

Using CiscoView

This chapter provides information on the use of CiscoView in the following sections:

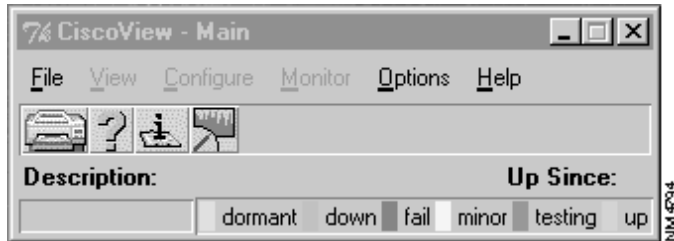
- Understanding the CiscoView Main Window
- Understanding Configuration
- Starting CiscoView and Displaying a Device
- Changing CiscoView Operating Characteristics
- Finding Devices
- Using the Dashboard Monitor
- Using CiscoView Tables
- Using Online Help

Note For additional information on CiscoView, see the context-sensitive online help system. This comprehensive online help system provides procedures, overview material, and links to related information.

Understanding the CiscoView Main Window

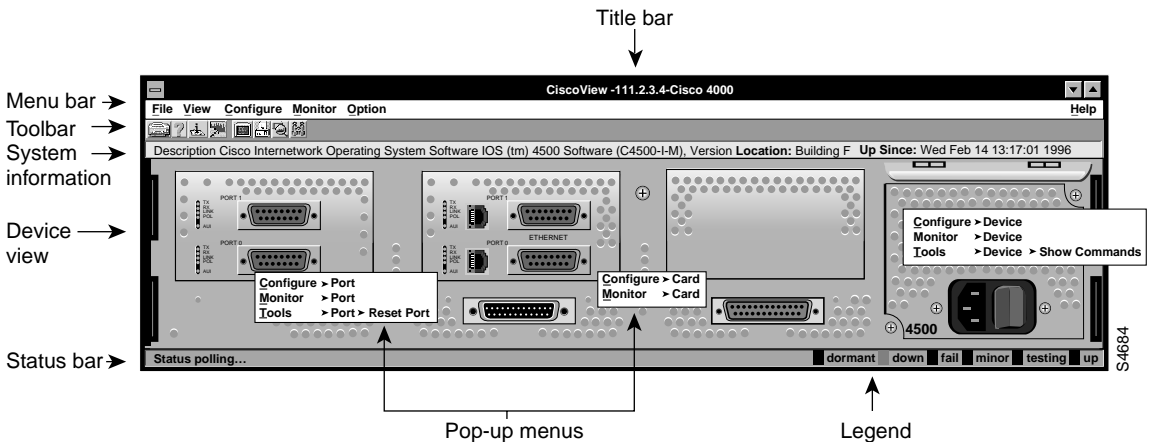
When you first open CiscoView, a small window appears as shown in Figure 4-1:

Figure 4-1 CiscoView Main Menu



Many of the menu items are grayed out because you have not opened a device. Once a device is open, a larger window appears showing the front or rear panel of the device. The following figure shows the main CiscoView window displaying an AS5200 device. The elements of this window are shown in Figure 4-2:

Figure 4-2 CiscoView Displaying an AS5200 Device



Title bar—provides the CiscoView application name and the name of the currently connected device.

Menu bar—allows you to perform CiscoView tasks, including displaying configuration and performance information for devices, cards, and ports; displaying different device representations; and controlling some of the operating characteristics of CiscoView.

Tool bar—provides a shortcut for entering important CiscoView commands such as Print or Help, Configuration, Monitoring information and access to Telnet.

System information area—displays information about the type of device, the Cisco device software that is running, and additional system information. For some devices, CPU utilization is displayed.

Graphical device representation— displays a graphical representation of the back or front panel of the device. Click on this area to display information about different parts of the device. For example, to display information regarding the configuration of an Ethernet port on an AS5200 device rear panel, double-click the port or do the following:

- Click and hold down the right mouse button to display the port popup window. Select the **Select Port>Configure** option.
- For more information on a particular device, press F1 with the mouse button positioned over the display for that device. All devices may not support the use of F1.

Status bar—provides a brief description of the currently selected device, interface, or port, and provides an ongoing operational status, including polling and error message information. For port status details, refer to Table 4-1.

