

Additional Tasks

This section covers Prime vNAM specific tasks that you can perform after installation is complete.



Some of these tasks are required while others are optional.

- Changing the Root Password, page C-1
- Resetting the Prime vNAM Root Password to the Default Value, page C-2
- Rebooting and Shutting Down the Prime vNAM, page C-2
- Installing and Configuring Local and External Storage, page C-2

For more detailed information about the product and tasks, see the Cisco Prime Network Analysis Module *User Guide*.

Changing the Root Password

This section describes how to change the root user password after you have done so during the initial login session.

To clear the password and return it to default factory setup state, use: clear system-passwords.

If you have forgotten the root password and cannot get into the system, boot the system to the helper utility using **reboot -helper** and reset using the menu selections.'

To change the root password:

- **Step 1** Open a console session or serial session with the NAM appliance.
- **Step 2** When prompted for a username, enter **root**.
- **Step 3** When prompted, enter the password for user root you created at initial logon.

After you log in as the root user, you have read and write access to the root level of the NAM appliance, and you can enter and perform CLI commands.

root@hostname#

Step 4 Enter the following command to change the root user password.

password root

New password:
Confirm password:

Step 5 Enter the new password for user root and confirm it.

We recommend that you make a record of the password and store this information in a secure location. You should change this password regularly in accordance with your site's password security policies.

Step 6 Type **exit** to end the session and log out.

Resetting the Prime vNAM Root Password to the Default Value

For information about how to reset the NAM root password to the default value, see the *Cisco Prime Network Analysis Module Software User Guide*.

Rebooting and Shutting Down the Prime vNAM

To perform a shutdown or reboot you can perform one of the following actions from the Prime vNAM CLI.

- From the Prime vNAM CLI, enter **shutdown** to power off the Prime vNAM.
- From the Prime vNAM CLI, enter **reboot** to reboot the Prime vNAM.
- From the Prime vNAM CLI, enter **reboot -helper** to enter the Helper Utility menu for installation or recovery.



Reboot and shutdown, as well as power up, can also be performed using the hypervisor interface.

Installing and Configuring Local and External Storage

Depending on your virtualization system, you may need to configure local storage or install and configure external storage for your capture data.

You can use local or external storage as a repository for long term data for performance comparisons.



Ensure that when you install Prime vNAM that the designated disk is readable and writeable by everyone so that all users can store capture data successfully.

Here is a brief summary describing which Prime vNAMs require you to configure external storage:

- ESXi vNAM—No configuration necessary. Local hard disk preallocates external storage.
- KVM vNAM—Configuration required.

This section describes how to manually prepare your external iSCSI storage information to work with KVM vNAM. It contains the following sections:

- Configuring the iSCSI Array
- Locating the Prime vNAM IQN
- Connecting the Storage Array

Configuring the iSCSI Array

You may decide that in addition to or instead of local storage that you want to set up an external storage drive using iSCSI. This section contains the required settings for Prime vNAM.

Use your vendor's user documentation to ensure you have properly configured the iSCSI array. The Prime vNAM is independent of most array settings, but some are important for accessibility and performance.

Step 1 To configure the Logical Unit Numbers (LUNs) on the array, there is often a Segment Size setting.

Larger segment sizes can improve write speeds. Configure the Segment Size setting to use the largest possible segment size (up to 512 KB).

Multiple LUNs can be configured on a single array.

Step 2 Map the LUNs to iSCSI Qualified Names (IQNs) on the array. Each IQN represents a different list of LUNs for hosts (such as the Prime vNAM) to access.

Prime vNAM supports up to 32 LUNs between all protocols and multiple LUNs mapped to one IQN.

- Step 3 Prime vNAM also has an IQN, which represents the host side of an iSCSI session. Ensure you map each Prime vNAM IQN to the LUNs for host read-write access. Most storage arrays require this for security reasons, to ensure that only certain hosts can access the LUNs. Each Prime vNAM has a unique IQN, so perform this step for each Prime vNAM that requires access and for each target LUN that is to be accessed. For more details about which CLI command to use, see Locating the Prime vNAM IQN, page C-3.
- Step 4 Set the IP path to the Prime vNAM management port. For details, see Connecting the Storage Array, page C-3.

Locating the Prime vNAM IQN

To find the Prime vNAM IQN, use the **remote-storage iscsi local-iqn** CLI command:

```
root@nam.domain# remote-storage iscsi local-iqn

Local iSCSI Qualified Name: iqn.1987-05.com.cisco:WS-SVC-NAM3-6G-K9.00:19:55:07:15:9A
```

Connecting the Storage Array

After you configure the iSCSI storage arrays, be sure that it has an IP path to the Prime vNAM management port. The array can be connected while the Prime vNAM is running.

Some arrays come with multiple storage controller modules. As a security feature, module ownership must often be mapped to each LUN.

The Prime vNAM logs into the storage to start an iSCSI session using the IP address and IQN(s) of the storage array. To connect the storage array using the user interface, follow these steps:

- Step 1 Log into the Prime vNAM web interface. To access the Data Storage page, choose Capture > Packet Capture/Decode > Data Storage.
- **Step 2** Click the **iSCSI Login** button and enter the target IP and IQN.

The storage table refreshes with the newly discovered LUNs.

If the LUNs do not appear:

a. Check remote-storage iscsi list to verify the iSCSI session was properly started.

The follow example shows how to verify the iSCSI session.

```
root@nam.domain# remote-storage iscsi list

Storage ID: 16
____ Label:
___ Status: Ready
Protocol: ISCSI
Target IP: 172.20.122.81

Target IQN: iqn.2011-09:celeros.target11
____ Type: LUN
___Model: IET VIRTUAL-DISK
____ LUN: 4

Capacity: 24.98GB
Available: 24.98GB
Active iSCSI Sessions:
tcp: [8] 172.20.122.81:3260,1 iqn.2011-09:celeros.target11
```

The LUN number (in the above example, LUN 4) can help you identify one LUN from others of the same IQN. This number is unique to each IQN, meaning two LUNs from different IQNs can have the same number.

- b. If the iSCSI session was properly started, check the storage array configuration to verify that:
 - The LUNs are mapped to the target IQN, and
 - The Prime vNAM IQN has been given Read/Write access to the LUNs.
- c. If you make any configuration changes, logout of the iSCSI session and login again. To logout, use the CLI remote-storage iscsi logout. If the LUNs appear on the user interface, you can select one of them and click iSCSI Logout. All LUNs mapped to that target IQN will be disconnected.

You can now use the iSCSI external storage from within Prime vNAM. For more information, see the *Cisco Prime Network Analysis Module Software User Guide*.

Migrating Prime vNAM to a new Host

To migrate the Prime vNAM to a new host:

- **Step 1** Ensure that the new host meets the system requirements. See the Host Configuration Requirements section for details.
- **Step 2** Create a backup of your data. See Backing Up Your Configuration.
- **Step 3** Shut down the vNAM.
- **Step 4** Perform migration.