HP Network Node Manager

Welcome to NNM

Windows® , HP-UX, Solaris, and Linux operating systems

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Please visit the HP OpenView web site at:

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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

1 Welcome to Network Node Manager

The Online Manuals

Network Node Manager includes a library of manuals for your use. Some are provided in printed form and included in the NNM package. All manuals are provided online from the `Help` menu. NNM provides the online manuals as PDF files. You can use a PDF viewer such as Adobe Acrobat, to view, search, and print the manuals.

Installing and Using Manuals

To access the manuals from NNM, use the `Help` menu from NNM. On Windows® operating systems, double-click on a manual title to launch the Acrobat Reader with the manual you selected. For NNM on a UNIX® system, if web browser is configured with Adobe Acrobat, then NNM launches Adobe Acrobat within your web browser. See the Release Notes for information on how to configure Adobe Acrobat within your web browser.

The NNM Manuals

The manuals are also available at `http://docs.hp.com`. All of the manuals except for the Developer Kit manuals are available on the product CD and are installed when you install the product.

Table 1-1   **The NNM Manuals**

Book	Description
Welcome to Network Node Manager	This book. *Welcome* provides information about the NNM documentation set and information about other resources available to you.
Reporting and Data Analysis	Contains information about how to export the historical data collected by NNM for use with other statistical analysis programs of your choice.
Creating and Using Registration Files	Contains information about customizing NNM menus, creating symbols, and adding fields for searchable information to objects.

Table 1-1   **The NNM Manuals (Continued)**

Book	Description
HP OpenView Reporter Integration	Contains information about using HP OpenView Reporter templates with HP OpenView Network Node Manager.
Printed versions of these books are included in your NNM product box. They are also available in electronic form.	
Installation Guide	Contains information about installing, configuring NNM.
Managing Your Network	Contains detailed information to help network administrators configure NNM for their team's use.
A Guide to Scalability and Distribution	Outlines the steps you need to take to deploy NNM across multiple management stations within your organization. Contains specific configuration procedures for using the scaling and distribution features of NNM.
Using Extended Topology	Discusses network management using the additional device connectivity information that the NNM Extended Topology functionality provides. You must purchase NNM Advanced Edition to have this functionality.
These books are available only with the NNM Developer's Kit.	
Integration Concepts	Provides an overview of integration possibilities for developers who are designing applications to be integrated with Network Node Manager.
HP OpenView Application Style Guide	Provides style guidelines for developers who are designing applications to be integrated with HP OpenView products.
HP OpenView Windows Developer's Guide	Provides information for developer's who want to provide access to their system and network management applications through NNM's interface.
SNMP Developer's Guide	Provides information for developers who want to integrate with NNM's SNMP APIs.

Table 1-1   **The NNM Manuals (Continued)**

Book	Description
HP OpenView Windows: A Guide for Java Developers	Provides information about the Java bindings to the OpenView APIs.

Other Resources

The following sections describe other resources included with NNM and available through HP that help you use the product more effectively.

Resources Included with NNM:

- "NNM Online Help System" on page 11
- "Release Notes" on page 13
- "Reference Pages (Manpages)" on page 14
- "The contrib Directory" on page 16
- "White Papers" on page 17

Resources and Services Available Through HP:

- "HP Web Sites" on page 18
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- "HP Education" on page 19
- "HP Product Support" on page 19
- "OpenView Forum" on page 19

Resources Included with NNM

NNM Online Help System

Network Node Manager includes an online help system that contains all the specific procedural information you will need while you are working with NNM. The help system has extensive search capabilities and a comprehensive index so you can easily find information. You can print or copy pages or sections of help information that are appropriate for the most common tasks for your organization.

TIP   The help system includes hyperlinks that make it more convenient and informative. By clicking on designated link words, you gain instant access to more topics and information related to your currently selected topic.

The online help system enables you to display information on the features of NNM, explains how to perform tasks with NNM, and includes conceptual information about how NNM works. Help entries are available from three general locations:

- Help menu
- [Help] button on dialog boxes
- Help from some symbol pop-up menus

Using the Help Menu

The contents of the Help menu varies from one submap to another, depending on additional installed applications. The Help menu also differs between NNM on a workstation running the UNIX operating system, NNM on a workstation running Windows operating systems, and the NNM web interface.

Printing Information from Online Help

NNM for Windows operating systems uses a standard Microsoft®
Windows help system. Each help window has a `Print` button or menu
item that you can use to print the current topic. You can also select
multiple topics in the help table of contents, then print those topics.

On UNIX operating systems, you can select a topic in the `Contents`
window of help, then select the `Print` menu item. In the `Print` dialog
box, select `Print Topic` to print only that topic. If you want to print all
the subtopics under that topic, select `Print Topic and All Subtopics`.

