



## Monitoring Service Quality Alerts



**Note**

Use the Service Quality Alerts display to view alerts that Operations Manager generates based on SNMP traps sent by IP Communications Service Monitor (Service Monitor). To use the Service Quality alerts display, you must have a licensed copy of Service Monitor configured to send traps to Operations Manager. You must also add Service Monitor to Operations Manager; see [Adding and Deleting Service Monitors](#), page 19-7.

These topics describe monitoring service quality alerts:

- [How to Use the Service Quality Alerts Display](#), page 4-1
- [Viewing Events Associated with a Service Quality Alert](#), page 4-6

### How to Use the Service Quality Alerts Display

The Service Quality Alerts display provides real-time information about IP phone service quality. Service Quality Alerts displays are designed so that you can set them up and leave them running, providing an ongoing monitoring tool that signals you when something needs attention.

When Operations Manager receives traps from Service Monitor, Operations Manager generates an event or events that are rolled up into an alert. The alert is shown on your Service Quality Alerts display. From a Service Quality Alerts display you can launch other windows to obtain more information, including:

- Event details—Displays details for the events that caused the alert to be generated.
- Service quality history—Reports service quality events generated during the previous 24 hours.



**Note**

All Service Quality Event History reports generated from within the Service Quality Alerts display provide information from the past 24 hours. To generate a Service Quality History report on time spans beyond the last 24 hours, use Service Quality History from the Reports tab by selecting **Reports > Service Quality History**. For more information, see [Getting All Stored Information on a Service Quality Event](#), page 11-15.

### Starting the Service Quality Alerts Display

To start the Service Quality Alerts display, select **Monitoring Dashboards > Service Quality Alerts**. Service Quality Alerts appears in a new window.



Tip

After you become familiar with the Service Quality Alerts display, you can edit the information it provides as described in the [Customizing the Service Quality Alerts Display, page 4-4](#).

## Understanding the Layout of the Service Quality Alerts Display

These topics provide details about the information in the Service Quality Alerts display.

### View Pane

The view pane lists the currently available *views*, or user-defined device groups, available for Service Quality Alerts. By default, two views—All Alerts and Suspended Devices—are always shown, and cannot be deleted from your Service Quality Alerts display.

The *current view* is highlighted in the view pane. Alerts for the devices in the current view are shown in the tabular display pane. To select another view, simply click the view name in the view pane.

Icons next to the views indicate the severity of the alerts received from devices in those views, signaling you that the devices may need attention.

For the current view, All Alerts, severity icons also appear next to the alerts in the tabular display to help you quickly locate a specific alert.

The view pane is updated every two minutes. You can have up to 18 views in the view pane in a single Service Quality Alerts display.

### Launch Information and View Status Bar Area

The launch information area shows the time on the server when the Service Quality Alerts display was started. The view status bar lists the selected view and the number of alerts in that view.

### Tabular Display Pane



The tabular display pane is the core of the Service Quality Alerts display. It contains a list of all alerts that are occurring on the devices in your current view. This pane is refreshed every 60 seconds. For an explanation for all of the items in the tabular display, see [Using the Service Quality Alerts Display, page 4-3](#).

Icons alert you to what needs attention; for example, the severity icons indicate which views and alerts require attention. The tabular display pane is scrollable and can store up to 1,000 records.




### Window Tools Area

The top-right corner of the Service Quality Alerts display contains available tools buttons. All buttons are described in [Table 4-1](#).

**Table 4-1** Service Quality Alerts Display—Window Tools Buttons

Icon	Meaning	Described in...
	Exports the current display to a PDF file.	—
	Opens the Service Quality Alerts Filter dialog box, for refining the data in the Service Quality Alerts display.	<a href="#">Filtering Service Quality Alerts, page 4-4</a>

**Table 4-1** Service Quality Alerts Display—Window Tools Buttons (continued)

Icon	Meaning	Described in...
	Opens a Service Quality Event History report in a separate window.	<a href="#">Understanding the Service Quality Event History Report, page 11-18</a>
	Opens a new window with the display reformatted so that it is suitable for printing from your browser.	—
	Opens online help.	—

## Using the Service Quality Alerts Display

The Service Quality Alerts display shows the alerts that are occurring in your current view. Alerts are grouped by their severity: critical, warning, or informational. Within these severity groupings, alerts with the latest change are listed first.

