



Trace Configuration

This chapter provides procedural information on using the Trace Configuration tool to configure trace parameters for Cisco CallManager services.

This chapter contains the following topics:

- [Configuring Cisco Extended Functions Trace Parameters, page 5-3](#)
- [Configuring Cisco CallManager Trace Parameters, page 5-6](#)
- [Configuring Cisco CDR Insert Trace Parameters, page 5-11](#)
- [Configuring Cisco CTIManager Trace Parameters, page 5-13](#)
- [Configuring Cisco Database Layer Monitor Trace Parameters, page 5-15](#)
- [Configuring Cisco IP Voice Media Streaming Application Trace Parameters, page 5-19](#)
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- [Debug Trace Level Settings, page 5-34](#)
- [Configuring Device Name Based Trace Monitoring Trace Parameters, page 5-35](#)
- [Configuring SDL Trace Parameters, page 5-39](#)
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- [Trace Log File Descriptions and Defaults, page 5-45](#)
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Cisco CallManager Serviceability provides a web-based trace tool to assist the system administrator and support personnel in troubleshooting Cisco CallManager problems. Trace provides three main functions:

- Configure trace parameters
- Collect trace files
- Analyze trace data for troubleshooting problems

The Trace and Alarm tools work together. You configure trace and alarm settings for Cisco CallManager services. A Cisco TAC engineer receives the results. You can direct alarms to the Win2000 Event Viewer, CiscoWorks2000 Syslog, system diagnostic interface (SDI) or signal distribution layer (SDL) trace log files, or to all destinations. You can base traces for Cisco CallManager services on debug levels, specific trace fields, and Cisco CallManager devices such as phones or gateways. You can perform a trace on the alarms that are sent to the SDI or SDL trace log files.

Use the Trace Configuration tool to specify the parameters you want to trace for troubleshooting Cisco CallManager problems. The Trace Configuration window provides two types of settings: trace filter and trace output.

Specify the following trace parameters:

- Cisco CallManager server (within the cluster)
- Cisco CallManager service on the server
- Debug level
- Specific trace fields
- Output settings

If the service is a call-processing application such as Cisco CallManager or Cisco CTIManager, you can configure a trace on devices such as phones and gateways; for example, you can narrow the trace to all enabled phones with a directory number beginning with 555.

**Note**

To log alarms in the SDI trace log file, check two check boxes in Trace configuration and one check box in Alarm configuration: the Trace on check box in Trace configuration, the Enable trace file log check box in Trace configuration, and the SDI alarm destination check box in Alarm configuration.

**Note**

Enabling Trace decreases system performance; therefore, enable Trace only for troubleshooting purposes. For assistance in using Trace, contact Cisco TAC.

Configuring Cisco Extended Functions Trace Parameters

This section describes how to configure trace parameters for the Cisco Extended Functions service.

Procedure

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- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
- The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
- The server that you chose displays next to the Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco Extended Functions service.
- The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.

**Note**

Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.

- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
A list of debug trace levels displays.
- Step 8** Click the desired debug trace level as described in [Table 5-8](#).
- Step 9** Check the Cisco Extended Functions Trace Fields check box.
[Table 5-2](#) describes the options from which to choose.

Table 5-1 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 Call Back Dictionary Trace	Activates Call Back Service Dictionary trace.
Enable Call Back Event Handler Trace	Activates Call Back Event Handler trace.
Enable Template Map Traces	Activates Standard templated map and multimap trace.
Enable QBE Helper CTI Trace	Activates QBE Helper CTI interface trace.
Enable QRT Event Handler Trace	Activates Quality Report Tool Event Handler trace.
Enable QRT Report Handler Trace	Activates Quality Report Tool Report Handler trace.
Enable Call Back Service Trace	Activates Call Back Service related trace.
Enable Call Back DB Traces	Activates DB Access trace.

Table 5-1 Cisco Extended Functions Trace Fields (continued)

Field Name	Description
Enable DOM Helper Traces	Activates DOM Helper trace.
Enable Redundancy and Change Notification Trace	Activates Database Change Notification trace.

