Chapter3 Installing the CiscoWorks NetView Interface

3

This chapter describes how to install the CiscoWorks NetView Interface software. Before you proceed with the installation tasks, ensure that you have gathered all the recommended information in the previous chapter, “Preparing to Install the CiscoWorks NetView Interface.”

The following is a brief overview of steps necessary to install the CiscoWorks NetView Interface:

- Mount the CiscoWorks NetView Interface CD-ROM.
- Run the */cdrom/extract_unbundled* script on the CD-ROM to install the software.

  This installation consists of three parts:

  — Installing the CiscoWorks NetView Interface

  — Installing the SunLink SNA Peer-to-Peer RunTime Environment (RTE)

  — Moving the installation files
- Verify the installation.

The installation process takes approximately 30 minutes, although the amount of time can vary depending on your system performance and installation method. An installation from a CD-ROM drive attached to a remote device might take longer.

Once you have completed these tasks, you must configure the IBM hosts and the SNA Peer-to-Peer RTE software. See Chapter 4 for detailed instructions.

Mounting the CiscoWorks NetView Interface CD-ROM

The CiscoWorks NetView Interface software consists of two CD-ROMs. The CiscoWorks NetView Interface CD-ROM contains CiscoWorks NetView Interface software and Sun software patches. The second CD-ROM contains the SunLink SNA Peer-to-Peer RTE software. You must have super-user access on the machine on which you are loading CiscoWorks NetView Interface in order to run the installation scripts.

The installation process consists of mounting the CiscoWorks NetView Interface CD-ROM and extracting the software. First it will extract the CiscoWorks NetView Interface files used by the scripts to construct software that is specific to the architecture of your system. It also extracts the Sun patches to the SNA Peer-to-Peer RunTime Environment that are required for CiscoWorks NetView Interface to work. The installation also prompts you to insert the second CD-ROM and proceed with the installation for the SNA Peer-to-Peer RTE.

There are two ways to mount a CD-ROM:

- From a local drive
- From a remote drive

Both instructions are described in the following sections.

To mount the CD-ROM and run the installation script, you must be a super user (root). Refer to "Becoming the Superuser" in Chapter 2 for detailed instructions on how to log in as a superuser.

Note: Some directories might be in disk partitions that are almost full. Refer to the Sun manual *System and Network Administration* or the manual pages: **mount**(8), **newfs**(8), and **fstab**(5) for more information on disk partitions. These manual pages apply to both the printed UNIX manual and the online version.

To access the online manual page for **mount**(8) for example, enter the command **man 8 mount** at the pound sign (#) prompt.

Mounting from a Local CD-ROM Drive

To mount the CD-ROM from a local CD-ROM drive, perform the following steps:

Step 1: Place the CD-ROM into its caddy and insert it into the CD-ROM drive.

Step 2: Become the superuser by entering **su** and the root password.

Step 3: If the */cdrom* directory does not already exist, enter the following command to create a new directory:

```
# mkdir /cdrom
```

If the */cdrom* directory already exists, proceed to the next step.

Step 4: To mount the CD-ROM, enter the following command:

```
# mount -rt hsfs /dev/sr0 /cdrom
```

In this command, the **-r** option mounts the CD-ROM in ReadOnly mode. The **-t** indicates the type of filesystem, where **hsfs** specifies a filesystem with an ISO 9660 Standard or High Sierra Standard with Rock Ridge extensions. If you do not use these options, media error messages might display on the console.

Mounting from a Remote CD-ROM Drive

To mount the CD-ROM from a remote CD-ROM drive, perform the following steps on the remote machine:

Step 1: Place the CD-ROM into its caddy and insert it into the CD-ROM drive.

Step 2: Become the superuser by entering **su** and the root password.

Step 3: If the */cdrom* directory does not already exist, enter the following command to create a new directory:

```
# mkdir /cdrom
```

If the */cdrom* directory already exists, proceed to the next step.

Step 4: If the */etc/exports* file does not exist, create it.

Step 5: Edit the */etc/exports* file to include the following line:

```
/cdrom -ro
```

Step 6: To mount the CD-ROM, enter the following command:

```
# mount -rt hsfs /dev/sr0 /cdrom
```

In this command, the **-r** option mounts the CD-ROM in ReadOnly mode. The **-t** indicates the type of filesystem, where **hsfs** specifies a filesystem with an ISO 9660 Standard or High Sierra Standard with Rock Ridge extensions. If you do not use these options, media error messages might display on the console.

