CiscoView Overview

CiscoView is a device management application that provides dynamic status, statistics, and comprehensive configuration information for Cisco Systems' switched internetworking products. CiscoView allows you to display a graphical image of each network device, display configuration and performance information, and perform minor troubleshooting tasks.

About This Booklet

This booklet guides you, the network administrator, through

- An Overview of CiscoView (this section)—Provides an overview of the CiscoView product and the organization of this booklet.

- Preparing to install CiscoView—Describes the hardware and software requirements for CiscoView.

- Installing and configuring CiscoView—Provides procedures for installing, configuring, and de-installing CiscoView.

- Getting started with CiscoView—Explains how to start CiscoView from the AIX command line or through NetView for AIX, and how to monitor a Cisco device.

You must be familiar with the Motif window management system and NetView for AIX to complete these tasks.

All Cisco technical documentation and additional literature is available on UniverCD, Cisco's online library of product information. Because UniverCD is updated and shipped monthly, it may be more up-to-date than printed documentation. UniverCD is available both as a single CD and as an annual subscription. To order UniverCD, contact your local sales representative or call Customer Service.

Related Documentation

In addition to this booklet and the online help system, CiscoView documentation includes: *CiscoView 3.0(2) Release Note*.

Customer Information Online

Cisco Information Online (CIO) is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CIO to obtain additional content and services.

Available 24 hours a day, 7 days a week, CIO provides a wealth of standard and value-added services to Cisco's customers and business partners. CIO services include product information, software updates, release notes, technical tips, the Bug Navigator, configuration notes,

brochures, descriptions of service offerings, and download access to public and authorized files.

CIO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously—a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CIO (called "CIO Classic") supports Zmodem, Kermit, Xmodem, FTP, Internet e-mail, and fax download options, and is excellent for quick access to information over lower bandwidths. The WWW version of CIO provides documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CIO in the following ways:

- WWW: `http://www.cisco.com`

- Telnet: `cio.cisco.com` (IP address 198.92.32.130)

- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; data bits: 8; parity: none; stop bits: 1; and baud rates up to 14.4 kbps.

For a copy of CIO's Frequently Asked Questions (FAQ), contact `cio-help@cisco.com`. For additional information, contact `cio-team@cisco.com`.

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

Preparing to Install CiscoView

Before you install, configure, and validate CiscoView, make sure you have the following:

- Root user authority

- Hardware prerequisites for CiscoView

- Software prerequisites for CiscoView

- Information necessary for installation and configuration

Becoming the Root User

The user named *root* can perform functions restricted from normal users. To install and configure CiscoView, you must know the root user's password and log in to your system as the root user or become the root user by use of the **su** command.

If you are not logged in, enter the following to log in as the root user:

```
login: root
Password: rootpassword
hostname#
```

If you are already logged in, but not as the root user, enter the following to change your login to root:

```
hostname% su
Password: rootpassword
hostname#
```

In both cases, the prompt changes to a pound sign (#), indicating that you are logged in as the root user.

Hardware Requirements Checklist

CiscoView requires the following hardware:

- IBM RISC System/6000 workstation, Model 340 or higher
- Color monitor
- PostScript-compatible printer (for printing window images)
- CD-ROM drive on the host system, or CD-ROM drive on an accessible remote host

System Requirements Checklist

CiscoView requires the following software products and conditions. Details and verification methods for each requirement are outlined in the paragraphs following this list.

- AIX—Version 3.2.5

- NetView for AIX—Version 3.1 (optional). CiscoView can operate *without* NetView for AIX as described under "Starting CiscoView from the Command Line," so NetView for AIX is optional. Without NetView for AIX, however, you cannot graph information.

- System software—X Window System Version 11, Release 5; Motif Version 1, Release 2.

- RAM—32 MB or more.

- Hard disk space—5 MB or more in the root directory, and 25 MB or more in the */usr* directory.

- Cisco IOS requirements—CiscoView requires the managed Cisco devices to be running specific versions of the Cisco Internetwork Operating System (Cisco IOS). See the *CiscoView 3.0(2) on AIX Release Note*.

Verifying AIX Version

To ascertain the operating system level, log in as the root user and enter

```
hostname% oslevel
```

Output similar to the following appears:

```
Processing.....Please Wait.
<>3250
```

This output indicates Version 3, Release 2.5.