When an alert is generated, it remains in the Service Quality Alerts display until it is cleared. Alerts are cleared based upon the frequency you set; see [Configuring Service Quality Event Settings, page 19-9](#). While the alert is in the display, if any of its events recur, the alert is updated. If an expired alert recurs, a new alert with a new ID is shown. This display is refreshed every 60 seconds.



Tip

You can generate a 24-hour Service Quality Event History report on all events that occurred on devices in your view by clicking the Service Quality Event History button in the upper right-hand corner of the window.

**Table 4-2** Service Quality Alerts Display—Contents




Heading	Description	
#	Number of alerts—Alerts numbered from 1	
!	Severity of alert	
		Critical
		Warning
		Informational Unidentified Trap alert
	(no icon)	Informational (for all other alerts)
ID	Alert identifier number. Click this link to open a Service Quality Alert Details display.	

Table 4-2 Service Quality Alerts Display—Contents (continued)

Heading	Description
Destination Type	Call destination: one of the following: <ul style="list-style-type: none"> <li>IP Phone—Click this link to open an IP Phone report. See <a href="#">Understanding IP Phone Reports, page 12-8</a>.</li> <li>Endpoint.</li> </ul>
Extension	Extension number if the destination type is IP phone.
Destination	IP address if the destination type is endpoint.
Latest Event Time	Date and time alert last occurred or was changed. Alerts are grouped by severity, and within severities, alerts with the latest change are listed first.

## Customizing the Service Quality Alerts Display

After adding your devices to a view, you can customize your Service Quality Alerts display by selecting specific *views* and using *filters*:

- Views control the *device groups* that appear on the Service Quality Alerts display. When you add, remove, and update Service Quality Alerts views, you affect all users.
- Filters control the *specific device types* you monitor, along with alert *severities* and their *status*. When you filter Service Quality Alerts, you affect your current session only.

## Selecting Views for Service Quality Alerts

When you select **Monitoring Dashboards > Service Quality Alerts** to open the Service Quality Alerts display, all available views are listed in the view pane on the left side of the display. If the views shown do not meet your needs, you can create a new view.

To create a new view, first create a user-defined group; see [Creating and Editing Groups, page 16-10](#). Then, use the Views page (see [Managing Views, page 6-1](#)) to select the new user-defined group and apply it to Service Quality Alerts. The user-defined group will then be displayed in the view pane. To remove a view from the view pane, deselect it from Service Quality Alerts on the Views page and apply your change.

The view pane is updated every two minutes. You can have up to 18 views in the view pane in a single Service Quality Alerts display. For information on how to manage your views, see [Managing Views, page 6-1](#).

## Filtering Service Quality Alerts

Filters allow you to manipulate the Service Quality Alerts display to show alerts based on their severity, status, and originating device.

