

Monitor Alarms and Events

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What Are Alarms and Events?

An event is a distinct incident that occurs at a specific point in time, such as a port status change, or a device becoming unreachable. Events can indicate an errors, failures, or exceptional conditions in the network. Events can also indicate the clearing of those errors, failures, or conditions.

An alarm is a response to one or more related events. Only certain events generate alarms. Alarms have a state (cleared or not cleared) and a severity (Critical, Major, Minor, and so forth). An alarm inherits the severity of its most recent event. Alarms remain open until a clearing event is generated (or if the alarm is manually cleared).

Related Topics

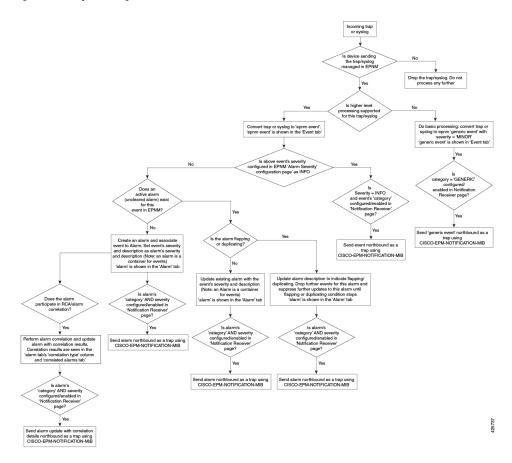
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How are Alarms and Events Created and Updated?

The processes SNMP traps, syslogs, and TL1 messages from both IPv4 and IPv6 devices. It maintains an event catalog that determines how it should respond to these events. The flowchart below represents the manner in which these alarms and events are processed:

Figure 1: Alarm processing flowchart



performs the following general steps when it processes an event:

- 1. Identifies the device and device component that is causing the event (localizes the event).
- Checks whether the supported event triggers inventory collection.Some events have specific rules that instruct what information it should collect.
- 3. Checks whether the event severity is INFO or CLEARED.
 - If it is INFO or CLEARED, saves the event and displays it in the GUI.
 - If it is any other severity, evaluates whether a new alarm should be opened (next step).
- 4. Checks whether an alarm already exists or a new alarm should be created.

• If an alarm does exist, associates the event to the existing alarm. The alarm severity is changed to match the severity of the new event, and the alarm time stamp is updated. If it is a clearing event (for example, a link up event), the alarm will be cleared.



Note

In some cases, a device may not generate a clearing alarm. The administrator should set the alarm auto-clearing interval.

• If an alarm does not exist, creates a new alarm and assigns it the same severity as the event.

Link Up/Down Flapping

Flapping is a flood of consecutive transitions from link down to link up (or visa versa) for the same interface on a device. It can occur when a fault causes repeated event notifications (for example, a cable with a loosely fitting connector). will mark an alarm as flapping if there are five occurrences of link up/down transitions within 60 seconds. The five occurrences could be of a sequence such as, Interface Down, Interface Up, Interface Down, and so on.

The alarm marked as flapping is either cleared or marked back as a link down when there is no occurrence of any link up/down transition for 60 seconds. The alarm will be updated based on the last non-flapping event received (up or down). This helps control the flow of events and constant updating of the alarm state and the associated notifications (display, emails, northbound traps).

Find and View Alarms

To view alarms, choose Monitor > Monitoring Tools > Alarms and Events. The alarms are classified into four categories and displayed in separate tabs in the Alarms table as given below:

- Network Health—Shows the controller, switches, and router category alarms.
- Rogue AP—Shows the Rogue AP and Adhoc Rogue category alarms.
- Security—Shows the security category alarms.
- System—Shows the system category alarms.

The count next to each tab name indicates the total number of alarms in that specific alarm category.

Show Active Alarms—You can search for specific alarms and also create and save customized (preset) filters as described in the procedure that follows the table - By default, the Alarms and Events page shows the latest 4000 active alarms excluding the cleared alarms. The active alarms are automatically refreshed based on the settings chosen in My Preferences page. For more details, see Set Up Your Alarm and Event Display Preferences, on page 5. You can temporarily disable the automatic refreshing of alarms by clicking the Pause Auto-Refresh button.

Show Alarm History—Click Show Alarm History in the Alarms and Events page to view up to 20,000 alarms. If you want to view the cleared alarms, see Cleared , on page 9. The alarms are not refreshed automatically in the Show Alarm History mode. But, you can manually refresh the alarms by clicking the Refresh icon in the Alarms and Events table.

The following table describes the alarm viewing options available in the show drop-down filter list.

