



Cisco Unified CCX Serviceability Administration Guide Release 8.5(1)

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Preface

Cisco Unified Contact Center Express (Unified CCX), a member of the Cisco Unified Communications family of products, manages customer voice contact centers for departments, branches, or small to medium-size companies planning to deploy an entry-level or mid-market contact center solution.

The *Cisco Unified CCX Serviceability Administration Guide* provides instructions for using the Serviceability web interface of Unified CCX. The preface contains the following subsections:

- [Purpose, page vii](#)
- [Audience and Use, page viii](#)
- [Organization, page viii](#)
- [Documentation Conventions, page ix](#)
- [Related Documentation, page x](#)
- [Obtaining Documentation and Submitting a Service Request, page x](#)

Purpose

The *Administration Guide for Cisco Unified CCX Serviceability* provides description and procedures for configuring alarms, traces, service parameters, and performance configuration and logging.

It also describes how to activate, start, and stop network services. Use this guide with the following documents for your configuration:

- *Cisco Unified CCX Administration Guide*—This document describes how to use the Cisco Unified CCX Administration interface to configure and manage Cisco Unified CCX.
- *Cisco Unified Serviceability Administration Guide*—This document provides description and procedures for defining and configuring alarms, configuring traces, and SNMP for common platform services. It also describes how to activate, start, and stop network services.

Audience and Use

The *Administration Guide for Cisco Unified CCX Serviceability* assists administrators who configure, troubleshoot, and support Cisco Unified CCX. This guide requires knowledge of telephony and IP networking technology.



Tip

For Cisco Unified CCX, you must perform serviceability-related tasks in both Cisco Unified Serviceability and Cisco Unified CCX Serviceability; for example, you may need to start and stop services, view alarms, and configure traces in both applications to troubleshoot a problem.

Cisco Unified Serviceability supports the functionality described in the *Cisco Unified Serviceability Administration Guide*; for tasks that are specific to Cisco Unified CCX Serviceability, use this guide, the *Administration Guide for Cisco Unified CCX Serviceability*.

Organization

The following table shows the organization of this guide:

Section Title	Description
Understanding Cisco Unified CCX Serviceability	Provides an overview of Cisco Unified CCX Serviceability, including browser support and information on how to access and use the GUI.

Section Title	Description
Using Alarms	Provides an overview of Cisco Unified CCX Serviceability alarms and the procedure for configuring the alarms.
Using Traces	Provides an overview of traces in Cisco Unified CCX Serviceability, the procedure for configuring trace parameters, and trace filter settings. You can also create and manage log profiles for different Unified CCX components.
Using Tools	Provides detailed information on the following submenu options in Tools menu of the Cisco Unified CCX Serviceability: <ul style="list-style-type: none"> • Control Center - Network Services • Datastore Control Center • Service Parameters • Performance Configuration and Logging

Documentation Conventions

Convention	Description
boldfaced text	Boldfaced text is used for: <ul style="list-style-type: none"> • Key and button names. (Example: Click OK.) • Information that you enter. (Example: Enter Administrator in the User Name box.)
< > (angle brackets)	Angle brackets are used around parameters for which you supply a value. (Example: In your browser, go to https://<Cisco Unified CCX server IP address>/cuadmin.)
- (hyphen)	Hyphens separate keys that must be pressed simultaneously. (Example: Press Ctrl-Alt-Delete .)

Convention	Description
> (right angle bracket)	A right angle bracket is used to separate selections that you make in the navigation bar of Cisco Unity Connection Administration. (Example: In Cisco Unity Connection Administration, go to Contacts > System Contacts.)

The *Administration Guide for Cisco Unified CCX Serviceability* also uses the following conventions:

**Note**

Means reader take note. Notes contain helpful suggestions or references to material not covered in the document.

**Caution**

Means reader be careful. In this situation, you might do something that could result in equipment damage or loss of data.

Related Documentation

Related Unified CCX documentation is available at the URL mentioned below:

http://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

Glossary

For a complete list of terms used in Cisco Unified CCX and Cisco Unified IP IVR, see http://www.cisco.com/en/US/products/sw/custcosw/ps1846/prod_technical_reference_list.html.



Understanding Cisco Unified CCX Serviceability

This chapter provides basic information on Cisco Unified CCX Serviceability and contains the following subsections:

- [Understanding Cisco Unified CCX Serviceability](#)
- [Using Alarms](#)
- [Using Traces](#)
- [Using Tools](#)
- [Using Help](#)

Understanding Cisco Unified CCX Serviceability

Cisco Unified CCX Serviceability, a web-based troubleshooting tool for Cisco Unified CCX, provides the following functionality:

- Configure alarms for local and remote Syslogs.
- Configure trace settings for Unified CCX components. Once enabled, you can collect and view trace information using the Real-Time Monitoring Tool (RTMT).
- Configure the log profiles to which Unified CCX trace information will be saved and manage the log profiles for different Unified CCX components.
- Manage and control network services.

- View replication status, synchronize data, and reset replication for Unified CCX servers in a cluster through Datastore Control Center.
- Set parameters for different platform services.
- Set JVM parameters for different Unified CCX services and collect thread and memory traces.

Depending on the service and component involved, you may perform serviceability-related tasks in both Cisco Unified CCX Serviceability and Cisco Unified Serviceability. For example, you may need to start and stop services, configure alarms, and traces in both applications to troubleshoot a problem.

Cisco Unified CCX Serviceability supports the functionality that is described in the *Cisco Unified CCX Administration Guide, Release 8.0(1)*. For information on using Cisco Unified Serviceability, see the *Cisco Unified Serviceability Administration Guide*.

Browser Support

Cisco supports the following browsers with Cisco Unified CCX Serviceability:

- Internet Explorer 6.0 and 7.0
- Firefox 2.0 and 3.0

To access Cisco Unified CCX Serviceability, you must browse to the application from a machine that runs the supported browser.

Accessing Cisco Unified CCX Serviceability

Once you complete the AppAdmin initial setup, the end user with administrator capability as configured in AppAdmin web interface can login to Cisco Unified CCX Serviceability. See the *Cisco Unified Contact Center Express Installation Guide* and *Cisco Unified CCX Administration Guide* for detailed instructions on initial AppAdmin setup and how to assign administrator capability to end users.

To Access Cisco Unified CCX Serviceability

- Step 1** By using a supported web browser, open a browser session.
- Step 2** Go to **<https://<server name or IP address>/uccxservice/>**.

Step 3 Enter an applicable username and password, and click **Login**.



Note

If you have already logged on to one of the applications that display in the Navigation drop-down box (except for Cisco Unified OS Administration, Cisco Unified Serviceability, or Disaster Recovery System), you can access Cisco Unified CCX Serviceability without logging in. From the Navigation drop-down box, click **Cisco Unified CCX Serviceability** and click Go.

