



# **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 blue text in the following list to go to the object:

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 $\mathcal{P}$ 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.

| Counters             | Counter Description   |
|----------------------|---|
| OutboundBusyAttempts | This counter represents the total number of times that Cisco Unified<br>Communications Manager attempts a call through the analog access gateway<br>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.<br>Counter applies only to loop-start and ground-start trunks.                                 |

Table B-1 Cisco Analog Access

### **Cisco Annunciator Device**

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

| Counters          | Counter Description   |
|-------------------|---|
| OutOfResources    | This counter represents the total number of times that Cisco Unified<br>Communications Manager attempted to allocate an annunciator resource from an<br>annunciator device and failed; for example, because all resources were already in<br>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.  |

### Table B-2 Cisco Annunciator Device

## **Cisco CallManager**

The Cisco CallManager object provides information about calls, applications, and devices that are registered with the Cisco Unified Communications Manager. Table B-3 contains information about Cisco CallManager counters.

| Table B-3 | Cisco CallManager |
|-----------|-------------------|
|-----------|-------------------|

| Counters                     | Counter Description  |
|------------------------------|--|
| AnnunciatorOutOfResources    | This counter represents the total number of times that Cisco Unified<br>Communications Manager attempted to allocate an annunciator resource from<br>those that are registered to a Cisco Unified Communications Manager when none<br>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<br>(in use) on Cisco Unified Communications Manager. An authenticated call<br>designates one in which all the endpoints that are participating in the call are<br>authenticated. An authenticated phone uses the Transport Layer Security (TLS)<br>authenticated Skinny protocol signaling with Cisco Unified Communications<br>Manager. |
| AuthenticatedCallsCompleted  | This counter represents the number of authenticated calls that connected and<br>subsequently disconnected through Cisco Unified Communications Manager. An<br>authenticated call designates one in which all the endpoints that are participating<br>in the call are authenticated. An authenticated phone uses the TLS authenticated<br>Skinny protocol signaling with Cisco Unified Communications Manager.                |

| Counters                              | Counter Description  |
|---------------------------------------|--|
| 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<br>Manager. This incremental count indicates that Cisco Unified Communications<br>Manager is up and running. If the count does not increment, that indicates that<br>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.   |

| 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<br>been denied due to throttling (a resource from this transcoder was not allocated<br>because, as specified by the Cisco CallManager service parameter MTP and<br>Transcoder Resource Throttling Percentage, the transcoder was being utilized<br>beyond the configured throttle percentage). This counter increments each time a<br>request for a transcoder on this Cisco Unified Communications Manager (Unified<br>CM) node is requested and denied due to transcoder throttling and reflects a<br>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<br>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-3 Cisco CallManager (continued)

### Table B-3 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.  |
| HWConferenceOutOfResources    | This counter represents the total number of times that Cisco Unified<br>Communications Manager attempted to allocate a hardware conference resource<br>from those that are registered to a Cisco Unified Communications Manager when<br>none was available.   |
| HWConferenceResourceActive    | This counter represents the total number of conference resources that are in use<br>on all hardware conference devices (such as Cisco Catalyst 6000, Catalyst 4000,<br>Cisco VG200, Cisco series 26xx and 36xx) that are registered with Cisco Unified<br>Communications Manager. System considers conference to be active when one<br>or more calls are connected to a bridge.   |
| HWConferenceResourceAvailable | This counter represents the number of hardware conference resources that are not<br>in use and that are available to be allocated on all hardware conference devices<br>(such as Cisco Catalyst 6000, Cisco Catalyst 4000, Cisco VG200, Cisco series<br>26xx and 36xx) that are allocated fromCisco Unified Communications Manager<br>and that have been completed, which means that the conference bridge has been<br>allocated and released. A conference activates when the first call connects to the<br>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<br>Communications Manager. Cisco Unified Communications Manager includes the<br>following initialization state values:  |
|                               | 1-Database; 2-Regions; 3-Locations; 4-QoS Policy; 5-Time Of Day; 6-AAR<br>Neighborhoods; 7-Digit Analysis; 8-Route Plan; 9-Call Control; 10-RSVP<br>Session Manager; 11-Supplementary Services; 12-Directory; 13-SDL Link;<br>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<br>currently in use (active) on all MOH servers that are registered with a Cisco<br>Unified Communications Manager.  |
| MOHMulticastResourceAvailable | This counter represents the total number of active multicast MOH connections<br>that are not being used on all MOH servers that are registered with a Cisco<br>Unified Communications Manager.  |

