CHAPTER 3

Getting Started

After you install VlanDirector, you are ready to work with the application and become familiar with its features.

This section provides information on how to navigate in VlanDirector, use the VlanDirector features, and perform initial VLAN configuration tasks.

Summary of Getting Started Tasks

The following is a list of the steps required to become familiar with the VlanDirector application and features. The procedure for completing each task follows this summary.

Step 1 Start VlanDirector, if it is not already running

Step 2 Locate the online help system

Step 3 Understand the discovery process

Step 4 Learn how to navigate in VlanDirector

Step 5 Become familiar with the topology maps

Step 6 Understand colors and legends in VlanDirector

Step 7 Create a new VLAN

Step 8 Understand how to move ports among VLANs

Step 9 Understand how to delete VLANs and VLAN components

Starting VlanDirector

You can start VlanDirector from SunNet Manager, HP OpenView, or from the UNIX command line.

Starting VlanDirector from SunNet Manager

To start VlanDirector from the SunNet Manager Tools menu, follow these steps:

Step 1 Save your existing SunNet Manager database.

Step 2 Restart SunNet Manager by entering the following command at the system prompt:

```
source <install directory>/etc/install.cshrc
snm -i
```

The SunNet Manager main window is displayed.

Step 3 To start VlanDirector, select **Tools** > **CW - VlanDirector**.

Starting VlanDirector from HP OpenView

To start VlanDirector from HP OpenView, do the following:

Step 1 Restart HP OpenView by entering the following at the UNIX system prompt:

ovw

Step 2 From the HP OpenView main window, select **Monitor**>**VlanDirector**.

Starting VlanDirector from a Device Icon Popup Menu

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

Step 1 In the SunNet Manager network map, display the popup menu for the device.

Step 2 Select VlanDirector from the popup menu.

Starting VlanDirector from the UNIX Command Line

To start VlanDirector from the UNIX command line, perform the following steps:

Step 1 Verify that your PATH environment variable includes the directory *<vlvroot>/bin* where *vlvroot* is the directory path in which VlanDirector was installed.

Step 2 Make sure that you are in a directory to which you have write permission, for example, your home directory.

Step 3 Enter the following command at the user level system prompt:

```
vdirector
```

This command starts the application, runs the discovery process, and then displays the following VlanDirector windows:

- VlanDirector Names
- Network Topology
- VLAN Devices
- VLAN Director Legends

If problems occur, the PATH environment variable might not include a path to VlanDirector executables. Make sure the PATH environment variable includes the path to VlanDirector executables.

If you do not want to change your PATH environment variable, you can launch VlanDirector as follows:

```
<vlvroot>/bin/vdirector
```

When entering this command, replace <vlvroot> with the directory and path name where VlanDirector is installed.

Command Line Start-up Options

This section provides information on command options and arguments that can be used with the **vdirector** command.

The following is the full syntax of the **vdirector** command:

vdirector [-db <config or known network DB>] [-cdp <seed discovery device>] [-v <version>] [-help] [-csf <community file>]

All of the arguments shown above are optional. The **vdirector** command options are described in the following table:

Option	Meaning
-csf	Specifies a community string file name
-db	Specifies the name of the known network or configuration. If there is both a known network and a configuration with the same name, VlanDirector uses the known network.
-cdp	Specifies the IP address or host name of a device to use as the seed CDP discovery device if necessary.
-v	Displays the version of the software and then exits.
-help	Displays the format and syntax of the vdirector command.

The **vdirector** command uses start-up options in the following order of priority:

1. It checks for command line arguments.
2. It checks for an existing *~/.cvlanrc* file.
3. It uses the known network, default1, as the **-db** argument and the seed switch specified by the environment variable VLV_SEED_SWITCH during installation, as the **-cdp** argument.

For example, if you specified a seed switch using the VLV_SEED_SWITCH environment variable, you could start VlanDirector using a different seed switch by using the -cdp command line option. Under these circumstances, VlanDirector would start using the command line option.

Using the Context-Sensitive Online Help System

The VlanDirector application is primarily documented with online help.

After you launch the VlanDirector application, use the help system to get information about using the VlanDirector interface, navigating within the product, and finding information on a specific topic.

Help is available in the following ways:

For this information	Do this
How to use the help system	On the Names window, select **Help>Using Help**.
Self-contained help system describing how to use the product features	On the Names window, select **Help>Using VlanDirector**.
Version information	On the Names window, select **Help>About VlanDirector**.
Context-sensitive help on any VlanDirector windows	Click the Help button in the window or search within the Help system.

Understanding the Discovery Process

When you start VlanDirector, it automatically performs a discovery of your network. If you are getting started with the product, you do not need to perform any of the discovery tasks listed here now, but you may want to refer to this information later or to help you become familiar with the discovery process.

VlanDirector finds out or discovers the devices in the network using Cisco Discovery Protocol (CDP). VlanDirector can only discover devices that support CDP. The discovered devices and links between them form a known network. The known network can consist of

up to 100 devices. The discovery process stops when it reaches the 100th device. You can include and exclude devices in the known network so that it includes only devices that you want included in the known network. You can also save a known network.

Instructions for performing the following discovery tasks are provided later in this chapter:

- Discovering a known network
- Starting discovery from VlanDirector
- Excluding devices from the known network
- Extending the known network
- Changing the discovery interval
- Resolving network irregularities
- Discovering routers

To discover a device, VlanDirector must have the following information:

- A host name or IP address of at least one switch from which to begin discovery
- A valid community string for the device
- IP access to the device in one of the following ways:
  - All devices must be on the same VLAN as the computer running VlanDirector
  - VLANs and routers must be configured to carry IP traffic from the computer running VlanDirector to all the devices

Understanding the Network and VLAN Maps and Views

After you launch VlanDirector, VlanDirector displays the following windows by default:

- VLAN Names
- Network Topology
- VLAN Devices
- VLAN Director Legends

When the discovery process is completed, these windows are populated with discovered information.

