



## CHAPTER 5

# Navigating Cisco Prime Device Fault Manager Tasks in LMS 4.2

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Cisco Prime Device Fault Manager (DFM) offers real-time fault monitoring and management that allows network operations personnel to monitor issues that could impact network latency and performance.

This chapter provides mapping of DFM tasks in LMS 4.2.

This chapter explains:

- [Alerts and Activities](#)
- [Device Management Tasks](#)
- [Notification Services Tasks](#)
- [Fault History Tasks](#)
- [Configuration Tasks](#)

# Alerts and Activities

This section provides information on DFM Alerts and Activities tasks in LMS 4.2

**Table 5-1 Alerts and Activities**

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Alerts and Activities</b>			
Getting Alert Details	CiscoWorks LMS Portal > Device Fault Manager > Alerts and Activities > Alerts and Activities > All Alerts	Monitor > Monitoring Tools:Fault Monitor	The Alerts and Activities display provides real-time information about the operational status of your network. The displays are designed so that you can set them up and leave them running. These displays have a monitoring tool that alerts you when something needs attention.
Suspended Devices View	CiscoWorks LMS Portal > Device Fault Manager > Alerts and Activities > Alerts and Activities > Suspended Devices	Monitor > Monitoring Tools:Event Monitor Or Monitor > Monitoring Tools: Fault Monitor	Devices not managed are displayed in the Suspended Devices view.

## Device Management Tasks

This section provides information on the following DFM Device Management tasks in LMS 4.2:

- [Device Import tasks](#)
- [Device Summary Tasks](#)
- [Rediscover/Delete Devices Tasks](#)
- [Device Details Tasks](#)
- [Discovery Status Tasks](#)
- [Device Aliases Tasks](#)
- [SNMP Config Tasks](#)

Table 5-2 Device Management Tasks

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Device Import tasks</b>			
Importing Devices into DFM	CiscoWorks LMS Portal > Device Fault Manager > Device Management > Device Import > Manual Allocation	Inventory > Device Administration: Add as Managed Devices	Manually adds DCR devices into LMS
Importing Devices into DFM	CiscoWorks LMS Portal > Device Fault Manager > Device Management > Device Import > Auto Allocation	Inventory > Device Administration: Device Allocation Policy	Automatically imports all DCR devices into LMS
<b>Device Summary Tasks</b>			
Device Summary and Device States	CiscoWorks LMS Portal > Device Fault Manager > Device Management > Device Summary	Inventory > Device Administration: Manage Device State	The Device Management Summary lists the device states for all devices in LMS.
<b>Rediscover/Delete Devices Tasks</b>			
Rediscovering and Deleting Devices	CiscoWorks LMS Portal > Device Fault Manager > Device Management > Rediscover/Delete	Admin > Collection Settings: Fault > Fault Management Rediscovery Schedule	You can rediscover specific devices. When rediscovery takes place, if there are any changes to a device or group configuration, the new settings will overwrite any previous settings.
<b>Device Details Tasks</b>			
Viewing Device Details	Device Management > Device Details	Monitor > Fault Settings: Setup > Fault Device Details	The Device Details display provides basic information about the device such as name, IP address, when it was added, and so on. The Device Details display opens and displays the information for the devices. You can also start a Detailed Device View (DDV) from this page, which is useful when you want to view details about a device that has no current alerts.
<b>Discovery Status Tasks</b>			
Verifying Device Import Using Discovery Status	Device Management > Discovery Status	Inventory > Device Administration: Discovery > Settings	After adding a device, you can verify that it has been imported by using the Discovery Status page.

Table 5-2 Device Management Tasks (continued)

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Device Aliases Tasks</b>			
Viewing Alias (Duplicate) Devices	Device Management > Device Aliases	Inventory > Device Administration: Device Aliases	The Alias Devices page lists all devices for which LMS has found duplicates. LMS considers a device to be an alias when its IP address, device name, or host name already exists in the DCR.
<b>SNMP Config Tasks</b>			
Modifying SNMP Timeout and Retries	Device Management > SNMP Config > Modify SNMP Configuration	Admin > Collection Settings: Fault > Fault Management SNMP Timeouts and Retries	Modifies SNMP timeouts and retries.