- Step 10** Check the Enable File Trace Log check box to enable the log file to receive trace information.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for Cisco Extended Functions: C:\ProgramFiles\Cisco\Trace\CEF\cef.txt. See [Table 5-13](#) for the Trace log file default parameters.

- Step 11** If you want the trace information to be available for Trace Analysis, check the Enable XML Formatted Output check box. If this check box is not checked, the log file compiles in text format, and it will not be available for Trace Analysis.
- Step 12** If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box.
- Step 13** To save your trace parameters configuration, click the **Update** button.
- The changes to trace configuration take effect immediately for Cisco Extended Functions.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Configuring Device Name Based Trace Monitoring Trace Parameters, page 5-35](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)

Configuring Cisco CallManager Trace Parameters

This section describes how to configure trace parameters for the Cisco CallManager service.

Procedure

- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
- The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.

The server that you chose displays next to the Current Server title, and a box with configured services displays.

Step 4 From the Configured Services box, choose the Cisco CallManager service.

The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.



Note Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.

Step 5 Check the Trace On check box.

Step 6 If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.

Step 7 In the Debug Trace Level selection box, click the Down arrow.
A list with six debug trace levels displays.

Step 8 Click the desired debug trace level as described in [Table 5-8](#).

Step 9 Check the Cisco CallManager Trace Fields check box.

[Table 5-2](#) describes the 17 options from which to choose.

Table 5-2 Cisco CallManager 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.

Table 5-2 Cisco CallManager Trace Fields (continued)

Field Name	Description
Enable Miscellaneous Trace	<p>Activates trace of miscellaneous devices.</p> <p>Note Do not check this check box during normal system operation.</p>
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 CallManager, unregistered with Cisco CallManager, and resource allocation processed successfully or failed.
Enable CM Real-Time Information Server Trace	Activates CallManager real-time information traces used by the real-time information server.
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 not covered by another check box. Used for normal debugging.

Table 5-2 Cisco CallManager Trace Fields (continued)

Field Name	Description
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.

Step 10 If you want trace information for specific Cisco CallManager devices, check the Device Name Based Trace Monitoring check box. See the “[Configuring Device Name Based Trace Monitoring Trace Parameters](#)” section on page 5-35.

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 [Table 5-8](#).

Step 11 Check the Enable File Trace Log check box to enable the log file to receive trace information.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco CallManager: C:\ProgramFiles\Cisco\Trace\CCM\ccm.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 12 If you want the trace information to be available for Trace Analysis, check the Enable XML Formatted Output check box. If this check box is not checked, the log file compiles in text format, and it will not be available for Trace Analysis.

Step 13 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

- Step 14** To configure SDL Trace parameters, click **SDL Configuration**. See the “[Configuring SDL Trace Parameters](#)” section on page 5-39.
- Step 15** To save your trace parameters configuration, click the **Update** button. The changes to trace configuration take effect immediately for Cisco CallManager.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.


Related Topics

- [Debug Trace Level Settings](#), page 5-34
- [Configuring SDL Trace Parameters](#), page 5-39
- [Viewing Trace Log Files](#), page 5-43
- [Configuring Device Name Based Trace Monitoring Trace Parameters](#), page 5-35
- [Trace Log File Descriptions and Defaults](#), page 5-45
- [Trace Filter Settings](#), page 5-46
- [Trace Output Settings](#), page 5-47
- [Chapter 2, “Alarm Configuration”](#)
- [Chapter 6, “Trace Collection Configuration”](#)
- [Chapter 7, “Trace Analysis Configuration”](#)
- [Chapter 21, “Bulk Trace Analysis”](#)

Configuring Cisco CDR Insert Trace Parameters

This section describes how to configure trace parameters for the Cisco CDR Insert service.

Procedure

- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
The server that you chose displays next to the Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco CDR Insert service.
The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.
-  **Note** Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.
-
- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
A list with seven debug trace levels displays.
- Step 8** Choose the desired debug trace level as described in [Table 5-8](#).
- Step 9** Check the Cisco CDR Insert Trace Fields check box.
- Step 10** Check Enable CDR Insert Trace check box.
- Step 11** To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco Messaging Interface: C:\ProgramFiles\Cisco\Trace\DBL\InsertCDR.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 12 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

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



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.


Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)

Configuring Cisco CTIManager Trace Parameters

This section describes how to configure trace parameters for the Cisco CTIManager service

Procedure

- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
The server that you chose displays next to the Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco CTIManager service.
The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service you chose.
-  **Note** Only the trace parameters for the service you chose display. The display shows all other parameters grayed out.
-
- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
A list with seven debug trace levels displays.
- Step 8** Click the desired debug trace level as described in [Table 5-8](#).
- Step 9** Check the Cisco CTIManager Trace Fields check box.
- Step 10** If you want all Cisco CTIManager trace parameters, check the Enable All Trace check box.

Step 11 If you want trace information for specific Cisco CTIManager devices, check the Device Name Based Trace Monitoring check box. Refer to the “[Configuring Device Name Based Trace Monitoring Trace Parameters](#)” section on page 5-35.

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 [Table 5-8](#).

Step 12 To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco CTIManager: C:\ProgramFiles\Cisco\Trace\CTI\cti.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 13 If you want the trace information to be available for Trace Analysis, check the Enable XML Formatted Output check box. If this check box is not checked, the log file compiles in text format, and it will not be available for Trace Analysis.

Step 14 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

Step 15 To configure SDL Trace parameters, click **SDL Configuration**. See the “[Configuring SDL Trace Parameters](#)” section on page 5-39.

Step 16 To save your trace parameters configuration, click the **Update** button.

Cisco CTIManager supports a trace polling mechanism; changes to trace configuration take affect at the next polling interval. The default polling interval is 5 minutes. To change the polling interval, refer to the *Cisco CallManager Administration Guide* for service parameters configuration procedures.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Configuring Device Name Based Trace Monitoring Trace Parameters, page 5-35](#)
- [Configuring SDL Trace Parameters, page 5-39](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)
- [Chapter 6, “Trace Collection Configuration”](#)
- [Chapter 7, “Trace Analysis Configuration”](#)
- [Chapter 21, “Bulk Trace Analysis”](#)

Configuring Cisco Database Layer Monitor Trace Parameters

This section describes how to configure trace parameters for the Cisco Database Layer Monitor service.

Procedure

-
- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.

The Cisco CallManager Serviceability window displays.

Step 2 Choose **Trace > Configuration**.

Step 3 From the Servers column, choose the server.

The server that you chose displays next to the Current Server title, and a box with configured services displays.

Step 4 From the Configured Services box, choose the Cisco Database Layer Monitor service.

The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.



Note Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.

Step 5 Check the Trace On check box.

Step 6 If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.

Step 7 In the Debug Trace Level selection box, click the Down arrow.

A list with seven debug trace levels displays.

Step 8 Click the desired debug trace level as described in [Table 5-8](#).

Step 9 Check the Cisco Database Layer Monitor Trace Fields check box.

[Table 5-3](#) describes the 9 options from which to choose.

Table 5-3 Database Layer Monitor Trace Fields

Field Name	Description
Enable Detailed DB Trace	Activates traces for lowest level of layer (SQL statements).
Enable DBLX Trace	Activates trace for ActiveX interface to database layer. Traces go to DBLX.txt file.

Table 5-3 Database Layer Monitor Trace Fields (continued)

Field Name	Description
Enable LDAP Trace	Activates trace for lightweight directory access protocol (LDAP) interface to database layer.
Enable Unit Test Trace	Do not check this check box. Cisco engineering uses it for debugging purposes.
Enable CCM Change Notification Trace	Activates trace to monitor communication between Cisco CallManager and database layer.
Enable Business Rules Trace	Activates traces for business rules and transactions. Traces go to DBLR.txt and DBLRt.txt files.
Enable DB Change Notification Trace	Activates the database change notification traces.
Enable All DB Trace	Activates traces for all application programs that use the database. You must restart all applications that use this database before the tracing begins. Traces go to DBL.txt file.
Enable Change Notification Service Trace	Activates trace to monitor communication between all services, except Cisco CallManager, and database layer.

Step 10 To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco Database Layer Monitor: C:\ProgramFiles\Cisco\Trace\DBL\Aupair.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 11 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

Step 12 To save your trace parameters configuration, click the **Update** button.