From VlanDirector, you can also display the following windows:

- VLAN Topology (shows VLAN devices with links)
- VLAN Ports

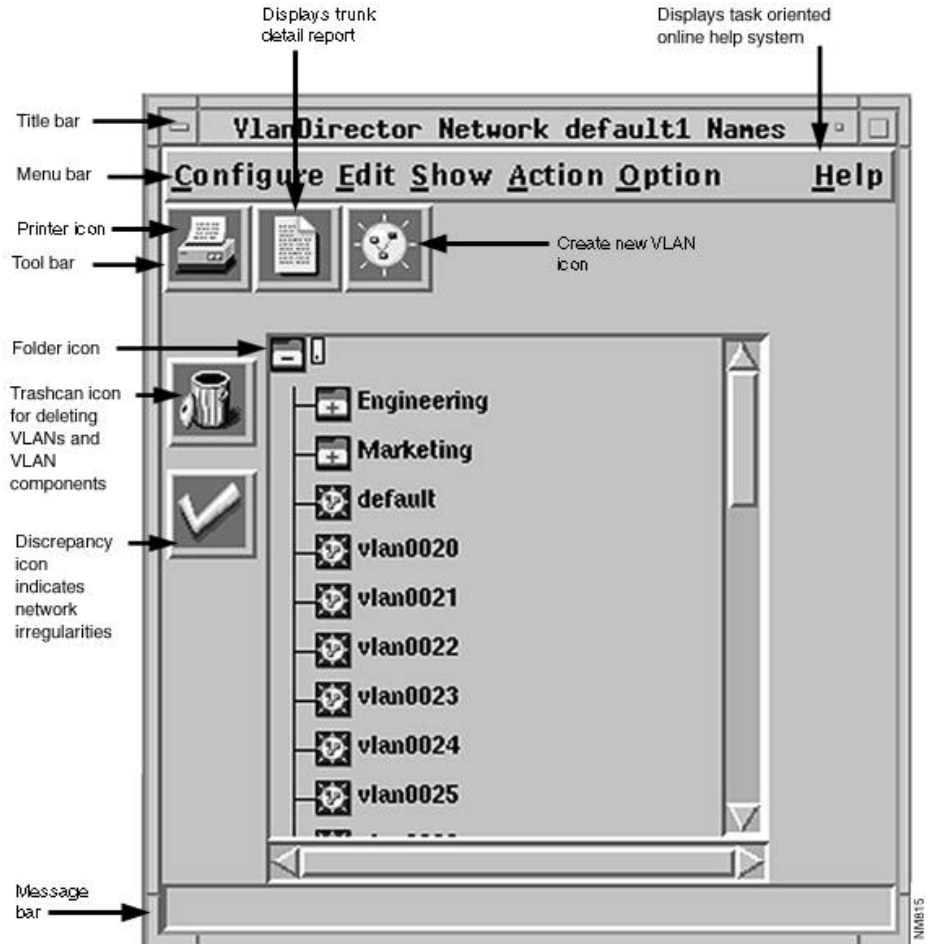
All of these windows, except the Names window, display various views of your network and are explained in detail later in this chapter.

Understanding the Names Window

The Names window displays the names of existing VLANs and folders. Use this window to create the name of a new VLAN or to organize groups of VLANs into folders, in the same way that you would organize files into folders or directories.

The Names window also provides menu commands to manage configurations and known networks. From the Names window, you can display other VLAN views. Figure 3-1 shows the Names window.

Figure 3-1 Names Window



The Names window has the following characteristics:

Menu Bar

The menu bar contains the commands that enable you to work with VLAN configurations, create VLAN names, and control many operating characteristics of the application, such as which network views are displayed.

Tool Bar

Icons in the toolbar include a printer symbol, which prints the Names window; the paper symbol, which opens a Trunk Details Report window; and the Sun symbol, which opens a create dialog box for creating a VLAN name or folder.

Icon Bar – Left Side of Pane

There are also icons appearing down the left side of the Names window. They include the trashcan, the background activity icon, and the discrepancies icon. The background activity icon looks like a magnifying glass. When open, VlanDirector is performing a discovery of network devices or installing VLANs in a known network. If you click this icon while the discovery or installation is in process, VlanDirector stops the discovery or installation.

Central Scrollable Pane – Names List

VLANs and folder names appear in the central scrollable pane.

The Network Topology Window

The Network Topology window shows all the physical devices and the links between them in the configuration or in the known network, depending on which is loaded. It displays up to 100 devices.

You can customize the appearance and amount of information this window displays. You can change its background, add or remove decorations such as building symbols, and then save and reload these changes.

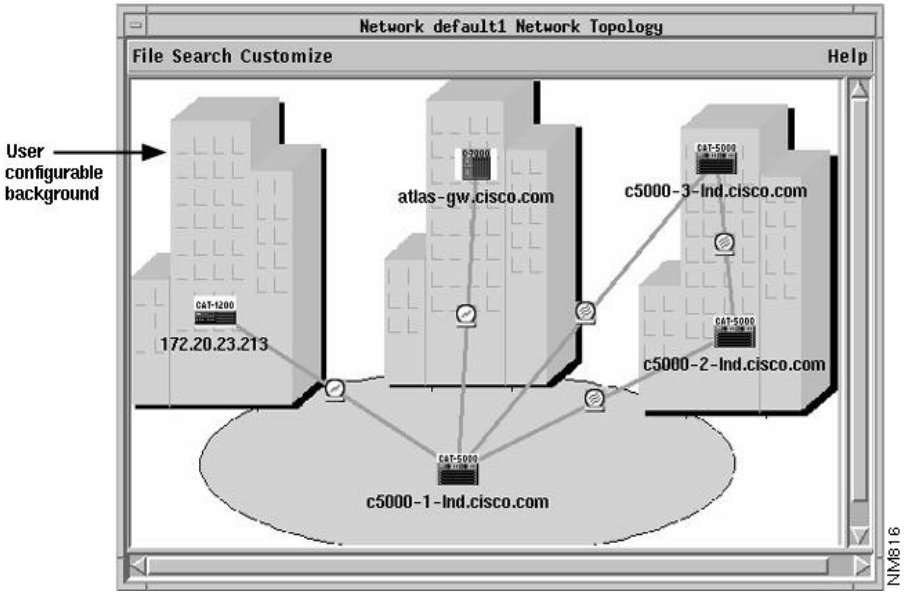
You can also add links to a VLAN from the Network Topology window. Figure 3-2 shows an example of the Network Topology window.