After you log in to Cisco Unified CCX Serviceability, you can access all administrative applications that display in the Navigation drop-down box, except for Cisco Unified OS Administration, Cisco Unified Serviceability, and Disaster Recovery System, without logging in again. Cisco Unified OS Administration, Cisco Unified Serviceability, and Disaster Recovery System require a separate authentication procedure.

Using the Cisco Unified CCX Serviceability Interface

In addition to troubleshooting, configuring logging and tracing, and doing service-related tasks in Cisco Unified CCX Serviceability, you can do the following tasks:

- To display documentation for a single window, click Help > This Page.
- To verify the version of Cisco Unified CCX Serviceability running on the server, click Help > About or click the About link in the upper-right corner of the window.
- To go directly to the home page in Cisco Unified CCX Serviceability from a configuration window, click Cisco Unified CCX Serviceability from the Navigation drop-down box.
- To access Cisco Unified CCX Administration or other applications, click the applicable application from the Navigation drop-down box and click Go.
- To log out of Cisco Unified CCX Serviceability, click the Logout link in the upper-right corner of the window.

- On each Cisco Unified CCX Serviceability configuration page, configuration icons appear that correspond to the configuration buttons at the bottom of the page. (For example, you can click either the Save icon or the Save button to complete the task.)

Using Alarms

This section provides information on using alarms in Cisco Unified CCX Serviceability and contains the following subsections:

- [Understanding Alarms](#)
- [Alarm Configuration](#)
- [Configuring Alarm Settings](#)
- [Alarm Configuration Settings](#)

Understanding Alarms

Cisco Unified CCX Serviceability alarms provide information on runtime status and the state of the system so that you can monitor the status and troubleshoot problems that are associated with the system. Alarm information includes the catalog, name, severity, explanation, recommended action, routing list, and parameters.

You can view alarm information that are sent to local syslog by using the SysLog Viewer in Cisco Unified CCX Real-Time Monitoring Tool (RTMT). Refer to *Cisco Unified CCX Real-Time Monitoring Tool Administration Guide* for detailed information on how to view alarm information.



Note

Use the Alarm Definitions web page in Cisco Unified Serviceability to find information about an alarm message. For a complete list of alarm definitions, see http://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_t_troubleshoot_and_alerts.html. See *Cisco Unified Serviceability Administration Guide* for information on how to view alarm definitions.

Alarm Configuration

Use the Alarm Configuration web page in Unified CCX Serviceability to view and configure alarm server settings for different Unified CCX components.

**Note**

Alarm Server Configuration is applicable for the following Unified CCX components: Unified CCX Administration, Unified CCX Engine, and Unified CCX Cluster View Daemon.

The alarm configuration submenu helps us to:

- Enable or disable sending of alarms to local or remote syslog server.
- Configure alarm event level for local or remote syslog server

Select **Alarm > Configuration** from the Cisco Unified CCX Serviceability menu bar to access the Alarm Configuration web page.

Related Topics

- [Configuring Alarm Settings](#)
- [Alarm Configuration Settings](#)

Configuring Alarm Settings

The Alarm Configuration page is used to view and update Unified CCX Alarm Configuration for local and remote syslogs.

Procedure

-
- Step 1** From the Unified CCX Serviceability menu bar, choose **Alarm** and click **Configuration**.

The Alarm Configuration web page opens displaying the local and remote syslog, Alarm Event Level values, and remote syslog server name, if configured on your Unified CCX server.

Step 2 The following fields are displayed on the Alarm Configuration web page.

Field	Description
Local Syslogs	
Enable Alarm	Use the check box next to Enable Alarm field to enable or disable the alarms for local syslog.
Alarm Event Level	Lists the alarm severity level.
Remote Syslogs	
Enable Alarm	Use the check box next to Enable Alarm field to enable or disable the alarms for remote syslog.
Alarm Event Level	Lists the alarm severity level.
Server Name	IP address or host name of the Syslog server to which system should send the alarm messages. If you are using CiscoWorks, enter the IP address or the host name of the CiscoWorks server.

Step 3 To update the Alarm Event Level for local or remote syslogs, check the check box before Enable Alarm field.

Step 4 Modify Alarm Event Level for the local or remote syslogs by selecting from the Alarm Event Level drop-down list. Modify the syslog server name in case of remote syslog.

Step 5 Click **Update** icon that displays in the tool bar in the upper, left corner of the window or the **Update** button that displays at the bottom of the window to save your configuration. Click **Clear** to reset data to the previous values.

In case of a High Availability deployment, the alarm configuration changes are automatically propagated to the second node. If the second node cannot be contacted, an alert message indicating that the update has failed on the remote node is displayed.



Caution

You should activate logging **only** for the purpose of debugging and remember to **deactivate** logging once the debugging session is complete.

Alarm Configuration Settings

Table 1-1 describes the alarm configuration settings for Unified CCX.

Table 1-1 Alarm Configuration Settings

Name	Description
Enable Alarm for Local Syslogs	<p>The SysLog viewer serves as the alarm destination. The program logs errors in the Application Logs within SysLog Viewer and provides a description of the alarm and a recommended action. You can access the SysLog Viewer from the Cisco Unified CCX Real-Time Monitoring Tool.</p> <p>For information on viewing logs with the SysLog Viewer, refer to the <i>Cisco Unified CCX Real-Time Monitoring Tool Administration Guide</i>.</p>
Enable Alarm for Remote Syslogs	<p>The Syslog file serves as the alarm destination. Check this check box to enable the Syslog messages to be stored on a Syslog server and to specify the Syslog server name.</p>

Table 1-1 **Alarm Configuration Settings (continued)**

Name	Description
Alarm Event Level	<p>Alarm event level messages range from severity 0 (most severe) to severity 7 (least severe) description of which is mentioned below. When you choose a severity level, all messages of that severity level and higher are sent.</p> <p>For example, if you choose ERROR_ALARM (Severity 3), all messages of severity 3, severity 2, severity 1, and severity 0 are sent. The default is “INFORMATIONAL_ALARM (Severity 6)”, which will send messages of all severity levels starting from 6 to severity level 0.</p> <p>You can choose one of the following alarm event level options from the drop-down list box:</p> <p>Emergency—This level designates system as unusable.</p> <p>Alert—This level indicates that immediate action is needed.</p> <p>Critical—The system detects a critical condition.</p> <p>Error—This level signifies an error condition exists.</p> <p>Warning—This level indicates that a warning condition is detected.</p> <p>Notice—This level designates a normal but significant condition.</p> <p>Informational—This level designates information messages only.</p> <p>Debug—This level designates detailed event information that Cisco TAC engineers use for debugging.</p>

Using Traces

A trace file is a log file that records activity from the Cisco Unified CCX components. Trace files let you obtain specific, detailed information about the system that can help you troubleshoot problems.

