



Cisco CallManager Performance Counters, RTMT, and CISCO-CCM-MIB

This appendix contains tables that describe the related counter information for Microsoft PerfMon, Real-Time Monitoring Tool (RTMT), and CISCO-CCM-MIB.

For a complete list, including descriptions, of performance objects and counters, see [Appendix C, “Performance Objects and Counters.”](#)

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Table A-1 Phone Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device	PerfMon	RTMT	CISCO-CCM-MIB
		<p>RTMT tables contain information such as IP address, registration status, model type, and DN.</p>	<p>Simple Network Management Protocol (SNMP) tables contain information such as IP address, registration status, and model type.</p>
<p>Cisco IP Phone (12 SP+, 30 VIP, 7910, 7940, 7960, 30SP+, 12SP, 12S, 7935)</p>	<p>Each registered Cisco IP Phone increments Cisco CallManager/RegisteredHardware Phones by one and creates one instance of Cisco phones.</p>	<p>RTMT search, based on registered phones for a specific node, should return the same number of devices as Cisco CallManager/RegisteredHardware Phones perfmon counter. RTMT phone table includes one entry for each registered, unregistered, or rejected Cisco IP Phone.</p>	<p>Number of registered phones in ccmPhoneTable should match Cisco CallManager/RegisteredHardware Phones perfmon counter. The ccmActivePhones and ccmRegisteredPhones counters should also match Cisco CallManager/RegisteredHardware Phones performance objects. The ccmPhoneTable includes one entry for each registered, unregistered, or rejected Cisco IP Phone.</p>

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device	PerfMon	RTMT	CISCO-CCM-MIB
		RTMT tables contain information such as IP address, registration status, model type, and DN.	SNMP tables contain information such as IP address, registration status, and model type.
			The <code>ccmRegisteredGateways</code> , <code>ccmUnregistered</code> gateways, and <code>ccmRejectedGateways</code> keep track of the number of registered gateway devices or ports, number of unregistered gateway devices or ports, and number of rejected gateway devices or ports, respectively.
A gateway may contain more than one device or port. Each device or port individually registers with Cisco CallManager. Cisco CallManager generates alarms at the device or port level.	Cisco CallManager/RegisteredMGCPGateway and Cisco CallManager/RegisteredAnalog Access performance counters represent the number of registered gateways. Cisco MGCP FXS Device, Cisco MGCP FXO Device, Cisco MGCP PRI Device, or Cisco MGCP T1CAS Device objects track device- or port-level information.	RTMT gateway table, based on Cisco CallManager alarms, contains device- or port-level information. Each registered, unregistered, or rejected device or port has one entry in RTMT gateway table. The VG200 with two FXS ports and one T1 port has three entries in RTMT gateway table.	The <code>ccmGatewayTable</code> , based on Cisco CallManager alarms, contains device- or port-level information. Each registered, unregistered, or rejected device or port has one entry in <code>ccmGatewayTable</code> . The VG200 with two FXS ports and one T1 port has three entries in <code>ccmGatewayTable</code> . The <code>ccmActiveGateway</code> and <code>ccmInActiveGateway</code> counters track number of active (registered) and lost contact with (unregistered or rejected) gateway devices or ports.