From this window you can:

- Display device or link attribute reports

- Launch CiscoView for a device

Figure 3-2 Network Topology Window



The VLAN Topology Window

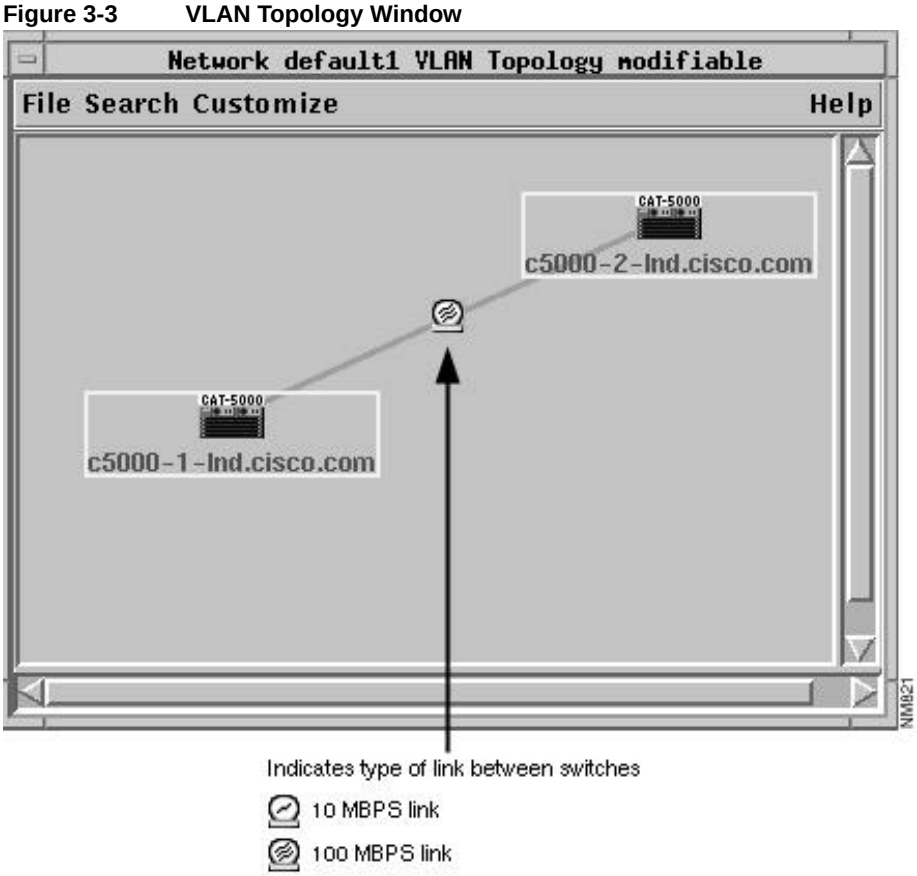
The VLAN Topology window shows all the devices and the links between them in the currently selected VLANs. It displays up to 100 devices.

From this window you can:

- Start CiscoView by double-clicking on any device.
- Delete VLAN links.
- Use this window as a drag and drop receiver when adding ports and links to a VLAN.

You can customize the appearance and the amount of information this window displays by changing its background, or adding or removing decorations such as building symbols. Figure 3-3 shows an example of the VLAN Topology window.

Figure 3-3 VLAN Topology Window

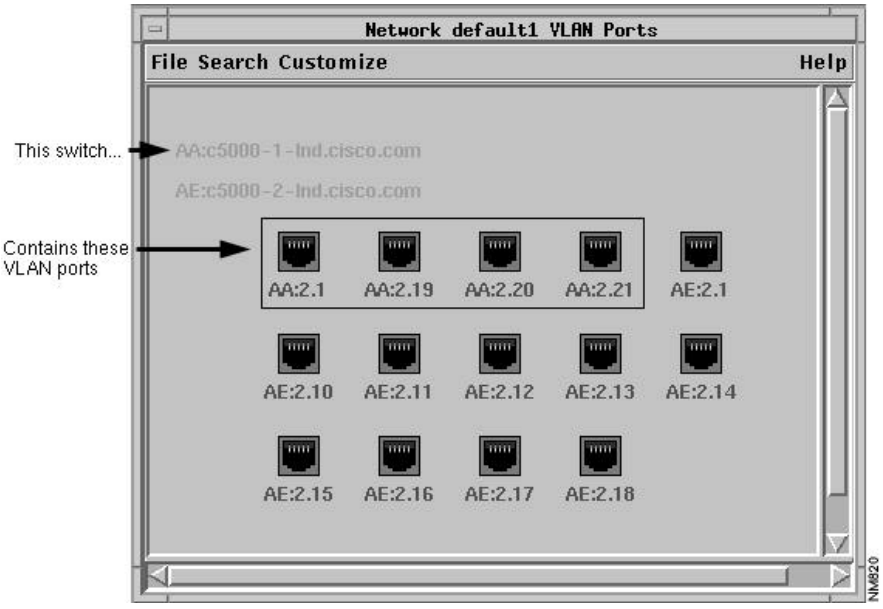


The VLAN Ports Window

The VLAN Ports window displays the ports in the VLAN(s) that you selected in the Names window and displays a legend to identify the switch the ports are on. The names of the switches that include VLAN ports are listed on the top left portion of the window. To determine what switch a port belongs to, match the letters listed at the beginning of the label underneath the port with the corresponding letters in the list of switch names.

