CHAPTER 2

Installing and Configuring Real Time Monitoring Tool

You can install Real Time Monitoring Tool (RTMT), which works for resolutions 800*600 and above, on a computer that is running Windows 98, Windows XP, Windows 2000, Windows Vista, or Linux with KDE and/or Gnome client.

Note RTMT requires at least 128 MB in memory to run on a Windows OS platform.

This chapter contains information on the following topics:

Installing RTMT

A single copy of RTMT that is installed on your computer lets you monitor one server or one cluster at a time. For example, you can monitor either of the following entities:

- A Cisco Unified Communications Manager product on one server.
- A server on a cluster to monitor the health of the cluster.

To monitor a product on a different server, you must first log off the server before you can log on to the other server.

Consider the following, before you install RTMT:

- On a client machine, you can install RTMT client downloaded from only one product type—Unified Communication Manager or Unified Presence or Unity Connection or Unified Contact Center Express. Installing RTMT client from different product types on the same client machine is not supported.

- The current RTMT download may not support earlier releases of Cisco Unified Communications Manager or Cisco Unity Connection. Some releases of Cisco Unified Communications Manager may require different versions of RTMT to be installed on your computer (one version per Cisco Unified Communications Manager release). Verify that the RTMT version that you install is compatible with the Cisco Unified Communications Manager that you are monitoring. If the RTMT version that you are using is not compatible with the server that you want to monitor, the system prompts you to download the compatible version.
- Your computer stores the user preferences, such as the IP address and RTMT frame size, from the RTMT client that last exits.

To install the tool, perform the following procedure:

Note While installing RTMT on a Windows Vista platform, you will see a User Account Control pop-up message that says, "An unidentified program wants to access your computer." Click **Allow** to continue working with RTMT.

Note For information on installing RTMT on a Cisco Intercompany Media Engine server, refer to the *Cisco Intercompany Media Engine Installation and Configuration Guide*.

Procedure

Step 1 Go to the Plug-ins window of the administration interface for your configuration:

Cisco Unified Communications Manager	From Cisco Unified Communications Manager Administration, choose **Application > Plugins**.
Cisco Unified Communications Manager Business Edition	From Cisco Unified Communications Manager Administration, choose **Application > Plugins**.
Unity Connection	From Cisco Unity Connection Administration, choose **System Settings > Plugins**.

Step 2 Click the **Find** button.

Step 3 To install the RTMT tool on a client that is running the Microsoft Windows operating system, click the **Download** link for the Cisco Unified CM Real-Time Monitoring Tool-Windows.

To install the RTMT tool on a client that is running the Linux operating system, click the **Download** link for the Cisco Unified CM Real-Time Monitoring Tool-Linux.

Step 4 Download the executable to the preferred location on your client.

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.

Step 6 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 7 After the RTMT welcome window displays, click **Next**.

Step 8 To accept the license agreement, click **I accept the terms of the license agreement**; then, click **Next**.

Step 9 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**.

Default installation paths are:

- Windows—C:\Program Files\Cisco\Unified-Communications-Manager Serviceability\JRtmt
- Linux—/opt/ Cisco/Unified-Communications-Manager_Serviceability/JRtmt

Step 10 To begin the installation, click **Next**.

The Setup Status window displays. Do not click Cancel.

Step 11 To complete the installation, click **Finish**.

Additional Information

See the "Related Topics" section on page 2-8.

Uninstalling RTMT

Tip When you use RTMT, it saves user preferences and the module jar files (the cache) locally on the client machine. 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. (Choose **Start > Settings > Control Panel >Add/Remove Programs**.)

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

Note When you uninstall RTMT on a Windows Vista machine, the following User Account Control pop-up message displays: "An unidentified program wants to access your computer." Click **Allow** to continue working with RTMT.

Additional Information

See the "Related Topics" section on page 2-8.

Launching RTMT

Caution *Unified CM clusters only:* You must configure a second server as the failover collector in Cisco Unified Communications Manager Administration, so RTMT can continue to retrieve information if the primary collector fails. Otherwise, RTMT cannot retrieve information if the primary collector has failed.

Note While using RTMT on a Windows Vista machine, you will a see a User Account Control pop-up message that says, "An unidentified program wants to access your computer." Click **Allow** to continue working with RTMT

Procedure

Step 1 After you install the plug-in, perform one of the following tasks:

- From your Windows desktop, double-click the **Real-Time Monitoring Tool** icon.
- Choose **Start > Programs > Cisco > Unified-Communications-Manager 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 server or (if applicable) first server in a cluster.

Step 3 In the User Name field, enter the Administrator username for the application.

Step 4 In the Password field, enter the Administrator 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 server, when the local cache does not contain a monitoring module that matches the backend version.

Step 5 Enter the port that the application will use to listen to the server. The default setting equals 8443.

Note The Trace and Log Central tool in RTMT uses the port number that you specify to communicate with all the nodes in a cluster. If your system uses port mapping and all Cisco CallManager nodes do not map to the same port number, then some RTMT tools can not connect to those nodes. The tools that will fail to connect include Trace and Log Central, Job Status, SyslogViewer, Perfmon Log Viewer, and FTP/SFTP Configuration.