| Counters                    | Counter Description   |
|-----------------------------|---|
| MOHOutOfResources           | This counter represents the total number of times that the Media Resource<br>Manager attempted to allocate an MOH resource when all available resources on<br>all MOH servers that are registered with a Cisco Unified Communications<br>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<br>that are provided by all MOH servers that are currently registered with Cisco<br>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<br>currently available on all MOH servers that are registered with Cisco Unified<br>Communications Manager. Each MOH unicast resource uses one stream.   |
| MTPOutOfResources           | This counter represents the total number of times that Cisco Unified<br>Communications Manager attempted but failed to allocate an MTP resource from<br>one MTP device that is registered with Cisco Unified Communications Manager.<br>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-3 Cisco CallManager (continued)

| Table B-3 | 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<br>IP phones that are currently registered in the system (for example,<br>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<br>incoming SIP requests from SIP phones to the Cisco Unified Communications<br>Manager server. An authentication failure occurs when a SIP phone with Digest<br>Authentication enabled sends a SIP line request with bad credentials to Cisco<br>Unified Communications Manager.   |
| SIPTrunkAuthorization                  | This counter represents the number of application-level authorization checks for<br>incoming SIP requests that Cisco Unified Communications Manager has issued<br>to SIP trunks. An application-level authorization check occurs when Cisco<br>Unified Communications Manager compares an incoming SIP request to the<br>application-level settings on the SIP Trunk Security Profile Configuration<br>window in Cisco Unified Communications Manager Administration.   |
| SIPTrunkAuthorizationFailures          | This counter represents the number of application-level authorization failures for<br>incoming SIP requests that have occurred on Cisco Unified Communications<br>Manager SIP trunks. An application-level authorization failure occurs when<br>Cisco Unified Communications Manager compares an incoming SIP request to<br>the application-level authorization settings on the SIP Trunk Security Profile<br>Configuration window in Cisco Unified Communications Manager<br>Administration and finds that authorization for one or more of the SIP features<br>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<br>occurred for incoming SIP requests from SIP trunks to Cisco Unified<br>Communications Manager. An authentication failure occurs when a SIP trunk<br>with Digest Authentication enabled sends a SIP request with bad credentials to<br>Cisco Unified Communications Manager.   |

| 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<br>conference bridge that was allocated from a Cisco Unified Communications<br>Manager and that have been completed, which means that the conference bridge<br>has been allocated and released. A conference activates when the first call<br>connects to the bridge. The conference completes when the last call disconnects<br>from the bridge. |
| SWConferenceOutOfResources    | This counter represents the total number of times that Cisco Unified<br>Communications Manager attempted to allocate a software conference resource<br>from those that are registered to Cisco Unified Communications Manager when<br>none were available. Counter includes failed attempts to add a new participant to<br>an existing conference.   |
| SWConferenceResourceActive    | This counter represents the total number of conference resources that are in use<br>on all software conference devices that are registered with Cisco Unified<br>Communications Manager. The system considers a conference to be active when<br>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<br>be started at the same time, for Cisco Unified Communications Manager. You<br>must have a minimum of three streams available for each new conference. One<br>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<br>Communications Manager attempted to allocate a transcoder resource from a<br>transcoder device that is registered to a Cisco Unified Communications Manager<br>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-3 Cisco CallManager (continued)

### Table B-3 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<br>by all transcoder devices that are currently registered with Cisco Unified<br>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<br>on all video conference bridge devices that are registered with Cisco Unified<br>Communications Manager.   |
| VCBOutOfConferences         | This counter represents the total number of times that Cisco Unified<br>Communications Manager attempted to allocate a video conference resource<br>from those that are registered to Cisco Unified Communications Manager when<br>none was available.   |
| VCBOutOfResources           | This counter represents the total number of failed new video conference requests.<br>A conference request can fail because, for example, the configured number of<br>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.   |

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

#### Table B-3 Cisco CallManager (continued)

### **Cisco CallManager Attendant Console**

The Cisco CallManager Attendant Console (Cisco CallManager Attendant Console Server service) object provides information about the Cisco Unified Communications Manager Attendant Console. Table B-4 contains information about Cisco CallManager Attendant Console counters.

