VlanDirector Installation Guide

VlanDirector is a virtual LAN-management application for Cisco Catalyst switches. It allows you to create, modify, and manage VLANs, offers multiple windows for displaying configuration status, and provides both physical and logical views of interconnected Catalyst switches.

This booklet provides the following information

- System and network requirements for running VlanDirector

- Instructions for mounting and unmounting the CDROM drive

- Instructions for installing VlanDirector on a Sun SPARCstation

- Instructions for installing VlanDirector on an HP system

For information on starting the application and performing basic start-up tasks refer to the "Getting Started Guide" or the context-sensitive online help system that is provided with the product.

System Requirements for VlanDirector

Before you install VlanDirector, make sure that your system meets the general requirements listed below.

Table 1   Hardware and Software System Requirements for VlanDirector

Category	Requirement	HP-UX Requirements
HARDWARE	Sun SPARCstation 4 or greater	HP-9000 System
	Color monitor	Color monitor
SOFTWARE		
Operating Systems	SunOS 4.1.3_U1, or SunOS 4.1.4	HP-UX, A.09.03, A.09.04, A09.05
Available Disk Space	24 MB if CiscoView 3.0 is not installed; 8 MB if CiscoView 3.0 is installed	86 MB if CiscoView 3.0 is not installed; 13MB if CiscoView is installed.

Category	Requirement	HP-UX Requirements
RAM	32 MB	32 MB
Windowing Systems	X11R4 or X11R5	X11R4 or X11R5
	OpenWindows 3.0, 3.3, or later; and Motif	HP Vue or Motif Window Manager
Network Management Software (not required)[1]	SunNet Manager 2.2.2 HP OpenView 3.3	HP OpenView 3.3

1. VlanDirector can run standalone; you do not need a network management platform to run it.

Note   If you are installing VlanDirector on an NFS-mounted drive, you will need root authority on the NFS partition. You can install VlanDirector on a local disk or a network-mounted disk to which you have root access.

Make sure that you have the required disk space for your VlanDirector database. The following table shows the disk space required for various components.

Table 2   Disk Space Required for Various Components

Component	Diskspace
Base	350K
Each switch	5K
Each module per switch	20K
Each VLAN	2K

A formula for an sample network management environment is suggested below. The sample network contains: 100 switches with 3 modules per switch and 500 VLANs. The formula to calculate space is:

350K + (100 X 5K) + (300 X 20) + (500 X 2) = 7850K

Network Requirements

Perform the following steps to verify that your network is set up correctly:

1 Ensure that the Cisco Discovery Protocol (CDP) is enabled on all switches in the network. To ensure that CDP is enabled, use the following command line interface (CLI) command on all switches:

```
set cdp enable all
```

2 If a switch is interconnected with fast Ethernet links and configured to carry more than one VLAN, verify that ISL is enabled on both sides of the trunk. Refer to the *Catalyst 5000 Series Configuration Guide and Command Reference* for information on how to enable ISL.

3 Verify that you can communicate with each switch over VLAN 1 (the default VLAN) by pinging each device.

4 Verify that all interconnected switches are running a minimum of system software version 1.2.

5 If your community strings for the devices differ from the default, verify that the format of the community string file you are using is correct. Refer to the *VlanDirector Getting Started Guide* for information on the community string file format.

Mounting from a Local CD-ROM

Before mounting the CD-ROM, place the VlanDirector CD-ROM into the CD-ROM drive.

To mount the CD-ROM from a local CD-ROM drive, perform the following steps:

1 Become superuser by entering **su** and the root password at the system prompt (#):

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

```
mkdir /cdrom
```

2 Mount the CD-ROM.

On a Sun workstation, enter the following:

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

On an HP system, enter the following, replacing <device name> with the name of your device:

```
mount -t cdfs -o ro /dev/<device name> /cdrom
```

For example, you might enter **dsk/c201d2s0** as your device name.

Continue with the appropriate installation procedure for your network.

Mounting from a Remote CD-ROM

Before mounting the CD-ROM, place the VlanDirector CD-ROM into the CD-ROM drive.

To mount the CD-ROM from a remote CD-ROM drive, perform the following steps on the *remote* machine where the CD-ROM drive is located:

Note   If you are running SunOS 5.*x*, refer to your Sun documentation for the appropriate commands to export a disk.

