CHAPTER 7

Configuring Trace

Note Enabling trace decreases system performance; therefore, enable trace only for troubleshooting purposes. For assistance in using trace, contact your technical support team.

This chapter contains the following topics:

Configuring Trace Parameters

This section describes how to configure trace parameters for feature and network services that you manage through Cisco Unified Serviceability.

Tip *Unified CM BE and Connection only*: For Cisco Unity Connection, you may need to run trace in Cisco Unified Serviceability and Cisco Unity Connection Serviceability to troubleshoot Cisco Unity Connection issues. To troubleshoot services that are supported in Cisco Unified Serviceability, you run trace in Cisco Unified Serviceability. Similarly, to troubleshoot Cisco Unity Connection components, you run trace in Cisco Unity Connection Serviceability. For information on how to run trace in Cisco Unity Connection Serviceability, refer to the *Cisco Unity Connection Serviceability Administration Guide*.

Procedure

Step 1 Choose **Trace > Configuration**.

The Trace Configuration window displays.

Step 2 From the Server drop-down list box, choose the server that is running the service for which you want to configure trace; then, click **Go**.

Step 3 From the Service Group drop-down list box, choose the service group for the service that you want to configure trace; then, click **Go**.

Tip Table 7-1 lists the services and trace libraries that correspond to the options that display in the Service Group drop-down list box.

Step 4 From the Service drop-down list box, choose the service for which you want to configure trace; then, click **Go**.

The drop-down list box displays active and inactive services.

Tip *Unified CM and Unified CM BE only*: For the Cisco CallManager and CTIManager services, you can configure SDL trace parameters. To do so, open the Trace Configuration window for one of those services, and click the **Go** button that is next to the Related Links drop-down list box.

If you configured Troubleshooting Trace for the service, a message displays at the top of the window that indicates that the Troubleshooting Traces feature is set, which means that the system disables all fields in the Trace Configuration window except for Trace Output Settings. To configure the Trace Output Settings, go to Step 12. To reset Troubleshooting Trace, see the "Configuring Troubleshooting Trace Settings" section on page 8-1.

The trace parameters display for the service that you chose. In addition, the Apply to All Nodes check box displays (Cisco Unified Communications Manager only).

Step 5 *Unified CM only*: If you want to do so, you can apply the trace settings for the service or trace library to all servers in the cluster by checking the **Apply to All Nodes** check box; that is, if your configuration supports clusters.

Step 6 Check the **Trace On** check box.

Step 7 *Unified CM and Unified CM BE only*: If you are configuring SDL trace parameters, go to Step 10.

Step 8 From the Debug Trace Level drop-down list box, choose the level of information that you want traced, as described in "Debug Trace Level Settings" section on page 7-7.

Step 9 Check the Trace Fields check box for the service that you chose; for example, Cisco Log Partition Monitoring Tool Trace Fields.

Note *Unified CM and Unified CM BE only*: If you are configuring trace for the Cisco CallManager or the Cisco CTIManager service and you only want trace information for specific Cisco Unified Communications Manager devices, go to Step 11.

Step 10 If the service does not have multiple trace settings where you can specify the traces that you want to activate, check the **Enable All Trace** check box. If the service that you chose has multiple trace settings, check the check boxes next to the trace check boxes that you want to enable, as described in Trace Field Descriptions, page 7-8.

Step 11 *Unified CM and Unified CM BE only*: If you are configuring trace for the Cisco CallManager or the Cisco CTIManager service and you want trace information for specific Cisco Unified Communications Manager devices, perform the following tasks:

a. Check the **Device Name Based Trace Monitoring** check box.

The Device Name Based Trace Monitoring option traces only the selected devices, thus narrowing the number of trace logs that are generated and reducing the impact on call processing.

b. Click the **Select Devices** button.

The Device Selection for Tracing window displays.