Step 6 Check the **Secure Connection** check box.

Step 7 Click **OK**.

Step 8 When prompted, add the certificate store by clicking **Yes**.

Real-Time Monitoring Tool RTMT starts.

Creating an RTMT-Only User

Cisco Unified Communications Manager supports the creation of an RTMT user with restricted access to Cisco Unified Communications Manager Administration. You can create a user with a profile that is limited to Cisco Unified Communications Manager RTMT usage only. The user will have full access to RTMT but will not have permission to administer a Cisco Unified Communications Manager server.

You can create an RTMT user by adding a new application user in Cisco Unified Communications Manager Administration and adding the user to the predefined Standard RealtimeAndTraceCollection group.

For complete instructions on adding users and user groups, refer the *Cisco Unified Communications Manager Administration Guide* and *Cisco Unified Communications Manager System Guide*.

Additional Information

- For complete instructions on configuring an application user, see the "Application User Configuration" chapter in the *Cisco Unified Communications Manager Administration Guide.*
- For information on adding an application user to a user group, see the "User Group Configuration" chapter in the *Cisco Unified Communications Manager Administration Guide.*
- Also see the "Related Topics" section on page 2-8.

Navigating RTMT

The RTMT window comprises the following main components:

- Menu Bar, which includes some or all of the following menu options, depending on your configuration:
  - 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.

Note The RTMT menu option **File > Cisco Unified Reporting** lets you access Cisco Unified Reporting from RTMT. You can use the Cisco Unified Reporting application to snapshot Cisco Unified Communications Manager cluster data for inspection or troubleshooting. Refer to the *Cisco Unified Reporting Administration Guide* for more information.

  - System—Allows you to monitor system summary, monitor server resources, work with performance counters, work with alerts, collect traces, and view syslog messages.
  - Communications Manager—Allows you to view Cisco Unified Communications Manager summary information on the server; monitor call-processing information; and view and search for devices, monitor services, and CTI.
  - Unity Connection—Allows you to view the Port Monitor tool.
  - IME Service—Allows you monitor server and network activity of the Cisco Intercompany Media Engine 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—Depending on your configuration, allows you to browse the applicable web pages for Cisco Unified Communications Manager Administration, Cisco Unified Serviceability, Cisco Unity Connection Administration, and Cisco Unity Connection Serviceability.
  - Help—Allows you to access RTMT documentation online help or to view the RTMT version.
- Quick Launch Channel—You can click this pane with tabs on the left side of the RTMT window to display information about the server or information about the applications. The tab contains groups of icons that you can click to monitor various objects.
- Monitor pane—Pane where monitoring results display.

Additional Information

See the "Related Topics" section on page 2-8.

Working with Configuration Profiles

You can use RTMT to connect to a server or to any server in a Cisco Unified Communications Manager cluster (if applicable). After you log in to a server, RTMT launches the monitoring module from the local cache or from a remote server when the local cache does not contain a monitoring module that matches the backend version.

RTMT includes a default configuration that is called Default. The first time that you use RTMT, it uses the Default profile and displays the system summary page in the monitor pane.

Unified CM clusters only: Default profile also dynamically monitors all registered phones for all Cisco Unified Communications Manager servers in a cluster. If your cluster contains five configured Cisco Unified Communications Manager servers, CM-Default displays the registered phones for each server in the cluster, as well as calls in progress and active gateway ports and channels.

You can configure RTMT to display the information that interests you, such as different performance counters for different features, in the monitor pane of RTMT and save the framework of your configuration in a profile. You can then restore the profile at a later time during the same session or the next time that you log in to RTMT. By creating multiple profiles, so each profile displays unique information, you can quickly display different information by switching profiles.

Note If you are running the RTMT client and monitoring performance counters during a Cisco Unified Communications Manager upgrade, the performance counters will not update during and after the upgrade. To continue monitoring performance counters accurately after the Cisco Unified Communications Manager upgrade completes, you must either reload the RTMT profile or restart the RTMT client.

This section provides information on the following topics:

Using the Default Configuration Profile

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

Unified CM clusters only: Default monitors all registered phones dynamically in all the Cisco Unified Communications Manager servers in a cluster. If your cluster includes five Cisco Unified Communications Manager-configured servers, Default displays all registered phones for each server in the cluster, as well as calls in progress and active gateway ports and channels.

Adding Configuration Profiles

With RTMT, you can customize your monitoring window by monitoring different performance counters, then 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.

Note *Unified CM clusters only:* Profiles apply to all servers within a cluster, but the profile cannot be saved and applied to a different cluster.

The system creates the new configuration profile.

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.

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" section on page 2-8.

Where to Find More Information

Related Topics

- Installing RTMT, page 2-1
- Uninstalling RTMT, page 2-3
- Launching RTMT, page 2-3
- Navigating RTMT, page 2-5
- Working with Configuration Profiles, page 2-6