C H A P T E R **2**

Diagnostic Traces in Cisco Unity Connection 9.x

Diagnostic traces can be used as a tool to assist you in troubleshooting problems. In Cisco Unity Connection Serviceability, you enable traces to troubleshoot Cisco Unity Connection components. In Cisco Unified Serviceability, you enable traces to troubleshoot services that are supported in Cisco Unified Serviceability. After the traces are enabled, you can access the trace log files by using Real-Time Monitoring Tool (RTMT) or the command line interface (CLI).

See the following sections:

Traces in Cisco Unity Connection Serviceability in Cisco Unity Connection 9.x

Cisco Unity Connection Serviceability provides both micro traces and macro traces that you can enable individually or in any combination.

Cisco Unity Connection Serviceability micro traces	Used to troubleshoot problems with specific Cisco Unity Connection components.
Cisco Unity Connection Serviceability macro traces	Used to troubleshoot general areas of Cisco Unity Connection functionality.

After the traces are enabled, you can access the trace log files by using the Real-Time Monitoring Tool (RTMT) or the command line interface (CLI).

See the following sections:

Cisco Unity Connection Serviceability Micro Traces for Selected Problems

You can use Cisco Unity Connection Serviceability micro traces to troubleshoot problems with specific Cisco Unity Connection components. After the traces are enabled, you can access the trace log files by using the Real-Time Monitoring Tool (RTMT) or the command line interface (CLI).

Table 2-1 lists the information for Cisco Unity Connection Serviceability micro traces that you need for troubleshooting selected problems and for viewing the trace logs. (For instructions on using Cisco Unity Connection Serviceability micro traces, see the "Using Traces" chapter of the *Administration Guide for Cisco Unity Connection Serviceability Release 9.x*, available at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/serv_administration/guide/9xcucservagx.html.)

Note Enabling Cisco Unity Connection Serviceability micro traces decreases system performance. Enable traces only for troubleshooting purposes.

Table 2-1   Cisco Unity Connection Serviceability Micro Traces for Selected Problems

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
Audio Issues			
Playing an attachment via the TUI	CML (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	ConvSub (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Calendar Integration Issues			
Calendar integration	CCL (levels 10, 11, 12, 13)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CsWebDav (levels 10, 11, 12, 13)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
Calendar integration (event notifications)	CsWebDav (levels 10 through 13)	Connection IMAP Server	diag_CuImapSvr_*.uc
Call Issues			
Routing rules	Arbiter (levels 14, 15, 16)	Connection Conversation Manager	diag_CuCsMgr_*.uc
	RoutingRules (level 11)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Client Issues			

Table 2-1   ***Cisco Unity Connection Serviceability Micro Traces for Selected Problems (continued)***

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
Cisco Unified Personal Communicator client (IMAP-related issues) (see also "Cisco Unified Personal Communicator client (IMAP-related issues)" in Table 2-2)	CML (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CsMalUmss (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CuImapSvr (all levels)	Connection IMAP Server	diag_CuImapSvr_*.uc
	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
ViewMail for Outlook (sending and receiving messages) (see also "ViewMail for Outlook (sending and receiving messages)" in Table 2-2)	CML (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CsMalUmss (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CuImapSvr (all levels)	Connection IMAP Server	diag_CuImapSvr_*.uc
	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
	SMTP (all levels)	Connection SMTP Server	diag_SMTP_*.uc
Connection Cluster Issues			
Connection clusters (except file replication)	SRM (all levels)	Connection Server Role Manager	diag_CuSrm_*.uc
Connection cluster file replication	CuFileSync (all levels)	Connection File Syncer	diag_CuFileSync_*.uc
External Message Store Issues			
Accessing emails in an external message store	CML (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
Fax Issues			
File rendering	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
SMTP messages are not sent	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc

Table 2-1   *Cisco Unity Connection Serviceability Micro Traces for Selected Problems (continued)*

