



# Monitoring System Performance in RTMT

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## About Performance Monitoring in RTMT

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## Performance Monitoring

The Real-Time Monitoring Tool integrates with Cisco Unified Presence Administration and Serviceability software. RTMT displays performance information for all Cisco Unified Presence components. RTMT provides alert notification for troubleshooting performance. It also periodically polls performance counter to display data for that counter. You can view perfmon counters in a chart or table format.

Perfmon monitoring allows you to perform the following tasks:

- Monitor performance counters including all the Cisco Unified Presence nodes in a cluster and database servers.
- Continuously monitor a set of preconfigured objects and receive notification in the form of an email message.
- Associate counter threshold settings to alert notification. An email or popup message provides notification to the administrator.
- Save and restore settings, such as counters being monitored, threshold settings, and alert notifications, for customized troubleshooting tasks.
- Display up to six perfmon counters in one chart for performance comparisons.

The Real-Time Monitoring Tool displays performance counters in chart or table format. Chart format looks like a miniature window of information. Up to six charts display in the RTMT performance monitoring pane for each category tab that you create. You can display a particular counter by double selecting the counter in the perfmon monitoring pane. Because chart view represents the default, you configure the performance counters to display in table format when you create a category.

You can remove a counter chart (table entry) with the Remove Chart/TableEntry menu item in the **System > Performance** menu.

**Tip**

The polling rate in each prepopulated monitoring window remains fixed, and the default value specifies 30 seconds. If the collecting rate for the AMC (Alert Manager and Collector) service parameter changes, the polling rate in the precanned window also updates. In addition, the local time of the RTMT client application and not the backend server time, provides the basis for the time stamp in each chart.

**Related Topics**

[Viewing a Counter Description, page 4-7](#)

## System Summary Status

The Real-Time Monitoring Tool provides a set of default monitoring objects that assist you in monitoring the health of the system. Default objects include performance counters or critical event status for the system and other supported services. The system summary in RTMT allows you to monitor important common information in a single monitoring pane. In system summary, you can view information on the following predefined objects:

- Virtual Memory usage
- CPU usage
- Common Partition Usage
- Alert History Log

## Server Status

The Servers category monitors CPU and memory usage, process, disk space usage, and critical services for the different applications on the server.

The CPU and Memory monitor provide information about the CPU usage and Virtual memory usage on each server. For each CPU on a server, the information includes the percentage of time that each processor spends executing processes in different modes and operations (User, Nice, System, Idle, IRQ, SoftIRQ, and IOWait). The percentage of CPU equals the total time that is spent executing in all the different modes and operations excluding the Idle time. For memory, the information includes the Total, Used, Free, Shared, Buffers, Cached, Total Swap, Used Swap, and Free Swap memory in Kbytes, and the percentage of Virtual Memory in Use.

The Process monitor provides information about the processes that are running on the system. RTMT displays the following information for each process—process ID (PID), CPU percentage, Status, Shared Memory (KB), Nice (level), VmRSS (KB), VmSize (KB), VmData (KB), Thread Count, Page Fault Count, and Data Stack Size (KB).

The Disk Usage monitoring category charts the percentage of disk usage for the common and swap partitions. It also displays the percentage of disk usage for each partition (Active, Boot, Common, Inactive, Swap, SharedMemory) in each host.

The Critical Services monitoring category provides the following:

- The name of the critical service
- The status of the critical service (whether the service is up, down, active, stopped by the administrator, starting, stopping, or in an unknown state),
- The elapsed time during which the services are up and running on the system

For a specific description of each state, see [Table 2-1](#).

**Table 2-1 Status of Critical Services**

Status of Critical Service	Description
starting	The service currently exists in start mode, as indicated in the Critical Services pane and in Control Center in Cisco Unified Serviceability.
up	The service currently runs, as indicated in the Critical Services pane and in Control Center in Cisco Unified Serviceability.
stopping	The service currently remains stopped, as indicated in the Critical Services pane and in Control Center in Cisco Unified Serviceability.
down	The service stopped running unexpectedly; that is, you did not perform a task that stopped the service. The Critical Services pane indicates that the service is down.  The CriticalServiceDown alert is generated when the service status equals down.
stopped by Admin	You performed a task that intentionally stopped the service; for example, the service stopped because you backed up or restored Cisco Unified Presence, performed an upgrade, stopped the service in Cisco Unified Serviceability or the Command Line Interface (CLI), and so on.  The Critical Services pane indicates the status.
not activated	The service does not exist in a currently activated status, as indicated in the Critical Services pane and in Service Activation in Cisco Unified Serviceability.
Unknown Status	The system cannot determine the state of the service, as indicated in the Critical Services pane.

