APPENDIX B

Performance Objects and Counters for Cisco Unified Communications Manager

This appendix provides information on Cisco Unified Communications Manager-related objects and counters. For information on specific counters, click the text in the following list to go to the object:

Tip For the latest performance monitoring counters, objects, and counter descriptions that are available for Cisco Unified Communications Manager, access the performance monitoring counters in the Cisco Unified Real-Time Monitoring Tool. In RTMT, you can review a counter description, as described in the "Using Performance Queries to Add a Counter" section on page 6-3.

Cisco Analog Access

The Cisco Analog Access object provides information about registered Cisco Analog Access gateways. Table B-1 contains information about Cisco Analog Access counters.

Table B-1 Cisco Analog Access

Counters	Counter Description
OutboundBusyAttempts	This counter represents the total number of times that Cisco Unified Communications Manager attempts a call through the analog access gateway when all ports were busy.
PortsActive	This counter represents the number of ports that are currently in use (active). A port appears active when a call is in progress on that port.
PortsOutOfService	This counter represents the number of ports that are currently out of service. Counter applies only to loop-start and ground-start trunks.

Cisco Annunciator Device

The Cisco Annunciator Device object provides information about registered Cisco annunciator devices. Table B-2 contains information about Cisco Annunciator counters.

Table B-2 Cisco Annunciator Device

Counters	Counter Description
OutOfResources	This counter represents the total number of times that Cisco Unified Communications Manager attempted to allocate an annunciator resource from an annunciator device and failed; for example, because all resources were already in use.
ResourceActive	This counter represents the total number of annunciator resources that are currently active (in use) for an annunciator device.
ResourceAvailable	This counter represents the total number of resources that are not active and are still available to be used at the current time for the annunciator device.
ResourceTotal	This counter represents the total number of annunciator resources that are configured for an annunciator device.

Cisco Call Restriction

The Cisco Call Restriction object provides information about the number of failures that result due to logical partitioning policy restrictions. Table B-3 contains information about Cisco Call Restriction counters.

Table B-3 Cisco Call Restriction

Counters	Counter Description
AdHocConferenceFailures	This counter represents the number of attempts that failed to add a participant to an Ad Hoc Conference because the call path between the geolocation of the devices already in conference and the device being invited to the conference was restricted due to a logical partition policy.
BasicCallFailures	This counter represents the number of basic calls that have failed because of logical partition policy restrictions between the geolocations of the called and calling parties. A basic call is any call that does not utilize supplementary services such as transfer, forward, and so on.
ForwardingFailures	This counter represents the number of attempts to forward an incoming call which failed because of a logical partition policy restriction between the geolocations of the two parties involved.
LogicalPartitionFailuresTotal	This counter represents the total number of call attempts that have failed because of a restriction of calls between geolocations of the calling and called parties. This includes the number of failures for Transfer, Ad Hoc Conference, Meet-Me Conference, PickUp, Call Park, Shared Lines and Basic Calls.
MeetMeConferenceFailures	This counter represents the number of attempts that failed to add a participant to a Meet-Me conference because the call path between the geolocation of the devices already in conference and the device attempting to join the conference was restricted due to a logical partition policy.

Table B-3 Cisco Call Restriction (continued)

Counters	Counter Description
MidCallFailures	This counter represents the number of calls that have failed because of a restriction between the geolocations of the called or connected parties after the initial policy check.
ParkRetrievalFailures	This counter represents the number of attempts to perform a Call Park operation that failed because the device that was attempting to retrieve the call had a logical partition policy restriction with the geolocation of the parked party.
PickUpFailures	This counter represents the number of attempts to perform a PickUp operation that failed because the device on which the pickup was being attempted had a logical partition policy restriction with the geolocation of the calling device.
SharedLineFailures	This counter represents the number of attempts to use a shared line which failed because the caller or callee has a logical partition policy restriction with the geolocation of the devices having the shared lines.
TransferFailures	This counter represents the number of call transfer attempts that failed due to restriction of calls between the geolocation of the transferred party and the transferred destination.

Cisco CallManager

The Cisco CallManager object provides information about calls, applications, and devices that are registered with the Cisco Unified Communications Manager. Table B-4 contains information about Cisco CallManager counters.

Table B-4 Cisco CallManager

Counters	Counter Description
AnnunciatorOutOfResources	This counter represents the total number of times that Cisco Unified Communications Manager attempted to allocate an annunciator resource from those that are registered to a Cisco Unified Communications Manager when none were available.
AnnunciatorResourceActive	This counter represents the total number of annunciator resources that are currently in use on all annunciator devices that are registered with a Cisco Unified Communications Manager.
AnnunciatorResourceAvailable	This counter represents the total number of annunciator resources that are not active and are currently available.
AnnunciatorResourceTotal	This counter represents the total number of annunciator resources that are provided by all annunciator devices that are currently registered with Cisco Unified Communications Manager.
AuthenticatedCallsActive	This counter represents the number of authenticated calls that are currently active (in use) on Cisco Unified Communications Manager. An authenticated call designates one in which all the endpoints that are participating in the call are authenticated. An authenticated phone uses the Transport Layer Security (TLS) authenticated Skinny protocol signaling with Cisco Unified Communications Manager.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
AuthenticatedCallsCompleted	This counter represents the number of authenticated calls that connected and subsequently disconnected through Cisco Unified Communications Manager. An authenticated call designates one in which all the endpoints that are participating in the call are authenticated. An authenticated phone uses the TLS authenticated Skinny protocol signaling with Cisco Unified Communications Manager.
AuthenticatedPartiallyRegisteredPhone	This counter represents the number of partially registered, authenticated SIP phones.
AuthenticatedRegisteredPhones	This counter represents the total number of authenticated phones that are registered to Cisco Unified Communications Manager. An authenticated phone uses the TLS authenticated Skinny protocol signaling with Cisco Unified Communications Manager.
BRIChannelsActive	This counter represents the number of BRI voice channels that are currently in an active call on this Cisco Unified Communications Manager.
BRISpansInService	This counter represents the number of BRI spans that are currently available for use.
CallManagerHeartBeat	This counter represents the heartbeat of Cisco Unified Communications Manager. This incremental count indicates that Cisco Unified Communications Manager is up and running. If the count does not increment, that indicates that Cisco Unified Communications Manager is down.
CallsActive	This counter represents the number of voice or video streaming connections that are currently in use (active); in other words, the number of calls that actually have a voice path that is connected on Cisco Unified Communications Manager.
CallsAttempted	This counter represents the total number of attempted calls. An attempted call occurs any time that a phone goes off hook and back on hook, regardless of whether any digits were dialed, or whether it connected to a destination. The system considers some call attempts during feature operations (such as transfer and conference) to be attempted calls.
CallsCompleted	This counter represents the number of calls that were actually connected (a voice path or video stream was established) through Cisco Unified Communications Manager. This number increases when the call terminates.
CallsInProgress	This counter represents the number of voice or video calls that are currently in progress on Cisco Unified Communications Manager, including all active calls. When a phone that is registered with Skinny Client Control Protocol (SCCP) goes off hook, the CallsInProgress progress counter increments. until it goes back on hook. For Cisco Unified IP Phones 7902, 7905, 7912, 7940, and 7960 that register with SIP, the CallsInProgress counter increments when the dial softkey is pressed. For all other phones that are running SIP, the CallsInProgress counter increments when the first digit is pressed. When all voice or video calls that are in progress are connected, the number of CallsInProgress represents the number of CallsActive. The counter decreases by one when a phone goes back on hook.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
CM_MediaTermPointsRequestsThrottled	This counter represents the total number of media termination point (MTP) resource requests that have been denied due to throttling (a resource from this MTP was not allocated because, as specified by the Cisco CallManager service parameter, MTP and Transcoder Resource Throttling Percentage, the MTP was being utilized beyond the configured throttle percentage). This counter increments each time a request for an MTP on this Cisco Unified Communications Manager (Unified CM) node is requested and denied due to MTP throttling and reflects a running total since the start of the Cisco CallManager service.
CM_TranscoderRequestsThrottled	This counter represents the total number of transcoder resource requests that have been denied due to throttling (a resource from this transcoder was not allocated because, as specified by the Cisco CallManager service parameter MTP and Transcoder Resource Throttling Percentage, the transcoder was being utilized beyond the configured throttle percentage). This counter increments each time a request for a transcoder on this Cisco Unified Communications Manager (Unified CM) node is requested and denied due to transcoder throttling and reflects a running total since the start of the Cisco CallManager service
EncryptedCallsActive	This counter represents the number of encrypted calls that are currently active (in use) on this Cisco Unified Communications Manager. An encrypted call represents one in which all the endpoints that are participating in the call are encrypted.
EncryptedCallsCompleted	This counter represents the number of encrypted calls that were connected and subsequently disconnected through this Cisco Unified Communications Manager. An encrypted call represents one in which all the endpoints that are participating in the call are encrypted.
EncryptedPartiallyRegisteredPhones	This counter represents the number of partially registered, encrypted SIP phones.
EncryptedRegisteredPhones	This counter represents the total number of encrypted phones that are registered on this Cisco Unified Communications Manager.
FXOPortsActive	This counter represents the number of FXO ports that are currently in use (active) on a Cisco Unified Communications Manager.
FXOPortsInService	This counter represents the number of FXO ports that are currently available for use in the system.
FXSPortsActive	This counter represents the number of FXS ports that are currently in use (active) on a Cisco Unified Communications Manager.
FXSPortsInService	This counter represents the number of FXS ports that are currently available for use in the system.
HuntListsInService	This counter represents the number of hunt lists that are currently in service on Cisco Unified Communications Manager.
HWConferenceActive	This counter represents the total number of hardware conference resources that are provided by all hardware conference bridge devices that are currently registered with Cisco Unified Communications Manager.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
HWConferenceCompleted	This counter represents the total number of conferences that used a hardware conference bridge (hardware-based conference devices such as Cisco Catalyst 6000, Cisco Catalyst 4000, Cisco VG200, Cisco series 26xx and 36xx) that is allocated from Cisco Unified Communications Manager and that have completed, which means that the conference bridge has been allocated and released. A conference activates when the first call connects to the bridge. The conference completes when the last call disconnects from the bridge.
HWConferenceOutOfResources	This counter represents the total number of times that Cisco Unified Communications Manager attempted to allocate a hardware conference resource from those that are registered to a Cisco Unified Communications Manager when none was available.
HWConferenceResourceActive	This counter represents the total number of conference resources that are in use on all hardware conference devices (such as Cisco Catalyst 6000, Catalyst 4000, Cisco VG200, Cisco series 26xx and 36xx) that are registered with Cisco Unified Communications Manager. System considers conference to be active when one or more calls are connected to a bridge.
HWConferenceResourceAvailable	This counter represents the number of hardware conference resources that are not in use and that are available to be allocated on all hardware conference devices (such as Cisco Catalyst 6000, Cisco Catalyst 4000, Cisco VG200, Cisco series 26xx and 36xx) that are allocated fromCisco Unified Communications Manager and that have been completed, which means that the conference bridge has been allocated and released. A conference activates when the first call connects to the bridge. The conference completes when the last call disconnects from the bridge.
HWConferenceResourceTotal	This counter represents the number of active conferences on all hardware conference devices that are registered with Cisco Unified Communications Manager.
InitializationState	This counter represents the current initialization state of Cisco Unified Communications Manager. Cisco Unified Communications Manager includes the following initialization state values: 1-Database; 2-Regions; 3-Locations; 4-QoS Policy; 5-Time Of Day; 6-AAR Neighborhoods; 7-Digit Analysis; 8-Route Plan; 9-Call Control; 10-RSVP Session Manager; 11-Supplementary Services; 12-Directory; 13-SDL Link; 14-Device; 100-Initialization Complete. Not all states display when this counter is used. This does not indicate that an error occurred; it simply indicates that the state(s) initialized and completed within the refresh period of the performance monitor.
LocationOutOfResources	This counter represents the total number of times that a call through Locations failed due to the lack of bandwidth.
MOHMulticastResourceActive	This counter represents the total number of multicast MOH resources that are currently in use (active) on all MOH servers that are registered with a Cisco Unified Communications Manager.
MOHMulticastResourceAvailable	This counter represents the total number of active multicast MOH connections that are not being used on all MOH servers that are registered with a Cisco Unified Communications Manager.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
MOHOutOfResources	This counter represents the total number of times that the Media Resource Manager attempted to allocate an MOH resource when all available resources on all MOH servers that are registered with a Cisco Unified Communications Manager were already active.
MOHTotalMulticastResources	This counter represents the total number of multicast MOH resources or connections that are provided by all MOH servers that are currently registered with a Cisco Unified Communications Manager.
MOHTotalUnicastResources	This counter represents the total number of unicast MOH resources or streams that are provided by all MOH servers that are currently registered with Cisco Unified Communications Manager. Each MOH unicast resource uses one stream.
MOHUnicastResourceActive	This counter represents the total number of unicast MOH resources that are currently in use (active) on all MOH servers that are registered with Cisco Unified Communications Manager. Each MOH unicast resource uses one stream.
MOHUnicastResourceAvailable	This counter represents the total number of unicast MOH resources that are currently available on all MOH servers that are registered with Cisco Unified Communications Manager. Each MOH unicast resource uses one stream.
MTPOutOfResources	This counter represents the total number of times that Cisco Unified Communications Manager attempted but failed to allocate an MTP resource from one MTP device that is registered with Cisco Unified Communications Manager. This also means that no transcoders were available to act as MTPs.
MTPResourceActive	This counter represents the total number of MTP resources that are currently in use (active) on all MTP devices that are registered with a Cisco Unified Communications Manager. Each MTP resource uses two streams. An MTP in use represents one MTP resource that has been allocated for use in a call.
MTPResourceAvailable	This counter represents the total number of MTP resources that are not in use and are available to be allocated on all MTP devices that are registered with Cisco Unified Communications Manager. Each MTP resource uses two streams. An MTP in use represents one MTP resource that has been allocated for use in a call.
MTPResourceTotal	This counter represents the total number of media termination point (MTP) resources that are provided by all MTP devices that are currently registered with Cisco Unified Communications Manager.
MTP_RequestsThrottled	This counter represents the total number of media termination point (MTP) resource requests that have been denied due to throttling (a resource from this MTP was not allocated because, as specified by the Cisco CallManager service parameter MTP and Transcoder Resource Throttling Percentage, the MTP was being utilized beyond the configured throttle percentage). This counter increments each time a resource is requested from this MTP and is denied due to throttling. This counter reflects a running total since the MTP device registered with the Cisco CallManager service.
PartiallyRegisteredPhone	This counter represents the number of partially registered phones that are running SIP.
PRIChannelsActive	This counter represents the number of PRI voice channels that are in an active call on a Cisco Unified Communications Manager.
PRISpansInService	This counter represents the number of PRI spans that are currently available for use.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
RegisteredAnalogAccess	This counter represents the number of registered Cisco analog access gateways that are registered with system. The count does not include the number of Cisco analog access ports.
RegisteredHardwarePhones	This counter represents the number of Cisco hardware IP phones (for example, Cisco Unified IP Phones 7960, 7940, 7910, and so on.) that are currently registered in the system.
RegisteredMGCPGateway	This counter represents the number of MGCP gateways that are currently registered in the system.
RegisteredOtherStationDevices	This counter represents the number of station devices other than Cisco hardware IP phones that are currently registered in the system (for example, Cisco IP SoftPhone, CTI port, CTI route point, Cisco voice-mail port).
SIPLineServerAuthorizationChallenges	This counter represents the number of authentication challenges for incoming SIP requests that the Cisco Unified Communications Manager server issued to phones that are running SIP. An authentication challenge occurs when a phone that is running SIP with Digest Authentication enabled sends a SIP line request to Cisco Unified Communications Manager.
SIPLineServerAuthorizationFailures	This counter represents the number of authentication challenge failures for incoming SIP requests from SIP phones to the Cisco Unified Communications Manager server. An authentication failure occurs when a SIP phone with Digest Authentication enabled sends a SIP line request with bad credentials to Cisco Unified Communications Manager.
SIPTrunkAuthorization	This counter represents the number of application-level authorization checks for incoming SIP requests that Cisco Unified Communications Manager has issued to SIP trunks. An application-level authorization check occurs when Cisco Unified Communications Manager compares an incoming SIP request to the application-level settings on the SIP Trunk Security Profile Configuration window in Cisco Unified Communications Manager Administration.
SIPTrunkAuthorizationFailures	This counter represents the number of application-level authorization failures for incoming SIP requests that have occurred on Cisco Unified Communications Manager SIP trunks. An application-level authorization failure occurs when Cisco Unified Communications Manager compares an incoming SIP request to the application-level authorization settings on the SIP Trunk Security Profile Configuration window in Cisco Unified Communications Manager Administration and finds that authorization for one or more of the SIP features on that window is not allowed.
SIPTrunkServerAuthenticationChallenges	This counter represents the number of authentication challenges for incoming SIP requests that Cisco Unified Communications Manager issued to SIP trunks. An authentication challenge occurs when a SIP trunk with Digest Authentication enabled sends a SIP request to Cisco Unified Communications Manager.
SIPTrunkServerAuthenticationFailures	This counter represents the number of authentication challenge failures that occurred for incoming SIP requests from SIP trunks to Cisco Unified Communications Manager. An authentication failure occurs when a SIP trunk with Digest Authentication enabled sends a SIP request with bad credentials to Cisco Unified Communications Manager.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
SWConferenceActive	This counter represents the number of active conferences on all software conference devices that are registered with Cisco Unified Communications Manager.
SWConferenceCompleted	This counter represents the total number of conferences that used a software conference bridge that was allocated from a Cisco Unified Communications Manager and that have been completed, which means that the conference bridge has been allocated and released. A conference activates when the first call connects to the bridge. The conference completes when the last call disconnects from the bridge.
SWConferenceOutOfResources	This counter represents the total number of times that Cisco Unified Communications Manager attempted to allocate a software conference resource from those that are registered to Cisco Unified Communications Manager when none were available. Counter includes failed attempts to add a new participant to an existing conference.
SWConferenceResourceActive	This counter represents the total number of conference resources that are in use on all software conference devices that are registered with Cisco Unified Communications Manager. The system considers a conference to be active when one or more calls connect to a bridge. One resource equals one stream.
SWConferenceResourceAvailable	This counter represents the number of new software-based conferences that can be started at the same time, for Cisco Unified Communications Manager. You must have a minimum of three streams available for each new conference. One resource equals one stream
SWConferenceResourceTotal	This counter represents the total number of software conference resources that are provided by all software conference bridge devices that are currently registered with Cisco Unified Communications Manager.
SystemCallsAttempted	This counter represents the total number of server-originated calls and attempted calls to the Unity message waiting indicator (MWI).
T1ChannelsActive	This counter represents the number of T1 CAS voice channels that are in an active call on a Cisco Unified Communications Manager.
T1SpansInService	This counter represents the number of T1 CAS spans that are currently available for use.
TLSConnectedSIPTrunks	This counter represents the number of SIP trunks that are configured and connected via Transport Layer Security (TLS).
TLSConnectedWSM	This counter represents the number of WSM Connectors that is configured and connected to Motorola WSM via Transport Layer Security (TLS).
TranscoderOutOfResources	This counter represents the total number of times that Cisco Unified Communications Manager attempted to allocate a transcoder resource from a transcoder device that is registered to a Cisco Unified Communications Manager when none was available.
TranscoderResourceActive	This counter represents the total number of transcoders that are in use on all transcoder devices that are registered with Cisco Unified Communications Manager. A transcoder in use represents one transcoder resource that has been allocated for use in a call. Each transcoder resource uses two streams.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
TranscoderResourceAvailable	This counter represents the total number of transcoders that are not in use and that are available to be allocated on all transcoder devices that are registered with Cisco Unified Communications Manager. Each transcoder resource uses two streams.
TranscoderResourceTotal	This counter represents the total number of transcoder resources that are provided by all transcoder devices that are currently registered with Cisco Unified Communications Manager.
VCBConferenceActive	This counter represents the total number of active video conferences on all video conference bridge devices that are registered with Cisco Unified Communications Manager.
VCBConferenceAvailable	This counter represents the total number of new video conferences on all video conference bridge devices that are registered with Cisco Unified Communications Manager.
VCBConferenceCompleted	This counter represents the total number of video conferences that used a video conference bridge that are allocated from Cisco Unified Communications Manager and that have been completed, which means that the conference bridge has been allocated and released. A conference activates when the first call connects to the bridge. The conference completes when the last call disconnects from the bridge.
VCBConferenceTotal	This counter represents the total number of video conferences that are supported on all video conference bridge devices that are registered with Cisco Unified Communications Manager.
VCBOutOfConferences	This counter represents the total number of times that Cisco Unified Communications Manager attempted to allocate a video conference resource from those that are registered to Cisco Unified Communications Manager when none was available.
VCBOutOfResources	This counter represents the total number of failed new video conference requests. A conference request can fail because, for example, the configured number of conferences is already in use.
VCBResourceActive	This counter represents the total number of video conference resources that are currently in use on all video conference devices that are registered with Cisco Unified Communications Manager.
VCBResourceAvailable	This counter represents the total number of video conference resources that are not active and are currently available.
VCBResourceTotal	This counter represents the total number of video conference resources that are provided by all video conference bridge devices that are currently registered with Cisco Unified Communications Manager.
VideoCallsActive	This counter represents the number of active video calls with active video streaming connections on all video conference bridge devices that are registered with Cisco Unified Communications Manager.
VideoCallsCompleted	This counter represents the number of video calls that were actually connected with video streams and then released.