Verifying System Software

If you will use CiscoView with NetView for AIX, verify that NetView is installed on the host. To do so, log in as the root user and enter

```
hostname% lslpp -m nv6000.base.obj
```

Output similar to the following appears:

```
Processing.....Please Wait.
nv6000.base.obj 3.1.0.0
   No Maintenance Level Applied.
```

This output indicates Version 3.1.

Verifying RAM Size

CiscoView requires a minimum of 32 MB of RAM. To find out how much RAM is available on your system, log in as the root user and enter the following command at the AIX prompt:

```
hostname# lscfg | grep mem
```

Output similar to the following appears:

```
+ mem0        00-0B           32 MB Memory Card
+ mem1        00-0C           32 MB Memory Card
```

If your workstation does not have at least 32 MB of RAM, upgrade its memory.

Verifying Hard Disk Space

CiscoView requires 5 MB of disk space in the root directory and 25 MB of disk space in the */usr* directory.

To find out how much disk space is available on your system, enter the following at the command prompt:

```
hostname% df -I
```

Output similar to the following appears:

```
Filesystem    Total KB    used    free %used Mounted
on
/dev/hd4        16384    10008    6376   61% /
/dev/hd2      1003520   871324  132196   86% /usr
/dev/hd3        16384      732   15652    4% /tmp
```

The amount of disk space available in each filesystem appears in the *free* column. Note that 1,000 KB equals 1 MB. If you do not have sufficient space in the filesystem mounted on the */usr* directory, you must create a filesystem mounted on the */usr/nms* directory.

Caution CiscoView can be installed only in the */usr/nms* directory. If you create a filesystem, its mount point must be */usr/nms*. If */usr/nms* already exists on your system, *back up all data in that directory* before installing CiscoView. Installation of CiscoView overwrites existing data.

To create a filesystem, we recommend that you contact a knowledgeable system administrator and use SMIT.

Installing and Configuring CiscoView

You use the System Management Interface Tool (SMIT), an IBM AIX system administration facility, to install and configure CiscoView from a local or remote CD-ROM drive. This section describes the graphical user interface (GUI) version of SMIT; you can use the ASCII version called *SMITTY*, if you prefer. Refer to your IBM documentation for more information about SMIT and SMITTY.

In the process of installing and configuring CiscoView, you do the following:

- Use SMIT to mount the CiscoView CD-ROM on the local filesystem from a local or remote CD-ROM drive
- Use SMIT to install CiscoView from CD-ROM
- Use SMIT to configure CiscoView
- Unmount the CD-ROM

When configuration is complete, go to the next section, "Getting Started with CiscoView," for a sequence of steps for the first-time user.

Note SMIT and this booklet refer to the software product as *CiscoView 3.0*. Everything you read about CiscoVIew 3.0 applies to 3.0 and above.

Mounting from a Local or Remote CD-ROM Drive

You can install CiscoView from a CD-ROM drive attached to your system or from a drive connected to a remote host. You must first use SMIT to mount the local or remote device on the local AIX system.

Mounting from a Local CD-ROM Drive

To mount the CD-ROM on the filesystem from a local CD-ROM drive, use SMIT to perform the following steps on the local host:

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

2 Log in as the root user. For details, see "Becoming the Root User."

3 Start SMIT by entering the following at the command prompt:

   hostname# **smit**

4 On SMIT's System Management menu, select **Physical & Logical Storage**.

5 Select **File Systems**.

6 Select **Add/Change/Show Delete File Systems**.

7 Select **CDROM File Systems**.

8 Select **Add a CDROM File System**.

9 Click the "DEVICE name" **List** button, and select the device name (such as */dev/cd0*) from the list that appears.

10 Enter the name of a mount point directory (such as */cdrom*) in the "Mount point" field.

11 Click **Do** and read the output.

   If you have already performed this procedure, or if another device is already mounted on the mount point, the process will fail.

12 Click **Done**.

13 Terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

14 Enter the following at the command prompt:

   hostname# **smit mountfs**

15 Click the "FILE SYSTEM name" **List** button, and select a device
name (such as */dev/cd0*) from the list that appears.

16 In the "DIRECTORY over which to mount" field, enter the name of a
mount point directory (such as */cdrom*).

17 Click the "TYPE of file system" **List** button, and select **cdrfs** as the
file system type.

18 Set the Mount as Read-Only System field to **yes**.

19 Click **Do**, read the output, and then click **Done**.

20 Terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the
Exit menu.

The CD-ROM is ready for installation of software.

