

# **Managing Devices**

After Prime Performance Manager discovers your network devices, you can view detailed information, perform management actions, and create individualized polling for discovered network devices.

Device views, the properties you can display, and the actions you can perform are described in the following topics:

- Displaying Device Information at the Network Level, page 8-2
- Managing Devices in the Network-Level View, page 8-16
- Displaying Device Information at the Device Level, page 8-23
- Managing Individual Devices, page 8-28
- Creating and Editing Device Polling Groups, page 8-29

# **Options for Displaying Device Information**

Prime Performance Manager provides many ways for you to see device information. Some are intended as a quick display of the highest priority device details; others are intended for detailed exploration of every single device parameter. Device information display options include:

- Network view—Displayed by choosing **Devices** from the Network menu. This view displays all network devices and allows you to see device information for all devices at one time. For information about parameters and editing options available in the network view, see Displaying Device Information at the Network Level, page 8-2.
- Device view—Displayed when you click a device hyperlink. Device hyperlinks appear in many locations including the device, alarms, and events windows. Information displayed at the individual device level is much the same as that displayed in network view, with some variations. For information about parameters and editing options available in the network view, see Displaying Device Information at the Device Level, page 8-23.
- Device Hyperlinks—You can view device details from device hyperlinks in one of two ways:
  - Mouse hover popup—A quick view of device details can be displayed when you move your cursor over a device hyperlink. The benefit of this option is speed.
  - 360 Device View—Clicking the icon next to a device hyperlink displays the 360 Network Device Details window. This window provides access to most device details including alarms and events. For information about this view, see Displaying the 360 Device Details View, page 8-21.

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The details displayed from device hyperlinks is controlled by the Details Displayed on Device Links option in User Preferences. For information, see Customizing the GUI and Information Display, page 3-7.

 Device Browser—You can display device details by clicking Device Browser at the bottom of the Prime Performance Manager window. The browser window displays key device details including polling data, uptime, alarms, and status. Options available in the network or device-level windows are available in the device browser.

# **Displaying Device Information at the Network Level**

The Prime Performance Manager network device view provides the broadest overview of your network devices. From this view you can drill down to different device details, as well as to individual devices for details about one device. (See Displaying Device Information at the Device Level, page 8-23.)

To display the network-level device view, from the Network menu, choose **Devices**. The Network Devices window displays the last updated time in the window title bar. If the gateway and client reside in the same time zone, one time is presented. If the gateway and client are in different time zones, both times are presented.

Device information areas, accessed from Network Devices window tabs, are displayed in Table 8-1.

Details	Description	For information, see
Devices	Lists all network devices and device properties.	Displaying Device Properties at the Network Level, page 8-3
Types	Displays a device distribution by device type.	Displaying Device Type Distributions at the Network Level, page 8-5
Alarms by Device	Displays alarms by device.	Displaying Alarms by Device at the Network Level, page 8-5
Alarms by Device Type	Displays alarms by device type.	Displaying Alarms by Device Type at the Network Level, page 8-6
SNMP Timeouts	Displays SNMP timeout alarms.	Displaying Device SNMP Time Out Alarms at the Network Level, page 8-7
Poll Response	Displays poll response data.	Displaying Device Poll Responses at the Network Level, page 8-7
Ping Response	Displays ICMP ping response data.	Displaying Device ICMP Ping Responses and Availability at the Network Level, page 8-8
Uptime	Displays device up time.	Displaying Device Network Up Time at the Network Level, page 8-8
Data Collection	Displays device data collection status.	
Software	Displays device software information.	Displaying Device Software at the Network Level, page 8-10
Contact/Location	Displays device contacts and locations.	Displaying Device Contacts and Locations at the Network Level, page 8-10

Table 8-1 Network-Level Device Information

Details	Description	For information, see
Vendor	Displays the device manufacturer.	
Prime Style	Displays device properties in Cisco Prime format.	Displaying Device Details in Cisco Prime Format, page 8-12

Table 8-1	Network-Level Device Information (continued)
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### **Displaying Device Properties at the Network Level**

Prime Performance Manager displays properties for all network devices in one view. To display them:

• From the Network menu, choose **Devices**.

All discovered network devices are displayed. Table 8-2 lists the available device properties. In addition, you can change the following items in User Preferences.

• Device details displayed from device hyperlinks—You can display device details from hyperlinks either as a popup that automatically appears when you move your mouse over the link, or in the 360 Network Device View window, which is displayed when you click an icon next to the hyperlink.

The device details displayed in the popup or 360 Network Device View are described in Table 8-2, and Table 8-11 on page 8-24. The details display option is useful in other windows that list device links, for example, the Network Active Alarms window, or when drilling down to the interface report level. However, you can disable this feature in User Preferences.

- Alarm severity icons—Devices include an alarm severity icon indicating the highest level alarm on the device. You can disable this feature in User Preferences.
- Deleted devices—Deleted devices, without hyperlinks, can be displayed by enabling this option in User Preferences.

For information about changing user preferences, see Customizing the GUI and Information Display, page 3-7

Property	Description
Internal ID <sup>1</sup>	Device internal ID. Prime Performance Manager assigns this ID to the device for internal use.
Unit <sup>2</sup>	Name of the unit to which the device is assigned.
Display Name	Device display name.
Custom Name <sup>1</sup>	Device custom name, if available.
Sync Name <sup>1</sup>	Device sync name.
IP Address or DNS Hostname <sup>1</sup>	Device IP address or DNS name as Prime Performance Manager discovered it.
System Name <sup>1</sup>	Device system name.
Management IP Address	IP address used to poll the device.

