

CHAPTER 2

Getting Started

This chapter gives an overview of how to use Prime Performance Manager to monitor the performance of network elements. It also provides details on starting and stopping the Cisco Prime Performance Manager.

This chapter contains:

- Starting Prime Performance Manager Server, page 2-1
- Discovering Your Network, page 2-4

For detailed information about Prime Performance Manager hardware and software requirements, see http://www.cisco.com/go/performance

Note

The default directory for installing Prime Performance Manager is /opt. In commands that call for the default directory, if you installed Prime Performance Manager in a different directory, you must specify that directory instead of /opt.

Starting Prime Performance Manager Server

Before starting an Prime Performance Manager server, verify that:

- Prime Performance Manager server has IP connectivity to each node
- SNMP is enabled on each node

A node in Prime Performance Manager can be of IOX image.

Because Prime Performance Manager application comprises a gateway component and a unit component, you must start both components to run the application.

You must be logged in as the root user or your login must have administrator privileges. To log in as the root user, see the Becoming the Root User, page 2-2.



For details on setting up administrator privileges, see Enabling SSL Support on Gateway in Prime Performance Manager, page 3-15.

To start Prime Performance Manager server on a Solaris or Linux system, enter:

```
# cd /opt/CSCOppm-gw/bin
Or
cd /opt/CSCOppm-unit/bin
# ./ppm start
```



If the database has an exception during start up, the server will fail to start.

Becoming the Root User

Some Prime Performance Manager procedures require that you log in as the root user.



As the root user, you can adversely affect your operating environment if you are unaware of the effects of the commands that you use. If you are a relatively inexperienced UNIX user, limit your activities as the root user to the tasks that are described in this manual.

If you are not logged in, log in as the root user:

```
> login: root
> Password: root-password
```

If you are already logged in, but not as the root user, use the su command to change your login to root:

```
# su
```

```
# Password: root-password
```

Supported Devices

You can access the list of supported devices for Prime Performance Manager from Cisco.com:

http://www.cisco.com/en/US/products/ps11715/products_device_support_tables_list.html

The supported device types and the IOS software versions are listed in the Devices Readme page (**Home** > **Managed Platform Documentation** > **Devices README**).

Prime Performance Manager supports pre-defined system reports. These reports are listed in the Report XML Definitions page (**Home > Reports Documentation**) page. The XML and the property files describe the MIB tables and the fields that are polled for data from the device. It also describes the fields that are mapped to the report columns.

To generate new reports for the devices, refer to the pre-defined system reports as examples, and add new report XML files to the etc/pollers/user directory in the Prime Performance Manager Gateway installation directory, by default it is /opt/CSCOppm-gw.

The new user-defined report XML files must have a unique filename from the pre-defined system report files. For additional details on how to define new reports, contact the Cisco support team.

Prime Network Integration

The Prime Performance Manager web interface allows you to manage devices through Prime Network and Discovery tab.

Using the Prime Network (ANA) tab:

Step 1 Enter the Prime Network (ANA) Inventory (IP Address, Port, User Name and Password) details. The user must have either ANA Administrator or ANA Configurator user privilege.

The default ANA web services port is 6081. The Port field accepts values from 1 to 65535.

Step 2 Select Strict Sync to discover only Prime Network type of devices.

Strict Synchronization allows you to discover only Prime Network type of devices. In Loose Synchronization mode, the Strict Sync check box is unchecked and Cisco Prime Performance Manager continues to manage devices that are not in Prime Network (ANA) inventory.

To log into ANA from Prime Performance Manager, the user must have either ANA Administrator or ANA Configurator user privilege and the device scope must be set to all network elements.

Step 3 Select **Install Cross Launch** to pass the Prime Network (ANA) device through Prime Performance Manager.

Prime Performance Manager installs the cross launch menu on ANA. This enables you to open the device's performance report page from ANA Client.

Step 4 Click the **Import Inventory** icon for Prime Performance Manager to detect Prime Network (ANA) device only.



Prime Network (ANA) cross launch synchronization feature is used only with the Inventory Import function. This is to make sure that Prime Performance Manager recognizes Prime Network (ANA) devices.