Tip From Cisco Unified Communications Manager Administration, choose **System > Enterprise Parameters**; configure the maximum number of devices that are available for tracing**.** Enter a value in the Max Number of Device Level Trace field. For help on configuring the parameter, click the link for the parameter name or the question mark button in the upper, right corner of the window.

c. From the **Find** drop-down list box, choose the device for which you want a trace.

d. Enter the appropriate search criteria for the device for which you want a trace and click the **Find** button.

The window with the search results displays. If more pages of search results to view exist, click the **First**, **Previous**, **Next**, or **Last** button.

e. Click the Trace check box for the device or devices for which you want device-name-based trace monitoring.

f. Click the **Save** button.

g. When the update finishes, click the browser close button to close the Device Selection for Tracing window and return to the Trace Configuration window.

h. If you want trace to apply to non-devices in addition to devices, check the **Include Non-device Traces** check box. If check box is checked, set the appropriate debug trace level as described in "Debug Trace Level Settings" section on page 7-7.

Step 12 To limit the number and size of the trace files, specify the trace output setting. See Table 7-18 for descriptions and default values.

Step 13 To save your trace parameters configuration, click the **Save** button.

The changes to trace configuration take effect immediately for all services except Cisco Messaging Interface (Cisco Unified Communications Manager and Cisco Unified Communications Manager Business Edition only). The trace configuration changes for Cisco Messaging Interface take effect in 3 to 5 minutes.

Note To set the default, click the **Set Default** button.

Additional Information

See the "Related Topics" section on page 7-18.

Service Groups in Trace Configuration

Table 7-1 lists the services and trace libraries that correspond to the options in the Service Group drop-down list box in the Trace Configuration window.

Table 7-1 Service Groups in Trace Configuration

Service Group	Services and Trace Libraries	Notes
Unified CM and Unified CM BE only: CM Services	Cisco CTIManager, Cisco CallManager, Cisco CallManager Cisco IP Phone Service, Cisco DHCP Monitor Service, Cisco Dialed Number Analyzer, Cisco Extended Functions, Cisco Extension Mobility, Cisco Extension Mobility Application, Cisco IP Voice Media Streaming App, Cisco Messaging Interface, Cisco TFTP, and Cisco Unified Mobile Voice Access Service	For a description of these services, see the "Understanding Services" section on page 9-1. For most services in the CM Services group, you run trace for specific components, instead of enabling all trace for the service. The "Trace Field Descriptions" section on page 7-8 lists the services for which you can run trace for specific components.
Unified CM and Unified CM BE only: CTI Services	Cisco CallManager Attendant Console Server, Cisco IP Manager Assistant, and Cisco Web Dialer Web Service	For a description of these services, see the "Understanding Services" section on page 9-1. For these services, you can run trace for specific components, instead of enabling all trace for the service; see the "Trace Field Descriptions" section on page 7-8.
Unified CM and Unified CM BE only: CDR Services	Cisco CAR Scheduler, Cisco CAR Web Service, Cisco CDR Agent, and Cisco CDR Repository Manager	For a description of these services, see the "Understanding Services" section on page 9-1. You enable all trace for each service, instead of running trace for specific components. In CAR, when reports are run that call stored procedures, CAR checks the configured debug trace level for the Cisco CAR Scheduler service and the Cisco CAR Web Service in the Trace Configuration window before stored procedure logging begins. For pregenerated reports, CAR checks the level for the Cisco CAR Scheduler service; for on-demand reports, CAR checks the level for the Cisco CAR Web Service. If you choose Debug from the Debug Trace Level drop-down list box, stored procedure logging gets enabled and continues until you choose another option from the drop-down list box. The following CAR reports use stored procedure logging: Gateway Utilization report, Route and Line Group Utilization report, Route/Hunt List Utilization report, Route Pattern/Hunt Pilot Utilization report, Conference Call Details report, Conference Call Summary report, Conference Bridge Utilization report, Voice Messaging Utilization report, and the CDR Search report.

