



# CHAPTER 12

## Working with Cisco Unified Communications Manager Monitoring

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This chapter contains information on the following topics:

- [Viewing/Monitoring a Predefined Cisco Unified Communications Manager Object](#), page 12-1
- [Working with Devices](#), page 12-3
- [Working with CTI Applications, Devices, and Lines](#), page 12-7
- [Related Topics](#), page 12-10

### Viewing/Monitoring a Predefined Cisco Unified Communications Manager Object

RTMT displays information on predefined Cisco Unified Communications Manager objects in the monitoring pane when you select Communications Manager in the quick launch channel. It monitors the predefined objects on all nodes in the cluster.

[Table 12-1](#) provides information on the predefined object that RTMT monitors.



**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.

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Table 12-1 Cisco Unified Communications Manager Categories

Category	Description
CallManager Summary	<p>Displays registered phones, calls in progress, and active gateway ports and channels.</p> <p>To display information on predefined Cisco Unified Communications Manager objects, choose <b>CallManager &gt; CallManager Summary</b>.</p>
Call Process	<ul style="list-style-type: none"> <li> <p><b>Call Activity</b>—Displays the call activity on Cisco Unified Communications Manager, including calls completed, calls attempted, and calls in progress. This includes all nodes in the cluster.</p> <p>To display information on call activities, choose <b>CallManager &gt; Call Processing &gt; Call Activity</b>.</p> </li> <li> <p><b>Gateway Activity</b>—Displays gateway activity on Cisco Unified Communications Manager, including active ports, ports in service, and calls completed. This includes all nodes in the cluster.</p> <p>To display information on gateway activities, choose <b>CallManager &gt; Call Processing &gt; Gateway Activity</b>. Select the type of gateway interface from the <b>Gateway Type</b> drop-down box.</p> </li> <li> <p><b>Trunk Activity</b>—Displays the trunk activity on Cisco Unified Communications Manager, including calls in progress and calls completed. This includes all nodes in the cluster.</p> <p>To display information on trunk activities, choose <b>CallManager &gt; Call Processing &gt; Trunk Activity</b>. Select the trunk type in the <b>Trunk Type</b> drop-down box.</p> </li> <li> <p><b>SDL Queue</b>—Displays SDL queue information, including number of signals in queue and number of processed signals.</p> <p>To display information on the SDL Queue, choose <b>CallManager &gt; Call Processing &gt; SDL Queue</b>. Select the type from the <b>SDL Queue Type</b> drop-down list box.</p> </li> <li> <p><b>SIP Activity</b>—Displays SIP activity on Cisco Unified Communications Manager, including summary requests, summary responses, summary of failure responses in, summary of failure responses out, retry requests out, and retry responses out. This includes all nodes in the cluster.</p> <p>To display information on SIP activities, choose <b>CallManager &gt; Call Processing &gt; SIP Activity</b>.</p> </li> </ul>
Device	<p>Device Summary displays information on the Cisco Unified Communications Manager server, including the number of registered phone devices, registered gateway devices, and registered media resource devices. This includes all nodes in the cluster.</p> <p>Device Search displays cluster name and device types in tree hierarchy and allows you to query for information on phones and devices.</p> <p>Phone Summary displays information on the Cisco Unified Communications Manager server, including the number of registered phones, registered SIP phones, registered SCCP phones, partially registered phones, and the number of failed registration attempts. This includes all nodes in the cluster.</p> <p>To display information on the number of registered phones, gateways, and media resource devices on Cisco Unified Communications Manager, choose <b>CallManager &gt; Device &gt; Device Summary</b>.</p> <p><b>Tip</b> To monitor other devices, you must perform additional configuration steps, as described in the <a href="#">“Finding Specific Devices to Monitor”</a> section on page 12-4.</p>