 Table 8-2
 Devices Properties at the Network Level

Property	Description	
Device Type	The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer.	
Vendor <sup>1</sup>	Device manufacturer.	
Software Version <sup>1</sup>	Device software version.	
Software Description <sup>1</sup>	Device software description, if available.	
Last Full Poll Time <sup>1</sup>	The time of the last Prime Performance Manager poll.	
Last Poll Response (secs) <sup>1</sup>	The time for the device to respond to the last SNMP poll requests.	
Avg. Poll Response (secs) <sup>1</sup>	Average time for the device to respond to Prime Performance Manager SNMP poll requests.	
Uptime <sup>1</sup>	Time the device has been up in days, hours, minutes, and seconds.	
Reboot Reason <sup>1</sup>	Reason for the last device reboot.	
Discovery Source <sup>1</sup>	Indicates how Prime Performance Manager discovered the device: PPM (Prime Performance Manager) or Prime Network. See Chapter 5, "Discovering Network Devices."	
Report Polling	Indicates whether report polling is enabled for this device.	
Severity	If alarms are raised for the device, the highest severity: Critical, Major, Minor, Warning, Informational, Unmanaged, or Normal.	
Last Status Change <sup>1</sup>	Date and time that the device status last changed.	
Status <sup>3</sup>	Current device status:	
	• Active—The device is active.	
	• Discovering—Prime Performance Manager is in the process of discovering the device; not all device details are known.	
	• Polling—Prime Performance Manager is polling the device.	
	• Unknown—Prime Performance Manager does not have the device details, possibly because connectivity is lost or other reasons.	
	• Unmanaged—Indicates a Prime Network device that is not managed by Prime Network.	
	• Waiting—Prime Performance Manager has sent a polling request and is waiting for a response.	
	• Warning—The device is in a warning status.	
Status Reason	Reason for the current device status. (If you cannot see all of the status reason text, place the cursor over the cell to see the full text in a tooltip.) The stateReasons.html provides a list of possible reasons,located at:	
-	/opt/CSCOppm-gw/apache/share/htdocs/eventHelp.	
Contact <sup>1</sup>	The device contact name, if added.	

Table 8-2 Devices Properties at the Network Level (continued)	Devices Properties at the Network Level (continued	I)
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Property	Description
Location <sup>2</sup>	The device location, if added. If GPS locations are enabled, the location is displayed as a hyperlink that, when launched, displays the device location in a separate Google Maps browser session.
Polling Group <sup>1</sup>	The polling group to which the device is assigned. See Creating and Editing Device Polling Groups, page 8-29
Report Policy <sup>1</sup>	The report policy to which the device is assigned. See Creating Report Policies, page 7-26.
Sending Alarms	Indicates whether the device is sending alarms. Users with authentication level Network Operator (level 3) and higher can edit this field. See Creating and Editing Device Polling Groups, page 8-29.

#### Table 8-2 Devices Properties at the Network Level (continued)

1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

2. Not displayed by default for device alarms; displayed for SNMP timeout alarms.

3. Not displayed by default for SNMP timeout alarms.

### **Displaying Device Type Distributions at the Network Level**

The Device Distributions page presents your device type distributions in table and pie chart format. Information includes the device type, the total number of devices, and the device type percentage within the network. To display device distributions:

• From the Network menu, choose Devices, then click Types.

Device Distribution fields include:

- Type—The name of the device platform, for example, Cisco1706, ONS15454.
- Total (*total number of devices*)—The total number of devices of a particular type.
- Percentage—The percentage of devices of this type out of all the discovered devices.

From the Device Distributions window, you can:

- Click a device type link to display all the devices of that type. From there you can drill down into individual devices to view reports, alarms, events, and other information described in Displaying Device Properties at the Network Level, page 8-3.
- Export the data to a CSV file.
- Send the distributions pie chart to a printer or graphic image.

### Displaying Alarms by Device at the Network Level

The Network Alarms by Device area displays a count of alarms by device and severity. You can display alarms by device from either the Devices or Alarms/Events windows:

• From the Network menu, choose either **Devices** or **Alarms/Events**, then click **Alarms by Device**.

Table 8-3 lists the Alarms by Device properties.

Column	Tool	Description
Internal ID <sup>1</sup>		Internal device ID. Prime Performance Manager assigns this ID to the device for internal use.
Device		Name of the device. When you click any of the device names, the Alarms tab of that device is displayed. This column is displayed by default.
Sending Alarms		Indicates whether the device is sending alarms. Users with authentication level Network Operator (level 3) and higher can edit this field. See Creating and Editing Device Polling Groups, page 8-29.
Last Status Change <sup>1</sup>	_	Date and time that the status of the device alarms last changed.
Total	_	Total number of alarms for the device.
Critical (alarm count) (alarm percentage)	$\otimes$	Total number of critical alarms for the device.
Major (alarm count) (alarm percentage)	V	Total number of major alarms for the device.
Minor (alarm count) (alarm percentage)	Δ	Total number of minor alarms for the device.
Warning (alarm count) (alarm percentage)	٩	Total number of warning alarms for the device.
Informational (alarm count) (alarm percentage)	1	Total number of informational alarms for the device.
Normal (alarm count) (alarm percentage)	<ul> <li>Image: A set of the set of the</li></ul>	Total number of normal alarms for the device.

1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

## **Displaying Alarms by Device Type at the Network Level**

The Network Alarms by Device Type area displays device alarm information organized by device types. You can display alarms by device type from either the Devices or Alarms/Events windows:

• From the Network menu, choose either **Devices** or **Alarms/Events**, then click **Alarms by Device Type**.

Network Alarms by Device Type displays the following information:

- Device Type—The device type, for example, Cisco7606 for Cisco 7606 Routers, CiscoONS15454 for Cisco ONS 15454 Multiservice Transport Platform, and so on.
- Total—The total number of alarms for the device type.
- Alarms—The following alarm totals are provided along with the total alarm count and alarm percentage:
  - Critical
  - Major

- Minor
- Warning
- Information
- Normal

## **Displaying Device SNMP Time Out Alarms at the Network Level**

The SNMP Timeout Alarms link displays the devices for which a Node Unreachable alarm is present. To display SNMP timeout alarms:

• From the Network menu, choose **Devices**, then click **SNMP Timeout**. The table displays the same device parameters as the Devices table. See Table 8-2 on page 8-3.

## **Displaying Device Poll Responses at the Network Level**

The Poll Response table displays the number of seconds devices take to respond to the Prime Performance Manager poll requests. To display the device poll responses:

• From the Network menu, choose **Devices**, then click **Poll Response**.

Table 8-4 lists the Poll Response information.

Column	Description
Internal ID <sup>1</sup>	Internal device ID. Prime Performance Manager assigns this ID to the device for internal use.
Unit <sup>1</sup>	Name of the unit to which the device is assigned.
Display Name	Name of the device.
Primary SNMP Address	IP address of the device, which SNMP uses to poll the device.
Device Type	The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer.
Location	The device location.
Report Polling	Indicates whether report polling is enabled for this device.
Last Full Poll Time	The date and time Prime Performance Manager last polled the device.
Last Poll Response	The time, in seconds, it took for the device to respond to the poll.
Avg. Poll Response (secs)	Average response time for the device to respond to poll from the Prime Performance Manager server.
Severity	The highest severity alarm currently raised on the device.