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
SMTP server mishandles faxes	SMTP (all levels)	Connection SMTP Server	diag_SMTP_*.uc
LDAP Issues			
LDAP synchronization (see also "LDAP synchronization" in Table 2-3)	CuCmDbEventListener	Connection CM Database Event Listener	diag_CuCmDbEventListener_*.uc
Message Issues			
Dispatch messages (see also "Dispatch messages" in Table 2-2)	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
IMAP messages (see also "IMAP messages"in Table 2-2)	CML (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CsMalUmss (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CuImapSvr (all levels)	Connection IMAP Server	diag_CuImapSvr_*.uc
	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
	SMTP (all levels)	Connection SMTP Server	diag_SMTP_*.uc
Message delivery and retrieval (see also "Message delivery and retrieval" in Table 2-2)	CML (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CsMalUmss (levels 10, 14, 18, 22, 23, 26)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
	Notifier (all levels except 6 and 7)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
	SMTP (all levels)	Connection SMTP Server	diag_SMTP_*.uc
	UmssSysAgentTasks (all levels)	Connection System Agent	diag_CuSysAgent_*.uc

Table 2-1   Cisco Unity Connection Serviceability Micro Traces for Selected Problems (continued)

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
NDRs (see also "NDRs" in Table 2-2)	CML (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CuCsMgr (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Notifications not sent (see also "Notifications not sent" in Table 2-2)	CuCsMgr (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
	Notifier (all levels except 6 and 7)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
	SMTP (all levels)	Connection SMTP Server	diag_SMTP_*.uc
Secure message aging	UmssSysAgentTasks (all levels)	Connection System Agent	diag_CuSysAgent_*.uc
SMS notifications	Notifier (all levels except 6 and 7)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
Networking Issues			
Intrasite Networking replication (see also "Intrasite Networking replication" in Table 2-2)	CuReplicator	Connection Digital Networking Replication Agent	diag_CuReplicator_*.uc
Intersite Networking replication	Feeder (levels 00, 01, 02, 03)	Connection Tomcat Application	diag_Tomcat_*.uc
	FeedReader (levels 00, 01, 02, 03, 10, 14)	Connection System Agent	diag_CuSysAgent_*.uc
VPIM message delivery (see also "VPIM message delivery" in Table 2-2)	MTA (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
	SMTP (all levels)	Connection SMTP Server	diag_SMTP_*.uc
Personal Call Transfer Rule Issues			
Accessing calendar information	CCL (levels 10, 11, 12, 13)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
	CsWebDav (levels 10, 11, 12, 13)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc

Table 2-1   Cisco Unity Connection Serviceability Micro Traces for Selected Problems (continued)

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
Configuring personal call transfer rule settings by phone	ConvSub (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Rule processing during calls to a rules-enabled user	ConvRoutingRules (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
	RulesEngine (all levels)	Connection Tomcat Application	diag_Tomcat_*.uc
		Connection Conversation Manager	diag_CuCsMgr_*.uc
Rules-related conversations	CDE (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Phone View Issues			
Phone View	PhoneManager (all levels)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Report Issues			
Data collection in reports	ReportDataHarvester (all levels)	Connection Report Data Harvester	diag_CuReportDataHarvester_*.uc
Display of reports	CuService (all levels)	Connection Tomcat Application	diag_Tomcat_*.uc
RSS Feed Issues			
Access to RSS feeds of voice messages	RSS (all levels)	Connection Tomcat Application	diag_Tomcat_*.uc
SNMP Issues			
SNMP	CuSnmpAgt (all levels)	Connection SNMP Agent	diag_CuSnmpAgt_*.uc
SpeechView Transcription Issues			
SpeechView transcriptions	SttClient (all levels)	Connection Message Transfer Agent	diag_MTA_*.uc
	SttService (all levels)	Connection SpeechView Processor	diag_SttService_*.uc
	SMTP (all levels)	Connection SMTP Server	diag_SMTP_*.uc
	MTA (level 10, 11, 12, 13)	Connection Message Transfer Agent	diag_MTA_*.uc
	SysAgent (level 10, 11, 12, 16)	Connection System Agent	diag_CuSysAgent_*.uc
Sending transcriptions to notification devices	Notifier (level 16, 21, 25, 30)	Connection Notifier	diag_CuNotifier_*.uc
Test Button (External Service and External Service Account) Issues			
Test button (external service diagnostic tool)	CuESD (all levels)	Connection Tomcat Application	diag_Tomcat_*.uc
Web Inbox Issues			
Interactions with Representational State Transfer (REST) API	VMREST (all levels)	Connection Tomcat Application	diag_Tomcat_*.uc

Cisco Unity Connection Serviceability Macro Traces for Selected Problems

Cisco Unity Connection Serviceability macro traces enable a preselected set of Cisco Unity Connection Serviceability micro traces with which you can troubleshoot general areas of Cisco Unity Connection functionality.