Device status legend—Provides port status as follows:

Table 4-1 CiscoView Port Status Legend

Color	Indicates
Cyan or greenish blue	dormant or waiting for an external event, such as having packets to transmit or dialing a remote site
Brown	administratively down
Red	operational failure
Yellow	minor alarm

Understanding the CiscoView Main Window

Color	Indicates
Magenta	testing
Green	up

Popup menus—go to the configuration and monitor information for the device, a card, or a port. For more information on popup menus, see “Displaying a Device,” later in this chapter.

Menus may vary depending on the device you are using. If an option is grayed out, it is not applicable to that device. Table 4-2 and Table 4-3 describe menu items found in the CiscoView File menu and the View menu.

Table 4-2 CiscoView File Menu Items

Item	Explanation
Open Device	Displays the back panel of a new device.
Open Previous	Reviews a list of devices that you have already displayed without specifying the IP address or other information.
Print	Prints the physical view of the device.
Print Setup	Displays and allows you to change printer parameters.
Exit	Exits CiscoView.

Table 4-3 CiscoView View Menu Items

Item	Explanation
Refresh	Refreshes the current display by checking that all information is current.
50%	Toggles the size of the device display between 50 and 100 percent.
Stack	Displays the devices in sequence of their physical order. It is grayed out if the device does not support the stack feature.
Front View	Displays the front panel of a device on selected devices only.

Item	Explanation
Rear	Displays the real panel of the device.
Logical	Displays the logical modem connections on an AS5200 only.

The Configure menu varies depending on the device you are using and what you have selected on the device to configure: the device itself, a card or a port. For more information on displaying a device, see “Displaying a Device” later in this chapter. Table 4-4 describes the Configure menu items.

Table 4-4 CiscoView Configure Menu Items

Item	Explanation
Device	Displays device configuration information. If nothing is selected, the device configuration is displayed.
Card	Displays card configuration information for a selected card. To view the card information, select a specific card first, then click on Configure>Card .
Port	Displays port configuration information for a selected port. To view the port information, select a specific port first, then click on Configure>Port . The types of ports that can be selected are modem port, port_tty, or port_con depending on the type of device you are using.

The Monitor menu varies depending on the device you are using and what you have selected on the device to monitor: the device itself, a card or a port. For more information on displaying a device, see “Displaying a Device” later in this chapter. Table 4-5 describes the Monitor menu items.

Table 4-5 CiscoView Monitor Menu Items

Item	Explanation
Device	Displays the monitoring information for a selected device. The monitoring information describes the various performance aspects of a device, card or port. The monitor window is a collection of graphical displays presented as dials or stripcharts, known as a dashboard. For more information on monitoring information, see “Using the Dashboard Monitor.”
Card	Displays the monitoring information for a selected card.
Port	Displays the monitoring information for a selected port.

The Options menu allows you to change the presentation and the operating characteristics of CiscoView. For example, if you wanted to display the Toolbar or change the polling frequency, you do it through the Options menu. Table 4-6 describes the Options menu items.

Table 4-6 CiscoView Options Menu Items

Item	Explanation
Show Toolbar	Display or hide the Toolbar to access shortcut commands.
Show Legend	Display or hide the legend.
Show System Information	Display or hide system information.
Properties	Set various operating characteristics, including polling frequency, the number of retries, the timeout interval, the Read and Write community string, MIB labels displayed as descriptors or an alias, and where to launch CiscoView either in the same window or a separate one.

Item	Explanation
Debug	Displays troubleshooting information and should be used only with Cisco support personnel. Writes the trace for device discovery and status polling to the <i>/tmp/cvlog</i> .
Debug SNMP	Displays all the SNMP traffic in encoded form to and from the device and should be used only with Cisco support personnel.

The Admin menu appears on specific devices that have administrative option features. Refer to online help for more information.

Understanding Configuration

Configuration is a process that establishes the characteristics of the devices and services on the network and records this information in the appropriate files. Configuring a device for management means supplying information about the specific device. Once the specific aspects of the device are entered into the system, the system can then identify the device and monitor its performance and you can manage the device using CiscoView.

You configure devices through CiscoView. See the online help for details on how to configure specific devices.

Starting CiscoView and Displaying a Device

There are several ways to display a CiscoView device including:

- Using CiscoWorks
- Using other network management platforms
- Using the Command line

The CiscoView Open Device window allows you to display a device in CiscoView or to change the currently displayed device. To display information, you need to know the Read Community Name and the Write Community Name. The community string is a Simple

Network Management Protocol (SNMP) security feature that requires a password to access SNMP features on a host, such as a Cisco router. Community strings can be set to read-only or read-write permission. To display the device, do the following:

- Step 1** Enter the name or IP address of the device in the Host field that you want to view.
- Step 2** Enter the Read Community string in the Read Community field.
- Step 3** Enter the Write Community string in the Write Community field.
- Step 4** Click **OK**.