Table 8-4Device Average Poll Responses at the Network Level

1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

### **Displaying Device ICMP Ping Responses and Availability at the Network Level**

The ICMP Ping Response and Device Availability table displays the number of seconds devices take to respond to the Prime Performance Manager Internet Control Message Protocol (ICMP) pings, and the resulting device availability percentages.

Note

The ICMP Ping reports must be enabled in order for data to appear in the ICMP Ping Reponse and Device Availability table. The ICMP Ping reports are located in the Availability report group.

To display ICMP ping results and device availability:

• From the Network menu, choose Devices, then click Ping Response.

The following information is displayed:

- Last ICMP Response—The time required for the device to respond to the last ICMP ping.
- Availability—Based upon the ping responses, the device availability is provided for the previous and current time periods for the following intervals:
  - 15 Minutes
  - Hourly
  - Daily
  - Weekly
  - Monthly

#### **Displaying Device Network Up Time at the Network Level**

The Uptime link displays the uptime for managed devices. To display device uptimes:

• From the Network menu, choose Devices, then click Uptime.

Table 8-5 lists the device up time properties.

Table 8-5Device Up Time

Column	Description	
Internal ID <sup>1</sup>	Internal device ID. Prime Performance Manager assigns this ID to the device for internal use.	
Unit <sup>1</sup>	Name of the unit to which the device is assigned.	
Display Name	The device display name.	
Device Type	The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer.	
Uptime	Time the device has been up, in days, hours, minutes, and seconds.	
Reboot Reason	Reason for the last reboot of the device.	
Severity	Indicates the highest alarm severity for the chosen device: Critical, Major, Minor, Warning, Informational, Unmanaged, or Normal.	

1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

### **Displaying Device Data Collection Status at the Network Level**

The Network Data Collection table allows you to quickly see the data collection status of devices across the network. To display the device data collection status:

• From the Network menu, choose Devices, then click Data Collection.

 Table 8-6 lists the data collection status parameters. ICMP, SNMP, Hypervisor, CLI, CSV Bulk

 Stats, NetFlow, JMX, DCM Bluk Stats, Status, Last Full Poll Time

Column	Description
Internal ID <sup>1</sup>	Internal device ID. Prime Performance Manager assigns this ID to the device for internal use.
Device Name	The display name of the device.
ICMP	Indicates whether the device IP data collector is active, inactive, or not configured for polling.
SNMP	Indicates whether the device SNMP data collector is active, inactive, or not configured for polling.
Hypervisor	Indicates whether the device Hypervisor data collector is active, inactive, or not configured for polling.
CLI	Indicates whether the device CLI data collector is active, inactive, or not configured for polling.
CSV Bulk Stats	Indicates whether the device CSV bulk statistics data collector is active, inactive, or not configured for polling.
NetFlow	Indicates whether the device NetFlow data collector is active, inactive, or not configured for polling.
JMX	Indicates whether the device Java Management Extensions data collector is active, inactive, or not configured for polling.
DCM Bulk Stats	Indicates whether the Cisco Digital Collection Manager bulk statistics data collector is active, inactive, or not configured for polling.

 Table 8-6
 Data Collection Parameters

Column	Description
Last Full Poll <sup>1</sup> Time	The date and time of the last full poll of the device for device-related MIBs.
Status	Current device status:
	• Active—The device is active.
	• Discovering—Prime Performance Manager is in the process of discovering the device; not all device details are known.
	• Polling—Prime Performance Manager is polling the device.
	• Unknown—Prime Performance Manager does not have the device details, possibly because connectivity is lost or other reasons.
	• Unmanaged—Indicates a Prime Network device that is not managed by Prime Network.
	• Waiting—Prime Performance Manager has sent a polling request and is waiting for a response.
	• Warning—The device is in a warning status.

Table 8-6 Data Collection Parameters (continu
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1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

### **Displaying Device Software at the Network Level**

The Network Software table lists the software versions and descriptions for each device in the Prime Performance Manager network. To display the device software information:

• From the Network menu, choose Devices, then click Software.

Table 8-7 lists the Software parameters.

 Table 8-7
 Device Software at the Network Level

Column	Description
Display Name	Name of the device.
Device Type	The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer.
Software Version	Software version used by the device.
Software Description	Full software version information.

## **Displaying Device Contacts and Locations at the Network Level**

The Contacts/Locations link displays the device contacts and locations if that information was entered for the device. To display the device contacts and locations:

• From the Network menu, choose Devices, then click Contacts/Locations.

 Table 8-8 lists the Contact and Location properties.

Column	Description
Internal ID <sup>1</sup>	Internal device ID. Prime Performance Manager assigns this ID to the device for internal use.
Display Name	The device display name.
IP Address or DNS Hostname <sup>1</sup>	IP address or DNS name of the device, as the Prime Performance Manager discovered it.
SysName <sup>1</sup>	System name of the device.
Management IP Address <sup>1</sup>	The IP address that SNMP uses to poll the device.
Device Type	The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer.
Contact	The device contact name.
Location	The device location.
Status	Current device status:
	• Active—The device is active.
	• Discovering—Prime Performance Manager is in the process of discovering the device; not all device details are known.
	• Polling—Prime Performance Manager is polling the device.
	• Unknown—Prime Performance Manager does not have the device details, possibly because connectivity is lost or other reasons.
	• Unmanaged—Indicates a Prime Network device that is not managed by Prime Network.
	• Waiting—Prime Performance Manager has sent a polling request and is waiting for a response.
	• Warning—The device is in a warning status.

Table 8-8	Device Contacts and Locations at the Network Level

1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

## **Displaying Device Vendors at the Network Level**

The Vendors link displays the device types, manufacturers, and status. To display the device vendor information:

• From the Network menu, choose Devices, then click Vendor.

Table 8-9 displays the device vendor information.

Column	Description
Internal ID <sup>1</sup>	Internal device ID. Prime Performance Manager assigns this ID to the device for internal use.
Display Name	The device display name.
IP Address or DNS Hostname <sup>1</sup>	IP address or DNS name of the device, as the Prime Performance Manager discovered it.
System Name <sup>1</sup>	System name of the device.
Management IP Address <sup>1</sup>	The IP address that SNMP uses to poll the device.
Device Type	The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer.
Vendor	The device manufacturer.
Status	The device status, for example, Active.

	Table 8-9	Device	Vendor	Information
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1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

### **Displaying Device Details in Cisco Prime Format**

If Prime Performance Manager is integrated with Cisco Prime Central (see "Prime Central Integration"), you can display the device details in a format that matches Prime Central. Because fewer properties are displayed than the Devices tab, Prime Style can provide a quick look at the Prime Performance Manager devices in an organization that aligns with their display in Prime Central.