Mounting from a Remote CD-ROM Drive

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

1 Perform the 20 steps exactly as listed under "Mounting from a Local
CD-ROM Drive" on the *remote* system.

2 Enter **smit mknfsexp** at the command prompt.

3 Enter the "PATHNAME of directory to export" (such as */cdrom*).

4 Use the arrow keys to change the Mode to Export Directory field to
read-only.

5 Enter the appropriate information, if necessary, into any of the other
fields.

6 Click **Do**, read the output, and then click **Done**.

7 Terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the
Exit menu.

After working on the *remote* system, perform the following steps on the
local system:

1 Log in as the root user. For details, see "Becoming the Root User."

2 Enter the following at the command prompt:

```
hostname# mount
remote_hostname:remote_exported_filesystem_name
local_mount_point
```

For example, to mount a remote filesystem named *zen*, enter

hostname# mount zen:/cdrom /cdrom

The CD-ROM is ready for installation of software.

Installing CiscoView

Installation is the transfer of software from the distribution medium to the AIX system.

Caution CiscoView can be installed only in the */usr/nms* directory. If */usr/nms* already exists, *back up the directory* because the installation process overwrites existing files.

To install CiscoView from a mounted CD-ROM drive, perform the following steps:

1 Place the CD-ROM into its caddy, and insert it into the local or remote CD-ROM drive.

2 Log in as the root user. For details, see "Becoming the Root User."

3 Start SMIT by entering the following at the command prompt:

    hostname# **smit**

4 On the System Management menu, select **Software Installation & Maintenance**.

5 On the next menu, select **Install / Update Software**.

6 On the next menu, select **Install / Update Selectable Software (Custom Install)**

7 On the next menu, select **Install Software Products at Latest Available Level**.

8 In the Install Software Products at Latest Available Level dialog, click the **List** button, then click the name of the CD-ROM device on which you loaded the CD-ROM in Step 1.

9 Click **Do**. The Install Software Products at Latest Available Level dialog displays additional fields.

10 Click the **List** button next to the "SOFTWARE to install" field. After a brief delay, the Multi-Select List dialog appears.

11 In the Multi-Select List dialog, click the CiscoView module named **CiscoView.base.obj**.

12 Click **OK** and then click **Do**.

13 In response to the "ARE YOU SURE?" prompt, click **OK** when you are sure you want to install the module you just highlighted.

While the animated man is running, SMIT installs CiscoView in the */usr/nms* directory, and CiscoView modifies SMIT to allow subsequent configuration and de-installation of CiscoView.

If the man raises his hands and SMIT displays *OK*, the process has succeeded. If the man falls on his face, installation has failed. If the reason for failure is not apparent, read the installation log file *$HOME/smit.log* and supply it to the Cisco Technical Assistance Center (TAC) if necessary.

14 Click **Done**.

15 If Step 13 indicated success, click **Return to System Management** and go to the next section, "Configuring CiscoView."

In the event of failure, terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

Configuring CiscoView

To configure the CiscoView product when installation is complete, perform the following steps:

1 Start SMIT if you have not already done so:

```
hostname# smit
```

2 On the initial SMIT menu, click **Communications Applications and Services**.

3 On the next menu, click **Cisco Network Management Applications for AIX**.

4 On the next menu, click **CiscoView**.

5 On the CiscoView 3.0 menu, click **Configure**.

6 On the Configure menu, select **CiscoView**.

7 The Configure CiscoView Product dialog appears.

8 In the Configure CiscoView Product dialog, accept the defaults, or type values into each of the following fields.

Product Group Name—Name of the AIX group of which users must be members to use CiscoView. The default is *cscworks*. Click the **List** button to select one or more names from a list.

Product User Name—AIX username assigned to the CiscoView application itself. The default is *cscworks*.

Product Group Users—Set of AIX users who belong to the product group in the previous item. These users can use the CiscoView application. Click the **List** button to select names from a list.

9 Click **Do**, wait for the process to complete, and read the output.

If the man raises his hands and SMIT displays *OK*, the process has succeeded. If the man falls on his face, configuration has failed. Contact a TAC representative.

10 Click **Done**, and then **Cancel**.

11 Terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

12 Unmount the CD by entering the following at the local or remote workstation where it is mounted:

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

AIX unmounts the CD-ROM device from the */cdrom* directory.

13 Remove the CD-ROM caddy from the drive.

After installing and configuring CiscoView, go to the section "Getting Started with CiscoView."