| Counters         | Counter Description  |
|------------------|--|
| CallsActive      | Do not use this counter. Information in this counter may not accurately reflect the total number of active calls.  |
| CallsRedirected  | This counter represents the total number of redirected calls for the Cisco<br>CallManager Attendant Console Server service. This number increases every time<br>that a pilot point receives a call and redirects the call to a member of its hunt<br>group.  |
| CallsTotal       | This counter represents the total number of all calls that have been made since the Cisco CallManager Attendant Console Server service started.  |
| CcmLineLinkState | This counter represents the line state. Values include 0, 1, 10, or 11. A value of 0 indicates that the Cisco CallManager Attendant Console Server service has not registered or has not received line link state information from Cisco Unified Communications Manager; 1 indicates that the Cisco CallManager Attendant Console Server service has registered and is receiving line link state information from Cisco Communications Manager; 10 indicates that the Cisco CallManager Attendant Console Server service has logged into CTI but has not registered or has not received line link state information from Cisco CallManager; 11 indicates that the Cisco CallManager; 11 indicates that the Cisco CallManager; 11 indicates that the Cisco CallManager Attendant Console Server service has logged into CTI but has not registered or has not received line link state information from Cisco Communications Manager; 11 indicates that the Cisco CallManager Attendant Console Server service has logged into CTI and has registered and is receiving line link state information. |
| ClientsOnline    | This counter represents the total number of Cisco Unified Communications<br>Manager attendant console clients that are currently online. Attendant Console<br>clients include all users that are configured in the Attendant Console User<br>Configuration window in Cisco Unified Communications Manager<br>Administration that are currently online. This number increases by one for each<br>client that goes online and decreases by one for each client that goes offline.  |

 Table B-4
 Cisco CallManager Attendant Console

| Table B-4 | Cisco CallManager Attendant Console (continued) |
|-----------|---|
|-----------|---|

| Counters          | Counter Description   |
|-------------------|---|
| ClientsRegistered | This counter represents the total number of registered clients for the Cisco<br>CallManager Attendant Console Server service. This number increases by one for<br>each new registration of a Cisco Unified Communications Manager attendant<br>console client when the client application logs in.  |
| ClientsTotal      | This counter represents the total number of Cisco Unified Communications<br>Manager Attendant Console clients that are currently registered with the<br>Cisco CallManager Attendant Console Server service. Attendant console clients<br>represent all users that are configured in the Attendant Console User<br>Configuration window in Cisco Unified Communications<br>ManagerAdministration.                |
| HeartBeat         | This counter represents the heartbeat of the Cisco CallManager Attendant<br>Console Server service. This incremental count indicates that Cisco CallManager<br>Attendant Console Server service is up and running. If the count does not<br>increase, this means that the service is down.  |
| LinesActive       | Do not use this counter. Information in this counter may not accurately reflect the total number of active lines.   |
| LinesIdle         | Do not use this counter. Information in this counter may not accurately reflect the total number of idle lines.   |
| LinesTotal        | Do not use this counter. Information in this counter may not accurately reflect the total number of lines.  |
| PilotPointsTotal  | This counter represents the total number of pilot points that are configured in Cisco Unified Communications Manager.   |
| StartTime         | This counter represents the time in milliseconds since the Cisco CallManager<br>Attendant Console Server service started. The real-time clock in the computer,<br>which is simply a reference point that indicates the current time and the time that<br>has elapsed, in milliseconds, since the service started, provides the basis for this<br>time. The reference point specifies midnight, January 1, 1970. |
| Version           | This counter represents the version of the Cisco CallManager Attendant Console Server 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.