To display Prime Performance Manager device details in Prime Central format:

• From the Network menu, choose **Devices**, then click **Prime Style**.

Table 8-8 lists the device properties displayed in the Prime Style tab.

Column Description Internal ID<sup>1</sup> Internal device ID. Prime Performance Manager assigns this ID to the device for internal use. Unit<sup>1</sup> The unit to which the device is assigned. Device Name IP address or DNS name of the device, as the Prime Performance Manager discovered it. Device Type The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer. Vendor The device manufacturer.

Table 8-10Device Details in Prime Style

Column	Description
Status	Current device status:
	• Active—The device is active.
	• Discovering—Prime Performance Manager is in the process of discovering the device; not all device details are known.
	• Polling—Prime Performance Manager is polling the device.
	• Unknown—Prime Performance Manager does not have the device details, possibly because connectivity is lost or other reasons.
	• Unmanaged—Indicates a Prime Network device that is not managed by Prime Network.
	• Waiting—Prime Performance Manager has sent a polling request and is waiting for a response.
	• Warning-—The device is in a warning status.
Management IP Address	IP address used to poll the device.
Software Version	The software version installed on the device.
System Name	The device system name.

Table 8-10 Device Details in Prime Style (continued)
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1. Not displayed by default. To display hidden properties, see Adding and Removing Properties from Property Views, page 3-16.

### Adding Device Topologies to Network Weathermap

Network Weathermap is a third party, open-source software application that takes data from your network devices and uses it to display a single-page overview of the current network state. You can add Network Weathermap to Prime Performance Manager and display Prime Performance Manager device topologies on it.

The following topics tell you how to download and install Network Weathermap, and how to create and manage Network Weathermap device topologies.

- Installing Network Weathermap, page 8-14
- Adding Device Topologies to Network Weathermap, page 8-14
- Editing Network Weathermap Device Topologies, page 8-15
- Deleting a Network Weathermap Device Topologies, page 8-15

If you add Network Weathermap to Prime Performance Manager, remember that it is not a Cisco application. If you do not know how to use Network Weathermap, visit the developer's website for user documentation, software release information, and other product details. Information for using Network Weathermap is not provided in this guide.

http://http://www.network-weathermap.com/

#### Installing Network Weathermap

To install Network Weathermap:

Step 1	Configure the HTTP server in Red Hat Linux
	yum install httpd.*
Step 2	Install the PHP and GD library:
	yum install php yum install php-gd
Step 3	Download the Weathermap 0,97c:
	http://www.network-weathermap.com/download
Step 4	Copy the downloaded weathermap zip file to /var/www/html
Step 5	Unzip the file.
	Weathermap files are placed in /var/www/html/weathermap
Step 6	In the weathermap directory, open editor.php with a text editor and change \$ENABLED to true.
Step 7	Start the server:
	service httpd start
Step 8	Enable the Weathermap using the ppm networktopology command:
	/opt/CSCOppm-gw/bin/ppm networktopology enable
Step 9	Log into Prime Performance Manager. See Launching the Web Interface, page 3-1 for procedures.
Step 10	From the Network menu, choose <b>Devices</b> .
	On the far right, you will see the Topology and Weathermap tabs.
Step 11	Continue with the "Adding Device Topologies to Network Weathermap" procedure on page 8-14 to create a device topology and display it on the Network Weathermap.

#### Adding Device Topologies to Network Weathermap

After you install and enable Network Weathermap, you can create a topology of selected Prime Performance Manager devices and add them to the Network Weathermap.

Note

To add a toplogy you must know the source and destination devices that comprise each topology link.

To add a device topology to Network Weathermap:

- Step 1 Log into Prime Performance Manager. See Launching the Web Interface, page 3-1 for procedures.
- **Step 2** From the Network menu, choose **Devices**.
- Step 3 Click the **Topology** tab.
- Step 4 Click Add Topology.
- **Step 5** In the Add Topology Name dialog box, enter the topology name,

Step 6	Click <b>OK</b> .
	A list of available devices is displayed.
Step 7	Click the device that you want to be the source for your first topology link.
Step 8	Click the device that you want to be the destination for your first topology link.
	The new link is displayed under Links.
Step 9	Repeat Steps 7 and 8 until you have added all the links that you want in your Network Weathermap topology.
	• You can add up to 30 links.
	• Use the Next Page and Previous Page toolbar tools to navigate the devices.
	• The first column switches between Source and Destination to help you track the device to add next.
Step 10	When the topology is finished, click <b>Submit</b> .
Step 11	Click the <b>Weathermap</b> tab.
	Your device topology is displayed.
Step 12	Manage the map following instructions provided in the Network Weathermap documentation. You can

http://www.network-weathermap.com/docs

download the documentation from the following website:

#### **Editing Network Weathermap Device Topologies**

To edit a Network Weathermap device topology:

Step 1	Log into Prime Performance Manager. See Launching the Web Interface, page 3-1 for procedures.
Step 2	From the Network menu, choose <b>Devices</b> .
Step 3	Click the <b>Topology</b> tab.
	The available topologies are displayed.
Step 4	Click the topology you want to edit, then click EditTopology.
	The device list and created topologies are displayed.
Step 5	As necessary, add links by clicking the source and destination devices you want to add, or choose a link and click <b>Delete Selected Link</b> .
Step 6	When finished, click <b>Submit</b> .
Step 7	Click Weathermap to view the updated topology.

#### **Deleting a Network Weathermap Device Topologies**

To remove a Network Weathermap device topology:

- Step 1 Log into Prime Performance Manager. See Launching the Web Interface, page 3-1 for procedures.
- **Step 2** From the Network menu, choose **Devices**.

Step 3	Click the <b>Topology</b> tab.
	The available topologies are displayed.

**Step 4** Click the topology you want to remove, then click **Delete Topology**.

#### **Uninstalling Network Weathermap**

If you want to remove Network Weathermap from Prime Performance Manager, you can either disable it using the ppm networktopology disable command, or uninstall it.

To uninstall Network Weathermap:

- **Step 1** Remove weathermapzip file and weather map folder from /var/www/html.
- **Step 2** Uninstall the PHP and GD libraries:

yum erase php-gd yum erase php

Step3:

**Step 3** Uninstall the HTTP server in Red Hat Linux:

yum erase httpd\*

## **Managing Devices in the Network-Level View**

At the network-level device view, operator or higher users can perform some device modifications. To manage network devices:

- **Step 1** From the Network menu, choose Devices.
- **Step 2** Navigate to one of the following device view tabs:
  - Devices
  - Types
  - Alarms by Device
  - Alarms by Device Type
  - SNMP Timeouts
  - Poll Response
  - Ping Response
  - Uptime
  - Software
  - Contact/Locations
  - Vendor
  - Prime Style

See Displaying Device Information at the Network Level, page 8-2 for information on displaying these views.