The Cisco Unified CCX system can generate trace information for different services. This information is stored in a trace file. To help you control the size of an trace file, you can specify the services for which you want to collect information and the level of information that you want to collect.

The Cisco Unified CCX system also generates information about all threads that are running on the system. This information is stored in the thread dump file and is useful for troubleshooting.

This section provides information on using traces in Cisco Unified CCX Serviceability and contains the following subsections:

- [The Component Trace File](#)
- [Configuring Trace Parameters](#)
- [Trace Level Options](#)
- [Viewing and Interpreting the Trace Files](#)
- [Log Profiles Management](#)

The Component Trace File

You can create a trace file for any of the following Unified CCX components:

- Cisco Unified CCX Administration
- Cisco Unified CCX Cluster View Daemon
- Cisco Unified CCX Editor
- Cisco Unified CCX Engine
- Cisco Unified CM Telephony Client
- Cisco Unified CCX Desktop Services
- Cisco Unified CCX Recording and Monitoring Services

The component trace file contains information about each component. To set up the trace file, follow the procedure mentioned in [Configuring Trace Parameters](#) section.

After configuring the information that you want to include in the trace files for the various services, you can collect and view trace files by using the trace and log central option in the Cisco Unified CCX Real-Time Monitoring Tool. Refer to *Cisco Unified CCX Real-Time Monitoring Tool Administration Guide* for detailed information.

Configuring Trace Parameters

You can view and configure trace parameters for any service that displays in Cisco Unified CCX Serviceability. This section describes how to configure trace parameters for network services that you manage through Cisco Unified CCX Serviceability. To update trace file information and to activate and deactivate logging, follow the procedure mentioned below:

Procedure

Step 1 From the Cisco Unified CCX Serviceability menu bar, choose **Trace** and click **Configuration**.

The Trace Configuration web page opens displaying the default trace configuration for Unified CCX Engine.

Step 2 From the Select Service drop-down list box, choose one of the following service or component for which you want to configure trace then, click **Go**.

- Cisco Unified CCX Administration
- Cisco Unified CCX Cluster View Daemon
- Cisco Unified CCX Editor
- Cisco Unified CCX Engine
- Cisco Unified CM Telephony Client
- Cisco Unified CCX Desktop Services
- Cisco Unified CCX Recording and Monitoring Services

You should be able to view the existing Trace configurations and debug levels for the selected Unified CCX service with check boxes for the various Debugging and XDebugging levels for each sub facility.

The debug levels for different Unified CCX subfacilities or services might vary depending on the selected service and are listed in the following table:

Cisco Unified CCX Components	Subfacilities or Services
Cisco Unified CCX Administration	
	Libraries
	Managers
	Miscellaneous
Cisco Unified CCX Cluster View Daemon	
	Libraries
	Managers
	Miscellaneous
Cisco Unified CCX Editor	
	Libraries
	Managers
	Miscellaneous
	Steps
Cisco Unified CCX Engine	
	Libraries
	Managers
	Miscellaneous
	Steps
	Subsystems
Cisco Unified CM Telephony Client or JTAPI Debug Levels	
	Warning
	Information
	Debugging
Cisco Desktop Services	

Cisco Unified CCX Components	Subfacilities or Services
	Cisco Desktop Administrator BarsCLI Cisco Desktop Call/Chat Service Cisco Desktop Agent E-Mail Service Cisco Desktop Enterprise Service Cisco Browser and IP Phone Agent Service Cisco Desktop IP Phone Agent Service Cisco Desktop LDAP Monitor Service Cisco Desktop License and Resource Manager Service Cisco Desktop Recording and Statistics Service Cisco Desktop LDAP Service Cisco Desktop Sync Service
Cisco Monitoring/Recording Services	Cisco Desktop VoIP Monitor Service Cisco Desktop Recording Service

Update the debug level for one or more of the libraries or sub facilities for the selected service by doing the following:

- a. To activate traces for a specific component or logging for a server, check the check box for the service that you chose.
- b. To deactivate logging for a server, uncheck the specific check box.



Caution

If you modify the trace level settings for Cisco Unified CM Telephony Client, you have to restart the Unified CCX Engine for the changes to take effect.

Step 3

To limit the number and size of the trace files, you can specify the trace output setting using the following two fields. See the following table for description and default values for these two fields.

Table 1-2 **Trace Output Settings**

Field	Description
Maximum No. of Files	The maximum number of trace files to be retained by the system. This field specifies the total number of trace files for a given service. Cisco Unified CCX Serviceability automatically appends a sequence number to the file name to indicate which file it is; for example, Cisco001MADM14.log. When the last file in the sequence is full, the trace data begins writing over the first file. The default value varies by service.
Maximum File Size	This field specifies the maximum size of the trace file in kilobytes or megabytes depending on the selected service. The default value varies by service.

- Step 4** Click **Save** icon that displays in the tool bar in the upper, left corner of the window or the **Save** button that displays at the bottom of the window to save your trace parameter configuration. The settings are updated in the system and the trace files will be generated as per the saved settings. Click **Restore Defaults** icon or button to revert to the default settings for the selected service.

In case of a High Availability deployment, the changes are propagated to the second node. If the second node cannot be contacted, an alert message indicating that the update has failed on the remote node is displayed.

**Caution**

You should activate logging **only** for the purpose of debugging and remember to **deactivate** logging once the debugging session is complete.

Related Topics

- [Trace Level Options](#)
- [Viewing and Interpreting the Trace Files](#)

Trace Level Options

A trace file is a log file that records activity from the Cisco Unified CCX component subsystems and steps. Trace files let you obtain specific, detailed information about the system that can help you troubleshoot problems.

The Cisco Unified CCX system can generate trace information for every component. This information is stored in an trace file. To help you control the size of an trace file, you specify the components for which you want to collect information and the level of information that you want to collect.

A trace file that records all information for a component, such as the Cisco Unified CCX Engine, can become large and difficult to read. To help you manage the trace file, the Cisco Unified CCX system lets you specify the subfacilities for which you want to record information.

For each component, you can select one or more Debugging trace levels. These selections specify the level of details in the debugging messages that the system sends to a trace file. For instance, if you select Debugging, the system sends only the basic error messages while if you select XDebugging5, the system will send errors, warnings, informational, debugging, verbose messages and so on in detail to the trace file.

Table 1-3 describes the Trace file subfacilities.

