

Installation Guide

Version 2.1



Installation Guide

Version 2.1

Note!

Before using this information and the product it supports, be sure to read the general information under "Appendix. Notices" on page 17.

Sixth Edition (November 1999)

This edition applies to Version 2.1 of the Nways Manager for HP-UX.

You can order publications through your IBM® representative or the IBM branch office that serves your locality. Publications are not stocked at the address that is given below.

A form for readers' comments appears at the back of this publication. If the form has been removed, you can send your comments to the following address:

Department CGFA
Design & Information Development
IBM Corporation
PO Box 12195
RESEARCH TRIANGLE PARK, NC 27709-9990
USA

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© Copyright International Business Machines Corporation 1997, 1999. All rights reserved.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Pretace							
About This Manual							. V
Who Should Read This Manual							. V
How This Manual is Organized							. V
Chapter 1. Introduction							. 1
Demonstration Version							. 1
Hardware and Software Prerequisites							. 1
Required Patches							. 1
Chapter 2. Installing Nways Manager for HP-UX .							. 3
Installing and Using Acrobat Reader 3.0							. 4
Managing Licenses							
Upgrading Your License							. 5
Increasing the Number of Licensed Nodes							. 5
Chapter 3. Configuring Nways Manager Applicatio	ns .						. 7
Configuring ATMC							
Configuring Element Manager							
Accessing the Device Managers from a Web Brow							
Remote Monitor							. 9
DB2 Universal Database							
Using Web Servers							
Apache Server							
Netscape Server							
Domino [™] Web Server							
Domino Web Gerver		•	 •	•		•	''
Chapter 4. Starting Nways Element Manager for H							
Starting ATMC							
Starting Remote Monitor							13
Accessing the README Files							
Accessing Online Documentation							
Remote Monitor Online Documentation							
Element Manager Online Documentation							14
Chapter 5. Removing Nways Manager Applications	s.						15
Removing Filesets							
Appendix. Notices							17
Trademarks							
Pandars' Comments — We'd Like to Hear from Yo							10

Preface

About This Manual

This manual provides information that is needed to install IBM Nways Manager for HP-UX Version 2.1 on your network. It also provides instructions for configuring Nways Manager applications and the Asynchronous Transfer Mode.

Who Should Read This Manual

This manual is intended for use by network administrators, installation, and service personnel responsible for installing and configuring Nways Manager for HP-UX.

How This Manual is Organized

This manual contains the following sections:

- "Chapter 1. Introduction" on page 1 describes the components of IBM Nways Manager for HP-UX Version 2.1.
- "Chapter 2. Installing Nways Manager for HP-UX" on page 3 contains step-by-step instructions for installing IBM Nways Manager for HP-UX Version 2.1 on your network.
- "Chapter 3. Configuring Nways Manager Applications" on page 7 describes how to configure Nways Manager applications.
- "Chapter 4. Starting Nways Element Manager for HP-UX" on page 13 describes how to start up the IBM Nways Element Management.
- "Chapter 5. Removing Nways Manager Applications" on page 15 describes how to remove IBM Nways Manager for HP-UX Version 2.1 from your network.

Chapter 1. Introduction

IBM Nways Manager for HP-UX Version 2.1 provides an effective way to manage heterogeneous networks (ATM, token-ring, Ethernet, FDDI), particularly medium to large local area networks with high-speed backbones.

Nways Manager consists of the following three components:

- Element Manager
- 2. Remote Monitor
- 3. Asynchronous Transfer Mode Configuration (ATMC)
- 4. Configuration Tools

For the latest technical information, including prerequisites, visit the Nways Manager Web site at:

http://www.networking.ibm.com/netmgt

Demonstration Version

The CD-ROM that accompanies this book provides all the Nways Manager components. You can install the Nways Manager for HP-UX components and use them for a 60-day demonstration period. During (or after) this period, you can purchase any of the Nways Manager components. To assist you in ordering, the part numbers of these components are displayed when the installation program is complete.

When you purchase a Nways Manager component, you receive a Production License Use Certificate (software key) that unlocks the component and allows you to permanently use it. You do not have to reinstall the component or applications. To view the part numbers of the components previously loaded, begin the installation program and click the button labeled **Order** located on the second panel.

