Installation Requirements

This chapter provides details about the host and client requirements that should be met before you deploy and configure Cisco Prime Virtual Network Analysis Module (Prime vNAM). The following sections contain information about the requirements and restrictions:

- Host Configuration Requirements, page 2-1
- Client Requirements, page 2-2

Host Configuration Requirements

For Prime vNAM you must have the following;

- Any X86_64 hardware has adequate resources to deploy a virtual environment for Prime vNAM. See Table 2-1 for hardware requirements.
- VMware with ESXi or RHEL with KVM installed on the hardware of choice. See Table 2-1 for supported hypervisor details.

The hypervisor must have access to the Prime vNAM software image on an FTP or HTTP server for deployment.

The Cisco Prime vNAM virtual appliance supports the platforms/hypervisors in Table 2-1.

Table 2-1   Requirements Per Prime vNAM[1]

Supported Hypervisors	RAM	CPU	Network	Hard Disk
VMware vSphere 5.1 (ESXi 5.1 and later)	4 GB per vNAM	Two CPU core	Two virtual NICs (VMXNET3)	100 GB for a vNAM[2] (PVSCSI storage driver)
Red Hat Enterprise Linux and included KVM that comes with RHEL 6.1			Two virtual NICs (virtio)	100 GB per vNAM[2] (IDE/SCSI))

1. Any deviation from the system requirements may cause unexpected results and is not supported.
2. VMware configuration is automatic when you use the OVA; manual configuration of KVM is required.

Note Before you deploy the virtual appliance, verify that your host server is running on supported hardware. If you are not sure whether your environment can support a 64-bit VM, you should verify using your server tools. For ESXi, you can verify by downloading and running the VMware CPU Identification Utility which indicates 64-bit VMware support. This utility can be found on the VMware site at: http://www.vmware.com/download/shared_utilities.html. For RHEL, you can run **uname -a** from the command line shell.

The disk I/O performance of vNAM depends on which vNAM function is being used. In case of packet capture functionality, higher the disk I/O performance, higher is the capture speed. 150 Mbps disk I/O is reasonable for a gigabit data link. If no packet capture is required, then the disk I/O performance requirement can be as low as 60 Mbps.

Client Requirements

The following table lists the client requirements:

Hardware	IBM-compatible or Macintosh computer with 2-GHz or faster processor
RAM	1 GB
Operating System	• Windows 7 • Windows Vista with Service Pack 1 • Windows XP Professional with Service Pack 2 • Red Hat Enterprise Linux 6.1 (base server)
Browser	• Microsoft Internet Explorer 9.0 on Windows XP Professional with Service Pack 2, Windows Vista with Service Pack 1, or Windows 7 • Mozilla Firefox 17.0.5 (ESR) or later on Windows XP Professional with Service Pack 2, Windows Vista with Service Pack 1, Windows 7, FireFox on OSX, or Red Hat Enterprise Linux All browsers require that you enable cookies, JavaScript/scripting 1.7 or later, and popup windows. If you reinstall Prime vNAM or upgrade to a newer release, before you access the appliance, make sure that you delete the cookies and clear the browser cache of each client.

Licensing

The Prime vNAM software requires a product license to run. An evaluation license is included with the product. It allows you to use the software for up to 60 days. When using an evaluation license, open the About window to view licensing information such as how many days remain before the evaluation license expires or details about your permanent license.

The evaluation license has a traffic limitation of 100 Mbps. After 60 days, you will no longer be able to access the user interface and must install a permanent license. After you purchase your license, you have permanent access to the software.

You have two license options for Prime vNAM—NAM-VX10 and NAM-VX20. The difference between the options is in the performance in terms of traffic monitoring throughput. See the *Cisco Prime Virtual Network Analysis Module Data Sheet* for details.

You can use the 60-day evaluation license to run Prime vNAM out-of-the-box and obtain your permanent license from Cisco to complete the license installation before the license expires. Your login window indicates how many days remain before the evaluation license expires. You will be unable to log in to the user interface after the evaluation license expires.

For details about installing a license, see Installing the License, page 2-3. For CLI licensing commands, see the *Cisco Prime Network Analysis Module Command Reference Guide*.

Installing the License

This section describes how to obtain and install the Prime vNAM license on the virtual appliance.

SUMMARY STEPS

1. Install Prime vNAM.

2. Obtain your product ID (PID) and serial number (SN) details from the Prime vNAM.

3. Log into Cisco Product Registration website for your license information.

4. Copy the emailed license file to your FTP server.

5. Install the Prime vNAM software license.

DETAILED STEPS

Step 1   Install and log into the virtual NAM. See Installation Overview, page 1-1.

Step 2   Use the **show inventory** CLI command from the Prime vNAM console to obtain the PID and SN. For example:

```
vnam1# show inventory
PID: ESX VID: SN: <serial number>
vnam1#
```

Here:

- PID—Product identification (ID) number of the device

- VID—Version ID of the device. Displays as 0 if the version number is not available

- SN—Serial number of the device.

Step 3   Access your license product activation kit via Cisco.com. Use the PID and SN from the show inventory command to access your unique license.

Step 4   You will receive an e-mail with the PAK information.

Step 5   Copy the PAK file to an FTP server to which you have access from the vNAM server.

Step 6   Install the Prime vNAM license using the **license install** CLI command.

The following is an example of the install license command:

license install ftp://joseph@computer.com/bin/licenses/*NAM_VA_License*.lic

In this example, the **install license** command fetches the license file, *NAM_VA_License.lic*, from the directory */bin/licenses* of the *host computer.com*

Step 7   Run `show license` command to see the installed license status.

Configuring Prime vNAM to Receive Data Traffic

In order for the Prime vNAM to receive traffic, you must configure its data port to receive data traffic from your virtual machine. Any traffic that arrives on the data port will be processed and analyzed.

Connectivity using vswitch in VMware ESXi requires promiscuous mode to be configured. See VMware documentation for details.

Connectivity using network bridge on RHEL KVM requires promiscuous mode to be configured. See RHEL documentation for details. See the Configuring Virtual Network Bridges section for details about creating network bridging.