To find these alarms:	Choose Monitor > Monitoring Tools > Alarms and Events and:
Alarms generated by specific device	For active alarms, click the "I" icon next to the device name to open the Device 360 view, then click the Alarms tab. For cleared alarms, refer to the Alarms and Events table.
	For certain devices, you can also use the Chassis View to check device alarms.
Alarms assigned to you	Click the Show drop-down filter list and choose Alarms assigned to me. You can also use this filter for cleared and correlated alarms.
Unassigned alarms	Click the Show drop-down filter list and choose Unassigned Alarms. You can also use this filter for cleared and correlated alarms.
Latest alarms according	For active alarms:
to the timestamp	• Alarms in the last 30 minutes—Click the Show drop-down filter and choose the last 5, 15, or 30 minutes (PI timestamp).
	• Alarms in the last 24 hours—Click the Show drop-down filter and choose the last 1, 8, or 24 hours (PI timestamp).
	• Alarms in the last 7 days—Click the Show drop-down filter and choose the last 7 days (PI timestamp).
Latest Alarms according to the device timestamp	Follow the same instructions as in the previous row, but choose the filters with the suffix (Device timestamp)
All alarms generated by a device group, series, or type	Choose a group from the navigation pane on the left. You can also use this filter for cleared and correlated alarms.
Alarms using customized filters	Create and save the advanced filter (see the procedure that follows this table).

Set Alarm and Event Management Preferences

- Set Up Your Alarm and Event Display Preferences, on page 5
- Customize the Alarm Summary, on page 6



Nota

Advanced users can also use the Representational State Transfer (REST) API to access device fault information. For information on the API, click at the top right of the window and choose.

Set Up Your Alarm and Event Display Preferences



Note

The list of 4000 alarms and events also includes cleared alarms which are not displayed. Click Show All to see all the open alarms.

You can customize the following alarm and event display by clicking at the top right of the window and choosing My Preferences. After you make your changes, click Save to apply your new settings. Other settings, such as whether acknowledged, cleared, and assigned alarms are displayed, are controlled globally by the administrator.

User Preference Setting	Description	
Automatically refresh Alarms & Events page	Enables or disables automatically refreshing of the Alarms and Events page. If enabled, the page is refreshed according to the setting in Refresh Alarm count in the Alarm Summary.	
Refresh Alarm count in the Alarm Summary every minutes/seconds	Sets the refresh interval for the alarm count in the Alarm Summary (1 minute by default) (see Customize the Alarm Summary, on page 6).	
Enable Alarm Badging on Alarms & Events page	When user enables Alarm Badging, alarm severity icons are displayed next to the device groups on the Monitor > Monitoring Tools > Alarms & Events page.	
Disable Alarm Acknowledge	Note This setting is only configurable if Hide Acknowledged Alarms is also enabled; that setting is disabled by default (see the previous table).	
Warning Message	Disables the following message from displaying when user selects an alarm and chooses Change Status > Acknowledge:	
	Warning: This alarm will not be generated, if the original event recurs again, within next 7 days, as it is acknowledged now. Clearing the alarm instead of acknowledging will cause the alarm to be generated if the event recurs again. Proceed with alarm acknowledgment?	
Disable confirmation	Disables the following message from displaying when user selects an alarm and chooses Change Status > Clear all of this condition:	
prompt for "Clear all of this	Are you sure you want to clear all alarms of this condition?	
condition"	(Disabled by default)	

User Preference Setting	Description	
Disable "Set severity to information" prompt for "Clear all of this condition" Do you want to set the severity for the selected alarm's condition to Information WARNING: This is a system-wide change that will prevent creation of future this condition. You can undo this change on the Severity Configuration page System Settings. (Disabled by default) Note Disables the following message which is displayed when user selects an alarchooses Change Status > Clear all of this condition: Do you want to set the severity for the selected alarm's condition to Information of future this condition. You can undo this change on the Severity Configuration page System Settings. (Disabled by default)		
Select alarm categories for Alarm Summary Toolbar	Controls what is displayed in the Alarm Summary (see Customize the Alarm Summary, on page 6).	
When clearing all alarms of a condition, always set the condition's severity to Information When user selects and alarm and chooses Change Status > Clear all of this (Disabled by default)		
Enable New Critical Alarm Count Notifications	Enables the notification pop-up that displays the count of critical alarms. The count gets updated once the alarm interval is refreshed depending on the interval set in Refresh Alarm count in the Alarm Summary (see Customize the Alarm Summary, on page 6). Only the outstanding critical alarms are displayed.	