Hardware and Software Prerequisites

For the latest hardware and software prerequisites, visit the Nways Manager Web site at:

http://www.networking.ibm.com/netmgt

Required Patches

This section lists required patches for applications used with Nways Manager for HP-UX. These patches are frequently updated, so it is important to download the most recent patches. This list was accurate at the time this document was printed, but the identification number and contents of the patches are subject to change with the updates.

OpenView 6.01

If you are using Network Node Manager Version 6.01, the following patches are necessary and can be downloaded from the HP Web site:

PHCO_18070 Network Node Manager will not run without this patch

PHCO_18131	PHCO_18217	PHCO_19181
PHSS_18012	PHSS_18891	PHSS_19108
PHSS_19394	PHSS_19454	PHSS_19463
DUIGO 40475		

PHSS_19475

OpenView 5.01

If you are using Network Node Manager Version 5.01, the following patches are necessary and can be downloaded from the HP Web site:

JDK 1.17.01

The required JDK 1.17.01 and its required patches are available at the HP Web site: http://www.hp.com/go/java

PHCO_18018 _a	PHSS_17225 _a	PHSS_17534 _a
PHSS_17544 a	PHSS_17566 a	PHSS_17872 a
PHSS 18012 a		

a indicates the patch is also required for HP-UX 10.20

HP-UX 10.20

The required patches for HP-UX 10.20 are also available at the HP Web site:

PHCO_18018	PHSS_17225	PHSS_17534
PHSS_17544	PHSS_17566	PHSS_17872

PHSS_18012

These patches are also required for JDK 1.17.01

Chapter 2. Installing Nways Manager for HP-UX

Note: Before beginning the installation process, make sure that you have access to the installation key code that is located in the liner notes of the CD-ROM jewel case.

To install Nways Manager for HP-UX Version 2.1, follow these steps:

- 1. Log in as the root user.
- 2. Make sure that you have stopped all the HP-OV daemons.

If you have previously installed Nways Remote Monitor, you must also stop the following processes:

/usr/LANReMon/rmoncommon/dcserver/bin/HP-UX/dcserver /usr/LANReMon/rmon/ls_dnslook

and delete these files:

/tmp/.dcserver /tmp/.lsvDNS

- Insert the IBM Nways Manager for HP-UX Version 2.1 CD-ROM into the CD-ROM drive.
- 4. Using the following procedure, mount the CD-ROM to the mount directory:
 - a. Use the following command to find the device name for your CD-ROM drive:

/usr/sbin/ioscan -fn -C disk

b. Use the following command to start the pfsd_mount daemon:

/usr/sbin/pfs_mountd &

c. Use the following command to start the pfsd daemon:

/usr/sbin/pfsd &

d. Edit the file /etc/pfs_fstab to include the following line:

device_name mount_point pfs-iso9660 ro,suid 0 0

For example:

/dev/dsk/c1t2d0/cdrom pfs-iso9660 ro,suid 0 0 e. Use the following command to mount the CD:

/usr/sbin/pfs_mount -t iso9660 -x no_version device_name/mount_point

For example:

```
/usr/sbins/pfs_mount
-t iso9660 -x no version /dev/dsk/c1t2d0 /cdrom
```

5. Initiate the test of system requirements by going to the command line and typing:

/cdrom/SystemCheck

6. Run the shell script to start the installation program by entering the command:

/cdrom/install.nways

The Welcome window for the installation program is displayed.

- 7. Follow the instruction prompts in the installation program to select and install Nways Manager for HP-UX Version 2.1.
- 8. If you are installing the demonstration version of this product, the part numbers of the components you installed are displayed when the installation is complete.

Important: Before you can remove a CD-ROM from the CD-ROM drive, you must first unmount the file system. To do so, enter the following command:

/usr/sbin/pfs umount /cdrom

Installing and Using Acrobat Reader 3.0

Acrobat Reader 3.0 is provided on the CD-ROM for viewing the online books. To install it:

- Untar file aixreader.tar located in /cdrom/acrobat using the following command: tar -xvf ar302hp tar
- 2. Uncompress the resulting file.
- Type INSTALL and follow the procedure.
- When prompted, enter the Installation directory. By default it is /usr/lpp/Acrobat3
- 5. Update your .profile with the Acrobat Reader installation directory: export PATH=\$PATH:/usr/1pp/Acrobat3/bin

To start Acrobat Reader 3.0 enter **acroread** then select the directory where the documentation you are looking for is stored.