## Notification Services Tasks

This section provides information on the following DFM Notification Services tasks in LMS 4.2:

- [Notification Customization Tasks](#)
- [Event Sets Tasks](#)
- [Notification Groups Tasks](#)
- [SNMP Trap Notification Tasks](#)
- [E-Mail Configuration Tasks](#)
- [Syslog Notification Tasks](#)

Table 5-3 Notification Services Tasks

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Notification Customization Tasks</b>			
Customizing DFM Events	CiscoWorks LMS Portal > Device Fault Manager > Notification Services > Notification Customization	Admin > Network: Notification and Action Settings > Fault Notification customization	<p>Notification Services allows you to customize the names and event severity in LMS.</p> <p>Customizing Names: When you customize an event name, that name is reflected in all notifications, faults and in Fault History. The new event name is used for all instances of an event, regardless of the component on which the event occurs.</p> <p>The event severity can be customized using the New Event Severity feature. You can select either Critical, Warning or Informational from the drop-down list.</p>

Table 5-3 Notification Services Tasks (continued)

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Event Sets Tasks</b>			
Configuring Event Sets	CiscoWorks LMS Portal > Device Fault Manager > Notification Services > Event Sets	Admin > Network: Notification and Action Settings > Event Sets	You can apply as many event sets as you want to a notification group, thereby tracking the specific events in which you are interested. If you do not specify an event set, LMS will monitor all events and faults for notifications.
<b>Notification Groups Tasks</b>			
Configuring Notification Groups	CiscoWorks LMS Portal > Device Fault Manager > Notification Services > Notification Groups	Admin > Network: Notification and Action Settings > Fault Notification Group	<p>You can configure a maximum of 64 notification groups.</p> <p>The notification groups contains the following information:</p> <ul style="list-style-type: none"> <li>• One or more event sets, if desired (otherwise, the notification group will contain all events and faults)</li> <li>• Devices</li> <li>• Fault status and severity</li> <li>• Event status and severity</li> <li>• Fields for user-specified additional information you want to include with the subscription</li> <li>• Whether the group is static or dynamic</li> </ul>

Table 5-3 Notification Services Tasks (continued)

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>SNMP Trap Notification Tasks</b>			
Managing SNMP Trap Notifications	CiscoWorks LMS Portal > Device Fault Manager > Notification Services > SNMP Trap Notification	Admin > Network: Notification and Action Settings > Fault - SNMP trap notification	<p>The SNMP Trap Notifications page displays the following information:</p> <ul style="list-style-type: none"> <li>• Subscription—The name of the user-defined request for notification.</li> <li>• Status—The subscription status; can be either of the following: <ul style="list-style-type: none"> <li>– Running—LMS is using the subscription while monitoring faults to determine when to send a notification.</li> <li>– Suspended—LMS will not use the subscription unless you resume it.</li> </ul> </li> <li>• Notification Group—The name of notification group that is applied to the subscription.</li> </ul> <p>You are completely in control of subscriptions. LMS does not delete subscriptions under any circumstances.</p>
<b>E-Mail Configuration Tasks</b>			
Managing E-Mail Notification Subscriptions	CiscoWorks LMS Portal > Device Fault Manager > Notification Services > E-Mail Configuration > E-Mail Notification	Admin > Network: Notification and Action Settings > Fault - Email notification	The E-Mail Notification Subscription page displays information about subscription, status and notification group.
Managing E-Mail Subject Customization	CiscoWorks LMS Portal > Device Fault Manager > Notification Services > E-Mail Configuration > E-Mail Subject Customization	Admin > Network: Notification and Action Settings > Fault - Email subject customization	<p>E-Mail Subject Customization page is used to customize the e-mail subject for forwarded faults and events. You need to select the subjects and the order in which they are to be displayed. When you apply and save the selections, the e-mails are sent in the customized order.</p> <p>The E-Mail Subject Customization page displays the available subjects and the selected subjects for e-mail.</p>

**Table 5-3 Notification Services Tasks (continued)**

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Syslog Notification Tasks</b>			
Managing Syslog Notifications	CiscoWorks LMS Portal > Device Fault Manager > Notification Services > Syslog Notification	Admin > Network: Notification and Action Settings > Fault - Syslog notification	Shows information about subscription, status and notification groups.

## Fault History Tasks

This section provides information on the following DFM Fault History tasks in LMS 4.2:

- [Group/Device Filtering Tasks](#)
- [Alert/Event ID Filtering Tasks](#)

**Table 5-4 Fault History Tasks**

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Group/Device Filtering Tasks</b>			
Searching for Faults on Devices or Device Groups	CiscoWorks LMS Portal > Device Fault Manager > Fault History > Group/Device Filtering	Reports > Fault and Events: History > Device Fault	The Group/Device Filtering option is used to get information about the alerts and events that occur on a specific device or device group
<b>Alert/Event ID Filtering Tasks</b>			
Searching for Faults Using Event Criteria	CiscoWorks LMS Portal > Device Fault Manager > Fault History > Alert/Event ID Filtering	Reports > Fault and Event: History > Event Fault	The Event ID Filtering option is used to get information about all instances of events that occur in the network.