Customize the Alarm Summary

You can specify what alarm categories are displayed:

- In the title bar alarm count (bell). This gives you a quick visual count of alarms you are interested in.
- In the Alarm Summary pop-up window that is launched when you click the alarm count. The pop-up window gives you a quick look at alarm counts with their severity, as shown in the following figure.

To customize this information:

- Step 1 Click Edit at the top left of the Alarm Summary pop-up window. This opens your My Preferences page. You can also open this page by clicking A at the top right of web GUI window and choosing My Preferences.
- **Step 2** Click the Alarms & Events tab.
- **Step 3** To change the Alarm Summary refresh interval, select a number from the Refresh Alarms & Events page and Alarm count in the Alarm Summary every drop-down list.
- **Step 4** To specify what is included in the Alarm Summary, Go to the Alarm Categories area. Select Alarm Summary from the Default category to displaydrop-down list. Enable or disable the required Alarm Category by selecting or deselecting the corresponding checkbox.

Step 5 Click Save to confirm the changes made in the My Preferences window.

Interpret Event and Alarm Badges and Colors

When there is a problem in the network, flags the problem by displaying an alarm or event icon with the element that is experiencing the problem. Alarm Severity Icons, on page 7 lists the icons and their colors.

Alarm Severity Icons

The table below lists the alarm colors and their respective severity levels for the icons displayed in various parts of the web GUI.

Severity Icon	Description	Color
8	Critical alarm	Red
V	Major alarm	Orange
A	Minor alarm	Yellow
•	Warning alarm	Light Blue
<u> </u>	Alarm cleared; normal, OK	Green
0	Informational alarm	Medium Blue
?	Indeterminate alarm	Dark Blue

Get Troubleshooting and Detailed Alarm Information

- View an Alarm's Details, on page 7
- Find Troubleshooting Information for an Active Alarm, on page 8
- Find Out Which Events Are Associated With An Alarm, on page 8

View an Alarm's Details

To get more details about an alarm, expand it. You can do this from the Alarms list (by choosing Monitor > Monitoring Tools > Alarms and Events, or by clicking Details in the Alarm Summary pop-up).

General Information—When alarm was found and	Device Details—Managed device name, address, uptime,
last updated, current and last severity, and how it	reachability status, collection status, and so forth
was detected	

Messages—Trap, syslog, or TL1 message	Device Events—Recent device events from past hour
	(of any type, in chronological order)

Find Troubleshooting Information for an Active Alarm

Use this procedure to get an explanation for why an active alarm occurred, and the recommended response to the alarm.



Note

Not all alarms have this information. Users with sufficient privileges can add or change the information that is displayed in the popup window.

- Step 1 Choose Monitor > Monitoring Tools > Alarms and Events, then click the Alarms tab. (For interface alarms, you can also get this information from the Interface 360 view under the Alarms tab.)
- Step 2 Locate the alarm, then click the "i" icon in the Severity column to open the popup window that provides the explanation and the recommended action that can be taken to troubleshoot the alarm.

If you take any actions, we recommend you document your actions. Choose the alarm, click Annotation.

Find Out Which Events Are Associated With An Alarm

To view the events that have been correlated to an alarm, from the Alarms table, click the "i" icon next to the Severity.



Acknowledge and Clear Alarms

An alarm can have a status of Not Acknowledged, Acknowledged, or Cleared.

Not Acknowledged

Not Acknowledged means the problem is not being worked on. It could indicate that a new fault condition in the network, or that a cleared fault condition that has recurred. Not Acknowledged alarms are not removed from the Alarms and Events tables until they are either acknowledged or cleared.

Acknowledged

Acknowledged means a fault condition has either been recognized and is being worked on, or it can be ignored. Moving an alarm to the acknowledged status is a manual operation and changes the alarm Status to Acknowledged. An acknowledged event is still considered to be open (that is, not cleared), so if any related events recur, the events are added to the alarm.

By default, acknowledged alarms are not removed from the Alarms list. This behavior depends on the Hide Acknowledge Alarms setting that is controlled by the Administrator.

Acknowledged alarms can be moved back to the Not Acknowledged status (for example, if you acknowledged the wrong alarm).

Cleared

Cleared means the fault condition no longer exists. If an alarm is cleared but an associated event recurs, opens a new alarm.

By default, cleared alarms will not be shown in the Alarms and Events page. To view the cleared alarms in the Alarms History table in the Alarms and Events page:



Note

When FRU alarms are generated, if inventory lacks location parameters then, generated alarms will not have location parameters. When the FRU alarms are cleared, the alarms may not have inventory location parameters.

- Choose Administration > Settings > System settings, then choose Alarms and Events.
- Under Alarm Display Options, uncheck the Hide cleared Alarms check box.

