Installing and Configuring CiscoWorks

Overview

To install and configure CiscoWorks network management software on your HP OpenView platform running the Sun Operating System, you will perform the following general tasks.

1 Use the installation and configuration worksheets in Chapter 2 to gather information required by the installation or configuration scripts.

2 Install CiscoWorks by invoking the */cdrom/extract_unbundled* script and reboot your workstation to ensure that the Sybase changes to the kernel take effect. If you are installing CiscoWorks 2.1 for the first time, regardless of whether you have CiscoWorks 2.0 or earlier installed, see the section "Installing CiscoWorks Software for the First Time." If you are upgrading only from a presales version of CiscoWorks 2.1, see the section "Performing a CiscoWorks Upgrade."

3 Configure CiscoWorks by invoking the *ncsconfigure* script in the */usr/tmp/unbundled* directory. If you are configuring CiscoWorks for the first time, see the section, "Configuring CiscoWorks." If you are upgrading from a previous version of CiscoWorks, see the section "Performing a CiscoWorks Upgrade."

Note If you are upgrading from a previous version of CiscoWorks, you need to shut down the Sybase database, then back up the existing Sybase files on your system. Next, run the **nmstartup** command to restart Sybase, then proceed with the CiscoWorks installation.

Updating the XKeysymDB file

CiscoWorks 2.1 is based on the OSF/Motif windowing system and requires Motif key mapping. During installation, a message will advise you that you need Motif key mapping. The installation script then offers to update the (key mapping) file for you in case you are using a different platform, such as OPEN LOOK. If necessary, you can also manually update the *XKeysymDB* file by appending *$NMSROOT/etc/XKeysymDB* to your *XKeysymDB* file.

Installing from a Local or Remote CD-ROM

CiscoWorks software is distributed on a CD-ROM. To install CiscoWorks from a CD-ROM drive attached to your system or from a drive attached to a remote system, perform the following steps:

Step 1   Attach a CD-ROM drive either to your workstation or to a remote workstation.

Step 2   If you plan to install CiscoWorks from a remote host, acquire the appropriate login account to mount the CD-ROM remotely.

Step 3   Log in as a superuser. For instructions, see the section "Becoming a Superuser" in Chapter 2.

Caution   Avoid exposing the CiscoWorks CD-ROM to direct sunlight because it might harm the contents.

If you are using a CD-ROM drive that is connected to your workstation, refer to the following section, "Mounting from a Local CD-ROM." If you are using a CD-ROM drive that is connected to a remote workstation, refer to the section "Mounting from a Remote CD-ROM." These instructions are also provided in the CiscoWorks CD-ROM insert booklet shipped with the product.

Mounting from a Local CD-ROM

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 a superuser by entering the following command and supplying your root password:

```
login: root
Password: <rootpassword>
```

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

```
hostname# mkdir /cdrom
```

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

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

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

In this command, the **-r** option mounts the CD-ROM in read-only mode. The **-t** indicates the type of file system where **hsfs** specifies a file system 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.

If you are installing CiscoWorks for the first time, refer to the section "Installing CiscoWorks Software for the First Time" for instructions. If you are upgrading from an earlier version of CiscoWorks, refer to the section "Performing a CiscoWorks Upgrade."

Mounting from a Remote CD-ROM

If you plan to use a CD-ROM drive attached to a remote system, CiscoWorks does not require any disk space on the remote system. The software is copied across the network to the local workstation.

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

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

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

Step 2 Become a superuser by entering the following command and supplying your root password:

```
login: root
Password: <rootpassword>
```

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

```
hostname# mkdir /cdrom
```

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
```

Timesaver Rebooting your computer from a server can take as long as 20 minutes. Entering the previous commands takes about 15 seconds and achieves the same effect.

Step 6 If the */etc/exports* existed previously, run **exportfs -a**:

```
hostname# exportfs -a
```

Step 7 If you just created */etc/exports* (in Step 4), you must enable your workstation as an NFS server. The **nfsd** command can be started by either rebooting your workstation *or* entering the following commands at the UNIX prompt:

```
hostname# nfsd 8 &
```

```
hostname# rpc.mountd -n
```

Step 8 To mount the CD-ROM, enter the following command:

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

In this command, the **-r** option mounts the CD-ROM in read-only mode. The **-t** indicates the type of file system where **hsfs** specifies the ISO 9660 standard or High Sierra standard with Rock Ridge extensions. If you do not use these options, media error messages may display on the monitor.

Perform steps 9 through 11 on the local workstation:

Step 9 Become a superuser by entering the following command and supplying your root password:

```
login: root
Password: <rootpassword>
```

Step 10 If the */cdrom* directory does not already exist, enter the following command to create a new directory:

```
hostname# mkdir /cdrom
```

Step 11 To mount the CD-ROM, enter the following command:

```
hostname# mount remote_workstation:/cdrom /cdrom
```

If you are installing CiscoWorks for the first time, refer to the following section, "Installing CiscoWorks Software for the First Time." If you are upgrading from an earlier version of CiscoWorks, refer to the section, "Performing a CiscoWorks Upgrade."

Installing CiscoWorks Software for the First Time

CiscoWorks software is distributed on a CD-ROM. It contains CiscoWorks software and the Sybase relational database. You can install CiscoWorks from a CD-ROM drive locally or from a remote system.

Note Upon new installation, CiscoWorks deletes the contents of the directory in which it is installed, thus erasing any preexisting data, including the directory that contains any existing Sybase or other value-added products, such as those from Remedy, DeskTalk, and SynOptics.

The installation script, *./extract_unbundled*, prompts you to supply the device name of the local or the remote CD-ROM drive or the name of the remote system and the device name of the remote drive.

You will install CiscoWorks by running the *./extract_unbundled* script on your system. The *extract_unbundled* script provides an interactive prompt and response dialog interface that guides you through the installation process. For more information on the *./extract_unbundled* script, refer to the manual pages on **./extract_unbundled**.

The installation and configuration process takes 20 to 30 minutes. The amount of time can vary depending on your system performance and installation method. Installation from a CD-ROM drive attached to a remote device may take longer.

Note You can exit the installation or configuration script at any time by entering **Ctrl-C** to return to the UNIX prompt. The responses you make up to the point you exit will be recorded for use as the defaults the next time you start the installation process.

The *.rhosts* file (root directory) on the remote system must contain the local host name and your username to access the remote system. For more information, refer to the manual pages on **rhosts**.

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

New Installation Procedure

This section provides a detailed explanation of the CiscoWorks installation script dialog for an installation from a CD-ROM drive.

During the installation, CiscoWorks prompts you for information regarding the naming and creating of directories, and similar functions of software installation. The letters or words enclosed in brackets are the default selections that you can make if you press Return. Or, you can enter your response and press Return.

Before installing CiscoWorks, you must do the following:

- Fill in the Installation Worksheet.

- Have the CiscoWorks CD-ROM readily available for insertion into the local CD-ROM drive connected to your system or a remote system.

- Log in as a superuser.

The installation script uses the following values:

- */usr/nms* is the name of the directory where the CiscoWorks software is being installed.

- *zen* is the name of the system where CiscoWorks is being installed.

- */dev/sr0* is the name of the remote CD-ROM drive where the CiscoWorks CD-ROM is inserted.

- *enterprise* is the name of the remote system to which the remote CD-ROM drive is attached.

- The Sun SPARCstation uses Sun4c architecture.

To install CiscoWorks, perform the following steps:

Step 1 Change the directory to the */cdrom* directory:

```
zen# cd /cdrom
```

Step 2 Enter the following command to begin the *./extract_unbundled* installation dialog:

```
zen# ./extract_unbundled
```

The following message appears and asks you if you want to continue:

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

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

                        CiscoWorks Version 2.1
                Copyright (c) 1986-1994 by Cisco Systems, Inc.
                           All rights reserved

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

Step 3 Press Return (the default for yes) to continue the installation process, or enter **n** to cancel the process.

Step 4 Respond to each of the installation prompts (press Return to accept the default or enter your response and press Return), until you return to the UNIX prompt.

Step 5 Enter the following command to reboot your system and ensure that the new kernel is used.

```
zen# reboot
```

Step 6 After your computer reboots, log into your system as a superuser.