- **Step 3** Select a device. Press **Shift** to select multiple contiguous devices, or **Ctrl** to select devices that are not contiguous.
- **Step 4** From the Actions menu (located just above the device table), choose any of the following actions.
  - Poll Device—Polls the devices selected in the device list.
  - Edit Properties—Allows you to edit the device display name and default web port. See Editing a Device Name, Web Port, Time Zone, and Location, page 8-17.
  - Edit Device Credentials—Allows you to edit the device SNMP or Telnet/SSH credentials used to poll the device. See Editing the Device Credentials, page 8-18.
  - Edit Report Policy—Allows you to change the report policy assigned to the device. See Editing the Report Policy Assigned to a Device, page 8-20
  - Edit Polling Policy—Allows you to change the polling policy assigned to the device. See Creating and Editing Device Polling Groups, page 8-29 and Editing the Polling Group Assigned to a Device, page 8-20.
  - Edit Management IP Addresses—Allows you to edit a device management IP addresses. See Editing the Device Management IP Addresses, page 8-20.
  - Relocate Device—Allows you to relocate a device from one unit to another. See Relocating Devices to Units, page 8-21.
  - Disable Sending Alarms—Disables sending alarms from the selected device.
  - Enable Sending Alarms—Enables sending alarms from the selected device.
  - Unmanage Device—Changes managed devices to unmanaged.
  - Manage Device—Changes unmanaged devices to managed.
  - Delete—Deletes the selected device(s).



If multiple devices are selected, not all actions are available.

**Step 5** To check device connectivity, from the device toolbar, click one or both of the following:

- Ping—Pings the device and displays the results in a Ping Device: [device name] window.
- Traceroute—Runs the traceroute command to detail the route from the gateway to the device and displays the results in a Traceroute Device: [*device name*] window.



You can also use the ppm ping and ppm traceroute commands to check device connectivity. See ppm ping, page B-53 and ppm traceroute, page B-84.

### Editing a Device Name, Web Port, Time Zone, and Location

Within the device network view, you can change the device name, web port, time zone and location. To edit these device properties:

- Step 1 Navigate to one of the following device views: Devices, Device Distribution, SNMP Timeout Alarms, Software, Average Poll Response, Uptime, Contact/Locations. (For information on displaying these views, see Displaying Device Information at the Network Level, page 8-2.)
- **Step 2** In the device list, select the device whose name you want to edit.
- Step 3 From the Actions menu, choose Edit Properties
- **Step 4** In the Edit Properties dialog box, edit the following properties:
  - Name—Name of the device. The name is green for valid inputs and red for invalid inputs. The name may include up to 100 alphanumeric and the special characters hyphen (-), underscore (\_), period (.), and colon (:). If you enter an invalid name, the Save option is disabled. After saving, the new name is displayed in the navigation tree and in the Details panel. The character '.' is allowed only when the resulting name is a valid hostname.
  - Default Web Port—Should you wish to change the default device web port, enter the web port number.
  - Time Zone—Should you wish to change the device time zone, enter the time zone by typing the first letters. The field will populate with time zones matching the letters you entered.
  - Location—The device location, which is displayed in the device Location property. If GPS Locations is enabled (see Changing System Configuration Settings, page 3-13), the location you enter is used to display the device location in Google Maps. If GPS is enabled, be sure to enter sufficient location information to enable Google Maps to display the device location accurately.

Step 5 Click Save.

### **Editing the Device Credentials**

To edit the device SNMP or Telnet/SSH credentials:

- Step 1 Navigate to one of the following device views: Devices, Device Distribution, SNMP Timeout Alarms, Software, Average Poll Response, Uptime, Contact/Locations. (For information on displaying these views, see Displaying Device Information at the Network Level, page 8-2.)
- **Step 2** In the device list, select the device whose credentials you want to edit.
- **Step 3** From the Actions menu, choose **Edit Device Credentials**.
- **Step 4** In the Edit Device Credentials dialog box, edit any of the following:

SNMP

- SNMP Version—Indicate the SNMP version, either 1, 2c, or 3.
- Max Table Varbind—Sets the maximum table variable binding.
- Port—Sets the SNMP port number.

SNMP v1, v2

• Read Community—The SNMP community name used by the device for read access to the information maintained by the SNMP agent on the device.

SNMP v3

- User Name—The user name.
- Authentication Protocol—The authentication protocol:

- md5—Uses the Hash-based Message Authentication Code (HMAC) MD5 algorithm for authentication
- sha—Uses the HMAC SHA algorithm for authentication
- Privacy Protocol—The privacy protocol:
  - 3des—Uses Data Encryption Standard (DES).
  - des—Uses the Data Encryption Standard (DES).
  - aes128—Uses Advanced Encryption Standard (AES) 128-bit encryption.
- Privacy Password—The privacy password.

#### Telnet/SSH

- ID—An internal identifier.
- Connection Protocol—Choose the transport protocol to be used to communicate with device:
  - Telnet—Telnet
  - SSHv1—SSH Version 1
  - SSHv2—SSH Version 2
  - WSMA\_SSH—Web Services Management Agent over SSHv2. WSMA is an infrastructure framework that allows external applications to monitor and control Cisco devices. WSMA uses transports such as SSH, HTTP, and HTTPS to access a set of Web Services agents residing on the Cisco device.
  - vCenter\_HTTPs
  - vCenter\_HTTP
  - ESXi\_HTTPs
  - ESXi\_HTTP
  - XEN\_TLS
  - KVM\_TLS
  - HyperV\_HTTPs
  - HyperV\_HTTP
- User Name—The device login username.
- Password—The password for the login user.
- Enable User Name—The privileged username.
- Enable Password—The privileged user password.
- Port—The device port to be used by the transport protocol chosen in the Protocol field.
- Sub System—The subsystem used by transport protocol. If the subsystem is defined on the device, enter it here. A blank string is the default subsystem for SSH. The default subsystem for WSMA is "wsma".

#### Step 5 Click Save.

The edited credentials are saved for the device.

