



CHAPTER 7

Real-Time Monitoring Configuration

This chapter contains the following information for configuring the Cisco Unified Presence Real-Time Monitoring Tool (RTMT).



Tip

Ensure that the RTMT version that you install is compatible with the Cisco Unified CallManager version that runs in your cluster; for example, the RTMT version that supports Cisco Unified CallManager 5.X does not support Cisco Unified CallManager 6.X. The RTMT version that supports Cisco Unified CallManager 5.0 supports Cisco Unified CallManager 5.1. To monitor clusters that are running different versions of Cisco Unified CallManager versions simultaneously, you must install multiple versions of RTMT (one version per Cisco Unified CallManager release). If you install multiple versions of the plug-in, you can install the versions on the same client as long as the versions exist in different folders. If the installation detects another version in the folder, a message displays. To continue the installation, install the version in a different folder.

- [Installing the Real-Time Monitoring Tool \(RTMT\), page 7-2](#)
- [Upgrading RTMT, page 7-2](#)
- [Uninstalling RTMT, page 7-3](#)
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Tip

For information on alert, performance monitoring, trace collection, and syslog viewer configuration, see the [“Where to Find More Information”](#) section on page 7-10.

Installing the Real-Time Monitoring Tool (RTMT)

You can install RTMT, which works for resolutions 800*600 and above, on a Windows 98, Windows XP, Windows 2000, or Red Hat Linux with KDE and/or Gnome client.

**Note**

If you have previously installed RTMT for use with a Cisco Unified CallManager server that is running Microsoft Windows, you must install RTMT for Cisco Unified Presence in a different folder on your local computer.

To install the tool, perform the following procedure:

Procedure

- Step 1** From Cisco Unified Presence Administration, choose **Application > Plugins**.
- Step 2** Click the **Find** button.
- Step 3** If you are planning to install the RTMT tool on a computer that is running the Microsoft Windows operating system, click the **Download** link for the Cisco Unified Presence Real-Time Monitoring Tool-Windows. If you are planning to install the RTMT tool on a computer that is running the Linux operating system, click the **Download** link for the Cisco Unified Presence Real-Time Monitoring Tool-Linux.
- Step 4** Download the executable to your preferred location.
- Step 5** To install the Windows version, double-click the RTMT icon that displays on the desktop or locate the directory where you downloaded the file and run the RTMT installation file. The extraction process begins.

To install the Linux version, ensure that the file has execute privileges; for example, enter the following command, which is case sensitive: **chmod +x CcmServRtmtPlugin.bin**.
- Step 6** In the RTMT welcome window, click **Next**.
- Step 7** To accept the license agreement, click **Yes**.
- Step 8** Choose the location where you want to install RTMT. If you do not want to use the default location, click Browse and navigate to a different location. Click **Next**.
- Step 9** To begin the installation, click **Next**.

The Setup Status window displays. Do not click Cancel.
- Step 10** To complete the installation, click **Finish**.

Additional Information

See the [Related Topics](#), page 7-10.

Upgrading RTMT

When you use the tool (RTMT), it saves user preferences and downloaded module jar files locally on the client machine. The system saves profiles in the Cisco Unified Presence database, so you can access these items in RTMT after you upgrade the tool.

**Tip**

To ensure compatibility, Cisco recommends that you upgrade RTMT after you complete the Cisco Unified Presence upgrade on all servers in the cluster.

To upgrade RTMT, perform the following procedure:

Procedure

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- Step 1** From Cisco Unified Presence Administration, choose **Application > Plugins**.
 - Step 2** Click the **Find** button.
 - Step 3** If you are planning to install the RTMT tool on a computer that is running the Microsoft Windows operating system, click the **Download** link for the Cisco Unified CallManager Real-Time Monitoring Tool-Windows. If you are planning to install the RTMT tool on a computer that is running the Linux operating system, click the **Download** link for the Cisco Unified CallManager Real-Time Monitoring Tool-Linux.
 - Step 4** Download the executable to your preferred location.
 - Step 5** To install the Windows version, double-click the RTMT icon that displays on the desktop or locate the directory where you downloaded the file and run the RTMT installation file. The extraction process begins.