Table 1-3 **Trace File Subfacilities**

Component Code	Description
AC_CLUSTER	Archive Cluster Component
AC_CONFIG	Archive Configuration Component
AC_DATABASE	Archive Database Component
AC_JTAPI	JTAPI Archive Component
AC_OS	Archive Operating System Component
AC_CALABRIO	CAD/CSD Archive Component
ADM	Administration Client
ADM_CFG	Administration Configuration
APP_MGR	Applications Manager
ARCHIVE_MGR	Archive Manager

Table 1-3 **Trace File Subfacilities (continued)**

Component Code	Description
AW_CFG	Restore Administration Configuration
BARBI_CLI	Backup and Restore Client Interface
BOOTSTRAP_MGR	Cisco Unified CCX Bootstrap Manager
CFG_MGR	Configuration Manager
CHANNEL_MGR	Channel Manager
CLUSTER_MGR	Cluster Manager
CONTACT_MGR	Contact Manager
CONTACT_STEPS	Contact Steps
CRA_CMM	Cisco Unified CCX ClusterMsgMgr Component
CRA_HRDM	Cisco Unified CCX Historical Reporting Data Manager
CVD	Cluster View Daemon
DB	Database
DBPURGE_MGR	Database Purge Manager
DESKTOP	Cisco Unified CCX Editor Desktop
DOC_MGR	Document Manager
EDT	Cisco Unified CCX Editor general
ENG	Cisco Unified CCX Engine
EXECUTOR_MGR	Executor Manager
EXPR_MGR	Expression Manager
FILE_MGR	File Manager
GENERIC	Generic catalog for a facility
GRAMMAR_MGR	Grammar Manager
GRP_CFG	Group Configuration
HOLIDAY_MGR	Holiday Manager
HR_MGR	Historical Reports Manager

Table 1-3 **Trace File Subfacilities (continued)**

Component Code	Description
ICD_CTI	Cisco Unified CCX CTI Server
ICD_HDM	IPCC Express Historical Data Manager
ICD_RTDM	Cisco Unified CCX ICD Real-Time Data Manager
IVR_RTDM	Cisco Unified CCX IP IVR Real-Time Data Manager
IO_ICM	Cisco Unified ICME Input/Output
JASMIN	Java Signaling and Monitoring Interface
LIB_APPADMININTERCEPTOR	Cisco Unified CCX Administration Interceptor Library
LIB_AXL	AXL Library
LIB_CFG	Configuration Library
LIB_CLUSTER_CFG	Configuration Library for the cluster
LIB_CRTP	CRTP Library
LIB_DATABASE	Database Library
LIB_DIRECTORY	Directory Access Library
LIB_EVENT	Event Message Library
LIB_ICM	Cisco Unified ICME Library
LIB_JASPER	Jasper Tomcat Library
LIB_JCUP	JavaCup Library to parse expressions
LIB_JDBC	JDBC Library
LIB_JINI	JINI Services
LIB_JMAIL	Java Mail Library
LIB_JLEX	JLEX Library used to parse expressions
LIB_LICENSE	License Library
LIB_MEDIA	Media Library
LIB_RMI	Java Remote Method Invocation Library
LIB_SERVLET	Servlet Library

Table 1-3 **Trace File Subfacilities (continued)**

Component Code	Description
LIB_TC	Tomcat Library
LOG_MGR	Log Manager
MRCP_CFG	MRCP Configuration
MGR_MGR	Manager Manager
NODE_MGR	Node Manager
PALETTE	Editor Palette
PROMPT_MGR	Prompt Manager
PURGING	Purging
RPT	Reporting
RTPPORT_MGR	RTP Manager
SCRIPT_MGR	Script Manager
SESSION_MGR	Session Manager
SIP_STACK	SIP Stack logging
SOCKET_MGR	Socket Manager
SS_APP	Application Subsystem
SS_CM	Contact Manager Subsystem
SS_CMT	Cisco Media Termination Subsystem
SS_DB	Database Subsystem
SS_EMAIL	E-mail Subsystem
SS_ENT_SRV	Enterprise Server Subsystem
SS_HTTP	HTTP Subsystem
SS_ICM	Cisco Unified ICME Subsystem
SS_MRCP_ASR	MRCP ASR Subsystem
SS_MRCP_TTS	MRCP TTS Subsystem
SS_OUTBOUND	Outbound Dialer Express Subsystem (uses MIVR log file)
SS_RM	Resource Manager Subsystem

Table 1-3 **Trace File Subfacilities (continued)**

Component Code	Description
SS_RMCM	Resource Manager Contact Manager Subsystem
SS_RTR	Real-Time Reporting Subsystem
SS_SIP	SIP Subsystem
SS_TEL	JTAPI Subsystem (Telephony)
SS_VB	Voice Browser Subsystem
SS_VOIPMON_SRV	Voice over IP Monitor Server Subsystem
STEP_CALL_CONTROL	Call Control Steps
STEP_ENT_SRV	Enterprise Server Steps
STEP_MEDIA_CONTROL	Media Control Steps
STEP_SESSION	Sessions Steps
STEP_SESSION_MGMT	Session Management Steps
STEP_USER	User Steps
STEP_CALL_CONTACT	Call Contact Steps
STEPS_CONTACT	Contact Steps
STEPS_DB	Database Steps
STEPS_DOCUMENT	Document Steps
STEPS_EMAIL	E-mail Steps
STEPS_GENERAL	General Steps
STEPS_GRAMMAR	Grammar Steps
STEPS_HTTP	HTTP Steps
STEPS_ICM	Cisco Unified ICME Steps
STEPS_IPCC_EXP	Cisco Unified CCX Steps
STEPS_JAVA	Java Steps
STEPS_PROMPT	Prompt Steps
STEPS_SESSION	Session Steps
STEPS_USER.ALARM	User Alarm Steps

Table 1-3 **Trace File Subfacilities (continued)**

Component Code	Description
USR_MGR	User Manager
WEB_STEPS	HTTP Contact Steps

When the Cisco Unified CCX product is running on a 7845 machine and tracing is ON (the default), limit the Busy Hour Call Completions (BHCC) to 4500 calls per hour. If you want to run a higher BHCC, turn the debug traces OFF. The trace subfacilities to be turned OFF are ICD_CTI, SS_TEL, SS_RM, SS_CM, and SS_RMCM.

Viewing and Interpreting the Trace Files

The Unified CCX server stores the trace files in the Log directory under the directory in which you installed the Unified CCX component. You can collect and view trace information using the Real-Time Monitoring Tool (RTMT).