## Configuration Tasks

This section provides information on the following Configuration tasks under DFM in LMS 4.2:

- [Polling and Thresholds Tasks](#)
- [Other Configuration Tasks](#)

Table 5-5 Configuration Tasks

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Polling and Thresholds Tasks</b>			
Managing Polling Parameters	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Polling and Thresholds > Polling Parameters	Monitor > Fault Settings: Setup > Polling Parameters	This feature allows you to perform the following tasks: <ul style="list-style-type: none"> <li>Viewing Polling Parameters</li> <li>Editing Polling Parameters</li> <li>Saving and Applying Changes</li> <li>Restoring Factory Setting Polling Parameters</li> </ul>
Managing Thresholds	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Polling and Thresholds > Managing Thresholds	Monitor > Threshold Settings: Fault	You can manage thresholds for: <ul style="list-style-type: none"> <li>System Defined Groups</li> <li>Customizable Groups (for devices)</li> <li>System defined groups, for example Access Port Groups, Interface Groups and Trunk Port Groups and their own sub groups.</li> </ul>
Setting Priorities	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Polling and Thresholds > Setting Priorities	Monitor > Fault Settings: Setup > Priority Settings	System-defined groups have a higher priority than customizable groups, but you can change the priorities as needed. This is helpful, for example, when you configure specific customizable groups of interest and want to give them the highest priority.
Applying Changes	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Polling and Threshold > Apply Changes	Monitor > Fault Settings: Setup > Apply Changes	Changes to polling parameters, setting priorities and threshold values do not take effect until you apply changes, thereby reconfiguring LMS to use the new values. Similarly, after you resume devices or device components that were suspended from polling, you must apply changes for the device elements to be polled.  Your login determines whether you can perform this operation.



Table 5-5 Configuration Tasks (continued)

LMS 3.2 Task Name	LMS 3.2 Navigation	LMS 4.2 Navigation	Description
<b>Other Configuration Tasks</b>			
Managing Rediscovery Schedule	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Other Configurations > Rediscovery Schedule	Admin > Collection Settings: Fault > Fault Management Rediscovery Schedule	DFM rediscovery probes the devices to discover their configuration and verify their manageable elements in inventory.  DFM contains a default discovery schedule that starts rediscovery on a weekly basis. Although you cannot modify the default discovery schedule, you can suspend it and add, modify, or delete additional schedules
Using Group Management	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Other Configurations > Group Administration	Admin > System: Group Management > Fault Groups	The Group Administration and Configuration page is where all group management activities take place.  You can create and edit groups, refresh membership, delete groups and view details of groups in this page.
Daily Purging Schedule	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Other Configurations > Daily Purging Schedule	Admin > Network: Purge Settings > Fault History Purging Schedule	This feature helps you to change the schedule for trimming the Fault History database.
Configuring Logging	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Other Configurations > Logging	Admin > System: Debug Settings > Fault Debugging Settings	LMS saves the previous three logs as backups. You cannot disable logging. However, you can: <ul style="list-style-type: none"> <li>• Collect more data when needed by increasing the logging level</li> <li>• Return to the default logging level as the norm</li> </ul>
Configuring SNMP Trap Forwarding	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Other Configurations > SNMP Trap Forwarding	Admin > Network: Notification and Action Settings > Fault - SNMP trap forwarding	Set a host and port number to receive pass-through traps.

**Table 5-5** Configuration Tasks (continued)

<b>LMS 3.2 Task Name</b>	<b>LMS 3.2 Navigation</b>	<b>LMS 4.2 Navigation</b>	<b>Description</b>
Configuring SNMP Trap Receiving	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Other Configurations > SNMP Trap Receiving	Admin > Network: Notification and Action Settings > Fault - SNMP trap receiving settings	Set the port on which LMS will listen for SNMP traps (normally port 162).
Configuring a Default SMTP Server	CiscoWorks LMS Portal > Device Fault Manager > Configuration > Other Configurations > SMTP Default Server	Admin > Network: Notification and Action Settings > Fault - Email Notification	Add or change the default server to be used for e-mail notifications. Specifying a default server here will override the setting used by Common Services.