| 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<br>of Cisco CallManager service due to Intercluster Trunk (ICT) call throttling.<br>When the threshold limit of 140 calls per 5 seconds is met, the ICT will start<br>throttling (rejecting) new calls. One cause for ICT call throttling occurs when<br>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<br>entered or exited a Code state (call-throttling mode). Valid values include 0 (Exit)<br>and 1 (Entry).   |
| CodeYellowEntryExit             | This counter indicates whether Cisco Unified Communications Manager has<br>entered or exited a Code Yellow state (call-throttling mode). Valid values include<br>0 (Exit) and 1 (Entry).  |
| EngineeringCounter1             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>Cisco uses information in this counter for diagnostic purposes.  |
| EngineeringCounter2             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>Cisco uses information in this counter for diagnostic purposes.  |
| EngineeringCounter3             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>Cisco uses information in this counter for diagnostic purposes.  |
| EngineeringCounter4             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>Cisco uses information in this counter for diagnostic purposes.  |
| EngineeringCounter5             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>Cisco uses information in this counter for diagnostic purposes.  |
| EngineeringCounter6             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>Cisco uses information in this counter for diagnostic purposes.  |
| EngineeringCounter7             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>Cisco uses information in this counter for diagnostic purposes.  |
| EngineeringCounter8             | Do not use this counter unless directed by a Cisco Engineering Special build.<br>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<br>Communications Manager queue. High-priority signals include timeout events,<br>internal Cisco Unified Communications Manager keepalives, certain gatekeeper<br>events, and internal process creation, among other events. A large number of<br>high-priority events will cause degraded performance on Cisco Unified<br>Communications Manager and result in slow call connection or loss of dial tone.<br>Use this counter in conjunction with the QueueSignalsProcessed 1-High counter<br>to determine the processing delay on Cisco Unified Communications Manager. |

### Table B-5 Cisco CallManager System Performance

### Table B-5 Cisco CallManager System Performance (continued)

| Counters                       | Counter Description   |
|--------------------------------|---|
| QueueSignalsPresent 2-Normal   | This counter indicates the number of normal-priority signals in the Cisco Unified<br>Communications Manager queue. Normal-priority signals include call-processing<br>functions, key presses, on-hook and off-hook notifications, among other events.<br>A large number of normal-priority events will cause degraded performance on<br>Cisco Unified Communications Manager, sometimes resulting in delayed dial<br>tone, slow call connection, or loss of dial tone. Use this counter in conjunction<br>with the QueueSignalsProcessed 2-Normal counter to determine the<br>call-processing delay on Cisco Unified Communications Manager. Remember<br>that high-priority signals must complete before normal-priority signals begin to<br>process, so check the high-priority counters as well to get an accurate picture of<br>the potential delay. |
| QueueSignalsPresent 3-Low      | This counter indicates the number of low-priority signals in the Cisco Unified<br>Communications Manager queue. Low-priority signals include station device<br>registration (except the initial station registration request message), among other<br>events. A large number of signals in this queue could result in delayed device<br>registration, among other events.   |
| QueueSignalsPresent 4-Lowest   | This counter indicates the number of lowest priority signals in the Cisco Unified<br>Communications Manager queue. Lowest priority signals include the initial<br>station registration request message during device registration, among other<br>events. A large number of signals in this queue could result in delayed device<br>registration, among other events.   |
| QueueSignalsProcessed 1-High   | This counter indicates the number of high-priority signals that Cisco Unified<br>Communications Manager processes for each 1-second interval. Use this counter<br>in conjunction with the QueueSignalsPresent 1-High counter to determine the<br>processing delay on this queue.  |
| QueueSignalsProcessed 2-Normal | This counter indicates the number of normal-priority signals that Cisco Unified<br>Communications Manager processes for each 1-second interval. Use this counter<br>in conjunction with the QueueSignalsPresent 2-Normal counter to determine the<br>processing delay on this queue. Remember that high-priority signals get<br>processed before normal-priority signals.   |
| QueueSignalsProcessed 3-Low    | This counter indicates the number of low-priority signals that Cisco Unified<br>Communications Manager processes for each 1-second interval. Use this counter<br>in conjunction with the QueueSignalsPresent 3-Low counter to determine the<br>processing delay on this queue. The number of signals processed gives an<br>indication of how much device registration activity is being processed in this time<br>interval.   |
| QueueSignalsProcessed 4-Lowest | This counter indicates the number of lowest priority signals that Cisco Unified<br>Communications Manager processes for each 1-second interval. Use this counter<br>in conjunction with the QueueSignalsPresent 4-Lowest counter to determine the<br>processing delay on this queue. The number of signals that are processed gives an<br>indication of how many devices began the Cisco Unified Communications<br>Manager registration process in this time interval.  |
| QueueSignalsProcessed Total    | This counter provides a sum total of all queue signals that Cisco Unified<br>Communications Manager processes for each 1-second period for all queue<br>levels: high, normal, low, and lowest.  |