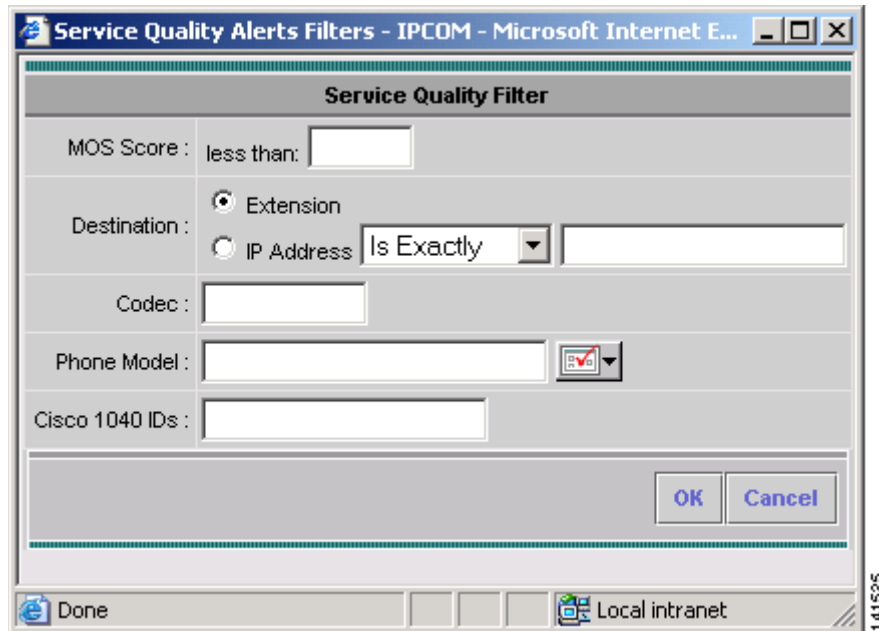


### Note

After you apply a service quality alert filter, the filter is applied to all of your views until you change the filter or end your session. Other clients that access Operations Manager are not affected. When you end your session, your filter is lost. A filter does not affect severity icons in the view pane.

- Step 1** Select **Monitoring Dashboards > Service Quality Alerts**. The Service Quality Alerts display opens.
- Step 2** Click the filtering button at the top-right of the Service Quality Alerts display. [Table 4-2](#) shows the Service Quality Filter dialog box.

**Figure 4-1** Service Quality Filter Dialog Box



- Step 3** Enter data for only *one* of the following filters:
- **MOS Score**—Enter a positive 2-digit number with one decimal place. The maximum MOS score is 5.0.
  - **Destination**—Select one of the following radio buttons and enter the appropriate information:
    - **Extension**—Phone extension being called. Select an operator from the list and enter a number.
    - **IP Address**— For a phone, switch, voice gateway, or Cisco 1040. Select an operator from the list and enter a number; depending on the operator, the number that you enter can be a portion of the IP address or the full IP address.
  - **Codec**—Enter any of these in a comma-separated list: G.723, G.728, G.729, or G.729a.
  - **Phone Model**—Click the button to select phone models from a list.
  - **Cisco 1040 IDs**—Enter a comma-separated list of Cisco 1040 IDs. The format for an ID is *A-*nnn** where A is a letter and nnn is a 3-digit number.
- Step 4** Click **OK**.

## Viewing Events Associated with a Service Quality Alert

Use the Service Quality Alert Details display to see the events that are associated with an alert.

### Starting the Service Quality Alert Details Display

The Service Quality Alert Details display provides information about all of the events that were rolled up into a specific alert.

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- Step 1** Select **Monitoring Dashboard > Service Quality Alerts**. The Service Quality Alerts display opens.
- Step 2** Locate the alert you want to investigate and click the alert ID. The Service Quality Alert Details display opens.
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### Event Processing for Service Quality Events During High CPU Utilization

During periods of high CPU utilization, Operations Manager limits the number of Service Quality events that it processes. You will know when this is occurring by the message that appears in the view status bar of the Service Quality Alerts display. The message states that not every alert is being displayed. The excess Service Quality Alerts display Events are written to the NMSROOT\logs\itemlogs\SQTraps\Traps.log file, and these events:

- Do not appear on the Service Quality Alerts display.
- Are not stored in the Alerts and Events history database—They do not appear in Service Quality Alerts History.



**Note**

NMSROOT is the directory where Operations Manager is installed on your system. If you selected the default directory during installation, it is C:\Program Files\CSCOpX.

Operations Manager checks CPU utilization on its server every 60 seconds. When CPU utilization reaches and remains at 50% or greater for two minutes, Operations Manager limits the number of Service Quality events processed until utilization drops below 50%. [Table 4-3](#) lists the number of events that Operations Manager processes.

**Table 4-3** Service Quality Event Processing Rates During High CPU Utilization




Operations Manager CPU Utilization	Number of Service Quality Events Processed Per Minute
50%	40
60%	20

## Using the Service Quality Alert Details Display

The Service Quality Alert Details display shows all of the events associated with a specific alert. The events are displayed in a table and events with the latest change are listed first. Events remain in the Service Quality Alert Details display until the parent alert expires. The Service Quality Alert Details table is refreshed every 60 seconds.

