CWSI Overview

CiscoWorks for Switched Internetworks (CWSI) Version 1.0 on AIX is a set of three network management applications: CiscoView, VlanDirector, and TrafficDirector.

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.

VlanDirector is a virtual LAN (VLAN) management application for Cisco's Catalyst switches. It provides configuration, monitoring, and error-reporting capabilities for switches connected as VLANs. VlanDirector offers multiple windows for displaying configuration status and provides physical and logical views of interconnected switches.

TrafficDirector lets you monitor, troubleshoot, and record information about your network's operation. It helps you identify and isolate a wide variety of fault conditions in networks. It uses a central management console in conjunction with data-gathering agents located at various points on a network. It can collect wide-ranging statistical data, display

selectively captured network traffic, set user-defined alarm conditions, and obtain real-time updates from all segments of a network.

To complete the following tasks, you must be familiar with the Motif window management system and NetView for AIX.

In addition to this booklet and the online help system, CWSI on AIX documentation includes the *CWSI 1.0 on AIX Release Note*.

Note If you are unfamiliar with the CiscoView 3.1(1) on AIX application, refer to the *CWSI 1.0 on AIX Release Note* for information on getting started with and maintaining the CiscoView 3.1(1) on AIX. For information on getting started with VlanDirector or TrafficDirector, refer to the appropriate user guide.

Preparing to Install CWSI

Before you install and configure CWSI, use the following checklists to verify that your system meets the CWSI requirements.

- Hardware Requirements Checklist
- System Requirements Checklist

Also plan your installation path using the scenarios provided in “Determining your CWSI Installation and Configuration Path” section.

Hardware Requirements Checklist

CWSI requires the following hardware:

- Any IBM RISC System/6000 workstation with Power architecture
- 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

CWSI requires the following software products and conditions.

- AIX—Version 3.2.5(1) or 4.1.
- NetView for AIX—Version 3.1 or 4.1 (optional). CWSI can operate *without* NetView for AIX, however, without NetView for AIX, 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 in the */* directory, 25 MB in */tmp* directory, and 50 MB in the */usr* directory.
- Cisco Internetwork Operating System (Cisco IOS) Software requirements—CWSI requires the managed Cisco devices to be running specific versions of the Cisco IOS software. See the *CWSI 1.0 on AIX Release Note*.

Caution CWSI 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

CWSI. Installation of CWSI overwrites existing data. To create a filesystem, we recommend that you contact a knowledgeable system administrator and use the System Management Interface Tool (SMIT).

Determining your CWSI Installation and Configuration Path

Depending upon the current applications you may or may not have installed on your system, the CWSI installation varies. Use the scenarios in this section to determine the order in which you would perform the procedures described in this booklet.

Scenario 1

If CiscoWorks and CiscoView 3.1(1) are not currently installed on your system, complete the following sections in this order:

1. "Mounting from a Local CD-ROM Drive."
2. "Installing CWSI."
3. "Configuring CiscoView."
4. "Installing Device Packages."

5 “Configuring TrafficDirector.”

6 “Unmounting the CD-ROM.”

Scenario 2

If CiscoWorks is currently installed on your system, but not CiscoView 3.1(1), complete the following sections in this order:

1 “Mounting from a Local CD-ROM Drive.”

2 “Installing CWSI.”

3 “Configuring CiscoView.”

4 “Configuring TrafficDirector.”

5 “Unmounting the CD-ROM.”

Scenario 3

If CiscoWorks and CiscoView 3.1(1) are currently installed on your system, you have two installation options:

- You can re-install CiscoView 3.1(1).
- You can install just VlanDirector or TrafficDirector.

If you choose to re-install CiscoView 3.1(1), complete the following sections in this order:

1. "Mounting from a Local CD-ROM Drive."
2. "Installing CWSI."
3. "Configuring CiscoView."
4. "Configuring TrafficDirector."
5. "Unmounting the CD-ROM."