Step 7: If the */etc/exports* file existed previously, run **exportfs -a**.

If */etc/exports* did not exist, reboot your machine to become an NFS server.

Complete the following steps on the local machine:

Step 8: Become the superuser by entering **su** and the root password.

Step 9: If the */cdrom* directory does not already exist, enter the following command to create a new directory:

```
# mkdir /cdrom
```

Step 10: To mount the CD-ROM, enter the following command:

```
# mount remote_machinename:/cdrom /cdrom
```

Running extract_unbundled Script

You install CiscoWorks by invoking and running the *extract_unbundled* script provided on the CiscoWorks NetView Interface CD-ROM. This script is our own version of *extract_unbundled*. The *extract_unbundled* script provides an interactive prompt and response dialog interface that guides you through the installation process. Refer to the CiscoWorks NetView Installation Worksheet for the information necessary before you proceed with the installation script.

Note: You can exit the installation script at any time by typing **Control C** (**^C**) to return to the UNIX environment. The responses you have made up to the point you exit will be recorded for use as the defaults the next time you start the installation process.

The superuser's *.rhosts* file on the remote system must contain your system's local host name and your username. Otherwise, you will not be able to access the remote system to download software from the remote system's CD-ROM drive. For more information, refer to the manual pages on **rhosts**.

If you use a local CD-ROM drive, the CiscoWorks NetView Interface software is installed directly on your system.

Note: Some of the output displayed by the sample installation script is not included. Ellipses (...) in the script indicate that some output is not displayed. A bracketed item ([ ]) after a prompt denotes the default response. If a bracketed item appears without any input next to it, the default value has been accepted.

The installation has three parts:

- The first part installs software related to CiscoWorks.
- The second part installs SunLink SNA Peer-to-Peer RunTime Environment.
- The third part copies the software to appropriate directories.

This section provides a detailed procedure that shows you how to install the CiscoWorks NetView Interface software either from a remote CD-ROM drive or a local CD-ROM drive.

The sample installation script uses the following values and hardware:

- *$NMSROOT* is the directory where the CiscoWorks NetView Interface software is being installed.
- *netmgmt* is the name of the system where the CiscoWorks NetView Interface is being installed.
- */dev/sr0* is the name of the CD-ROM drive where the CiscoWorks CD-ROM is inserted.
- */usr/nms* is the name of the CiscoWorks software directory.
- *enterprise* is the name of the remote system to which the remote CD-ROM drive is attached.
- The Sun SPARCstation uses Sun4c architecture.

Substitute the appropriate usernames and directory path names when you install the software.

To run the */cdrom/extract_unbundled* script, perform the following steps:

Step 1: If you are performing a remote mount, ensure you have completed the steps in the previous section "Mounting from a Remote CD-ROM Drive."

Step 2: To extract the files from the CD-ROM, enter the following commands at the UNIX prompt:

```
# cd /
# /cdrom/extract_unbundled
```

Make sure you enter **/cdrom/extract_unbundled** to ensure that you run the correct version of this command. The following output is produced:

```
./extract_unbundled: The following product will be installed:


************************************************************
******

         CiscoWorks NetView Interface Version 1.0
             Copyright (c) 1986-1993 by Cisco Systems, Inc.
                         All rights reserved

************************************************************
******

Do you want to continue (y/n)?  [y]
```

Step 3: To continue with the installation program, when the banner displays to indicate that CiscoWorks NetView Interface 1.0 will be installed, enter **y**.

The installation script displays the following text. If you do not want to continue with the installation, enter **n**.

