	All the objects
CISCO PRODUCTS MIB	CISCO-PRODUCTS-MIB.my	Only OIDs <sup>1</sup> used for sysObjectID object for MSSBU products
CISCO SMI	CISCO-SMI.my	CISCO-Specific Structure of Management Information
CISCO TC	CISCO-TC.my	CISCO-Specific Textual Conventions
CISCO SYSTEM MIB	CISCO-SYSTEM-MIB.my	All the objects
ENTITY VENDORTYPE MIB	CISCO-ENTITY-VENDORTYPE-MIB.my	Those OIDs used for entphysicalVendorType Object for MSSBU products
CISCO VSI CONTROLLER	CISCO-VSI-CONTROLLER-MIB.my	All the objects

1. OID is defined as object identifiers.

# StrataCom® Enterprise MIBs

The StrataCom Enterprise MIBs supported in PXM45 are part of the `AXIPOP-MIB.my` file. These are listed in Table 1-3.

**Table 1-3 StrataCom Enterprise MIBs in PXM45**

<b>MIB</b>	<b>MIB File Name</b>	<b>Supported Objects</b>
RTM MIB	RTM-MIB.my	All the objects
ERROR STATUS MIB	ERROR-STATUS-MIB.my	All the objects
BASIS SHELF MIB: For Shelf and Redundancy Table	BASIS-SHELF-MIB.my	statsMasterIpAddress statsCollectionInterval statsBucketInterval userName shelfIntegratedAlarm shelfNum redPrimarySlotNum redRowStatus redPrimaryState redSecondarySlotNum redSecondaryState redType redCoveringSlot
MODULE MIB for TRAPS	BASIS-GENERIC-MIB.my	moduleTrapAlarmSeverity
GENERIC MIB for TRAPS	GENERICOBJECT-MIB.my	genericTimeStamp

# MIB Support Restrictions

For certain standard MIB objects, the access defined in the MIB and the access as implemented in PXM45 are different, with a different default value in certain cases. These constitute MIB support limitations.

Table 1-4 lists the MIB supported limitation objects. In all cases, the access defined by the MIB is for read-write, while only read-only is supported in the PXM45.

**Table 1-4 MIB Support Limitations**

MIB	MIB File Name	Unsupported Table/Objects
SNMPv2 MIB	SNMPv2-MIB.my	sysORLastChange sysORTable
IF MIB	IF-MIB.my	ifInOctets ifInUcastPkts ifInNUcastPkts 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 linkDown TRAP linkUp Trap All the deprecated Objects

**Table 1-4 MIB Support Limitations (continued)**

<b>MIB</b>	<b>MIB File Name</b>	<b>Unsupported Table/Objects</b>
ENTITY MIB	ENTITY-MIB.my	entPhysicalAssetID entPhysicalAlias entLogicalTable entLPMappingTable entAliasMappingTable entConfigChange TRAP
CISCO ENTITY FRU CONTROL MIB	CISCO-ENTITY-FRU-CONTROL-MIB.my	cefcFRUPowerSupplyGroupTable
BASIS SHELF MIB	BASIS-SHELF-MIB.my	redPrimaryType redSecondaryType redFeature redLineModuleType shelfTable shelfNumValidEntries shelfDate shelfTime shelfTmZn shelfTmZnGMTOff shelfBkplnType shelfBkplnSerialNum shelfAlarmCardBitMap apsIpAddress redundantApsIpAddress axisFeederTkNo axisSvcBillingColInterval axisSvcBillingBucketInterval axisSvcBilling
BASIS GENERIC MIB	BASIS-GENERIC-MIB.my	all the objects except moduleTrapAlarmSeverity
GENERICOBJECT MIB	GENERICOBJECT-MIB.my	genericLineNum genericLineType

# OID Assignments

This MIB contains OID<sup>1</sup> assignments for CISCO components for use by ENTITY-MIB. This MIB module defines the object identifiers that are assigned to various components on Cisco products, which are used by the `entPhysicalTable` of the ENTITY-MIB to uniquely identify the type of each physical entry.

Table 1-5 lists the values for `entPhysicalVendorType` object in the switch.

## Chassis, Backplane, Slots, and Fans

Table 1-5 lists the OID<sup>1</sup> assignments for chassis, backplane, slots, and fans.