1   Become superuser by entering **su** and the root password at the command prompt.

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

   mkdir /cdrom

3   If the */etc/exports* file does not exist, create it.

4   Edit the */etc/exports* file to include the following line:

```
/cdrom -ro
```

5 If */etc/exports* does not exist, enter the following commands to reboot your machine to become an NFS server:

```
nfsd 8 &
rpc.mountd -n
```

To verify that you have exported the disk, enter the following command, replacing <host name> with the name of your host:

```
/usr/etc/showmount -e <host name>
```

6 Mount the CD-ROM.

On a Sun workstation, enter the following:

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

On an HP system, enter the following, replacing <device name> with the name of your device:

```
/etc/mount -t cdfs -o -ro /dev/<device name> /cdrom
```

For example, you might enter **dsk/c201d2s0** as your device name.

7 Enter the following command to run **exportfs**:

```
exportfs -a
```

Perform the following steps on the *local* machine:

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1 Become superuser by entering **su** and the root password at the command prompt.

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

```
mkdir /cdrom
```

3 Mount the CD-ROM.

On a Sun workstation, enter the following:

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

On an HP system, enter the following, replacing <device name> with the name of your device:

```
/etc/mount -t cdfs -o -ro /dev/<device name> /cdrom
```

For example, you might enter **dsk/c201d2s0** as your device name.

Installing VlanDirector on a Sun Workstation

Follow this procedure if you are installing VlanDirector or a Sun workstation. If you are installing VlanDirector on an HP system, continue to Installing VlanDirector on an HP System.

This section describes how to install VlanDirector on a Sun workstation. The procedure is the same whether you are using SunNet Manager or HP OpenView network management software on the Sun workstation, or installing VlanDirector on a Sun workstation without SunNet Manager or HP OpenView.

Note Before installing VlanDirector, enter the following command to remove the */usr /tmp/unbundled* directory, if it exists:

rm -rf /usr/tmp/unbundled

1 To install the files from the CD-ROM drive, enter the following commands at the root system prompt (#):

   cd /cdrom
   ./extract_unbundled

   Make sure you include the dot, slash (**./**) in the **extract_unbundled** command.

   The screen displays product information and prompts you as follows:

   Do you want to continue (y|n)? [y]

2 Enter **y** or press **Return** to continue with the installation.

Copyright information about the product and the terms of the Cisco licensing agreement are displayed, followed by the prompt:

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

3 Enter **y** to continue with the installation.

The screen displays information about where the files will be installed, by default, and allows you to modify the default destination for VlanDirector. The default destination is */usr/vlan.* The system prompts as follows:

```
Should product be installed in /usr/vlan (y:n)? [y]
```

4 Enter **y** or press **Return** in response to the prompt to continue with the installation. The default location is typically used.

The system prompts as follows:

```
/usr/vlan is not a valid directory, create it (y|n)?
[y]
```

If your system does not already have CiscoView installed, continue to Step 6.

Otherwise, enter **y** or Press **Return** to continue with the installation.

5 If your system already has CiscoView installed, the system prompts as follows:

```
CiscoView [Ver] is installed

Use existing version (y|n)? [y]
```

VlanDirector is shipped with a licensed user version of CiscoView. If you enter **y** (for Yes) at this prompt, the installation script responds that the existing version of CiscoView on your system has all the files necessary to reinstall CiscoView. If you enter **n** (for No) at this prompt, CiscoView will be reinstalled.

6 Enter **y** or press **Return** to accept the default.

The system prompts as follows:

```
Enter hostname or IP address of switch [none]
```

7 Enter the host name or IP address of a Catalyst 5000 switch as the seed switch or starting device for the discovery process.

It is strongly recommended that you enter the host name or address of a switch at this prompt. If you specify the default value None, the installation will continue, but without a default discovery value.

The system prompts as follows:

```
Should secure X binaries be used? (y|n) [n]
```

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8 Enter **n** or Press **Return** to accept the default and continue with the installation.

The default value is typically No.

The system prompts as follows:

```
Enter database owner? [ <real user ID>]
```

9 Press **Return** to accept the default value, unless you want to change the group ID of the database.

The system prompts as follows:

```
Should data files be installed in
/usr/vlan/etc/vview (y|n)? [y]
```

10 Enter **y** or press **Return** to accept the default value, unless you want the modifiable files to be located in another directory. If so, specify the directory path.

The system prompts as follows:

```
Use this owner and group (y|n)? [y]
```

This applies to all files other than the writable files that were referred to in previous prompts.

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11 Enter **y** or press **Return** to accept the default. Typically the default is acceptable.

The system prompts as follows:

```
Are these settings correct (y|n)? [y]
```

12 Enter **y** or press **Return** to start the installation.

Prior to installation, you can review your previous responses. You can press Ctrl-C at any time to terminate the installation.

