



CHAPTER 9

Using Alarms and Events

The following topics provide information about using the Cisco Prime Performance Manager alarms and events:

- [Displaying Active Alarms and Event History, page 9-1](#)
- [Active Alarms and Event History Toolbar, page 9-4](#)
- [Filtering Alarms and Events, page 9-7](#)
- [Viewing Alarms and Events Properties, page 9-9](#)
- [Attaching Notes to Alarms or Events, page 9-12](#)

Displaying Active Alarms and Event History

Active Alarms and Event History allows to view a network summary of active alarms and historical events. The contents of the Active Alarms window and the Event History window are very similar in appearance. However, the Active Alarms table shows fewer entries than the Event History table because multiple events are associated with a single alarm.



Note

The appearance and the contents displayed in the Events and Alarms tab are not the same while viewing reports at the device level. For more information see [Working With Reports and Dashboards, page 7-1](#)

To see a summary of all active alarms, in the Prime Performance Manager web interface, in the navigation tree click **Active Alarms**. Active alarms are displayed in the right pane and includes basic information for each active alarm. Prime Performance Manager updates the alarm information at least once a minute. For information about the Active Alarms display, see [Active Alarms and Event History Toolbar, page 9-4](#)

To see a summary of recent events, in the navigation tree click **Event History**. Events are displayed in the right pane. For more information about the Event History display, see [Active Alarms and Event History Toolbar, page 9-4](#)

If you select a device in the navigation tree and click the Alarms or Events tab, the Prime Performance Manager displays alarms or events information for only that device.

To select multiple alarms or events in the table, check the check box for the alarm or event in the far left column. To clear the selection, from the toolbar, click **Clear Selection**. You can use the Shift key to select multiple rows. To clear the selection, left-click anywhere in the table. For more information about sorting, displaying, or hiding columns, see [Navigating Table Columns, page 3-8](#).

[Table 9-1](#) shows the Active Alarms, Alarms tab, Event History, and Events tabs details.

Table 9-1 **Active Alarms and Event History**

| Column | Description |
|--------------|---|
| Internal ID | Internal ID of the alarm or event. The internal ID is a unique ID that Prime Performance Manager assigns for its own internal use. This ID can also be useful when the Cisco Technical Assistance Center (TAC) needs to debug problems. |
| Ack | Indicates whether the alarm or event is acknowledged. To acknowledge an unacknowledged alarm or event, click the Acknowledge toolbar tool. To make a previously acknowledged event unacknowledged, click the Unacknowledged toolbar tool. This column is displayed by default. |
| Name | The name of the alarm or event. This column is displayed by default under Active Alarms and Alarms tab. |
| Alarm Nature | The alarm nature. The alarm nature is determined when the alarm is created. The valid values are: <ul style="list-style-type: none"> • ADAC—Automatically detected and automatically cleared • ADMC—Automatically detected and manually cleared • Undefined—Undefined This column is under Active Alarms and Alarms tab. |
| Alarm Type | The alarm type. Valid values are: <ul style="list-style-type: none"> • Communications • Processing Error • Environmental • QOS • Equipment • Undefined |
| Element Name | The network element name associated with the event. |

Table 9-1 **Active Alarms and Event History (continued)**








| Column | Description |
|-------------------|--|
| Category | <p>The event category. Default values include:</p> <ul style="list-style-type: none"> • Create—Creation event, such as the creation of a seed file. • Delete—Deletion event, such as the deletion of an object or file. • Discover—Discovery event, such as Discovery beginning. • Edit—Edit event. A user has edited an object. • Ignore—Ignore event. A user has ignored a link or linkset. • Login—Login event. A user has logged into Prime Performance Manager. • LoginDisable—LoginDisable event. The Prime Performance Manager has disabled a user's User-Based Access authentication because of too many failed attempts to log into Prime Performance Manager. • LoginFail—LoginFail event. An attempt by a user to log into Prime Performance Manager has failed. • Logout—Logout event. A user has logged out of Prime Performance Manager. • OverWrite—OverWrite event. An existing file, such as a seed file or route file, has been overwritten. • Poll—Poll event, such as an SNMP poll. • Purge—Purge event. A user has requested Discovery with Delete Existing Data selected, and Prime Performance Manager has deleted the existing Prime Performance Manager database. • Status—Status change message generated. • Request—A request is created for every user-initiated action that generates a request from the gateway to a unit. |
| Severity | <p>The alarm or event severity. Severities include:</p> <ul style="list-style-type: none">  Critical  Major  Minor  Warning  Normal  Indeterminate  Informational <p>Note You cannot change the severity of an event.</p> |
| Original Severity | The original severity of the event. |
| Count | The number of events in the sequence of events for an alarm. |
| Note | Indicates whether a note is associated with the event. |
| Create Time CST | Central Standard Time (CST) at which this event was received. This column is displayed by default in the Event History window and the Events tab. |