**Table 1-5** *OID<sup>1</sup> Assignments—Chassis, Backplane, Slots, and Fans*

Component Name	OID <sup>1</sup> Name	OID <sup>1</sup> Value
MGX 8850 Chassis	cevChassisMGX8850	cevChassis 86
BPX SES Chassis	cevchassis	cevChassis 101
MGX 8850 Backplane	cevBackplaneMGX8850	cevBackplane 9
BPX-SES Backplane	cevBackplaneBPXSES	cevBackplane 11
Processor Switch Module (PXM) Slot	cevContainerPsmSlot	cevContainer 31
Service Module (SM) Slot	cevContainerSmSlot	cevContainer 32
Service Redundancy Module (SRM) Slot	cevContainerSrmSlot	cevContainer 34
MGX 8800 Fan Tray (9 Fans)	cevContainerMGX8800FanTray	cevContainer 33
SES Fan Tray (8 Fans)	sevContainerSESFanTray	cevContainer 36
MGX 8800 AC Power Supply Tray	cevContainerMGX8800ACPSTray	cevContainer 35
MGX 8800 Single Pulse Fan	cevFanSinglePulse	cevFan 4
MGX 8800 Dual Pulse Fan	cevFanDualPulse	cevFan 5
MGX 8800 Power Entry Module (PEM)	cevPowerSupplyMGX8800Pem	cevPowerSupply 17
MGX 8800 Temperature Sensor	cevSensorMGX8800Temp	cevSensor 11
MGX 8800 Power Supply Voltage Level Monitor (DC Level Monitor)	cevSensorMGX8800PSVoltage	cevSensor 12
Fan Speed Sensor for MGX 8850, SES	cevSensorMGX8800FanSpeed	cevSensor 13
Alternating Current (AC) Power Supply, 1200 Watts	cevPowerSupplyAC1200W	cevPowerSupply 10
Alternating Current (AC) Power Supply, 1050 Watts	cevPowerSupplyAC1050W	cevPowerSupply 23

1. OID is defined as an object identifier.

## Front Modules

Table 1-6 lists the OID<sup>1</sup> assignments for Front Modules as defined in CISCO-ENTITY-VENDORTYPE-OID-MIB.

**Table 1-6** *OID<sup>1</sup> Assignments—Front Modules*

Component Name	OID <sup>1</sup> Name	OID <sup>1</sup> Value
PXM1 Module	cevCpuPSM1Gps	cevModuleCpuType 12
PXM1-2-T3E3	cevCpuPsm12t3e3	cevModuleCpuType 16
PXM1-4-155	cevCpuPsm14oc3	cevModuleCpuType 17
PXM1-622	cevCpuPsm11oc12	cevModuleCpuType 18
PXM45	cevCpuPSM45Gbps	cevModuleCpuType 13
AXSM-1-2488	cevAxsm1Oc48	cevModuleWASCommonCards 9
AXSM-8-155	cevAxsm8Oc3	cevModuleWASCommonCards 11
AXSM-16-155	cevAxsm16Oc3	cevModuleWASCommonCards 12
AXSM-16-T3E3	cevAxsm16T3E3	cevModuleWASCommonCards 13

1. OID is defined as an object identifier.



## Line Modules

Table 1-7 lists the OID<sup>1</sup> assignments for Line Modules.

**Table 1-7** *OID<sup>1</sup> Assignments—Line Modules*

Component Name	OID <sup>1</sup> Name	OID <sup>1</sup> Value
PXM-UI	cevLmPsmUI	cevModuleWASBackCards 11
PXM-HD	cevLmPsmHD	cevModuleWASBackCards 28
PXM-UI-S3	cevLmS3Ui	cevModuleWASBackCards 17
MGX-MMF-4-155	cevLmMmf4oc3	cevModuleWASBackCards 12
MGX-SMFIR-4-155	cevLmSmflr4oc3	cevModuleWASBackCards 13
MGX-SMFLR-4-155	cevLmSmflr4oc3	cevModuleWASBackCards 14
MGX-SMFIR-1-622	cevLmSmflr1oc12	cevModuleWASBackCards 15
MGX-SMFLR-1-622	cevLmSmflr1oc12	cevModuleWASBackCards 16
SMFIR-1-2488	cevLmSmflr1oc48	cevModuleWASBackCards 26
SMFLR-1-2488	cevLmSmflr1oc48	cevModuleWSBackCards 27
SMFSR-1-2488	cevLmSmfSrloc48	cevModuleWASBackCards 34
SMFXLR-1-2488	cevLmSmfXlrloc48	cevModuleWASBackCards 35
SMFIR-2-622	cevLmSmflr2oc12	cevModuleWASBackCards 32
SMFLR-2-622	cevLmSmflr2oc12	cevModuleWASBackCards 33
SMFLR-1-622/C	cevLmSmflr1Oc12C	cevModuleWASBackCards 42
SMFLR-1-622/C	cevLmSmflr1Oc12C	cevModuleWASBackCards 43
SMFIR-4-155/C	cevLmSmflr4Oc3C	cevModuleWASBackCards 45
SMFLR-4-155/C	cevLmSmflr4Oc3C	cevModuleWASBackCards 46
MMF-8-155	cevLmMmf8oc3	cevModuleWASBackCards 23
SMFIR-8-155	cevLmSmflr8oc3	cevModuleWASBackCards 24
SMFLR-8-155	cevLmSmflr8oc3	cevModuleWASBackCards 25
SMB-8-T3	cevLmSmb8t3	cevModuleWASBackCards 29
SMB-8-E3	cevLmSmb8e3	cevModuleWASBackCards 30
SMB-4-155	cevLmSmb4stm1	cevModuleWASBackCards 31

1. OID is defined as an object identifier.

# Cisco Products MIB

The Cisco Products MIB contains OID<sup>1</sup> assignments to use for the SNMPv2-MIB. This module defines the object identifiers that are assigned to various Cisco products. The `sysObjectID` values are assigned to the MGX series.

## Product Object Identifiers

Table 1-8 lists the OID<sup>1</sup> assignments for the switch.

**Table 1-8** *Product Specific Object Identifiers*

Product Name	OID <sup>1</sup> Name	OID <sup>1</sup> Value
MGX 8850	ciscoMGX8850	ciscoProducts 228

1. OID is defined as an object identifier.