To change the status of an alarm:

- **Step 1** Choose Monitor > Monitoring Tools > Alarms & Events.
- **Step 2** Select an alarm, then choose Change Status and the appropriate status (Acknowledge, Unacknowledge, Clear, Clear all of this Condition).

Note

Clear all of this Condition triggers a clearing event for all alarms with the same condition as the alarm you selected. When you choose this status, displays a dialog asking if you want to change the severity for the selected alarm condition to Information. This prevents from issuing alarms for the specified condition. To later reset the condition's severity, choose Administration > System Settings > Severity Configuration and modify the severity.

Step 3 Click Yes to confirm that you want to clear all alarms of the specified condition.

Add Notes To an Alarm

The annotation feature allows you to add free-form text to the alarm, which is displayed in the Messages area of the alarm details. To add text to an alarm, choose the alarm in the Alarms and Events table, click Annotation, and enter your text. As with acknowledging, when you annotate an alarm, adds your user name and the annotation time stamp to the Messages area of the alarm details.

Manage How Alarms are Triggered (Alarm Thresholds)

You can customize how often information is gathered (polling interval), the threshold value that indicates a problem, and whether should generate an informational event or an alarm (of an severity) when a problem is detected. Not all policies have all of these settings; for example, a policy may only collect statistics, so it would not have any thresholds or alarms associated with it.

- **Step 1** Choose Monitor > Monitoring Tools > Monitoring Policies > My Policies and select the policy you want to edit.
- **Step 2** Locate the parameter you want to change. You can search for the parameter by entering a string in the Parameter text box.
- Step 3 To adjust the polling interval, select the new interval from the Polling Frequency drop-down list. To disable polling, choose No Polling. Note that some polling frequencies are applied to groups of parameters. Changing the group interval will change the polling for all settings in the group. If a policy does not have any thresholds or events associated with it, prompts you to save the changes.
- **Step 4** To change a threshold value, expand the parameter and choose a value from the parameter's drop-down list.
- Step 5 To specify what should do when the threshold is surpassed, choose an alarm value from the parameter's drop-down list. You can configure to generate an alarm of a specified severity, generate an informational event, or do nothing (if no reaction is configured).
- Step 6 Click:
 - Save and Activate to save and activate the policy immediately on the selected devices.
 - Save and Close to save the policy and activate it at a later time.

Which Events Are Supported?

View Events

To view alarms, choose Monitor > Monitoring Tools > Alarms and Events, and then click the Events tab.

Show Active Events—By default, the Alarms and Events page shows the latest 4000 active events including the cleared events. The active events are automatically refreshed based on the settings chosen in My Preferences page. For more details, see Set Up Your Alarm and Event Display Preferences, on page 5. You can temporarily disable the automatic refreshing of events by clicking the Pause Auto-Refresh button.

Show Event History—Click Show Event History in the Alarms and Events page to view up to 20,000 events. The events are not refreshed automatically in the Show Event History mode. But, you can manually refresh the events by clicking the Refresh icon in the Alarms and Events table.

The Events tab provides a variety of filters that you can use to find the information you are looking for. You can also create and save customized (preset) filters using the same procedure described in Find and View Alarms, on page 3. The following table lists some of the ways you can filter events.

Click the Take Snapshot tab to view the paged events. You can view up to 20,000 paged events. The tab name gets changed as Snapshot of current date and time. By defalut 50 events will be displayed per page. You can vary the Page Size from 50 to 200.

To find these events:	Select Monitor > Monitoring Tools > Alarms and Events, click the Events tab, and:
All events generated by a device group, series, type, location group, or user-defined group	Choose a group from the left sidebar menu
Events in last x minutes, hours, or days	Click the Show drop-down filter list and choose the appropriate filter
Non-informational events generated in the last hour	From the Show drop-down filter list, choose Non-info events in last hour
Events using customized filters	Create and save an advanced filter (see Find and View Alarms, on page 3)

View Syslog Policies

To view the Syslog policy, do the following:

- **Step 1** Choose Monitor > Monitoring Tools > Syslog Policies. All the syslog policies are listed in the Syslog Policies page.
- **Step 2** Click the Expand icon to view the policy details.

Related Topics

Create a New Syslog Policy, on page 11 Edit a Syslog Policy, on page 12 Change Syslog Policy Ranks, on page 13 Change Syslog Policy Ranks

Create a New Syslog Policy

To create a new Syslog policy, do the following:

- **Step 1** Choose Monitor > Monitoring Tools > Syslog Policies.
- **Step 2** Click the Add icon. The Create New Syslog Policy window appears.