The changes to trace configuration take affect immediately for Cisco Database Layer Monitor.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)

Configuring Cisco IP Voice Media Streaming Application Trace Parameters

This section describes how to configure trace parameters for the Cisco IP Voice Media Streaming Application service.

Procedure


- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
- The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
- The server that you chose displays next to the Current Servers title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco IP Voice Media Streaming App service.
- The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.
-  **Note** Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.
-
- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
- A list with seven debug trace levels displays.
- Step 8** Click the desired debug trace level as described in [Table 5-8](#).
- Step 9** Check the Cisco IP Voice Media Streaming App Trace Fields check box.
- [Table 5-4](#) describes the 12 options from which to choose.

Table 5-4 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 DB Setup Manager Trace	Activates trace to monitor database setup and changes for MTP, conference bridge, and MOH.
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.

Step 10 To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco IP Voice Media Streaming Application: C:\ProgramFiles\Cisco\Trace\CMS\cms.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 11 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

Step 12 To save your trace parameters configuration, click the **Update** button.

The changes to trace configuration take effect immediately for Cisco IP Voice Media Streaming Application.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.


Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)

Configuring Cisco Messaging Interface Trace Parameters

This section describes how to configure trace parameters for the Cisco Messaging Interface service.

Procedure

- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
The server that you chose displays next to the Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco Messaging Interface service.
The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.
-  **Note** Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.
-
- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
A list with seven debug trace levels displays.
- Step 8** Choose the desired debug trace level as described in [Table 5-8](#).
- Step 9** Check the Cisco Messaging Interface check box.
- Step 10** Check Enable All Trace check box.

Step 11 To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco Messaging Interface: C:\ProgramFiles\Cisco\Trace\CMI\csumi.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 12 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

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

The changes to trace configuration take effect in 3 to 5 minutes for Cisco Messaging Interface.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.


Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)

Configuring Cisco MOH Audio Translator Trace Parameters

This section describes how to configure trace parameters for the Cisco MOH Audio Translator service.

Procedure

- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
The server that you chose displays next to Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco MOH Audio Translator service.
The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.
-  **Note** Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.
-
- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
A list with seven debug trace levels displays.
- Step 8** Click the desired debug trace level as described in [Table 5-8](#).
- Step 9** Check the Cisco MOH Audio Translator Trace Fields check box.

Step 10 If you want all MOH Audio Translator trace parameters, check the Enable All Trace check box.

Step 11 To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco MOH Audio Translator: C:\ProgramFiles\Cisco\Trace\CMS\at.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 12 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

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

The changes to trace configuration take effect within 1 minute for Cisco MOH Audio Translator.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)

- [Chapter 2, “Alarm Configuration”](#)

Configuring Cisco RIS Data Collector Trace Parameters

This section describes how to configure trace parameters for the Cisco RIS Data Collector service.

Procedure

- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
The server that you chose displays next to the Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco RIS Data Collector service.
The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.



Note Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.

- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
A list with seven debug trace levels displays.
- Step 8** Click the desired debug trace level as described in [Table 5-8](#).

Step 9 Check the Cisco RIS Data Collector Trace Fields check box.

Table 5-5 describes the options from which to choose.

Table 5-5 RIS Data Collector Trace Fields

Field Name	Description
Enable RISDC Trace	Activates trace for the RISDC thread of the real-time information server (RIS) data collector.
Enable Link Services Trace	Activates trace for the Link Services library in both the RIS data collector and its RISX client.
Enable RISDB Trace	Activates trace for the RISDB library in the RIS data collector.
Enable SNMPDC Trace	Activates trace for the SNMPDC thread of the RIS data collector.
Enable RISX Trace	Activates trace for the RISX client to the RIS data collector.
Enable RISDC Access Trace	Activates trace for the RISDC access library in the RIS data collector.
Enable Real-Time Monitoring Tool Trace	Activates trace for the Real-Time Monitoring Tool ISAPI client to the RIS data collector.
Enable CCM SNMP Agent Trace	Activates trace for the CCM SNMP agent.

Step 10 To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco RIS Data Collector: C:\ProgramFiles\Cisco\Trace\RIS\ris.txt. See [Table 5-13](#) for the Trace log file default parameters.

Step 11 If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.