Managing Licenses

If this is the first time you have installed Nways Manager for HP-UX Version 2.1, you will see the License panel that allows you to register your licensed products or elect to use a demonstration version of the installed Nways Manager components:

- To register a licensed product, enter your customer number and license key number when prompted.
- To install a 60-day demonstration version of the selected components, press CTRL-C to exit the License panel.

If you are installing the Element Manager component or the Nways Manager Suite of components, you will be asked to select what version of these components you want to install and enter the number of nodes for which you have purchased a license.

If you have already installed some parts of the Element Manager component or the Nways Manager Suite, and have installed the correct license key, the installation program will complete automatically.

If you have not already installed an applicable license key, you will be taken to the License panel to install the key and complete installation.

Upgrading Your License

If you have purchased a license that allows you to upgrade from a demonstration version of a Nways Manager component, simply run the installation program again, select the component, and enter your customer number and license key number when prompted in the *License* panel.

This will install the license key, register the product, and save any of the accumulated data.

Increasing the Number of Licensed Nodes

If you have purchased a license allowing you to manage additional nodes using Nways Element Manager or Nways Manager Suite, use the following commands to update the node-count associated with your product license:

- Select Tools -> IBM Nways Java -> Open License Status from the OpenView menu bar.
- Click **Update** on the *License Status* dialog box, which produces the *Update* dialog box.
- 3. Enter the new value for the number of nodes to be managed.
- Click Update Now.
- 5. Click **Close** to return to the *License Status* dialog box.

You can select refresh at the bottom of the *License Status* dialog box to verify the newly entered number of nodes.

6. Select **Close** to exit the *License Status* dialog box.

Chapter 3. Configuring Nways Manager Applications

This section describes any additional configuration steps that you need to perform after installing Nways Manager for HP-UX.

Important

Before configuring Nways Manager applications, be sure that you have installed the patches listed in "Required Patches" on page 1.

Configuring ATMC

To configure ATMC, complete this procedure:

1. To run Java® Development Kit (JDK) 1.17.01 or later, enter the following command to export the JAVA_HOME system variable:

export JAVA_HOME=/opt/java

2. Install ObjectStore with the following patches:

PHSS_15391

PHSS_16585

- 3. Change the following environment settings:
 - a. Add the following lines to your /etc/profile file.

OS_ROOTDIR=/usr/local/ODI/0S5.1 SHLIB_PATH=/usr/local/ODI/0S5.1/lib JAVA_HOME=/opt/java

b. Add the following lines to your /.profile file:

PATH=\$PATH:/usr/local/ODI/0S5.1

SHLIB_PATH=/usr/local/ODI/0S5.1/lib

JAVA_HOME=/opt/java

OS_CACHE_SIZE=5,000,000

OS_ROOTDIR=/usr/local/ODI/OS5.1

OS_COMMSEG=/usr/CML/OSTORE/CACHE

OS_CACHE_DIR=/usr/CML/OSTORE/CACHE

c. Run the etc/environment file to make the changes effective.

Configuring Element Manager

The Element Manager component requires no additional configuration.

Accessing the Device Managers from a Web Browser

There are three basic components involved in Web browser-based access to the device managers:

- · Nways Manager Workstation
- · Web Server
- Web Browser compliant with JDK 1.1.5 or later

Nways Manager Workstation

The Nways Manager maintains the Nways Web pages that are sent from the Web server to the Web browser clients.

Web Server

You can run Java device management applications in client mode on stations connected to the network management station without configuring a Web server, but for true intranet access through a Web browser, you must configure your Web server to locate the Nways Java Management Web pages subdirectory.

Web servers supported for the Nways Web access include:

- Apache
- Fast Track
- Microsoft IIS
- Lotus[®] Domino[™] Go Server
- · Netscape Enterprise Server

On the network management station, you must:

- Assign a new port number for use by the HTTP server higher than 8000. (The
 default value is 80.) This action adds an additional level of security to Web browser
 access, and prevents port conflicts with other applications using the server.
- 2. Assign an alias or logical name to the directory in which the HTML pages are stored on the management system. The Nways Web pages are stored in:
 - /usr/CML/JMA/java/websvr.
- Verify that the properties assigned to this directory by the server include allowing Web browser access. Consult your Web server documentation for more information on how to do this.

Web Access for ATM Manager

Before you can use the ATM Manager via a Web browser, you must configure your Web server. The following configuration for the Lotus Domino server can be used as a guide if you are using another server.