Interpreting a Trace File

The trace files contain information in standard Syslog format. The file includes some or all of the following information for each event that it records:

- Line number
- Date and time the event occurred
- Facility and subfacility (component) name
- Severity level
- Message name
- Explanation
- Parameters and values

Log Profiles Management

Log Profile is an aggregated entity that preserves trace settings of the following Cisco Unified CCX services:

- Cisco Unified CCX Engine (Traces termed as MIVR)
- Cisco Unified CCX Administration (Traces termed as MADM)
- Cisco Unified CCX Cluster View Daemon (Traces termed as MCVD)

Log profiles in Unified CCX 8.5 can be one of the following two types:

1. System Log Profiles: These log profiles are pre-installed with Unified CCX 8.5 and you cannot modify these profiles. [Table 1-4](#) provides detailed information on the six system log profiles that are factory shipped with Unified CCX 8.5:

Table 1-4 System Log Profiles

Name	Scenario in which this profile must be activated	Facility	Subfacility	Levels
Outbound	Outbound related issues	MIVR	SS_OB SS_RM	Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(1)
AppAdmin	For any issues in Unified CCX Serviceability	MADM	LIB_AXL LIB_CFG ADM_CFG MGR_MGR ADM_SRV	Debugging(Enabled), XDebugging(None) Debugging(Enabled), XDebugging(None) Debugging(Enabled), XDebugging(None) Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(None)
Media	For calls that fail due to media issues or some issues with the media stream transfer	MIVR	LIB_MEDIA SS_CMT	Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(1)

Table 1-4 System Log Profiles (continued)

Name	Scenario in which this profile must be activated	Facility	Subfacility	Levels
Real Time Data Problems	For calls that are stuck due to RTR issues	MIVR	SS_RM SS_CM ICD_RTDM	Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(1)
Call Stuck In Queue	Call is stuck in some CSQ and it is not going to an available agent in that CSQ	MIVR	SS_CM SS_RM SS_TEL/SS_SIP ICD_RTDM ICD_CTI	Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(None) Debugging(Enabled), XDebugging(1) Debugging(Enabled), XDebugging(1)
Default	This profile can be activated once an issue is resolved.	This profile has the trace settings as it appears after a fresh installation of Unified CCX.		

2. Custom Log Profiles: If the trace settings generated by system profiles are not sufficient in a particular scenario, you can create custom log profiles for better troubleshooting. You can upload and activate these custom log profiles, on a need basis.

**Note**

In a HA deployment of Unified CCX, all the log profile operations will be reflected on both the nodes in the cluster.

Choose **Trace > Profile** from the Unified CCX Serviceability menu bar to access the Log Profiles Management web page. The Log Profiles Management web page opens displaying the available log profiles each with a radio button. You can perform different operations on the listed log profiles, which are explained in detail in the following sub-sections.

Related Topics

- [Create Profile](#)
- [Save As Another Profile](#)
- [Enable Profile](#)
- [Save Current Trace Settings](#)
- [Save Current Trace Settings](#)
- [Upload Profile](#)
- [View and Update Profile](#)

Create Profile

To create a log profile for a specific trace, perform the following steps:

Procedure

-
- Step 1** From the Unified CCX Serviceability menu bar, choose **Trace > Profile**. The Log Profiles Management web page displays.
 - Step 2** Click **Add New** icon that displays in the tool bar in the upper, left corner of the window or the **Add New** button that displays at the bottom of the window.
Log Profile Configuration web page displays. You can view list of sub facilities such as libraries, managers, steps, subsystems, and so on with check boxes for the various Debugging and XDebugging levels for each sub facility for the MIVR tab by default.
 - Step 3** Select desired trace setting for different subfacilities in a service by clicking the corresponding check box.
 - Step 4** Click MCVD and MADM tabs to navigate to view and enable trace setting for these profiles.
 - Step 5** On successful configuration of these log profiles, click **Save** to save the profile or **Save and Enable** to save and enable the profile. The new profile will be displayed in the main profile page.

Related Topics

- [View and Update Profile](#)
- [Enable Profile](#)

- [Save Current Trace Settings](#)

Save As Another Profile

To save an existing profile as another profile, perform the following steps:

Procedure

- Step 1** From the Unified CCX Serviceability menu bar, choose **Trace > Profile**. The Log Profiles Management web page displays.
- Step 2** Click the radio button to select a log profile.
- Step 3** Click **Save As**. Log Profile Configuration web page for the selected profile is displayed where you can view and update the existing profile settings. Click MIVR, MCVD, and MADM tabs to view and modify the trace settings.
- Step 4** You can save these updated trace settings with a new name. You will see a message confirming successful saving of the new profile.

Related Topics

- [View and Update Profile](#)
- [Enable Profile](#)
- [Save Current Trace Settings](#)

Enable Profile

To enable or activate a log profile, perform the following steps:

Procedure

- Step 1** From the Unified CCX Serviceability menu bar, choose **Trace** and click **Profile**. The Log Profiles Management web page displays.
- You can enable a log profile using any one of the following methods from the Log Profiles Management web page:
- a. Select the radio button for the profile and click **Enable** icon or button or

- b. Click the hyperlink for the desired profile. Log Profile Configuration web page for the selected profile is displayed. Click **Enable** icon or button in the Profile Configuration web page or
- c. Click **Add New**. Enter the desired trace settings in the Profile Configuration web page and click Save and Enable icon or button in the Profile Configuration web page.

Step 2 The trace setting for the selected profile is transferred to system's trace settings and on successful activation, a message will be displayed in the status bar.

Related Topics

- [Create Profile](#)
- [View and Update Profile](#)

Delete Profile

To delete an existing log profile, perform the following steps:

Procedure

Step 1 From the Unified CCX Serviceability menu bar, choose **Trace** and click **Profile**. The Log Profiles Management web page displays.

Step 2 Select the radio button for an existing profile and click **Delete** icon or button to delete a log profile.

Alternatively, you can click the hyperlink of the profile that you want to delete from the Log Profiles Management web page. Log Profile Configuration web page for the selected profile is displayed where you can view the existing profile settings. Click **Delete** to delete the selected log profile.

Step 3 The selected log profile is deleted and you will see a confirmation message in the status bar.



Note

You cannot delete the default and system log profiles. If the selected log profile happens to be the last-enabled profile in the system, then you cannot delete the profile. If you try to delete the last-enabled profile, the following alert message - "This is the last enabled profile in system and hence not allowed to be deleted." will be displayed.

Related Topics

- [View and Update Profile](#)
- [Enable Profile](#)

Save Current Trace Settings

The trace settings that are currently enabled in Unified CCX can be saved by clicking **Save Current Trace Settings** so that it can be enabled at a later date. For example, you might be asked to enable certain trace levels or a log profile during troubleshooting. In such a scenario, before doing the troubleshooting, you can save the current trace settings of your system as a profile so that you can enable the same trace settings after resolving the issue.

Use the procedure mentioned below to save the current trace settings in the system as a profile:

Procedure

-
- Step 1** From the Unified CCX Serviceability menu bar, choose **Trace** and click **Profile**. The Log Profiles Management web page displays.
 - Step 2** Click **Save Current Trace Settings** icon in the tool bar or the **Save Current Trace Settings** button at the bottom of the window.
 - Step 3** The Explorer User Prompt dialog box opens. Enter a name for your log profile.
 - Step 4** Click **OK** to save this profile. All the existing trace settings in your system is saved as a profile. Click **Cancel** to cancel this operation.