| Counters                 | Counter Description   |
|--------------------------|---|
| SkinnyDevicesThrottled   | This counter represents the total number of Skinny devices that are being<br>throttled. A Skinny device gets throttled (asked to shut down and reregister) when<br>the total number of events that the Skinny device generated exceeds the<br>configured maximum threshold value (default value specifies 2000 events) within<br>a 5-second interval. |
| ThrottlingSampleActivity | This counter indicates how many samples, out of the configured sample size, have<br>non-zero averageExpectedDelay values. This counter gets reset when any sample<br>has an averageExpectedDelay value of zero. This process repeats for each batch<br>of samples. A batch represents the configured sample size.                                     |
| TotalCodeYellowEntry     | This counter indicates the number of times that Cisco Unified Communications<br>Manager call processing enters the code yellow state. This counter remains<br>cumulative from the start of the Cisco Unified Communications Manager process.  |

#### Table B-5 Cisco CallManager System Performance (continued)

### **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<br>Manager links. CTI Manager maintains links to all active servers in a cluster, if<br>applicable.  |
| CTIConnectionActive | This counter represents the total number of CTI clients that are currently<br>connected to the CTIManager. This counter increases by one when new<br>connection is established and decreases by one when a connection is released. The<br>CTIManager service parameter MaxCTIConnections determines the maximum<br>number of active connections. |
| DevicesOpen         | This counter represents the total number of devices that are configured in Cisco<br>Unified Communications Manager that CTI applications control and/or monitor.<br>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<br>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<br>dual-mode phones that are anchored in Cisco Unified Communications Manager.<br>The counter increments when a call is received from or placed to a dual-mode<br>phone. The counter increments twice if a dual-mode phone calls another<br>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<br>Communications Manager attempted. The counter increments when a SIP 302 -<br>Moved Temporarily message is received from the Wireless Service Manager<br>(WSM) and Cisco Unified Communications Manager redirects the call to the<br>DMMS in WLAN.      |
| FollowMeCompleted   | This counter represents the number of follow-me operations that were<br>successfully completed. The counter increments when the DMMS in WLAN<br>answers the call and the media (voice path) is successfully established with the<br>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).   |
| 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.<br>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.   |

| Counters          | Counter Description  |
|-------------------|--|
| 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. |

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

## **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<br>mobility application handled since the last restart of the Cisco CallManager<br>service. A typical login would constitute two HTTP requests: one to query the<br>initial login state of the device and another to log in the user on a device.<br>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.  |
| 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.   |
| 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<br>connections that are currently active (in use) on all H.323 trunks that are<br>registered with a Cisco Unified Communications Manager; in other words, the<br>number of calls that actually have video-streaming connections on a Cisco<br>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<br>a hunt list. A call in progress represents one that the call distributor is attempting<br>to extend to a member of a line or route group and that has not yet been answered.<br>Examples of a hunt list member include a line, a station device, a trunk device, or<br>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.   |
| 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<br>route groups that belong to an in-service hunt list. An available member currently<br>handles a call and will accept a new call. An idle member does not handle any call<br>and will accept a new call. A hunt list member can comprise a route group, line<br>group, or a combination. A member of a line group represents a directory number<br>of a line on an IP phone or a voice-mail port. A member of a route group<br>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.

| 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<br>and released on a HW conference device. A conference starts when the first call<br>connects to the bridge. The conference completes when the last call disconnects<br>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.   |

Table B-12 Cisco HW Conference Bridge Device

## **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.

| Counters         | Counter Description  |
|------------------|--|
| AssistantsActive | This counter represents the number of assistant consoles that are currently active.<br>An active assistant console exists when an assistant is logged in from the assistant<br>console desktop application.  |
| LinesOpen        | This counter represents the number of phone lines that the Cisco Unified<br>Communications Manager Assistant application opened. An open phone line<br>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<br>using the Cisco Unified Communications Manager Assistant application. Each<br>manager and each assistant constitute an active session; so, for one<br>manager/assistant pair, this counter would reflect two sessions. |

 Table B-13
 Cisco IP Manager Assistant Service

### **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.

| 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<br>Unified Communications Manager through the location failed due to lack of<br>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. |

