CiscoView CD Installation Instructions

This instruction book provides information about installing and running CiscoView on your network management station. You can install CiscoView on an HP system or Sun or Solaris workstation, either as a standalone application or on top of the system network management platform.

CiscoView is a GUI-based device management software application that lets you access dynamic status, statistics, and comprehensive configuration information for Cisco Systems switch and internetworking products.

CiscoView lets you display a graphical representation of each network device, display configuration and performance information, perform minor troubleshooting tasks, and control and configure specific devices. There are also device-specific applications that further enhance your network management capabilities.

If you are installing CiscoView on a Network File System (NFS) mounted drive, you need root authority on the NFS partition.

System Requirements for CiscoView

Before you install CiscoView, make sure that your system meets the system requirements shown in Table 1, and the hardware and software recommendations shown in Table 2.

Table 1 CiscoView Typical System Requirements

	Operating System	Available Disk Space	RAM
Sun	Solaris 1.x, (SunOS 4.1.3, SunOS 4.1.3_U1, or SunOS 4.1.4)	70 MB[1]	32 MB
	Solaris 2.4 with recommended patches as of March 16, 1996 Solaris 2.5		
HP	HP-UX A.09.04/A09.05 10.01/10.10	70 MB[1]	32 MB

1. Minimum install requirement is 45 MB.

Table 2 CiscoView Hardware and Software Recommendations

	Sun	HP
Hardware	Sun SPARCstation Color monitor	HP 9000 system Color monitor
Software Windowing system	X11R4 or X11R5 OpenWindows 3.0 or 3.3 Motif 1.2	Motif or HP VUE 3.0
Network management software (optional)	SunNet Manager 2.2.2, 2.2.3, or 2.3 HP OpenView 3.3, 4.0.1, or 4.1[1]	HP OpenView 3.3, 4.0.1, or 4.1

1. HP OpenView 3.3 on Solaris 2.5 is not supported.

Mounting on a SunOS Workstation

This section describes how to mount CiscoView on a SunOS 4.1.x system.

Mounting from a Local CD-ROM Drive

Insert the CiscoView CD-ROM disk into the CD-ROM drive; then perform the following steps:

1. Become the superuser by entering **su** and the root password at the command prompt, or log in as **root**. The command prompt changes to the pound sign (#).
2. If the */cdrom* directory does not already exist, enter the following command to create it:

   ```
   # mkdir /cdrom
   ```

3. Mount the CD-ROM drive by entering the following command:

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

4. To continue the installation, go to “Installing CiscoView.”

Mounting from a Remote CD-ROM Drive

Insert the CiscoView CD-ROM into the CD-ROM drive; then perform the steps 1 through 6 on the remote machine.

1. Become the superuser by entering **su** and the root password at the command prompt, or log in as **root**. The command prompt changes to the pound sign (#).
2. Use a text editor to create an */etc/exports* file, if one does not exist.
3. Add the following line to the */etc/exports* file:

   ```
   /cdrom -ro
   ```

4. Ensure that your workstation is enabled as an NFS server, as follows:

   Verify NFS server status with the following command:

   ```
   # ps -ax | grep nfsd | grep -v grep
   ```

   Both *nfsd* and *rpc.mountd* daemons must be running for a workstation to be an NFS server. If no *nfsd* daemons are running, start some with the following command:

   ```
   # nfsd 8 &
   ```

Verify *rpc.mountd* daemon status with the following command:

```
# ps -ax | grep rpc.mountd | grep -v grep
```

If no *rpc.mountd* daemon is running, start one with the following command:

```
# /usr/etc/rpc.mountd -n
```

5 To mount the CD-ROM drive, enter the following command:

```
# /etc/mount -rt hsfs /dev/device_name /cdrom
```

The **-r** option mounts the CD-ROM drive in read-only mode, and the **-t** option 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. The *device_name* argument specifies the device that you mount, usually *sr0*. If you do not use these options, media error messages may appear on the console.