You can use the **Discover** tab to discover the devices in Prime Performance Manager independently of Prime Network (ANA).

This section contains:

- Prime Network Inventory Import Feature, page 2-4
- Discovering Your Network, page 2-4

Prime Network Inventory Import Feature

This section the details the Prime Network (ANA) Inventory import feature in Strict Synchronization and Loose Synchronization modes:



SNMP v3, Cloud, and Icmp devices are not imported from ANA. The ANA business tags of stopped VNEs are also not imported.

Strict Synchronization:

- Prime Performance Manager does not manage devices that are not in the Prime Network (ANA) inventory.
- Deleted Prime Network (ANA) devices become unmanaged in the Prime Network inventory, but their statistics data are not removed.
- The following functions are not available after Strict Synchronization:
 - Device discovery
 - Edit SNMP credentials
 - Edit node name

Loose Synchronization:

- Prime Performance Manager manages devices that are not in the Prime Network (ANA) inventory.
- Deleted Prime Network (ANA) devices are managed by Prime Performance Manager.
- The following functions are available after Loose Synchronization:
 - Device discovery
 - Edit SNMP credentials
 - Edit node name
 - Edit node SNMP IP address
 - Unmanage node

Discovering Your Network

This section provides details on using Prime Performance Manager to discover your networks. It includes:

- Discovery Overview, page 2-4
- Verifying Discovery, page 2-6

Discovery Overview

Prime Performance Manager uses a Discovery process to populate Prime Performance Manager database and discover the objects in your network.

You can run Discovery if Prime Performance Manager User-Based Access is disabled. If you are a System Administrator, you can run it if it is enabled. For more information about user authorization levels in Prime Performance Manager, see Configuring Prime Performance Manager User Account Levels, page 3-6.)

To discover your network:

Start Prime Performance Manager.
If you want to change SNMP settings, do so before running Discovery.
Select the Administrative node in the Prime Performance Manager left tree.
Select the Discovery tab.
You use the Discovery tab to discover the objects in your network.
Enter a seed node IP address or name in the IP Address, Address range, Subnet, CIDR, or DNS Hostname field, and click the Add button.
Prime Performance Manager automatically adds the seed node in the Seed Details table
Click the Discover Network button.
A message appears, Discovery Is Running and the nodes are discovered. See Discovered Nodes, page 2-5 for more information.
Examine the discovered nodes by clicking on the Summary Lists item in the tree.
If you suspect that Prime Performance Manager did not discover all of the nodes, see Verifying Discovery, page 2-6 for troubleshooting information. You might need to add more seed nodes and run Discovery again.
After you ensure that Prime Performance Manager discovered all of the nodes in the network, save the list of seed nodes in a seed file.

- Backing Up or Restoring Prime Performance Manager Files, page 3-20
- Discovered Nodes, page 2-5

Discovered Nodes

To view the list of discovered nodes from the navigation tree select **Summary List > Nodes**. By default, this table is sorted by alarm severity.

- To see a tooltip for each column in the table, place the cursor over a column heading.
- If a cell is too small to show all of its data, place the cursor over the cell to see the full text in a tooltip.

You can resize each column, or sort the table based on the information in any of the columns. By default, Prime Performance Manager displays all columns in the Discovered Nodes section except Internal ID, Uptime, Reboot Reason, Process Traps, and Last Status Change.

- To display hidden columns, right-click in the table heading and select the check boxes for the columns that you want to display.
- To hide columns, right-click in the table heading and uncheck the check boxes for the columns that you want to hide.

For detailed information on working in tables, see Nodes Table, page 5-23. This table gives descriptions of the columns and check boxes of the discovered nodes table

Verifying Discovery

After you discover the network (see Discovery Overview, page 2-4), click on the Nodes Summary Table to verify that Prime Performance Manager discovered all of the nodes in the network. If you suspect that Prime Performance Manager did not discover all of the nodes, verify that:

- Prime Performance Manager server can ping the nodes.
- SNMP is enabled on the nodes.
- Prime Performance Manager is configured with the correct SNMP community name.

If you suspect that Prime Performance Manager did not discover all of the nodes, run the Discovery again. See Discovery Overview, page 2-4 for more details.