Table B-4 Cisco CallManager (continued)

Counters	Counter Description
VideoOutOfResources	This counter represents the total number of times that Cisco Unified Communications Manager attempted to allocate a video-streaming resource from one of the video conference bridge devices that is registered to Cisco Unified Communications Manager when none was available.
XCODE_RequestsThrottled	This counter represents the total number of transcoder resource requests that have been denied due to throttling (a resource from this transcoder was not allocated because, as specified by the Cisco CallManager service parameter MTP and Transcoder Resource Throttling Percentage, the transcoder was being utilized beyond the configured throttle percentage). This counter increments each time a resource is requested from this transcoder and is denied due to throttling. This counter reflects a running total since the transcoder device registered with the Cisco CallManager service.

Cisco CallManager System Performance

The Cisco CallManager System Performance object provides system performance information about Cisco Unified Communications Manager. Table B-5 contains information about Cisco CallManager system performance counters.

Table B-5 Cisco CallManager System Performance

Counters	Counter Description
AverageExpectedDelay	This counter represents the current average expected delay before any incoming message gets handled.
CallsRejectedDueToICTThrottling	This counter represents the total number of calls that were rejected since the start of Cisco CallManager service due to Intercluster Trunk (ICT) call throttling. When the threshold limit of 140 calls per 5 seconds is met, the ICT will start throttling (rejecting) new calls. One cause for ICT call throttling occurs when calls across an ICT enter a route loop condition.
CallThrottlingGenericCounter3	This counter represents a generic counter that is used for call-throttling purpose.
CodeRedEntryExit	This counter indicates whether Cisco Unified Communications Manager has entered or exited a Code state (call-throttling mode). Valid values include 0 (Exit) and 1 (Entry).
CodeYellowEntryExit	This counter indicates whether Cisco Unified Communications Manager has entered or exited a Code Yellow state (call-throttling mode). Valid values include 0 (Exit) and 1 (Entry).
EngineeringCounter1	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
EngineeringCounter2	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
EngineeringCounter3	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
EngineeringCounter4	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.

Table B-5 Cisco CallManager System Performance (continued)

Counters	Counter Description
EngineeringCounter5	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
EngineeringCounter6	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
EngineeringCounter7	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
EngineeringCounter8	Do not use this counter unless directed by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
QueueSignalsPresent 1-High	This counter indicates the number of high-priority signals in the Cisco Unified Communications Manager queue. High-priority signals include timeout events, internal Cisco Unified Communications Manager keepalives, certain gatekeeper events, and internal process creation, among other events. A large number of high-priority events will cause degraded performance on Cisco Unified Communications Manager and result in slow call connection or loss of dial tone. Use this counter in conjunction with the QueueSignalsProcessed 1-High counter to determine the processing delay on Cisco Unified Communications Manager.
QueueSignalsPresent 2-Normal	This counter indicates the number of normal-priority signals in the Cisco Unified Communications Manager queue. Normal-priority signals include call-processing functions, key presses, on-hook and off-hook notifications, among other events. A large number of normal-priority events will cause degraded performance on Cisco Unified Communications Manager, sometimes resulting in delayed dial tone, slow call connection, or loss of dial tone. Use this counter in conjunction with the QueueSignalsProcessed 2-Normal counter to determine the call-processing delay on Cisco Unified Communications Manager. Remember that high-priority signals must complete before normal-priority signals begin to process, so check the high-priority counters as well to get an accurate picture of the potential delay.
QueueSignalsPresent 3-Low	This counter indicates the number of low-priority signals in the Cisco Unified Communications Manager queue. Low-priority signals include station device registration (except the initial station registration request message), among other events. A large number of signals in this queue could result in delayed device registration, among other events.
QueueSignalsPresent 4-Lowest	This counter indicates the number of lowest priority signals in the Cisco Unified Communications Manager queue. Lowest priority signals include the initial station registration request message during device registration, among other events. A large number of signals in this queue could result in delayed device registration, among other events.
QueueSignalsProcessed 1-High	This counter indicates the number of high-priority signals that Cisco Unified Communications Manager processes for each 1-second interval. Use this counter in conjunction with the QueueSignalsPresent 1-High counter to determine the processing delay on this queue.
QueueSignalsProcessed 2-Normal	This counter indicates the number of normal-priority signals that Cisco Unified Communications Manager processes for each 1-second interval. Use this counter in conjunction with the QueueSignalsPresent 2-Normal counter to determine the processing delay on this queue. Remember that high-priority signals get processed before normal-priority signals.

Table B-5 Cisco CallManager System Performance (continued)

Counters	Counter Description
QueueSignalsProcessed 3-Low	This counter indicates the number of low-priority signals that Cisco Unified Communications Manager processes for each 1-second interval. Use this counter in conjunction with the QueueSignalsPresent 3-Low counter to determine the processing delay on this queue. The number of signals processed gives an indication of how much device registration activity is being processed in this time interval.
QueueSignalsProcessed 4-Lowest	This counter indicates the number of lowest priority signals that Cisco Unified Communications Manager processes for each 1-second interval. Use this counter in conjunction with the QueueSignalsPresent 4-Lowest counter to determine the processing delay on this queue. The number of signals that are processed gives an indication of how many devices began the Cisco Unified Communications Manager registration process in this time interval.
QueueSignalsProcessed Total	This counter provides a sum total of all queue signals that Cisco Unified Communications Manager processes for each 1-second period for all queue levels: high, normal, low, and lowest.
SkinnyDevicesThrottled	This counter represents the total number of Skinny devices that are being throttled. A Skinny device gets throttled (asked to shut down and reregister) when the total number of events that the Skinny device generated exceeds the configured maximum threshold value (default value specifies 2000 events) within a 5-second interval.
ThrottlingSampleActivity	This counter indicates how many samples, out of the configured sample size, have non-zero averageExpectedDelay values. This counter resets when any sample has an averageExpectedDelay value of zero. This process repeats for each batch of samples. A batch represents the configured sample size.
TotalCodeYellowEntry	This counter indicates the number of times that Cisco Unified Communications Manager call processing enters the code yellow state. This counter remains cumulative from the start of the Cisco Unified Communications Manager process.

Cisco CTIManager

The Cisco CTI Manager object provides information about Cisco CTI Manager. Table B-6 contains information about Cisco CTIManager counters.

Table B-6 Cisco CTI Manager

Counters	Counter Description
CcmLinkActive	This counter represents the total number of active Cisco Unified Communications Manager links. CTI Manager maintains links to all active servers in a cluster, if applicable.
CTIConnectionActive	This counter represents the total number of CTI clients that are currently connected to the CTIManager. This counter increases by one when new connection is established and decreases by one when a connection is released. The CTIManager service parameter MaxCTIConnections determines the maximum number of active connections.