6 Run **exportfs -a** with the following command:

```
# exportfs -a
```

7 Go to the local machine.

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

9 Create a */cdrom* directory, if one does not already exist, by entering the following command:

```
# mkdir /cdrom
```

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

```
# /etc/mount -r remote_machine_name:/cdrom /cdrom
```

11 To continue the installation, go to "Installing CiscoView."

Mounting on Sun/Solaris

This section describes how to mount CiscoView on a Sun/Solaris 2.4 or 2.5 system.

Mounting from a Local CD-ROM Drive

Insert the CiscoView CD-ROM disk into the CD-ROM drive; then perform the following steps:

1 Become the superuser by entering **su** and the root password at the command prompt, or log in as **root**. The command prompt changes to the pound sign (#).

2 If the */cdrom* directory does not already exist, enter the following command to create it:

```
# mkdir /cdrom
```

3 Mount the CD-ROM drive. The *vold* daemon process manages the CD-ROM device and performs the mounting. The CD-ROM may automatically mount onto the */cdrom/cdrom0* directory.

If you are running File Manager, a separate File Manager window displays the contents of the CD-ROM disk. If the */cdrom/cdrom0* directory is empty because the CD was not mounted, or if File Manager did not open a window displaying the contents of the CD-ROM disk, verify if the *vold* daemon is running by entering the following command:

```
# ps -e | grep vold | grep -v grep
```

If the system does not display anything, restart the daemon using:

```
# /usr/sbin/vold &
```

If the vold daemon is running but did not mount the CD, stop the *vold* daemon process and then restart the daemon:

```
# kill -15 process_ID_number
# /usr/sbin/vold &
```

4 To continue the installation, go to “Installing CiscoView.”

Mounting from a Remote CD-ROM Drive

Insert the CiscoView CD-ROM disk into the CD-ROM drive; then perform the steps 1 through 6 on the remote machine.

1 Become the superuser by entering **su** and the root password at the command prompt, or log in as **root**. The command prompt changes to the pound sign (#).

2 If the */cdrom* directory does not already exist, enter the following command to create it:

```
# mkdir /cdrom
```

3 Use a text editor to create an */etc/dfs/dfstab* file, if one does not exist.

4 Ensure that your workstation is enabled as an NFS server, as follows:

Verify NFS server status with the following command:

```
# ps -ef | grep nfs | grep -v grep
```

If your machine is enabled as an NFS server, the following daemons should be running: */usr/lib/nfs/nfsd* and */usr/lib/nfs/mountd.*

If these daemons are not running, enable your machine as an NFS server with the following command:

```
# /etc/init.d/nfs.server start
```

5 Add the following line to the */etc/dfs/dfstab* file:

```
share -F nfs -o ro /cdrom/cdrom0
```

6 Mount the CD-ROM drive. The *vold* daemon process manages the CD-ROM device and performs the mounting. The CD-ROM may automatically mount onto the */cdrom/cdrom0* directory. If you are running File Manager, a separate File Manager window displays the contents of the CD-ROM disk. If the */cdrom/cdrom0* directory is empty because the CD was not mounted, or if File Manager did not open a window displaying the contents of the CD-ROM disk, verify if the *vold* daemon is running by entering the following command:

```
# ps -e | grep vold | grep -v grep
```

If the system does not display anything, restart the daemon using:

```
# /usr/sbin/vold &
```

If the vold daemon is running but did not mount the CD, stop the *vold* daemon process and then restart the daemon:

```
# kill -15 process_ID_number
# /usr/sbin/vold &
```

7. Go to the local machine.
8. Become the superuser by entering **su** and the root password.
9. Create a */cdrom* directory, if one does not already exist, by entering the following command:

   ```
   # mkdir -p /cdrom/cv
   ```

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

    ```
    # /usr/sbin/mount -r
    remote_machinename:/cdrom/cdrom0 /cdrom/cv
    ```

    By default, CiscoView is installed in */opt/CSCOcv*.

11. To continue the installation, go to "Installing CiscoView."

Mounting on HP-UX

This section describes how to mount CiscoView on HP-UX 9.0x and 10.x systems.