For example, if the port label begins with the letters AB, locate the switch beginning with the letters AB to find the switch on which the port is located. Figure 3-4 shows an example of the VLAN Ports window and illustrates how to identify which ports belong to a VLAN.

Figure 3-4 VLAN Ports Window



From this window you can:

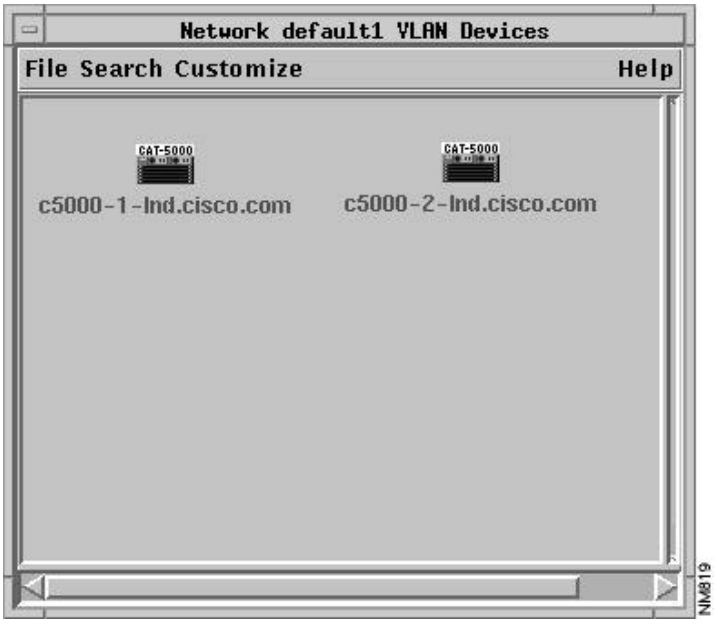
- Start CiscoView by double-clicking on any port.

- Add a customized display of ports in a VLAN.
- Delete ports from a VLAN.
- Observe ports in VLANs.

The VLAN Devices Window

The VLAN Devices window shows all the devices assigned to the selected VLAN. You can click the right or MENU mouse button on a device icon to view additional information about the device. The VLAN Devices window does not show links between the devices.

Figure 3-5 VLAN Devices window



From this window you can

- Double-click a device to open CiscoView for that device.

- Remove a device from a VLAN.
- Customize the display.
- Save and retrieve customized displays.

VlanDirector Legends Window

The Legends window shows you the name and corresponding color for each selected VLAN. When you first launch VlanDirector, this window displays the following legend:

- Red indicates the default VLAN.
- Brown indicates multiple VLAN membership. This refers to ports that belong to more than one VLAN
- Grey indicates unselected VLANs.

Names of ports and devices in a selected VLAN are displayed in the VLAN Devices, Topology, or Ports window in the appropriate color from the legend.

Navigating in VlanDirector

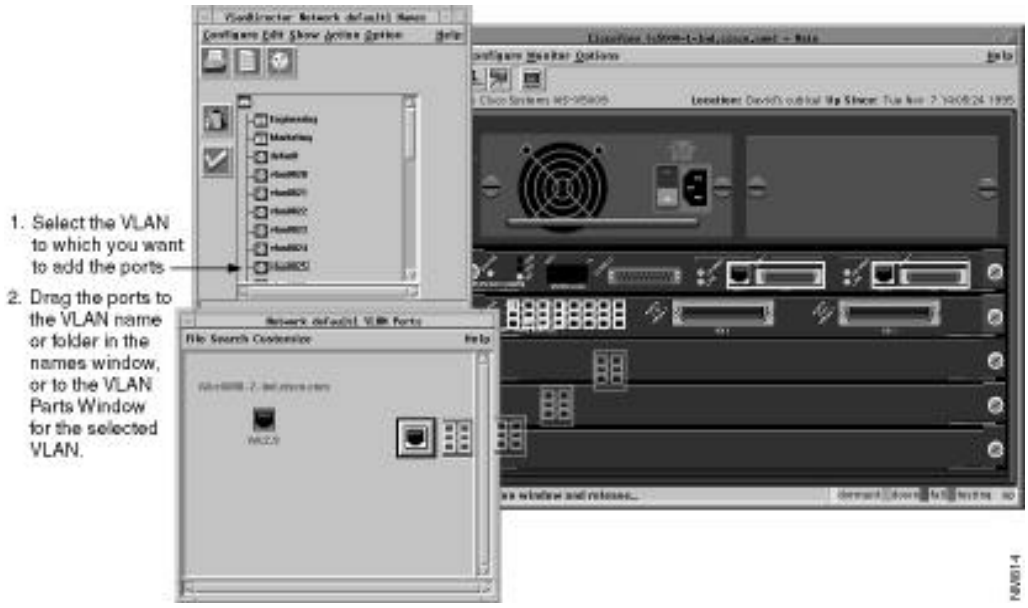
VlanDirector combines the following navigational aids to help you to become familiar with the user interface and perform VLAN configuration. If you are getting started with VlanDirector, familiarize yourself with these navigational aids before you perform VLAN configuration tasks.