Table B-6 Cisco CTI Manager (continued)

Counters	Counter Description
DevicesOpen	This counter represents the total number of devices that are configured in Cisco Unified Communications Manager that CTI applications control and/or monitor. Devices include hardware IP phones, CTI ports, CTI route points, and so on.
LinesOpen	This counter represents the total number of lines that are configured in Cisco Unified Communications Manager that control and/or monitor CTI applications.
QbeVersion	This counter represents the version number of the Quick Buffer Encoding (QBE) interface that the CTIManager uses.

Cisco Dual-Mode Mobility

The Cisco Dual-Mode Mobility object provides information about the dual-mode mobility application on Cisco Unified Communications Manager. Table B-7 contains information about Cisco Dual-Mode Mobility counters.

Table B-7 Cisco Dual-Mode Mobility

Counters	Counter Description
CallsAnchored	This counter represents the number of calls that are placed or received on dual-mode phones that are anchored in Cisco Unified Communications Manager. The counter increments when a call is received from or placed to a dual-mode phone. The counter increments twice if a dual-mode phone calls another dual-mode phone.
DMMSRegistered	This counter represents the number of Dual-mode Mobile Station (DMMS) subscribers that are registered in the wireless LAN (WLAN).
FollowMeAborted	This counter represents the number of failed follow-me operations.
FollowMeAttempted	This counter represents the number of follow-me operations that Cisco Unified Communications Manager attempted. The counter increments when a SIP 302 - Moved Temporarily message is received from the Wireless Service Manager (WSM) and Cisco Unified Communications Manager redirects the call to the DMMS in WLAN.
FollowMeCompleted	This counter represents the number of follow-me operations that were successfully completed. The counter increments when the DMMS in WLAN answers the call and the media (voice path) is successfully established with the calling device.
FollowMeInProgress	This counter represents the number of follow-me operations that are currently in progress. The counter increments when a follow-me is attempted, and it decrements when the follow-me operation is aborted or completed.
H1HandOutAttempted	This counter represents the number of H1 hand-out operations that dual-mode phones attempt. The counter increments when Cisco Unified Communications Manager processes a call to the H1 number from a DMMS.
H1HandOutCompleted	This counter represents the number of successfully completed H1 hand-out operations The counter increments when the DMMS in WLAN successfully reestablishes a media (voice path).

Table B-7 Cisco Dual-Mode Mobility (continued)

Counters	Counter Description
H2HandOutCompleted	This counter represents the number of successfully completed H2 hand-out operations. The counter increments when the DMMS in WLAN successfully reestablishes a media (voice path).
H2HandOutsAttempted	This counter represents the number of H2 hand-out operations that dual-mode phones attempt. The counter increments when Cisco Unified Communications Manager receives a call to the H2 number from a DMMS.
HandInAborted	This counter represents the number of hand-in operations that failed.
HandInAttempted	This counter represents the number of hand-in operations that dual-mode phones attempt.
HandInCompleted	This counter represents the number of successfully completed hand-in operations. The counter increments when the DMMS in WLAN successfully reestablishes a media (voice path).
HandInInProgress	This counter represents the number of hand-in operations that are currently in progress. The counter increments when a hand-in is attempted, and the counter decrements when the hand-in is aborted or completed.
HandOutAborted	This counter represents the number of hand-out operations that failed.
HandOutInProgress	This counter represents the number of H1 and H2 hand-out operations that are currently in progress. The counter increments when a H1 or H2 hand-out is attempted, and it decrements when the hand-out is aborted or completed.

Cisco Extension Mobility

The Cisco Extension Mobility object provides information about the extension mobility application. Table B-8 contains information about Cisco Extension Mobility counters.

Table B-8 Cisco Extension Mobility Application

Counters	Counter Description
RequestsHandled	This counter represents the total number of HTTP requests that the extension mobility application handled since the last restart of the Cisco CallManager service. A typical login would constitute two HTTP requests: one to query the initial login state of the device and another to log in the user on a device. Similarly, a typical logout also results in two HTTP requests.
RequestsInProgress	This counter represents the number of HTTP requests that the extension mobility application currently is handling. A typical login would constitute two HTTP requests: one to query the initial login state of the device and another to log in the user on a device. Similarly, a typical logout also results in two HTTP requests.
RequestsThrottled	This counter represents the total number of Login/Logout Requests that failed due to throttling.
LoginsSuccessful	This counter represents the total number of successful login requests that were completed through EM Service.

Table B-8 Cisco Extension Mobility Application (continued)

Counters	Counter Description
LogoutsSuccessful	This counter represents the total number of successful logout requests that were completed through EM Service
Total Login/LogoutRequestsAttempted	This counter represents the total number of Login and Logout requests that were attempted through this EM Service. This number includes both successful and unsuccessful attempts.

Cisco Gatekeeper

The Cisco Gatekeeper object provides information about registered Cisco gatekeeper devices. Table B-9 contains information about Cisco gatekeeper device counters.

Table B-9 Cisco Gatekeeper

Counters	Counter Description
ACFsReceived	This counter represents the total number of RAS Admission Confirm messages that are received from the configured gatekeeper and its alternate gatekeepers.
ARQsAttempted	This counter represents the total number of RAS Admission Request messages that are attempted by using the configured gatekeeper and its alternate gatekeepers.
RasRetries	This counter represents the number of retries due to loss or delay of all RAS acknowledgement messages on the configured gatekeeper and its alternate gatekeepers.
VideoOutOfResources	This counter represents the total number of video-stream requests to the configured gatekeeper or its alternate gatekeepers that failed, most likely due to lack of bandwidth.

Cisco H.323

The Cisco H.323 object provides information about registered Cisco H.323 devices. Table B-10 contains information about Cisco H.323 device counters.

Table B-10 Cisco H.323

Counters	Counter Description
CallsActive	This counter represents the number of streaming connections that are currently active (in use) on the configured H.323 device; in other words, the number of calls that actually have a voice path that is connected.
CallsAttempted	This counter represents the total number of calls that have been attempted on a device, including both successful and unsuccessful call attempts.
CallsCompleted	This counter represents the total number of successful calls that were made from a device.
CallsInProgress	This counter represents the number of calls that are currently in progress on a device.

Table B-10 Cisco H.323 (continued)

Counters	Counter Description
CallsRejectedDueToICTCallThrottling	This counter represents the total number of calls rejected due to Intercluster Trunk (ICT) call throttling since the start of the Cisco CallManager service. When the system reaches a threshold limit of 140 calls per 5 seconds, ICT will start throttling (rejecting) new calls. One cause for ICT call throttling occurs when calls across an ICT enter a route loop condition.
VideoCallsActive	This counter represents the number of video calls with video streaming connections that are currently active (in use) on all H.323 trunks that are registered with a Cisco Unified Communications Manager; in other words, the number of calls that actually have video-streaming connections on a Cisco Unified Communications Manager.
VideoCallsCompleted	This counter represents the number of video calls that were actually connected with video streams for all H.323 trunks that were registered with a Cisco Unified Communications Manager. This number increases when the call terminates.

Cisco Hunt Lists

The Cisco Hunt Lists object provides information about the hunt lists that are defined in Cisco Unified Communications Manager Administration. Table B-11 contains information about Cisco hunt list counters.

Table B-11 Cisco Hunt Lists

Counters	Counter Description
CallsAbandoned	This counter represents the number of abandoned calls that occurred through a hunt list. An abandoned call represents one in which a caller hangs up before the call is answered.
CallsActive	This counter represents the number of calls that are currently active (in use) that occurred through a hunt list. An active call represents one that gets distributed and answered, and to which a voice path connects.
CallsBusyAttempts	This counter represents the number of times that calls through a hunt list were attempted when all members of the line and/or route groups were busy.
CallsInProgress	This counter represents the number of calls that are currently in progress through a hunt list. A call in progress represents one that the call distributor is attempting to extend to a member of a line or route group and that has not yet been answered. Examples of a hunt list member include a line, a station device, a trunk device, or a port/channel of a trunk device.
CallsRingNoAnswer	This counter represents the total number of calls through a hunt list that rang but that called parties did not answer.

Table B-11 Cisco Hunt Lists (continued)

Counters	Counter Description
HuntListInService	This counter specifies whether the particular hunt list is currently in service. A value of 0 indicates that the hunt list is out of service; a value of 1 indicates that the hunt list is in service. Reasons that a hunt list could be out of service include the hunt list is not running on a primary Cisco Unified Communications Manager based on its Cisco Unified Communications Manager Group or the hunt list has been disabled in Cisco Unified Communications Manager Administration.
MembersAvailable	This counter represents the total number of available or idle members of line and route groups that belong to an in-service hunt list. An available member currently handles a call and will accept a new call. An idle member does not handle any call and will accept a new call. A hunt list member can comprise a route group, line group, or a combination. A member of a line group represents a directory number of a line on an IP phone or a voice-mail port. A member of a route group represents a station gateway, a trunk gateway, or port/channel of a trunk gateway.

Cisco HW Conference Bridge Device

The Cisco HW Conference Bridge Device object provides information about registered Cisco hardware conference bridge devices. Table B-12 contains information about Cisco hardware conference bridge device counters.

Table B-12 Cisco HW Conference Bridge Device

Counters	Counter Description
HWConferenceActive	This counter represents the number of conferences that are currently active (in use) on a HW conference bridge device. One resource represents one stream.
HWConferenceCompleted	This counter represents the total number of conferences that have been allocated and released on a HW conference device. A conference starts when the first call connects to the bridge. The conference completes when the last call disconnects from the bridge.
OutOfResources	This counter represents the total number of times that an attempt was made to allocate a conference resource from a HW conference device and failed, for example, because all resources were already in use.
ResourceActive	This counter represents the number of resources that are currently in use (active) for this HW conference device. One resource represents one stream.
ResourceAvailable	This counter represents the total number of resources that are not active and are still available to be used now for a HW conference device. One resource represents one stream.
ResourceTotal	This counter represents the total number of resources for a HW conference bridge device. This counter equals the sum of the counters ResourceAvailable and ResourceActive. One resource represents one stream.

Cisco IP Manager Assistant

The Cisco IP Manager Assistant (IPMA) Service object provides information about the Cisco Unified Communications Manager Assistant application. Table B-13 contains information on Cisco IPMA counters.

Table B-13 Cisco IP Manager Assistant Service

Counters	Counter Description
AssistantsActive	This counter represents the number of assistant consoles that are currently active. An active assistant console exists when an assistant is logged in from the assistant console desktop application.
LinesOpen	This counter represents the number of phone lines that the Cisco Unified Communications Manager Assistant application opened. An open phone line exists when the application assumes line control from CTI.
ManagersActive	This counter represents the current number of managers that the Cisco IPMA is servicing.
SessionsCurrent	This counter represents the total number of managers assistants that are currently using the Cisco Unified Communications Manager Assistant application. Each manager and each assistant constitute an active session; so, for one manager/assistant pair, this counter would reflect two sessions.

Cisco Lines

The Cisco Lines object represents the number of Cisco lines (directory numbers) that can dial and connect to a device. Lines represent all directory numbers that terminate on an endpoint. The directory number that is assigned to it identifies the line. The Cisco Lines object does not include directory numbers that include wildcards such as a pattern for a Digital or Analog Access gateway.

The Active counter represents the state of the line, either active or not active. A zero indicates that the line is not in use. When the number is greater than zero, this indicates that the line is active, and the number represents the number of calls that are currently in progress on that line. If more than one call is active, this indicates that the call is on hold either because of being placed on hold specifically (user hold) or because of a network hold operation (for example, a transfer is in progress, and it is on transfer hold). This applies to all directory numbers that are assigned to any device.

Cisco Locations

The Cisco Location object provides information about locations that are defined in Cisco Unified Communications Manager. Table B-14 contains information on Cisco location counters.

Table B-14 Cisco Locations

Counters	Counter Description
BandwidthAvailable	This counter represents the current bandwidth in a given location. A value of 0 indicates that no bandwidth is available.
BandwidthMaximum	This counter represents the maximum bandwidth that is available in a given location. A value of 0 indicates that infinite bandwidth is available.
CallsInProgress	This counter represents the number of calls that are currently in progress on a particular Cisco Unified Communications Manager.
OutOfResources	This counter represents the total number of times that a call on a particular Cisco Unified Communications Manager through the location failed due to lack of bandwidth.
RSVP AudioReservationErrorCounts	This counter represents the number of RSVP reservation errors in the audio stream.
RSVP MandatoryConnectionsInProgress	This counter represents the number of connections with mandatory RSVP that are in progress.
RSVP OptionalConnectionsInProgress	This counter represents the number of connections with optional RSVP that are in progress.
RSVP TotalCallsFailed	This counter represents the number of total calls that failed due to a RSVP reservation failure.
RSVP VideoCallsFailed	This counter represents the number of video calls that failed due to a RSVP reservation failure.
RSVP VideoReservationErrorCounts	This counter represents the number of RSVP reservation errors in the video stream
VideoBandwidthAvailable	This counter represents the bandwidth that is currently available for video in the location where the person who initiated the video conference resides. A value of 0 indicates that no bandwidth is available.
VideoBandwidthMaximum	This counter represents the maximum bandwidth that is available for video in the location where the person who initiated the video conference resides. A value of 0 indicates that no bandwidth is allocated for video.
VideoOutOfResources	This counter represents the total number of failed video-stream requests (most likely due to lack of bandwidth) in the location where the person who initiated the video conference resides.

Cisco Media Streaming Application

The Cisco IP Voice Media Streaming Application object provides information about the registered MTPs, MOH servers, conference bridge servers, and annunciators. Table B-15 contains information on Cisco IP Voice Media Streaming Application counters.

Note One object exists for each Cisco Unified Communications Manager in the Cisco Unified Communications Manager group that is associated with the device pool that the annunciator device is configured to use.