**Table 12-1** Cisco Unified Communications Manager Categories (continued)

Category	Description
Service	<ul style="list-style-type: none"> <li>• Cisco TFTP—Displays Cisco TFTP status on the Cisco Unified Communications Manager server, including total TFTP requests, total TFTP requests found, and total TFTP requests aborted. This includes all nodes in the cluster. To display information on the Cisco TFTP service, choose <b>CallManager &gt; Service &gt; Cisco TFTP</b>.</li> <li>• Heartbeat—Displays heartbeat information for the Cisco Unified Communications Manager, Cisco TFTP, and the Cisco Unified Communications Manager Attendant Console service. To display the heartbeat status of Cisco Unified Communications Manager servers, Cisco TFTP servers, and Cisco Unified Communications Manager Attendant Console servers, choose <b>CallManager &gt; Service &gt; Heartbeat</b>.</li> <li>• Database Summary—Displays summary information for the database on the Cisco Unified Communications Manager server, including change notification requests that are queued in the database, change notification requests that are queued in memory, total number of clients connected, and the number of device resets that are in the queue. To display information on the database, choose <b>CallManager &gt; Service &gt; Database Summary</b>.</li> </ul>
CTI Manager	<p>Displays information on the devices and applications that interfaces with the CTI Manager.</p> <p>To display information on CTI Applications, choose <b>CallManager &gt; CTI &gt; CTI Manager</b>.</p> <p>To monitor specific CTI types, you must perform additional configuration steps, as described in the following sections:</p> <ul style="list-style-type: none"> <li>• <a href="#">Finding CTI Applications to Monitor, page 12-7</a></li> <li>• <a href="#">Finding CTI Devices to Monitor, page 12-8</a></li> <li>• <a href="#">Finding CTI Lines to Monitor, page 12-9</a></li> </ul> <p>You cannot choose CTI Manager by using the menu bar. To monitor the number of open devices, lines, and CTI connections in a single window on Cisco Unified Communications Manager, see the “<a href="#">Working with Devices</a>” section on page 12-3.</p>

**Additional Information**

See the [Related Topics, page 12-10](#).

## Working with Devices

This section contains information on the following topics:

- [Finding Specific Devices to Monitor, page 12-4](#)
- [Viewing Phone Information, page 12-5](#)
- [Viewing Device Properties, page 12-6](#)
- [Configuring Polling Rate for Devices and Performance Monitoring Counters, page 12-6](#)

## Finding Specific Devices to Monitor

By performing the following procedure, you can monitor data for the following device types:

- Phones
- Gateway Devices
- H.323 Devices
- CTI Devices
- Voice Mail Devices
- Media Resources
- Hunt List
- SIP Trunk

### Procedure

**Step 1** Perform one of the following tasks:

- On the Quick Launch Channel
  - Click **CallManager**.
  - In the tree hierarchy, double-click **Device**.
  - Click the Device Search icon.
- Choose **CallManager > Device > Device Search > Open Device Search > <device type; for example, Phone, Gateway, Hunt List, and so on>**. A device selection window displays where you enter the search criteria. Go to [Step 4](#).

The Device Search window displays the cluster names and tree hierarchy that lists all device types that you can monitor.



**Tip** After you display the Device Search or CTI Search panes, you can right-click a device type and choose **CCMAdmin** to go to Cisco Unified Communications Manager Administration.

**Step 2** To find all devices in the cluster or to view a complete list of device models from which you can choose, right-click the cluster name and choose **Monitor**.

**Step 3** To monitor a specific device type, right-click or double-click the device type from the tree hierarchy.



**Tip** If you right-click the device type, you must choose **Monitor** for the device selection window to display.

**Step 4** In the Select device with status window, click the radio button that applies.

**Step 5** In the drop-down list box next to the radio button that you clicked, choose **Any CallManager** or a specific Cisco Unified Communications Manager server for which you want the device information to display.



**Tip** In the remaining steps, you can choose the **< Back, Next >**, **Finish**, or **Cancel** buttons.

- Step 6** Click the **Next >** button.
- Step 7** In the Search by device model pane, click the radio button that applies.



**Tip** If you chose **Device Model**, choose the device type for which you want the device information to display.

- Step 8** Click **Next**.
- Step 9** In the Search with name pane, click the radio button that applies and enter the appropriate information in the corresponding fields, if required.
- Step 10** Click **Next**.
- Step 11** In the Monitor following attributes pane, check one or all of the search attributes.
- Step 12** Click **Finish**.

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#### Additional Information

See the [Related Topics, page 12-10](#).