De-Installing CiscoView

If you must de-install the CiscoView product, perform these steps:

1 Log in as the root user. For details, see "Becoming the Root User."

2 Start SMIT by entering the following at the command prompt:

   hostname# **smit**

3 On the System Management menu, select **Communications Applications and Services**.

4 On the next menu, select **Cisco Network-Management Applications for AIX**.

5 On the next menu, select **CiscoView**.

6 On the next menu, select **Maintain**.

7 On the next menu, select **Remove CiscoView for AIX program**.

8 In response to the "ARE YOU SURE?" prompt, click **OK**.

   While the animated man is running, SMIT de-installs the CiscoView product. If the man raises his hands and SMIT displays *OK*, the de-installation process has succeeded. If the man falls on his face, de-installation has failed. Contact a TAC representative.

9 Terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

Getting Started with CiscoView

This section contains a two start-up methods for the first-time user of CiscoView, plus a brief description of the CiscoView online help system.

For details on CiscoView features, refer to the online help system.

Starting CiscoView from the Command Line

If your system does *not* have NetView for AIX, use this procedure.

To start CiscoView from the AIX command line and monitor a Cisco device, perform these steps.

1 Start CiscoView by entering the following at the command line:

```
% nmcview
```

2 You must now specify a Cisco device to monitor.

Select **Open Device** on CiscoView's **File** menu, enter a host name or IP address in the Host field, and then click **OK**.

A graphical image of the device's back panel appears.

Starting CiscoView from NetView for AIX

To start CiscoView when NetView for AIX is installed on the host system, do the following:

1 Start NetView for AIX by entering the following at the command line:

   `% nv6000`

2 Click the IP Internet symbol on NetView's root map. NetView displays all devices running the Internet Protocol (IP), including Cisco devices.

3 To see an image of a device's control panels, highlight exactly one Cisco device on the network map and select **Monitor> CiscoView**.

   If the CiscoView application is not visible on NetView's Monitor menu (and the configuration steps were successful), look for the *CiscoView* file in the */usr/OV/registration/C* directory. If the file is not there, contact a TAC representative.

Discovering New or Changed IP Devices

The default IP Internet map includes all IP devices connected to NetView when NetView is started. To discover newly added or modified IP

devices, use NetView's **Options> Manage Objects** command as follows:

1 Click a device symbol on the default IP Internet map.

2 Select **Options> Manage Objects**. NetView displays a submap of the selected device's children (that are reachable in one hop). Newly appearing children could have been newly added to the network or explicitly unmanaged by a previous user. All newly appearing child devices are now accessible by CiscoView.

3 Select **File> Save Map As** to save the database of devices that you created.

For detailed information on how to run **Manage Objects**, refer to the online help.

Adding Devices to the IP Map

Perform the following steps for each *undiscoverable* Cisco device that you must add by hand:

1 Display the network map, then select **Edit> Add> Object**. The Add Object Palette appears.

2 In the Symbol Class area of the Add Object Palette, click the Cisco Router icon.

3 From the Symbol Subclass area of the Add Object Palette, use the middle mouse button to drag a specific Cisco device icon to the network map. The Add Object window appears.

4 Complete the Add Object window, and then click **OK** to record information about the object you just added.

Changing Cisco Device Icons

The map generated by **Manage Objects** might contain incorrect or generic device symbols. If necessary, use the NetView **Change Symbol Type** command to change Cisco device icons, as follows:

1 Select a Cisco device on the map, and press the right mouse button or equivalent. The Symbol menu pops up.

2 On the Symbol popup menu, Select **Edit> Change Symbol Type**. The Change Symbol Type window appears.

3 In the Symbol Class area of the Change Symbol Type window, click the correct symbol class of the selected device.

4 In the Symbol Subclasses area of the Change Symbol Type window, click a specific icon to represent the selected device. Then click **OK**.

5 To confirm that the selected device has the correct SNMP community strings, select **Options> SNMP Configuration** from the NetView menu bar.

Using the CiscoView Online Help System

CiscoView's online help is similar to help systems supplied with Microsoft Windows-based products. The help system satisfies most of your needs for information—there is no printed reference manual.

You can access online help about CiscoView

- From the **Help** menu within CiscoView, from which you can select a contents page, a CiscoView overview, or help on the help system itself. Read the help system help for details on keyword searches.

- By clicking the **Help** button or pressing the **F1** key on any CiscoView window. This method presents context-sensitive help.

- By clicking **CW-Applications> CiscoView** on the NetView **Help** menu. This method presents the CiscoView contents page.

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