### **Editing the Report Policy Assigned to a Device**

To edit the report policy assigned to a device:
Step 1 Navigate to one of the following device views: Devices, Device Distribution, SNMP Timeout Alarms, Software, Average Poll Response, Uptime, Contact/Locations. (For information on displaying these views, see Displaying Device Information at the Network Level, page 8-2.)
Step 2 In the device list, select the device whose report policy you want to edit.
Step 3 From the Actions menu, choose Edit Report Policy.
Step 4 In the Edit Report Policy dialog box, choose the report policy that you want assigned to the device from the Report Policy policy list.
Step 5 Click Save.

### **Editing the Polling Group Assigned to a Device**

To edit the polling group assigned to a device:

- Step 1 Navigate to one of the following device views: Devices, Device Distribution, SNMP Timeout Alarms, Software, Average Poll Response, Uptime, Contact/Locations. (For information on displaying these views, see Displaying Device Information at the Network Level, page 8-2.)
- **Step 2** In the device list, select the device whose polling group you want to edit.
- Step 3 From the Actions menu, choose Edit Polling Group.
- **Step 4** In the Polling Group Details dialog box, edit the following properties:
  - Polling Group—Allows you to assign a different polling policy to the device. For information about creating and editing polling policies, see Creating and Editing Device Polling Groups, page 8-29
  - Timeout—The timeout duration in seconds configured in the polling policy. Timeout is not editable unless you choose This Device Only in the Polling Policy field.
  - Retries—The number of times Prime Performance Manager will retry a connection after a timeout configured in the polling policy. Retries is not editable unless you choose This Device Only in the Polling Policy field.

Step 5 Click Save.

## **Editing the Device Management IP Addresses**

To edit the polling group assigned to a device:



The Edit SNMP IP Addresses option is available only for the users with authentication Level 5.

Step 1	Navigate to one of the following device views: Devices, Device Distribution, SNMP Timeout Alarms,
	Software, Average Poll Response, Uptime, Contact/Locations. (For information on displaying these
	views, see Displaying Device Information at the Network Level, page 8-2.)

- **Step 2** In the device list, select the device whose management IP addresses you want to edit.
- Step 3 From the Actions menu, choose Edit Management IP Addresses.

The Edit Management IP Address dialog box displays the following:

- Available IP Addresses—Lists all IP addresses not associated polling.
- IP Addresses for Management—Lists the IP addresses associated with the device, including the primary SNMP address and all backup IP addresses.
- **Step 4** Click any of the following:
  - Add—Adds the IP Addresses from the Available IP Address box to the IP Addresses for Management box. This option is disabled if there is no IP address in the Available IP Address box.
  - **Remove**—Removes the IP Addresses from the IP Addresses for Management box and adds them to the Available IP Addresses box. This option is disabled if there is no IP address in the IP Addresses for Management box.
  - **Raise**—Moves the selected IP address up one level in the IP Addresses for Management box. This option is disabled if there is only one IP address in the IP Addresses for Management box.
  - Lower—Moves the selected IP address down one level in the IP Addresses for Management box. This option is disabled if there is only one IP address in the IP Addresses for Management box.
- Step 5 When finished, click Save.

### **Relocating Devices to Units**

To relocate a device to a different unit:

Step 1	Navigate to one of the following device views: Devices, Device Distribution, SNMP Timeout Alarms, Software, Average Poll Response, Uptime, Contact/Locations. (For information on displaying these views, see Displaying Device Information at the Network Level, page 8-2.)
Step 2	In the device list, select the device that you want to relocate.
Step 3	From the Actions menu, choose Relocate Device.
Step 4	In the Relocate Device dialog box, choose the unit to which you want to assign the device from the Units list.
Step 5	Click Save.

#### **Displaying the 360 Device Details View**

The Details Displayed on Device Links user preference allows you to display a 360 device details view when you click the link icon next to device hyperlinks. (The 360 device details view is enabled by default. To customize user preferences, see Customizing the GUI and Information Display, page 3-7.)

To display the 360 device details view:

- **Step 1** Navigate to a device hyperlink in one of the following windows:
  - Devices tab in the Network Devices window.
  - Alarms or Events window.
  - Reports window.
  - Click the view icon located to the right of the device hyperlink.
- **Step 2** Mover your cursor over a device link and click the display tool icon to the right of the link.

The 360 Network Device Details window appears. Information displayed from the window includes:

- Device name and IP address.
- Software and polling information
- CPU and memory utilization, and the last total poll response, CPU and memory utilization is the average for the specified time period, The timestamp is the beginning of the interval.
- Tabs that allow you to display device alarms, events, availability, collector status, and polling information.
- Tools at the top of the window allow you to display device alarms in the Alarms window, display the Cisco support website, and run ping and traceroute commands on the device.

#### Figure 8-1 360 Network Device Details



1	Alarms, support, ping, and traceroute tools.	5	CPU and memory utilization, average poll response
2	Device name and IP address	6	Device information selection tabs
3	Device location	7	Device information display
4	Software and polling information		

# <u>Note</u>

Not all information is displayed for Basic users.

## **Displaying Device Information at the Device Level**

Prime Performance Manager allows you to drill down to individual devices and review additional parameters and details not displayed at the network level. including device-level reports, dashboards, properties, event history, active alarms, status, and availability.

Device time stamps can be displayed in the device time zone by enabling the Display Device Level Data in Device Time Zone option in User Preferences. Time stamps affected by this option include the time stamp displayed in report titles, calendar popup selections, summary table maximum date strings, graph date strings, tooltip hover information, the Timestamp column in report table format, and the Timestamp values in exported CSV files. For information about changing user preferences, see Customizing the GUI and Information Display, page 3-7.

To display individual device information:

- **Step 1** Navigate to one of the following:
  - Performance menu > Reports > Choose a report. > Click a device link in the report.
  - Network menu > Devices
  - Network menu > Alarms/Events
  - System menu > Gateways/Units
  - If you attached devices to custom report views, display the view or subview. (For information about custom report views, see Creating and Managing Custom Report Views, page 7-46.)
- **Step 2** Click a device link or, if you are displaying a custom view, display the view or subview containing the device.

At the individual device view, the following is displayed:



**Note** In addition to the menus listed below, custom report views and subviews with attached devices will display a View and View Editor menus. For information, see Creating and Managing Custom Report Views, page 7-46.

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**Step 3** To close the window, click the Close icon at the top right. The window closes automatically if you navigate to other windows.

- Reports—Allows you display any report that is generated for the device. The reports that are available depend upon the device hardware and network provisioning. In many cases, you can drill down to detailed device component reports, for example, interfaces and ports. For additional information about the Prime Performance Manager reports, see Chapter 7, "Managing Reports, Dashboards, and Views."
- Dashboards—Allows you display any dashboard that can be generated for the device based upon the hardware and technologies that are provisioned for it. Like reports, you can often drill down to view device component dashboards. For additional information about the Prime Performance Manager reports, see Managing Dashboards, page 7-43.
- Details—Displays the detailed device information listed in Table 8-11.