Table 9-1 **Active Alarms and Event History (continued)**

| Column | Description |
|--------------------------------|---|
| Create Time (Device Time Zone) | Device time zone at which the event was received. |
| Change Time CST | Central Standard Time (CST) at which this event was last updated. |
| Change Time (Device Time Zone) | Device time zone at which the event was updated. |
| Ack By | <ul style="list-style-type: none"> • If you did not implement the Prime Performance Manager User-Based Access, the name of the device that last acknowledged the event. • If you implemented the Prime Performance Manager User-Based Access, the name of the user who last acknowledged the event. • If no one acknowledged the event, this field is blank. |
| Ack Time CST | Time at which the event was acknowledged. |
| Ack Time (Device Time Zone) | Device time zone at which the event was acknowledged. |
| Clear By | User who cleared the event. This column is in Active Alarms and Alarms tab and is hidden by default. |
| Clear Time | Time at which the event was cleared. This column is in Active Alarms and Alarms tab. |
| Clear Time (Device Time Zone) | Device time zone at which the event was cleared. This column is in Active Alarms and Alarms tab and is hidden by default. |
| Device | Name of the device associated with the alarm or event. If no device is associated with the alarm or event, None appears. |
| Device type | The device type. |
| Message | Message associated with the alarm or event. |

Active Alarms and Event History Toolbar

The Active Alarms and Event History displays include a toolbar that you can use to manage the alarms or events display. [Table 9-2](#) lists the tools and their functions.

Table 9-2 **Alarms and Event History Toolbar**










| Tool | Name | Description |
|---|---|---|
|  | Modify Event Filter | Opens the Prime Performance Manager Alarm and Event Filter dialog box. |
|  | Remove Filter | <p>Activates and deactivates the event filter specified in the Event Filter dialog box. If:</p> <ul style="list-style-type: none"> The filter is activated, Prime Performance Manager shows only those alarms or events that pass the filter. The filter is deactivated, Prime Performance Manager shows all alarms or events. <p>If you activate a filter in an object's Recent Events table in the Prime Performance Manager main window, the filter is activated in all Recent Events tables in the Prime Performance Manager main window for all other objects.</p> |
| — | Archived (web interface only) | <p>Appears in the tool bar when you view the Event History table or the Active Alarms table. Click the Archived button to display a table of archived events or alarms. This button works as a toggle, so you can use it to switch back and forth.</p> <p> Caution You can limit the number of rows in the archived events table by editing the MaxArchivedRecords property in the etc/SgmEventLimits.conf file. The default value is 200,000. Increasing it can significantly impact server performance.</p> |
|  | Refresh | Forces a refresh of the current web page. Click this icon to refresh the current page. |
|  | Pause or Resume | <p>Pauses or resumes the table. While the table is paused, Prime Performance Manager does not display new alarms or events (unless you apply a filter or edit your preferences). When the table is resumed, all new alarms or events that occurred after the table was paused are added to the display.</p> <p>If alarms or events are deleted while the table is paused, they are not removed from the table. Instead, they are dimmed and cannot be acknowledged or edited. Deleted alarms or events are removed from the table when you resume the table.</p> |
| N/A | All | Filters the page by all severities. |
|  | Critical (<i>alarm count</i>) (<i>alarm percentage</i>) | <p>Filters the page to include only the alarms with Critical severity. This opens the Active Alarms filtered by Critical Severity page.</p> <p>The alarm count and the alarm percentage are not displayed in the Event History table.</p> |
|  | Major (<i>alarm count</i>) (<i>alarm percentage</i>) | <p>Filters the page to include only the alarms with Major severity. This opens the Active Alarms filtered by Major Severity page.</p> <p>The alarm count and the alarm percentage are not displayed in the Event History table.</p> |
|  | Minor (<i>alarm count</i>) (<i>alarm percentage</i>) | <p>Filters the page to include only the alarms with Minor severity. This opens the Active Alarms filtered by Minor Severity page.</p> <p>The alarm count and the alarm percentage are not displayed in the Event History table.</p> |
|  | Warning (<i>alarm count</i>) (<i>alarm percentage</i>) | <p>Filters the page to include only the alarms with Warning severity. This opens the Active Alarms filtered by Critical Severity page.</p> <p>The alarm count and the alarm percentage are not displayed in the Event History table.</p> |