Note If you re-install CiscoView, you may want to de-install the current application and back up all data in the */usr/nms* directory because the installation process overwrites existing files.

If you choose not to re-install CiscoView 3.1(1), complete the following sections in this order:

1. "Mounting from a Local CD-ROM Drive."
2. "Installing TrafficDirector and VlanDirector."
3. "Configuring TrafficDirector."
4. "Unmounting the CD-ROM."

Scenario 4

If CiscoView 3.1(1) is currently installed on your system, but not CiscoWorks, you have two install options:

- You can re-install CiscoView 3.1(1).
- You can install just VlanDirector or TrafficDirector.

If you choose to re-install CiscoView 3.1(1), complete the following sections in this order:

1. "Mounting from a Local CD-ROM Drive."
2. "Installing CWSI."
3. "Configuring CiscoView."
4. "Installing Device Packages."
5. "Configuring TrafficDirector."
6. "Unmounting the CD-ROM."

Note If you re-install CiscoView, you may want to de-install the current application and back up all data in the */usr/nms* directory because the installation process overwrites existing files.

If you choose not to re-install CiscoView 3.1(1), complete the following sections in this order:

1. “Mounting from a Local CD-ROM Drive.”
2. “Installing TrafficDirector and VlanDirector.”
3. “Installing Device Packages.”
4. “Configuring TrafficDirector.”
5. “Unmounting the CD-ROM.”

Installing and Configuring CWSI

You use the System Management Interface Tool (SMIT), an IBM AIX system administration facility, to install and configure CSWI from a local or remote CD-ROM drive. This section describes how to install and configure CWSI using the graphical user interface (GUI) version of SMIT. If you prefer, you can also use the ASCII version called SMITTY. For more information about using SMIT and SMITTY, refer to your IBM documentation.

To install and configure CSWI, do the following:

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

Mounting from a Local CD-ROM Drive

You can install CWSI from a CD-ROM drive attached to your system or from a drive connected to a remote host. However, before installing CWSI from a CD-ROM, you must first use SMIT to mount the local or remote CD-ROM drive on the local AIX system.

This section describes mounting from a local CD-ROM drive. For information on mounting from a remote CD-ROM drive, refer to the *CWSI 1.0 on AIX Release Note*.

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

To mount the CD-ROM on the filesystem from a local CD-ROM drive, insert the CWSI CD-ROM into the CD-ROM drive and perform the following steps:

1. Log in as the root user and start SMIT by entering the following at the command prompt:

   ```
   hostname# smit
   ```

2. On the System Management menu, select **Physical & Logical Storage**.

3 Select **File Systems** and select **Add/Change/Show Delete File Systems**.

4 Select **CDROM File Systems**.

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

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

7 In the “Mount point” field, enter the name of a mount point directory (such as */cdrom*).

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

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

10 Enter the following at the command prompt:

```
hostname# smit mountfs
```

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

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

13 Click the “TYPE of file system” **List** button, and select **cdrfs** as the file system type.

14 Set the “Mount as Read-Only System” field to **Yes**.

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

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

The CD-ROM is now ready for CWSI to be installed.

Installing the CWSI Applications

Before beginning installation, ensure that you have determined your installation and configuration path using the scenarios listed in the “Determining your CWSI Installation and Configuration Path” section. CiscoView 3.1(1) is a prerequisite for the VlanDirector and TrafficDirector applications. If CiscoView 3.1(1) is not already installed, you will be prompted to install CiscoView before you install VlanDirector or TrafficDirector.

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

Installing CWSI

Use the following procedure to install the CWSI applications if any of the following situations exist:

- CiscoWorks and CiscoView 3.1(1) are not installed on your system.
- CiscoWorks is installed but not CiscoView 3.1(1).
- CiscoWorks and CiscoView are installed, but you have chosen to re-install CiscoView before installing TrafficDirector and VlanDirector.

To install the CWSI applications:

1. Insert the CWSI CD-ROM into the CD-ROM drive.
2. Log in as the root user and start SMIT by entering the following at the command prompt:

   ```
   hostname# smit
   ```

3. On the System Management menu, select **Software Installation & Maintenance**.
4. On the next menu, select **Install/Update Software**.