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
Cisco IOS GW (Cisco 362X/364X/366X and Cisco VG200) (Only when configured as MGCP)	Each registered Cisco IOS GW increments Cisco CallManager/RegisteredMGCP Gateway by one and also creates one instance of Cisco MGCP Gateways. When only one device or port is registered to Cisco CallManager, then Cisco CallManager considers the gateway registered. The VG200 with two FXS ports and one T1 port increments Cisco CallManager/RegisteredMGCP Gateway exactly by one when one, two, or all of its devices or ports are registered to Cisco CallManager.	RTMT tracks these gateways at the device or port level. A VG200 gateway with two FXS ports and one T1 port will have three entries in the RTMT gateway device table.	SNMP tracks these gateways at the device or port level. A VG200 gateway with two FXS ports and one T1 port will have three entries in the CCM MIB ccmGatewayTable.
FXS	Each registered FXS port in Cisco IOS Gateway creates one instance of the Cisco MGCP FXS Device object.	The RTMT gateway device table stores each FXS port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each FXS port as one device. Based on registration status, ccmActiveGateway, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
- FXO	Each registered FXO port in Cisco IOS Gateway creates one instance of Cisco MGCP FXO Device.	The RTMT gateway device table stores each FXO port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each FXO port as one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
- T1-PRI / E1-PRI	Each registered T1/E1 PRI port in Cisco IOS Gateway creates one instance of Cisco MGCP PRI Device.	The RTMT gateway device table stores each T1/E1 PRI port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each T1/E1 PRI port as one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
- T1-CAS	Each registered T1-CAS port in Cisco IOS Gateway creates one instance of Cisco MGCP T1CAS Device.	The RTMT gateway device table stores each T1 CAS port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each T1-CAS port as one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
<p>Cisco Catalyst 4000 Access Gateway Module/Cisco Catalyst 4224 Voice Gateway Switch</p>	<p>Each registered Catalyst 4000 Access Gateway Module/Switch increments Cisco CallManager/RegisteredMGCP Gateway and creates one instance of Cisco MGCP Gateways. When only one device or port is registered to Cisco CallManager, the Cisco CallManager considers the gateway registered. The Cisco Catalyst 4000 Access Gateway Module with two FXS ports and one T1 port will increment Cisco CallManager/RegisteredMGCPGateway exactly by one when one, two, or all of its devices or ports are registered with Cisco CallManager.</p>	<p>RTMT tracks these gateways at the device or port level. A Cisco Catalyst 4000 Access Gateway Module with two FXS ports and one T1 port will have three entries in the RTMT gateway device table.</p>	<p>SNMP tracks these gateways at the device or port level. A Cisco Catalyst 4000 Access Gateway Module with two FXS ports and one T1 port will have three entries in the CCM MIB ccmGatewayTable.</p>

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
- FXS	Each registered FXS port creates one instance of Cisco MGCP FXS Device.	The RTMT gateway device table stores each FXS port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each FXS port as one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
- FXO	Each registered FXO port creates one instance of Cisco MGCP FXO Device.	The RTMT gateway device table stores each FXO port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable captures each FXO port, which is considered one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
- T1/E1 PRI	Each registered FXO port creates one instance of Cisco MGCP PRI Device.	The RTMT gateway device table stores each T1/E1PRI port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each T1/E1 PRI port as one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
- T1-CAS	Each registered FXO port creates one instance of Cisco MGCP T1CAS Device.	The RTMT gateway device table stores each T1-CAS port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each T1-CAS port as one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
WS-4616-FXS (Each WS-4616-FXS contains eight FXS ports and behaves like eight individual devices.)	See the preceding FXS section.	See the preceding FXS section.	See the preceding FXS section.
WS-X6608-E1 (has eight individual Cisco Catalyst 6000 E1 VoIP Gateways)			
Cisco Catalyst 6000 E1 VoIP Gateway (E1-PRI)	Each registered Cisco Catalyst 6000 E1 VoIP Gateway increments Cisco CallManager/RegisteredMGCPGateway counter and creates one instance of Cisco MGCP PRI Device.	The RTMT gateway device table stores each Cisco Catalyst 6000 E1 VoIP Gateway as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco Catalyst 6000 E1 VoIP Gateway as one device. Based on the registration status, ccmActiveGateways, ccmInActiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
WS-X6608-T1 (has eight individual Cisco Catalyst 6000 T1 VoIP Gateways)			