Table 2-2 lists the information for Cisco Unity Connection Serviceability macro traces that you need for troubleshooting selected problems and for viewing the trace logs. (For instructions on using Cisco Unity Connection Serviceability macro traces, see the "Using Traces" chapter of the *Administration Guide for Cisco Unity Connection Serviceability Release 9.x*, available at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/serv_administration/guide/9xcucservagx.html.)

> **Note** Enabling Cisco Unity Connection Serviceability macro traces decreases system performance. Enable traces only for troubleshooting purposes.

Table 2-2   Cisco Unity Connection Serviceability Macro Traces for Selected Problems

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
Audio Issues			
Audio quality	Media (Wave) Traces	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Mixer	diag_CuMixer_*.uc
Call Issues			
Call control	Call Control (Miu) Traces (expand the macro trace to select SIP or SCCP)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Call flow	Call Flow Diagnostics	Connection Conversation Manager	diag_CuCsMgr_*.uc
ViewMail for Outlook (recording or playback by phone)	Call Control (Miu) Traces (expand the macro trace to select SIP or SCCP)	Connection Conversation Manager	diag_CuCsMgr_*.uc
Client Issues			
Cisco Unified Personal Communicator client (IMAP-related issues) (see also "Cisco Unified Personal Communicator client (IMAP-related issues)" in Table 2-1)	Call Flow Diagnostics	Connection Conversation Manager	diag_CuCsMgr_*.uc

Table 2-2   Cisco Unity Connection Serviceability Macro Traces for Selected Problems (continued)

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
ViewMail for Outlook (sending and receiving messages) (see also "ViewMail for Outlook (sending and receiving messages)" in Table 2-1)	Call Flow Diagnostics	Connection Conversation Manager	diag_CuCsMgr_*.uc
	ViewMail for Outlook	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection IMAP Server	diag_CuImapSvr_*.uc
		Connection Message Transfer Agent	diag_MTA_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
		Connection REST Service	diag_Tomcat_*.uc
		Connection Mailbox Sync	diag_CuMbxSync_*.uc
Cisco Unity Connection Serviceability Issues			
Cisco Unity Connection Serviceability	Connection Serviceability Web Service	Connection Tomcat Application	diag_Tomcat_*.uc
Conversation Issues			
Conversations	Conversation Traces	Connection Conversation Manager	diag_CuCsMgr_*.uc
Message Issues			
Dispatch messages (see also "Dispatch messages" in Table 2-1)	Call Flow Diagnostics	Connection Conversation Manager	diag_CuCsMgr_*.uc
IMAP messages (see also "IMAP messages" in Table 2-1)	Call Flow Diagnostics	Connection Conversation Manager	diag_CuCsMgr_*.uc
Message delivery and retrieval (see also "Message delivery and retrieval" in Table 2-1)	Message Tracking Traces	Connection Message Transfer Agent	diag_MTA_*.uc
		Connection System Agent	diag_CuSysAgent_*.uc
		Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Tomcat Application	diag_Tomcat_*.uc
		Connection IMAP Server	diag_CuImapSvr_*.uc
NDRs (see also "NDRs" in Table 2-1)	Call Flow Diagnostics	Connection Conversation Manager	diag_CuCsMgr_*.uc
Notifications not sent (see also "Notifications not sent" in Table 2-1)	Traces for Other Notification Problems (expand the macro trace to select SIP or SCCP)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc

Table 2-2   ***Cisco Unity Connection Serviceability Macro Traces for Selected Problems (continued)***

