



APPENDIX **B**

Management Information Base Reference

This appendix lists the Management Information Bases (MIBs) supported by the NME-APA module. A MIB is a database of objects that can be monitored by a network management system (NMS).

Cisco NME-APA MIB Implementation

This section provides brief descriptions of individual MIB implementations. Also included for each MIB group are the actions used to configure and manage the NME-APA device and the MIB objects associated with each action.

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- [ENTITY-MIB, page B-2](#)
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MIB-II

MIB-II defines the second version of the Management Information Base (MIB-II) for use with network management protocols in TCP/IP-based internets. MIB-II objects are used to control and monitor the management protocol operations of the SNMP agent.

The NME-APA implements all required groups in the MIB-II.

The NME-APA does not support the following objects:

- system (sub-folder)
 - sysServices
- ip (sub-folder)
 - All objects in the ipAddrTable are supported except for ipAdEntReasmMaxSize
 - All objects in the ipRouteTable are supported except for ipRouteMetric2, ipRouteMetric3, ipRouteMetric4, ipRouteMetric5, and ipRouteAge
- egp (sub-folder)
- transmission (sub-folder)

For further information, see RFC 1213.

ENTITY-MIB

ENTITY-MIB objects are used to represent multiple logical entities supported by a single SNMP agent.

The Entity-MIB contains five groups of MIB objects:

- entityPhysical group (required): objects used to represent physical system components.
The entityPhysical2 group (required) augments the entityPhysical group.
- entityLogical group (not required): objects used to represent the list of logical entities.
The entityLogical2 group augments the entityLogical group.
- entityMapping group (part of this group is required): objects used to represent the associations between multiple logical entities, physical components, interfaces, and port identifiers.
- entityGeneral group (required): objects used to represent global entity information.
- entityNotifications group (required): notifications used to indicate Entity MIB data consistency and general status information.

The NME-APA supports all objects of the entityPhysicalTable except for the following:

- entPhysicalMfgDate
- entPhysicalUris

For further information, see [ENTITY-MIB](#).

ENTITY-STATE-MIB

The ENTITY-STATE-MIB objects are extensions to the Entity MIB that are used to provide information about the state of physical entities.

In addition, the ENTITY-STATE-MIB defines a set of standard Textual Conventions representing various states of an entity, which can be imported and used in other MIB modules.

ENTITY-STATE-MIB provides standard definitions for the following states:

- Administrative status
- Operational status
- Usage status
- Alarm status
- Standby status

The NME-APA supports only the following objects:

- entStateOper
- entStateAlarm

For further information, see RFC 4268.

HOST-RESOURCES-MIB

The HOST-RESOURCES-MIB objects are used in managing host systems. It defines attributes common to all internet hosts, such as personal computers as well as Unix-based systems.

The HOST-RESOURCES-MIB contains the following groups of MIB objects:

- hrSystem group (required)
- hrStorage group (required)
- hrDevice group (required)
- hrSoftwareRunning group
- hrSoftwareInstalled group

NME-APA supports only the following MIB objects:

- hrStorageAllocationUnits
- hrStorageSize
- hrStorageUsed

For further information, see [HOST-RESOURCES-MIB](#).

IF-MIB

The IF-MIB module described generic objects for network interface sub-layers. This MIB is an updated version of MIB-II's ifTable, and incorporates the extensions defined in RFC 1229.

The supported objects of the IF-MIB are:

- ifMIB - ifMIBObjects
 - ifTableLastChange
 - ifXTable
 - ifStackTable
 - ifStackLastChange
- interfaces
 - ifNumber
 - ifTable

For further information, see [IF-MIB](#).

CISCO-SYSLOG-EVENT-EXT-MIB

The CISCO-SYSLOG-EVENT-EXT-MIB module extends the Cisco Syslog MIB and provides network management support to handle and process Syslog messages as device events. The objects are used to indicate the level of severity of messages that should be displayed on the following devices:

- console
- event log GUI
- HTML event log console

NME-APA supports only the `cslogEventDispositionTable` object.

For further information, see [CISCO-SYSLOG-EVENT-EXT-MIB](#).