Table 7-1 Service Groups in Trace Configuration (continued)

Service Group	Services and Trace Libraries	Notes
Database and Admin Services	Cisco AXL Web Service, Cisco CCM DBL Web Library, Cisco CCMAdmin Web Service, Cisco CCMUser Web Service, Cisco Database Layer Monitor *Unified CM and Unified CM BE only*: Cisco Bulk Provisioning Service, Cisco GRT Communications Web Service, Cisco Role-based Security, Cisco TAPS Service, and Cisco Unified Reporting Web Service *Unified CM BE only*: Cisco License Manager	For a description of these services (not the Cisco CCM DBL Web Library or Cisco Role-based Security options), see the "Understanding Services" section on page 9-1. Choosing the Cisco CCM DBL Web Library option activates the trace for database access for Java applications. For database access for C++ applications, activate trace for Cisco Database Layer Monitor, as described in the "Cisco Extended Functions Trace Fields" section on page 7-15. Choosing the Cisco Role-based Security option, which supports Cisco Unified Communications Manager, activates trace for user-role authorization. For most services in the Database and Admin Services group, you enable all trace for the service/library, instead of enabling trace for specific components. For Cisco Database Layer Monitor, you can run trace for specific components.
Performance and Monitoring Services	Cisco AMC Service, Cisco CCM NCS Web Library, Cisco CallManager SNMP Service, Cisco Log Partition Monitoring Tool, Cisco RIS Data Collector, Cisco RisBean Library, and Cisco RTMT Web Service *Unified CM and Unified CM BE only*: Cisco CCM PD Web Service	For a description of these services (not the Cisco CCM NCS Web Library or the Cisco RTMT Web Service), see the "Understanding Services" section on page 9-1. Choosing the Cisco CCM NCS Web Library option activates trace for database change notification for the Java client. Choosing the Cisco RTMT Web Service option activates trace for the RTMT servlets; running this trace creates the server-side log for RTMT client queries.
Unified CM and Unified CM BE only: Security Services	Cisco CTL Provider and Cisco Certificate Authority Proxy Function	For a description of these services, see the "Understanding Services" section on page 9-1. You enable all trace for each service, instead of running trace for specific components.
Unified CM and Unified CM BE only: Directory Service	Cisco DirSync	For a description of this service, see the "Understanding Services" section on page 9-1. You enable all trace for this service, instead of running trace for specific components.

Table 7-1 Service Groups in Trace Configuration (continued)

Service Group	Services and Trace Libraries	Notes
Backup and Restore Services	Cisco DRF Local and Cisco DRF Master	For a description of these services, see the "Understanding Services" section on page 9-1. You enable all trace for each service, instead of running trace for specific components.
System Services	Cisco CCMRealm Web Service, Cisco CCMService Web Service, Cisco Common User Interface, and Cisco Trace Collection Service	For a description of the Cisco Trace Collection service, see the "Understanding Services" section on page 9-1. Choosing the Cisco CCMRealm Web Service option activates trace for login authentication. Choosing the Cisco Common User Interface option activates trace for the common code that multiple applications use; for example, Cisco Unified Operating System Administration and Cisco Unified Serviceability. Choosing the Cisco CCMService Web Service option activates trace for the Cisco Unified Serviceability web application (GUI). You enable all trace for each option/service, instead of running trace for specific components.
SOAP Services	Cisco SOAP Web Service and Cisco SOAPMessage Service	Choosing the Cisco SOAP Web Service option activates the trace for the AXL Serviceability API. You enable all trace for this service, instead of running trace for specific components.
Platform Services	Cisco Unified OS Admin Web Service	The Cisco Unified OS Admin Web Service supports Cisco Unified Operating System Administration, which is the web application that provides management of platform-related functionality such as certificate management, version settings, and installations and upgrades. You enable all trace for this service, instead of running trace for specific components.

Debug Trace Level Settings

Table 7-2 describes the debug trace level settings for services.