## Viewing Phone Information

You can view information about phones that display in the RTMT device monitoring pane. This section describes how to view phone information.

#### Procedure

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- Step 1** To display the phone in the RTMT device monitoring pane, see the [“Finding Specific Devices to Monitor” section on page 12-4](#).
- Step 2** Perform one of the following tasks:
- Right-click the phone for which you want information to display and choose **Open**.
  - Click the phone and choose **Device > Open**.
- Step 3** In the Select Device with Status pane, click the radio button that applies.
- Step 4** In the drop-down list box next to the radio button that you clicked, choose **Any CallManager** or a specific Cisco Unified Communications Manager server for which you want the device information to display.
- Step 5** In the Search By Device Model pane, choose the phone protocol that you want to display.
- Step 6** Click the **Any Model or Device Model** radio button. If you click the Device Model radio button, choose a particular phone model that you want to display.
- Step 7** Click **Next**.
- Step 8** In the Search With Name pane, click the radio button that applies and enter the appropriate information in the corresponding fields.
- Step 9** In the Monitor following attributes pane, check one or all of the search attributes.
- Step 10** Click **Finish**.

The Device Information window displays. For more information on the device, choose any field that displays in the left pane of the window.

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#### Additional Information

See the [Related Topics, page 12-10](#).

## Viewing Device Properties

You can view the properties of devices that display in the RTMT device monitoring pane. This section describes how to view device properties.

#### Procedure

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- Step 1** Display the device in the RTMT device monitoring pane. See the [“Finding Specific Devices to Monitor” section on page 12-4](#).
- Step 2** Perform one of the following tasks:
- Right-click the device for which you want property information and choose **Properties**.
  - Click the device for which you want property information and choose **Device > Properties**.
- Step 3** To display the device description information, click the **Description** tab.
- Step 4** To display other device information, click the **Other Info** tab.
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#### Additional Information

See the [Related Topics, page 12-10](#).

## Configuring Polling Rate for Devices and Performance Monitoring Counters

Cisco Unified Communications Manager polls counters, devices, and gateway ports to gather status information. In the RTMT monitoring pane, you configure the polling intervals for the performance monitoring counters and devices.



#### Note

High-frequency polling rate may adversely affect Cisco Unified Communications Manager 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

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- Step 1** Display the device or 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 12-10](#).

## Working with CTI Applications, Devices, and Lines

This section contains information on the following topics:

- [Viewing CTI Manager Information, page 12-7](#)
- [Finding CTI Applications to Monitor, page 12-7](#)
- [Finding CTI Devices to Monitor, page 12-8](#)
- [Viewing Application Information, page 12-10](#)
- [Viewing Application Information, page 12-10](#)

### Viewing CTI Manager Information

To display a chart of open devices, lines, and CTI connections for each Cisco Unified Communications Manager node in the cluster, click **CallManager** in the quick launch channel; double-click **CTI**, and then click the **CTI Manager** icon.

**Additional Information**

See the [Related Topics, page 12-10](#).

### Finding CTI Applications to Monitor

Perform the following procedure to find specific CTI applications to monitor:

**Procedure**

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- Step 1** Perform one of the following tasks:
- On the Quick Launch Channel
    - Click **CallManager**.
    - In the tree hierarchy, double-click **CTI**.
    - Click the CTI Search icon.
  - Choose **CallManager > CTI > CTI Search > CTI Applications**. The selection window displays where you can enter the search criteria.
- Step 2** From the CTI Manager drop-down list box, choose the CTI Manager that you want to monitor.
- Step 3** From the Applications Status drop-down list box, choose the application status.

- Step 4** Click **Next**.
- Step 5** In the Application Pattern pane, click the radio button that applies.
- Step 6** Enter the information in the field for the radio button that you clicked; for example, if you clicked the IP Subnet radio button, enter the IP address and the subnet mask in the field.
- Step 7** Click **Next**.
- Step 8** In the Monitor following attributes window, check one or all of the check boxes for the attributes that you want to monitor.
- Step 9** Click **Finish**.
- The applications monitoring pane displays the information that you chose.
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#### Additional Information

See the [Related Topics, page 12-10](#).

## Finding CTI Devices to Monitor

Perform the following procedure to find specific CTI devices to monitor.