1. Enter the following commands in the configuration file of your Web server, making sure that the two "Pass" statements are entered in this order:

```
Exec /atm-bin/* /usr/CML/ATMWEB/bin/*
Pass /atm-html/* /usr/CML/ATMWEB/html/*
Pass /* /a directory path/*
```

2. Reset the Web server by entering the appropriate command; for example:

refresh -s httpd

Web Browser Compliant with JDK 1.1.5 or Later

Java support comes with your browser. The Web browser can dynamically load the Java application.

Java communication uses the IP host name and not the IP address, therefore both the client and server need the correct host names to which they are communicating. If the client is dynamically assigned an IP address, ensure that this IP address is associated with your client's IP host name. This process works correctly with Dynamic Host Configuration Protocol (DHCP).

If your client uses the PPP protocol to connect to the server, the client will be dynamically assigned both an IP address and an IP host name. In this situation, Windows NT®, or Windows 95) do not provide the correct IP host name to the Java applications running in the client. Hence, the Java applications will not provide the correct IP host name to the server and the server will not be able to send asynchronous (unsolicited) events to the client. To correct this problem, change the IP host name on the Windows client to the value "localhost" for the PPP connection's TCP/IP protocol. The Java code in the Windows client will then provide the server with the correct (dynamically assigned) IP host name.

When you access the Nways Web pages, your browser may ask if you want to allow unsigned applets. To use the Web functions of the Nways Manager, you must allow unsigned applets.

Note: If you are using the HotJava[™] Browser, you must start it using the following parameters:

hotjava -mx64M

Remote Monitor

Before you can use Remote Monitor, you must set the RMONHOME environment variable to point to:

/usr/LANReMon/rmon

To set the RMONHOME environment variable in your .profile and add it to your default path, add the following lines to your .profile:

RMONHOME=/usr/LANReMon/rmon export RMONHOME

PATH=\$RMONHOME:\$PATH export PATH

DB2 Universal Database

Performance management for these device managers uses a Java Database Connectivity (JDBC)-compliant database. For your convenience, DB2 Universal Database[®] is provided.

You will need to create a database instance that can be accessed using JDBC by the device managers. The steps explaining how to create a database instance using DB2[®] with Nways Manager for HP-UX (the concept is the same if you are using another JDBC-compliant database, but you will need to refer to that database's instructions) can be found in the *Nways Manager Element Manager User's Guide*.

Using Web Servers

Before you can use the various web servers to configure Nways Manager, you must install the following web server settings. All web servers have to be configured to listen to the client on port 80 (which is the default port for most of the servers).

Apache Server

1. Add the following lines in the given order to the file:

/Server_root/cpnf/srm.conf.
Alias /nways "/usr/CML/JMA/java/webservr"
Alias /cgi/code "/usr/CML/JMA/java/webservr/code"
ScriptAlias /cgi "/usr/CML/JMA/java/webservr"

Server_root - The directory where the Apache Websvr is installed. **usr** - The directory where the Nways product is installed.

Netscape Server

- 1. Go to the server main page and check whether the server is ON.
- 2. Select **Programs** menu from the top of the page.
- Select CGI File Type.
- 4. Select Yes for Activate CGI as a file type.
- Select Content Management from the top menu.
- 6. Select Additional Document Directories, and add the following lines:

URL prefix: nways

Map to directory: /usr/CML/JMA/java/websvr

URL prefix: cgi

Map to directory: /usr/CML/JMA/java/websvr

Domino[™] Web Server

- Go to http://Machine/Frntpage.html (machine where you have installed the Domino Web Server).
- 2. Select Configuration and Administration Forms.

(http://Machine/admin-bin/Cfgin/initial)

3. Select Request Routing.

(http://Machine/admin-bin/Cfgin/mpfrule)

4. Add the following lines in the given order:

Action	Request Template	Replacement File Path
Pass	/nways/*	/usr/CML/JMA/java/websvr/*
Exec	/cgi/CgiLauncher*	/usr/CML/JMA/java/websvr/CgiLauncher*
Pass	/cgi/*	/usr/CML/JMA/java/websvr/*

Chapter 4. Starting Nways Element Manager for HP-UX

The first time you start an application, be sure that you log in as a root user. To start the Nways Manager applications that you have installed, enter the command:

/opt/OV/bin/ovw

The Network Node Manager root map is displayed, from which you can open Nways Manager applications.