- Standard Motif Graphical User Interface conventions, including drag-and-drop mouse functionality. You can drag and drop ports and other components to easily perform VLAN configurations.
- Multiple network and VLAN views allow you to switch between high-level topology maps and detailed device and port views.
- Color is used to indicate port status, VLAN membership, and selectable icons. See Understanding the VlanDirector and CiscoView Color-Coded Legends.

Using Drag and Drop

VlanDirector enables you to drag and drop symbolic representations of network components, following Motif standards. To drag and drop an item on a target, select the icon representing that item and then drag it to the target. You can drag or drop a single item, or more than one item simultaneously. For example, when creating a new VLAN, you can drag and drop a port from a CiscoView display to the VLAN Ports window to add a port to a VLAN. Figure 3-6 shows an example of dragging a group of ports from a CiscoView window to a VlanDirector Ports window.

Figure 3-6 Example of Drag-and-Drop from CiscoView to VlanDirector



In this example, multiple ports are dragged from the CiscoView display to the VLAN ports window. Multiple ports are represented by a single port icon.

Single Selection

To drag and drop an item, for example, a port:

Step 1 Select the item by clicking the left or SELECT mouse button.

Step 2 Use the middle mouse button, (the ADJUST mouse button on some systems) to drag and drop the icon.

Multiple Selection

You can drag and drop multiple items of the same type. To drag and drop more than one item, for example, multiple ports:

Step 1 While holding down the **Shift** key, select the items or icons to be dragged.

Step 2 Use the middle mouse button, (the ADJUST mouse button on some systems) to drag and drop the selected items.

Drop Targets

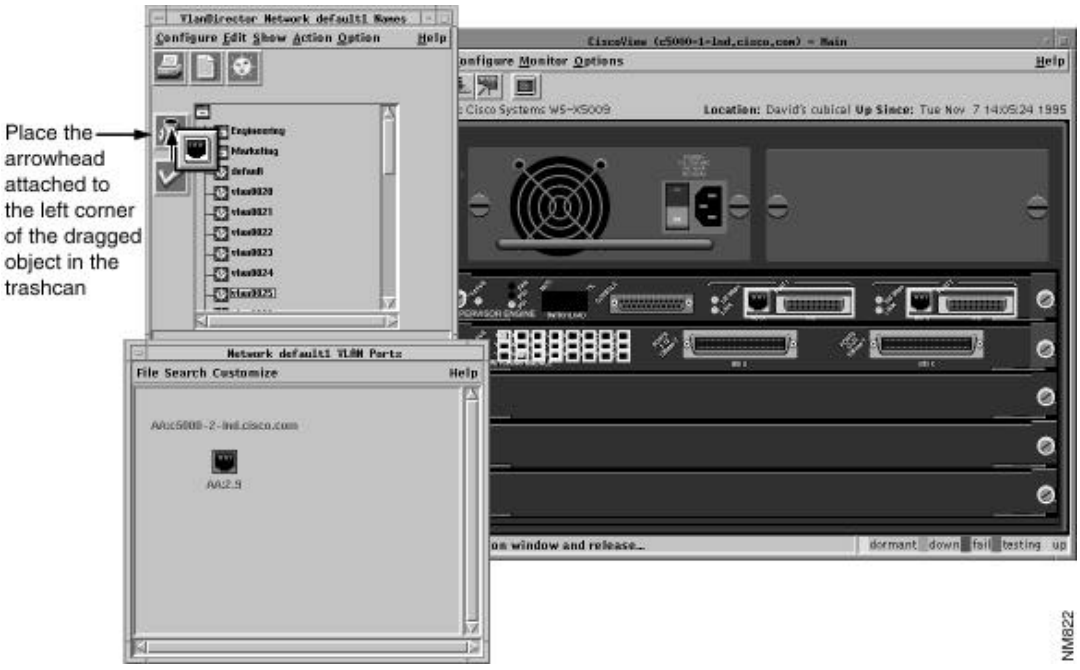
When you are dragging an object or icon, you can determine where you are permitted to drop it by the color of the icon. When dragging over a valid target, the object (for example, a port icon) displays a black and white frame. Dropping an object over a valid target causes the object to disappear indicating that the desired action has been taken. Dropping an object over an invalid target also causes the object to disappear, indicating no action is taken. When dragging over an invalid target, the object has a black and light beige frame. No error message is displayed.

A valid drop target cannot always accept a dropped icon or object. When this occurs, an error message is displayed. For example, the VLAN Devices, Ports, or Topology window can accept a port from CiscoView if it is displaying only one VLAN. If it is displaying more than one VLAN, it cannot accept the port from CiscoView.

Dragging to the Trashcan

When dragging an item to the trashcan, make sure that you drop the arrowhead of the pointer attached to the left corner of the dragged icon in the trashcan, as shown in Figure 3-7.

Figure 3-7 Dragging and Dropping to the Trashcan



Using CiscoView with VlanDirector

CiscoView is a device management application that enables you to display a graphical representation of each network device, display configuration and performance information, and perform minor troubleshooting tasks.

CiscoView is provided with VlanDirector. Use CiscoView with VlanDirector to add or delete ports to and from a VLAN by dragging and dropping ports from a CiscoView display into a VlanDirector display, as shown in Figure 3-7.

To start CiscoView

- In the Names window, select **Action>Launch CiscoView**.

or

- Double-click on a device or port in a Network Topology, VLAN Topology, VLAN Devices, or VLAN Ports window.

Understanding Colors and Legends in VlanDirector

VlanDirector uses color to indicate port status, VLAN membership, and icon selection.

Port Status

CiscoView and VlanDirector use the following color-coded scheme to indicate port status.

Magenta – Testing

Green – Up

Brown – Down

Cyan – Dormant

Red – Failure

Orange – Minor Alarm

VLAN Membership

To display the color-coded legend for VLAN membership, in the Names window select **Option>Show Legend**.

