HP OpenView Network Node Manager

Quick Start Installation Guide

For Red Hat Linux Advanced Server 2.1



Manufacturing Part Number : T2490-90003 October 2003

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Support

Please visit the HP OpenView web site at:

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http://openview.hp.com/
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There you will find contact information and details about the products, services, and support that HP OpenView offers.

You can go directly to the HP OpenView support web site at:

http://support.openview.hp.com/

The support site includes:

- Downloadable documentation
- Troubleshooting information
- Patches and updates
- Problem reporting
- Training information
- Support program information

Installing the Software

This guide will help you install HP OpenView Network Node Manager on a Red Hat Linux Advanced Server 2.1 system.

There are several tasks to complete during the installation process:

- Match your system's setup to the NNM minimum requirements.
- Complete any necessary pre-installation steps.
- Install the NNM software.
- Run the NNM software.
- Obtain a permanent password for your NNM software.
- Configure NNM to access the HP OpenView Web interface.

Once you have successfully installed NNM, refer to the last section in this guide, for "where-to-go-next" information on configuring and using your NNM product.

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Task 1: Checking Minimum System Requirements

Before starting, you or your system administrator should check that your system meets the minimum hardware and software requirements.

The following lists the system requirements to install NNM on Red Hat Linux Advanced Server 2.1:

- Intel P4 or higher processor with internal memory of 512 MB RAM or more.
- Minimum 1 GB disk space.
- 8 GB disk space for smooth operation.
- Network card with TCP/IP configured.
- Video card that supports 24-bit true colors or minimum 512 colors.

Refer to the Release Notes for more information on system requirements. You can access the Release Notes from the CD. The Release Notes are in the <code>README.html</code> file

From the left pane of the Release Notes click on Supported Configurations.

Task 2: Completing Pre-Installation Steps

To ensure that all products installed on your system run compatibly and efficiently with NNM, there are several preparatory steps you need to do before you actually install NNM.

General Configuration

- 1. Set the DISPLAY environment variable to the appropriate value. Also, run the xhost command to allow connection from the system running NNM to the system displaying NNM.
- 2. Install the products and/or patches described in the remainder of this section. Some of these products must be installed before you install NNM, while others are optional or not relevant to your network's environment.
 - DHCP setup...depends on your network environment
 - Web browser installation...required

DHCP Setup

Users of the Dynamic Host Configuration Protocol (DHCP) need to ensure that their NNM management station is assigned the same IP address each time it runs NNM.

You can specify a range of IP addresses that your network is configured to assign dynamically for mobile devices. NNM keeps the map clean and the Alarm Browser list free of unnecessary messages about devices within this address range as they are repeatedly attached and detached from your network. See *Managing Your Network with HP OpenView Network Node Manager* for more information.

Web Browser Installation

Several of the NNM features are web-based, and require a web browser to be installed on the same system where NNM is installed. Furthermore, the Java-based graphical interfaces require a Java plug-in (JPI) for the browser. Refer to the Release Notes for supported web browsers and JPI installation information. You can access the Release Notes from the CD. The Release Notes are in the README.html file.

From the left pane of the Release Notes, double-click on Supported Configurations.

To install the browser, follow the instructions that came with it. Be sure to configure any web proxies according to the browser's instructions.

Pre-Installation Requirements

The following are the pre-installation requirements for installing NNM:

- Red Hat Linux Advanced Server 2.1.
- Creation of /var partition with adequate disk space to accommodate NNM databases. Disk space depends on usage.
- NNM starts the Emanate snmp agent at udp 161 port. You should either stop the system-supplied native snmp agent. or restart it at a different port, for example 50161.

For more information on how to start the snmp agent at a different port, see the snmpd.1 man page. If the snmp agent is not restarted at a different port, some of the native snmp agent features may be missing.

• For smooth installation of NNM, make sure the following RPMs are installed on the system:

ncompress-4.2 and db3x-3.2

To check whether these RPMs are installed on the system or not, run the following commands:

— rpm -qa | grep ncompress-4.2

The output of this command should show the following:

ncompress-4.2.n-nn where n can be any number.

— rpm -qa | grep db3x-3.2

The output of this command should show the following:

db3x-3.2.n-n

- Do not upgrade, downgrade, or unistall any of the following system RPM packages:
 - glibc-2.2.4
 - XFree86-libs-4.1
 - libstdc++-2.96
 - lesstif-0.93
 - openmotif-2.1.30
- The web user interface of NNM requires Netscape 7.1 or Mozilla 1.4 with Java plug-in 1.4.2 enabled. Refer to the respective browser installation documentation for information on installing the Java plug-in.
- Log on to the system as root user to install NNM.
- Configure the X server with 24-bit true colors or more than 512 colors.
- Ensure that the host name resolution is configured properly.

Task 3: Installing Network Node Manager

A single CD contains the files required to install on Red Hat Linux Advanced Server 2.1. This CD contains the following files and directories:

- install.nnm
- OVAGENTDEPOT_LINUX
- OVNNMDEPOT_LINUX
- OVECSDEPOT_LINUX
- remove.nnm
- Release notes in .pdf and .html formats

IMPORTANT The release notes contain an addendum that describes the changes incorporated into online and user documentation.

NNM requires specific fonts. After you have installed NNM, you can see which fonts are required by viewing the appropriate app-defaults files. The app-defaults files are located in /usr/lib/X11/app-defaults.