Table 7-2 Debug Trace Levels for Services

Level	Description
Error	Traces alarm conditions and events. Used for all traces that are generated in abnormal path. Uses minimum number of CPU cycles.
Special	Traces all Error conditions plus process and device initialization messages.
State Transition	Traces all Special conditions plus subsystem state transitions that occur during normal operation. Traces call-processing events.
Significant	Traces all State Transition conditions plus media layer events that occur during normal operation.
Entry/Exit	**Note** Not all services use this trace level. Traces all Significant conditions plus entry and exit points of routines.
Arbitrary	**Note** *Unified CM and Unified CM BE only*: Do not use this trace level with the Cisco CallManager service or the Cisco IP Voice Media Streaming Application service during normal operation. Traces all Entry/Exit conditions plus low-level debugging information.
Detailed	**Note** *Unified CM and Unified CM BE only*: Do not use this trace level with the Cisco CallManager service or the Cisco IP Voice Media Streaming Application service during normal operation. Traces all Arbitrary conditions plus detailed debugging information.

Table 7-3 describes the debug trace level settings for servlets.

Table 7-3 Debug Trace Levels for Servlets

Level	Description
Fatal	Traces very severe error events that may cause the application to abort.
Error	Traces alarm conditions and events. Used for all traces that are generated in abnormal path.
Warn	Traces potentially harmful situations.

Table 7-3 Debug Trace Levels for Servlets (continued)

Level	Description
Info	Traces the majority of servlet problems and has a minimal effect on system performance.
Debug	Traces all State Transition conditions plus media layer events that occur during normal operation. Trace level that turns on all logging.

Additional Information

See the "Related Topics" section on page 7-18.

Trace Field Descriptions

For some services, you can activate trace for specific components, instead of enabling all trace for the service. The following list includes the services for which you can activate trace for specific components. Clicking one of the cross-references takes you to the applicable section where a description displays for each trace field for the service. If a service does not exist in the following list, the Enable All Trace check box displays for the service in the Trace Configuration window.

The following services are applicable to Cisco Unified Communications Manager, Cisco Unified Communications Manager Business Edition, and Cisco Unity Connection:

- Cisco Extended Functions Trace Fields, page 7-15
- Cisco RIS Data Collector Trace Fields, page 7-9

The following services are applicable to Cisco Unified Communications Manager and Cisco Unified Communications Manager Business Edition only:

- Cisco CallManager SDI Trace Fields, page 7-10
- Cisco CallManager SDL Trace Fields, page 7-12
- Cisco CallManager Attendant Console Server Trace Fields, page 7-13
- Cisco CTIManager SDL Trace Fields, page 7-13
- Cisco Extended Functions Trace Fields, page 7-15
- Cisco Extension Mobility Trace Fields, page 7-15
- Cisco IP Manager Assistant Trace Fields, page 7-16
- Cisco IP Voice Media Streaming App Trace Fields, page 7-16
- Cisco TFTP Trace Fields, page 7-17
- Cisco Web Dialer Web Service Trace Fields, page 7-17

Cisco Database Layer Monitor Trace Fields

Table 7-4 describes the Cisco Database Layer Monitor trace fields. The Cisco Database Layer Monitor service supports Cisco Unified Communications Manager and Cisco Unity Connection.

Table 7-4 Cisco Database Layer Monitor Trace Fields

Field Name	Description
Enable DB Library Trace	Activates database library trace for C++ applications.
Enable Service Trace	Activates service trace.
Enable DB Change Notification Trace	Activates the database change notification traces for C++ applications.
Enable Unit Test Trace	Do not check this check box. Cisco engineering uses it for debugging purposes.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco RIS Data Collector Trace Fields

Table 7-5 describes the Cisco RIS Data Collector trace fields. The Cisco RIS Data Collector service supports Cisco Unified Communications Manager and Cisco Unity Connection.