- **Step 3** In the Policy Attributes page, enter the unique Name, Description (optional), and choose the desired type of action that the policy will perform.
- Step 4 Click Next.
- **Step 5** You will view the Send Email option or Run Script option based on the policy action chosen in the Policy Attributes window.
 - Send Email Option
 - Click Create New Email Recipient and enter the Name and Email Address to create new recipient.
 - Alternatively, select a recipient and notification time range from the drop-down list.
 - Click the Add icon to specify multiple recipients. Send Email will notify one or more recipients by email when matching syslogs are received during corresponding certain times period.
 - Run Script Option
 - Click the Upload scripts button to upload a new script from your system. Prime Infrastructure accepts all types of syslog scripts and parameters. Hence, you can upload scripts of any type and provide parameters pertaining to those scripts. The scripts that you upload will be listed in the Script file drop-down list. You can select any one of the uploaded scripts from the drop-down list and create a new syslog policy.

By default Run Script option is disabled. To enable Run Script option, go to Administration > Settings > System Settings > Alarms and Events > Syslog Policies. You must have Syslog Policies Settings access privilege to access the Syslog Policies system settings page.

- Step 6 Click Next.
- In the Device Groups window, choose the Device Groups to which you want to apply the syslog policy. If you do not select any device groups the policy will be applied to all the devices.
- **Step 8** In the Syslog Fields window, configure the following filters for the syslog fields
 - All Messages The policy will activate for any syslog that meets its other conditions (such as device groups). The content of the syslog message will not affect whether the policy is activated or not.
 - Message Types: The policy will apply only for syslogs that match certain message types such as specific combinations of facility, severity, and mnemonic fields.
 - Advanced Filters To create more complex filters on the facility, severity, and mnemonic fields.
 - Choose a field (facility, severity, or mnemonic).
 - Chose a filter operation. Most filters will also require a value. The "Match" radio buttons above the list of filters determines whether all given conditions must be true, or if at least one must be true.
- Step 9 Click Summary to view the details of the syslog policy. If you wish to change the settings, navigate to the respective window and do the necessary changes.
- Step 10 Click Finish.

Edit a Syslog Policy

To edit a new Syslog policy, do the following:

- **Step 1** Choose Monitor > Monitoring Tools > Syslog Policies.
- **Step 2** Choose the policy and then click the Edit icon. The Edit Syslog policy wizard appears.
- **Step 3** In the Policy Attributes window, check and modify the Description if required.
 - **Note** The policies name and action type cannot be changed after the policy is created.
- **Step 4** To make desired changes in the Edit Syslog Policy wizard follow the same as the steps in Create a New Syslog Policy Wizard.
- **Step 5** Click Finish to save the changes or click Cancel to discard.

Delete Syslog Policy

To delete a Syslog Policy, do the following:

- **Step 1** Choose Monitor > Monitoring Tools > Syslog Policies.
- **Step 2** Choose the syslog policy which you want to delete and click the Delete icon.
- **Step 3** Click yes in the Delete Confirmation dialog box to delete, or No to cancel.

Change Syslog Policy Ranks

To change an existing syslog policy rank, do the following:

- **Step 1** Choose Monitor > Monitoring Tools > Syslog Policies.
- **Step 2** Choose the syslog policy which you want to change the rank.
- Step 3 Click Move Up or Move Down button to increase or decrease the rank of the selected policy. Click Move Up or Move Down button to increase or decrease the rank of the selected policy. Or
- **Step 4** Click Move To button. You can enter the desired ranks in the drop-down box and click enter to save the changes.

View Syslogs

logs all syslogs from severity 0 through 7 (emergency through debugging messages) generated by all devices that are managed by . Syslogs from devices that are not managed are not logged or displayed. also logs all SNMP messages.

stores a maximum of 2,000,000 syslogs with the following display limits:

- Live syslog streaming—Latest 2,000 syslogs
- **Step 1** To view syslogs, choose Monitor > Monitoring Tools > Syslog Viewer.

Use the filters to locate different syslogs. You can enter regular expressions in the fields; for example:

^Auth, V|violation|\$,^Sec*V|violation\$

- **Step 2** To view live syslogs, click the Live tab. If the data is excessive, click the Pause icon. You can click the Resume arrow at any time.
- **Step 3** If you do not want to see duplicates of a syslog, click Deduplicate. will aggregate the syslogs of that type into one line item and display the count in the Count field.
- **Step 4** To view older syslogs (syslogs that were received before you clicked the Live tab), click the Historic tab. Click the Create Syslog Policy button to create a new syslog policy.