## Viewing and Monitoring System Summary and Server Status

The Real-Time Monitoring Tool displays information on predefined system objects in the monitoring pane when you select System in the Quick Launch Channel, or **System > System Summary**. To view server-related information in the monitoring pane, select Server in the Quick Launch Channel, or **System**

> **Server** > <**predefined object of choice**>. To view information about the overall performance of Cisco Unified Presence and Cisco Jabber, select the CUP in the Quick Launch Channel or **CUP > CUP Summary/Cisco Jabber Summary**.

### Before You Begin

Review the information about performance monitoring in RTMT.

[Table 2-2](#) provides information on the predefined object that RTMT monitors.

**Table 2-2**      **System Categories**

Category	Description
System Summary	<p>Displays information on Virtual Memory usage, CPU usage, Common Partition Usage, and the alert history log.</p> <p>To display information on predefined system objects, select <b>System &gt; System Summary</b>.</p>
Server	<ul style="list-style-type: none"> <li> <p><b>CPU and Memory</b>—Displays information on CPU usage and Virtual memory usage for the server.</p> <p>To display information on CPU and Virtual memory usage, select <b>System &gt; Server &gt; CPU and Memory</b>. To monitor CPU and memory usage for specific server, select the server from the Host list box.</p> </li> <li> <p><b>Process</b>—Displays information on the processes that are running on the server.</p> <p>To display information on processes running on the system, select <b>System &gt; Server &gt; Process</b>. To monitor process usage for specific server, select the server from the Host list box.</p> </li> <li> <p><b>Disk Usage</b>—Displays information on disk usage on the server.</p> <p>To display information on disk usage on the system, select <b>System &gt; Server &gt; Disk Usage</b>. To monitor disk usage for specific server, select the server from the Host list box.</p> </li> <li> <p><b>Critical Services</b>—Displays the name of the critical service, the status (whether the service is up, down, active, stopped by the administrator, starting, stopping, or in an unknown state), and the elapsed time during which the services have existed in a particular state for a particular Cisco Unified Communications node.</p> <p>To display information on critical services, select <b>System &gt; Server &gt; Critical Services</b>. To display system critical services, select on the system tab. To monitor critical services for specific server, select the server from the Host list box and select the critical services tab in which you are interested.</p> <p>If the critical service status indicates that the administrator stopped the service, the administrator performed a task that intentionally stopped the service; for example, the service stopped because the administrator backed up or restored Cisco Unified Communications Manager, performed an upgrade, stopped the service in Cisco Unified CallManager Serviceability or the Command Line Interface (CLI), and so on.</p> <p>If the critical service status displays as unknown state, the system cannot determine the state of the service</p> <p>For more information on the critical service states, refer to <a href="#">Server Status, page 2-2</a>.</p> </li> </ul>

**Troubleshooting Tips**

To zoom in on the monitor of a predefined object, select 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.

**Related Topics**

- [Viewing and Monitoring Cisco Unified Presence and Cisco Jabber Summaries, page 2-5](#)
- [About Performance Monitoring in RTMT, page 2-1](#)

## Viewing and Monitoring Cisco Unified Presence and Cisco Jabber Summaries

The Real-Time Monitoring Tool provides a set of important performance counters that assist you in monitoring the overall performance of Cisco Unified Presence and Cisco Jabber. The Cisco Unified Presence and Cisco Jabber summaries in RTMT allow you to monitor important common information in a single monitoring pane.

To display information on important performance counters that reflect the overall performance of Cisco Unified Presence and Cisco Jabber, select **CUP > CUP Summary** or **CUP > Cisco Jabber Summary**.

Under CUP Summary, review the following information:

**For Cisco Unified Presence Release 8.6(2) and earlier**

- Presence Engine Active Subscriptions
- Proxy SIP Message Requests In
- IPPM Message Requests Out
- Proxy SIP Requests In
- Proxy SIP Subscribe Requests In
- JVM Virtual Memory

**For Cisco Unified Presence Release 8.6(3) and later**

- PE Active JSM Sessions
- XCP JSM IM Sessions
- Total IMs Handled
- Current XMPP Clients Connected
- Total Ad hoc Chat Rooms
- Total Persistent Chat Rooms

Under Cisco Jabber Summary, review the following information:

- Client Soap interface
- SIP Client Registered Users
- SIP Client Registered User Failures

- SIP Client IM Messages