Step 12 To save your trace parameters configuration, click the **Update** button.

The changes made to trace configuration take effect immediately; however, trace configuration changes affect two Cisco RIS Data Collector dynamic link libraries (DLL) (RISX.dll and ASTIsapi.dll). These DLLs belong to the Internet Information Services (IIS) processes, which means that trace configuration changes require a restart of the IIS process. Refer to Microsoft Windows documentation for IIS starting and stopping procedures.



Note Restarting the IIS process stops and restarts all Internet services, including the web server used by Cisco CallManager Administration and the Real-Time Monitoring Tool. These programs will be unavailable while IIS is being restarted. You must close and reopen any existing AST browser windows after IIS restarts.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

Related Topics


- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)

- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)

Configuring Cisco Telephony Call Dispatcher Trace Parameters

This section describes how to configure trace parameters for the Cisco Telephony Call Dispatcher service.

Procedure

- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
- The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
- The server that you chose displays next to the Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco Telephony Call Dispatcher service.
- The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.
-  **Note** Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.
-
- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.

A list with debug trace levels displays.

- Step 8** Click the desired debug trace level settings as described in [Table 5-8](#).
- Step 9** Check the Cisco Telephony Call Dispatcher Trace Fields check box.
- Step 10** Check the Enable low level trace check box or the Enable high level trace check box, or both.

[Table 5-6](#) describes the two options from which to choose.

Table 5-6 Telephony Call Dispatcher Trace Fields

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

- Step 11** To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco Telephony Call Dispatcher: C:\ProgramFiles\Cisco\Trace\TCD\tcdsrv.txt. See [Table 5-13](#) for the Trace log file default parameters.

- Step 12** If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.
- Step 13** To save your trace parameters configuration, click the **Update** button.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)

Configuring Cisco TFTP Trace Parameters

This section describes how to configure trace parameters for the Cisco TFTP service.

Procedure

-
- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.
- Step 3** From the Servers column, choose the server.
The server that you chose displays next to the Current Servers title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco TFTP service.

The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.



Note Only the trace parameters for the service that you chose display. The display shows all other parameters grayed out.

- Step 5** Check the Trace On check box.
- Step 6** If you want trace to apply to all Cisco CallManager servers in the cluster, check the Apply to All Nodes check box.
- Step 7** In the Debug Trace Level selection box, click the Down arrow.
A list with debug trace levels displays.
- Step 8** Click the desired debug trace level as described in [Table 5-8](#).
- Step 9** Check the Cisco TFTP Trace Fields check box.

[Table 5-7](#) describes the three options from which to choose.

Table 5-7 TFTP Trace Fields

Field Name	Description
Enable Service System Trace	Activates trace for generic TFTP service.
Enable Serve File Trace	Activates trace for serving files.
Enable Build File Trace	Activates trace for building files.

- Step 10** To enable the log file to receive trace information, check the Enable File Trace Log check box.

The default log file name and the default parameters display in the fields. If you want to send the trace information to another file, specify the filename and pathname by clicking the File Name field. Change the default parameters by clicking the appropriate field and entering the information.



Note Trace validates the filename and ensures that the filename has a .txt extension. Do not use a filename that exists on another computer. Use a filename that exists on the computer that is running the trace.

The following default Trace log file name applies for the Cisco TFTP:
C:\ProgramFiles\Cisco\Trace\TFTP\ctftp.txt. See [Table 5-13](#) for the Trace log file default parameters.

- Step 11** If you want the trace information available for Trace Analysis, check the Enable XML Formatted Output check box. If this check box is not checked, the log file compiles in text format, and it will not be available for Trace Analysis.
- Step 12** If you are a Cisco engineer debugging the system, check the Enable Debug Output String check box; otherwise, continue with the following steps.
- Step 13** To save your trace parameters configuration, click the **Update** button.

The changes to trace configuration take effect immediately for Cisco TFTP.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

Related Topics

- [Debug Trace Level Settings, page 5-34](#)
- [Viewing Trace Log Files, page 5-43](#)
- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 2, “Alarm Configuration”](#)
- [Chapter 6, “Trace Collection Configuration”](#)
- [Chapter 7, “Trace Analysis Configuration”](#)
- [Chapter 21, “Bulk Trace Analysis”](#)

Debug Trace Level Settings

Table 5-8 describes the debug trace level settings.