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

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

7 In the Install Software Products at Latest Available Level dialog box, click the **List** button. The Single Select dialog box is displayed.

8 Click the name of the CD-ROM device on which you loaded the CD-ROM in Step 1 and click **Do**. The Install Software Products at Latest Available Level dialog box displays additional fields.

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

10 In the Multi-Select List dialog box, click on **CiscoView**, and to install TrafficDirector and VlanDirector click on **TrafficDirector** and **VlanDirector**.

Note You can install the CWSI applications simultaneously or one at a time. To install the CWSI applications simultaneously, select each of the applications before proceeding to Step 12. To install the CWSI applications one at a time, perform Steps 11 through 14 of this procedure for each application.

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

12 In response to the “ARE YOU SURE?” prompt, click **OK** to install the application or applications you selected. SMIT installs CWSI in the */usr/nms* directory and CWSI modifies SMIT to allow subsequent configuration and de-installation of CWSI.

   If the installation was successful, an *OK* status is displayed. If the installation was unsuccessful a *Failed* status is displayed. If the reason for the failure is not apparent, read the installation log file *$HOME/smit.log* and, if necessary, contact the Cisco Technical Assistance Center (TAC).

13 Click **Done**.

14 If installation was successful, click **Return to System Management** and proceed to the next section as mapped in the scenario you chose in the “Determining your CWSI Installation and Configuration Path” section.

   If the installation failed, terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

Installing TrafficDirector and VlanDirector

Use the following procedure to install the CWSI TrafficDirector and VlanDirector applications if CiscoView 3.1(1) is currently installed on your system and you are just installing TrafficDirector and VlanDirector.

To install the TrafficDirector and VlanDirector applications:

1. Insert the CWSI CD-ROM into the CD-ROM drive.
2. Log in as the root user and start SMIT by entering the following at the command prompt:

   ```
   hostname# smit
   ```

3. On the System Management menu, select **Software Installation & Maintenance**.
4. On the next menu, select **Install/Update Software**.
5. On the next menu, select **Install/Update Selectable Software (Custom Install)**.
6. On the next menu, select **Install Software Products at Latest Available Level**.
7. In the Install Software Products at Latest Available Level dialog box, click the **List** button. The Single Select dialog box is displayed.

8 Click the name of the CD-ROM device on which you loaded the CD-ROM in Step 1 and click **Do**. The Install Software Products at Latest Available Level dialog box displays additional fields.

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

10 In the Multi-Select List dialog box, click on **TrafficDirector** and **VlanDirector**.

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

12 In response to the "ARE YOU SURE?" prompt, click **OK** to install the applications you selected. SMIT installs CWSI in the */usr/nms* directory and CWSI modifies SMIT to allow subsequent configuration and de-installation of CWSI.

   If the installation was successful, an *OK* status is displayed. If the installation was unsuccessful a *Failed* status is displayed. If the reason for the failure is not apparent, read the installation log file *$HOME/smit.log* and, if necessary, contact the Cisco Technical Assistance Center (TAC).

13 Click **Done**.

14 If installation was successful, click **Return to System Management** and complete the steps in the "Configuring TrafficDirector" section.

If the installation failed, terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

Installing Device Packages

Follow the steps in this procedure if CiscoView 3.1(1) is installed on your system, but CiscoWorks is not, and you want to install all device package files that reside in a directory path on a system.

Note If CiscoWorks and CiscoView 3.1(1) are installed on your system, the device packages are installed at the same time.

Use the following procedure to install CiscoView 3.1 (1) device packages if either of the following situation exists:

- CiscoWorks and CiscoView 3.1(1) are not currently installed on your system and you are installing CWSI 1.0 on AIX.
- CiscoView 3.1(1) is installed on your system but not CiscoWorks.