#### Table B-14 Cisco Locations

| Counters              | Counter Description   |
|-----------------------|---|
| 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.                            |

#### Table B-14 Cisco Locations (continued)

## **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.

۵, 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<br>IP Voice Media Streaming Application that a Cisco Unified Communications<br>Manager connection was lost.  |
| ANNConnectionState  | For each Cisco Unified Communications Manager that is associated with an<br>annunciator, this counter represents the current registration state to Cisco Unified<br>Communications Manager; 0 indicates no registration to Cisco Unified<br>Communications Manager; 1 indicates registration to the primary Cisco Unified<br>Communications Manager; 2 indicates connection to the secondary Cisco Unified<br>Communications Manager (connected to Cisco Unified Communications<br>Manager but not registered until the primary Cisco Unified Communications<br>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.   |

| Counter               | Counter Description   |
|-----------------------|---|
| 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<br>IP Voice Media Streaming Application that a Cisco Unified Communications<br>Manager connection was lost.   |
| CFBConnectionState    | For each Cisco Unified Communications Manager that is associated with a SW<br>Conference Bridge, this counter represents the current registration state to Cisco<br>Unified Communications Manager; 0 indicates no registration to Cisco Unified<br>Communications Manager; 1 indicates registration to the primary Cisco Unified<br>Communications Manager; 2 indicates connection to the secondary Cisco Unified<br>Communications Manager (connected to Cisco Unified Communications<br>Manager but not registered until the primary Cisco Unified Communications<br>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<br>this MOH server. Some of these audio sources may not be actively streaming<br>audio data if no devices are listening. The exception exists for multicast audio<br>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<br>IP Voice Media Streaming Application that a Cisco Unified Communications<br>Manager connection was lost.   |

| Table B-15 | Cisco Media Streaming Application (continued) |
|------------|---|
|------------|---|

| Counter             | Counter Description   |
|---------------------|---|
| MOHConnectionState  | For each Cisco Unified Communications Manager that is associated with an<br>MOH, this counter represents the current registration state to Cisco Unified<br>Communications Manager; 0 indicates no registration to Cisco Unified<br>Communications Manager; 1 indicates registration to the primary Cisco Unified<br>Communications Manager; 2 indicates connection to the secondary Cisco Unified<br>Communications Manager (connected to Cisco Unified Communications<br>Manager but not registered until the primary Cisco Unified Communications<br>Manager connection fails).      |
| 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<br>for each configured MOH codec. For unicast streams, the stream may exist in a<br>suspended state where no audio data is received until a device connects to listen<br>to the stream. Each MOH multicast resource uses one stream for each audio<br>source and codec combination. For example, if the default audio source is<br>configured for multicast, G.711 mu-law and wideband codecs, then two streams<br>get used (default audio source + G.711 mu-law and default audio source +<br>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<br>have connected to the MOH server since the Cisco IP Voice Media Streaming<br>Application service started.   |
| MTPConnectionsLost  | This counter represents the total number of times since the last restart of the Cisco<br>IP Voice Streaming Application that a Cisco Unified Communications Manager<br>connection was lost.   |
| MTPConnectionState  | For each Cisco Unified Communications Manager that is associated with an MTP,<br>this counter represents the current registration state to Cisco Unified<br>Communications Manager; 0 indicates no registration to Cisco Unified<br>Communications Manager; 1 indicates registration to the primary Cisco Unified<br>Communications Manager; 2 indicates connection to the secondary Cisco Unified<br>Communications Manager (connected to Cisco Unified Communications<br>Manager but not registered until the primary Cisco Unified Communications<br>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.   |

| Counter             | Counter Description   |
|---------------------|---|
| 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.  |

Table B-15 Cisco Media Streaming Application (continued)

### **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.

| 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.<br>The real-time clock in the computer, which simply acts as a reference point that<br>indicates the current time and the time that has elapsed, in milliseconds, since the<br>service started, provides the basis for this time. The reference point specifies<br>midnight, January 1, 1970. |