To install the Linux version, ensure that the file has execute privileges; for example, enter the following command, which is case sensitive: **chmod +x CcmServRtmtPlugin.bin**.
 - Step 6** In the RTMT welcome window, click **Next**.
 - Step 7** Because you cannot change the installation location for upgrades, click **Next**.
The Setup Status window displays; do not click **Cancel**.
 - Step 8** In the Maintenance Complete window, click **Finish**.
-

Additional Information

See the [Related Topics](#), page 7-10.

Uninstalling RTMT

**Tip**

When you use RTMT, it saves user preferences and the module jar files (the cache) locally on the client machine. The system also saves the cache in the server database. When you uninstall RTMT, you choose whether to delete or save the cache.

On a Windows client, you uninstall RTMT through **Add/Remove Programs** under the Control Panel. (Start > Settings > Control Panel > Add/Remove Programs)

To uninstall RTMT on a Red Hat Linux with KDE and/or Gnome client, choose **Start > Accessories > Uninstall Real-time Monitoring tool** from the task bar.

Additional Information

See the [Related Topics](#), page 7-10.

Launching RTMT

Before You Begin

Before you can use RTMT, you must activate the Cisco AMC Service on each node in the cluster. From Cisco Unified Presence Serviceability, choose **Tools > Service Activation** and check the **Cisco AMC Service** check box. Click **Update**.

Procedure

-
- Step 1** After you install the plug-in, perform one of the following tasks:
- From your Windows desktop, double-click the **Cisco Unified CallManager Real-Time Monitoring Tool** icon.
 - Choose **Start > Programs > Cisco CallManager Serviceability > Real-Time Monitoring Tool > Real-Time Monitoring Tool**.

The Real-Time Monitoring Tool Login window displays.

- Step 2** In the Host IP Address field, enter either the IP address or host name of the first node.
- Step 3** In the User Name field, enter the CCMAAdministrator application user username; for example, the default username for this user equals **CCMAAdministrator**.
- Step 4** In the Password field, enter the CCMAAdministrator application user password that you established for the username.



Note If the authentication fails or if the server is unreachable, the tool prompts you to reenter the server and authentication details, or you can click the Cancel button to exit the application. After the authentication succeeds, RTMT launches the monitoring module from local cache or from a remote node, when the local cache does not contain a monitoring module that matches the backend Cisco Unified Presence version.

- Step 5** Enter the port that the application will use to listen to the server. The default setting equals 8443.
- Step 6** Check the **Secure Connection** check box.
- Step 7** Click **OK**.
- Step 8** Add the certificate store by clicking **Yes**.
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Additional Information

See the [Related Topics, page 7-10](#).

Navigating RTMT

The RTMT window comprises the following main components:

- Menu Bar, which includes the following menu options:
 - File—Allows you to save, restore, and delete existing RTMT profiles, monitor Java Heap Memory Usage, go to the Serviceability Report Archive window in Cisco Unified Serviceability, log off or exit RTMT.

- System—Allows you to monitor system summary, monitor server resources, work with performance counters, and work with alerts, collect traces, and view syslog messages.
- CUP—Allows you to view Cisco Unified CallManager summary information on the server.
- Edit—Allows you to configure categories (for table format view), set the polling rate for devices and performance monitoring counters, hide the quick launch channel, and edit the trace setting for RTMT.
- Window—Allows you to close a single RTMT window or all RTMT windows.
- Application—Allows you to browse the web pages for Administration and Serviceability.
- Help—Allows you to access RTMT documentation online help or to view the RTMT version.
- Quick Launch Channel—Pane on the left side of RTMT window with tabs that you can click on to display information on the server or information on the applications. The tab contain groups of icons that you can click on to monitor various objects.
- Monitor pane—Pane where monitoring results display.

Additional Information

See the [Related Topics, page 7-10](#).