Table 7-5 Cisco RIS Data Collector Trace Fields

Field Name	Description
Enable RISDC Trace	Activates trace for the RISDC thread of the RIS data collector service (RIS).
Enable System Access Trace	Activates trace for the system access library in the RIS data collector.
Enable Link Services Trace	Activates trace for the link services library in the RIS data collector.
Enable RISDC Access Trace	Activates trace for the RISDC access library in the RIS data collector.
Enable RISDB Trace	Activates trace for the RISDB library in the RIS data collector.
Enable PI Trace	Activates trace for the PI library in the RIS data collector.

Table 7-5 Cisco RIS Data Collector Trace Fields (continued)

Field Name	Description
Enable XML Trace	Activates trace for the input/output XML messages of the RIS data collector service.
Enable Perfmon Logger Trace	Activates trace for the troubleshooting perfmon data logging in the RIS data collector. Used to trace the name of the log file, the total number of counters that are logged, the names of the application and system counters and instances, calculation of process and thread CPU percentage, and occurrences of log file rollover and deletion.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco CallManager SDI Trace Fields

Table 7-6 describes the Cisco CallManager SDI trace fields. The Cisco CallManager service supports Cisco Unified Communications Manager.

Table 7-6 Cisco CallManager SDI Trace Fields

Field Name	Description
Enable H245 Message Trace	Activates trace of H245 messages.
Enable DT-24+/DE-30+ Trace	Activates the logging of ISDN type of DT-24+/DE-30+ device traces.
Enable PRI Trace	Activates trace of primary rate interface (PRI) devices.
Enable ISDN Translation Trace	Activates ISDN message traces. Used for normal debugging.
Enable H225 & Gatekeeper Trace	Activates trace of H.225 devices. Used for normal debugging.
Enable Miscellaneous Trace	Activates trace of miscellaneous devices. **Note** Do not check this check box during normal system operation.
Enable Conference Bridge Trace	Activates trace of conference bridges. Used for normal debugging.
Enable Music on Hold Trace	Activates trace of music on hold (MOH) devices. Used to trace MOH device status such as registered with Cisco Unified Communications Manager, unregistered with Cisco Unified Communications Manager, and resource allocation processed successfully or failed.

Table 7-6 Cisco CallManager SDI Trace Fields (continued)

Field Name	Description
Enable Unified CMReal-Time Information Server Trace	Activates Cisco Unified Communications Manager real-time information traces that the real-time information server uses.
Enable SIP Stack Trace	Activates trace of SIP stack. **Note** Enabling SIP Stack Trace can cause extreme performance degradation especially during high traffic hours.
Enable Annunciator Trace	Activates trace for the annunciator, a SCCP device that uses the Cisco IP Voice Media Streaming Application service to enable Cisco Unified Communications Manager to play prerecorded announcements (.wav files) and tones to Cisco Unified IP Phones, gateways, and other configurable devices.
Enable CDR Trace	Activates traces for CDR.
Enable Analog Trunk Trace	Activates trace of all analog trunk (AT) gateways.
Enable All Phone Device Trace	Activates trace of phone devices. Trace information includes SoftPhone devices. Used for normal debugging.
Enable MTP Trace	Activates trace of media termination point (MTP) devices. Used for normal debugging.
Enable All Gateway Trace	Activates trace of all analog and digital gateways.
Enable Forward and Miscellaneous Trace	Activates trace for call forwarding and all subsystems that are not covered by another check box. Used for normal debugging.
Enable MGCP Trace	Activates trace for media gateway control protocol (MGCP) devices. Used for normal debugging.
Enable Media Resource Manager Trace	Activates trace for media resource manager (MRM) activities.
Enable SIP Call Processing Trace	Activates trace for SIP call processing.
Enable SCCP Keep Alive Trace	Activates trace for SCCP keepalive trace information in the Cisco CallManager traces. Because each SCCP device reports keepalive messages every 30 seconds, and each keepalive message creates 3 lines of trace data, the system generates a large amount of trace data when this check box is checked.
Enable SIP Keep Alive (REGISTER Refresh) Trace	Activates trace for SIP keepalive (REGISTER refresh) trace information in the Cisco CallManager traces. Because each SIP device reports keepalive messages every 2 minutes, and each keepalive message can create multiple lines of trace data, the system generates a large amount of trace data when this check box is checked.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco CallManager SDL Trace Fields