 Table B-16
 Cisco Messaging Interface

## **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<br>with the MGCP BRI device. Possible values: 0 (Unknown) indicates the status of<br>the channel could not be determined; 1 (Out of service) indicates that this channel<br>is not available for use; 2 (Idle) indicates that this channel has no active call and<br>is ready for use; 3 (Busy) indicates an active call on this channel; 4 (Reserved)<br>indicates that this channel has been reserved for use as a D-channel or for use as<br>a Synch-Channel for BRI. |
| Channel 2 Status     | This counter represents the status of the indicated B-Channel that is associated<br>with the MGCP BRI device. Possible values: 0 (Unknown) indicates the status of<br>the channel could not be determined; 1 (Out of service) indicates that this channel<br>is not available for use; 2 (Idle) indicates that this channel has no active call and<br>is ready for use; 3 (Busy) indicates an active call on this channel; 4 (Reserved)<br>indicates that this channel has been reserved for use as a D-channel or for use as<br>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-19Cisco 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.  |
| 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.

| 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.         |

Table B-20Cisco MGCP Gateways

## **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 MG |
|---------------------|
|---------------------|

| 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<br>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<br>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.

| Counters       | Counter Description  |
|----------------|--|
|                | 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.  |

| Counters   | Counter Description   |  |
|--|---|--|
| Channel 1 Status through Channel 24<br>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.   |  |

| Table B-22 C | Sisco MGCP T1 CAS | Device (continued) |
|--------------|-------------------|--------------------|
|--------------|-------------------|--------------------|

## **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-23Cisco 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.  |
| MobilityFollowMeCallsIgnoredDueToA<br>nswerTooSoon | 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.   |

| 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.  |

### Table B-23 Cisco Mobility Manager (continued)

## **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-24Cisco 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<br>Manager attempted to allocate an MOH resource when all available resources on<br>all MOH servers that are registered with a Cisco Unified Communications<br>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.   |

| 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.

| 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 gets reset 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<br>occurred. Path replacement in a QSIG network optimizes the path between two<br>edge PINX (PBXs) that are involved in a call. This counter resets when the<br>Cisco CallManager service parameter Path Replacement Enabled is enabled or<br>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<br>throttled (dropped) because they exceeded the threshold for the number of<br>incoming packets per second that is allowed from a single IP address. Configure<br>the threshold via the SIP Station UDP Port Throttle Threshold and SIP Trunk UDP<br>Port Throttle Threshold service parameters in Cisco Unified Communications<br>Manager Administration. This counter increments for every throttled UDP packet<br>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 both 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 increases when the call terminates.   |
| 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 terminates.  |

## **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-30 contains information on Cisco SIP Stack counters.

### Table B-30Cisco 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.<br>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.   |
| 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.   |

| Counters                | Counter Description  |
|-------------------------|--|
| 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.                                     |
| RetryCancels            | This counter represents the total number of CANCEL retries that the SIP device<br>has sent. To determine the number of first CANCEL attempts, subtract the value<br>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.                                  |

Table B-30Cisco SIP Stack (continued)

**Counters** 

indicates that failure responses were received by a SIP device that is providing a

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.

| 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<br>has sent. To determine the number of first NOTIFY attempts, subtract the value of<br>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<br>has been sent. To determine the number of first PUBLISHs attempts, subtract the<br>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<br>sent. To determine the number of first REFER attempts, subtract the value of this<br>counter from the value of the sipStatsReferOuts counter.                                     |
| RetryRegisters         | This counter represents the total number of REGISTER retries that the SIP device<br>has sent. To determine the number of first REGISTER attempts, subtract the value<br>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<br>has sent. To determine the number of first UPDATE attempts, subtract the value<br>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. |
| 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   |

**Counter Description** 

#### Table B-30 Cisco SIP Stack (continued)

server function.

SIPGenericCounter1

| Counters                         | Counter Description  |
|----------------------------------|--|
| 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   |
| 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   |

### Table B-30 Cisco SIP Stack (continued)

| Counters          | Counter Description   |
|-------------------|---|
| 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.                                    |

| 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-30 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-30 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-30Cisco 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<br>sent. This number includes messages that originate on the device and messages<br>that are being relayed by the device. When a particular message gets sent more<br>than once, each transmission gets counted separately; for example, a message that<br>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.  |

### Table B-30 Cisco SIP Stack (continued)

## **Cisco SIP Station**

The Cisco SIP Station object provides information about SIP line-side devices. Table B-31 contains information on the Cisco SIP Station counters.