Section	Field	Description
Toolbar	Actions menu	Allows you to modify device parameters. See Managing Individual Devices, page 8-28.
	Ping	Pings the selected device.
	Traceroute	Runs a traceroute to the selected.
	Launch	Launches the device home page.
Naming	Display Name	The device display name.
Information	Custom Name	The custom device name, if one is defined. If not, this field displays Unknown.
	Sync Name	If devices were imported from Prime Network, the device name (or business tag, if defined) as it appears in Prime Network.
	IP Address or Host Name	The device IP address or DNS name, as discovered by Prime Performance Manager.
	System Name	The name set on the router and returned, using the SNMP variable sysName.
	Unit	The name of the unit to which the device belongs.
	Homepage	Provides a link to the device home page.
	Report Policy	If the device has a report policy, the policy is displayed here. If the device doesn't have a policy, None is displayed. Clicking its link takes you to the Report Policy tab.

#### Table 8-11 Device Details at the Device Level

Section	Field	Description
Status	Sending Alarms	Indicates whether the device is sending alarms, Yes or No.
Information	Alarm Severity	Indicates the alarm severity of the object.
	Status	Current device status:
		• Active—The device is active.
		• Discovering—Prime Performance Manager is in the process of discovering the device; not all device details are known.
		• Polling—Prime Performance Manager is polling the device.
		• Unknown—Prime Performance Manager does not have the device details, possibly because connectivity is lost or other reasons.
		• Unmanaged—Indicates a Prime Network device that is not managed by Prime Network.
		• Waiting—Prime Performance Manager has sent a polling request and is waiting for a response.
		• Warning—The device is in a warning status.
	Last Status Change	Date and time when the device status was last changed.
	Status Reason	Reason for the current device status. (If you cannot see all of the status reason text, place the cursor over the cell to see the full text in a tooltip.) A list of possible reasons is provided in the stateReasons.html, located at:
		/opt/CSCOppm-gw/apache/share/htdocs/eventHelp.
Device Performance	Memory Utilization	Displays the memory utilization at the time of the poll. If the device has multiple memory pools, the utilization is the average of the pools. Text color is based on the Enabled Colors user preference:
		• Off—Text is not color coded.
		• On—Text follows the ascending metric.
		• Red/Orange/Gold Only—follows the ascending metric, with the exception of green.
		For information about user preferences, see Customizing the GUI and Information Display, page 3-7.
	CPU Utilization	Displays the memory utilization at the time of the poll. If the device has multiple CPUs, the utilization is the average of the CPUs. Text color is also based on the Enabled Colors user preference.
Descriptive Information	Contact	The contact person for the managed device and contact information, if available. If the contact details are not available, this field displays Unknown.

#### Table 8-11 Device Details at the Device Level (continued)

Section	Field	Description
	Software Version	The software version (for example, the ONS package or IOS version) that is installed on the device.
	Software Description	Comprehensive information about the software that is installed on the device.
	Device Type	The device type, which is usually based on the device family, for example, Cisco1706 for Cisco 1706 Series Routers. If the device family type is not known, IP Device is displayed. Prime Performance Manager gateway and unit servers are listed as ciscoGatewayServer and ciscoUnitServer.
	Location	The device physical location. If the device location details are not available, this field displays Unknown.
	Vendor	The device manufacturer.
Uptime Information	Uptime	The time the device has been up, in days, hours, minutes, and seconds.
	Reboot Time	The date and time of the last device reboot.
	Reboot Reason	The reason for the last reboot of the device.

#### Table 8-11 Device Details at the Device Level (continued)

• Data Collection—Displays the data collection information for the device shown in Table 8-12.

#### Table 8-12 Device Data Collection at the Device Level

Section	Field	Description
Polling Information	Status	Indicates the device status. See Table 8-2 on page 8-3 for a list of device statuses.
	Report Polling	Indicates whether report polling is enabled for this device.
	First Discovered	The date and time when Prime Performance Manager first discovered the device.
	Last Poll IP Address	The last IP address that was polled for this device.
	Last Capability Full Poll Time	The last time the device capabilities were assessed. This query is performed once every 24 hours at a minimum. It also occurs when Prime Performance Manager detects a device configuration or entity change, or when the SystemCapabilities or UserCapabilities file changes.
	Last Full Poll Time	The date and time of the last full poll of the device for device-related MIBs.
	Last Poll Response (secs)	The time, in seconds, taken by this device to respond to the last poll request.
	Avg Poll Response (secs)	The average time, in seconds, taken by this device to respond to poll requests.
	Polling Group	The polling group to which the device is assigned. For information about polling groups, see Creating and Editing Device Polling Groups, page 8-29.

Section	Field	Description	
	Report Policy	The report policy assigned to the device. If no report policy is assigned, the field will display "This device only." For information about report policies, see Creating Report Policies, page 7-26.	
Collector Status	ICMP	Indicates whether the Internet Control Message Protocol is active.	
	SNMP	Indicates whether data has been retrieved through SNMP. Will be Active unless data has never been retrieved using SNMP.	
	Hypervisor	Indicates whether a hypervisor is active. This will normally be active for VM devices.	
	CLI	Indicates whether an XML poll was performed:	
		• Active—A successful XML poll has occurred.	
		• Not Configured—An XML poll was never performed.	
		• Not Active—An XML poll failed because of credentials.	
	CSV Bulk Stats	Indicates whether CSV bulk stats were collected. This will be Not Configured for any device other than the Cisco ASR 5000. For the Cisco ASR 5000, the field will display:	
		• Not Configured—If no CSV poll was conducted.	
		• Active—If a successful CSV poll occurred and bulk stats results were available.	
		• Not Active—If a successful CSV poll occurred but no bulk stats were available.	
	Netflow	Indicates whether Netflow data was collected.	
		• Active—The device is configured to export NetFlow and the collector is receiving the flows regularly.	
		• Not Active—The device is configured for NetFlow but it might not be receiving flows recently.	
		• Not Configured—The device is not configured for NetFlow export.	
	JMX	Indicates whether Java Management Extensions data was collected.	
	DCM Bulk Stats	Indicates whether Cisco Data Collection Manager bulk stats were collected.	

