



APPENDIX **B**

Supported MIB Objects

The NAM supports all of the following MIB groups:

- RMON
- RMON2
- DSMON
- High Capacity RMON—except the mediaIndependentGroup.
- SMON
- Application Response Time (ART) MIB

Supported MIBs

[Table B-1](#) lists the RMON and RMON2 MIB objects supported by the supervisor engine and the NAM. The supervisor engine implements some objects from the RMON MIBs as specified in [Table B-1](#). The supervisor engine RMON implementation is completely independent of the NAM implementation, and no MIB objects are shared.

To collect etherStats from a physical interface on the switch, configure the etherStatTable on the supervisor engine instead of on the NAM. The etherStats are collected accurately on multiple physical interfaces simultaneously.

If you are interested in the etherStats for a specific VLAN, configure the etherStatsTable on the NAM. For the data source, use the ifIndex corresponding to that VLAN.

Any alarmVariable configured on the supervisor engine must reference a MIB object on the supervisor engine. An alarmVariable configured on the NAM must reference a MIB object on the NAM.



Note

You cannot configure an alarmVariable on the NAM that references a MIB object on the supervisor engine or configure an alarmVariable on the supervisor engine that references a MIB object on the NAM.

Table B-1 Supervisor Engine Module and NAM RMON Support

Module	Object Identifier (OID) and Description	Source
Supervisor Engine	...mib-2(1).rmon(16).statistics(1).etherStatsTable(1) ...mib-2(1).rmon(16).statistics(1).tokenRingMLStatsTable(2)...mib-2(1).rmon(16).statistics(1).tokenRingPStatsTable(3)	RFC 2819 (RMON-MIB) RFC 1513 (TOKEN-RING-RMON MIB) RFC 1513 (TOKEN-RING-RMON MIB)
	Counters for packets, octets, broadcasts, errors, etc.	
Supervisor Engine	...mib-2(1).rmon(16).history(2).historyControlTable(1) ...mib-2(1).rmon(16).history(2).etherHistoryTable(2) ...mib-2(1).rmon(16).history(2).tokenRingMLHistoryTable(3)...mib-2(1).rmon(16).history(2).tokenRingPHistoryTable(4)	RFC 2819 (RMON-MIB) RFC 2819 (RMON-MIB) RFC 1513 (TOKEN-RING-RMON MIB) RFC 1513 (TOKEN-RING-RMON MIB)
	Periodically samples and saves statistics group counters for later retrieval.	
Supervisor Engine	...mib-2(1).rmon(16).alarm(3)	RFC 2819 (RMON-MIB)
	A threshold that can be set on critical RMON variables for network management.	
Network Analysis	...mib-2(1).rmon(16).alarm(3)	RFC 2819 (RMON-MIB)
	A threshold that can be set on critical RMON variables for network management.	
Network Analysis	...mib-2(1).rmon(16).hosts(4)	RFC 2819 (RMON-MIB)
	Maintains statistics on each host device on the segment or port.	
Network Analysis	...mib-2(1).rmon(16).hostTopN(5)	RFC 2819 (RMON-MIB)
	A user-defined subset report of the Hosts group, sorted by a statistical counter.	
Network Analysis	...mib-2(1).rmon(16).statistics(1).etherStatsTable(1)	RFC 2819 (RMON-MIB)
Network Analysis	...mib-2(1).rmon(16).matrix(6)	RFC 2819 (RMON-MIB)
	Maintains conversation statistics between hosts on a network.	
Network Analysis	...mib-2(1).rmon(16).filter(7)	RFC 2819 (RMON-MIB)
	A filter engine that generates a packet stream from frames that match a specified pattern.	
Network Analysis	...mib-2(1).rmon(16).capture(8)	RFC 2819 (RMON-MIB)
	Manages buffers for packets captured by the Filter group for uploading to the management console.	