Table B-15 Cisco Media Streaming Application

Counter	Counter Description
ANNConnectionsLost	This counter represents the total number of times since the last restart of the Cisco IP Voice Media Streaming Application that a Cisco Unified Communications Manager connection was lost.
ANNConnectionState	For each Cisco Unified Communications Manager that is associated with an annunciator, this counter represents the current registration state to Cisco Unified Communications Manager; 0 indicates no registration to Cisco Unified Communications Manager; 1 indicates registration to the primary Cisco Unified Communications Manager; 2 indicates connection to the secondary Cisco Unified Communications Manager (connected to Cisco Unified Communications Manager but not registered until the primary Cisco Unified Communications Manager connection fails).
ANNConnectionsTotal	This counter represents the total number of annunciator instances that have been started since the Cisco IP Voice Media Streaming Application service started.
ANNInstancesActive	This counter represents the number of actively playing (currently in use) announcements.
ANNStreamsActive	This counter represents the total number of currently active simplex (one direction) streams for all connections. Each stream direction counts as one stream. One internal stream provides the audio input and another output stream to the endpoint device.
ANNStreamsAvailable	This counter represents the remaining number of streams that are allocated for the annunciator device that are available for use. This counter starts as 2 multiplied by the number of configured connections (defined in the Cisco IP Voice Media Streaming App service parameter for the Annunciator, Call Count) and is reduced by one for each active stream that started.
ANNStreamsTotal	This counter represents the total number of simplex (one direction) streams that connected to the annunciator device since the Cisco IP Voice Media Streaming Application service started.
CFBConferencesActive	This counter represents the number of active (currently in use) conferences.
CFBConferencesTotal	This counter represents the total number of conferences that started since the Cisco IP Voice Media Streaming Application service started.
CFBConnectionsLost	This counter represents the total number of times since the last restart of the Cisco IP Voice Media Streaming Application that a Cisco Unified Communications Manager connection was lost.

Table B-15 Cisco Media Streaming Application (continued)

Counter	Counter Description
CFBConnectionState	For each Cisco Unified Communications Manager that is associated with a SW Conference Bridge, this counter represents the current registration state to Cisco Unified Communications Manager; 0 indicates no registration to Cisco Unified Communications Manager; 1 indicates registration to the primary Cisco Unified Communications Manager; 2 indicates connection to the secondary Cisco Unified Communications Manager (connected to Cisco Unified Communications Manager but not registered until the primary Cisco Unified Communications Manager connection fails).
CFBStreamsActive	This counter represents the total number of currently active simplex (one direction) streams for all conferences. Each stream direction counts as one stream. In a three-party conference, the number of active streams equals 6.
CFBStreamsAvailable	This counter represents the remaining number of streams that are allocated for the conference bridge that are available for use. This counter starts as 2 multiplied by the number of configured connections (defined in the Cisco IP Voice Media Streaming App service parameter for Conference Bridge, Call Count) and is reduced by one for each active stream started.
CFBStreamsTotal	This counter represents the total number of simplex (one direction) streams that connected to the conference bridge since the Cisco IP Voice Media Streaming Application service started.
MOHAudioSourcesActive	This counter represents the number of active (currently in use) audio sources for this MOH server. Some of these audio sources may not be actively streaming audio data if no devices are listening. The exception exists for multicast audio sources, which will always be streaming audio. When an audio source is in use, even after the listener has disconnected, this counter will always have one input stream for each configured MOH codec. For unicast streams, the stream may exist in a suspended state where no audio data is received until a device connects to listen to the stream. Each MOH multicast resource uses one stream for each audio source and codec combination. For example, if the default audio source is configured for multicast, G.711 mu-law and wideband codecs, then two streams get used (default audio source + G.711 mu-law and default audio source + wideband).
MOHConnectionsLost	This counter represents the total number of times since the last restart of the Cisco IP Voice Media Streaming Application that a Cisco Unified Communications Manager connection was lost.
MOHConnectionState	For each Cisco Unified Communications Manager that is associated with an MOH, this counter represents the current registration state to Cisco Unified Communications Manager; 0 indicates no registration to Cisco Unified Communications Manager; 1 indicates registration to the primary Cisco Unified Communications Manager; 2 indicates connection to the secondary Cisco Unified Communications Manager (connected to Cisco Unified Communications Manager but not registered until the primary Cisco Unified Communications Manager connection fails).

Table B-15 Cisco Media Streaming Application (continued)

Counter	Counter Description
MOHStreamsActive	This counter represents the total number of active (currently in use) simplex (one direction) streams for all connections. One output stream exists for each device that is listening to a unicast audio source, and one input stream exists for each active audio source, multiplied by the number of MOH codecs. When an audio source has been used once, it will always have one input stream for each configured MOH codec. For unicast streams, the stream may exist in a suspended state where no audio data is received until a device connects to listen to the stream. Each MOH multicast resource uses one stream for each audio source and codec combination. For example, if the default audio source is configured for multicast, G.711 mu-law and wideband codecs, then two streams get used (default audio source + G.711 mu-law and default audio source + wideband).
MOHStreamsAvailable	This counter represents the remaining number of streams that are allocated for the MOH device that are available for use. This counter starts as 408 plus the number of configured half-duplex unicast connections and is reduced by 1 for each active stream that started. The counter gets reduced by 2 for each multicast audio source, multiplied by the number of MOH codecs that are configured. The counter gets reduced by 1 for each unicast audio source, multiplied by the number of MOH codecs configured.
MOHStreamsTotal	This counter represents the total number of simplex (one direction) streams that have connected to the MOH server since the Cisco IP Voice Media Streaming Application service started.
MTPConnectionsLost	This counter represents the total number of times since the last restart of the Cisco IP Voice Streaming Application that a Cisco Unified Communications Manager connection was lost.
MTPConnectionState	For each Cisco Unified Communications Manager that is associated with an MTP, this counter represents the current registration state to Cisco Unified Communications Manager; 0 indicates no registration to Cisco Unified Communications Manager; 1 indicates registration to the primary Cisco Unified Communications Manager; 2 indicates connection to the secondary Cisco Unified Communications Manager (connected to Cisco Unified Communications Manager but not registered until the primary Cisco Unified Communications Manager connection fails).
MTPConnectionsTotal	This counter represents the total number of MTP instances that have been started since the Cisco IP Voice Media Streaming Application service started.
MTPInstancesActive	This counter represents the number of active (currently in use) instances of MTP.
MTPStreamsActive	This counter represents the total number of currently active simplex (one direction) streams for all connections. Each stream direction counts as one stream.
MTPStreamsAvailable	This counter represents the remaining number of streams that are allocated for the MTP device that are available for use. This counter starts as 2 multiplied by the number of configured connections (defined in the Cisco IP Voice Media Streaming App service parameter for MTP, Call Count) and is reduced by one for each active stream started.
MTPStreamsTotal	This counter represents the total number of simplex (one direction) streams that connected to the MTP device since the Cisco IP Voice Media Streaming Application service started.

Cisco Messaging Interface

The Cisco Messaging Interface object provides information about the Cisco Messaging Interface (CMI) service. Table B-16 contains information on Cisco Messaging Interface (CMI) counters.

Table B-16 Cisco Messaging Interface

Counters	Counter Description
HeartBeat	This counter represents the heartbeat of the CMI service. This incremental count indicates that the CMI service is up and running. If the count does not increase (increment), the CMI service is down.
SMDIMessageCountInbound	This counter represents the running count of inbound SMDI messages since the last restart of the CMI service.
SMDIMessageCountInbound24Hour	This counter represents the rolling count of inbound SMDI messages in the last 24 hours.
SMDIMessageCountOutbound	This counter represents the running count of outbound SMDI messages since the last restart of the CMI service.
SMDIMessageCountOutbound24Hour	This counter represents the rolling count of outbound SMDI messages in the last 24 hours.
StartTime	This counter represents the time in milliseconds when the CMI service started. The real-time clock in the computer, which simply acts as a reference point that indicates the current time and the time that has elapsed, in milliseconds, since the service started, provides the basis for this time. The reference point specifies midnight, January 1, 1970.

Cisco MGCP BRI Device

The Cisco Media Gateway Control Protocol (MGCP) Foreign Exchange Office (FXO) Device object provides information about registered Cisco MGCP BRI devices. Table B-17 contains information on Cisco MGCP BRI device counters.

Table B-17 Cisco MGCP BRI Device

Counters	Counter Description
CallsCompleted	This counter represents the total number of successful calls that were made from this MGCP Basic Rate Interface (BRI) device
Channel 1 Status	This counter represents the status of the indicated B-Channel that is associated with the MGCP BRI device. Possible values: 0 (Unknown) indicates the status of the channel could not be determined; 1 (Out of service) indicates that this channel is not available for use; 2 (Idle) indicates that this channel has no active call and is ready for use; 3 (Busy) indicates an active call on this channel; 4 (Reserved) indicates that this channel has been reserved for use as a D-channel or for use as a Synch-Channel for BRI.

Table B-17 Cisco MGCP BRI Device (continued)

Counters	Counter Description
Channel 2 Status	This counter represents the status of the indicated B-Channel that is associated with the MGCP BRI device. Possible values: 0 (Unknown) indicates the status of the channel could not be determined; 1 (Out of service) indicates that this channel is not available for use; 2 (Idle) indicates that this channel has no active call and is ready for use; 3 (Busy) indicates an active call on this channel; 4 (Reserved) indicates that this channel has been reserved for use as a D-channel or for use as a Synch-Channel for BRI.
DatalinkInService	This counter represents the state of the Data Link (D-Channel) on the corresponding digital access gateway. This value will get set to 1 (one) if the Data Link is up (in service) or 0 (zero) if the Data Link is down (out of service).
OutboundBusyAttempts	This counter represents the total number of times that a call through this MGCP BRI device was attempted when no voice channels are available.

Cisco MGCP FXO Device

The Cisco Media Gateway Control Protocol (MGCP) Foreign Exchange Office (FXO) Device object provides information about registered Cisco MGCP FXO devices. Table B-18 contains information on Cisco MGCP FXO device counters.

Table B-18 Cisco MGCP FXO Device

Counters	Counter Description
CallsCompleted	This counter represents the total number of successful calls that were made from the port on an MGCP FXO device.
OutboundBusyAttempts	This counter represents the total number of times that a call through the port on this MGCP FXO device was attempted when no voice channels were available.
PortStatus	This counter represents the status of the FXO port associated with this MGCP FXO device.

Cisco MGCP FXS Device

The Cisco MGCP Foreign Exchange Station (FXS) Device object provides information about registered Cisco MGCP FXS devices. One instance of this object gets created for each port on a Cisco Catalyst 6000 24 port FXS Analog Interface Module gateway. For example, a fully configured Catalyst 6000 Analog Interface Module would represent 24 separate instances of this object. Table B-19 contains information on Cisco MGCP FXS device counters.

Table B-19 Cisco MGCP FXS Device

Counters	Counter Description
CallsCompleted	This counter represents the total number of successful calls that were made from this port on the MGCP FXS device.

Table B-19 Cisco MGCP FXS Device (continued)

Counters	Counter Description
OutboundBusyAttempts	This counter represents the total number of times that a call through this port on the MGCP FXS device was attempted when no voice channels were available.
PortStatus	This counter represents the status of the FXS port that is associated with a MGCP FXS device.

Cisco MGCP Gateways

The Cisco MGCP Gateways object provides information about registered MGCP gateways. Table B-20 contains information on Cisco MGCP gateway counters.

Table B-20 Cisco MGCP Gateways

Counters	Counter Description
BRIChannelsActive	This counter represents the number of BRI voice channels that are currently active in a call in the gateway
BRISpansInService	This counter represents the number of BRI spans that are currently available for use in the gateway.
FXOPortsActive	This counter represents the number of FXO ports that are currently active in a call in the gateway.
FXOPortsInService	This counter represents the number of FXO ports that are currently available for use in the gateway.
FXSPortsActive	This counter represents the number of FXS ports that are currently active in a call in the gateway.
FXSPortsInService	This counter represents the number of FXS ports that are currently available for use in the gateway.
PRIChannelsActive	This counter represents the number of PRI voice channels that are currently active in a call in the gateway.
PRISpansInService	This counter represents the number of PRI spans that are currently available for use in the gateway.
T1ChannelsActive	This counter represents the number of T1 CAS voice channels that are currently active in a call in the gateway.
T1SpansInService	This counter represents the number of T1 CAS spans that are currently available for use in the gateway.

Cisco MGCP PRI Device

The Cisco MGCP Primary Rate Interface (PRI) Device object provides information about registered Cisco MGCP PRI devices. Table B-21 contains information on Cisco MGCP PRI device counters.

Table B-21 Cisco MGCP PRI Device

Counters	Counter Description
CallsActive	This counter represents the number of calls that are currently active (in use) on this MGCP PRI device.
CallsCompleted	This counter represents the total number of successful calls that were made from this MGCP PRI device.
Channel 1 Status through Channel 15 Status (consecutively numbered)	This counter represents the status of the indicated B-Channel that is associated with a MGCP PRI device. Possible values: 0 (Unknown) indicates that the status of the channel could not be determined; 1 (Out of service) indicates that this channel is not available for use; 2 (Idle) indicates that this channel has no active call and is ready for use; 3 (Busy) indicates that an active call exists on this channel; 4 (Reserved) indicates that this channel has been reserved for use as a D-Channel or for use as a Synch-Channel for E-1.
Channel 16 Status	This counter represents the status of the indicated B-Channel that is associated with a MGCP PRI Device. Possible values: 0-Unknown, 1-Out of service, 2-Idle, 3-Busy, 4-Reserved, for an E1 PRI Interface, this channel is reserved for use as a D-Channel.
Channel 17 Status through Channel 31 Status (consecutively numbered)	This counter represents the status of the indicated B-Channel that is associated with the MGCP PRI Device. 0-Unknown, 1-Out of service, 2-Idle, 3-Busy, 4-Reserved.
DatalinkInService	This counter represents the state of the Data Link (D-Channel) on the corresponding digital access gateway. This value will be set to 1 (one) if the Data Link is up (in service) or 0 (zero) if the Data Link is down (out of service).
OutboundBusyAttempts	This counter represents the total number of times that a call through an MGCP PRI device was attempted when no voice channels were available.

Cisco MGCP T1 CAS Device

The Cisco MGCP T1 Channel Associated Signaling (CAS) Device object provides information about registered Cisco MGCP T1 CAS devices. Table B-22 contains information on Cisco MGCP TI CAS device counters.