A series of installation scripts are extracted:

```
./extract_unbundled: Extracting installation scripts ...
x ./install_unbundled, 836 bytes, 2 tape blocks
x ./1.0_CiscoWorksNV, 10753 bytes, 22 tape blocks
x ./1.0_CiscoWorksSun, 7694 bytes, 16 tape blocks
x ./1.0_CiscoWorksNVcp, 6595 bytes, 13 tape blocks
x ./CWNVconfigure, 9178 bytes, 18 tape blocks
x ./.installnv/config.defs, 475 bytes, 1 tape blocks
x ./.installnv/exclude.sun4, 0 bytes, 0 tape blocks
x ./.installnv/include.install, 199 bytes, 1 tape blocks
x ./.installnv/variables, 236 bytes, 1 tape blocks

./extract_unbundled: Starting installation process ...
./extract_unbundled: /usr/tmp/unbundled/install_unbundled -c/
cdrom -f

/usr/tmp/unbundled/install_unbundled: Starting installation
script /usr/tmp/unbundled/1.0_CiscoWorksNV ...
/usr/tmp/unbundled/install_unbundled: /usr/tmp/unbundled/
1.0_CiscoWorksNV -c/cdrom -f
/share/var/tmp/unbundled
```

```
******* CiscoWorks NetView Interface 1.0 INSTALLATION *******

  ******** If using remote cdrom you must have root ********
               access to the remote machine

INSTALLATION SETUP:
Step 1
This section of the CiscoWorks NetView Interface 1.0
installation will ask you to specify the directory path where
CiscoWorks is installed.
You must have write access to the CiscoWorks directory.

This installation needs a temporary work directory.  By default
the installation will use /usr/tmp.  If this directory does not
have enough space or the directory has no write permission the
installation will prompt you for another temporary work directory.

The installation has three steps:
         1)  The first step installs CiscoWorks related software.
          2)  The second step installs:
              SunLink SNA Peer-to-Peer RunTime Environment.
          3)  The third step copies the software to appropriate
              directories.

The installation will take approximately 30 minutes.
```

Step 4: Indicate whether or not the CiscoWorks software is already installed.

```
Is CiscoWorks installed at your site? [yes]
```

If the CiscoWorks software is not installed, the installation aborts. You should install CiscoWorks, then resume the installation of the CiscoWorks NetView Interface software.

Step 5: Specify the directory where CiscoWorks is installed.

```
What directory does the CiscoWorks software reside in?  [/usr/nms]
```

If you set the $NMSROOT environment variable in CiscoWorks, that variable is used as the default. If it is not set, the default directory is */usr/nms*.

Press Return to accept the displayed directory or enter the complete path for the directory where you want the software installed. A temporary directory, */usr/tmp/cisco*, is created.

Step 6: Confirm the information you specified earlier.

```
CiscoWorks Directory :  /usr/nms
Is this value correct? [y]
```

If your installation is of a different type or you wish to install the software in a different directory, enter **n**. You are returned to the beginning of the *extract_unbundled* script. Otherwise, press Return to continue. Note that the remote host line will not appear if you are installing the software on a local host.

The CiscoWorks software is copied onto your system. It takes approximately 20 minutes for the files to be copied to your system. While the files are being copied, you will see output similar to the following:

```
CDROM INSTALLATION - This section of the CiscoWorks NetView Inter-
face 1.0 installation will load files from the installation cdrom
into the
/usr/tmp directory.

Installing CiscoWorks NetView Interface 1.0 ...

uncompress -c /cdrom/ciscoworksNV/sun4.netview.tar.Z | tar xvfpB
- 2>&1 | tee /share/var/tmp/unbundled/.installnv/tar.log | cat -u
x ./script/cmpconf, 2612 bytes, 6 tape blocks
x ./script/getconf, 3229 bytes, 7 tape blocks
x ./script/contacts, 673 bytes, 2 tape blocks
...
...
x ./sun/README, 1942 bytes, 4 tape blocks
x ./sun/appc, 262144 bytes, 512 tape blocks
x ./sun/pca, 122880 bytes, 240 tape blocks
x ./sun/runcmd, 57344 bytes, 112 tape blocks
x ./sun/pca.schema, 1502 bytes, 3 tape blocks

Step 1 of CiscoWorks NetView Interface 1.0 installation completed.
```

Ignore the pauses that occur briefly while the files are being copied.

The system continues to display the installation script output.

```
Continuing with Step 2 ...

/share/var/tmp/unbundled

******* CiscoWorks NetView Interface 1.0 INSTALLATION *******

INSTALLATION SETUP:
Step 2
This section will install SunConnect SNA Peer RTE.

Is SunConnect SNA Peer RTE installed at your site? [yes | no] no
```

Step 7: If you do not have SunConnect's SNA Peer RTE installed at your site, enter **no**. If you already have this software installed, enter **yes**.

If you already have SunConnect's SNA Peer RTE installed and answer no, you receive the following message: `Skipping SunConnect SNA Peer RTE installation`.