Export Alarms, Events or Syslogs to a CSV or PDF File

Use this procedure to save alarms, events or syslogs as a CSV or PDF file.

- **Step 1** Navigate to the data you want to export.
- **Step 2** If you have a very large amount of data, apply a filter; otherwise the export process may take some time.
- Step 3 Click at the top right of the table to open the Export dialog box.
- **Step 4** Choose CSV or PDF, click OK, and save the file.

Working with Alarms, Events and Syslog Reports

This section describes how to create, schedule and run a alarms, events and syslog reports.

Related Topics

Create a New Alarm Report, on page 14 Create a New Events Report, on page 15 Create a New Syslog Report, on page 16

Create a New Alarm Report

You can create an alarm report by performing the following steps.

- **Step 1** Navigate to Report > Report Launch Pad > Fault > Alarm Reports.
- **Step 2** Click the New button. The New Alarm Reports page appears.
- Step 3 Select the Create the report in the current virtual domain and each of its sub-domains check box, if you wish to create alarm reports for both the main domain and sub-domains.
- **Step 4** Enter the title of the report in the Report Title text box.
- **Step 5** Select an option from the Report By list box.
- **Step 6** Click the Edit button adjacent to the Report Criteria field to modify the criterion.

- Step 7 Select a severity level of the report from the Severity list box. The available options are cleared, critical, information, major, minor, and warning.
- **Step 8** Select any of the options from the Alarm Category list box.
- **Step 9** Select a Reporting Period. You can either select an option from the list box or specify the From and To period.
- **Step 10** Click the Customize button to customize the report.
- **Step 11** Select the Enable check box to allow scheduling.
- Step 12 Select a format in which the report must be exported from the Export Format list box. The available formats are CSV and PDF.
- **Step 13** Enter the destination to which the report must be delivered. It can either be an email ID or an SFTP server name.
- Set the date and time by clicking the calendar icon in the Start Date/Time text box. It displays the current date and time, by default.
- **Step 15** Set a desired Recurrence period.
- **Step 16** Click the save icon adjacent to the Report Run Result label to launch the Run History page.
- **Step 17** Click the Run button to generate the report.
- **Step 18** Click the Save button to save the report.
- **Step 19** Click the Run and Save button to generate the report and save it for later use.
- **Step 20** Click the Save and Export button to save the report parameters and export it as a CSV or PDF file.
- **Step 21** Click the Save and Email button to save the report parameters and send it through email.
- **Step 22** Click the Cancel button to discard the changes.

Create a New Events Report

You can create an events report by performing the following steps.

- **Step 1** Navigate to Report > Report Launch Pad > Fault > Events Reports.
- **Step 2** Click the New button. The New Events Reports page appears.
- Step 3 Select the Create the report in the current virtual domain and each of its sub-domains check box, if you wish to create events reports for both the main domain and sub-domains.
- **Step 4** Enter the title of the report in the Report Title text box.
- **Step 5** Select an option from the Report By list box.
- **Step 6** Click the Edit button adjacent to the Report Criteria field to modify the criterion.
- Step 7 Select a severity level of the report from the Severity list box. The available options are cleared, critical, information, major, minor, and warning.
- **Step 8** Select any of the options from the Event Category list box.
- **Step 9** Select a Reporting Period. You can either select an option from the list box or specify the From and To period.
- **Step 10** Click the Customize button to customize the report.
- **Step 11** Select the Enable check box to allow scheduling.
- Step 12 Select a format in which the report must be exported from the Export Format list box. The available formats are CSV and PDF.
- **Step 13** Enter the destination to which the report must be delivered. It can either be an email ID or an SFTP server name.

- Step 14 Set the date and time by clicking the calendar icon in the Start Date/Time text box. It displays the current date and time, by default.
- **Step 15** Set a desired Recurrence period.
- **Step 16** Click the save icon adjacent to the Report Run Result label to launch the Run History page.
- **Step 17** Click the Run button to generate the report.
- **Step 18** Click the Save button to save the report.
- **Step 19** Click the Run and Save button to generate the report and save it for later use.
- **Step 20** Click the Save and Export button to save the report parameters and export it as a CSV or PDF file.
- **Step 21** Click the Save and Email button to save the report parameters and send it through email.
- **Step 22** Click the Cancel button to discard the changes.

Create a New Syslog Report

You can create a syslog report by performing the following steps.