Table B-22 Cisco MGCP T1 CAS Device

Counters	Counter Description
CallsActive	This counter represents the number of calls that are currently active (in use) on this MGCP T1 CAS device.
CallsCompleted	This counter represents the total number of successful calls that were made from this MGCP T1 CAS device.

Table B-22 Cisco MGCP T1 CAS Device (continued)

Counters	Counter Description
Channel 1 Status through Channel 24 Status (consecutively numbered)	This counter represents the status of the indicated B-Channel that is associated with an MGCP T1 CAS device. Possible values: 0 (Unknown) indicates the status of the channel could not be determined; 1 (Out of service) indicates that this channel is not available for use; 2 (Idle) indicates that this channel has no active call and is ready for use; 3 (Busy) indicates that an active call exists on this channel; 4 (Reserved) indicates that this channel has been reserved for use as a D-Channel or for use as a Synch-Channel for E-1.
OutboundBusyAttempts	This counter represents the total number of times that a call through the MGCP T1 CAS device was attempted when no voice channels were available.

Cisco Mobility Manager

The Cisco Mobility Manager object provides information on registered Cisco Unified Mobility Manager devices. Table B-23 contains information on Cisco Unified Mobility Manager device counters.

Table B-23 Cisco Mobility Manager

Counters	Counter Description
MobileCallsAnchored	This counter represents the total number of paths that are associated with single-mode/dual-mode phone call that is currently anchored on a Cisco Unified Communications Manager. Call anchoring occurs when a call enters an enterprise gateway and connects to a mobility application that then uses redirection to send the call back out an enterprise gateway. For example, this counter increments twice for a dual-mode phone-to-dual-mode phone call: once for the originating call and once for the terminating call. When the call terminates, this counter decrements accordingly.
MobilityHandinsAborted	This counter represents the total number of aborted handins.
MobileHandinsCompleted	This counter represents the total number of handins that were completed by dual-mode phones. A completed handin occurs when the call successfully connects in the enterprise network and the phone moves from WAN to WLAN.
MobilityHandinsFailed	This counter represents the total number of handins (calls on mobile devices that move from cellular to the wireless network) that failed.
MobilityHandoutsAborted	This counter represents the total number of aborted handouts.
MobileHandoutsCompleted	This counter represents the total number of handouts (calls on mobile devices that move from the enterprise WLAN network to the cellular network) that were completed. A completed handout occurs when the call successfully connects.
MobileHandoutsFailed	This counter represents the total number of handouts (calls on mobile devices that move from cellular to the wireless network) that failed.
MobilityFollowMeCallsAttempted	This counter represents the total number of follow-me calls that were attempted.
MobilityFollowMeCallsIgnoredDueToAnswerTooSoon	This counter represents the total number of follow-me calls that were ignored before the AnswerTooSoon timer went off.
MobilityIVRCallsAttempted	This counter represents the total number of attempted IVR calls.
MobilityIVRCallsFailed	This counter represents the total number of failed IVR calls.

Table B-23 Cisco Mobility Manager (continued)

Counters	Counter Description
MobilityIVRCallsSucceeded	This counter represents the total number of successful IVR calls.
MobilitySCCPDualModeRegistered	This counter represents the total number of dual-mode SCCP devices that are registered.
MobilitySIPDualModeRegistered	This counter represents the total number of dual-mode SIP devices that are registered.

Cisco Music On Hold (MOH) Device

The Cisco Music On Hold (MOH) Device object provides information about registered Cisco MOH devices. Table B-24 contains information on Cisco MOH device counters.

Table B-24 Cisco MOH Device

Counters	Counter Description
MOHHighestActiveResources	This counter represents the largest number of simultaneously active MOH connections for an MOH server. This number includes both multicast and unicast connections.
MOHMulticastResourceActive	This counter represents the number of currently active multicast connections to multicast addresses that are served by an MOH server. Each MOH multicast resource uses one stream for each audio source and codec combination. For example, if the default audio source is configured for multicast, G.711 mu-law and wideband codecs, two streams get used (default audio source + G.711 mu-law and default audio source + wideband).
MOHMulticastResourceAvailable	This counter represents the number of multicast MOH connections to multicast addresses that are served by an MOH server that are not active and are still available to be used now for the MOH server. Each MOH multicast resource uses one stream for each audio source and codec combination. For example, if the default audio source is configured for multicast, G.711 mu-law and wideband codecs, two streams get used (default audio source + G.711 mu-law and default audio source + wideband).
MOHOutOfResources	This counter represents the total number of times that the Media Resource Manager attempted to allocate an MOH resource when all available resources on all MOH servers that are registered with a Cisco Unified Communications Manager were already active.
MOHTotalMulticastResources	This counter represents the total number of multicast MOH connections that are allowed to multicast addresses that are served by an MOH server. Each MOH multicast resource uses one stream for each audio source and codec combination. For example, if the default audio source is configured for multicast, G.711 mu-law and wideband codecs, two streams get used (default audio source + G.711 mu-law and default audio source + wideband).
MOHTotalUnicastResources	This counter represents the total number of unicast MOH connections that are allowed by an MOH server. Each MOH unicast resource uses one stream.

Table B-24 Cisco MOH Device (continued)

Counters	Counter Description
MOHUnicastResourceActive	This counter represents the number of active unicast MOH connections to an MOH server. Each MOH unicast resource uses one stream.
MOHUnicastResourceAvailable	This counter represents the number of unicast MOH connections that are not active and are still available to be used now for an MOH server. Each MOH unicast resource uses one stream.

Cisco MTP Device

The Cisco Media Termination Point (MTP) Device object provides information about registered Cisco MTP devices. Table B-25 contains information on Cisco MTP device counters.

Table B-25 Cisco MTP Device

Counters	Counter Description
OutOfResources	This counter represents the total number of times that an attempt was made to allocate an MTP resource from an MTP device and failed; for example, because all resources were already in use.
ResourceActive	This counter represents the number of MTP resources that are currently in use (active) for an MTP device. Each MTP resource uses two streams. An MTP in use represents one MTP resource that has been allocated for use in a call.
ResourceAvailable	This counter represents the total number of MTP resources that are not active and are still available to be used now for an MTP device. Each MTP resource uses two streams. An MTP in use represents one MTP resource that has been allocated for use in a call.
ResourceTotal	This counter represents the total number of MTP resources that an MTP device provides. This counter equals the sum of the counters ResourceAvailable and ResourceActive.

Cisco Phones

The Cisco Phones object provides information about the number of registered Cisco Unified IP Phones, including both hardware-based and other station devices.

The CallsAttempted counter represents the number of calls that have been attempted from this phone. This number increases each time that the phone goes off hook and on hook.

Cisco Presence Feature

The Cisco Presence object provides information about presence subscriptions, such as statistics that are related to the speed dial or call list Busy Lamp Field (BLF) subscriptions. Table B-26 contains information on Cisco Presence feature.

Table B-26 Cisco Presence

Counters	Counter Description
ActiveCallListAndTrunkSubscriptions	This counter represents the active presence subscriptions for the call list feature as well as presence subscriptions through SIP trunk.
ActiveSubscriptions	This counter represents all active incoming and outgoing presence subscriptions.
CallListAndTrunkSubscriptionsThrottled	This counter represents the cumulative number of rejected call list and trunk side presence subscriptions due to throttling for the call list feature.
IncomingLineSideSubscriptions	This counter represents the cumulative number of presence subscriptions that were received on the line side.
IncomingTrunkSideSubscriptions	This counter represents the cumulative number of presence subscriptions that were received on the trunk side.
OutgoingTrunkSideSubscriptions	This counter represents the cumulative number of presence subscriptions that were sent on the trunk side.

Cisco QSIG Feature

The Cisco QSIG Feature object provides information regarding the operation of various QSIG features, such as call diversion and path replacement. Table B-27 contains information on the Cisco QSIG feature counters.

Table B-27 Cisco QSIG Feature

Counters	Counter Description
CallForwardByRerouteCompleted	This counter represents the number of successful calls that has been forwarded by rerouting. Call forward by rerouting enables the path for a forwarded call to be optimized (minimizes the number of B-Channels in use) from the originator perspective. This counter resets when the Cisco CallManager service parameter Call Forward by Reroute Enabled is enabled or disabled, or when the Cisco CallManager service restarts.
PathReplacementCompleted	This counter represents the number of successful path replacements that have occurred. Path replacement in a QSIG network optimizes the path between two edge PINX (PBXs) that are involved in a call. This counter resets when the Cisco CallManager service parameter Path Replacement Enabled is enabled or disabled, or when the Cisco CallManager service restarts.

Cisco Signaling Performance

The Cisco Signaling Performance object provides call-signaling data on transport communications on Cisco Unified Communications Manager. Table B-28 contains information on the Cisco Signaling Performance counter.

Table B-28 Cisco Signaling Performance

Counters	Counter Description
UDPPacketsThrottled	This counter represents the total number of incoming UDP packets that were throttled (dropped) because they exceeded the threshold for the number of incoming packets per second that is allowed from a single IP address. Configure the threshold via the SIP Station UDP Port Throttle Threshold and SIP Trunk UDP Port Throttle Threshold service parameters in Cisco Unified Communications Manager Administration. This counter increments for every throttled UDP packet that was received since the last restart of the Cisco CallManager Service.

Cisco SIP

The Cisco Session Initiation Protocol (SIP) object provides information about configured SIP devices. Table B-29 contains information on the Cisco SIP counters.

Table B-29 Cisco SIP

Counters	Counter Description
CallsActive	This counter represents the number of calls that are currently active (in use) on this SIP device.
CallsAttempted	This counter represents the number of calls that have been attempted on this SIP device, including the successful and unsuccessful call attempts.
CallsCompleted	This counter represents the number of calls that were actually connected (a voice path was established) from a SIP device. This number increments when the call is terminated.
CallsInProgress	This counter represents the number of calls that are currently in progress on a SIP device, including all active calls. When all calls that are in progress are connected, the number of CallsInProgress equals the number of CallsActive.
VideoCallsActive	This counter represents the number of video calls with streaming video connections that are currently active (in use) on this SIP device.
VideoCallsCompleted	This counter represents the number of video calls that were actually connected with video streams for this SIP device. This number increments when the call is terminated.

Cisco SIP Normalization

The Cisco SIP Normalization performance object contains counters that allow you to monitor aspects of the normalization script, including initialization errors, runtime errors, and script status. Each device that has an associated script causes a new instance of these counters to be created. Table B-30 contains information on the Cisco SIP Normalization counters.

Table B-30 Cisco SIP Normalization

Display Name	Description
DeviceResetAutomatically	This counter indicates the number of times that Cisco Unified CM automatically resets the device (SIP trunk). The device reset is based on the values that are specified in the Script Execution Error Recovery Action and System Resource Error Recovery Action fields on the SIP Normalization Script Configuration window in Cisco Unified Communications Manager Administration. When the device (SIP trunk) is reset due to script errors, the counter value increments. This count restarts when the device is reset manually.
DeviceResetManually	This counter indicates the number of times that the device (SIP trunk) is reset manually in Cisco Unified Communications Manager Administration or by other methods, such as AXL. When the device associated with a script is reset due to configuration changes, the counter value increments. The counter restarts in the following situations: • The SIP trunk is deleted. • The script on the trunk gets changed or deleted. • Cisco Unified Communications Manager restarts.
ErrorExecution	This counter represents the number of execution errors that occurred while the script executed. Execution errors can occur while a message handler executes. Execution errors can be caused by resource errors, an argument mismatch in a function call, and so on. When an execution error occurs, Cisco Unified CM performs the following actions: • Automatically restores the message to the original content before applying additional error handling actions. • Increments the value of the counter. • Takes appropriate action based on the configuration of the Script Execution Error Recovery Action and System Resource Error Recovery Action fields in Cisco Unified Communications Manager Administration. Check the SIPNormalizationScriptError alarm for details, including the line number in the script that failed. Correct the script problem, upload the corrected script as needed, and reset the trunk. This counter increments every time an execution error occurs. This counter provides a count from the most recent trunk reset that involved a script configuration change. (A device reset alone does not restart the count; the script configuration must also change before the reset occurs.) If the counter continues to increment after you fix the script problem, examine the script again.

Table B-30 Cisco SIP Normalization (continued)

Display Name	Description
ErrorInit	This counter represents the number of times a script error occurred after the script successfully loaded into memory, but failed to initialize in Cisco Unified CM. A script can fail to initialize due to resource errors, an argument mismatch in a function call, the expected table was not returned, and so on. Check the SIPNormalizationScriptError alarm for details, including the line number in the script that failed. Correct the script problem, upload the corrected script as needed, and reset the trunk. This counter increments every time an initialization error occurs. This counter provides a count from the most recent trunk reset that was accompanied by a script configuration change. (A device reset alone does not restart the count; the script configuration must also change before the reset occurs.) If the counter continues to increment after you fix the script problem, examine the script again. When the error occurs during initialization, Cisco Unified CM automatically disables the script.
ErrorInternal	This counter indicates the number of internal errors that occurred while the script executed. Internal errors are very rare. If the value in this counter is higher than zero, a defect exists in the system that is not related to the script content or execution. Collect SDI traces and contact the Technical Assistance Center (TAC).
ErrorLoad	This counter represents the number of times a script error occurred when the script loaded into memory in Cisco Unified Communications Manager. A script can fail to load due to memory issues or syntax errors. Check the SIPNormalizationScriptError alarm for details. Check the script syntax for errors, upload the corrected script as needed, and reset the trunk. This counter increments every time a load error occurs. This counter provides a count from the most recent trunk reset that was accompanied by a script configuration change. (A device reset alone will not restart the count; the script configuration must also change before the reset occurs.) If the counter continues to increment even after you fix the script problem, examine the script again.
ErrorResource	This counter indicates whether the script encountered a resource error. Two kinds of resource errors exist: exceeding the value in the Memory Threshold field and exceeding the value in the Lua Instruction Threshold field. (Both fields display on the SIP Normalization Script Configuration window in Cisco Unified Communications Manager Administration.) If either condition occurs, Cisco Unified Communications Manager immediately closes the script and issues the SIPNormalizationScriptError alarm. If a resource error occurs while the script loads or initializes, the script is disabled. If a resource error occurs during execution, the configured system resource error recovery action is taken. (The setting of the System Resource Error Recovery Action field on the SIP Normalization Script Configuration window in Cisco Unified Communications Manager Administration defines this action.)