Table B-1 Supervisor Engine Module and NAM RMON Support (continued)

Module	Object Identifier (OID) and Description	Source
Supervisor Engine	...mib-2(1).rmon(16).event(9)	RFC 2819 (RMON-MIB)
	Generates SNMP traps when an Alarms group threshold is exceeded and logs the events.	
Network Analysis	...mib-2(1).rmon(16).event(9)	RFC 2819 (RMON-MIB)
	Generates SNMP traps when an Alarms group threshold is exceeded and logs the events.	
Supervisor Engine	...mib-2(1).rmon(16).tokenRing(10).ringStation ControlTable(1)	RFC 1513 (TOKEN-RING-RMON MIB)
	...mib-2(1).rmon(16).tokenRing(10).ringStation Table(2)	RFC 1513 (TOKEN-RING-RMON MIB)
	...mib-2(1).rmon(16).tokenRing(10).ringStation OrderTable(3)	RFC 1513 (TOKEN-RING-RMON MIB)
	...mib-2(1).rmon(16).tokenRing(10).ringStationConfig ControlTable(4)	RFC 1513 (TOKEN-RING-RMON MIB)
	...mib-2(1).rmon(16).tokenRing(10).ringStationConfig Table(5)	RFC 1513 (TOKEN-RING-RMON MIB)
	...mib-2(1).rmon(16).tokenRing(10).sourceRouting StatsTable(6)	RFC 1513 (TOKEN-RING-RMON MIB)
	Aggregates detailed Token Ring statistics.	
Network Analysis	...mib-2(1).rmon(16).protocolDir(11)	RFC 2021 (RMON2-MIB)
	A table of protocols for which the Network Analysis Module monitors and maintains statistics.	
Network Analysis	...mib-2(1).rmon(16).protocolDist(12)	RFC 2021 (RMON2-MIB)
	A table of statistics for each protocol in protocolDir(11).	
Network Analysis	...mib-2(1).rmon(16).addressMap(13)	RFC 2021 (RMON2-MIB)
	List of MAC-to-network-layer address bindings.	
Network Analysis	...mib-2(1).rmon(16).nlHost(14)	RFC 2021 (RMON2-MIB)
	Statistics for each network layer address.	
Network Analysis	...mib-2(1).rmon(16).nlMatrix(15)	RFC 2021 (RMON2-MIB)
	Traffic statistics for pairs of network layer addresses.	
Network Analysis	...mib-2(1).rmon(16).alHost(16)	RFC 2021 (RMON2-MIB)
	Statistics by application layer protocol for each network address.	
Network Analysis	...mib-2(1).rmon(16).alMatrix(17)	RFC 2021 (RMON2-MIB)
	Traffic statistics by application layer protocol for pairs of network layer addresses.	

Table B-1 Supervisor Engine Module and NAM RMON Support (continued)