The VLAN membership legend shows the correspondence between selected VLANs in the Names window and colors in the VLAN Topology, Devices, and Ports windows, and port highlights in CiscoView.

When you select a VLAN in the Names window, it is assigned a color. VlanDirector displays the names of ports and devices belonging to this VLAN in this color and CiscoView outlines the ports in the same color.

If a port or device belongs to more than one VLAN, it is identified in the legend with the label ":multiple" and its assigned color, which by default is light brown.

Icon Selection

VlanDirector uses color to indicate when an icon is selected or active, and when certain operations are valid. Items, such as folder names, appear yellow when selected. Ports and devices are outlined in yellow when selected.

Similarly, when dragging an icon from one window to another, VlanDirector uses color to indicate where you can drop the icon. For example, when dragging a port icon from CiscoView, VlanDirector indicates which window can accept that port by changing the inside border of the icon from beige to white.

Colors are configurable. You can set both the colors and the number of colors in the palette by editing the*.cvlanrc* file. If the number of colors in the palette is fewer than the number of VLANs you created, the colors are reused, causing them to lose significance. This occurs, for example, if you specified the following colors:

red, orange, yellow, green, blue

and you selected the following VLANs:

VLAN 1 Red

VLAN 22 Orange

VLAN 3 Yellow

VLAN 14 Green

VLAN 5 Blue

VLAN 26 Red

VLAN 7 Orange

The colors are reused and red and orange are assigned to more than one VLAN.

To resolve this problem, edit the *~/.cvlanrc* file to include additional colors from the *rgb.txt* file on your system. If you are using Open Windows, the *rgb.txt* file is located in *$OPENWINHOME/lib/rgb.txt*. If you are using Motif, the *rgb.txt* file is located in */usr/lib/X11/rgb.txt*.

Creating a New VLAN

When you first install your Cisco switches, all ports are assigned to one default VLAN.

When you create a new VLAN, you will move ports from the default VLAN or other existing VLANs to the newly created VLAN.

VlanDirector is not able to determine which ports in the default VLAN are in use. Therefore, you should keep careful records of port usage. You can move ports from the default VLAN to another. When you delete a port from a VLAN, the port goes to the default VLAN. You cannot delete ports from the default VLAN, nor can you delete the default VLAN.

To create a VLAN, create a VLAN name, and then assign ports to that VLAN.

Creating a New VLAN Name

To create a new VLAN name, follow these steps:

Step 1 In the Names window, select a folder icon. If you are creating a VLAN for the first time, only one folder icon exists. The folder icon is located in the top left corner of the window pane, as indicated in Figure 3-1. You can create a single VLAN name or create a folder to contain more than one VLAN name. This example shows how to create a single name.

Step 2 In the Names window, select **Action>Create VLAN or Folder**, or click the Sun icon in the Tool Bar.

The VlanDirector Create Names Entry window is displayed.

Step 3 In the Name field, specify the name of the new VLAN. For example, enter *mktg* to specify *mktg* as the name of the new VLAN. Folder names and VLAN names together cannot exceed 32 alphanumeric or symbolic characters.

For a list of invalid characters in VLAN names or folders, see Naming Conventions in VlanDirector.

To modify an existing folder name, in the Names window, click the right or MENU mouse button on the name you want to modify.

Step 4 In the Type field, select the VLAN icon to create a VLAN name.

Step 5 You can, optionally, enter text in the Purpose and Description fields but this is not required.

Step 6 Click Advanced to specify a VLAN number for a Catalyst device. The VlanDirector Advance VLAN Parameters window is displayed.

All Catalyst devices have VLAN numbers. If you do not assign a VLAN number, VlanDirector will assign one for you. To specify a number, in the Catalyst VLAN Number field, enter a number from 1 through 1023.

The VLAN name concept is unique to VlanDirector, and is not used with Catalyst devices.

Step 7 Click **OK** to return to the VlanDirector Create Names Entry window.

Step 8 Click **OK**.

The newly created VLAN name is displayed in the Names window.

Assigning the VLAN Ports

To assign ports to a VLAN, follow these steps:

Step 1 In the Names window, using the left mouse button, select the VLAN to which you want to add ports. Make sure that only this VLAN is selected.

Step 2 Launch CiscoView for the device that contains the ports you want to place in the new VLAN. To launch CiscoView, double-click the device in any view in which the device is displayed. Or in the Names window, select **Action>Launch CiscoView**, and select the device from the displayed list of devices.

Step 3 On the CiscoView display, select the ports you want to include in the VLAN. Determine that the ports you want to include in the VLAN are available. To do this, check your records for other port configurations that may have taken place outside of VlanDirector.

For help on selecting or dragging and dropping ports, see "Using Drag and Drop."

Step 4 Drag the selected port(s) to the VLAN Topology, Devices, or Ports window.

The VLAN Ports window displays the ports in the newly added VLAN.

Naming Conventions in VlanDirector

VlanDirector uses the following types of conventions:

Naming Conventions for VLANs and Folders

Folder names and VLAN names together cannot exceed 32 alphanumeric or symbolic characters, including separator characters.

Whenever VlanDirector displays VLAN names in the VLAN Ports window, it includes its folder, or full path name. You can have a folder or VLAN name of one character or symbol. Case is significant.

VLANs are the endpoint of the name tree so you cannot nest them. You can, however, nest folders.

You cannot use the following characters in VLAN names or folders:

~ \ !@ # $ % ^ & * ( ) + = | \ { } [ ]: ; " , ' < > ? /

Naming Conventions for Catalyst Devices

Catalyst VLAN IDs are integers from 1-1023 inclusive. They are augmented by a character string up to 32 characters with no imposed structure or content. You specify the VLAN ID when assigning a VLAN name. If you do not assign a VLAN ID, VlanDirector will automatically assign it for you.