Table B-30 Cisco SIP Normalization (continued)

Display Name	Description
MemoryUsage	This counter specifies the amount of memory, in bytes, that the script consumes. This counter increases and decreases to match the amount of memory that the script uses. This count gets cleared when the script closes (because a closed script does not consume memory) and restarts when the script opens (gets enabled). A high number in this counter indicates a resource problem. Check the MemoryUsagePercentage counter and the SIPNormalizationResourceWarning alarm, which occur when the resource consumption exceeds an internally set threshold.
MemoryUsagePercentage	This counter specifies the percentage of the total amount of memory that the script consumes. The value in this counter is derived by dividing the value in the MemoryUsage counter by the value in the Memory Threshold field (in the SIP Normalization Script Configuration window) and multiplying the result by 100 to arrive at a percentage. This counter increases and decreases in accordance with the MemoryUsage counter. This count gets cleared when the script closes (because closed scripts do not consume memory) and restarts when the script opens (gets enabled). When this counter reaches the internally controlled resource threshold, the SIPNormalizationResourceWarning alarm is issued.
MessageRollback	This counter indicates the number of times that the system automatically rolled back a message. The system rolls back the message by using the error handling that is specified in the Script Execution Error Recovery Action field in the SIP Normalization Script Configuration window in Cisco Unified CM Administration. When an execution error occurs, Cisco Unified CM automatically restores the message to the original content before applying additional error handling actions. If error handling specifies Rollback only, no further action is taken beyond rolling back to the original message before the normalization attempt. For the other possible Script Execution Error Recovery Actions, message rollback always occurs first, followed by the specified action, such as disabling the script, resetting the script automatically, or resetting the trunk automatically.
msgAddContentBody	This counter represents the number of times that the script added a content body to the message. If you are using the msg:addContentBody API in the script, this counter increases each time that the msg:addContentBody API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgAddHeader	This counter represents the number of times that the script added a SIP header to the message. If you are using the msg:addHeader API in the script, this counter increases each time that the msg:addHeader API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgAddHeaderUriParameter	This counter represents the number of times that the script added a SIP header URI parameter to a SIP header in the message. If you are using the msg:addHeaderUriParameter API in the script, this counter increases each time that the msg:addHeaderUriParameter API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.

Table B-30 Cisco SIP Normalization (continued)

Display Name	Description
msgAddHeaderValueParameter	This counter represents the number of times that the script added a SIP header value parameter to a SIP header in the message. If you are using the msg:addHeaderValueParameter API in the script, this counter increases each time that the msg:addHeaderValueParameter API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgApplyNumberMask	This counter represents the number of times that the script applied a number mask to a SIP header in the message. If you are using the msg:applyNumberMask API in the script, this counter increases each time that the msg:applyNumberMask API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgBlock	This counter represents the number of times that the script blocked a message. If you are using the msg:block API in the script, this counter increases each time that the msg:block API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgConvertDiversionToHI	This counter represents the number of times that the script converted Diversion headers into History-Info headers in the message. If you are using the msg:convertDiversionToHI API in the script, this counter increases each time that the msg:convertDiversionToHI API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgConvertHIToDiversion	This counter represents the number of times that the script converted Diversion headers into History-Info headers in the message. If you are using the msg:convertDiversionToHI API in the script, this counter increases each time that the msg:convertDiversionToHI API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgModifyHeader	This counter represents the number of times that the script modified a SIP header in the message. If you are using the msg:modifyHeader API in the script, this counter increases each time that the msg:modifyHeader API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgRemoveContentBody	This counter represents the number of times that the script removed a content body from the message. If you are using the msg:removeContentBody API in the script, this counter increases each time that the msg:removeContentBody API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgRemoveHeader	This counter represents the number of times that the script removed a SIP header from the message. If you are using the msg:removeHeader API in the script, this counter increases each time that the msg:removeHeader API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgRemoveHeaderValue	This counter represents the number of times that the script removed a SIP header value from the message. If you are using the msg:removeHeaderValue API in the script, this counter increases each time that the msg:removeHeaderValue API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgSetRequestUri	This counter represents the number of times that the script modified the request URI in the message. If you are using the msg:setRequestUri API in the script, this counter increases each time that the msg:setRequestUri API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.

Table B-30 Cisco SIP Normalization (continued)

Display Name	Description
msgSetResponseCode	This counter represents the number of times that the script modified the response code and/or response phrase in the message. If you are using the msg:setResponseCode API in the script, this counter increases each time that the msg:setResponseCode API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
msgSetSdp	This counter represents the number of times that the script set the SDP in the message. If you are using the msg:setSdp API in the script, this counter increases each time that the msg:setSdp API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
ptAddContentBody	This counter represents the number of times that the script added a content body to the PassThrough (pt) object. If you are using the pt:addContentBody API in the script, this counter increases each time that the pt:addContentBody API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
ptAddHeader	This counter represents the number of times that the script added a SIP header to the PassThrough (pt) object. If you are using the pt:addHeader API in the script, this counter increases each time that the pt:addHeader API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
ptAddHeaderUriParameter	This counter represents the number of times that the script added a SIP header URI parameter to the PassThrough (pt) object. If you are using the pt:addHeaderUriParameter API in the script, this counter increases each time that the pt:addHeaderUriParameter API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
ptAddHeaderValueParameter	This counter represents the number of times that the script added a SIP header value parameter to the PassThrough (pt) object. If you are using the pt:addHeaderValueParameter API in the script, this counter increases each time that the pt:addHeaderValueParameter API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
ptAddRequestUriParameter	This counter represents the number of times that the script added a request URI parameter to the PassThrough (pt) object. If you are using the pt:addRequestUriParameter API in the script, this counter increases each time that the pt:addRequestUriParameter API executes successfully. If the counter behavior is not as expected, examine the script logic for errors.
ScriptActive	This counter indicates whether the script is currently active (running on the trunk). The following values display for the counter: • 0—Indicates that the script is closed (disabled). • 1—Indicates that the script is open and operational. To open the script that should be running on this trunk, perform the following actions: 1. Check for any alarms that might indicate why the script is not open. 2. Correct any errors. 3. Upload a new script if necessary. 4. Reset the trunk.

Table B-30 Cisco SIP Normalization (continued)

Display Name	Description
ScriptClosed	This counter indicates the number of times that Cisco Unified Communications Manager has closed the script. When the script is closed, it is not enabled on this device. Cisco Unified CM closes the script under one of the following conditions: • The device was reset manually. • The device was reset automatically (due to an error). • The device was deleted. This count restarts when the SIP trunk is reset after a change to the script configuration and when Cisco Unified CM restarts.
ScriptDisabledAutomatically	This counter indicates the number of times that the system automatically disabled the script. The values that are specified in the Script Execution Error Recovery Action and System Resource Error Recovery Action fields in the SIP Normalization Script Configuration window in Cisco Unified CM Administration determine whether the script is disabled. The script also gets disabled as a result of script error conditions that are encountered during loading and initialization. This counter provides a count from the most recent manual device reset that involved a script configuration change (a device reset alone does not restart the count; the script must also have changed before the reset occurs). This counter increments every time Cisco Unified CM automatically disables a script due to script errors. If the number in this counter is higher than expected, perform the following actions: • Check for SIPNormalizationScriptError alarm and SIPNormalizationAutoResetDisabled alarm. • Check for any resource-related alarms and counters in RTMT to determine whether a resource issue is occurring. • Check for any unexpected SIP normalization events in the SDI trace files.

Table B-30 Cisco SIP Normalization (continued)

Display Name	Description
ScriptOpened	This counter indicates the number of times that the Cisco Unified CM attempted to open the script. For the a script to open, it must load into memory in Cisco Unified CM, initialize, and be operational. A number greater than one in this counter means that Cisco Unified CM has made more than one attempt to open the script on this SIP trunk, either for an expected reason or due to an error during loading or initialization. The error can occur due to execution errors or resource errors or invalid syntax in the script. Expect this counter to be greater than one if any of these counters increment: DeviceResetManually, DeviceResetAutomatically, or ScriptResetAutomatically. The DeviceResetManually counter increments when an expected event, such as a maintenance window on the SIP trunk, causes the script to close. If the number in this counter is high for an unexpected reason, perform the following actions: • Check for alarms, such as the SIPNormalizationScriptClosed, SIPNormalizationScriptError, or SIPNormalizationResourceWarning. • Check resource-related alarms and counters in RTMT to determine whether a resource issue is occurring. • Check for any unexpected SIP normalization events in the SDI trace files. This count restarts when the SIP trunk resets after a script configuration change and when Cisco Unified CM restarts.
ScriptResetAutomatically	This counter indicates the number of times that the system automatically reset the script. The script resets based on the values that are specified in the Script Execution Error Recovery Action and System Resource Error Recovery Action fields in the SIP Normalization Script Configuration window in Cisco Unified CM Administration. This counter specifies a count of the number of automatic script resets after the last manual device reset; this counter increments every time the Cisco Unified CM automatically resets a script due to script errors. If the number in this counter is higher than expected, perform the following actions: • Check for a SIPNormalizationScriptError alarm. • Check for any resource-related alarms and counters in RTMT to determine whether a resource issue is occurring. • Check for any unexpected SIP normalization events in the SDI trace files.

Cisco SIP Stack

The Cisco SIP Stack object provides information about Session Initiation Protocol (SIP) stack statistics that are generated or used by SIP devices such as SIP Proxy, SIP Redirect Server, SIP Registrar, and SIP User Agent. Table B-31 contains information on Cisco SIP Stack counters.

Table B-31 Cisco SIP Stack

Counters	Counter Description
AckIns	This counter represents the total number of ACK requests that the SIP device received.
AckOuts	This counter represents the total number of ACK requests that the SIP device sent.
ByeIns	This counter represents the total number of BYE requests that the SIP device received. This number includes retransmission.
ByeOuts	This counter represents the total number of BYE requests that the SIP device sent. This number includes retransmission.
CancelIns	This counter represents the total number of CANCEL requests that the SIP device received. This number includes retransmission.
CancelOuts	This counter represents the total number of CANCEL requests that the SIP device sent. This number includes retransmission.
CCBsAllocated	This counter represents the number of Call Control Blocks (CCB) that are currently in use by the SIP stack. Each active SIP dialog uses one CCB.
GlobalFailedClassIns	This counter represents the total number of 6xx class SIP responses that the SIP device has received. This number includes retransmission. This class of responses indicates that a SIP device, that is providing a client function, received a failure response message. Generally, the responses indicate that a server had definitive information on a particular called party and not just the particular instance in the Request-URI.
GlobalFailedClassOuts	This counter represents the total number of 6xx class SIP responses that the SIP device sent. This number includes retransmission. This class of responses indicates that a SIP device, that is providing a server function, received a failure response message. Generally, the responses indicate that a server had definitive information on a particular called party and not just the particular instance in the Request-URI.
InfoClassIns	This counter represents the total number of 1xx class SIP responses that the SIP device received. This includes retransmission. This class of responses provides information on the progress of a SIP request.
InfoClassOuts	This counter represents the total number of 1xx class SIP responses that the SIP device sent. This includes retransmission. This class of responses provides information on the progress of processing a SIP request.
InfoIns	This counter represents the total number of INFO requests that the SIP device has received. This number includes retransmission.
InfoOuts	This counter represents the total number of INFO requests that the SIP device has sent. This number includes retransmission.
InviteIns	This counter represents the total number of INVITE requests that the SIP device received. This number includes retransmission.

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
InviteOuts	This counter represents the total number of INVITE requests that the SIP device has sent. This number includes retransmission.
NotifyIns	This counter represents the total number of NOTIFY requests that the SIP device has received. This number includes retransmission.
NotifyOuts	This counter represents the total number of NOTIFY requests that the SIP device has sent. This number includes retransmission.
OptionsIns	This counter represents the total number of OPTIONS requests that the SIP device received. This number includes retransmission.
OptionsOuts	This counter represents the total number of OPTIONS requests that the SIP device has sent. This number includes retransmission.
PRAckIns	This counter represents the total number of PRACK requests that the SIP device has received. This number includes retransmission.
PRAckOuts	This counter represents the total number of PRACK requests that the SIP device has sent. This number includes retransmission.
PublishIns	This counter represents the total number of PUBLISH requests that the SIP device received. This number includes retransmissions.
PublishOuts	This counter represents the total number of PUBLISH requests that the SIP device has sent. This number includes retransmission
RedirClassIns	This counter represents the total number of 3xx class SIP responses that the SIP device has received. This number includes retransmission. This class of responses provides information about redirections to addresses where the callee may be reachable.
RedirClassOuts	This counter represents the total number of 3xx class SIP responses that the SIP device has sent. This number includes retransmission. This class of responses provides information about redirections to addresses where the callee may be reachable.
ReferIns	This counter represents the total number of REFER requests that the SIP device has received. This number includes retransmission.
ReferOuts	This counter represents the total number of REFER requests that the SIP device has sent. This number includes retransmission.
RegisterIns	This counter represents the total number of REGISTER requests that the SIP device has received. This number includes retransmission.
RegisterOuts	This counter represents the total number of REGISTER requests that the SIP device has sent. This number includes retransmission.
RequestsFailedClassIns	This counter represents the total number of 4xx class SIP responses that the SIP device has received. This number includes retransmission. This class of responses indicates a request failure by a SIP device that is providing a client function.
RequestsFailedClassOuts	This counter represents the total number of 4xx class SIP responses that the SIP device has sent. This number includes retransmission. This class of responses indicates a request failure by a SIP device that is providing a server function.
RetryByes	This counter represents the total number of BYE retries that the SIP device has sent. To determine the number of first BYE attempts, subtract the value of this counter from the value of the sipStatsByeOuts counter.