To install device packages:

1. If you have not already done so, start SMIT by entering the following at the command prompt:

   ```
   hostname# smit
   ```

2. On the System Management 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. In the CiscoView dialog box, click **Device Package Installation**.
6. In the field “Select Device Packages to Install” click the **List** button.
7. In the Multi-Select List dialog box, select the device packages you want to install and click **OK**.

8 Click **Do**, wait for the process to finish, and read the output.

   If the process is successful, an *OK* status is displayed. If the device package installation failed, a *Failed* status is displayed. If the process failed, contact a Cisco TAC representative.

9 Click **Done** and then **Cancel** and proceed to the next section as mapped in the scenario you chose in the "Determining your CWSI Installation and Configuration Path" section.

Configuring CWSI

You need to start SMIT to perform either of the following tasks:

- Configuring CiscoView
- Configuring TrafficDirector

Note You do not have to configure the VlanDirector application. VlanDirector uses the owner and group names configured for CiscoView.

Starting SMIT

To start SMIT, enter the following at the command prompt:

```
hostname# smit
```

Configuring CiscoView

Follow these steps to configure the CiscoView application.

1. On the System Management menu, click **Communications Applications and Services**.
2. On the next menu, click **Cisco Network Management Applications for AIX**.
3. On the next menu, click on **CiscoView**.
4. In the CiscoView dialog box, select **Product Configuration**.
5. In the Product Configuration dialog box, accept the defaults or type values into each of the following fields:

   Product Group Name—Name of the AIX group that owns the CiscoView files. The default is *bin.* Click the **List** button to select one or more names from a list.

   Product User Name—AIX username of the individual assigned to the CiscoView files. The default is *bin.*

   Load MIBs Into NetView—The default is **No**. If you want to monitor MIBs through NetView, click the **List** button to select **Yes**.

The procedure for loading MIBs may take a significant amount of time depending on the number of MIBs loaded.

6 Click **Do**, wait for the process to finish, and read the output.

Note If you do not load MIBs, this process may take approximately 20 minutes or more to complete.

If the MIBs were successfully loaded, an *OK* status is displayed. If the configuration failed, a *Failed* status is displayed. If the configuration fails, contact a Cisco TAC representative.

7 Click **Done** and then **Cancel**.

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

9 Proceed to the next section as mapped in the scenario you chose in the "Determining your CWSI Installation and Configuration Path" section.

Configuring TrafficDirector

Follow these steps to configure the TrafficDirector application:

1. On the System Management menu, click **Communications Applications and Services**.
2. On the next menu, click **Cisco Network Management Applications for AIX**.
3. On the next menu, click on **TrafficDirector**.
4. In the TrafficDirector dialog box, select **Configure**.
5. In the TrafficDirector dialog box, type the values provided on the pink or yellow password form shipped with CWSI, or the permanent password that you have been assigned, in the following fields:

   Serial Number

   Password

   Expiry Date

Note For more information about the TrafficDirector licensing requirements and obtaining a permanent license agreement, see the *CWSI 1.0 Release Note*.

6 To start the configuration process, click **Do**.

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

Unmounting the CD-ROM

To unmount the CD-ROM:

1 Enter 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.

2 Remove the CD-ROM caddy from the CD-ROM drive.

You are now ready to proceed to the “Starting CWSI” section.

De-Installing CWSI

If necessary, you can de-install the CWSI applications. You can de-install only TrafficDirector or VlanDirector, but if you de-install CiscoView, the VlanDirector and TrafficDirector applications automatically de-install as well. Before de-installing the CWSI applications, you must start SMIT.

Starting SMIT

1. Log in as the root user and start SMIT by entering the following at the command prompt:

   ```
   hostname# smit
   ```

De-installing CiscoView

1. On the System Management menu, select **Communications Applications and Services**.
2. On the next menu, select **Cisco Network-Management Applications for AIX**.
3. On the next menu, select **CiscoView**.
4. On the next menu, select **Maintenance**.

