CHAPTER 4

Validating CiscoWorks Installation

To validate the CiscoWorks installation and configuration, you must edit the *.cshrc* file on your system. Follow the procedures in this chapter to complete the validation of your CiscoWorks installation.

Validation Process Overview

This section briefly summarizes the steps you should follow to complete the CiscoWorks installation and configuration and to validate the installation. These steps are explained in detail following:

1 Define environment variables and the search paths.

2 Edit the *.cshrc* file.

3 Start the HP OpenView Console and display CiscoWorks applications.

4 Display the CiscoWorks processes by using the Process Manager window.

Defining Environment Variables and Search Paths

To use HP OpenView, CiscoWorks, and Sybase, you must define the appropriate environment variables and paths in your *.cshrc* file.

Environment variables define how your particular system is set up, such as directory paths that specify the location of files (either manual pages or software). The environment variables and paths are explained in Table 4-1.

Table 4-1 Environment Variables and Directory Paths

Environment Variable or Path	Explanation
NMSROOT	Refers to the directory */usr/nms* or */nms* where the CiscoWorks software was installed. If the software was installed in a different directory, substitute the appropriate directory path to ensure a correct definition of the NMSROOT environment variable.
SYBASE	Refers to the directory path where Sybase is located. The default is *$NSMROOT/sybase*. If you selected the default, the Sybase software was installed in the */usr/nms/sybase* or */nms/sybase* directory. The SYBASE variable refers to the NMSROOT variable and the sybase directory following it.
PATH	Refers to the directory path for */usr/OV/bin*, *$NMSROOT/bin*, *$NMSROOT/etc*, and *$SYBASE/bin.* The path should be specified for HP OpenView, CiscoWorks, and Sybase.
MANPATH	Refers to the directory path for finding manual pages. It should include include $NMSROOT/man
DISPLAY	Refers to the X11 display with which CiscoWorks operates. The default is *:0* or *hostname:0*

Editing the .cshrc File

The addition of environment variables and path names to your *.cshrc* file will be applicable only to your login account. If you have other system administrators or network managers who need access to CiscoWorks, edit their *.cshrc* files and add the information specified in the following procedure.

The following steps describe how to add the appropriate environment variables and path names to the *.cshrc* file or the *.login* file. If you installed HP OpenView, CiscoWorks, and Sybase software in directories other than the default directories, substitute the correct directory paths.

Step 1 Log in as a superuser.

Step 2 Using a text editor such as **vi**, access the *.cshrc* file on your system.

This script resides in the home directory of each CiscoWorks user.

Step 3 Add the following lines to the *.cshrc* file, making sure you enter the uppercase and lowercase characters as shown. Substitute the appropriate directory path for each environment variable, if necessary. Note that the set path line should include any existing set path definitions in the file.

```
#Set environment variables for ovw, CiscoWorks, and Sybase
setenv NMSROOT /usr/nms
setenv SYBASE directory location of Sybase
#Set path for CiscoWorks and Sybase executables
set path = ($path $NMSROOT/bin $NMSROOT/etc $SYBASE/bin /usr/OV)
#Set path for CiscoWorks man pages
if (!($?MANPATH)) then
  setenv MANPATH /usr/man
else
  setenv MANPATH "$MANPATH": $NMSROOT/man
endif
```

Step 4 Instruct each user of CiscoWorks to enter the following command at the UNIX prompt, to ensure that the changes made to the *.cshrc* file become a part of his or her active system environment.

```
hostname% source $NMSROOT/etc/install.cshrc
```

Note Individual users can edit their own *.cshrc* files by logging in with their user IDs and following the same preceding sequence of steps.

Verifying Changes to the .cshrc File

After you edit the *.cshrc* file, verify that the changes you made are active. Enter the following command at the UNIX prompt to display the edited *.cshrc* file:

```
hostname% printenv | more
```

Note that the environment variables for NMSROOT and SYBASE are displayed. In addition, the paths are defined for CiscoWorks and Sybase executables, and the CiscoWorks manual pages, as well as other system variables.

Displaying CiscoWorks Applications

To verify the CiscoWorks installation and configuration, access HP OpenView and display the CiscoWorks applications. CiscoWorks applications are integrated conveniently into the network management menu structure of HP OpenView.

For detailed information on how to start the HP OpenView Console, refer to the *HP OpenView Windows User's Guide*.

Perform the following steps to view CiscoWorks applications:

Step 1 Enter the following command at the UNIX prompt:

```
hostname% ovw
```

The HP OpenView default network map, Root, which displays all the IP (Internet Protocol) devices (those running the Internet Protocol), including Cisco devices, appears.

Step 2 Display CiscoWorks menu items under the following HP OpenView menus according to Table 4-2, CiscoWorks Applications Under HP OpenView.

Table 4-2 CiscoWorks Applications Under HP OpenView

HP OpenView Menu	CiscoWorks Application	CiscoWorks Application Enabled When
Monitor	Health Monitor...	One Cisco device is selected in your network map.
	Environmental Monitor...	In your network map, one Cisco device is selected that contains an Environmental Monitor Card.
	Real-Time Graphs...	One Cisco device is selected in your network map.
	CW - Device Polling...	Always Enabled.
	CW - Polling Summary...	Always Enabled.
Monitor>Description	Contacts	One Cisco device is selected in your network map.
Administer>CiscoWorks System	Process Mgr...	Always Enabled.
	Global Command Mgr...	Always Enabled.
	Global Command Scheduler...	Always Enabled.
Administer>CiscoWorks Devices	Device Mgmt...	Always Enabled.
	Configuration Mgr...	Always Enabled.
	Configuration Snap-In Mgr...	Always Enabled.
	AutoInstall Mgr...	Always Enabled.
Administer>CiscoWorks Software Images	Software Library Mgr...	In your network map, one Cisco device is selected that contains flash memory.
	Software Inventory Mgr...	Always Enabled.
	Device Software Mgr...	In your network map, one Cisco device is selected that contains flash memory.
Administer>CiscoWorks Security	SA Password...	Always Enabled.
	Security Mgr...	Always Enabled.
	Domain Mgr...	Always Enabled.
	TACACS Mgr...	Always Enabled.