Table 9-2 Alarms and Event History Toolbar (continued)















| Tool | Name | Description |
|---|--|--|
|  | Informational (<i>alarm count</i>) (<i>alarm percentage</i>) | Filters the page to include only the alarms with Informational severity. This opens the Active Alarms filtered by Critical Severity page. Filtering the page by alarm informational severity, allows the user to determine the status of a device. The alarm count and the alarm percentage are not displayed in the Event History table. |
|  | Indeterminate (<i>alarm count</i>) (<i>alarm percentage</i>) | Filters the page to include only the alarms with Indeterminate severity. This opens the Active Alarms filtered by Indeterminate Severity page. The alarm count and the alarm percentage are not displayed in the Event History table. |
|  | Normal (<i>alarm count</i>) (<i>alarm percentage</i>) | Filters the page to include only the alarms with Normal severity. This opens the Active Alarms filtered by Normal Severity page. The alarm count and the alarm percentage are not displayed in the Event History table. |
|  | Acknowledge | Acknowledges the selected alarms or events. |
|  | Unacknowledge | Unacknowledges the selected alarms or events. |
|  | Clear | Clears the chosen alarms in the Active Alarms table. When you clear an alarm, the alarm no longer affects the severity of the object (its severity changes to normal), but the alarm remains visible in the Active Alarms table. This option is not available for events. |
|  | Delete | Deletes the chosen alarms or events. When you delete an alarm or event, you remove it from the table, and Prime Performance Manager archives the alarm or event in its database. Also, the alarm or event, no longer affects the severity of the object. |
|  | Clear and Delete | Clears the chosen alarms and also deletes them from the Active Alarms table. Use the Clear and Delete button if you need to designate an alarm as Manually Cleared before deleting it. When you use the Clear and Delete button, Prime Performance Manager changes the alarm severity of the object to normal, sends an alarm log message to <code>/opt/CSCOppm-gw/logs/messageLog.txt</code> , and sends a trap to a northbound host to indicate that the alarm cleared. This option is not available for events. |
|  | Event Properties | Opens the Alarm and Event Properties window, Properties tab. |
|  | Events for Alarm | Launches a dialog box that shows a table of events that are associated with the selected alarm. (This button is only available in alarm tables.) |
|  | Edit Notes | Opens the Alarm and Event Properties window, Notes tab. |

Table 9-2 **Alarms and Event History Toolbar (continued)**

| Tool | Name | Description |
|---|---------------------------------|---|
|  | Time Difference | Shows the time difference in days, minutes, hours, and seconds between two alarms or events. <ul style="list-style-type: none"> In the client interface, use the Ctrl key to select two alarms or events. In the web interface, check the check boxes of two alarms or events. Then click the Time Difference button. |
|  | Export the report as a CSV file | Exports the alarms and events related table data to a report with comma-separated values (CSV file). You can save this file to disk or open it with an application that you choose (for example, Microsoft Excel). |
|  | Help for Event | Shows context-sensitive help for the chosen alarm or event in a separate browser window. For TCAs, displays the View Threshold dialog box. |
| | Report for Event | If a TCA is selected, launches the associated report. |

Filtering Alarms and Events

You can use the Modify Event Filter to change the alarm or event information appears.

To change the alarms or events display, in the navigation tree, choose **Active Alarms** or **Event History**, then click the Modify event filter tool. The Prime Performance Manager Alarm and Event Filter dialog box appears. The dialog box allows you to set filtering options based on three areas:

- Categories
- Severities
- Other

Use the Categories pane to specify the alarm or event categories you want to display. The following categories are available:

- Status
- Create
- Delete
- Discover
- Edit
- Ignore
- Login
- LoginDisable
- LoginFail
- Logout
- OverWrite
- Poll
- Purge
- Request

All categories are checked by default. You can click **Deselect All**, or **Select All** to select or deselect all categories.