Table 5-8 *Debug Trace Levels*

Level	Description
Error	Traces alarm conditions and events. Used for all traces generated in abnormal path. Uses minimum amount 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	Traces all Significant conditions plus entry and exit points of routines. Not all services use this trace level (for example, Cisco CallManager does not).

Table 5-8 Debug Trace Levels (continued)

Level	Description
Arbitrary	<p>Traces all Entry/Exit conditions plus low-level debugging information.</p> <p>Note Do not use this trace level with the Cisco CallManager service or the Cisco IP Voice Media Streaming Application service during normal operation.</p>
Detailed	<p>Traces all Arbitrary conditions plus detailed debugging information.</p> <p>Note Do not use this trace level with the Cisco CallManager service or the Cisco IP Voice Media Streaming Application service during normal operation.</p>

Configuring Device Name Based Trace Monitoring Trace Parameters

Use this Trace Configuration option to narrow the number of trace logs generated and reduce the impact on call processing. This option traces only the selected devices.

This section describes how to configure device-name-based trace monitoring parameters for the Cisco CallManager and Cisco CTIManager services.

Procedure

-
- Step 1** From the Cisco CallManager Administration window, choose **Application > Cisco CallManager Serviceability**.
- The Cisco CallManager Serviceability window displays.
- Step 2** Choose **Trace > Configuration**.

- Step 3** From the Servers column, choose the server.
The server that you chose displays next to the Current Server title, and a box with configured services displays.
- Step 4** From the Configured Services box, choose the Cisco CallManager or the Cisco CTIManager service.
The service that you chose displays next to the Current Service title, along with the current server that you chose. The trace parameters display for the service that you chose.
- Step 5** Check the Trace On check box.
- Step 6** In the Debug Trace Level selection box, click the Down arrow.
A list with seven debug trace levels displays.
- Step 7** Click the desired debug trace level as described in [Table 5-8](#).
- Step 8** If you are configuring devices for Cisco CallManager, check the Cisco CallManager Trace Fields check box. If you are configuring devices for Cisco CTIManager, check the Cisco CTIManager Trace Fields check box.
See [Table 5-2](#) for Cisco CallManager trace fields information.
- Step 9** Check the Device Name Based Trace Monitoring check box.
- Step 10** Click the **Select Devices** button.
The Device Selection for Tracing window displays.

**Tip**

Using Cisco CallManager Administration **System > Enterprise Parameters**, configure the maximum number of devices available for tracing. Enter a value in the Max Number of Device Level Trace field. The default is 12. Refer to the *Cisco CallManager Administration Guide* for details.

- Step 11** Click the Down arrow of the Find box.
- Step 12** From the following list, choose the device for which you want a trace:
- Phones
 - Gateways
 - CTI Route Point
 - Cisco Voice Mail Port
 - Conference Bridge

- Music on Hold Server
- Media Termination Point

Step 13 Click the Down arrow of the where box.

Step 14 From the following list, choose the type of device information for which you want a trace:

- Device Name
- Description
- Directory Number
- Calling Search Space
- Device Pool

Step 15 Click the Down arrow of the second box.

Step 16 From the following list, choose the search criteria of the device information for which you want a trace:

- begins with
- contains
- ends with
- is exactly
- is not empty
- is empty

Step 17 Enter the text search criteria string that corresponds with your choice in the previous step; for example, begins with ABC or ends with 123.

Step 18 Click the Down arrow of the Trace box.

Step 19 From the following list, choose the device Trace status for which you want a trace:

- All
- Enabled
- Disabled

Step 20 Click the Down arrow of the Enter search text box.

Step 21 Click the Down arrow of the Endpoints box.

This box applies for gateways; otherwise, Endpoints displays NoData.

Step 22 From the following list, choose an option:

- Show
- Hide

Step 23 Click the **Find** button.

The window with the search results displays with the following fields:

- Device Name
- IP Address
- Description
- Status
- Trace

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

Step 24 Click the Trace check box for the device for which you want device-name-based trace monitoring. You may choose multiple devices.