You should be able to view this new log profile along with the existing profiles in the Log Profiles Management web page. You can select and click **Enable** to enable the same profile at a later date.

Related Topics

- [View and Update Profile](#)
- [Enable Profile](#)
- [Save As Another Profile](#)

Upload Profile

To upload a log profile, perform the following steps:

Procedure

- Step 1** From the Unified CCX Serviceability menu bar, choose **Trace** and click **Profile**. The Log Profiles Management web page displays.
- Step 2** To locate the log profile, click the **Browse** button next to **Enter a Profile File to Upload** field, navigate to the directory in which the profile (.xml file) is located, and click **Open**. The path for the profile appears in this field.
- Step 3** Click **Upload** to upload the profile.
- Step 4** You should be able to view the uploaded profile along with the existing profiles in the Log Profiles Management web page.

Related Topics

- [View and Update Profile](#)
- [Enable Profile](#)
- [Save Current Trace Settings](#)

View and Update Profile

You can update only custom log profiles. To view and update an existing log profile, perform the following steps:

Procedure

- Step 1** From the Unified CCX Serviceability menu bar, choose **Trace** and click **Profile**. The Log Profiles Management web page displays.
- Step 2** Click the hyperlink of the profile you wish to view or update.
Log Profile Configuration web page for the selected profile is displayed where you can view the existing profile settings.

- Step 3** Click MIVR, MCVD, and MADM tabs to view and modify the trace settings.
- Step 4** Click **Save** to save the updated profile settings or **Save and Enable** to enable the updated profile. You will see a message confirming successful saving or enabling of the updated profile.
- Click **Cancel** to go back to Log Profiles Management web page.

Related Topics

- [Create Profile](#)
- [Upload Profile](#)
- [Enable Profile](#)
- [Save Current Trace Settings](#)

Using Tools

The Tools menu of the Cisco Unified CCX Serviceability contains the following submenu options:

- [Control Center - Network Services](#)
- [Datastore Control Center](#)
- [Service Parameters](#)
- [Performance Configuration and Logging](#)

Managing Services in Control Center

Control Center in Cisco Unified CCX Serviceability lets you do the following tasks:

- Start, stop, and restart Unified CCX services
- View the status the status of Unified CCX services
- Refresh the status of Unified CCX services

Cisco Unified CCX Serviceability provides Control Center - Network Services menu option, which is essential for your system to function.

Choose **Tools > Control Center - Network Services** from the Unified CCX Serviceability menu bar to perform the above-mentioned actions. This section covers the following topics:

- [Starting, Stopping, Restarting, and Refreshing Status of Network Services in Control Center](#)
- [Using a Command Line Interface to Start and Stop Services](#)



Tip

You may need to manage services in both Cisco Unified CCX Serviceability and Cisco Unified Serviceability to troubleshoot a problem. The Cisco Unified Serviceability services are described in the *Cisco Unified Serviceability Administration Guide*.

Control Center - Network Services

Installed automatically, network services include services that the system requires to function; for example, database and system services. Because these services are required for basic functionality, you cannot activate them in the Service Activation window.

After the installation of your application, network services start automatically. The list of services displayed in the Control Center—Network Services web page depends on the license package of your Unified CCX. If you have a Unified CCX Premium license, Unified CCX Serviceability categorizes the network services into the following categories, which are explained in the subsequent sections:

- [System Services](#)
- [Admin Services](#)
- [DB Services](#)
- [Desktop Services](#)

The Control Center - Network Services web page displays the following information for the network services:

- Name of the network services, their dependant subsystems, managers, or components

- Status of the service (IN SERVICE, PARTIAL SERVICE, or SHUT DOWN; for individual subsystems, the status could be OUT OF SERVICE or NOT CONFIGURED).
- Start Time of the service
- Up Time of the service

System Services

The Unified CCX Serviceability service supports starting and stopping of the following System Services:

- Cisco Unified CCX SNMP Java Adapter
- Cisco Unified CCX Perfmon Counter Service
- Cisco Unified CCX DB Perfmon Counter Service
- Cisco Unified CCX Cluster View Daemon - List of Managers
- Cisco Unified CCX Engine - List of Subsystems and Managers
- Cisco Unified CCX Voice Subagent

Admin Services

The Unified CCX Serviceability service supports starting and stopping of the following Admin Services:

- Cisco Unified CCX Serviceability - List of Managers - You cannot start or stop this service from the Unified CCX Serviceability web interface and you need to use CLI.
- Cisco Unified CCX Administration

DB Services

You can start and stop Cisco Unified CCX Database service.

Desktop Services

The Unified CCX Serviceability service supports starting and stopping of the following Desktop Services:

- Cisco Desktop Recording and Playback Service
- Cisco Desktop VoIP Monitor Service
- Cisco Desktop LDAP Monitor Service
- Cisco Desktop Sync Service
- Cisco Desktop Call/Chat Service
- Cisco Desktop Agent E-Mail Service
- Cisco Desktop Browser and IP Phone Agent Service
- Cisco Desktop License and Resource Manager Service
- Cisco Desktop Enterprise Service
- Cisco Desktop Recording and Statistics Service

Related Topics

- [Starting, Stopping, Restarting, and Refreshing Status of Network Services in Control Center](#)

Starting, Stopping, Restarting, and Refreshing Status of Network Services in Control Center

Control Center in Cisco Unified CCX Serviceability allows you to view status, refresh the status, and to start, stop, and restart network services.

Perform the following procedure to start, stop, restart, or view the status of services for a server (or for a server in a cluster in a Cisco Unified CCX cluster configuration). You can start, stop, or refresh only one service at a time. Be aware that when a service is stopping, you cannot start it until the service is stopped. Likewise, when a service is starting, you cannot stop it until the service starts.

Procedure

Step 1 Choose **Tools > Control Center—Network Services** from the Unified CCX Serviceability menu bar.

Step 2 From the **Server** drop-down list box, choose the sever; then, click **Go**.

The window displays the following items:

- The service names for the server that you chose.
- The service status; for example, In Service, Shutdown, Partial Service and so on. (Status column)
- The exact time that the service started running. (Start Time column)
- The amount of time that the service has been running. (Up Time column)

Step 3 Perform one of the following tasks:

- Click the radio button before the service that you want to start and click the **Start** button.
The Status changes to reflect the updated status.
- Click the radio button before the service that you want to stop and click the **Stop** button.
The Status changes to reflect the updated status.
- Click the radio button before the service that you want to restart and click the **Restart** button.
A message indicates that restarting may take a while. Click **OK**.
- To get the latest status of the services, click the **Refresh** button. The status information is updated to reflect the current status.

Using a Command Line Interface to Start and Stop Services

You can start and stop some services through the Command Line Interface (CLI). For a list of services that you can start and stop through the CLI and for information on how to perform these tasks, refer to the *Command Line Interface Reference Guide for Cisco Unified CCX*.