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
RetryCancels	This counter represents the total number of CANCEL retries that the SIP device has sent. To determine the number of first CANCEL attempts, subtract the value of this counter from the value of the sipStatsCancelOuts counter.
RetryInfo	This counter represents the total number of INFO retries that the SIP device has sent. To determine the number of first INFO attempts, subtract the value of this counter from the value of the sipStatsInfoOuts counter.
RetryInvites	This counter represents the total number of INVITE retries that the SIP device has sent. To determine the number of first INVITE attempts, subtract the value of this counter from the value of the sipStatsInviteOuts counter.
RetryNotify	This counter represents the total number of NOTIFY retries that the SIP device has sent. To determine the number of first NOTIFY attempts, subtract the value of this counter from the value of the sipStatsNotifyOuts counter.
RetryPRAck	This counter represents the total number of PRACK retries that the SIP device has sent. To determine the number of first PRACK attempts, subtract the value of this counter from the value of the sipStatsPRAckOuts counter.
RetryPublish	This counter represents the total number of PUBLISH retries that the SIP device has been sent. To determine the number of first PUBLISHs attempts, subtract the value of this counter from the value of the sipStatsPublishOuts counter.
RetryRefer	This counter represents the total number of REFER retries that the SIP device has sent. To determine the number of first REFER attempts, subtract the value of this counter from the value of the sipStatsReferOuts counter.
RetryRegisters	This counter represents the total number of REGISTER retries that the SIP device has sent. To determine the number of first REGISTER attempts, subtract the value of this counter from the value of the sipStatsRegisterOuts counter.
RetryRel1xx	This counter represents the total number of Reliable 1xx retries that the SIP device has sent.
RetryRequestsOut	This counter represents the total number of Request retries that the SIP device has sent.
RetryResponsesFinal	This counter represents the total number of Final Response retries that the SIP device has sent.
RetryResponsesNonFinal	This counter represents the total number of non-Final Response retries that the SIP device has sent.
RetrySubscribe	This counter represents the total number of SUBSCRIBE retries that the SIP device has sent. To determine the number of first SUBSCRIBE attempts, subtract the value of this counter from the value of the sipStatsSubscribeOuts counter.
RetryUpdate	This counter represents the total number of UPDATE retries that the SIP device has sent. To determine the number of first UPDATE attempts, subtract the value of this counter from the value of the sipStatsUpdateOuts counter.
SCBsAllocated	This counter represents the number of Subscription Control Blocks (SCB) that are currently in use by the SIP stack. Each subscription uses one SCB.
ServerFailedClassIns	This counter represents the total number of 5xx class SIP responses that the SIP device has received. This number includes retransmission. This class of responses indicates that failure responses were received by a SIP device that is providing a client function.

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
ServerFailedClassOuts	This counter represents the total number of 5xx class SIP responses that the SIP device has sent. This number includes retransmission. This class of responses indicates that failure responses were received by a SIP device that is providing a server function.
SIPGenericCounter1	Do not use this counter unless directed to do so by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
SIPGenericCounter2	Do not use this counter unless directed to do so by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
SIPGenericCounter3	Do not use this counter unless directed to do so by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
SIPGenericCounter4	Do not use this counter unless directed to do so by a Cisco Engineering Special build. Cisco uses information in this counter for diagnostic purposes.
SIPHandlerSDLQueueSignalsPresent	This counter represents the number of SDL signals that are currently on the four SDL priority queues of the SIPHandler component. The SIPHandler component contains the SIP stack.
StatusCode1xxIns	This counter represents the total number of 1xx response messages, including retransmission, that the SIP device has received. This count includes the following 1xx responses: • 100 Trying • 180 Ringing • 181 Call is being forwarded • 182 Queued • 183 Session Progress
StatusCode1xxOuts	This counter represents the total number of 1xx response messages, including retransmission, that the SIP device has sent. This count includes the following 1xx responses: • 100 Trying • 180 Ringing • 181 Call is being forwarded • 182 Queued • 183 Session Progress
StatusCode2xxIns	This counter represents the total number of 2xx response messages, including retransmission, that the SIP device has received. This count includes the following 2xx responses: • 200 OK • 202 Success Accepted

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
StatusCode2xxOuts	This counter represents the total number of 2xx response messages, including retransmission, that the SIP device has sent. This count includes the following 2xx responses: • 200 OK • 202 Success Accepted
StatusCode3xxins	This counter represents the total number of 3xx response messages, including retransmission, that the SIP device has received. This count includes the following 3xx responses: • 300 Multiple Choices • 301 Moved Permanently • 302 Moved Temporarily • 303 Incompatible Bandwidth Units • 305 Use Proxy • 380 Alternative Service
StatusCode302Outs	This counter represents the total number of 302 Moved Temporarily response messages, including retransmission, that the SIP device has sent.

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
StatusCode4xxIns	This counter represents the total number of 4xx response messages, including retransmission, that the SIP device has received. This count includes the following 4xx responses: • 400 Bad Request • 401 Unauthorized • 402 Payment Required • 403 Forbidden • 404 Not Found • 405 Method Not Allowed • 406 Not Acceptable • 407 Proxy Authentication Required • 408 Request Timeout • 409 Conflict • 410 Gone • 413 Request Entity Too Large • 414 Request-URI Too Long • 415 Unsupported Media Type • 416 Unsupported URI Scheme • 417 Unknown Resource Priority • 420 Bad Extension • 422 Session Expires Value Too Small • 423 Interval Too Brief • 480 Temporarily Unavailable • 481 Call/Transaction Does Not Exist • 482 Loop Detected • 483 Too Many Hops • 484 Address Incomplete • 485 Ambiguous • 486 Busy Here • 487 Request Terminated • 488 Not Acceptable Here • 489 Bad Subscription Event • 491 Request Pending

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
StatusCode4xxOuts	This counter represents the total number of 4xx response messages, including retransmission, that the SIP device has sent. This count includes the following 4xx responses: • 400 Bad Request • 401 Unauthorized • 402 Payment Required • 403 Forbidden • 404 Not Found • 405 Method Not Allowed • 406 Not Acceptable • 407 Proxy Authentication Required • 408 Request Timeout • 409 Conflict • 410 Gone • 413 Request Entity Too Large • 414 Request-URI Too Long • 415 Unsupported Media Type • 416 Unsupported URI Scheme • 417 Unknown Resource Priority • 420 Bad Extension • 422 Session Expires Value Too Small • 423 Interval Too Brief • 480 Temporarily Unavailable • 481 Call/Transaction Does Not Exist • 482 Loop Detected • 483 Too Many Hops • 484 Address Incomplete • 485 Ambiguous • 486 Busy Here • 487 Request Terminated • 488 Not Acceptable Here • 489 Bad Subscription Event • 491 Request Pending

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
StatusCode5xxIns	This counter represents the total number of 5xx response messages, including retransmission, that the SIP device has received. This count includes the following 5xx responses: • 500 Server Internal Error • 501 Not Implemented • 502 Bad Gateway • 503 Service Unavailable • 504 Server Timeout • 505 Version Not Supported • 580 Precondition Failed
StatusCode5xxOuts	This counter represents the total number of 5xx response messages, including retransmission, that the SIP device has sent. This count includes the following 5xx responses: • 500 Server Internal Error • 501 Not Implemented • 502 Bad Gateway • 503 Service Unavailable • 504 Server Timeout • 505 Version Not Supported • 580 Precondition Failed
StatusCode6xxIns	This counter represents the total number of 6xx response messages, including retransmission, that the SIP device has received. This count includes the following 6xx responses: • 600 Busy Everywhere • 603 Decline • 604 Does Not Exist Anywhere • 606 Not Acceptable
StatusCode6xxOuts	This counter represents the total number of 6xx response messages, including retransmission, that the SIP device has sent. This count includes the following 6xx responses: • 600 Busy Everywhere • 603 Decline • 604 Does Not Exist Anywhere • 606 Not Acceptable
SubscribeIns	This counter represents the total number of SUBSCRIBE requests that the SIP device has received. This number includes retransmission.
SubscribeOuts	This counter represents the total number of SUBSCRIBE requests that the SIP device has sent. This number includes retransmission.

Table B-31 Cisco SIP Stack (continued)

Counters	Counter Description
SuccessClassIns	This counter represents the total number of 2xx class SIP responses that the SIP device has received. This includes retransmission. This class of responses provides information on the successful completion of a SIP request.
SuccessClassOuts	This counter represents the total number of 2xx class SIP responses that the SIP device has sent. This includes retransmission. This class of responses provides information on the successful completion of a SIP request.
SummaryRequestsIn	This counter represents the total number of SIP request messages that have been received by the SIP device. This number includes retransmissions.
SummaryRequestsOut	This counter represents the total number of SIP request messages that the device sent. This number includes messages that originate on the device and messages that are being relayed by the device. When a particular message gets sent more than once, each transmission gets counted separately; for example, a message that is re-sent as a retransmission or as a result of forking.
SummaryResponsesIn	This counter represents the total number of SIP response messages that the SIP device received. This number includes retransmission.
SummaryResponsesOut	This counter represents the total number of SIP response messages that the SIP device sent (originated and relayed). This number includes retransmission.
UpdateIns	This counter represents the total number of UPDATE requests that the SIP device has received. This number includes retransmission.
UpdateOuts	This counter represents the total number of UPDATE requests that the SIP device has sent. This number includes retransmission.

Cisco SIP Station

The Cisco SIP Station object provides information about SIP line-side devices. Table B-32 contains information on the Cisco SIP Station counters.

Table B-32 Cisco SIP Station

Counters	Counter Description
ConfigMismatchesPersistent	This counter represents the number of times that a phone that is running SIP was persistently unable to register due to a configuration version mismatch between the TFTP server and Cisco Unified Communications Manager since the last restart of the Cisco Unified Communications Manager. This counter increments each time that Cisco Unified Communications Manager cannot resolve the mismatch and manual intervention is required (such as a configuration update or device reset).
ConfigMismatchesTemporary	This counter represents the number of times that a phone that is running SIP was temporarily unable to register due to a configuration version mismatch between the TFTP server and Cisco Unified Communications Manager since the last restart of the Cisco CallManager service. This counter increments each time Cisco Unified Communications Manager is able to resolve the mismatch automatically.

Table B-32 Cisco SIP Station (continued)

Counters	Counter Description
DBTimeouts	This counter represents the number of new registrations that failed because a timeout occurred while the system was attempting to retrieve the device configuration from the database.
NewRegAccepted	This counter represents the total number of new REGISTRATION requests that have been removed from the NewRegistration queue and processed since the last restart of the Cisco CallManager service.
NewRegQueueSize	This counter represents the number of REGISTRATION requests that are currently on the NewRegistration queue. The system places REGISTRATION requests that are received from devices that are not currently registered on this queue before they are processed.
NewRegRejected	This counter represents the total number of new REGISTRATION requests that were rejected with a 486 Busy Here response and not placed on the NewRegistration queue since the last restart of the Cisco CallManager service. The system rejects REGISTRATION requests if the NewRegistration queue exceeds a programmed size.
TokensAccepted	This counter represents the total number of token requests that have been granted since the last Cisco Communications Manager restart. Cisco Unified Communications Manager grants tokens as long as the number of outstanding tokens remains below the number that is specified in the Cisco CallManager service parameter Maximum Phone Fallback Queue Depth.
TokensOutstanding	This counter represents the number of devices that have been granted a token but have not yet registered. The system requires that devices that are reconnecting to a higher priority Cisco Unified Communications Manager server be granted a token before registering. Tokens protect Cisco Unified Communications Manager from being overloaded with registration requests when it comes back online after a failover situation.
TokensRejected	This counter represents the total number of token requests that have been rejected since the last Cisco Unified Communications Manager restart. Cisco Unified Communications Manager will reject token request if the number of outstanding tokens is greater than the number that is specified in the Cisco CallManager service parameter Maximum Phone Fallback Queue Depth.

Cisco SW Conf Bridge Device

The Cisco SW Conference Bridge Device object provides information about registered Cisco software conference bridge devices. Table B-33 contains information on the Cisco software conference bridge device counters.

Table B-33 Cisco SW Conf Bridge Device

Counters	Counter Description
OutOfResources	This counter represents the total number of times that an attempt was made to allocate a conference resource from a SW conference device and failed because all resources were already in use.
ResourceActive	This counter represents the number of resources that are currently in use (active) for a SW conference device. One resource represents one stream.
ResourceAvailable	This counter represents the total number of resources that are not active and are still available to be used now for a SW conference device. One resource represents one stream.
ResourceTotal	This counter represents the total number of conference resources that a SW conference device provides. One resource represents one stream.This counter equals the sum of the ResourceAvailable and ResourceActive counters.
SWConferenceActive	This counter represents the number of software-based conferences that are currently active (in use) on a SW conference device.
SWConferenceCompleted	This counter represents the total number of conferences that have been allocated and released on a SW conference device. A conference starts when the first call connects to the bridge. The conference completes when the last call disconnects from the bridge.

Cisco TFTP Server

The Cisco Trivial File Transfer Protocol (TFTP) Server object provides information about the Cisco TFTP server. Table B-34 contains information on Cisco TFTP server counters.

Table B-34 Cisco TFTP Server

Counters	Counter Description
BuildAbortCount	This counter represents the number of times that the build process aborted when it received a Build all request. This counter increases when building of device/unit/softkey/dial rules gets aborted as a result of group level change notifications.
BuildCount	This counter represents the number of times since the TFTP service started that the TFTP server has built all the configuration files in response to a database change notification that affects all devices. This counter increases by one every time the TFTP server performs a new build of all the configuration files.
BuildDeviceCount	This counter represents the number of devices that were processed in the last build of all the configuration files. This counter also updates while processing device change notifications. The counter increases when a new device is added and decreases when an existing device is deleted.