Working with Configuration Profiles

This section provides information on the following topics:

- [Using the Default Configuration Profile, page 7-5](#)
- [Adding Configuration Profiles, page 7-5](#)
- [Restoring Profiles, page 7-6](#)
- [Deleting Configuration Profiles, page 7-6](#)

Using the Default Configuration Profile

When you initially load RTMT, the system includes a default profile that is called CM-Default. The first time that you use RTMT, it will use the CM-Default profile and display the summary page in the monitor pane.

See the “[Adding Configuration Profiles](#)” section on [page 7-5](#) for information on how to create your own configuration profile.

Additional Information

See the [Related Topics, page 7-10](#).

Adding Configuration Profiles

After you open multiple monitoring windows in RTMT (such as CPU & Memory, and performance counters), you can create your own configuration profiles, so you can restore these monitoring windows in a single step rather than opening each window again. You can switch between different profiles during the same RTMT session or use the configuration profile in subsequent RTMT sessions.

The following procedure describes how to create a profile.

Procedure

-
- Step 1** Choose **System > Profile**.
The Preferences dialog box displays.
- Step 2** Click **Save**.
The Save Current Configuration dialog box displays.
- Step 3** In the Configuration name field, enter a name for this particular configuration profile.
- Step 4** In the Configuration description field, enter a description of this particular configuration profile.



Note You can enter whatever you want for the configuration profile name and description.

The system creates the new configuration profile.

Additional Information

See the [Related Topics](#), page 7-10.

Restoring Profiles

Perform the following procedure to restore a profile that you configured:

Procedure

-
- Step 1** Choose **System > Profile**.
The Preferences dialog box displays.
- Step 2** Click the profile that you want to restore.
- Step 3** Click **Restore**.
All windows with precanned settings and/or performance monitoring counters for the restored configuration open.
-

Additional Information

See the [Related Topics](#), page 7-10.

Deleting Configuration Profiles

Perform the following procedure to delete a profile that you configured:

Procedure

-
- Step 1** Choose **System > Profile**.
The Preferences dialog box displays.

- Step 2** Click the profile that you want to delete.
- Step 3** Click **Delete**.
- Step 4** Click **Close**.
-

Additional Information

See the [Related Topics, page 7-10](#).

Working with Predefined Objects

The tool (RTMT) provides a set of default monitoring objects that monitor the health of the system. Default objects include performance counters or critical event status for services that are supported with Cisco Unified Presence.

This section provides information on the following topics:

- [Viewing/Monitoring a Predefined Object, page 7-7](#)
- [Configuring Polling Rate Performance Monitoring Counters, page 7-8](#)

Viewing/Monitoring a Predefined Object

The monitoring pane for a category, that is, a predefined object, displays the activities of predefined monitoring objects. The following procedure describes how to view information for a category.



Tip

To zoom in on the monitor of a predefined object, click and drag the left mouse button over the area of the chart in which you are interested. Release the left mouse button when you have the selected area. RTMT updates the monitored view. To zoom out and reset the monitor to the initial default view, press the “R” key.

Procedure

- Step 1** To view or monitor a category, click System or CUP in the Quick Launch Channel.
- When you select System in the quick launch channel, RTMT displays information on predefined system objects, such as virtual memory usage. When you select CUP in the quick launch channel, RTMT displays information on predefined Cisco Unified Presence Server objects in the monitoring pane, such as PE Active Subscription. RTMT monitors the predefined objects on all nodes in the cluster.
- Step 2** Click a category; for example, Summary or Server. If an icon displays for the category, click the icon to display the information that you want to monitor.



Note

Some options that are in in the current version of RTMT do not apply to Cisco Unified Presence.