To open a Java Device view:

- 1. Select a device by clicking on an icon in the Topology Map.
- Select Tools -> IBM Nways Java: Open Java Device View or select Tools -> IBM Nways Java: Open IBM 8260 Switching Module Series

Starting ATMC

To open Nways Manager in the ATM configuration:

- 1. Click on the ATM Campus icon to display the ATM topology.
- 2. Click on the VLANs icon to use the LAN-Emulation function.

Starting Remote Monitor

You can start Remote Monitor in three different ways:

- 1. From the Java Management Application (JMA) of devices that support RMON.
- From the OpenView Toolbar, select any of the options in the Performance -> Nways Manager-Remote Monitor -> Menu.
- 3. From the command line enter:

\$RMONHOME/rmon

Accessing the README Files

The following README files are also installed:

Component	README File
Remote Monitor	/usr/lpp/lanReMon/lpp.README
Element Manager	/usr/CML/misc/README
ATMC	/usr/lpp/ahm6000/lpp.README.HP

Accessing Online Documentation

After starting Nways Manager, you can access online User's Guides for Nways Manager applications at the following Web site:

http://www.networking.ibm.com/netmgt

Remote Monitor Online Documentation

Use the latest version of Acrobat Reader (3.0 or later) to access online documentation for Remote Monitor, available in these directories:

/usr/LANReMon/doc/ecam.pdf /usr/LANReMon/doc/lanremon.pdf

Element Manager Online Documentation

Use your HTML browser to access the file:

/usr/CML/JMA/java/websvr/help/toc.html

Web documentation

 For the latest online documentation for Nways Element Manager for HP-UX, visit the Nways Manager Web site at:

http://www.networking.ibm.com/netmgt

Chapter 5. Removing Nways Manager Applications

To remove Nways Manager applications, perform the following steps:

Removing Filesets

- 1. Make sure that you have root privileges.
- 2. At the command line, enter /usr/sbin/swremove
- 3. From the SD Remove panel, select:

nwaysmgr - to remove Nways Element Manager lanReMon - to remove Nways Manager Remote Monitor rmonCommon - to remove Nways Manager Remote Monitor ahm6000 - to remove ATMC

Note: Select cml only if you are uninstalling the entire product set.

Appendix. Notices

The information in this manual was developed by IBM for products, services, or features offered in the U.S.A. However, IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area.

References in this publication to IBM products, programs, and services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any of IBM's intellectual property rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the user's responsibility.

IBM may have patents or pending patent applications covering the subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation Licensing 2-31 Roppongi 3-chome, Minato-ku Tokyo 106, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION ,AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product, and use of those Web sites is at your own risk.

Trademarks

The following items are trademarks of the IBM corporation in the United States or other countries both:

DB2	DB2 Universal Database	Nways	Netview
AIX	ATMC	IBM	OS/2

TME 10 is a trademark of Tivoli Systems Inc., in the United States or other countries or both.

Domino and Lotus are trademarks of the Lotus Development Corporation in the United States or other countries or both.

Java and HotJava are trademarks of Sun Microsystems, Inc.

Microsoft, Windows, Windows NT, and the Windows 95 logo are trademarks or registered trademarks of the Microsoft Corporation.

Netscape is a registered trademark of the Netscape Corporation.

UNIX is a registered trademark in the United States and other countries licensed exclusively through X/Open Company Limited.

Other company, product, and service names may be trademarks or service marks of others.

Readers' Comments — We'd Like to Hear from You

Nways Manager for HP-UX Installation Guide

Publication No. SK2T-0432-03

Overall, how satisfied are you with the information in this book?						
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	
Overall satisfaction						
How satisfied are you th	nat the information	in this book is:				
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	
Accurate						
Complete						
Easy to find						
Easy to understand						
Well organized						
Applicable to your tasks						
Thank you for your respo	nses. May we conta	act you? Ye	s 🗌 No			
When you send comment way it believes appropriate			-	r distribute your cor	nments in any	
Name		Ad	dress			
Company or Organization	1					
Phone No.						

Readers' Comments — We'd Like to Hear from You SK2T-0432-03



Cut or Fold Along Line

Fold and Tape Please do not staple Fold and Tape

PLACE POSTAGE STAMP HERE

Department CGFA
Design & Information Development
IBM Corporation
PO Box 12195
Research Triangle Park, NC
USA 27709-9990

Fold and Tape

Please do not staple

Fold and Tape

IBM

Printed in U.S.A.

Nways Management Web site:

http://www.networking.com/netmgt

SK2T-0432-03