Mounting from a Local CD-ROM Drive

Insert the CiscoView CD-ROM disk into the CD-ROM drive; then perform the following steps:

1. Become the superuser by entering **su** and the root password at the command prompt, or log in as **root**. The command prompt changes to the pound sign (#).
2. If the */cdrom* directory does not already exist, enter the following command to create it:

   # **mkdir /cdrom**

3. Mount the CD-ROM drive by entering one of the following commands.

   On HP-UX 9.x:

   # **/etc/mount -rt cdfs -o ro /dev/dsk/***device_name* **/cdrom**

On HP-UX 10.x:

```
# /usr/sbin/mount -rt cdfs /dev/dsk/device_name
/cdrom
```

An example of a device name on HP-UX 9.x is */dev/dsk/c201d2s0*, on HP-UX 10.x is */dev/dsk/c0t3d0*.

4. To continue the installation, go to "Installing CiscoView."

Mounting from a Remote CD-ROM Drive

Insert the CiscoView CD-ROM disk into the CD-ROM drive; then perform steps 1 through 7 on the remote machine.

1. Become the superuser by entering **su** and the root password at the command prompt, or log in as **root**. The command prompt changes to the pound sign (#).
2. If the */cdrom* directory does not already exist, enter the following command to create it:

   ```
   # mkdir /cdrom
   ```

3. Use a text editor to create an */etc/exports* file, if one does not exist.

4 Add the following line to the */etc/exports* file:

```
/cdrom -ro
```

5 Ensure that your workstation is enabled as an NFS server, as follows.

Verify NFS server status with the following command. Both *nfsd* and *rpc.mountd* daemons must be running for a workstation to be an NFS server.

```
# ps -e | grep nfsd | grep -v grep
```

If no *nfsd* daemons are running, start some with one of the following commands:

On HP-UX 9.x:

```
# /etc/nfs.server start
```

On HP-UX 10.x:

```
# /sbin/init.d/nfs.server start
```

Verify *rpc.mountd* daemon status with the following command:

```
# ps -e | grep rpc.mountd | grep -v grep
```

If no *rpc.mountd* daemon is running, start one with the following command.

On HP-UX 9.x:

```
# /usr/etc/rpc.mountd -n
```

On HP-UX 10.x:

```
# /usr/sbin/rpc.mountd -n
```

6 Mount the CD-ROM drive by entering one of the following commands.

On HP-UX 9.x:

```
# /etc/mount -rt cdfs -o ro /dev/dsk/device_name
/cdrom
```

On HP-UX 10.x:

```
# /usr/sbin/mount -rt cdfs /dev/dsk/device_name
/cdrom
```

An example of a device name on HP-UX 9.x is */dev/dsk/c201d2s0*, on HP-UX 10.x is */dev/dsk/c0t3d0*.

The **-r** option mounts the CD-ROM in read-only mode. The **-t** option indicates the type of file system, where **cdfs** specifies a file system with an ISO 9660 standard or High Sierra standard with Rock Ridge extensions. *device_name* is the device that you mount, usually *dsk/c201d5s0*. If you do not use these options, media error messages may appear on the console.

7 Run **exportfs -a** with the following command:

On HP-UX 9.x:

```
# /usr/etc/exportfs -a
```

On HP-UX 10.x:

```
# /usr/sbin/exportfs -a
```

8 Go to the local machine.

9 Become the superuser by entering **su** and the root password.

10 Create a */cdrom* directory, if one does not already exist, by entering the following command:

```
# mkdir /cdrom
```

11 Mount the CD-ROM drive by entering one of the following commands:

On HP-UX 9.x:

```
# /etc/mount -r remote_machine_name:filesystem
local_machine_filesystem
```

On HP-UX 10.x:

```
# /usr/sbin/mount remote_machine_name:filesystem
local_machine_filesystem
```

12 To continue the installation, go to “Installing CiscoView.”

Installing CiscoView

This section describes how to install CiscoView on a SunOS or Solaris workstation, or an HP system. After the initial steps to begin the installation, the procedure is the same for both Sun and HP systems.

After you complete this entire section, go to “Loading Management Information Base (MIB).”

Starting a SunOS Installation

Note Before installing CiscoView, you should save and close your SunNet Manager maps. Also, you should enter the following command to remove the */var/tmp/unbundled* directory (if it exists):

```
# rm -rf /var/tmp/unbundled/*
```

To install CiscoView on a Sun/SunOS workstation, first copy the files from the CD-ROM drive by entering the following commands at the system prompt:

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

Make sure to include the **./** in the **./extract_unbundled** command. To complete your installation, skip to "Continuing the Installation."