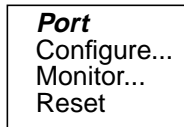
CiscoView displays a front or rear panel of the device. To display information, change configurations, and change community string information at the management window, you need to enter the Read/Write All password in the Read Community and Write Community name fields in this window. If you open the device without a Write Community string, and need to change device information, you can use the **Option>Properties** window to reset the community string information.

Understanding the Display

The display you see when you first enter CiscoView is of the front or rear panel of the device. Click on various parts of this graphic to see what it contains. For example, the AS5200 rear panel is shown in the figure below, and there are numbered callouts. If you click on these numbers, you select different things.

Once you have made a selection on the panel, select **Configure** or **Monitor** to configure or monitor the device, card, or port.

You can also use the right mouse button to get to a popup menu that allows you to configure or monitor a device, card, or port. For example, if you are using an AS5200 card and need port information, select a port on the display and click the right mouse button. The following popup menu appears:



Select one of the options, **Configure**, **Monitor**, or **Reset**.

Printing a Display

You can print the CiscoView Main window and specify certain printing options. To print the main window, select **File>Print**.

To print the main window, and specify printing options, do the following:

- Step 1** Select **File>Print Setup**.
The CiscoView Print Setup window is displayed.
- Step 2** In the Printer Name field, select a printer from the scrolling list, or enter the name of a printer.
- Step 3** In the Copies field, enter the number of copies you want to print.
- Step 4** In the Orientation field, select the paper orientation for printing by clicking on the radio button next to the appropriate orientation format: portrait or landscape.
- Step 5** In the Format field, select your printer format type by clicking on the radio button next to the appropriate option: Ljet or PostScript. Ljet or LaserJet prints the CiscoView Main window in PCL. PostScript prints the window is PostScript. For most low-end printers, use the Ljet option.
- Step 6** Click **OK** to close this window
- Step 7** Click File>Print to print the window display.

Changing CiscoView Operating Characteristics

You can change some CiscoView operating characteristics, such as the polling frequency or the number of retries, from within the CiscoView application. To change the operating characteristics, do the following:

- Step 1** Select **Options>Properties**.
The CiscoView Properties window appears.
- Step 2** Enter a value in the Polling Frequency field to change the polling frequency. The default value varies by device. A typical value is every 60 seconds. To disable polling frequency, set the value to zero. If you set the polling frequency below

60 seconds for a number of devices, it may slow down your network. It is advisable to use low polling frequencies in specific testing situations and change them back when done. Do not poll faster than every 5 seconds.

Step 3 Enter a new value in the Retries field to change the number of retries. The default value is 3. The retries value indicates how many times CiscoView retries an unresponsive device. In busy networks, SNMP datagrams can get discarded. The Retries value allows the application to continue operation during network problems. A setting of 3 is considered a reasonable value. The value can be increased if the network is slow.

Step 4 Enter a new value in the Timeout field to change the timeout interval. A timeout indicates the amount of time it takes to reach a device. If it takes longer than the time specified, the device is considered either unreachable or down. The interval value is specified in seconds. The default is 3.

As a guideline, the timeout value should be set to twice the average end-to-end delay in your network. If you have a network with several slow links, you may need to set the timeout to a higher value. If you have only LAN links in your network, a value of 2 seconds is reasonable to account for processing delays and timer accuracy.

In high traffic situations, you may experience timeouts. You should not reduce the polling frequency since this may cause a general error. Increase the timeout interval if you consistently experience timeouts.

Step 5 Click the radio button next to MIB Label translation field to display MIB descriptors instead of displaying textual labels. Textual labels are the default. MIB descriptors are actual variable names used to manage devices, for example `locIfOutBitsSec` and MIB textual labels are user-friendly aliases of the MIB descriptor. For example the MIB textual label for `locIfOutBitsSec` is Output BPS.

Step 6 Enter the string in the appropriate field to enter the Read or Write Community string. This option allows you to enter the write community string for a device after you display the device.

This is useful, for example, if you want to make changes to a device or port setting but did not specify the write community string when you first opened the device display. You can enter the write community string in the Write Community field without exiting and reopening the window.

Step 7 Select the window where you want to launch CiscoView, from the same window or from a separate window. The default is Separate.