Step 25 Click the **Update** button.

Step 26 When the update finishes, click the **Close** button to close the Device Selection for Tracing window and return to the Trace Configuration window.

Step 27 To update the Trace Configuration parameters for the service you chose, click the **Update** button.

Step 28 Continue with the rest of your trace configuration parameter settings as described in the [“Configuring Cisco CallManager Trace Parameters”](#) section on page 5-6, and the [“Configuring Cisco CTIManager Trace Parameters”](#) section on page 5-13.

Related Topics

- [Configuring Cisco CallManager Trace Parameters, page 5-6](#)
- [Configuring Cisco CTIManager Trace Parameters, page 5-13](#)
- [Chapter 6, “Trace Collection Configuration”](#)
- [Chapter 7, “Trace Analysis Configuration”](#)

Configuring SDL Trace Parameters

This section describes how to configure the SDL trace parameters for the Cisco CallManager and Cisco CTIManager services.

Procedure

- Step 1** From the Cisco CallManager or Cisco CTIManager trace configuration window, click the **SDL Configuration** link.
- The SDL Trace Configuration window displays.
- Step 2** Check the Trace On check box.
- Step 3** If you are configuring SDL parameters for the Cisco CallManager service check the Trace Filter Settings check boxes that you want to apply to this trace as described in [Table 5-9](#). If you are configuring the SDL parameters for the Cisco CTIManager service, check the Trace Filter Settings check boxes that you want to apply to this trace as described in [Table 5-10](#).



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

Table 5-9 Cisco CallManager SDL Configuration Filter Settings

Setting Name	Description
Enable All Layer 1 Trace	Activates traces for Layer 1.
Enable Detailed Layer 1 Trace	Activates detailed Layer 1 traces.
Enable All Layer 2 Trace	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 Trace	Activates traces for Layer 3.
Enable All Call Control Trace	Activates traces for call control.

Table 5-9 Cisco CallManager SDL Configuration Filter Settings (continued)

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 Message Translation Signals Trace	Activates traces for message translation signals.
Enable UIIE Output Trace	Activates traces for user-to-user informational element (UIIE) 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 admin trace for ICCP.
Enable Default Trace	Activates default trace.

Table 5-10 Cisco CTIManager Trace SDL Configuration 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 SDL Trace	Activates CTI SDL trace.
Enable CTI Application Trace	Activates trace for CTI applications.
Enable CTI Information Trace	Activates trace for CTI information.
Enable CTI Warning Trace	Activates warning trace for CTI.
Enable CTI Error Trace	Activates error trace for CTI.
Enable Network Service Data Trace	Activates network service data trace.
Enable Network Service Event Trace	Activates network service event trace.

Table 5-10 Cisco CTIManager Trace SDL Configuration Filter Settings

Setting Name	Description
Enable ICCP Admin Trace	Activates admin trace for ICCP.
Enable Default Trace	Activates default trace.

Step 4 If you are configuring SDL parameters for the Cisco CallManager service, check the Trace Characteristics check boxes that you want to apply to this trace as described in [Table 5-11](#). If you are configuring the SDL parameters for the Cisco CTIManager service, check the Trace Characteristics check boxes that you want to apply to this trace as described in [Table 5-12](#).

Table 5-11 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 SDLTrace	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 trace for SDL TCP event.

Table 5-12 Cisco CTIManager SDL Configuration 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 trace for SDL TCP event.

Step 5 If you want the trace information available for Trace Analysis, check the Enable XML Formatted Output check box. If this check box is not checked, the log file compiles in text format, and it will not be available for Trace Analysis.

The default trace directory path and the default parameters display in the fields. If you want to send the trace information to another file, enter the filename and pathname in the Trace Directory Path field. Change the default parameters by clicking the appropriate field and entering the information.

The following default Trace log file name applies for SDL Trace Configuration: C:\Program Files\Cisco\Trace\SDL. See [Table 5-13](#) for the Trace log file default parameters.

Step 6 To save your SDL trace parameters configuration, click the **Update** button.

The changes to trace configuration take effect immediately for SDL Trace Configuration.



Note To set the default, click the **SetDefault** button. To apply the current settings for chosen services to all nodes in a cluster, check the Apply to all Nodes check box.