Problem Area	Traces to Set	RTMT Service to Select	Trace Log Filename
Single inbox message synchronization	Single Inbox Traces	Connection Mailbox Sync	diag_CuMbxSync_*.uc
MWI Issues			
MWIs	Traces for MWI problems (expand the macro trace to select SIP or SCCP)	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
Networking Issues			
Intrasite Networking replication (see also "Intrasite Networking replication" in Table 2-1)	Digital Networking	Connection Digital Networking Replication Agent	diag_CuReplicator_*.uc
VPIM message delivery (see also "VPIM message delivery" in Table 2-1)	Call Flow Diagnostics	Connection Conversation Manager	diag_CuCsMgr_*.uc
Startup Issues			
Connection startup fails	Unity Startup	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Notifier	diag_CuNotifier_*.uc
Text to Speech Issues			
Text to Speech	Call Control (Miu) Traces (expand the macro trace to select SIP or SCCP)	Connection Conversation Manager	diag_CuCsMgr_*.uc
	Media (Wave) Traces	Connection Conversation Manager	diag_CuCsMgr_*.uc
		Connection Mixer	diag_CuMixer_*.uc
	Text to Speech (TTS) Traces	Connection Conversation Manager	diag_CuCsMgr_*.uc

Using Cisco Unity Connection Serviceability Traces to Troubleshoot Problems

When you use Cisco Unity Connection Serviceability micro traces or macro traces to troubleshoot problems in Cisco Unity Connection, you must first enable the applicable traces in Cisco Unity Connection Serviceability. Then you can use the Real-Time Monitoring Tool (RTMT) or the command line interface (CLI) to collect and view the logs that are generated by the traces.

Do the applicable procedure:

- To Enable Cisco Unity Connection Serviceability Micro Traces and View Trace Logs, page 2-10
- To Enable Cisco Unity Connection Serviceability Macro Traces and View Trace Logs, page 2-10

To Enable Cisco Unity Connection Serviceability Micro Traces and View Trace Logs

Step 1 In Cisco Unity Connection Serviceability, on the Trace menu, select **Micro Traces**.

Step 2 On the Micro Traces page, in the Server field, select the name of the Connection server and select **Go**.

Step 3 In the Micro Trace field, select the micro trace that you want to set and select **Go**.

Step 4 Under Micro Traces, check the check boxes for the micro-trace levels that you want to set and select **Save**.

Step 5 Reproduce the problem.

Step 6 To collect the trace log files, launch the Real-Time Monitoring Tool (RTMT). For detailed instructions, see the "Working with Trace and Log Central" chapter of the applicable *Cisco Unified Real-Time Monitoring Tool Administration Guide*, available at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

You can access the trace log files by using the command line interface (CLI). For information, see the applicable *Command Line Interface Reference Guide for Cisco Unified Solutions* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

Step 7 In RTMT, on the System menu, select **Tools > Trace > Trace & Log Central**.

Step 8 In the Trace & Log Central tree hierarchy, double-click **Collect Files**.

Step 9 In the Select CUC Services/Application tab, check the check boxes for the applicable services and select **Next**.

Step 10 In the Select System Services/Applications tab, select **Next**.

Step 11 In the Collection Time group box, specify the time range for which you want to collect traces.

Step 12 In the Download File option group box, specify the options you want for downloading traces.

Step 13 Select **Finish**.

Step 14 To view the trace files that you collected, you can use the Local Browse option of the trace collection feature.

Step 15 In Cisco Unity Connection Serviceability, disable the traces that you enabled in Step 3 and Step 4, then select **Save**.

To Enable Cisco Unity Connection Serviceability Macro Traces and View Trace Logs

Step 1 In Cisco Unity Connection Serviceability, on the Trace menu, select **Macro Traces**.

Step 2 On the Macro Traces page, in the Server field, select the name of the Connection server and select **Go**.

Step 3 Check the check box of the macro trace that you want to enable.

Step 4 Expand the macro trace, and check the check box for the levels that you want to enable.

Step 5 Select **Save**.

Step 6 Reproduce the problem.

Step 7 To collect the trace log files, launch the Real-Time Monitoring Tool (RTMT). For detailed instructions, see the "Working with Trace and Log Central" chapter of the applicable *Cisco Unified Real-Time Monitoring Tool Administration Guide*, available at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

You can access the trace log files by using the command line interface (CLI). For information, see the applicable *Command Line Interface Reference Guide for Cisco Unified Solutions* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

Step 8   In RTMT, on the System menu, select **Tools > Trace > Trace & Log Central**.

Step 9   In the Trace & Log Central tree hierarchy, double-click **Collect Files**.

Step 10   In the Select CUC Services/Application tab, check the check boxes for the applicable services and select **Next**.

Step 11   In the Select System Services/Applications tab, select **Next**.