#### Table 8-12 Device Data Collection at the Device Level

Section	Field	Description
IP Addresses for Management	IP Address	IP addresses associated with this device, including the primary SNMP address and all backup IP addresses that are intended for SNMP.
	Last Full Poll Time	The date and time of the last full poll of the device. If the IP address has never been polled, Prime Performance Manager displays Never Polled.
	Manageable	Indicates whether the IP address is used for SNMP polling, Yes or No.

- Event History—Displays events that have occurred on the device. For a list of event parameters, see Table 9-1 on page 9-2.
- Active Alarms—Displays alarms that have been raised on the device. For a list of event parameters, see Table 9-1 on page 9-2.
- Report Status—Displays the reports available for the device.
- Availability—Displays device availability information in table and bar chart format. Availability increments include current and last 15 minutes, hour, day, week and month.
- Star Graphs—Allows you to add selected charts from multiple device reports and effectively create a custom report view for a specific device. For information, see Creating Custom Device Star Graphs, page 7-15.
- Device Status—Displays information from the Details, Data Collection, Event History, Active Alarms, and Availability tabs in a snapshot device status view.

Note

When you select an individual device, it is added to the Devices navigation list so you can go back to it at any later point during the session. For example, if you select five devices, Device 1, Device 2, Device, 3, Device 4, and Device 5, these devices will appear in the navigation area so you can display them at any point.

# **Managing Individual Devices**

When you drill down to an individual device, you can perform the management actions that you can perform from the device summary window.

To manage an individual device:

#### **Step 1** Navigate to one of the following:

- Performance menu > Reports > Choose a report. > Click a device link in the report.
- Network menu > Devices
- Network menu > Alarms/Events
- System menu > Gateways/Units

- If you attached devices to custom report views, display the view or subview. (For information about custom report views, see Creating and Managing Custom Report Views, page 7-46.)
- **Step 2** Click a device link or, if you are displaying a custom view, display the view or subview containing the device.
- Step 3 Click the **Details** tab.
- **Step 4** From the Actions menu, choose any of the following options:
  - Poll Device—Polls the devices selected in the device list.
  - Edit Properties—Allows you to edit the device display name and default web port. See Editing a Device Name, Web Port, Time Zone, and Location, page 8-17.
  - Edit Report Policy—Allows you to change the report policy assigned to the device or, alternatively, set the report to its defaultSee Editing the Report Policy Assigned to a Device, page 8-20
  - Edit Polling Policy—Displays the Report Policy dialog box where you can change the polling policy assigned to the device or return the report policy to its default settings. See Creating and Editing Device Polling Groups, page 8-29 and Editing the Polling Group Assigned to a Device, page 8-20.
  - Edit Management IP Addresses—Allows you to edit a device Management IP addresses. See Editing the Device Management IP Addresses, page 8-20.
  - Relocate Device—Allows you to relocate a device from one unit to another. See Relocating Devices to Units, page 8-21.
  - Disable/Enable Sending Alarms—Disables or enables sending alarms from the selected device. The menu item displayed is based on the current device state.
  - Manage/Unmanage Device—Changes managed devices to unmanaged, and unmanaged devices to managed. The menu item displayed is based on the current device state.
  - Delete—Deletes the selected device(s).

# **Creating and Editing Device Polling Groups**

Device polling is the frequency at which Prime Performance Manager retrieves updated information from devices. When you complete device discovery (see Chapter 5, "Discovering Network Devices"), Prime Performance Manager assigns devices to polling groups based on the device type. For example, all discovered Cisco 7606 Series Routers are assigned to a Cisco7606s polling group, all Cisco MWR 1941-DC Mobile Wireless Routers are placed in a CiscoMWR-1941-DC polling group, and so on. The number of polling groups created during device discovery depend on the number of unique device types Prime Performance Manager discovers. If all devices belong to the same device type, then only one polling group is created.

Polling groups are defined by the attributes listed in Table 8-13. All polling groups created during device discovery are assigned the default values. However, you can:

- Change the polling based on the device type. For example, to change the polling for all Cisco 7606 routers, you would modify the Cisco7606s polling group.
- Create a new polling group and assign devices to it. For example, if you want to assign the same polling parameters to a group of devices with different device types, you create the polling group and assign each device to it.

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Parameter	Default	Description
Poll Interval	15 minutes	The interval of time at which Prime Performance Manager polls the device.
Time Out	30 seconds	If Prime Performance Manager cannot connect to the device initially, the amount of time it will continue to try to connect before it times out.
Retries	2	If Prime Performance Manager cannot connect to the device, the number of times it will retry the connection after the time out interval is reached.

## **Editing Polling Group Parameters**

Complete the following steps to edit the parameters of an existing polling group:

Step 1 Log into the Prime Performance Manager GUI as the administrator user.
Step 2 From the Network menu, choose Polling Groups.
Step 3 Scroll to the polling group you want to modify and edit the values in the following table cells:

Time Out
Retries
See Table 8-13 on page 8-30, for polling group parameter descriptions and default values.

Note You cannot edit the polling group name.

Step 4 On the Polling Group toolbar, click the Save Polling Group tool.

### **Creating a New Polling Group**

Complete the following steps to create a new polling group:

- **Step 1** Log into the Prime Performance Manager GUI as the administrator user.
- Step 2 From the Network menu, choose Polling Groups.
- **Step 3** On the Polling Group Editor toolbar, click the **Add Polling Group** tool.
- **Step 4** Scroll to the polling group you want to modify and edit the values in the following table cells:
  - Poll Interval
  - Time Out
  - Retries

See Table 8-13 on page 8-30, for polling group parameter descriptions and default values.



You cannot edit the polling group name.

Step 5 On the Polling Group Editor toolbar, click the Save Polling Group tool.

## **Assigning Devices to Polling Groups**

By default, Prime Performance Manager creates device type polling groups and assigns devices to them based on their device type. You can create custom polling groups and reassign the devices to them. To assign a device to a custom polling group:

- Step 1 Log into the Prime Performance Manager GUI as the administrator user.
- Step 2 From the Network menu, choose Devices.
- **Step 3** In the device table, select the row of the device whose polling group you want to change. To select more than one device, press **Shift** and highlight the device table row.
- Step 4 From the Devices window toolbar Actions menu, choose Edit Polling Group.
- **Step 5** In the Edit Polling Group dialog box, choose the polling group you want to assign. The following options appear:
  - The device type polling group. This option is not displayed if you choose multiple devices with different device types.
  - This Device Only—If selected, allows you to edit the polling group parameters and assign it to the selected devices.
  - Default—Assigns the device(s) to the default polling group.
  - Custom groups—If you created polling groups, they are displayed.
- Step 6 Click OK.