Table 7-7 describes the Cisco CallManager SDL trace filter settings. Table 7-8 describes the Cisco CallManager SDL configuration characteristics. The Cisco CallManager service supports Cisco Unified Communications Manager.

Note Cisco recommends that you use the defaults unless a Cisco engineer instructs you to do otherwise.

Table 7-7 Cisco CallManager SDL Configuration Trace Filter Settings

Setting Name	Description
Enable all Layer 1 traces.	Activates traces for Layer 1.
Enable detailed Layer 1 traces.	Activates detailed Layer 1 traces.
Enable all Layer 2 traces.	Activates traces for Layer 2.
Enable Layer 2 interface trace.	Activates Layer 2 interface traces.
Enable Layer 2 TCP trace.	Activates Layer 2 Transmission Control Program (TCP) traces.
Enable detailed dump Layer 2 trace.	Activates detailed traces for dump Layer 2.
Enable all Layer 3 traces.	Activates traces for Layer 3.
Enable all call control traces.	Activates traces for call control.
Enable miscellaneous polls trace.	Activates traces for miscellaneous polls.
Enable miscellaneous trace (database signals).	Activates miscellaneous traces such as database signals.
Enable message translation signals trace.	Activates traces for message translation signals.
Enable UUIE output trace.	Activates traces for user-to-user informational element (UUIE) output.
Enable gateway signals trace.	Activates traces for gateway signals.
Enable CTI trace.	Activates CTI trace.
Enable network service data trace	Activates network service data trace.
Enable network service event trace	Activates network service event trace.
Enable ICCP admin trace	Activates ICCP administration trace.
Enable default trace	Activates default trace.

Table 7-8 Cisco CallManager SDL Configuration Trace Characteristics

Characteristics	Description
Enable SDL link states trace.	Activates trace for intracluster communication protocol (ICCP) link state.
Enable low-level SDL trace.	Activates trace for low-level SDL.
Enable SDL link poll trace.	Activates trace for ICCP link poll.
Enable SDL link messages trace.	Activates trace for ICCP raw messages.
Enable signal data dump trace.	Activates traces for signal data dump.
Enable correlation tag mapping trace.	Activates traces for correlation tag mapping.
Enable SDL process states trace.	Activates traces for SDL process states.
Disable pretty print of SDL trace.	Disables trace for pretty print of SDL. Pretty print adds tabs and spaces in a trace file without performing post processing.
Enable SDL TCP event trace.	Activates SDL TCP event trace.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco CallManager Attendant Console Server Trace Fields

Table 7-9 describes the Cisco CallManager Attendant Console Server trace fields. The Cisco CallManager Attendant Console service supports Cisco Unified Communications Manager Attendant Console.

Table 7-9 Cisco CallManager Attendant Console Server Trace Fields

Field Name	Description
Enable low level trace	Activates low-level trace.
Enable high level trace	Activates high-level trace.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco CTIManager SDL Trace Fields

Table 7-10 describes the Cisco CTIManager SDL configuration trace filter settings. Table 7-11 describes the Cisco CTIManager SDL configuration trace characteristics. The Cisco CTIManager service supports Cisco Unified Communications Manager.

Tip Cisco recommends that you use the defaults unless a Cisco engineer instructs you to do otherwise.