Note Multiple instances of CiscoView may slow down your machine because higher RAM requirements are needed for this usage.

This option allows the user to keep the desktop from being cluttered by reusing the existing CiscoView window to display devices.

Step 8 Click **OK** to have the changes you have made on the Properties window take effect.

Finding Devices

Sometimes finding a device on a large network can pose a problem but you can find devices in CiscoView easily once you understand how the information is organized. Topics covered are:

- Organization of Management Information
- Categories of Information

Organizing Management Information

CiscoView displays two primary types of information. Configuration information includes data such as information about a device chassis. Performance information includes data such as the number of Ethernet errors during a given period.

Configuration information is displayed in CiscoView Configuration windows. Performance information is displayed in CiscoView Monitor windows, which are sometimes referred to as dashboards.

Configuration and performance information is displayed for devices, cards, and ports.

Categorizing Information

CiscoView displays different categories of information for each device, card, and port. To see the categories of information that can be displayed for each component type, look at the CATEGORY popup menu on the Configuration or Monitor windows. To display a particular type of information, select the category type.

Displaying Configuration Information

CiscoView displays configuration information through the Configuration menu on the CiscoView main window, or by selecting Configure from a component popup menu. CiscoView displays configuration information in the Configuration windows that include either a list of fields for a single port or a table that includes fields for multiple ports.

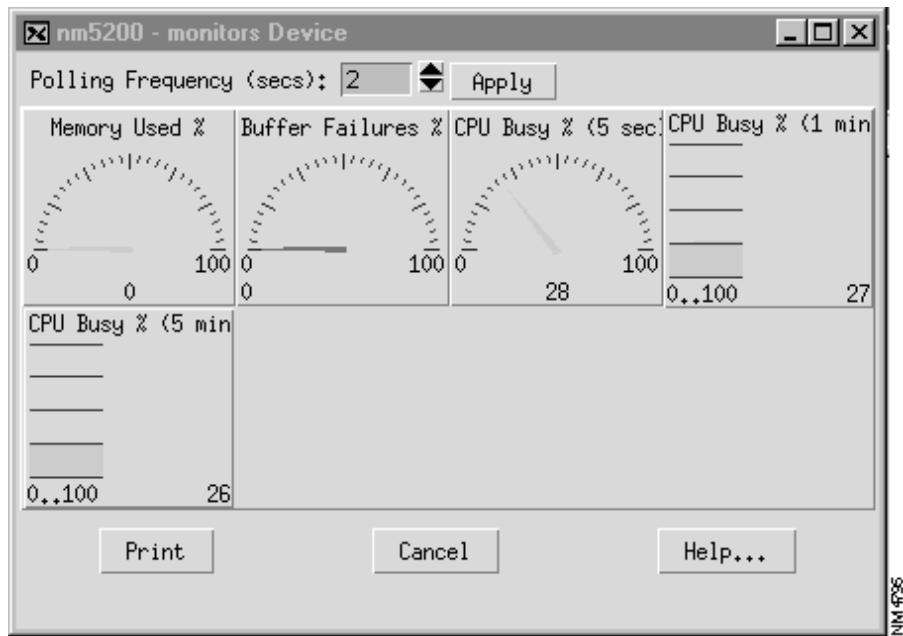
Displaying Performance Information

CiscoView displays performance information using the Monitor menu on the main window, or by selecting Monitor from a component popup menu. Performance information is displayed in a dashboard made up of a collection of small graphical displays in one window. For more information on the dashboard monitor, see *Using the Dashboard Monitor*, later in this chapter.

Using the Dashboard Monitor

The dashboard monitor displays various types of network performance information, such as poll utilization errors. The display varies, depending on the type of device and whether or not is a device or a port, but the display consists of dials or stripcharts as shown in Figure 4-3.

Figure 4-3 Dashboard Monitor



Each display represents information provided by a MIB variable, with the common meaning indicated above the display.

Using the Grapher Tool

Within the dashboard monitor, there is a grapher tool that you can use to depict performance in graph form. To start the graphing tool for the network management platform, you select a graphical display in the dashboard and click on the Grapher button. You can use all of the features of the graphing tool when you are troubleshooting performance problems. The network management platform graphing tool cannot support the graphing of multiple MIB variables in one data set. If the graphical display selected is composed of such formulas, the following error message appears:

Sorry, can't graph formulas.

Using CiscoView Tables

For some devices, CiscoView allows you to select multiple ports. You can display configuration or performance information for multiple ports or port groups in one window. The entries that can be modified are displayed in pink. Figure 4-4 shows the table for three of the ports for an AS5200 card.