Modifying VLANs or Moving Ports Among VLANs

After you have created VLANs according to the desired configuration for your network, you will frequently need to modify existing VLANs to accommodate network changes such as user moves and varying traffic loads.

To change ports in a VLAN, follow these steps:

Step 1 In the Names window, click to select the destination VLAN for the moved ports. Make sure that one or more of the following VLAN windows are displayed:

- VLAN Topology window
- VLAN Devices window
- VLAN Ports window

Step 2 Launch CiscoView for the device containing the ports that you want to move.

Step 3 On the CiscoView display, select the ports that you want to move to the destination VLAN.

Step 4 Drag and drop the ports from the CiscoView display to the VLAN Topology, Devices, or Ports window that you opened in Step 1.

Adding a Link

Adding a link to a VLAN configures connections between two devices to provide a path for traffic on that VLAN. When you add a new device to a VLAN, you can select from a list of links VlanDirector displays. Regardless of how the links are set up, you can manually add and delete links as described here. To add a link, follow these steps:

Step 1 In the Names window, select the VLAN name to which you want to add links. Select only one name.

Step 2 In the Network Topology window, select the links you want to add to the VLAN. Select a link by selecting the link icon located in the center of the link.

Using the middle mouse button, drag and drop the selection from the Network Topology window to the VLAN Topology, VLAN Devices, or VLAN Ports window. As you drag, link information is displayed.

Deleting VLAN and VLAN Components

You can remove a port or device from a VLAN, remove a link from a VLAN, or delete a VLAN.

Deleting a Port from a VLAN

You can remove a port from a VLAN configuration. This operation moves it from the current VLAN back to the default VLAN. You cannot delete ports from the default VLAN. In this way you can reassign them later to a different VLAN, and remove them from the default VLAN.

To remove a port from a VLAN, follow these steps:

Step 1 In the Names window, select the VLAN name from which you want to delete a port or ports.

Step 2 Open the VlanDirector Ports window or display CiscoView for the device containing the port or ports.

Step 3 Select the port or ports you want to delete from the VLAN Ports window or from a CiscoView display of the device containing the port or ports.

Step 4 Drag the port or ports to the trashcan icon in the Names window. Deletions and additions can be undone using the UNDO Changes window.

The port or ports are removed from the VLAN.

When dragging an item to the trashcan, make sure that you place the pointer in the trashcan, and not just the icon that you are dragging.

Deleting Devices from a VLAN

You can remove a device, and consequently all its user ports from a VLAN. If you do not want to delete all the ports, follow the steps for deleting a port from a VLAN.

You cannot directly delete link ports from a VLAN, but you can delete the link that uses them. If deleting a link port leaves the VLAN disconnected, the VLAN topology window shows a device with no links connecting it to the other devices in the VLAN. To delete a link port, delete the link.

To delete a device, follow these steps:

Step 1 In the Names window, select the VLAN name from which you want to delete a device. Select only one name.

Step 2 Open the VLAN Topology or the VLAN Devices window.

Step 3 Select the devices you want to delete from the VLAN Topology or VLAN Devices window.

Step 4 Drag the selection to the trashcan in the Names window. Deletions and additions can be undone using the UNDO Changes window.

Deleting Links

Deleting links severs connections between devices.

You cannot directly delete link ports from a VLAN, but you can delete the link that uses them. If deleting a link leaves the VLAN disconnected, the VLAN topology window shows a device with no links connecting it to the other devices in the VLAN.

To delete a link, follow these steps:

Step 1 In the Names window, select the VLAN name from which you want to remove links. Select only one name.

Step 2 Open the VLAN Topology window and select the links you want to remove.

Step 3 Drag the links to the trashcan icon in the Names window. Deleted links can be restored by using the UNDO Changes window.

The selected links are deleted.

Using Known Networks or Saved Configurations

VlanDirector defines the following types of networking configurations:

- Known Network
- Configuration
- Temporary Configuration

You can work in any one of the three different modes, depending on your configuration requirements. You can determine which mode you are in by checking the window title on any of the views that you are currently working with. The title bar indicates the current mode. If you are working with a known network, the title bar includes the word Network. If you are working with a configuration, the title bar includes the word Config. If you are working with a temporary configuration, it includes the word Config and a name starting with.vlv, for example, .vlvAAA03694.

Known Network

The known network depicts the current state of the devices (up to 100), links, ports, protocols, and VLANs in the physical network. VlanDirector displays this information in the VlanDirector windows. In a known network, devices, links, and ports are updated each time the discovery process is run. The discovery process is run on the schedule you specify in VlanDirector Properties window. The default interval is every 300 seconds.

When using a known network, VlanDirector updates the network and VLAN maps as added and deleted devices are discovered.

When you start VlanDirector on a known network, it runs the discovery process and creates a known network. On subsequent launches, you can specify a saved configuration or a known network.

When you are working with a known network, you can operate in one of two modes: Auto Install On or Auto Install Off

When Auto Install is On, any changes you make are immediately applied to the known network. Auto Install is On by default.

Sometimes this may not desirable; for example, when you need to make multiple changes or when you want to be very cautious about any changes you make. In these circumstances, make sure that the Auto Install feature is set to Off.

VlanDirector enables you to switch from working with a known network to a temporary configuration in which you can cautiously make changes and preview those changes before you apply them to the network. To operate in the temporary configuration mode, turn the Auto Install feature to Off.

Turning Automatic Installation Off

Automatic Installation is On by default. To turn Automatic Installation to Off,

follow these steps:

Step 1 In the Names window, select **Option>Properties**.

The VlanDirector Properties window is displayed.

Step 2 From the pulldown list, select Installation Management.

The VlanDirector Properties Installation Management window is displayed.

Step 3 In the Auto Install field, select Off.