Step 8: Mount the SunLink CD-ROM into the appropriate drive and press Return.

```
** Please mount the release media if you haven't done so already.**
Press return when ready!
```

Step 9: The installation script displays the following:

```
Mounting /dev/sr0 /cdrom ...
/cdrom mounted
Invoking cdm to install SunConnect SNA Peer RTE ...
./cdm Initializing Done
```

```
Current program environment:
        Application : none
        Category    : all
        Directory   : /cdrom
```

A menu of options entitled CDM displays.

Enter the number **1** to select an application for installation.

```
----->>>>> CDM <<<<<-----

        1.  Select Application
        2.  Show Current Application
        3.  Install Application
        4.  Display Application Text File
        5.  Print Application Text File
        6.  List Applications
        7.  List Categories
        8.  Change Current Category
        9.  Change Current Directory
        10. Show Program Environment

Please enter a number or q to quit: 1
```

The SunLink SNA Peer RTE application should display as the only application available.

Step 10: Enter the number **1** to select the SunLink SNA Peer-to-Peer.

```
Applications available:

        1.  SunLink 7.0.1 SNA Peer-to-Peer

Please enter a number or q for the main menu: 1
```

If the SunLink software appears as a different number, enter that number at the prompt.

Step 11: Enter the number **3** to install the SunLink SNA Peer-to-Peer RTE.

```
"SunLink 7.0.1 SNA Peer-to-Peer" selected as new application.

----->>>>> CDM <<<<<-----

        1.  Select Application
        2.  Show Current Application
        3.  Install Application
        4.  Display Application Text File
        5.  Print Application Text File
        6.  List Applications
        7.  List Categories
        8.  Change Current Category
        9.  Change Current Directory
        10. Show Program Environment

Please enter a number or q to quit: 3
```

Step 12: Enter **y** to begin the install the SunLink SNA Peer-to-Peer RTE software.

```
Begin installation now?   y
Executing installation file ...
The following product will be installed:

    7.0.1 SunLink(TM) SNA Peer-To-Peer
    RunTime Environment
    Sun-4 SUNBIN
    CD-ROM (UFS file system format ) 1 0f 1
    Part Number:  258-3374-10
    Compatible with the Sun(TM) Operating System Release 4.1.1
...
```

```
...
...
```

Copyright and licensing information displays.

```
Do you want to continue [y|n]? y
```

Step 13: Enter **y** to continue with the installation.

If you enter **n**, you are exited from the installation. The system continues to display installation text:

```
/cdrom/SNAP2P/../bin/extract_unbundled : Extracting
Installation Scripts
/cdrom/SNAP2P/../bin/extract_unbundled : Begin Install Script
Execution
Invoking /usr/tmp/unbundled/7.0_SNAP2P; Log file is /usr/tmp/
unbundled/7.0_SNAP2P.log
```

Step 14: Enter **y** to view the installation files and current free disk space.

```
Do you want to see a description of this installation script [y|n]?
y
```

If you do not want to see a description of the installation script, enter **n**. Output similar to the following appears if you enter **y.**

```
Installs sunlink/snap2p, sunlink/mapper, sunlink/sync
directories.
The following are Software Requirements for SNAP2P: None.
The following are Hardware Requirements for SNAP2P:
     A communications port (local port or see Optional Hardware).
The following are Optional Software for SNAP2P: SunNet Manager
The following are Optional Hardware for SNAP2P:
     MCP (Sun-4) or TRI/S (Sun-4c or Sun-4m) or HSI/S (Sun-4c or
Sun-4m).

Installation should take approximately 5 minutes.

Here is the Current Free Disk space:
Filesystem            kbytes    used   avail capacity  Mounted on
/dev/sd0a               7508    5691    1067    84%    /
/dev/sd0g              74722   57524    9726    86%    /usr
/dev/sd2c             388998  172302  177797    49%    /disk
/dev/sr0                4730    2273    2457    48%    /cdrom
This software requires 4000 kbytes of disk space
```

Step 15: Enter **y** to continue with the installation.

```
Do you want to continue [y|n]? y
```

The system displays the SunOS requirements.

```
SNAP2P : This software is compatible with these operating systems:
         4.1.1
Check this product's PRODUCT NOTES for the most current statement
on its SunOS compatibility.
```

Step 16: Enter **y** to continue with the installation.

```
Do you want to continue? [y|n] y
```

Step 17: Specify the function of the network management workstation that this software will be installed. In most cases, enter **standalone**.

```
Enter system type [standalone | server]: standalone
```

If your workstation will act as a server for other workstations, enter **server**.