- Step 7** To continue with SDL Trace Configuration for another service, choose the service from the Configured Services box; otherwise continue with [Step 8](#).
- Step 8** To return to the Cisco CallManager or Cisco CTIManager SDI Trace Configuration window, click the **SDI Configuration** link.
-

Viewing Trace Log Files

You can view the contents of the SDI or SDL trace log file in text or XML format. Use Trace Analysis to view the log files in XML format (see [Chapter 7, “Trace Analysis Configuration”](#)) or use a text editor to view the log files in text format.

Microsoft Windows 2000 documentation provides detailed information about Microsoft text editors.

This section describes how to view the contents of a trace log file in text format.

Procedure

- Step 1** From the Microsoft Windows menu, choose **Start > Run**.
The Run window displays.
- Step 2** In the Open: field text box, enter the log file path name; for example, c:\Program Files\Cisco\Trace.
- Step 3** Click the **OK** button.
The Trace folder window displays. The trace directory includes folders for CCM, CMI, CMS, CTI, DBL, RIS, TCD, and TFTP. The trace log files for the Cisco CallManager services exist in these folders.
- Step 4** Double-click the folder that contains the trace log file that you want to view; for example, to view CTIManager log files, double-click the CTI folder.

A window with all the trace log files contained within the folder displays; for example, cti001.txt, cti002.txt, cti003.txt.

**Tip**

Hundreds of log files may exist in the folder. To find the most recent log file, sort by date (most recent first).

Step 5 Use a text editor to open the log file and view the contents.

Related Topics

- [Trace Log File Descriptions and Defaults, page 5-45](#)
- [Trace Filter Settings, page 5-46](#)
- [Trace Output Settings, page 5-47](#)
- [Chapter 6, “Trace Collection Configuration”](#)
- [Chapter 7, “Trace Analysis Configuration”](#)

Trace Log File Descriptions and Defaults

Table 5-13 contains the trace log file descriptions and defaults.

Table 5-13 Trace Log File Description

Field	Description
Maximum number of files	The total number of trace files for a given service. Cisco CallManager automatically appends a sequence number to the file name to indicate which file it is; for example, ccm299.txt. When the last file in the sequence is full, the trace data begins writing over the first file. The default is 300 files.
Maximum number of lines	The maximum number of lines of data stored in each trace file. The default is 10000 lines for text files and 2000 for XML files.
Maximum number of minutes	The maximum minutes of data stored in each trace file. The default is 1440 minutes.

When the trace data exceeds either the maximum number of lines or the maximum minutes for one file, Cisco CallManager closes that file and writes the remaining trace data to the next file in the sequence. For example, you can set up trace files to store a full week of data, with one day of data in each file. To do this, set the number of files to 7, the minutes to 1440 (one day), and the number of lines to a large value such as 10000 (or larger for a busy system).

Trace Filter Settings

Use the trace filter settings to set the type of trace that you want ([Table 5-14](#)). To access the trace filter settings, click the Trace On check box.

Table 5-14 Trace Configuration Filter Settings

Filter Setting	Description
Debug trace level	Setting specifies the level of information that you want traced (see Table 5-8). Levels range from error to detailed.
Trace fields	Each Cisco CallManager service provides specific trace fields. The configuration procedure for each service describes the trace fields.
Device Name Based Trace Monitoring	Setting applies to Cisco CallManager and Cisco CTIManager services only. This filter setting configures trace for devices such as phones and gateways. See the “Configuring Device Name Based Trace Monitoring Trace Parameters” section on page 5-35.

Trace Output Settings

Use the trace output settings to specify the output log file and its format (Table 5-15).

**Note**

Trace Configuration automatically provides the time and date of the trace.

Table 5-15 Trace Configuration Output Settings

Filter Setting	Description
Enable file trace log	This setting enables sending the output of the trace to a log file (either the default log file or one that you choose). Each Cisco CallManager service includes a default log file.
Enable XML formatted output	This setting formats the output of the trace in XML format. Trace Analysis requires XML format. Cisco CallManager, CTIManager, and Cisco TFTP services support this setting.
Enable debug output string	Cisco engineers use this setting.