Starting a Sun/Solaris Installation

To install CiscoView on a Solaris platform, perform the following steps:

1Extract the files from the CD-ROM by entering:

```
# pkgadd -d /cdrom/cdrom0 all
or
# cd /cdrom/cdrom0
# ./setup.sh
```

2 Answer **yes** each time **pkgadd** prompts whether you want to install a package.

3 To complete your installation, skip to "Continuing the Installation."

Starting an HP Installation

To install CiscoView on an HP system, exit HP OpenView and install the files from the CD-ROM drive by entering the following commands at the system prompt:

```
# su root
# cd /cdrom
# ./setup.sh
```

To complete your installation, skip to "Continuing the Installation."

Continuing the Installation

After you start the installation, a series of prompts appear. You can press **Return** to accept the default value (shown first in parentheses) for each prompt. This procedure does not describe each prompt that appears.

1. Respond to the program prompt:

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

   If you answer yes (the default), the installation begins and copyright information about the product and the terms of the Cisco licensing agreement are displayed, followed by a prompt:

   ```
   Do you agree to the terms of this copyright (y/n)?
   ```

   Enter **y** (or press **Return**) to continue the installation.

2. The screen displays a series of prompts about the following variables: the installation location for CiscoView (you can change this when prompted), file owner and group, installation location for the *app-defaults* file, integration of CiscoView with a network management system, and device options. You can select which devices you want to install from the list (the default is all devices).

Enter **y** or press **Return** in response to each prompt to continue the installation.

Note You can press **Ctrl-C** at any time to terminate the installation. If you terminate before the installation is complete, you must perform the installation from the beginning.

3 The installation program displays a summary of your answers before you confirm the installation. Review this summary to check your responses to the installation prompts.

If your responses are all as you want them to be, enter **y** or press **Return** to perform the installation.

As the installation proceeds, the file names are listed on the screen as they are installed. The engine takes approximately 7 to 15 minutes to install, depending on your system speed. Each CiscoView package takes approximately 3 to 5 minutes to install.

4 Check */tmp/ciscoinstall.log* for errors. Save this file; it can help you with troubleshooting if you have problems with the installation.

After the installation has been completed, messages similar to the following are shown on the screen.

```
INSTALLATION COMPLETE A complete logfile is located in
/tmp/ciscoinstall.log.  Update your PATH to include
/usr/nms/CV/bin, etc.
=====================================================
========== Software Install Tool Completed. =========
=====================================================
```

5 To update our path.

For C Shell, source the *install.cshrc* file by adding the following line to the *.login* (for each CiscoView user) or *.cshrc* file:

source */usr/nms/etc/install.cshrc*

For Bourne/Korn shell, add the following line to the *.profile* file:

. */usr/nms/***bin/install.sh**

6 Set the path to the CiscoView binaries.

In the C shell, add the following line to the *.login* (for each CiscoView user) or *.cshrc* file:

set path=($path */usr/nms/***bin)**

In the Bourne shell, add the following line to the *.profile* file:

PATH=${PATH}:*/usr/nms/***bin export PATH**

To unmount the CD-ROM drive, continue to "Unmounting the CD-ROM Drive."

Unmounting the CD-ROM Drive

1 To unmount the CD-ROM drive enter the following commands as superuser.

For SunOS or HP-UX:

```
# cd /
# umount /cdrom
```

For Sun/Solaris:

```
# umount /cdrom (for a remote CD)
OR
# umount /cdrom/./cdrom0 (for a local CD)
```

2 To eject the CD-ROM disk, either press the eject button on the CD-ROM drive (HP machines), or type:

   For SunOS or HP-UX:

   # **eject /cdrom**

   For Sun/Solaris:

   # **eject**

3 Remove the CD-ROM disk and store it in a safe place.

4 To load the MIB files for CiscoView, go to “Loading Management Information Base (MIB).”

Loading Management Information Base (MIB)

This section describes how to load MIB files for CiscoView. This is a required task.