Step 12   In the Collection Time group box, specify the time range for which you want to collect traces.

Step 13   In the Download File option group box, specify the options you want for downloading traces.

Step 14   Select **Finish**.

Step 15   To view the trace files that you collected, you can use the Local Browse option of the trace collection feature.

Step 16   In Cisco Unity Connection Serviceability, disable the traces that you enabled in Step 3 through Step 5, then select **Save**.

For additional information on using Cisco Unity Connection Serviceability micro traces and macro traces, see the "Using Traces" chapter of the *Administration Guide for Cisco Unity Connection Serviceability Release 9.x*, available at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/serv_administration/guide/9xcucservagx.html.

For information on RTMT, see the applicable *Cisco Unified Real-Time Monitoring Tool Administration Guide* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

For information on the CLI, see the applicable *Command Line Interface Reference Guide for Cisco Unified Solutions* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

Traces in Cisco Unified Serviceability in Cisco Unity Connection 9.x

See the following sections:

Cisco Unified Serviceability Traces for Selected Problems

You can use Cisco Unified Serviceability traces to troubleshoot certain problems. After the traces are enabled, you can access the trace log files by using the Real-Time Monitoring Tool (RTMT) or the command line interface (CLI).

Table 2-3 lists the information for Cisco Unified Serviceability traces that you need for troubleshooting selected problems and for viewing the trace logs. (For detailed information on using Cisco Unified Serviceability traces, see the "Trace" chapter of the applicable *Cisco Unified Serviceability Administration Guide* at
http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.)

> **Note**   Enabling Cisco Unified Serviceability traces decreases system performance. Enable traces only for troubleshooting purposes.

Table 2-3   Cisco Unified Serviceability Traces for Selected Problems

Problem Area	Traces to Set	RTMT Service to Select
Backing up and restoring	Cisco DRF Local Cisco DRF Master	Cisco DRF Local Cisco DRF Master
LDAP synchronization	Cisco DirSync	Cisco DirSync
Web application sign-in	Cisco CCMRealm Web Service	Cisco CallManager Realm

Using Cisco Unified Serviceability Traces to Troubleshoot Problems

When you use Cisco Unified Serviceability traces to troubleshoot problems in Cisco Unity Connection, you must first enable the applicable traces in Cisco Unified Serviceability. Then you can use the Real-Time Monitoring Tool (RTMT) or the command line interface (CLI) to collect and view the logs that are generated by the traces.

Do the following procedure.

To Enable Cisco Unified Serviceability Traces and View Trace Logs

Step 1   In Cisco Unified Serviceability, on the Trace menu, select **Troubleshooting Trace Settings**.

Step 2   On the Troubleshooting Trace Settings page, under Directory Services, check the check box for the trace that you want to enable and select **Save**.

Step 3   Reproduce the problem.

Step 4   To collect the trace log files, launch the Real-Time Monitoring Tool (RTMT). For detailed instructions, see the "Working with Trace and Log Central" chapter of the applicable *Cisco Unified Real-Time Monitoring Tool Administration Guide*, available at
http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

You can access the trace log files by using the command line interface (CLI). For information, see the applicable *Command Line Interface Reference Guide for Cisco Unified Communications Solutions* at
http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

Step 5   In RTMT, on the System menu, select **Tools > Trace > Trace & Log Central**.

Step 6   In the Trace & Log Central tree hierarchy, double-click **Collect Files**.

Step 7   In the Select CUC Services/Application tab, select **Next**.

Step 8   In the Select System Services/Applications tab, check the check boxes for the applicable service and select **Next**.

Step 9   In the Collection Time group box, specify the time range for which you want to collect traces.

Step 10   In the Download File option group box, specify the options you want for downloading traces.

Step 11   Select **Finish**.

Step 12   To view the trace files that you collected, you can use the Local Browse option of the trace collection feature.

Step 13   In Cisco Unity Connection Serviceability, disable the traces that you enabled in Step 2, and select **Save**.

For additional information on Cisco Unified Serviceability traces, see the "Trace" chapter of the applicable *Cisco Unified Serviceability Administration Guide* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

For information on RTMT, see the applicable *Cisco Unified Real-Time Monitoring Tool Administration Guide* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

For information on the CLI, see the applicable *Command Line Interface Reference Guide for Cisco Unified Solutions* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.