Figure 4-4 CiscoView Tables

The screenshot shows a window titled "nm5200 - monitors port". At the top, there is a "CATEGORY:" dropdown menu set to "Port". Below it, there is a "Polling Frequency (secs):" field set to "10" with an "Apply" button, and a "Display Values:" dropdown menu set to "delta". The main area contains a table with 11 columns: Utilization, In Error %, Out Error %, Input BPS(5min), Output BPS(5min), In Queue Drops, Out Queue Drops, Out Collisions, Ignored In Pkts, and Internal Resets. The table has three rows, numbered 1, 2, and 3. Row 1 has values: 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 2. Row 2 has values: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 29089. Row 3 has values: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 29088. Below the table are three buttons: "Print", "Cancel", and "Help...".

	Utilization	In Error %	Out Error %	Input BPS(5min)	Output BPS(5min)	In Queue Drops	Out Queue Drops	Out Collisions	Ignored In Pkts	Internal Resets
1	0	0	0	0	0	0	0	1	0	2
2	0	0	0	0	0	0	0	0	0	29089
3	0	0	0	0	0	0	0	0	0	29088

To get a CiscoView table:

- Step 1** Select multiple ports by clicking on them as you hold down the Shift key.
- Step 2** Click on **Configure** or **Monitor**.

A CiscoView Table with all the ports you selected listed in the first column appears and the information for all of them displayed in tabular format.

You can add, delete, or modify entries from the table. Table 4-7 describes how to make edits to CiscoView Tables.

Table 4-7 Edits to CiscoView Tables

Changes to a Table	Action
Add an entry	Select Create .
Modify an entry	<ol style="list-style-type: none"> 1. Select the table column entry that you want to modify. 2. View the possible values, if available, by displaying the popup menu next to the entry. 3. Select or enter the new value in the table column. 4. Select Modify. 5. Select OK.
Remove an entry	<ol style="list-style-type: none"> 1. Select any column in the table row that you want to delete. 2. Select Delete. 3. Select OK.

Using Online Help

Context-sensitive online help provides you with step-by-step instructions on how to use CiscoWorks Windows applications. The online help system also provides a glossary and keyword search capability. The following table provides a quick guideline to access help from a number of vantage points:

For Information About	Do This
The help system for specific products	Select Help>Contents
How to use the help system	Select Help>Using Help
How to use CiscoView features	Select Help>Using CiscoView
Current CiscoView versions	Select Help>About CiscoView
The current device package version	Select Help>About CiscoView
How to view configuration and performance, dashboard windows and field descriptions	Click the Help button in the dialog window
How to change a component value	Press the Help button over the field
How to use help view	Select Help>On Help

Note Report any online help or documentation bugs to cs-ciscoworks@cisco.com or bug-doc@cisco.com.

Jumps and Popups

Two key concepts in using the help system are jumps and popups. Click on a highlighted underlined topic to jump to a help window specific to that topic. When you jump to another topic, you have to click Back on the Menu Bar to go back to the previous help topic. Click on a dotted underlined term to open a popup help window, which provides a definition of that term. When you go to a popup, hit return to return to your previous help topic.

Help Contents Tab

The Help Contents Tab has three functional tabs:

- Contents tab—links CiscoView device, application and help topics and subtopics.
- Index tab—searches keywords in the help system.
- Find tab—searches the help system and indexes every help word.

For information on how to use this table select **Help>On Help**.

Help Window Menu and Button Bars

Each help window has a menu bar and a button bar. The menu bar provides standard help functions for printing help topics, copying and pasting text from help topics, making online notes about particular help topics, and placing bookmarks.

The button bar provides the following buttons:

- Contents—Opens the current help table of contents. Help topics are highlighted and underlined. Select a help topic to open a help window specific to the underlined topic. Some topics open popup windows that contain a list of subtopics. Select a help subtopic to open a help window specific to the underlined subtopic.
- Back—Moves you back sequentially to previously opened help windows.

- **Print**—Prints current help topic window.
- **Browse**—Allows you to browse through sets of related help screens, providing quick access to overviews of particular help topics.

OverView and See Also Links

Many help windows have Overview and See Also links in the help window topics. You can select the Overview link to obtain background information for the procedure described in the current help window. Select the See Also link to view a list of related topics and go directly to those topics from the current help window.

Exit Help

Select **File>Exit** on the Menu Bar in the Help window to exit Help.