- Step 3** Depending on which category you want to display, choose one of the following options from [Table 7-1](#):

Table 7-1 Monitoring Categories

Category	Data that Displays
CUP Summary	Displays information on PE Active Subscription, Proxy SIP Message Requests In, Proxy SIP Message Requests Out, Proxy SIP Register Requests In, Proxy SIP Subscribe Requests In, and JVM Memory. To display information on predefined system objects, choose CUP > CUP Summary.
System Summary	Displays information on Virtual Memory usage, CPU usage, Common Partition Usage, and the alert history log. To display information on predefined system objects, choose System > System Summary.
Server	• CPU and Memory—Displays information on CPU usage and Virtual memory usage for each server. To display information on CPU and Virtual memory usage, choose System > Server > CPU and Memory. To monitor CPU and memory usage for specific server, choose the server from the host drop-down list box. • Process—Displays information on the processes that are running on each server. To display information on processes running on the system, choose System > Server > Process. To monitor process usage for specific server, choose the server from the Host drop-down list box. • Disk Usage—Displays information on disk usage on each server. To display information on disk usage on the system, choose System > Server > Disk Usage. To monitor disk usage for specific server, choose the server from the host drop-down list box. • Critical Services—Displays information on the status of services that are running on the server. To display information on critical services, choose System > Server > Critical Services. To display system critical services, click the System tab. To display Cisco Unified Presense Server critical services, click on the CUP tab. To monitor Critical services for specific server, choose the server from the host drop-down list box.
Performance	Displays perfmon counters. To display perfmon counters, choose System > Performance > Performance. For more information on using perfmon counters, see the “Configuring and Using Performance Monitoring” section on page 9-1.

Additional Information

See the [Related Topics](#), page 7-10.

Configuring Polling Rate Performance Monitoring Counters

Cisco Unified Presence polls counters to gather status information. In the RTMT monitoring pane, you configure the polling intervals for the performance-monitoring counters.

**Note**

High-frequency polling rate may adversely affect Cisco Unified Presence performance. The minimum polling rate for monitoring a performance counter in chart view equals 5 seconds; the minimum rate for monitoring a performance counter in table view equals 1 second. The default value for both equals 10 seconds.

The default value for devices equals 10 minutes.

Perform the following procedure to update the polling rate:

Procedure

-
- Step 1** Display the performance-monitoring counter in the RTMT monitoring pane.
 - Step 2** Click the device and choose **Edit > Polling Rate**.
 - Step 3** In the Polling Interval pane, specify the time that you want to use.
 - Step 4** Click **OK**.
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Additional Information

See the [Related Topics, page 7-10](#).

Working with Categories

Categories allow you to monitor performance-monitoring counters. For example, the category, Cisco UP SIP Proxy, allows you to monitor performance-monitoring counters in graph format for the SIP proxy. If you want to monitor more counters, you can configure a new category and display the data in table format.

Adding a Category

To add a category, perform the following procedure:

Procedure

-
- Step 1** Display the Performance Monitoring tree hierarchy.
 - Step 2** Choose **Edit > New Category**.
 - Step 3** Enter the name of the category; click **OK**.
- The category tab displays at the bottom of the window.
-

Additional Information

- See the [Related Topics, page 7-10](#).

Renaming a Category

To rename a category, perform the following procedure:

Procedure

-
- Step 1** Perform one of the following tasks:
- Right-click the category tab that you want to rename and choose **Rename Category**.
 - Click the category tab that you want to rename and choose **Edit > Rename Category**.
- Step 2** Enter the new name and click **OK**.
- The renamed category displays at the bottom of the window.
-

Additional Information

- See the [Related Topics](#), page 7-10.

Deleting a Category

To delete a category, perform one of the following tasks:

- Right-click the category tab that you want to delete and choose **Remove Category**.
- Click the category tab that you want to delete and choose **Edit > Remove Category**.

Additional Information

See the [Related Topics](#), page 7-10.

Where to Find More Information

- [Alert Configuration in RTMT](#), page 8-1
- [Configuring and Using Performance Monitoring](#), page 9-1
- [Trace Collection and Log Central in RTMT](#), page 10-1

Additional Information

See the [Related Topics](#), page 7-10.

Related Topics

- [Adding a Category](#), page 7-9
- [Renaming a Category](#), page 7-10
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- [Configuring and Using Performance Monitoring](#), page 9-1
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