The system displays the destination for the SNAP2P files.

```
Currently, the destination directory for the SNAP2P: /usr

The destination directory /usr is not empty.
It contains:
total 60
drwxr-sr-x  2 bin          1024 Oct 23  1991 5bin
drwxr-sr-x  3 bin           512 Oct 23  1991 5include
...
...
drwxr-sr-x  2 bin           512 Oct 23  1991 xpg2lib
Ready to install SNAP2P in /usr,
```

Step 18: Enter **y** to continue with the installation.

```
Do you want to continue [y|n]? y
```

The system displays the installation files and repeats the CDM menu.

```
Installing software to  :/usr/sunlink/snap2p
a ./p2p_etc/appc 560 blocks
...
...
x ./snm/pca, 90112 bytes, 176 tape blocks
7.0_SNAP2P : **** Installation Completed ****
----->>>>> CDM <<<<<-----

        1.  Select Application
        2.  Show Current Application
        3.  Install Application
        4.  Display Application Text File
        5.  Print Application Text File
        6.  List Applications
        7.  List Categories
        8.  Change Current Category
        9.  Change Current Directory
        10. Show Program Environment

Please enter a number or q to quit: q
```

Step 19: Enter a **q** to quit this part of the installation.

The installation script continues to display the output text:

```
Starting the step3 of CiscoWorks NetView Interface 1.0
installation ...

***** CiscoWorks NetView Interface 1.0 INSTALLATION *****

INSTALLATION SETUP:
Step 3
This section of the CiscoWorks NetView Interface 1.0
installation will copy software to the appropriate directory
```

Step 20: To move the installation files, specify the directory where SunLink SNA Peer-to-Peer RTE software is installed.

```
Where is SunLink SNA Peer-to-Peer RunTime Environment software
installed? [/usr/sunlink/snap2p]
```

Press Return to accept the displayed directory or enter the complete path for the directory where the software is to be installed.

The system displays the text of the movement of the installation files.

```
Copying /usr/tmp/cisco/script to /disk/cw1.0/bin ...
Copied scripts to /disk/cw1.0/bin

Moving /usr/sunlink/snap2p .. appc, pca, and runcmd server
to name.FCS ...
Copying /usr/tmp/cisco/sun to /usr/sunlink/snap2p ...
Copied /usr/tmp/cisco/sun/appc to /usr/sunlink/snap2p/
Copied /usr/tmp/cisco/sun/runcmd /usr/sunlink/snap2p/
Copied /usr/tmp/cisco/sun/pca to /usr/sunlink/snap2p/
Copied /usr/tmp/cisco/sun/README to /usr/sunlink/snap2p/
Copied /usr/tmp/cisco/sun/pca.schema to /usr/sunlink/snap2p/

** CiscoWorks NetView Interface 1.0 installation is
   complete.  Please proceed with the configuration
   by starting /usr/tmp/unbundled/CWNVconfigure.
```

The installation is complete.

Step 21: To eject the CD-ROM, enter the following commands:

```
# cd /cdrom
# eject sr0
```

Continue to the next section on verifying the installation before configuring the CiscoWork NetView Interface.

Verifying the Installation

This section explains how to verify the software installation. Verification ensures that the software has been loaded properly.

CiscoWorks NetView Interface

To verify that the CiscoWorks NetView Interface software was successfully installed, enter the following at the command line:

```
hostname% $NMSROOT/bin/netmenu
```

The system should respond with **netmenu** output that describes the RUNCMD commands available. Refer to Chapter 6 for a sample of **netmenu** output.

Continue to Chapter 4, “Configuring the CiscoWorks NetView Interface,” to configure the IBM and SunLink portion of the installation.

Contacting your IBM Administrator to Add PU Definitions

Because you are required to use SNA configuration file parameters during the configuration of this software, you may want to contact your IBM administrator before you perform the configuration. Notify the administrator that you are installing the CiscoWorks NetView Interface and that you will need to synchronize some of the VTAM definitions with the software configuration file you are installing. Refer to section “Configuring the IBM SNA Configuration” in Chapter 4 for more information on what is required.