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
Cisco Catalyst 6000 T1 VoIP Gateway (T1-PRI)	Each registered Cisco Catalyst 6000 T1 VoIP Gateway increments Cisco CallManager/RegisteredMGCPGateway counter and creates one instance of Cisco MGCP PRI Device.	The RTMT gateway device table stores each Cisco Catalyst 6000 T1 VoIP Gateway as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco Catalyst 6000 T1 VoIP Gateway as one device. Based on the registration status, ccmActiveGateways, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
Cisco Catalyst 6000 T1 VoIP Gateway (T1-CAS)	Each registered Cisco Catalyst 6000 T1 VoIP Gateway increments Cisco CallManager/RegisteredMGCPGateway counter and creates one instance of Cisco MGCP T1CAS Device.	The RTMT gateway device table stores each Cisco Catalyst 6000 T1 VoIP Gateway port as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco Catalyst 6000 T1 VoIP Gateway port as one device. Based on the registration status, ccmActiveGateways, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
Cisco Catalyst 6000 24 Port FXS Analog Interface Module.	Each registered Cisco Catalyst 6000 24 Port FXS Analog Interface Module increments Cisco CallManager/RegisteredMGCPGateway counter by one and creates one instance of Cisco MGCP Gateways. It also creates 24 instances of the Cisco MGCP FXS Device object to track status of each of the 24 ports.	The RTMT gateway device table stores each Cisco Catalyst 6000 24 Port FXS Analog Interface Module as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco Catalyst 6000 24 Port FXS Analog Interface Module as one device. Based on the registration status, ccmActiveGateways, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
Cisco Access Digital Trunk Gateway DE-30+ (PRI)	Each registered Cisco DE-30+ Gateway increments Cisco CallManager/RegisteredMGCPGateway by one and creates one instance each of Cisco MGCP PRI Device and Cisco MGCP Gateways.	The RTMT gateway device table stores each Cisco DE-30+ Gateway as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco DE-30+ Gateway as one device. Based on the registration status, ccmActiveGateways, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
Cisco Access Digital Trunk Gateway DT-24+ (T1-PRI)	Each registered Cisco DE-24+ Gateway increments Cisco CallManager/RegisteredMGCPGateway by one and creates one instance each of Cisco MGCP PRI Device and Cisco MGCP Gateways.	The RTMT gateway device table stores each Cisco DT-24+ Gateway as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco DT-24+ Gateway as one device. Based on the registration status, ccmActiveGateways, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.

Table A-2 Gateway Information for Performance Counters, RTMT, and CISCO-CCM-MIB (continued)

Device	PerfMon	RTMT	CISCO-CCM-MIB
Cisco Access Digital Trunk Gateway DT-24+ (T1-CAS)	Each registered Cisco DE-24+ Gateway increments Cisco CallManager/RegisteredMGCPGateway by one and creates one instance each of Cisco MGCP T1CAS Device and Cisco MGCP Gateways.	The RTMT gateway device table stores each Cisco DT-24+ Gateway as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco DT-24+ Gateway as one device. Based on the registration status, ccmActiveGateways, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.
Cisco AS/AT (2/4/8)	Each registered Cisco AS/AT gateway increments Cisco CallManager/RegisteredAnalogAccess counter by one and creates one instance of Cisco Analog Access.	The RTMT gateway device table stores each Cisco AS/AT gateway as one device. RTMT can search and display devices in the table.	The ccmGatewayTable stores each Cisco AS/AT gateway as one device. Based on the registration status, ccmActiveGateways, ccmInactiveGateways, ccmRegisteredGateways, ccmUnregisteredGateways, and ccmRejectedGateways counters get updated.

Table A-3 H.323 Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device Description	Perfmon	RTMT	CISCO-CCM-MIB
		RTMT tables contain information such as IP address, registration status, model type, and DN.	The gatekeeper information is available in the ccmH.323DeviceTable as part of the H.323 Trunk information.
H.323 phone, H.323 gateway (H.323 phone and gateway do not register with Cisco CallManager. Cisco CallManager generates H.323Started alarm when it is ready to handle calls for the indicated H.323 phone and gateway.)	When Cisco CallManager is ready to handle calls for the indicated H.323 device, it creates one instance of Cisco H.323 Perfmon object for each H.323 phone or gateway.	When Cisco CallManager is ready to handle calls for the indicated H.323 device, each H.323 device has one entry in RTMT H.323 table. RTMT search based on H.323 devices should return same number of devices as the number of instances of Cisco H.323 Perfmon object.	The ccmH.323DeviceTable has one entry for each H.323 device.
H.323 gatekeeper (Cisco CallManager considers H.323 gatekeeper registered when Cisco CallManager successfully registers with H.323 gatekeeper.)		The RTMT H.323 table stores each H.323 gatekeeper as a device.	

Table A-4 Voice-Mail Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device Description	Perfmon	RTMT	CISCO-CCM-MIB
		RTMT tables contain information such as IP address, registration status, model type, and DN.	SNMP tables contain information such as IP address, registration status, and model type.
Cisco uOne, ActiveVoice	Each registered Cisco uOne/Active Voice increments Cisco CallManager/RegisteredOtherStation Devices counter and creates one instance of Cisco Phones object.	Each Cisco uOne/Active Voice device has one device in RTMT Voice Messaging table.	The ccmVoiceMailDeviceTable has one entry for each voice-messaging device. Based on the registration status, the ccmRegisteredVoiceMailDevices, ccmUnregisteredVoiceMailDevices, and ccmRejectedVoiceMailDevices counters in the Cisco CallManager MIB will be updated.