The web-based interfaces of NNM, including Dynamic Views, use an
HTML based help system. When you locate a topic of special interest,
click and drag the mouse to select the information of interest. Then, from
the browser's File menu, choose print, and click the "Selected Text"
option. Then proceed to print as usual.

You can then combine these help printouts into a binder for future
reference. This is especially useful for frequently-accessed information,
so that you do not have to access the help system every time you need to
look up a common task or function. You can also use these printouts to
create your own operating manuals.

Searching for Information

The most efficient way to find a particular help topic is index search. You
access index search via the `Index` tab in the help system on Windows
operating systems or by the `Index` button on UNIX operating systems.
Every topic in the help system is indexed by the keywords that are used
in the topic. When using index search, enter the word that best describes
what you are looking for and that is most likely to narrow down your
search. For example, if you want to find help on automatic map
generation, enter the word "automatic" or "auto-generate" rather than
the word "map." Those words are more likely to find the entry that you
want.

In the Windows operating systems only: another way to find information
is by using the `Find` function in the online help. The `Find` function
searches every word in every topic for the word or phrase of your choice,
and returns a list of the titles of topics where those words or phrases
appear.

Customizing Information for Your Organization

You can create custom information for your team or for a specific site within your organization. Simply copy and paste the contents of a help window to a word processor. Then add your own site-specific information or specific procedural information for your tasks to the help text. This can save you time when writing your own training or procedural manuals.

Using Online Help Independently from the Software (Windows operating systems only)

The NNM help system on the Windows operating systems is designed so that you can copy the help volume onto a diskette, take it with you, and run it independently of the software—whether on your home computer or traveling with you on your laptop.

Copy the following files to a floppy disk. These files are found in the *install_dir*\help\%LANG% directory:

- *help_file_name*.hlp

- *help_file_name*.cnt

Double-click on the *help_file_name*.hlp file to start the help system.

Using Dialog Box Help

The [Help] button in a dialog box explains the purpose of the dialog box.

Using Symbol Pop-up Menu Help

The right mouse button pop-up menu on a selected symbol may contain a help item for that symbol. You can customize this menu through the application registration file (ARF) to add a help topic if it does not already contain one.

Release Notes

For information about NNM that becomes available after this book is published, refer to the ReleaseNotes directory or the README.html file on the CD-ROM.

Release notes are available on your hard drive after installing NNM. You can access the release notes from the NNM menu `Help:Release Notes` (or on the Windows operating systems under `Start:Programs:HP OpenView:HP OpenView Online Documentation:NNM Release Notes`).

You can also launch the release notes in your web browser:

Windows:
`install_dir\www\htdocs\C\ReleaseNotes\README_NNMGR.html`

UNIX:
`/opt/OV/www/htdocs/$LANG/ReleaseNotes/README_NNMGR.html`

NOTE   In this manual, `C`, `$LANG`, and `%LANG%` in directory listings are variables for the language currently in use. `C` contains the English version.

Reference Pages (Manpages)

Reference pages (Windows operating systems) or manpages (UNIX operating system) document NNM configuration possibilities in much greater detail than you will find any place else. These pages include information about every possible parameter and available command line option, as well as background information that may be helpful when troubleshooting issues. These pages are named according to the function or feature that they are documenting.

Throughout the NNM manuals, you will be referred to specific reference pages (manpages) for more information about the topic being discussed. You may want to browse through this resource collection yourself. You will find many more reference pages than are mentioned in these manuals.

Accessing Reference Pages

On Windows operating systems, reference pages are provided through the help system. You can access them from these locations:

- `Start:Programs:HP OpenView->HP OpenView Online Documentation->NNM Reference Pages`

- Any submap within NNM, through the `Help` menu.

TIP   If you are not sure which reference page to access for a specific issue, use
the Find feature of the help system. Find searches every word in every
reference page and provides a list of all places where the word appears.
For example, if you want to learn about the netmon service's parameter
choices and relationship to other services, type netmon in the Find dialog
box.

Accessing Manpages

On HP-UX and Linux operating systems, the following procedure is just
one suggestion for displaying or printing manpages. This procedure
requires that you have manpages installed locally on your system. (If
your network provides manpages remotely instead (for example, from a
central server), then check with your system administrator about how to
access them.)

1. Determine where on your system the manpage files are kept. Type

   echo $MANPATH

   You should see a list with one or more directories. Multiple
   directories will be separated by colons (for example,
   /usr/local/man:/usr/man). It is recommended that you check the
   contents of each directory to make sure it actually has manpage files
   in it.