To install NNM on Red Hat Linux Advanced Server 2.1, complete the following steps:

- 1. Insert the CD-ROM in the CD-ROM drive.
- 2. If the CD-ROM is not mounted, you will need to mount it on to the system by using the following command:

mount /dev/cdrom /mnt/cdrom

3. Use the cd command to change to the /mnt/cdrom directory as follows:

cd /mnt/cdrom

4. To install NNM, execute the install.nnm script as follows:

./install.nnm

5. Provide appropriate answers to the questions that the installation software requires while installing the software.

NNM on Red Hat Linux Advanced Server 2.1 is now ready for use.

Licensing Information

NNM starts up with a temporary license that has a node limit of 250.

To determine how many nodes you are currently managing, run the following command:

\$/opt/OV/bin/ovtopodump -1

From the output of this command, use the MANAGED NODES value to determine if your license will cover the number of nodes you are actually managing.

Once you determine that the node limit on your license is adequate, you must enter the license password. There are several ways to access the dialog box where you will enter the license password:

- Execute the ovnnmPassword command from the command line.
- Restart NNM (ovw).
- Select Options:License Password from the NNM menu.

Enter your password in the textbox provided. Type the password exactly as it is given to you, including punctuation. After entering your password, click Apply.

Task 4: Running Network Node Manager

In this task, you will verify that NNM was installed and runs correctly within its native graphical user interface (GUI), HP OpenView Windows.

1. If NNM is not currently running, start it up. As root, type

/opt/OV/bin/ovstart -c

2. Make sure the NNM background processes have started. As root, type $% \left({{{\rm{AS}}} \right)_{\rm{T}}} \right)$

/opt/OV/bin/ovstatus -c

You should see on the screen several lists of the processes (such as netmon, ovtopmd, and pmd) that are running.

3. Start the HP OpenView Windows GUI. Type

/opt/OV/bin/ovw

You will see the HP OpenView welcome banner, followed by an NNM Root submap window with a default map in it.

- 4. Each time you start the NNM GUI, it will encourage you to register your NNM product if you have not already done so. You have 60 days from the date of installation to complete this registration process (described in Task 5).
- 5. Note that some of the NNM new features are web-based, meaning they won't run within the HP OpenView Windows GUI. To use these features, see Task 6 for instructions on how to configure NNM to run within the HP OpenView Web environment.

Task 5: Registering Your Network Node Manager Product

Your NNM product was shipped with a license that includes a temporary, "Instant-On" password. In addition, this password allows you to run NNM on remote console. This password allows you to use the product for 60 days after you install it. Once you have installed NNM, you should register it with Hewlett-Packard as soon as possible in order to obtain a permanent password.

To request a permanent password and license, you need the following:

- The Entitlement Certificate, which contains the HP product number and order number.
- The IP address of the server.
- Your company information.

To obtain a password and permanent license for NNM, select Options: License Password from the menu bar of either the Root submap or any other submap. The HP Auto Pass installation program leads you through the licensing process.

Task 6: Configuring Network Node Manager for the Web

In this task, you will configure NNM so that you can access it via the HP OpenView Launcher interfaces, which are Java-based. This lets you use certain web-enabled NNM features at remote workstations.

Running NNM on the Web

1. If necessary, install a web browser.

HP recommends that you use either Netscape 7.1 or Mozilla 1.4 to run NNM on the web.

2. Make sure the NNM background processes are running. As root, type at a command prompt

/opt/OV/bin/ovstart -c

3. Start the NNM graphical interface by entering the following:

/opt/OV/bin/ovw

- 4. If necessary, start your web browser.
- 5. To access NNM via the HP OpenView Launcher GUI, use either method below:
 - If NNM is running on your system, select the Tools:HP OpenView Launcher item from the NNM menu bar. The Launcher window will appear.
 - If NNM is running on a system other than yours, open up a web browser on your system. In the browser's Location field, specify one of the following URLs (where *hostname* is the full domain name of your web server, such as mymachine.myco.com).
 - For a system running a Linux® operating system:

http://hostname:3443/OvCgi/ovlaunch.exe

If You Have NNM Installed, but no Web Server Product yet...

If your NNM system does not yet have a web server product, see "General Configuration" on page 11. Reinstall NNM after installing a web server. The reinstallation of NNM will properly configure it to use your web server product.

Uninstalling Network Node Manager

If you need to remove Network Node Manager from your computer, compete the following steps:

- 1. Stop any HP OpenView processes by executing \$/opt/OV/bin/ovstop
- 2. Run the remove script: \$/opt/OV/bin/remove.nnm

Where to go Next...

Once you have installed and licensed your NNM product, you will want to configure it to best meet your needs. Refer to *Managing Your Network with HP OpenView Network Node Manager* for guidance about configuring NNM. The following table lists several sources that can help you get started using NNM. A more comprehensive list of information sources is provided in Chapter 3 of the printed manual, *Managing Your Network with HP OpenView Network Node Manager*.

Type of Information	Specific Sources
Hewlett-Packard Support	Go to the HP OpenView web site at the following URL:
	http://openview.hp.com
User Documentation	These are available in printed format, online format, or both.
	- For document descriptions, refer to Chapter 3 of the printed manual, <i>Managing Your Network with HP OpenView Network Node Manager</i> .
	- To access these documents online, in the NNM menu bar select the Help:Online Manuals item.
Other Online Documentation	- Online Help System: In the NNM menu bar, select the Help:Online Help item.

Installing the Software Where to go Next...