**Note**

These are the default categories; additional categories might be defined by the Prime Performance Manager system administrator.

The Severities pane allows you to specify which alarm/event severities you want to display. Severities include:

- Informational
- Normal
- Indeterminate
- Warning
- Critical
- Minor
- Major

The Alarm and Event Filter dialog box Other pane allows you to further define the alarms and events filter. These settings are applied to all alarms/events displays in the current view. [Table 9-3](#) describes the options in the Other pane.

Table 9-3 Alarm and Event Filter Dialog Box Other Pane

| Field | Description |
|-------------------------|---|
| Acknowledged | Check box indicating whether only acknowledged alarms/events appear in the Active Alarms/Event History window. This check box is checked by default. |
| Unacknowledged | Check box indicating whether only unacknowledged alarms/events appear in the Active Alarms/Event History window. This check box is checked by default. |
| Time Before | Check box indicating whether only alarms/events that Prime Performance Manager logs before a specified date and time, appear in the Active Alarms/Event History window. This check box is unchecked by default. |
| Time Before | Specifies the date and time prior to which alarms/events that Prime Performance Manager logs appear in the Active Alarms/Event History window. This field is dimmed unless the Time Before check box is checked. |
| Time After | Check box indicating whether only alarms/events that Prime Performance Manager logs after a specified date and time, appear in the Active Alarms/Event History window. This check box is unchecked by default. |
| Time After | Specifies the date and time after which alarms/events that Prime Performance Manager logs appear in the Active Alarms/Event History window. This field is dimmed unless the Time After check box is checked. |
| Name or Message Matches | Check box indicating whether only alarms/events that contain the specified message text appear in the Active Alarms/Event History window. This check box is unchecked by default. The Name or Message Matches field value is retained after a message filter is set. |

Table 9-3 Alarm and Event Filter Dialog Box Other Pane (continued)

| Field | Description |
|--------------------------------|---|
| Match Case | <p>Indicates whether only alarms/events that match the case of the text in the Name or Message Matches field should appear in the Active Alarms/Event History window. This field is dimmed unless Name or Message Matches is selected. Match Case default is not selected by default if Name or Message Matches is selected. Match Case is disabled if Match Regex is selected.</p> <p>The Active Alarms/Event History table is filtered properly, based on the text entered in the Name or Message Matches text box (case sensitive), if Match Case is selected.</p> <p>The Match Case selection is retained after a message filter is set.</p> |
| Match Regex | <p>Check box indicating whether only alarms/events that match the regular expression of the text in the Name or Message Matches field should appear in the Active Alarms/Event History window.</p> <p>This field is dimmed unless the Name or Message Matches check box is checked. Match Regex is unchecked by default, if the Name or Message Matches check box is checked. Match Regex is disabled if the Match Case check box is checked.</p> <p>The Active Alarms/Event History table is filtered properly, based on the regular expression entered in the Name or Message Matches text box (case-sensitive), if the Match Regex check box is selected.</p> <p>The check box Match Regex is selected after a message filter is checked.</p> <p>Note If invalid regex is provided, then Active Alarms/Event History table does not contain any rows.</p> |
| Suppress for unmanaged devices | <p>Check box to suppress alarms/events for any objects that have been set to the unmanaged state. To suppress alarms/events for unmanaged objects, check the check box. To retain alarms/events for unmanaged objects, uncheck the check box.</p> <p>Note If you are viewing alarms/events for a specific object in the navigation tree of Prime Performance Manager main window, this button is not available.</p> |

Viewing Alarms and Events Properties


You can use Prime Performance Manager to view detailed information about a chosen alarm or event, including its associated object, status, and other information. To view detailed information about an alarm or event, in the Web interface, check the alarm or event check box, then in the toolbar, click the **Event Properties** . The Event Properties dialog box appears. [Table 9-4](#) lists the alarms and event properties.