Table B-34 Cisco TFTP Server (continued)

Counters	Counter Description
BuildDialruleCount	This counter represents the number of dial rules that were processed in the last build of the configuration files. This counter also updates while processing dial rule change notifications. The counter increases when a new dial rule is added and decreases when an existing dial rule is deleted.
BuildDuration	This counter represents the time in seconds that it took to build the last configuration files.
BuildSignCount	This counter represents the number of security-enabled phone devices for which the configuration file was digitally signed with the Cisco Unified Communications Manager server key in the last build of all the configuration files. This counter also updates while processing security-enabled phone device change notifications.
BuildSoftKeyCount	This counter represents the number of softkeys that were processed in the last build of the configuration files. This counter increments when a new softkey is added and decrements when an existing softkey is deleted.
BuildUnitCount	This counter represents the number of gateways that were processed in the last build of all the configuration files. This counter also updates while processing unit change notifications. The counter increases when a new gateway is added and decreases when an existing gateway is deleted.
ChangeNotifications	This counter represents the total number of all the Cisco Unified Communications Manager database change notifications that the TFTP server received. Each time that a device configuration is updated in Cisco Unified Communications Manager Administration, the TFTP server gets sent a database change notification to rebuild the XML file for the updated device.
DeviceChangeNotifications	This counter represents the number of times that the TFTP server received database change notification to create, update, or delete configuration files for devices.
DialruleChangeNotifications	This counter represents the number of times that the TFTP server received database change notification to create, update, or delete configuration files for dial rules.
EncryptCount	This counter represents the number of configuration files that were encrypted. This counter gets updated each time a configuration file is successfully encrypted
GKFoundCount	This counter represents the number of GK files that were found in the cache. This counter gets updated each time a GK file is found in the cache
GKNotFoundCount	This counter represents the number of GK files that were not found in the cache. This counter gets updated each time a request to get a GK file results in the cache not finding it
HeartBeat	This counter represents the heartbeat of the TFTP server. This incremental count indicates that the TFTP server is up and running. If the count does not increase, this means that the TFTP server is down.
HttpConnectRequests	This counter represents the number of clients that are currently requesting the HTTP GET file request.

Table B-34 Cisco TFTP Server (continued)

Counters	Counter Description
HttpRequests	This counter represents the total number of file requests (such as requests for XML configuration files, phone firmware files, audio files, and so on.) that the HTTP server handled. This counter represents the sum total of the following counters since the HTTP service started: RequestsProcessed, RequestsNotFound, RequestsOverflow, RequestsAborted, and RequestsInProgress.
HttpRequestsAborted	This counter represents the total number of HTTP requests that the HTTP server. canceled (aborted) unexpectedly. Requests could get aborted if the requesting device cannot be reached (for instance, the device lost power) or if the file transfer was interrupted due to network connectivity problems.
HttpRequestsNotFound	This counter represents the total number of HTTP requests where the requested file was not found. When the HTTP server does not find the requested file, a message gets sent to the requesting device.
HttpRequestsOverflow	This counter represents the total number of HTTP requests that were rejected when the maximum number of allowable client connections was reached. The requests may have arrived while the TFTP server was building the configuration files or because of some other resource limitation. The Cisco TFTP advanced service parameter, Maximum Serving Count, sets the maximum number of allowable connections.
HttpRequestsProcessed	This counter represents the total number of HTTP requests that the HTTP server. successfully processed.
HttpServedFromDisk	This counters represents the number of requests that the HTTP server completed with the files that are on disk and not cached in memory.
LDFoundCount	This counter represents the number of LD files that were found in the cache. This counter gets updated each time a LD file is found in cache memory.
LDNotFoundCount	This counter represents the number of LD files that were not found in cache memory. This counter gets updated each time a request to get an LD file results in the cache not finding it.
MaxServingCount	This counter represents the maximum number of client connections that the TFTP can serve simultaneously. The Cisco TFTP advanced service parameter, Maximum Serving Count, sets this value.
Requests	This counter represents the total number of file requests (such as requests for XML configuration files, phone firmware files, audio files, and so on.) that the TFTP server handles. This counter represents the sum total of the following counters since the TFTP service started: RequestsProcessed, RequestsNotFound, RequestsOverflow, RequestsAborted, and RequestsInProgress.
RequestsAborted	This counter represents the total number of TFTP requests that the TFTP server canceled (aborted) unexpectedly. Requests could be aborted if the requesting device cannot be reached (for instance, the device lost power) or if the file transfer was interrupted due to network connectivity problems.
RequestsInProgress	This counter represents the number of file requests that the TFTP server currently is processing. This counter increases for each new file request and decreases for each file request that is completed. This counter indicates the current load of the TFTP server.

Table B-34 Cisco TFTP Server (continued)

Counters	Counter Description
RequestsNotFound	This counter represents the total number of TFTP requests for which the requested file was not found. When the TFTP server does not find the requested file, a message gets sent to the requesting device. If this counter increments in a cluster that is configured as secure, this event usually indicates an error condition. If, however, the cluster is configured as non-secure, it is normal for the CTL file to be absent (not found), which results in a message being sent to the requesting device and a corresponding increment in this counter. For non-secure clusters, then, this normal occurrence does not represent an error condition.
RequestsOverflow	This counter represents the total number of TFTP requests that were rejected because the maximum number of allowable client connections was exceeded, because requests arrived while the TFTP server was building the configuration files, or because of some other resource limitation. The Cisco TFTP advanced service parameter, Maximum Serving Count, sets the maximum number of allowable connections.
RequestsProcessed	This counter represents the total number of TFTP requests that the TFTP server successfully processed.
SegmentsAcknowledged	This counter represents the total number of data segments that the client devices acknowledged. Files get sent to the requesting device in data segments of 512 bytes, and for each 512-byte segment, the device sends the TFTP server an acknowledgment message. Each additional data segment gets sent upon receipt of the acknowledgment for the previous data segment until the complete file successfully gets transmitted to the requesting device.
SegmentsFromDisk	This counter represents the number of data segments that the TFTP server reads from the files on disk, while serving files.
SegmentSent	This counter represents the total number of data segments that the TFTP server sent. Files get sent to the requesting device in data segments of 512 bytes.
SEPFoundCount	This counter represents the number of SEP files that were successfully found in the cache. This counter gets updated each time that a SEP file is found in the cache.
SEPNotFoundCount	This counter represents the number of SEP files that were not found in the cache. This counter gets updated each time that a request to get a SEP file produces a not found in cache memory result.
SIPFoundCount	This counter represents the number of SIP files that were successfully found in the cache. This counter gets updated each time that a SIP file is found in the cache
SIPNotFoundCount	This counter represents the number of SIP files that were not found in the cache. This counter gets updated each time that a request to get a SIP file produces a not found in cache memory result.
SoftkeyChangeNotifications	This counter represents the number of times that the TFTP server received database change notification to create, update, or delete configuration files for softkeys.
UnitChangeNotifications	This counter represents the number of times that the TFTP server received database change notification to create, update, or delete gateway-related configuration files.

Cisco Transcode Device

The Cisco Transcode Device object provides information about registered Cisco transcoding devices. Table B-35 contains information on Cisco transcoder device counters.

Table B-35 Cisco Transcode Device

Counters	Counter Description
OutOfResources	This counter represents the total number of times that an attempt was made to allocate a transcoder resource from a transcoder device and failed; for example, because all resources were already in use.
ResourceActive	This counter represents the number of transcoder resources that are currently in use (active) for a transcoder device. Each transcoder resource uses two streams.
ResourceAvailable	This counter represents the total number of resources that are not active and are still available to be used now for a transcoder device. Each transcoder resource uses two streams.
ResourceTotal	This counter represents the total number of transcoder resources that a transcoder device provided. This counter equals the sum of the counters ResourceActive and ResourceAvailable.

Cisco Video Conference Bridge

The Cisco Video Conference Bridge object provides information about registered Cisco video conference bridge devices. Table B-36 contains information on Cisco video conference bridge device counters.

Table B-36 Cisco Video Conference Bridge

Counters	Counter Description
ConferencesActive	This counter represents the total number of video conferences that are currently active (in use) on a video conference bridge device. The system specifies a conference as active when the first call connects to the bridge.
ConferencesAvailable	This counter represents the number of video conferences that are not active and are still available on a video conference device.
ConferencesCompleted	This counter represents the total number of video conferences that have been allocated and released on a video conference device. A conference starts when the first call connects to the bridge. The conference completes when the last call disconnects from the bridge.
ConferencesTotal	This counter represents the total number of video conferences that are configured for a video conference device.
OutOfConferences	This counter represents the total number of times that an attempt was made to initiate a video conference from a video conference device and failed because the device already had the maximum number of active conferences that is allowed (as specified by the TotalConferences counter).

Table B-36 Cisco Video Conference Bridge (continued)

Counters	Counter Description
OutOfResources	This counter represents the total number of times that an attempt was made to allocate a conference resource from a video conference device and failed, for example, because all resources were already in use.
ResourceActive	This counter represents the total number of resources that are currently active (in use) on a video conference bridge device. One resource gets used per participant.
ResourceAvailable	This counter represents the total number of resources that are not active and are still available on a device to handle additional participants for a video conference bridge device.
ResourceTotal	This counter represents the total number of resources that are configured on a video conference bridge device. One resource gets used per participant.

Cisco Web Dialer

The Cisco Web Dialer object provides information about the Cisco Web Dialer application and the Redirector servlet. Table B-37 contains information on the Cisco Web Dialer counters.

Table B-37 Cisco Web Dialer

Counters	Counter Description
CallsCompleted	This counter represents the number of Make Call and End Call requests that the Cisco Web Dialer application successfully completed.
CallsFailed	This counter represents the number of Make Call and End Call requests that were unsuccessful.
RedirectorSessionsHandled	This counter represents the total number of HTTP sessions that the Redirector servlet handled since the last service startup.
RedirectorSessionsInProgress	This counter represents the number of HTTP sessions that are currently being serviced by the Redirector servlet.
RequestsCompleted	This counter represents the number of Make Call and End Call requests that the Web Dialer servlet has successfully completed.
RequestsFailed	This counter represents the number of Make Call and End Call requests that failed.
SessionsHandled	This counter represents the total number of CTI sessions that the Cisco Web Dialer servlet handled since the last service startup.
SessionsInProgress	This counter represents the number of CTI sessions that the Cisco Web Dialer servlet is currently servicing.

Cisco WSM Connector

The WSM object provides information on WSMConnectors that are configured on Cisco Unified Communications Manager. Each WSMConnector represents a physical Motorola WSM device. Table B-38 contains information on the Cisco WSM Connector counters.

Table B-38 Cisco WSM Connector

Counters	Counter Description
CallsActive	This counter represents the number of calls that are currently active (in use) on the WSMConnector device.
CallsAttempted	This counter represents the number of calls that have been attempted on the WSMConnector device, including both successful and unsuccessful call attempts.
CallsCompleted	This counter represents the number of calls that are connected (a voice path was established) through the WSMConnector device. The counter increments when the call terminates.
CallsInProgress	This counter represents the number of calls that are currently in progress on the WSMConnector device. This includes all active calls. When the number of CallsInProgress equals the number of CallsActive, this indicates that all calls are connected.
DMMSRegistered	This counter represents the number of DMMS subscribers that are registered to the WSM.

IME Client

The IME Client object provides information about the Cisco IME client on the Cisco Unified Communications Manager server. Table B-39 contains information on the Cisco IME client counters.

Table B-39 Cisco IME Client

Counters	Counter Description
CallsAccepted	This counter indicates the number of Cisco IME calls that the Cisco Unified Communications Manager received successfully and that the called party answered, resulting in an IP call.
CallsAttempted	This counter indicates the number of calls that the Cisco Unified Communications Manager received through Cisco IME. This number includes accepted calls, failed calls, and busy, no-answer calls. The counter increments each time that Cisco Unified Communications Manager receives a call through Cisco IME.
CallsReceived	This counter indicates the number of calls that Cisco Unified Communications Manager receives through Cisco IME. This number includes accepted calls, failed calls, and busy, no-answer calls. The counter increments on call initiation.
CallsSetup	This counter indicates the number of Cisco IME calls that Cisco Unified Communications Manager placed successfully and that the remote party answered, resulting in an IP call.
DomainsUnique	This counter indicates the number of unique domain names of peer enterprises that the Cisco IME client discovered. The counter serves as an indicator of overall system usage.

Table B-39 Cisco IME Client (continued)

Counters	Counter Description
FallbackCallsFailed	This counter indicates the total number of failed fallback attempts.
FallbackCallsSuccessful	This counter indicates the total number of Cisco IME calls that have fallen back to the PSTN mid-call due to a quality problem. The counter includes calls initiated and calls received by this Cisco Unified Communications Manager.
IMESetupsFailed	This counter indicates the total number of call attempts for which a Cisco IME route was available but that were set up through the PSTN due to a failure to connect to the target over the IP network.
RoutesLearned	This counter indicates the total number of distinct phone numbers that the Cisco IME has learned and that are present as routes in the Cisco Unified Communications Manager routing tables. If this number grows too large, the server may exceed the per-cluster limit, and you may need to add additional servers to your cluster.
RoutesPublished	This counter indicates the total number of DIDs that were published successfully into the IME distributed cache across all Cisco IME client instances. The counter provides a dynamic measurement that gives you an indication of your own provisioned usage and a sense of how successful the system has been in storing the DIDs in the network.
RoutesRejected	This counter indicates the number of learned routes that were rejected because the the administrator blacklisted the number or domain. This counter provides an indication of the number of cases where a VoIP call cannot happen in the future because of the blocked validation.
VCRUploadRequests	This counter indicates the number of voice call record (VCR) upload requests that the Cisco Unified Communications Manager has sent to the Cisco IME server to be stored in the IME distributed cache.

IME Client Instance

The IME Client Instance object provides information about the Cisco IME client instance on the Cisco Unified Communications Manager server. Table B-40 contains information on the Cisco IME client instance counters.

Table B-40 IME Client

Counters	Counter Description
IMEServiceStatus	This counter indicates the overall health of the connection to the Cisco IME services for a particular Cisco IME client instance (Cisco Unified Communications Manager). The following values may display for the counter: • 0—Indicates an unknown state (which may mean that the Cisco IME service is not active). If the value specifies 0, an alert gets generated once per hour while the connection remains in the unknown state. • 1—Indicates a healthy state; that is, the Cisco IME service is active, and the Cisco Unified Communications Manager has successfully established a connection to its primary and backup servers for the Cisco IME client instance, if configured. • 2—Indicates an unhealthy state; that is, the Cisco IME service is active, but the Cisco Unified Communications Manager has not successfully established a connection to its primary and backup servers for the Cisco IME client instance, if configured.

Where to Find More Information

Related Topics

- Understanding Performance Monitoring
- Working with Performance Queries