CISCO-CONFIG-COPY-MIB

The CISCO-CONFIG-COPY-MIB facilitates writing of configuration files of an SNMP Agent running Cisco IOS in the following ways:

- to and from the net
- copying running configurations to startup configurations and vice-versa
- copying a configuration (running or startup) to and from the local IOS file system

The NME-APA supports only the following objects:

- `ccCopySourceFileType`
- `ccCopyDestFileType`
- `ccCopyEntryRowStatus`

For further information, see [CISCO-CONFIG-COPY-MIB](#).

CISCO-QUEUE-MIB

The CISCO-QUEUE-MIB objects are used for managing interface queuing in Cisco devices.

The NME-APA supports only the following objects:

- `cQIfQType`
- `cQStatsDiscards`
- `cQStatsBandwidth`

For further information, see [CISCO-QUEUE-MIB](#).

CISCO-SERVICE-CONTROL-ATTACK-MIB

The CISCO-SERVICE-CONTROL-ATTACK-MIB objects are used to provide information about the attack parameters of service control entities.

The NME-APA supports the only the following objects:

- `cscaTypeName`
- `cscaTypeCurrentNumAttacks`

- cscTypeTotalNumAttacks
- cscTypeTotalNumFlows
- cscTypeTotalNumSeconds
- cscInfoUpStreamAttackFilteringTime
- cscInfoUpStreamLastAttackFilteringTime
- cscInfoDownStreamAttackFilteringTime
- cscInfoDownStreamLastAttackFilteringTime

CISCO-SERVICE-CONTROLLER-MIB

The NME-APA supports only the following objects:

- cServiceControlGlobalControllersDescription
- cServiceControlGlobalControllersBandwidth
- cServiceControlGlobalControllersUtilization

CISCO-SERVICE-CONTROL-LINK-MIB

The CISCO-SERVICE-CONTROL-LINK-MIB objects are used to provide information about the status and configuration of links used by service control entities.

The NME-APA supports the following objects:

- cscLinkStatusAdminModeOnActive
- cscLinkStatusAdminModeOnFailure
- cscLinkStatusOperMode
- cscLinkStatusAdminReflectionEnable
- cscLinkStatusSubscriberSidePortIndex
- cscLinkStatusNetworkSidePortIndex
- cscLinkStatusAdminReflectionState

For further information, see [CISCO-SERVICE-CONTROL-LINK-MIB](#).

CISCO-SERVICE-CONTROL-RDR-MIB

The CISCO-SERVICE-CONTROL-RDR-MIB objects are used to provide statistics and configuration relating to the Raw Data Record Formatter running on a service control entity.

The NME-APA supports the following objects:

- cServiceControlRdrFormatterEnable
- cServiceControlRdrFormatterNumReportsSent
- cServiceControlRdrFormatterNumReportsDiscarded
- cServiceControlRdrFormatterReportRate
- cServiceControlRdrFormatterReportRatePeak

- cServiceControlRdrFormatterReportRatePeakTime
- cServiceControlRdrFormatterProtocol
- cServiceControlRdrFormatterForwardingMode
- cServiceControlRdrFormatterClearCountersTime
- cServiceControlRdrCategoryID
- cServiceControlRdrCategoryName
- cServiceControlRdrCategoryNumReportsSent
- cServiceControlRdrCategoryNumReportsDiscarded
- cServiceControlRdrCategoryReportRate
- cServiceControlRdrCategoryNumReportsQueued

For further information, see [CISCO-SERVICE-CONTROL-RDR-MIB](#).

CISCO-SERVICE-CONTROL-SUBSCRIBERS-MIB

The CISCO-SERVICE-CONTROL-SUBSCRIBERS-MIB objects are used to provide global and specific information on subscribers managed by a service control entity.

The NME-APA supports the following objects:

- cServiceControlSubscribersInfoTable

For further information, see [CISCO-SERVICE-CONTROL-SUBSCRIBERS-MIB](#).

CISCO-SERVICE-CONTROL-TP-STATS-MIB

The CISCO-SERVICE-CONTROL-TP-STATS-MIB objects are used to provide information and statistics about the traffic processor(s) of a service control entity.

The NME-APA supports the following objects:

- cServiceControlTpStatsTable

For further information, see [CISCO-SERVICE-CONTROL-TP-STATS-MIB](#).