Saved Configuration

A saved configuration is an image of some devices, ports, links, and VLANs based on a known network, but has not been updated by the discovery process. A saved configuration is created whenever you select **Configure>Save As** in the Names window. It does not necessarily reflect the current state of the network and its devices. When VlanDirector operates on a saved configuration, it shows the modifications you have made in the configuration and not the current state of devices in the network.

Configurations can be created, modified and retrieved.

When starting VlanDirector from the command line with a saved configuration, use the following command syntax:

```
vdirector -do <saved configuration>
```

You can display an existing saved configuration, save a known network as a configuration, and save a temporary configuration as a saved configuration.

Temporary Configuration

When working with a known network, you can change to a temporary configuration. A temporary configuration enables you to cautiously make changes before you apply them to your network. When working with a temporary configuration, changes are not made to the known network until you select **Action>Install All** or **Action>Install Selection**.

To switch from the known network to the temporary configuration mode

Step 1 In the Names window, select **Option>Properties**. The VlanDirector Properties window is displayed.

Step 2 Select Installation Management. In the Auto Install field, select Off.

Step 3 Make changes to your known network. A temporary configuration is automatically created and VlanDirector switches to Temporary Configuration mode. Auto Install remains off, and any further changes will create a new temporary configuration.

To change a temporary configuration to a saved configuration, select **Configure>Save As**, and specify the name for the saved configuration.

If you select **Action>Install All** from the Names window and if the command is successful, the temporary configuration is deleted and VlanDirector switches back to network mode.

Working with Discovery

When you start VlanDirector on a known network, you also start the discovery process. If you use the **vdirector** command, VlanDirector uses the default discovery root device to start the discovery process. You specified this device when you installed the application.

The discovery process finds or makes known devices on your network and presents them in topology maps and views. The moving magnifying glass icon on the upper left side of the Names window indicates that the discovery process is in progress. The discovery process is complete when the magnifying glass is no longer visible.

After you complete the discovery process, the topology windows display the known network. You can now create a new VLAN, or manage your existing VLANs.

Starting Discovery from VlanDirector

To restart the discovery process from VlanDirector, follow these steps:

Step 1 Start VlanDirector; the Names window is displayed.

Step 2 In the Names window, select **Configure>Open** Network.

The VlanDirector Open Network window is displayed.

Step 3 In the Known Network field, enter the name of a known network or select one from the pull-down list. If you specify the name of an existing known network, the name of its root discovery device is displayed in the Discovery Root Device field.

Step 4 In the Discovery Root Device field, enter the name for the discovery root device or device from which to begin the discovery process, or select one from the pull-down list.

Step 5 Click **OK** to restart the discovery process.

Excluding Devices from the Known Network

If your known network includes devices that you do not want to manage using VlanDirector, you can exclude them. You may want to exclude them, for example, if your network has more than 100 devices, or you may want to exclude some devices to reduce the number of devices in the specified known network. You can exclude one device or multiple devices simultaneously using the following procedure.

To exclude a device, follow these steps:

Step 1 In the Network Topology window, select **Customize>Modify Network**. Make sure that you are in the Network Topology window, and not the VLAN Network Topology window.

The VlanDirector Modify Network window is displayed. This window enables you to include and exclude a device or devices from the known network.

Step 2 To exclude a device from the Included Devices list, select the name or IP address of the device you want to exclude.

Step 3 Click **Exclude**.

The selected device is removed from the Include list and added to the Exclude list.

Step 4 Click **OK**.

Adding a Device Back into the Known Network

You can include a previously excluded device or devices in the known network using the following procedure:

Step 1 In the Network Topology window, select **Customize>Modify Network**.

The VlanDirector Modify Network dialog box is displayed. This window enables you to include and exclude a device or devices from the discovery process.

Step 2 To include a device from the Excluded Devices list, select the name or IP address of the device you want to include.

Step 3 Click **Include**.

Step 4 The selected device is removed from the Exclude list and added to the Include list.

Step 5 Click **OK**.

Extending the Known Network

You may want to extend a known network, for example, if you had to exclude some devices to remain below the 100 device limit, or if you want to manage devices that VlanDirector could not discover from the Root Discovery Device because they were connected only by a router.

To extend a known network, complete the following steps:

Step 1 In the Network Topology window, select **Customize>Extend Network**.

The VlanDirector Extend Network window is displayed.

Step 2 In the Discovery Root Device field, specify the name of the device or the IP address from which to start the extended portion of the known network.

Step 3 Click **OK** to start the discovery process.

Changing the Discovery Interval

Depending on the requirements of the configuration you are performing, you may want to change the interval at which the Discovery process is repeated. The default value is 300 seconds (5 minutes). To change the Discovery interval, perform the following steps:

Step 1 From the Names window, select **Option**>**Properties**.

Step 2 From the VlanDirector Properties window, pull down the Reports menu and select Installation Management.

Step 3 In the Properties Installation Management window Discovery Interval field, enter the new value for the Discovery interval. The default value is 300 seconds.

Step 4 Click **OK**. Then restart discovery.

The discovery process does not guarantee that the next discovery will follow the previous one by exactly the specified interval of seconds. Depending on what else VlanDirector is doing, it can take longer than the specified interval. It will never be a shorter interval. Specify the value 0 to indicate that the discovery process should only be run once.

Resolving Network Irregularities

During the discovery process, the Names window may replace the discovery icon (the moving magnifying glass) with a large check mark. This indicates that VlanDirector discovered some discrepancies in the network. You can continue using VlanDirector with discrepancies, but you must evaluate the seriousness of the problem first. A discrepancy is an irregularity that can affect VlanDirector or actual network operation. To examine a discrepancy, in the Names window, select **Action > Show Discrepancies,** or click the Discrepancy icon in the Names window.

Discovery of Routers

The discovery process does not include details of routers, but includes the router icon and the connections by which CDP found it in the known network.