Module	Object Identifier (OID) and Description	Source
Network Analysis	...mib-2(1).rmon(16).usrHistory(18)	RFC 2021 (RMON2-MIB)
	Extends history beyond RMON1 link-layer statistics to include any RMON, RMON2, MIB-I, or MIB-II statistic.	
Supervisor Engine	...mib-2(1).rmon(16).probeConfig(19).	RFC 2021 (RMON2-MIB)
	Displays a list of agent capabilities and configurations.	
Network Analysis	...mib-2(1).rmon(16).switchRMON(22).smonMIB Objects(1)	RFC 2613 (SMON-MIB)
	dataSourceCaps(1).dataSourceCapsTable(1).	
	Maps physical entities and VLANs to ifEntries.	
Network Analysis	...mib-2(1).rmon(16).switchRMON(22).smonMIB Objects(1)	RFC 2613 (SMON-MIB)
	smonStats(2).smonVlanStatsControlTable(1).	
	Traffic statistics by VLAN ID number.	
Network Analysis	...mib-2(1).rmon(16).switchRMON(22).smonMIB Objects(1).smonStats(2).smonPrioStatsControlTable(3)	RFC 2613 (SMON-MIB)
	.	
	Traffic statistics by 802.1p user priority value.	
Network Analysis	...frontier(141).mibdoc2(2).netscout2(1).art(5).art ControlTable(2)	draft-warth-rmon2-artmib-01.txt
	Application response time statistics.	(ART-MIB)
Network Analysis	...mib-2(1).rmon(16).mediaIndependentStats(21)	RFC 3273 (HC-RMON-MIB)
	Counters for packets, octets, broadcasts, errors, etc.	
	rmon.dsmonMib(26).dsmonObjects(1).dsmonAgg Objects(1).dsmonMaxAggGroups(1) rmon.dsmonMib(26).dsmonObjects(1).dsmonAgg Objects(1).dsmonAggControlLocked(2) rmon.dsmonMib(26).dsmonObjects(1).dsmonAgg Objects(1).dsmonAggControlChanges(3) rmon.dsmonMib(26).dsmonObjects(1).dsmonAgg Objects(1).dsmonAggControlLastChangeTime(4) rmon.dsmonMib(26).dsmonObjects(1).dsmonAgg Objects(1).dsmonAggControlTable(5) rmon.dsmonMib(26).dsmonObjects(1).dsmonAgg Objects(1).dsmonAggProfileTable(6) rmon.dsmonMib(26).dsmonObjects(1).dsmonAgg Objects(1).dsmonAggGroupTable(7)	RFC 3287 (DSMON-MIB)
	Aggregation or profile control variables and tables	

Table B-1 Supervisor Engine Module and NAM RMON Support (continued)

Module	Object Identifier (OID) and Description	Source
	rmon.dsmonMib(26).dsmonObjects(1).dsmonStatsObjects(2).dsmonStatsControlTable(1) rmon.dsmonMib(26).dsmonObjects(1).dsmonStatsObjects(2).dsmonStatsTable(2) Per-datasource statistics collection tables	RFC 3287 (DSMON-MIB)
	rmon.dsmonMib(26).dsmonObjects(1).dsmonPdistObjects(3).dsmonPdistCtlTable(1) rmon.dsmonMib(26).dsmonObjects(1).dsmonPdistObjects(3).dsmonPdistStatsTable(2) rmon.dsmonMib(26).dsmonObjects(1).dsmonPdistObjects(3).dsmonPdistTopNCtlTable(3) rmon.dsmonMib(26).dsmonObjects(1).dsmonPdistObjects(3).dsmonPdistTopNTable(4) Per-protocol statistics collection tables	RFC 3287 (DSMON-MIB)
	rmon.dsmonMib(26).dsmonObjects(1).dsmonHostObjects(4).dsmonHostCtlTable(1) rmon.dsmonMib(26).dsmonObjects(1).dsmonHostObjects(4).dsmonHostTable(2) rmon.dsmonMib(26).dsmonObjects(1).dsmonHostObjects(4).dsmonHostTopNCtlTable(3) rmon.dsmonMib(26).dsmonObjects(1).dsmonHostObjects(4).dsmonHostTopNTable(4) Per-host statistics collection tables	RFC 3287 (DSMON-MIB)
	rmon.dsmonMib(26).dsmonObjects(1).dsmonCapsObjects(5).dsmonCapabilities(1) DSMON capabilities variable	RFC 3287 (DSMON-MIB)
	rmon.dsmonMib(26).dsmonObjects(1).dsmonMatrixObjects(6).dsmonMatrixCtlTable(1) rmon.dsmonMib(26).dsmonObjects(1).dsmonMatrixObjects(6).dsmonMatrixSDTable(2) rmon.dsmonMib(26).dsmonObjects(1).dsmonMatrixObjects(6).dsmonMatrixDSTable(3) rmon.dsmonMib(26).dsmonObjects(1).dsmonMatrixObjects(6).dsmonMatrixTopNCtlTable(4) rmon.dsmonMib(26).dsmonObjects(1).dsmonMatrixObjects(6).dsmonMatrixTopNTable(5) Matrix statistics collection tables	RFC 3287 (DSMON-MIB)
Supervisor Engine	...ciscoMgmt(9).ciscoNbarProtocolDiscoveryMIB(244).cnpdMIBObjects(1).cnpdStatus(1) Indicates per interface whether nbar protocol discovery is enabled.	CISCO-NBAR-PROTOCOL-DISCOVER-MIB