The alert name, destination, destination type, and description of the alert are displayed above the Service Quality Alert Details table. [Table 4-4](#) describes the columns in the Service Quality Alert Details table. [Table 4-5](#) describes the command buttons on the Service Quality Alert Details display.

**Table 4-4** Service Quality Alert Details Display—Contents

Column	Description
#	Number of events—Events numbered from 1
!	Severity of alert
	 Critical
	 Warning
	 Informational Unidentified Trap alert
(no icon)	Informational (for all other events)
MOS	.05 through 5.0
Cause	One of the following: <ul style="list-style-type: none"> <li>Jitter</li> <li>Latency</li> </ul>
Time Stamp	Date and time at which the event occurred.
Codec	One of the following: <ul style="list-style-type: none"> <li>G.723</li> <li>G.728</li> <li>G.729</li> <li>G.729a</li> </ul>
Source Type	One of the following: <ul style="list-style-type: none"> <li>Endpoint</li> <li>IP Phone</li> </ul>
Source	IP address or DNS name or phone extension.
Event ID	Event identifier number. Click this link to open the event properties page (see <a href="#">Viewing Event Properties, page 4-8</a> ).
Tools	Links to tools that provide more information on the event. <p><b>Note</b> Selecting Service Quality Event History opens a 24-hour Service Quality Event History report on the component.</p>

**Table 4-5 Service Quality Alert Details Display—Command Buttons**

Button	Action
Refresh	Refreshes the data in the display.
Acknowledge	Changes the event status to Acknowledged. See <a href="#">Acknowledging a Service Quality Alert, page 4-8</a> .
Clear	Clears the service quality alert. See <a href="#">Clearing a Service Quality Alert, page 4-8</a> .
Notify	Sends e-mail notification of the alert. See <a href="#">Sending E-Mail in Response to a Service Quality Alert, page 4-9</a> .
Close	Closes the Service Quality Alert Details display.

## Viewing Event Properties

The event properties page provides additional detail about the event, such as the values of MIB attributes at the time of the event.

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- Step 1** Select **Monitoring Dashboard > Service Quality Alerts**. The Service Quality Alerts display opens.
  - Step 2** Locate the alert you want to investigate and click the alert ID. The Service Quality Alert Details display appears.
  - Step 3** Locate the event you want to investigate, and click the event ID. The event properties page appears.
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## Acknowledging a Service Quality Alert

Acknowledging an active alert signals other users that you are aware of the alert. When you click the **Acknowledge** button in the Service Quality Alert Details display, this status change is populated to all Service Quality Alerts displays.

If an event on the alert recurs, the status reverts to Active.

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- Step 1** From the Service Quality Alert Details display, click **Acknowledge**. A confirmation window opens.
  - Step 2** Click **OK**.
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## Clearing a Service Quality Alert

You can clear a service quality alert by clicking the **Clear** button on the Service Quality Alert Details display.

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- Step 1** From the Service Quality Alert Details display, click **Clear**. A confirmation window opens.
  - Step 2** Click **OK**.
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## Sending E-Mail in Response to a Service Quality Alert

When you click the **Notify** button on the Service Quality Alert Details display, Operations Manager opens a dialog box that you can complete to manually send an e-mail notification to one or more recipients. The e-mail notification will contain only the text you add; it will not append any alert or event information. (If you want to send *automatic* e-mail notifications when alerts or events occur on certain devices, use Notifications to set up an e-mail notification subscription. See [Understanding Notifications, page 14-1.](#))

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- Step 1** From the Service Quality Alert Details display, click **Notify**. The E-mail Notification Recipient(s) dialog box opens.
- Step 2** In the E-mail Notification Recipient(s) dialog box:
- a. Enter a fully qualified DNS name or IP address for an SMTP server.
  - b. Enter your e-mail address in the Sender Address field.
  - c. Enter a comma-separated list of e-mail addresses in the Recipient Address(es) field.
  - d. Enter a subject heading in the Subject field.
  - e. (Optional) Enter a message in the Message field.
  - f. Click **Send**.
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