Table 9-4 Alarms and Event Properties

| Tab, Field, or Button | Description |
|-----------------------|---|
| Message | Message text for the alarm or event. |
| Properties | Shows detailed information about the chosen alarm or event. |

Table 9-4 **Alarms and Event Properties (continued)**

| Tab, Field, or Button | Description |
|-----------------------|--|
| Notes | Shows notes associated with this alarm or event. If no note is currently associated with the alarm or event, this field displays No Notes. In the Notes tab, the date and time the Notes field for this alarm or event was last updated is displayed. If no note is currently associated with the alarm or event, this field displays Not Set. |
| Details | Shows specific alarm or event attributes. |
| Events for Alarm | Shows a table of events associated with the selected alarm. (This tab does not appear in the Event Properties dialog box if it is selected through the Event History link.) |
| Category | Type of the alarm or event. Default values are: <ul style="list-style-type: none"> • Create—Creation event, such as the creation of a seed file. • Delete—Deletion event, such as the deletion of an object or file. • Discover—Discovery event, such as Discovery beginning. • Edit—Edit event. A user has edited an object. • Ignore—Ignore event. A user has ignored a link or linkset. • Login—Login event. A user has logged into Prime Performance Manager. • LoginDisable—LoginDisable event. The Prime Performance Manager has disabled a user's User-Based Access authentication as a result of too many failed attempts to log into Prime Performance Manager. • LoginFail—LoginFail event. A user's attempt to log into Prime Performance Manager has failed. • Logout—Logout event. A user has logged out of Prime Performance Manager. • OverWrite—OverWrite event. An existing file, such as a seed file or route file, has been overwritten. • Poll—Poll event, such as an SNMP poll. • Purge—Purge event. A user has requested Discovery with Delete Existing Data selected, and the Prime Performance Manager has deleted the existing Prime Performance Manager database. • Request—Request event. A user has initiated an action that generates a request from the gateway to a unit. • Status—Status change message generated. |

Table 9-4 **Alarms and Event Properties (continued)**

| Tab, Field, or Button | Description |
|-------------------------------------|---|
| Severity | Severity of the alarm or event. Possible severities are:  Critical  Major  Minor  Warning  Normal  Indeterminate  Informational |
| Original Severity | Original severity of the alarm or event. |
| Create Time | Date and time the event was logged. |
| Change Time | Date and time the alarm last changed. This field is important only for alarms. |
| Acknowledged | Indicates whether the alarm or event has been acknowledged. |
| Acknowledged By | Name of the device that last acknowledged the alarm or event. If no one has acknowledged the alarm or event, this field is not shown. |
| Acknowledge Time | Time at which the event was acknowledged. |
| Cleared By | User who cleared the event. |
| Clear Time | Time at which the event was cleared. |
| Internal ID | Internal identification that the Prime Performance Manager uses for the alarm or event. |
| Name | Name for the alarm or event, for example, InterfaceState. |
| Alarm Nature | Nature of the alarm. |
| Alarm Type | Type of the alarm. |
| Count | Number of events in the sequence of events for an alarm. This field is important only for alarms because an event count will always be 1. |
| Element Name | Name of the managed element, for example, the device name. |
| Device | Name of the device associated with the alarm or event. |
| Create Time (Device Time Zone) | Device time zone at which the event was received. |
| Change Time (Device Time Zone) | Device time zone at which the event was updated. |
| Acknowledge Time (Device Time Zone) | Device time zone at which the event was acknowledged. |
| Clear Time (Device Time Zone) | Device time zone at which the event was cleared. |

Attaching Notes to Alarms or Events

You can use Prime Performance Manager to add notes to alarms and events. To add a note to an alarm or event, in the Web interface, select an alarm or event checking its check box, then click **Edit Notes**. The Event Properties dialog box appears with the Notes tab selected. See [Table 9-5](#) for more detail.



Note

You can add a note to an alarm or event by using either the Prime Performance Manager web interface. You can also view the note from either interface.

Table 9-5 Alarms/Events Notes Attachment

| Field or Button | Description |
|-----------------|---|
| Name | Message text of the alarm or event. |
| Last Update | Date and time the Notes field for this alarm or event was last updated. If no note is currently associated with this alarm or event, this field shows the value Not Set. You cannot edit this field. |
| Notes | Notes to associate with this alarm or event. In this field, you can enter any important information about the alarm or event, such as its associated object, what triggered the alarm or event, how often it has occurred, and so on. |
| Edit Note | Enables you to edit or add a note. |
| Save | Saves changes you have made to the alarm or event information. |
| Cancel | Cancels the operation without saving any changes. |
| Help | Shows Online help for the current window. |

Related Topic

[Viewing Alarms and Events Properties, page 9-9](#)