#### Procedure

- Step 1** Perform one of the following tasks:
- On the Quick Launch Channel
    - Click CallManager.
    - In the tree hierarchy, double-click **CTI**.
    - Click the CTI Search icon.
  - Choose **CallManager > CTI > CTI Search > CTI Devices**. The selection window displays where you can enter the search criteria. Go to [Step 2](#).



**Tip** If you right-click the option, choose **Monitor**.

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- Step 2** From the CTI Manager drop-down list box, choose the CTI Manager that you want to monitor.
- Step 3** From the Devices Status drop-down list box, choose the device status.
- Step 4** In the Devices pane, click the radio button that applies.



**Tip** If you chose **Device Name**, enter the device name in the field.

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- Step 5** Click **Next**.
- Step 6** In the Application Pattern window, click the radio button that applies.
- Step 7** Enter the information in the field for the radio button that you clicked; for example, if you clicked IP Subnet, enter the IP address and subnet mask in the field.
- Step 8** Click **Next**.

- Step 9** In the Monitor following attributes window, check one or all check boxes for the attributes that you want to monitor.
- Step 10** Click **Finish**.
- The devices monitoring pane displays the information that you chose.
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**Additional Information**

See the [Related Topics, page 12-10](#).

## Finding CTI Lines to Monitor

Perform the following procedure to find specific CTI lines to monitor.

**Procedure**

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- Step 1** Perform one of the following tasks:
- On the Quick Launch Channel
    - Click CallManager.
    - In the tree hierarchy, double-click **CTI**.
    - Click the CTI Search icon.
  - Choose **CallManager > CTI > CTI Search > CTI Lines**. The selection window displays where you can enter the search criteria. Go to [Step 2](#).



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**Tip** If you right-click the option, choose **Monitor**.

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- Step 2** From the CTI Manager & Status drop-down list box, choose the CTI manager that you want to monitor.
- Step 3** From the Lines Status drop-down list box, choose the status.
- Step 4** In the Devices pane, click the radio button that applies.



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**Tip** If you chose **Device Name**, enter the device name in the field.

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- Step 5** In the Lines pane, click the radio button that applies:



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**Note** If you chose **Directory Number**, enter the directory number in the field.

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- Step 6** Click **Next**.
- Step 7** In the Application Pattern pane, click the radio buttons apply:
- Step 8** Enter the information in the field for the radio button that you clicked; for example, if you clicked IP Subnet, enter the IP address and subnet mask in the field.
- Step 9** Click **Next**.

- Step 10** In the Monitor following attributes window, check one or all check boxes for the attributes that you want to monitor.
- Step 11** Click **Finish**.
- The lines monitoring pane displays the information that you chose.
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**Additional Information**

See the [Related Topics, page 12-10](#).

## Viewing Application Information

You can view the application information for selected devices such as the Cisco Unified IP Phone, CTI port, and CTI route point. This section describes how to view application information.

**Procedure**

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- Step 1** Display the devices in the RTMT monitoring pane, as described in the [“Finding CTI Devices to Monitor” section on page 12-8](#).
- Step 2** Perform one of the following tasks:
- Right-click the device for which you want application information; for example, CTI; then, choose **App Info**.
  - Click the device for which you want application information and choose **Device > App Info**.
- The Application Information window displays the CTI manager server name, application ID, user ID, application IP address, application status, app time stamp, device time stamp, device name, and CTI device open status.
- Step 3** To view updated information, click **Refresh**. To close the window, click **OK**.
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**Additional Information**

See the [Related Topics, page 12-10](#).

## Related Topics

- [Viewing/Monitoring a Predefined Cisco Unified Communications Manager Object, page 12-1](#)
- [Working with Devices, page 12-3](#)
- [Working with CTI Applications, Devices, and Lines, page 12-7](#)
- [Monitoring Cisco Unified Communications Manager, page 11-1](#)
- [Alerts, page 6-1](#)
- [Working with Alerts, page 7-1](#)
- [Understanding Performance Monitoring, page 4-1](#)

- [Configuring and Displaying Performance Counters, page 5-1](#)
- [Configuring Trace and Log Central in RTMT, page 9-1](#)