About Unified CCX Datastore

Datastores are components that allow you to manage and monitor historical, agent, repository, and configuration data across all servers in the Unified CCX cluster.

**Note**

Support for High Availability and remote servers is available only in multiple-server deployments.

The Unified CCX Cluster uses the publisher/subscriber database model for data replication across the system. Under normal circumstances, the database master acts as the source of data and the other node acts as the target for the data. In other words, the database master is the *publisher* and the other node is the *subscriber*.

**Note**

In the **Tools > Datastore Control Center > Datastores** web page, the first node installed in the cluster is marked as publisher (with an icon marked P). This should not be confused with the publisher/ subscriber model being discussed here. In Unified CCX 8.5(1), the term publisher is used to denote only the first node in the cluster and does not indicate that node to be the source of the data. The publisher/subscriber mentioned in these pages refer to the source and destination of the data respectively. Typically, the database master node acts as the source and the other node acts as the destination.

The publisher/subscriber database model enables Unified CCX to provide high-availability and failover support. To support this on the database level, the data must be available on multiple nodes of the cluster. To have such data availability, replication is used for the Agent, Historical, and Repository datastore. The Configuration datastore does not use replication; instead, it uses atomic transactions to commit data changes to all active Configuration datastores in the cluster.

The database master is the main database. All data is written to this database, with the other database synchronizing with it. If the database master fails, then data can be written to the database on the second node. When the database master is back online, it returns to accepting writes. It also synchronizes with the other database to ensure data consistency is maintained in the cluster.

Network Outage

By default, replication between two nodes is removed if they are not able to synchronize with each other due to network outage for a substantial period of time. If the replication is dropped due to network outage, an alert is sent to the administrator so that the administrator can take corrective action.



Note

Even though the replication between the nodes is removed, data could still be written to the database, which is accessible to the Unified CCX engine.

If the replication is removed, the administrator can go to **Tools > Datastore Control Center > Replication Servers** submenu from the Cisco Unified CCX Serviceability menu bar and click **Reset Replication**. This ensures that the replication is established between the nodes and the data synchronization (repair) process is initiated. Click **Check Details** icon in this web page to monitor the status of the repair.

If the network outage did not result in the replication setup being removed, once the network is up, the synchronization of data between the databases will happen automatically. For outages that last a few seconds, typically the administrator need not take any action and the system will be able to synchronize automatically.

Datastore Control Center

Unified CCX Cluster configuration is not complete until Agent, Historical, and Repository publishers are configured. The Datastore Control Center in Unified CCX 8.5(1) displays the status of datastore replication, allows you to synchronize data, and reset replication functions.



Note

Support for High Availability is available only in multiple-server deployments.

Use the Datastore Control Center to perform the following functions:

- Obtain an overview of the datastores in the cluster and their relationships.
- Manage the datastore read/write access.
- Monitor and control the replication state (available only for Agent, Historical, and Repository datastores.)



Tip

The Datastore Control Center page is available even in single-node deployments but you can only monitor the read and write access. You cannot synchronize data, reset replication, or control the replication state.

The Datastore Control Center will have the following two submenus:

- [Replication Servers](#)
- [Datastores](#)

The following table describes the datastores available and what they contain.

Datastore Name	Description
Historical	This datastore contains Historical Report data.
Repository	This datastore contains user prompts tables, grammar tables, and document tables
Agent	This datastore contains agent configuration information, agent report data, and metadata for recorded files.
Configuration	This datastore contains Unified CCX system configuration information.

Replication Servers

The Replication Servers menu option in Datastore Control Center allows you to view replication status and reset the replication between two nodes for the above-mentioned four datastores across all servers in the cluster. This menu will be available only in a High Availability deployment.

Follow the procedure below to access the Replication Servers web page:

Procedure

- Step 1** Choose **Tools > Datastore Control Center > Replication Servers** from the Unified CCX Serviceability menu bar.
- Step 2** The Replication Servers web page opens displaying the list of servers and the following fields in a High Availability deployment.

Datastore Name	Description
Server	Host name of the server.
Node ID	Node ID of the server in the Unified CCX cluster.
State	The current connectivity status of the node in the replication network, which can be one of the following values: DROPPED/ TIMED OUT - The server cannot be reached and is not available in the replicated network. ACTIVE/ CONNECTED - The server is connected in the replication network and sends or receives updates.
Job Status	The current state of this database.
Last Changed	The time the connection state was last changed.

- Step 3** Click **Reset Replication** to reset the replication if the replication is not functional between the two nodes. The **Reset Replication** button will be enabled only when the database on both the nodes are enabled.

When the subscriber goes down and it is required to make configuration updates from the publisher, you can disable Config Datastore (CDS) and Historical Datastore (HDS) on the subscriber using **Disable CDS and HDS** icon or button. The database information for the cluster is displayed at the bottom of the window. Once the subscriber is up, you can enable CDS and HDS on the subscriber using the same toggle button.



Caution

Any Configuration in Application Administration and Historical data on the Subscriber node would get over written, when CDS is enabled again.

Related Topics

- [Datastores](#)

- [Datastore Control Center](#)

Datstores

Choose **Tools > Datastore Control Center** and click **Datstores** from the Unified CCX Serviceability menu bar to view replication status of all the Unified CCX datstores and to synchronize data.

The following fields describe the Datastore Control Center contents common to all the Unified CCX datstores.

Field	Description
Server	Server machine name.
Replication Type	One of the following Enterprise Replication (ER) values in a High Availability deployment: <ul style="list-style-type: none"> • ER - Publication • ER - Subscription
Node ID	Node ID of server/node in Unified CCX cluster.
Read Access	Indicates whether data can be read from the datastore. Options: Yes, No.
Write Access	Indicates whether data can be written to the datastore. Options: Yes, No.
Replicate Status	Can be one of the following values: <p>RUNNING - All the necessary database services are up and the datastore is functioning as expected.</p> <p>RETRYING - The datastore is in partial service and might be in the state of restart.</p> <p>SHUTDOWN - The datastore is shutdown.</p> <p>UNKNOWN - Unable to determine the current status of the datastore. This value is shown in a single-node deployment only.</p>

Field	Description
Last Update Time	Indicates the last action the replication agent was performing.
Info	Use these icons to view further information in a new window: Check Details - Click this icon to view information about data synchronization or repair jobs that might have been initiated. History - Click this icon to view information about the replication latency (the time it takes to replicate transactions).

Click **Synchronize Data** to synchronize data for each datastore except for the Configuration datastore between the two nodes in case of mismatch.

Related Topics

- [Replication Servers](#)
- [Datastore Control Center](#)

Service Parameters

Use the Service Parameters page to view and update different services in Unified CCX servers. Ensure the following prerequisites are met before configuring the parameters:

- The servers are configured.
- The service is available on the servers.