Table A-5 CTI Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device Description	Perfmon	RTMT	CISCO-CCM-MIB
		<p>RTMT tables contain information such as IP address, registration status, model type, and DN.</p>	<p>SNMP tables contain information such as IP address, registration status, and model type.</p> <p>The ccmCTIDeviceTable stores each CTI device as one device.</p>
<p>CTI Route Point, CTI Port</p>	<p>Each registered CTI device increments Cisco CallManager/RegisteredOtherStation Devices and also creates one instance of Cisco phones.</p>	<p>The RTMT CTI table stores each CTI device as one device.</p>	<p>Based on the registration status, the ccmRegisteredCTIDevices, ccmUnregisteredCTIDevices, and ccmRejectedCTIDevices counters in the Cisco CallManager MIB get updated.</p>

Table A-6 Conference Bridge Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device Description	Perfmon	RTMT	CISCO-CCM-MIB
		RTMT tables contain information such as IP address, registration status, model type, and DN.	SNMP tables contain information such as IP address, registration status, and model type.
Conference bridge devices	Various counters calculate and capture number of conference resources. One conference bridge resource requires at least three streams from single conference bridge device. You can configure each conference bridge to have many streams.	The RTMT Media table stores each conference bridge device as one device.	The ccmMediaDevice Table stores each conference bridge device as one device.

Table A-7 MTP Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device Description	Perfmon	RTMT	CISCO-CCM-MIB
		RTMT tables contain information such as IP address, registration status, model type, and DN.	SNMP tables contain information such as IP address, registration status, and model type.
MTP devices	Various counters calculate and capture number of MTP resources. One MTP resource requires two streams from single MTP device. You can configure an MTP device to have many streams. For an MTP device that is configured with 48 streams, Cisco CallManager creates 24 MTP resources.	The RTMT Media table stores each MTP device as one device.	The ccmMediaDevice Table stores each MTP device as one device.
Cisco Annunciator devices	Various counters calculate and capture number of annunciator resources.	The RTMT Media table stores each annunciator device as one device.	The ccmMediaDeviceTable stores each annunciator device as one device.
Cisco Hunt Lists	Various counters calculate and capture data about Cisco hunt lists.	The RTMT Hunt List table stores each hunt list as one entry.	The CCM MIB does not contain the hunt list information.
Cisco SIP Trunk	Various counters calculate and capture data about Cisco SIP Trunk device.	The RTMT SIP Trunk table stores each SIP Trunk device as one device.	The CCMSIPDeviceTable stores each SIP Trunk as one device.

Table A-8 MOH Information for Performance Counters, RTMT, and CISCO-CCM-MIB

Device Description	Perfmon	RTMT	CISCO-CCM-MIB
		RTMT tables contain information such as IP address, registration status, model type, and DN.	SNMP tables contain information such as IP address, registration status, and model type.
MOH devices	Various counters calculate and capture number of MOH resources. One MOH resource requires one stream. You can configure an MOH device to have multiple streams. For an MOH device that is configured with 48 streams, Cisco CallManager creates 48 MOH resources. Each MOH device creates one instance of Cisco MOH Device.	Each MOH device has one entry in RTMT Media table. RTMT search based on registered MOH devices should return same number of devices as the number of instances of Cisco MOH Device Perfmon object.	The ccmMediaDeviceTable has one entry for each MOH device.

Where to Find More Information

Related Topics

- [Chapter 9, “Real-Time Monitoring Tool”](#)
- [Chapter 12, “Microsoft Performance”](#)
- [Chapter 18, “Simple Network Management Protocol”](#)
- [Appendix C, “Performance Objects and Counters”](#)
- [Chapter 12, “Real-Time Monitoring Configuration,”](#) *Cisco CallManager Serviceability Administration Guide*

Where to Find More Information

- [Chapter 23, “Microsoft Performance,”](#) *Cisco CallManager Serviceability Administration Guide*
- [Chapter 31, “Simple Network Management Protocol Configuration,”](#) *Cisco CallManager Serviceability Administration Guide*