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

6 In response to the “ARE YOU SURE?” prompt, click **OK**. If the de-installation is successful, an *OK* status is displayed. If the de-installation failed, a *Failed* status is displayed. If the de-installation failed, contact a Cisco TAC representative.

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

De-installing TrafficDirector

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

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

3 On the next menu, select **TrafficDirector**.

4 In the TrafficDirector dialog box, select **Remove TrafficDirector for AIX**.

5 In response to the “ARE YOU SURE?” prompt, click **OK**. If the de-installation is successful, an *OK* status is displayed. If the

de-installation failed, a *Failed* status is displayed. If the de-installation failed, contact a Cisco TAC representative.

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

De-installing VlanDirector

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

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

3 On the next menu, select **VlanDirector**.

4 In the TrafficDirector dialog box, select **Remove VlanDirector for AIX**.

5 In response to the “ARE YOU SURE?” prompt, click **OK**. If the de-installation is successful, an *OK* status is displayed. If the it failed, a *Failed* status is displayed. If the de-installation failed, contact a Cisco TAC representative.

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

Starting CWSI

This section contains a two startup methods for the first-time CWSI user. You can start the CiscoView and VlanDirector applications from the AIX command line or from NetView for AIX. You can start the TrafficDirector application only from the AIX command line.

After starting the CWSI applications, proceed to the:

- "Getting Started with CiscoView" section of the *CWSI 1.0 on AIX* release note for information on getting started with and maintaining the CiscoView 3.1(1) on AIX application.
- "Getting Started" chapter of the *TrafficDirector UNIX 3.3 User Guide* for information on getting started with the TrafficDirector application.
- "Getting Started" chapter of the *VlanDirector User Guide* for information on getting started with the VlanDirector application.

Starting CWSI Applications from the AIX Command Line

If your system does *not* have NetView for AIX, use the following procedures to start the CWSI applications from the AIX command line.

Starting CiscoView

To start the CiscoView application:

1. Enter the following at the command prompt from the *usr/nms/bin* directory:

   ```
   % nmcview
   ```

2. To specify a Cisco device to monitor, select **Open Device** on the CiscoView **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 VlanDirector

To start VlanDirector:

1. Enter the following at the command prompt from the *usr/nms/bin* directory:

   ```
   % vdirector
   ```

The VlanDirector Startup window appears. For information on creating a VlanDirector view, refer to the “Getting Started” chapter of the *VlanDirector User Guide*.

Starting TrafficDirector

To start TrafficDirector:

1. Set the environment variable NSHOME to the */usr/nms/tdir* directory.
2. To start TrafficDirector, enter the following at the command prompt from the *usr/nms/tdir/bin* directory:

   ```
   % tdir
   ```

For information on getting started with TrafficDirector, refer to the “Getting Started” chapter of the *TrafficDirector 3.3 UNIX User Guide*.

Starting CWSI Applications from NetView for AIX

You can start the CiscoView and VlanDirector applications from NetView for AIX.

To start the CiscoView or VlanDirector applications:

1. If necessary, 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 IP, including Cisco devices.

3. If starting the CiscoView application, open the **Monitor** menu and select **CiscoView**.

   or

   If starting VlanDirector, open the **Monitor** menu and select **VlanDirector**.

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

Service and Support

This section describes how to contact Cisco Systems to order knowledge products and how to get service and support.

Cisco Connection Documentation

Cisco documentation and additional literature are available on a CD called Cisco Connection Documentation, Enterprise Series. The CD is updated and shipped monthly, so it might be more up to date than printed documentation. To order the Cisco Connection Documentation, Enterprise Series CD, contact your local sales representative or call Customer Service. The CD is available both as a single CD and as an annual subscription. You can also access Cisco technical documentation on the World Wide Web URL `http://www.cisco.com`.

Cisco Connection Online

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

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO 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.

CCO 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 CCO 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 CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: `http://www.cisco.com`
- Telnet: `cco.cisco.com`
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100

emulation; databits: 8; parity: none; stop bits: 1; and baud rates up to 14.4 kbps.

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

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