Caution

Some changes to service parameters may cause system failure. Cisco recommends that you do not make any changes to service parameters unless you fully understand the feature that you are changing or unless the Cisco Technical Assistance Center (TAC) specifies the changes.

Use the following procedure to configure the service parameters for a particular service on a particular Unified CCX server.

Procedure

Step 1 From the Unified CCX Serviceability menu bar, choose **Tools** and click **Service Parameters**.

Step 2 Choose a server from the Server drop-down list box. If parameters are available for that server, the service drop down list box appears displaying the following services:

- Cisco AMC Service.
- Cisco Log Partition Monitoring Tool.
- Cisco Trace Collection Service.
- Cisco RIS Data Collector.
- Cisco Serviceability Reporter.
- Cisco DRF local
- Cisco DRF Master



Note

Only the common platform services mentioned above are supported currently for Unified CCX 8.5(1).

Step 3 Choose the service that contains the parameter that you want to update from the Service drop-down list box.



Note

The Service Parameter Configuration window displays all services (active or not active).

Step 4 The parameters for the selected service are displayed and the suggested values (if available) are listed against each one of them. Update the appropriate parameter value.

Step 5 Click **Save**.

The modified values are saved and the new values are reflected on subsequent access to the service's parameters.

Click **Set to Default** to set all service parameters for this instance of the service to the default value. A warning is displayed that this action cannot be undone and only on confirmation, the parameter values for the selected service is set to the default values.

**Note**

Currently, you cannot configure any parameters for the following platform services: Cisco Trace Collection Service and Cisco Log Partition Monitoring Tool.

Performance Configuration and Logging

Use the Performance Configuration and Logging page to configure JVM parameters and dump Thread and Memory traces for performance monitoring of the Unified CCX server(s). You can configure this settings only for the following services of Unified CCX:

- Cisco Unified CCX Cluster View Daemon
- Cisco Unified CCX Engine
- Unified CCX Serviceability

**Note**

You cannot configure JVM options for Unified CCX Administration service.

Use the following procedure to configure JVM parameters for a particular service on a particular server.

Procedure

-
- Step 1** From the Cisco Unified CCX Serviceability menu bar, choose **Tools > Performance Configuration and Logging**.
- Step 2** Choose a server from the Server drop-down list box and click **Go**.
The first node is selected by default and JVM options for the Unified CCX Engine service in the first node is displayed.
- Step 3** Choose a service for which you want to see the JVM options from the Service drop-down list box. You should be able to select any one of the following services from this list box:

- Unified CCX Cluster View Daemon
- Unified CCX Engine
- Unified CCX Administration

Step 4 The following JVM options are displayed for each service:

- PrintClassHistogram
- PrintGCDetails
- PrintGC
- PrintGCTimeStamps

Step 5 Click **Dump Thread Trace** icon or button to dump the thread traces for the selected service in the selected server. You can collect the corresponding `jvm.log` from the log folder for that facility using Real-Time Monitoring Tool (RTMT).

Step 6 Click **Dump Memory Trace** icon or button to dump the memory traces. This creates the following two logs in the log folder for that facility.

- Memory-<facility name>-<time stamp>.hprof (for heap dump)
- histo-<facility name> <time stamp>.log (for histogram)

Step 7 You can change the JVM options by clicking **Enable** or **Disable** radio buttons in this page.

Click **Update JVM Options** icon or button to update the new settings for selected service on selected node.

Using Help

The Help Menu of the Cisco Unified CCX Serviceability web interface provides access to online help for the Unified CCX system. Use the Help menu to access configuration procedures and description of Unified CCX components.

The Help menu contains the following menu options:

- **Contents and Index**—Choose this option to view the entire Unified CCX Serviceability Administration Guide online help system and index (see [Contents and Index Option](#)).
- **For this page**—Choose this option to view context-sensitive help (see [For This Page Menu Option](#)).

- **Troubleshooting Tips**—to search the troubleshooting wiki page for suggestions on how to solve problems that may arise in the performance of your Unified CCX system (see [Troubleshooting Tips Menu Option](#)).
- **Unified CCX Documentation on Cisco.com**—Choose this option to view the documentation index page (see [For This Page Menu Option](#)).
- **About**—Choose this option to view Unified CCX version information (see [About Menu Option](#)).

Contents and Index Option

To view the entire Unified CCX Serviceability Administration Guide online help system and index, choose **Help > Contents and Index** from the Unified CCX Serviceability menu bar. The Unified CCX Serviceability Administration Guide Online Help window opens.

When you click any topic in the left pane, the section of the online help that corresponds to that topic appears in the right pane.

The following table describes the menu options in the Unified CCX Administrator Guide Online Help window.

Table 1-5 *Online Help Menu Options Online Help Menu Options*

Menu Option	Description
Home	Returns you to the beginning of the online help document.
Search	Opens a search window, in which you can search for specific words in the online help files.
Using Help	Opens a file explaining how to use the online help files.
Glossary	Opens a glossary of definitions for terms used in Cisco Unified CCX and Cisco Unified IP IVR.
View PDF	Opens a PDF ¹ version of the Cisco Unified CCX Serviceability Administration Guide.

Table 1-5 **Online Help Menu Options (continued) Online Help Menu Options**

Menu Option	Description
Contents	Displays the contents of the Cisco Unified CCX Serviceability Administration Guide online help files in the left pane of the online help window.
Index	Displays the index of the Cisco Unified CCX Serviceability Administration Guide online help files in the left pane of the online help window.

1. PDF = Portable Document Format

For This Page Menu Option

To access context-sensitive help, open the web page for which you want help and choose **Help > For This Page** from the Unified CCX Serviceability menu bar. The Unified CCX Serviceability online help displays information that is specific to the open web page.

Troubleshooting Tips Menu Option

The Unified CCX system provides the Troubleshooting Tips tool as a way for you to search the troubleshooting wiki page for suggestions on how to solve problems that may arise in the performance of your Unified CCX system.



Note

For more information, see the Troubleshooting Wiki page: http://docwiki.cisco.com/wiki/Troubleshooting_Unified_Contact_Center_Express.

To access the Troubleshooting Tips wiki page, choose **Help > Troubleshooting Tips** from the Unified CCX Serviceability Administration menu bar.

Unified CCX Documentation Link Option

To access the complete Unified CCX documentation set for Unified CCX, and Unified IP IVR, choose **Help > Cisco Unified CCX Documentation on Cisco.com** from the Unified CCX Administration menu bar. A new browser window opens to display the following documentation index page:
http://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html.

About Menu Option

To access Unified CCX version information, choose **Help > About** from the Unified CCX Serviceability menu bar. The Unified CCX Serviceability web page opens, displaying version information and package information.



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