HP OpenView MIB Files

If you are using HP OpenView, you need to load MIB files into the HP OpenView Simple Network Management Protocol (SNMP) MIB database after installation. This enables the CiscoView and Health Monitor applications to query devices for information.

To load the MIB files, enter **$NMSROOT/bin/cvinstall -f** at the command prompt.

Note that the system takes 15 to 20 minutes to load all 57 MIB files.

To start CiscoView, go to “Starting CiscoView.”

SunNet Manager MIB Files

If you are using SunNet Manager (SNM), MIB files are automatically copied into the correct SNM directory.

Before installing CiscoView, you should save your SNM maps. After CiscoView is installed, run SNM with the **-i** option (**snm -i**) so that all

MIB schema, CiscoView application registration, and device registration information is taken into account.

Optionally, you can run SNM with the **-q** option (**snm -i -q**). This option displays information about each schema as it is loaded.

To start CiscoView, go to “Starting CiscoView.”

Starting CiscoView

This section describes how to start CiscoView from SunNet Manager, HP OpenView, or the UNIX command prompt on either a Sun or HP system.

If you are using HP OpenView, skip to the section “Starting CiscoView from HP OpenView.” To start CiscoView from the UNIX command line, skip to “Starting CiscoView from the Command Line.”

Starting CiscoView from SunNet Manager

You can start CiscoView from the SunNet Manager Tools menu. To access it, you need to restart SunNet Manager as follows (this procedure assumes that CiscoView is in your path):

1. Save your existing SunNet Manager database and exit the program.
2. Restart SunNet Manager by entering the following command at the system prompt:

   ```
   % snm -i
   ```

   The SunNet Manager main window appears.
3. To start CiscoView, select **Tools>CW - CiscoView**.

You are now finished with the installation. Refer to “Using the Online Help System” for information on the online help.

Starting CiscoView from a Device Icon

To start CiscoView from a device icon, perform the following steps:

1. In the SunNet Manager Properties sheet for the device, enter the Read community string for the device you want to view.

2. In the SunNet Manager network map, display the pop-up menu for the device by clicking on the device.
3. Choose **CiscoView** from the pop-up menu.

   The CiscoView window is displayed with a graphical representation of the specified device (also referred to as a *panel*).

You are now finished with the installation. Refer to "Using the Online Help System" for information on the online help.

Starting CiscoView from HP OpenView

Before starting CiscoView from HP OpenView, launch HP OpenView by entering **ovw** on the UNIX command line.

To start CiscoView, select **Monitor>CiscoView** from the HP OpenView main window.

Starting CiscoView from the Command Line

To start CiscoView from the UNIX command line, enter the following at the system prompt:

```
% nmcview -host device_name -rd
read_community_string
```

For example, the following command starts CiscoView and displays the device named “charlie” with the Read community string “over.”

```
% nmcview -host charlie -rd over
```

The CiscoView window is displayed with a graphical representation of the specified device (also referred to as a *panel*).

Make sure that the PATH environment variable includes the path to the CiscoView executables.

You are now finished with the installation. Refer to “Using the Online Help System” for information on the online help.

Displaying a Device with CiscoView

After you start CiscoView, you will see the CiscoView main window. To display a device, either select a device from a network map, or follow these steps:

1 Select **File**>**Open Device**.

The File - Open Device window is displayed.

2 Complete the fields in the File - Open Device window as follows:

In the **Host** field, enter the host name or IP address of the device you want to display.

In the **Read Community** field, enter the Read Community string specified by your network administrator (unless Public has already been specified).

In the **Write Community** field, enter the Write Community string specified by your network administrator (unless Public has already been specified). The correct Write Community string allows you to change certain device settings.

3 Click **OK** to display the panel of the specified device.

Adding New Device Support

To add new devices to CiscoView (incremental installations), access the Cisco Systems online support channel, Cisco Connection Online (CCO), formerly known as Cisco Information Online (CIO). Instructions on how to download additional devices for CiscoView using the **cvinstall** command are on CCO or on the anonymous ftp server, in the Network

Management section of the Software Image Library or on the Incremental Instructions document found on the Cisco Enterprise Customer Documentation CD.