   If you do not see a list of directories or you get no response to the
   echo $MANPATH command, refer to *Managing Your Network*, see the
   "Establishing Universal Pathnames" section.

2. Determine what syntax and options the man command is using. At a
   command-line prompt, type:

   strings /usr/bin/man | grep col

   You should receive a message similar to the following:

   ```
   tbl -TX %s |neqn|nroff -h -man|col -x > %s
   tbl -TX %s |neqn|nroff -man|col -x|%s
   ```

3. Use the command syntax shown in Step 2 in one of two ways:

   • Specify the qualified path of the directory containing manpage
     files as the %s value in the command.

Example: you know that the *bggen*(1) manpage is stored in the /usr/man/man1 directory on your system, but you are not currently in that directory. To display this manpage online, type the following command:

```
tbl -TX /usr/man/man1/bggen.1 |neqn|nroff
-man|col|more
```

Example: to send the *bggen*(1) command's manpage to a file for printing instead, type the following:

```
tbl -TX /usr/man/man1/bggen.1 |neqn|nroff -man|col >
/filename
```

- cd to the directory on your system that contains manpage files. Then specify just the command name and number as the %s value.

Example: you are in the /usr/man/man1 directory. Display the *bggen*(1) command's manpage online by typing:

```
tbl -TX bggen.1 |neqn|nroff -man|col| more
```

Example: to send this manpage to a file for printing instead, type the following:

```
tbl -TX bggen.1 |neqn|nroff -man|col > /filename
```

On Solaris systems, consult your system documentation for information on accessing manpages online or printing them.

The contrib Directory

The NNM contrib directory is a collection of programs and extensions to existing NNM programs that HP programmers have developed and want to share with NNM users.

The contrib directory contains a README file explaining the files in the directory. Many of the individual programs have README files as well, which contain information specific to the program.

When you install NNM on a UNIX operating system, the contrib directory is installed by default.

To install the contrib directory on the Windows operating systems, you must use the "Custom Installation" feature.

The files are installed in:

Windows: `install_dir`\contrib\NNM

UNIX: `$OV_CONTRIB/NNM`

These programs are not supported by Hewlett-Packard and, as such, you use them at your own risk.

White Papers

White papers are documents that explain various technical aspects of NNM and network management in general. Often these topics are not documented elsewhere.

When you install NNM on a UNIX operating system, the current white papers are installed by default.

To install the white papers on a Windows operating systems, you must use the "Custom Installation" feature.

The white papers are installed in:

Windows: `install_dir`\Doc\WhitePapers

UNIX: `$OV_DOC/WhitePapers`

Resources and Services Available Through HP

HP Web Sites

General Information

Using a web browser, you can learn more about HP OpenView by visiting the main HP OpenView web page at: `http://openview.hp.com`

This web site contains information on current products, as well as literature that you can print or download for viewing. There are links to HP technical support and sales offices.

Product Manuals

There is a web site for accessing current HP OpenView product technical manuals that you can download and print. These manuals are available in PDF format. The URL is:

`http://docs.hp.com`

Technical Knowledge Base

Another web site you may find useful is the HP OpenView technical knowledge base. This provides you with a central place to search for general information about HP OpenView. You can access this information from the "support" link at the URL:
`http://openview.hp.com`

HP Consulting Service

The HP Consulting Service provides a wide range of consulting services, including initial installation and configuration, and network planning and organization. They can also help you plan and implement advanced strategies to help you take the best advantage of NNM's capabilities to meet the specific needs of your organization. For more information about their services, visit the main HP OpenView web site, `http://openview.hp.com` and click on the "support" link.

HP Education

HP Education presents numerous classes on Network Node Manager and HP OpenView, geared toward different levels of training. For more information about course descriptions and class schedules, visit the main HP OpenView web site, `http://openview.hp.com`, and click on the "support" link.

HP Product Support

HP has more than 40 Response Centers worldwide offering telephone support in native languages and time zones. To register for telephone support, contact your local HP sales representative, or browse the HP support web site at `http://openview.hp.com`. Click on the "support" link.

In addition, HP offers software and materials support contracts so that you can automatically receive the newest versions of applications as they are available.

OpenView Forum

OpenView Forum is an association of users and developers of HP OpenView network and system management solutions. An independent corporation, the OpenView Forum represents a vast body of practical knowledge and experience provided through conferences, a web server, an email reflector, and personal contacts.

The OpenView Forum online discussion center provides members with a place where they can gain information and knowledge, and provide feedback to software developers about HP OpenView products.

OpenView Forum sponsors a conference each year, which is attended by vendors and more than 1000 Forum members. You can find out more about OpenView Forum at their web site: `http://www.ovforum.org`.