Tip When you choose the CTIManager service from the Service Groups drop-down list box, the Trace Configuration window displays for SDI traces for this service. To activate SDI trace for the Cisco CTI Manager service, check the **Enable All Trace** check box in the Trace Configuration window for the Cisco CTIManager service. To access the SDL Configuration window, choose **SDL Configuration** from the Related Links drop-down list box; the settings that are described in Table 7-10 and Table 7-11 display.

Table 7-10 Cisco CTIManager SDL Configuration Trace Filter Settings

Setting Name	Description
Enable miscellaneous polls trace.	Activates traces for miscellaneous polls.
Enable miscellaneous trace (database signals).	Activates miscellaneous traces such as database signals.
Enable CTI trace.	Activates CTI trace.
Enable Network Service Data Trace	Activates network service data trace.
Enable Network Service Event Trace	Activates network service event trace.
Enable ICCP Admin Trace	Activates ICCP administration trace.
Enable Default Trace	Activates default trace.

Table 7-11 Cisco CTIManager SDL Configuration Trace Characteristics

Characteristics	Description
Enable SDL link states trace.	Activates trace for ICCP link state.
Enable low-level SDL trace.	Activates trace for low-level SDL.
Enable SDL link poll trace.	Activates trace for ICCP link poll.
Enable SDL link messages trace.	Activates trace for ICCP raw messages.
Enable signal data dump trace.	Activates traces for signal data dump.
Enable correlation tag mapping trace.	Activates traces for correlation tag mapping.
Enable SDL process states trace.	Activates traces for SDL process states.
Disable pretty print of SDL trace.	Disables trace for pretty print of SDL. Pretty print adds tabs and spaces in a trace file without performing post processing.
Enable SDL TCP Event trace	Activates SDL TCP event trace.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco Extended Functions Trace Fields

Table 7-12 describes the Cisco Extended Functions trace fields. The Cisco Extended Functions service supports Cisco Unified Communications Manager.

Table 7-12 Cisco Extended Functions Trace Fields

Field Name	Description
Enable QBE Helper TSP Trace	Activates telephony service provider trace.
Enable QBE Helper TSPI Trace	Activates QBE helper TSP interface trace.
Enable QRT Dictionary Trace	Activates quality report tool service dictionary trace.
Enable DOM Helper Traces	Activates DOM helper trace.
Enable Redundancy and Change Notification Trace	Activates database change notification trace.
Enable QRT Report Handler Trace	Activates quality report tool report handler trace.
Enable QBE Helper CTI Trace	Activates QBE helper CTI trace.
Enable QRT Service Trace	Activates quality report tool service related trace.
Enable QRT DB Traces	Activates QRT DB access trace.
Enable Template Map Traces	Activates standard template map and multimap trace.
Enable QRT Event Handler Trace	Activates quality report tool event handler trace.
Enable QRT Real-Time Information Server Trace	Activates quality report tool real-time information server trace.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco Extension Mobility Trace Fields

Table 7-13 describes the Cisco Extension Mobility trace fields. The Cisco Extension Mobility service supports Cisco Unified Communications Manager.

Table 7-13 Cisco Extension Mobility Trace Fields

Field Name	Description
Enable EM Service Trace	Activates trace for the extension mobility service.

Tip When you activate trace for the Cisco Extension Mobility Application service, you check the Enable All Trace check box in the Trace Configuration window for the Cisco Extension Mobility Application service.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco IP Manager Assistant Trace Fields

Table 7-14 describes the Cisco IP Manager Assistant trace fields. The Cisco IP Manager Assistant service supports Cisco Unified Communications Manager Assistant.

Table 7-14 Cisco IP Manager Assistant Trace Fields

Field Name	Description
Enable IPMA Service Trace	Activates trace for the Cisco IP Manager Assistant service.
Enable IPMA Manager Configuration Change Log	Activates trace for the changes that you make to the manager and assistant configurations.
Enable IPMA CTI Trace	Activates trace for the CTI Manager connection.
Enable IPMA CTI Security Trace	Activates trace for the secure connection to CTIManager.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco IP Voice Media Streaming App Trace Fields

The information in this section does not apply to Cisco Unity Connection.