Table B-31 Cisco SIP Station

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

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

### Table B-31 Cisco SIP Station (continued)

## **Cisco SW Conf Bridge Device**

The Cisco SW Conference Bridge Device object provides information about registered Cisco software conference bridge devices. Table B-32 contains information on the Cisco software conference bridge device counters.

| 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<br>and released on a SW conference device. A conference starts when the first call<br>connects to the bridge. The conference completes when the last call disconnects<br>from the bridge. |

### Table B-32 Cisco SW Conf Bridge Device

# **Cisco TFTP Server**

The Cisco Trivial File Transfer Protocol (TFTP) Server object provides information about the Cisco TFTP server. Table B-33 contains information on Cisco TFTP server counters.

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

#### Table B-33 Cisco TFTP Server

| Counters                    | Counter Description   |
|-----------------------------|---|
| 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<br>the configuration file was digitally signed with the Cisco Unified<br>Communications Manager server key in the last build of all the configuration<br>files. This counter also updates while processing security-enabled phone device<br>change notifications.                                      |
| BuildSoftKeyCount           | This counter represents the number of softkeys that were processed in the last<br>build of the configuration files. This counter increments when a new softkey is<br>added and decrements when an existing softkey is deleted.  |
| BuildUnitCount              | This counter represents the number of gateways that were processed in the last<br>build of all the configuration files. This counter also updates while processing unit<br>change notifications. The counter increases when a new gateway is added and<br>decreases when an existing gateway is deleted.  |
| ChangeNotifications         | This counter represents the total number of all the Cisco Unified Communications<br>Manager database change notifications that the TFTP server received. Each time<br>that a device configuration is updated in Cisco Unified Communications Manager<br>Administration, the TFTP server gets sent a database change notification to<br>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.<br>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.<br>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.  |
| 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. |

### Table B-33 Cisco TFTP Server (continued)

| Counters              | Counter Description   |  |
|-----------------------|---|--|
| HttpRequestsAborted   | This counter represents the total number of HTTP requests that the HTTP server.<br>canceled (aborted) unexpectedly. Requests could get aborted if the requesting<br>device cannot be reached (for instance, the device lost power) or if the file transfer<br>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<br>when the maximum number of allowable client connections was reached. The<br>requests may have arrived while the TFTP server was building the configuration<br>files or because of some other resource limitation. The Cisco TFTP advanced<br>service parameter, Maximum Serving Count, sets the maximum number of<br>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<br>memory. This counter gets updated each time a request to get an LD file results in<br>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-33 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<br>because the maximum number of allowable client connections was exceeded,<br>because requests arrived while the TFTP server was building the configuration<br>files, or because of some other resource limitation. The Cisco TFTP advanced<br>service parameter, Maximum Serving Count, sets the maximum number of<br>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.<br>This counter gets updated each time that a request to get a SEP file produces a not<br>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.<br>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.   |  |

### Table B-33 Cisco TFTP Server (continued)

## **Cisco Transcode Device**

The Cisco Transcode Device object provides information about registered Cisco transcoding devices. Table B-34 contains information on Cisco transcoder device counters.

| 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-35 contains information on Cisco video conference bridge device counters.

| 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<br>allocated and released on a video conference device. A conference starts when the<br>first call connects to the bridge. The conference completes when the last call<br>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-35
 Cisco Video Conference Bridge

| 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.  |

| Table B-35 | Cisco Video | Conference | Bridge (continued) |
|------------|-------------|------------|--------------------|
|------------|-------------|------------|--------------------|

## **Cisco Web Dialer**

The Cisco Web Dialer object provides information about the Cisco Web Dialer application and the Redirector servlet. Table B-36 contains information on the Cisco Web Dialer counters.

| 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<br>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.                          |

| Table B-36 | Cisco | Web | Dialer |
|------------|-------|-----|--------|
|            |       |     |        |

## **Cisco WSM Connector**

The WSM object provides information on WSMConnectors that are configured on Cisco Unified Communications Manager. Each WSMConnector represents a physical Motrola WSM device. Table B-37 contains information on the Cisco WSM Connector counters.

| Table B-37 | Cisco WSN | 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.   |

# Where to Find More Information

#### **Related Topics**

- Understanding Performance Monitoring
- Working with Performance Queries