- **Step 1** Navigate to Report > Report Launch Pad > Fault > Syslog Reports.
- **Step 2** Click the New button. The New Syslog Reports page appears.
- Step 3 Select the Create the report in the current virtual domain and each of its sub-domains check box, if you wish to create syslog reports for both the main domain and sub-domains.
- **Step 4** Enter the title of the report in the Report Title text box.
- **Step 5** Select an option from the Report By list box.
- **Step 6** Click the Edit button adjacent to the Report Criteria field to modify the criterion.
- Step 7 Select a severity level of the report from the Severity list box. The available options are Alert, Critical, Debug, Emergency, Error, Informational, Notice, and Warning.
- **Step 8** Select a Reporting Period. You can either select an option from the list box or specify the From and To period.
- **Step 9** Click the Customize button to customize the report.
- **Step 10** Select the Enable check box to allow scheduling.
- **Step 11** Select a format in which the report must be exported from the Export Format list box. The available formats are CSV and PDF.
- **Step 12** Enter the destination to which the report must be delivered. It can either be an email ID or an SFTP server name.
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- **Step 17** Click the Save button to save the report.
- **Step 18** Click the Run and Save button to generate the report and save it for later use.
- **Step 19** Click the Save and Export button to save the report parameters and export it as a CSV or PDF file.
- **Step 20** Click the Save and Email button to save the report parameters and send it through email.

Step 21 Click the Cancel button to discard the changes.

Get Support from Cisco

If you receive an alarm in Monitor > Monitoring Tools > Alarms and Events for which you cannot find a resolution in the Cisco Support Community (click an alarm, then choose Troubleshoot > Support Forum.), you can use to open a support request (click an alarm, then choose Troubleshoot > Support Case).

Respond to Problems Within

generates internal SNMP traps to monitor its own functions—such as server CPU and disk utilization, fan and power supply failures, and high availability (HA) state changes.

What is an Alarm Policy?

An Alarm Policy is a filtering method that allows you to control the alarms on network conditions, thereby reducing noise in the system. Choose Monitor > Monitoring Tools > Alarm Policies to view the alarm policies. You can create, edit, delete, and rank the alarm policies. Alarm policy includes one or more conditions, and an action that is applied to any events/alarms that meet all the defined conditions.

The new alarm policies will not be applicable for the alarms already generated by . You must delete or clear the existing alarms for the alarm policy to be effective in .



Note

When restarting the Prime Infrastructure Server, all the alarm policies will be suspended. Once the server is up and running, all policies will be enforced.

You can create alarm policies to perform the following actions:

- Suppress alarms—Does not generate alarms for the selected events. But, events will be created and saved normally.
- Suppress events and alarms—Does not create events and alarms.
- Change alarm severities—Overrides the system-wide default severity for the alarms/events that meet the conditions set in the policy.
- Create disassociation threshold alarm—Generates an alarm when a certain percentage of access points
 across one or more device groups are disassociated from their controllers.
- Configure AP Disassociated alarm suppression—Suppress the alarms with the condition "AP disassociated from controller" either permanently or temporarily.

Related Topics

Create a New Alarm Policy, on page 19 Types of Alarm Policies, on page 18 Edit an Existing Alarm Policy, on page 20 Alarm Policy Ranks, on page 19

Types of Alarm Policies

The table below shows the alarm policy types and the various alarm actions available for each alarm policy type.

Policy Type	Available Action Options
Access Point	Suppress Alarms
	Suppress Alarms and Events
	Change Alarm Severities
AP Disassociation	Create Disassociation Threshold Alarm
	Configure Suppression for AP Disassociated Alarm
Controller	Suppress Alarms
	Suppress Alarms and Events
	Change Alarm Severities
nterface	Suppress Alarms
	Suppress Alarms and Events
	Change Alarm Severities
Layer 2 Switch	Suppress Alarms
	Suppress Alarms and Events
	Change Alarm Severities
System	Suppress Alarms
	Suppress Alarms and Events
	Change Alarm Severities
Vired Infrastructure	Suppress Alarms
	Suppress Alarms and Events
	Change Alarm Severities
	Suppress Alarms and Events Change Alarm Severities Suppress Alarms Suppress Alarms and Events

Alarm Policy Ranks

Rank determines the priority or execution order of the alarm policy whenever two or more policies are applied to the same alarm or event. By default, the alarm policies will be ranked in the order they are created.