As the installation proceeds, the filenames are listed on the screen as they are installed. The installation process takes approximately 5 to 10 minutes, depending on the system speed.

After the installation has been completed, a message similar to the following is shown on the screen:

======SOFTWARE INSTALLATION COMPLETED=====

13 Check the */tmp/ciscoinstall.log* file for warnings and errors.

Continue to "Unmounting the CD-ROM."

Installing VlanDirector on an HP System

Follow this procedure to install VlanDirector 1.0 on an HP system. Enter all commands as superuser at the root prompt (#):

1 Create a directory into which you will install VlanDirector:

```
mkdir /usr/vlan
```

2 Enter the following command to begin the installation procedure:

```
/etc/update -s /cdrom/vl.tar -d /usr/vlan VLIC
```

A list of files is displayed on the screen, followed by system information.

3 Enter the following commands to proceed with the installation:

```
cd /usr/vlan/install/bin
```

```
./vlinstall -s /cdrom/vl.tar
```

Copyright information about the product and the terms of the Cisco licensing agreement are displayed, followed by the prompt:

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

4 Enter **y** to continue with the installation.

The screen displays information about where the files will be installed, by default, and allows you to modify the default destination for VlanDirector. The default destination is */usr/vlan.* The system prompts as follows:

```
Should product be installed in /usr/vlan (y:n)? [y]
```

If your system does not already have CiscoView installed, continue to Step 6.

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

If your system already has CiscoView installed, the system prompts as follows:

```
CiscoView <version number> is installed

Use existing version (y:n)? [y]
```

VlanDirector is shipped with a licensed user version of CiscoView. If you enter **y** (for Yes) at this prompt, the installation procedure recommends that the existing version of CiscoView on your system has all the files necessary to reinstall CiscoView. If you enter **n** (for No) at this prompt, CiscoView will be reinstalled.

6   Enter **y** or press Return to continue with the installation.

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The system prompts as follows:

```
Enter hostname or IP address of switch [none]
```

7 Enter the host name or IP address of a Catalyst 5000 switch as the seed switch or starting device for the discovery process.

It is strongly recommended that you enter the host name or address of a switch at this prompt. If you specify the default value None, the installation will continue, but you will not have a default discovery value.

The system prompts as follows:

```
Should xauth enabled binaries be used? (y|n) [n]
```

8 Enter **n** or Press **Return** to accept the default and continue with the installation.

The default value is typically No.

The system prompts as follows:

```
Enter database owner? [<bin>]
```

9 Press **Return** to accept the default value and continue with the installation.

The system prompts as follows:

```
Enter database group [<bin>]
```

10 Press **Return** to accept the default value, unless you want to change the group ID of the database.

The system prompts as follows:

```
HP OpenView is installed. Do you wish to add to it?
(y/n)? [y]
```

11 Press **Return** to accept the default value and continue with the installation.

The system prompts as follows:

```
Please confirm the directory where HP Openview is
installed ? [/usr/OV]
```

12 Press **Return** to accept the default location and continue with the installation.

The system prompts as follows:

```
Should data files be installed in
/usr/vlan/etc/vview (y|n)? [y]
```

13 Enter **y** or Press **Return** to accept the default value, unless you want the modifiable files to be located in another directory. If so, specify the directory path.

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The system prompts as follows:

```
Use this owner and group (y|n)? [y]
```

This applies to all files other than the writable files that were referred to in previous prompts.

14 Enter **y** or Press **Return** to accept the default. Typically the default is acceptable.

The system prompts as follows:

```
Are these settings correct (y|n)? [y]
```

15 Enter **y** or Press **Return** to complete the installation.

Prior to installation, you can review your previous responses. You can press Ctrl-C at any time to terminate the installation.

As the installation proceeds, the filenames are listed on the screen as they are installed. The installation process takes approximately 5 to 10 minutes, depending on the system speed.

After the installation has been completed, a message similar to the following is shown on the screen:

=====SOFTWARE INSTALLATION COMPLETED========

16 Check the */tmp/ciscoinstall.log* file for warnings and errors.

Continue to "Unmounting the CD-ROM."

Unmounting the CD-ROM

After you have completed the installation, unmount the CD-ROM. To unmount and eject the CD-ROM from your local machine, enter the following commands as superuser at the root system prompt (#):

On a Sun system, enter the following commands:

```
cd /
umount /cdrom
eject /cdrom
```

On an HP system, enter the following commands:

```
cd /
umount /cdrom
```
Remove the CD-ROM and store it in a safe place.

Note   A complete log of the installation can be found in the */tmp/ciscoinstall.log* file. Save this file to help you troubleshoot future installation problems.

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