Table B-1 Supervisor Engine Module and NAM RMON Support (continued)

Module	Object Identifier (OID) and Description	Source
Supervisor Engine	...ciscoMgmt(9).ciscoNbarProtocolDiscoveryMIB(244).cnpdMIBObjects(1).cnpdAllStats(2)	CISCO-NBAR-PROTOCOL-DISCOVER-MIB
	Statistics per interface for nbar protocol discovery.	
Network Analysis	...mib-2(1).entityMIB(47).entityMIBObjects(1).entityPhysical(1).entPhysicalTable(1)	RFC 2737 (ENTITY-MIB)
	Entity physical description.	
Network Analysis	...mib-2(1).entityMIB(47).entityMIBObjects(1).entityGeneral(4)	RFC 2737 (ENTITY-MIB)
Network Analysis	...ciscoMgmt(9).ciscoCdpMIB(23).ciscoCdpMIBObjects(1).cdpInterface(1)	CISCO-CDP-MIB
Network Analysis	...ciscoMgmt(9).ciscoCdpMIB(23).ciscoCdpMIBObjects(1).cdpCache(1)	CISCO-CDP-MIB
Network Analysis	...ciscoMgmt(9).ciscoCdpMIB(23).ciscoCdpMIBObjects(1).cdpGlobal(3)	CISCO-CDP-MIB
Supervisor Engine	...ciscoMgmt(9).ciscoProcessMIB(109).ciscoProcessMIBObjects(1).cpmCPU(1).cpmCPUTotalTable(10).cpmCPUTotalEntry(1)	CISCO-PROCESS-MIB
	CPU Statistics	
Supervisor Engine	...cisco(9).workgroup(5).ciscoStackMib(1).systemGrp(1).sysTrafficPeak(19)	CISCO-STACK-MIB
	Peak traffic meter value	
Supervisor Engine	..cisco(9).workgroup(5).ciscoStackMib(1).systemGrp(1).sysTrafficPeakTime(20)	CISCO-STACK-MIB
	Time since last peak traffic meter value occurred.	
Supervisor Engine	...ciscoMgmt(9).ciscoMemoryPoolMIB(48).ciscoMemoryPoolEntry(1)	CISCO-MEMORY-POOL-MIB
	Free and Largest block of contiguous memory	
Supervisor Engine	...mgmt(20).mib-2(1).entityMIB(47).entityMIBObjects(1).entityPhysical(1)	ENTITY-MIB
	Text description of physical entity.	
Supervisor Engine	...ciscoMgmt(9).ciscoEnvMonMib(13).ciscoEnvMonObjects(10)	CISCO-ENVMON-MIB
	Power, Temperature and Fan Status	

Table B-1 *Supervisor Engine Module and NAM RMON Support (continued)*

Module	Object Identifier (OID) and Description	Source
Supervisor Engine	...cisco(9).workgroup(5).ciscoStackMIB(1).ciscoStatckMIBConformance(31).ciscoStaticMIBGroups(20.chassisGroup(3)	CISCO-STACK-MIB
	Collection of objects providing information about the chassis of the device.	
Supervisor Engine	...ciscoMgmt(9).ciscoCat6kCrossbarMIB(217).ciscoCat6kXbarMIBObjects(1)	CISCO-CAT6K-CROSSBAR-MIB
	Crossbar statistics.	
Supervisor Engine	...ciscoMgmt(9).ciscoMIBObjects(1).cseMIBObjects(1).cseTcamUsage(9).cseTcamUsageTable(1).cseTcamUsageEntry(1)	CISCO-SWITCH-ENGINE
	Description of the resource type, total amount of TCAM allocated for that type as well as the amount of allocated resource that has been used up.	