HP OpenView Menu	CiscoWorks Application	CiscoWorks Application Enabled When
Diagnose	Show Commands...	One Cisco device is selected in your network map.
	Log Mgr...	Always Enabled.
Network Connectivity	Path Tool...	Always Enabled.
Misc	Sync w/Sybase...	Always Enabled.
	CW - Login...	Always Enabled.
	CW - Logout...	Always Enabled.
	Sybase DWB...	One Cisco device is selected in your network map.

If no CiscoWorks applications are visible under the HP OpenView menus, the installation may have been unsuccessful; if this happens, try reinstalling CiscoWorks.

Working with Network Maps

With HP OpenView, an Internet Protocol (IP) map is created automatically to show you the devices that are connected directly to your HP OpenView workstation. The IP map communicates directly with the topology database. Consequently, if a new node is added to the topology database, the IP map will automatically create or modify a submap to recognize the new device.

Submaps are created automatically only for devices running Internet Protocols (IP). If your network is running non-IP protocols such as AppleTalk or Novell, you need to manually create maps to recognize these devices. To learn how to use the **New Map** command, refer to your *HP OpenView Windows User's Guide*.

Viewing CiscoWorks Processes

To verify that the appropriate CiscoWorks processes are running, you must access the Process Manager window. Use the CiscoWorks Process Manager application to select different types of CiscoWorks processes or daemons. A *daemon* is a process that performs a specific function for the system. Each CiscoWorks process performs specific functions.

The Process Manager monitors the following six CiscoWorks daemon processes: Log daemon, Polling daemon, Event Logger daemon, Syslog daemon, TACACS Authentication Server, and Sybase Server daemon. Figure 4-1 shows the Process Manager window on the Sun OS platform.

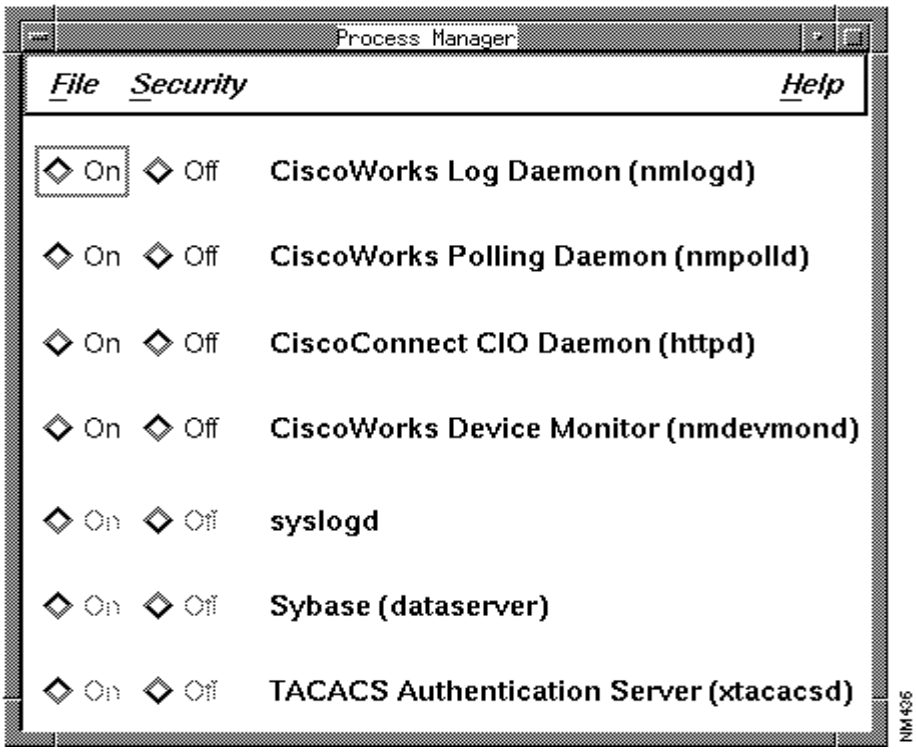

Figure 4-1 Process Manager Window

By default, the first four CiscoWorks processes in the Process Manager window are running whenever you reboot your system. These processes can run continuously, even if HP OpenView is not running on your system.

To start the Process Manager application, perform the following steps:

Step 1 From the HP OpenView menu bar, select the **Administer** menu.

Step 2 From the Administer submenu, select the **CiscoWorks System** submenu.

Step 3 From the **CiscoWorks System** submenu, select **Process Mgr . . . .**

The Process Manager window appears.

Step 4 To start a process, click the **On** button next to it.

If the process starts successfully, the **On** button will appear enabled.

Step 5 To exit the Process Manager application, select **File>Exit**.

After validating the CiscoWorks installation as described in this chapter, proceed to the *CiscoWorks User Guide* to learn how to perform network management with CiscoWorks.