If you do not have Internet access, you can add devices from the Network Management Support CD. This is a separate CD that contains additional devices not included on the CiscoView CD.

Installing Device Files from CiscoView

To install devices after CiscoView is installed on your system, enter at the UNIX command line:

$NMSROOT/bin/cvinstall */cdrom/cv_pkgs/pkg_name.pkg*

Replace */cdrom/cv_pkgs* with the directory path where the package files are stored, and enter the name of the device package you want to install.

Installing Device Files from Another Source

To incrementally add device support from the Network Management Support CD or from CCO:

1. Download the device package files from the Support CD or CCO into the *cv_pkgs* directory.

2 For CCO tar packages, untar the package by entering: **tar -xvf** *tar_file_name*

3 Set your NMSROOT environment variable.

For Sun and HP-UX 9.x enter: **setenv NMSROOT** */usr/nms*
For Solaris and HP-UX 10.x enter: **setenv NMSROOT** */opt/CSCOcv*

Replace the directory name with the location of the CiscoView software. The CiscoView installation defaults to these directories.

4 Go to the *cv_pkg* directory:

For Sun and HP-UX enter: **cd** */cdrom/cv–pkgs*
For Solaris enter: **cd** */cdrom/cdrom0/cv–pkgs*

Replace */cdrom*cv_pkgs* with the directory path where the package files are stored.

5 To install the package, log in as root and enter:

$NMSROOT/bin/cvinstall *pkg_name.pkg*

Replace *pkg_name.pkg* with the name of the device package you want to install.

Removing CiscoView

If you encounter problems during installation, you might want to reinstall CiscoView. Before reinstalling CiscoView, you must first remove it.

Removing CiscoView on SunOS 4.1.x

To remove CiscoView on SunOS 4.1.x, enter the following commands (this removes only the files in the *ciscoview.mfs* directory):

```
# cd /var/sadm/csco
# ./rmprod ciscoview
```

Removing CiscoView on Solaris 2.x

To remove CiscoView on Solaris 2.x (SunOS 5.x), enter the following commands (this removes only the files in the *ciscoview.mfs* directory):

```
# pkgrm CSCOcv
```

Removing CiscoView on HP-UX 9.x

To remove CiscoView from an HP-UX 9.x system, enter the following commands:

```
# rmfn -l CVIC
# rmfn -l CISCO-VIEW
```

Removing CiscoView on HP-UX 10.x

To remove CiscoView from an HP-UX 10.x system, enter the following command:

```
# swremove -v CISCOVIEW
```

Cleaning Up Standalone CiscoView Files

For CiscoView standalone, to clean up either a Sun workstation or an HP system check to see if any user files exist in the directory tree. If you do not find any user files, you can delete the directory.

```
# find /usr/nms -type f -print
# rm -rf /usr/nms
```

Replace */usr/nms* with the location of the CiscoView files. For example, on Solaris and HP-UX 10.x, replace with */opt/CSCOcv*.

Cleaning Up Integrated CiscoView Files

To clean up CiscoView integrated on CiscoWorks, enter the following:

```
# find /usr/nms -type f -print
# rm -rf /usr/nms/CVapp
```

Using the Online Help System

Use the help system to get information about using the CiscoView interface, navigating within the product, finding information on a specific topic, and viewing information about device, port, and card configuration and performance.

Table 3 shows the different ways of accessing online help.

Table 3 Accessing Online Help Information

For information about ...	Do this ...
The help system for specific products	Select **Help>Contents**.
How to use the help system	Select **Help>Using Help**.
How to use CiscoView features	Select **Help>Using CiscoView**.
The current CiscoView version	Select **Help>About CiscoView**.
How to view Configuration and Performance (dashboard) windows and field descriptions	Click the **Help** button in the window or search within the help system.
How to change a component value	Press the **Help** button over the field.

Troubleshooting

If you cannot open the specified device in CiscoView, you receive a message indicating that the device is unmanageable. This message indicates one of the following conditions:

- The SNMP server is not set in the device. You can still ping the device from the management station.
- You have entered an incorrect community string in the File - Open Device window.
- The management station cannot reach the device and cannot successfully ping the device.

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