Points to be remembered while ranking the alarm policies:

- 1. A lower rank number indicates higher priority
- 2. A policy with highest rank is applied first, then next highest rank, and so on
- 3. A high-ranked policy may affect the behavior of a lower-ranked policy or may override the lower-ranked policy entirely.
 - Suppress Alarms will not be applied if a higher-rank alarm suppression policy has already been applied to the event.
 - Suppress Alarms and Events will not be applied if either:
 - A higher-rank suppression policy has already been applied to the event.
 - The event indicates an AP has been disassociated for a sustained period of time.
 - Change Alarm Severities will not be applied if a higher-rank severity change policy has already been applied to the event or alarm.
 - Create Disassociation Threshold Alarm—Does not count AP disassociated alarms that are suppressed
 by a higher-rank suppression policy. If the AP disassociated alarms are temporarily suppressed, they
 will be counted once their suppression time expires.
 - Configure AP Disassociated Alarm—Suppression will not be applied if a higher-ranked suppression policy has already been applied to the alarm.

To change the ranking of alarm policies, do the following:

Step 1 Choose Monitor > Monitoring Tools > Alarm Policies.

All the alarm policies are listed in the order they are created.

- **Step 2** Choose the alarm policy which you want to change the order.
- Step 3 Click the Move To icon and enter the ranking number in the Row field or click the Move up icon or Move down icon and change the ranking order.

View Alarm Policies

Step 1 Choose Monitor > Monitoring Tools > Alarm Policies.

All the alarm polices are listed in the Alarm Policies page.

Step 2 Click the Expand icon to view the policy details.

Create a New Alarm Policy

To create a new Alarm Policy, do the following:

- **Step 1** Choose Monitor > Monitoring Tools > Alarm Policies.
- **Step 2** Click the Add icon and choose the policy type from the Select A Policy Type window.

The Create a New Alarm Policy wizard appears.

Step 3 In the Policy Attributes page, enter the Name, Description (optional), and choose the type of action you want to perform.

The type of action displayed here is based on the chosen policy in the previous step. See, Types of Alarm Policies in Related Links.

- **Step 4** For Access Point, Controller, Interface, Layer 2 Switch, unclassified, and Wired Infrastructure policy types, do the following:
 - a) Choose the Device groups.
 - If you do not select any device the policy will apply to all devices.
 - b) (Only for Interface policies) Choose the Port groups.
 - If you do not select any port the policy will apply to all the port groups.
 - c) Choose the alarms/events that you want to suppress or the alarms/events that you want to change the severity based on the action chosen in the Policy Attributes page.
 - d) Click Summary to view the details of the policy. If you wish to change the settings, navigate to the respective page and do the necessary changes.
 - e) Click Finish.
- **Step 5** For AP Disassociation policy type, do the following:

Note The AP disassociation alarm policy will be applied only to the leaf nodes.

a) Choose the Device groups.

This is a mandatory step, if you have chosen Create Diassociation Threshold Alarm action in the Policy Attributes page. If you do not select any device for Configure Suppression for AP Disassociated Alarms action, the policy will be applied to all the devices.

- b) For Create Diassociation Threshold Alarm action, choose the desired dissociation threshold percentage.
- c) For Configure Suppression for AP Disassociated Alarms action, click Suppress Permanently if you want to permanently suppress the alarm or click Display if the condition persists for this duration and select a suppression duration using the slider.
- d) Click Summary to view the details of the policy. If you wish to change the settings, navigate to the respective page and do the necessary changes.
- e) Click Finish.

Related Topics

Types of Alarm Policies, on page 18 Edit an Existing Alarm Policy, on page 20

Edit an Existing Alarm Policy

To edit the Alarm Policy, follow these steps:

Step 1 Choose Monitor > Monitoring Tools > Alarm Policies.

- **Step 2** Choose the policy and then click the Edit icon.
 - The Edit Alarm Policy wizard appears.
- **Step 3** In the Policy Attributes page, check and modify the Description if required.
 - You cannot edit the policy name and action chosen while creating the policy.
- **Step 4** The remaining steps in the Edit Alarm Policy wizard are same as the steps in Create a New Alarm Policy wizard. See, Create a New Alarm Policy, on page 19.
- **Step 5** Click Finish to save the changes or click Cancel to discard.

Related Topics

What is an Alarm Policy?, on page 17 Create a New Alarm Policy, on page 19

Delete Alarm Policy

To delete the alarm policy, do the following;

- **Step 1** Choose Monitor > Monitoring Tools > Alarm Policies.
- **Step 2** Choose the alarm policy which you want to delete and click the Delete icon.
- **Step 3** Click yes in the Delete Confirmation dialog box to delete, or No to cancel.

Alarms and Events Notification Policies

You can create policies for sending notifications on specific alarms of interest that are generated from particular device groups, to specific recipient groups.

For more information see the section Event Receiving, Forwarding, and Notifications in the chapter Fault Management Administration Tasks in the Cisco Prime Infrastructure Administrator Guide.

Alarms and Events Notification Policies