Table 7-15 describes the Cisco IP Voice Media Streaming App trace fields. The Cisco IP Voice Media Streaming App service supports Cisco Unified Communications Manager.

Table 7-15 Cisco IP Voice Media Streaming Application Trace Fields

Field Name	Description
Enable Service Initialization Trace	Activates trace for initialization information.
Enable MTP Device Trace	Activates traces to monitor the processed messages for media termination point (MTP).
Enable Device Recovery Trace	Activates traces for device-recovery-related information for MTP, conference bridge, and MOH.
Enable Skinny Station Messages Trace	Activates traces for skinny station protocol.
Enable WinSock Level 2 Trace	Activates trace for high-level, detailed WinSock-related information.
Enable Music On Hold Manager Trace	Activates trace to monitor MOH audio source manager.
Enable Annunciator Trace	Activates trace to monitor annunciator.
Enable DB Setup Manager Trace	Activates trace to monitor database setup and changes for MTP, conference bridge, and MOH.

Table 7-15 Cisco IP Voice Media Streaming Application Trace Fields (continued)

Field Name	Description
Enable Conference Bridge Device Trace	Activates traces to monitor the processed messages for conference bridge.
Enable Device Driver Trace	Activates device driver traces.
Enable WinSock Level 1 Trace	Activates trace for low-level, general, WinSock-related information.
Enable Music on Hold Device Trace	Activates traces to monitor the processed messages for MOH.
Enable TFTP Downloads Trace	Activates trace to monitor the download of MOH audio source files.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco TFTP Trace Fields

Table 7-16 describes the Cisco TFTP trace fields. The Cisco TFTP service supports Cisco Unified Communications Manager.

Table 7-16 Cisco TFTP Trace Fields

Field Name	Description
Enable Service System Trace	Activates trace for service system.
Enable Build File Trace	Activates trace for build files.
Enable Serve File Trace	Activates trace for serve files.

Additional Information

See the "Related Topics" section on page 7-18.

Cisco Web Dialer Web Service Trace Fields

Table 7-17 describes the Cisco Web Dialer Web Service trace fields. The Cisco Web Dialer Web Service supports Cisco Unified Communications Manager.

Table 7-17 Cisco Web Dialer Web Service Trace Fields

Field Name	Description
Enable Web Dialer Servlet Trace	Activates trace for Cisco Web Dialer servlet.
Enable Redirector Servlet Trace	Activates trace for the Redirector servlet.

Additional Information

See the "Related Topics" section on page 7-18.

Trace Output Settings Descriptions and Defaults

Table 7-18 contains the trace log file descriptions and defaults.

Caution When you change either the Maximum No. of Files or the Maximum File Size settings in the Trace Configuration window, the system deletes all service log files except for the current file, that is, if the service is running; if the service has not been activated, the system deletes the files immediately after you activate the service. Before you change the Maximum No. of Files setting or the Maximum File Size setting, download and save the service log files to another server if you want to keep a record of the log files; to perform this task, use Trace and Log Central in RTMT.

Table 7-18 Trace Output Settings

Field	Description
Maximum number of files	This field specifies the total number of trace files for a given service. Cisco Unified Serviceability automatically appends a sequence number to the file name to indicate which file it is; for example, cus299.txt. When the last file in the sequence is full, the trace data begins writing over the first file. The default varies by service.
Maximum file size (MB)	This field specifies the maximum size of the trace file in megabytes. The default varies by service.

Additional Information

See the "Related Topics" section on page 7-18.

Where to Find More Information

Related Topics

- Configuring Trace Parameters, page 7-1
- Service Groups in Trace Configuration, page 7-4
- Debug Trace Level Settings, page 7-7
- Trace Field Descriptions, page 7-8
- Trace Output Settings Descriptions and Defaults, page 7-18