```
login: root
password:<root password>
```

Your installation is complete. Next, configure the CiscoWorks software as described in the following section, "Configuring CiscoWorks."

If your CiscoWorks installation fails, or a given application seems to be malfunctioning, take a look at the log file to see if an error was generated that you can correct. If the error condition is unusual, you may want to supply the log file to a technical support representative in order to verify and resolve the condition.

If needed, you can obtain complete log information on the installation in */usr/tmp/unbundled/ .install.log*. Similarly, you can obtain complete log information on the configuration process in */usr/ tmp/unbundled/ncsconfigure*.

When you complete the installation process, you see CiscoWorks applications dispersed among the HP OpenView menus.

Configuring CiscoWorks

After installing CiscoWorks and rebooting your system, you must configure CiscoWorks to fit your particular environment. The interactive configuration script will prompt you to enter all of the required information, then ask you to confirm your choices before any actual changes are made to your system.

When you run the configuration script, *ncsconfigure*, it does the following:

* Adds an entry to */etc/passwd* for Sybase and CiscoWorks

* Adds an entry to */etc/group* for the CiscoWorks group and sybase group

* Adds CiscoWorks startup commands to */etc/rc.local*

If you are using Network Information Service (NIS), the configuration script saves NIS-related information to the following files:

* */usr/tmp/CW.group*

* */usr/tmp/CW.prod*

* */usr/tmp/CW.sybase*

After completing the CiscoWorks configuration, refer your NIS administrator to the information in these files to update your NIS server. Your NIS administrator can add these files to the NIS database and transfer this information to the NIS server as an update.

Note At any time before you confirm the configuration, you can abort the process by entering **Ctrl-C** to return to the UNIX prompt. The responses to the interactive dialog you make up to the point you exit are recorded for use as the defaults in the next configuration. After you confirm your configuration choices and the actual configuration process begins, Ctrl-C is disabled. If you want to change your choices, rerun the */usr/tmp/unbundled/ncsconfigure* script.

Before configuring CiscoWorks, do the following:

* Install HP OpenView on your system. The configuration script attempts to find HP OpenView files. If it fails to find them, the configuration process is aborted.

* Log in as a superuser. If you are not logged in as a superuser, you cannot complete the CiscoWorks configuration.

New Configuration Procedure

This section describes how to configure CiscoWorks for the first time.

During the installation, CiscoWorks prompts you for information regarding the directory where CiscoWorks is to be configured, the users and groups who can access CiscoWorks, and similar functions of software configuration. The letters or words enclosed in brackets ([ ]) are the default selections that will be used if you press Return. To select something other than the default, enter your response and press Return.

To configure CiscoWorks, perform the following steps:

Step 1   After rebooting your system and logging in as a superuser, enter the following command to begin the CiscoWorks configuration process:

```
hostname# /usr/tmp/unbundled/ncsconfigure
```

The following script displays:

```
******************** CiscoWorks 2.1 CONFIGURATION *********************
CONFIGURATION SETUP  -  This section of the CiscoWorks 2.1 configuration
will ask you to verify the type of installation (new or upgrade) and
the directory path where the product has been installed.
Is this a new installation of CiscoWorks 2.1, or an upgrade of an
existing CiscoWorks 1.0 installation?
Verify type of installation as (n)ew or (u)pgrade: [new]
```

Step 2   Specify that you are configuring a new installation of CiscoWorks by pressing Return to accept the default option.

Step 3   Respond to each of the configuration prompts (press Return to accept the default or enter your response), until you complete the configuration process and return to the UNIX prompt.

Step 4   After configuring CiscoWorks, you can remove the installation log files by following the instructions in the section "Removing Log Files."

Step 5   To eject the CD-ROM, enter the following commands:

```
hostname# cd /
hostname# umount /cdrom
hostname# eject sr0
```

If you are using Network Information Service (NIS), sometimes called *yellow pages*, the configuration script saves NIS-related information during the configuration to the following files: */usr/tmp/CW.group*, */usr/tmp/CW.prod*, and */usr/tmp/CW.sybase*. Your NIS administrator can add these files to the NIS database and transfer this information to the NIS server as an update.

Step 6   Enter the following command to create additional space in the database and transaction log:

```
hostname# $NMSROOT/etc/enlarge_nms
```

An interactive script prompts you for the name of the file to enlarge and the new size.

Respond to each of the configuration prompts (press Return to accept the default), until you return to the UNIX prompt.

Note   Make sure you validate the CiscoWorks installation and configuration process by following the instructions in Chapter 4, "Validating CiscoWorks Installation." When you validate the CiscoWorks installation, you will be able to access CiscoWorks through HP OpenView.

Troubleshooting File Permissions During Configuration

If the message, "`FIFO_config: Permission denied`," displays during CiscoWorks configuration, perform the following steps:

Step 1   As *root*, remove the following files using the remove (**rm**) command:

```
# rm /tmp/interfaces
# rm $SYBASE/install/FIFO_config
# rm $SYBASE/interfaces
# umask 0
```

This allows you to rerun *ncsconfigure* and get the correct file permissions.

Step 2   Rerun *ncsconfigure* as a superuser by entering the following command:

```
# /usr/tmp/unbundled/ncsconfigure
```

The configuration should run correctly. If you have further problems, refer to the troubleshooting information in the *CiscoWorks User's Guide.*

Performing a CiscoWorks Upgrade

This section applies only to those few users who have installed an early version of CiscoWorks 2.1. All other users, whether installing CiscoWorks for the first time or replacing an existing version of CiscoWorks, should treat CiscoWorks 2.1 as a new installation.

Caution   Before continuing with the upgrade, back up your Sybase database. In case of sudden or unexpected data loss, you can restore the database from the backup copy. Unlike performing a new installation, if you are upgrading from a presales version of CiscoWorks 2.1 to the final version 2.1, CiscoWorks replaces only necessary files and automatically preserves the existing database records into the new database.

CiscoWorks software is distributed on a CD-ROM. You can install CiscoWorks from a CD-ROM drive attached to your system or from a CD-ROM drive attached to a remote system.

After you mount the CD-ROM as described in the section "Installing from a Local or Remote CD-ROM," you will install CiscoWorks by invoking and running the *./extract_unbundled* script from the CD-ROM drive. The *./extract_unbundled* script provides an interactive prompt and response dialog interface that guides you through the installation process.

The installation and configuration process takes 20 to 30 minutes. 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.

You can exit the installation script at any time by entering **Ctrl-C** to return to the UNIX environment. The responses you make up to the point you exit will be recorded as the defaults the next time you start the installation process.

To upgrade from your presales version of CiscoWorks 2.1 to the final CiscoWorks 2.1 on HP OpenView, perform the following steps:

Step 1   Change the directory to the */cdrom* directory:

```
zen# cd /cdrom
```

Step 2   Enter the following at the UNIX prompt:

```
zen# cd /cdrom
```

```
zen# ./extract_unbundled
```

The following script displays:

```
******************************************************************************
**

                              CiscoWorks Version 2.1
                    Copyright (c) 1986-1994 by Cisco Systems, Inc.
                               All rights reserved

******************************************************************************
**
```

Step 3 To begin the installation process, press Return.

Step 4 Respond to each of the installation prompts. (Press Return to accept the default.) For example, when the installation script prompts you, "Verify type of installation as (n)ew or (u)pgrade," enter **u** for upgrade.

After you respond to each of the prompts, a CiscoWorks message confirms that the installation is completed.

Configuring a CiscoWorks Upgrade

This section provides information on configuring CiscoWorks.

Before configuring CiscoWorks, do the following:

- Install HP OpenView on your system. The configuration script attempts to find HP OpenView files. If it fails to find them, the configuration process is aborted.

- Log in as a superuser. If you are not logged in as a superuser, CiscoWorks will be unable to complete the configuration.

If you are using Network Information Service (NIS) at your site, the configuration script saves NIS-related information during the configuration to the following files:

- */usr/tmp/CW.group*

- */usr/tmp/CW.prod*

- */usr/tmp/CW.sybase*

After completing the CiscoWorks configuration, your NIS administrator can add these files to the NIS database and transfer this information to the NIS server as an update.

To configure your CiscoWorks upgrade perform the following steps:

Step 1 At the UNIX prompt, enter the following.

```
zen# /usr/tmp/unbundled/ncsconfigure -p Sybase sa password
```

Step 2 To begin the configuration process, press Return.

Step 3 Respond to each of the configuration prompts (press Return to accept the default), until you complete the configuration process and return to the UNIX prompt.

After configuring CiscoWorks, you can remove the installation log files by following the instructions in the section "Removing Log Files."

Step 4 To eject the CD-ROM enter the following commands:

```
hostname# cd /
```

```
hostname# umount /cdrom
hostname# eject sr0
```

The CD-ROM caddy is ejected from the drive.

Note   To validate the CiscoWorks installation and configuration process, follow the instructions in Chapter 4, "Validating CiscoWorks Installation." After you validate the CiscoWorks installation, you will be able to access CiscoWorks through HP OpenView.

Removing Log Files

During the installation process, several log files are created to track the installation process and provide diagnostic information if a problem arises. When you are satisfied that CiscoWorks is properly installed and operating, you can remove these files. To remove these files from your system, enter the following command:

```
hostname# rm /usr/tmp/unbundled/.install/*.log
```

After installing and configuring CiscoWorks, proceed to Chapter 4, "Validating CiscoWorks Installation."