Troubleshooting

This chapter provides the following sections on how to troubleshoot any problems you might encounter when managing your devices or when using CiscoWorks Windows. It also includes information on how to report unresolved problems to Cisco Systems:

- Troubleshooting Your Device
    - Identifying Device Problems (Dashboard Monitor)
    - Interpreting SNMP Error Messages
- Troubleshooting CiscoWorks Windows
    - Using Release Note Information
    - Configuration Builder
    - Show Commands
    - Health Monitor
    - CiscoView
- Reporting Problems to Cisco Systems

Troubleshooting Your Device

This section describes actions you can take to troubleshoot your device:

- Identifying Device Problems (Dashboard Monitor)
- Interpreting SNMP Error Messages

Read your Cisco IOS release notes or check CCO for the latest bug information for the version of Cisco IOS your device is running.

Identifying Device Problems (Dashboard Monitor)

Perform any of the following tasks in CiscoView to isolate the cause of a problem:

- Check the color-coded legend to determine the status of a port.

- Check the port configuration information and determine whether the port is active. (See the "Using CiscoView" chapter for information on displaying configuration information.)

- Check the performance information by examining the dashboard display.

- Check the utilization and error information for ports and the memory information for a device.

- Check the status bar for SNMP or other error messages.

Interpreting SNMP Error Messages

CiscoView displays the following SNMP error messages resulting from failed command requests in the Status Bar message area (Table 6-1).

Table 6-1   SNMP Error Messages

Message	Explanation
timeout	You can no longer reach the device in the time specified in the CiscoView Properties window.
tooBig	The request you made cannot fit into a single packet. Generally, CiscoView splits requests for physical view status until the device can respond. In certain cases, CiscoView assumes that if an agent times out on 20 or more variables, the agent might not be able to respond because the request is too big; it splits the request and resends it. Check that the MTU size on the SNMP interface is as large as possible so that CiscoView does not waste bandwidth by sending more than one request.
genErr	A collective message name for problems that do not have a unique error message.

Table 6-1   SNMP Error Messages (Continued)

Message	Explanation
noSuchName	A request for a variable was sent to a variable that is not accessible. This occurs if you are not using the correct community string.
badValue	The agent did not respond within the time interval specified by the timeout/retries field in the CiscoView Properties window. This can also indicate the use of an incorrect community string.

Troubleshooting CiscoWorks Windows

This section describes using release notes and provides troubleshooting tips for CiscoWorks Windows applications in the following sections.

- Using Release Note Information

- Configuration Builder

- Show Commands

- Health Monitor

- CiscoView

Using Release Note Information

For CiscoWorks Windows release-specific installation information, double-click on the ReadmeFile icon in your CiscoWorks Windows program group or folder. For detailed release information and caveats, refer to the CiscoWorks Windows Release Notes or the CiscoView Release Notes shipped with the product or on CCO. They present the known problems you might encounter and possible workarounds for them.

Configuration Builder

Table 6-2 provides Configuration Builder troubleshooting procedures.

Table 6-2   Configuration Builder Troubleshooting Procedures

Problem	Explanation
Configuration Builder generates a path error.	The working directory for Configuration Builder might be incorrect. Ensure that the working directory is *c:\directory name\data.*
The TCP/IP option is grayed-out in Learn and Send dialog boxes.	One of the following might be true: • You have a TCP/IP transport that is not WINSOCK-compliant; Configuration Builder cannot use TCP/IP for learning or sending a configuration to the router. Configuration Builder recognizes only those TCP/IP stacks that are WINSOCK-compliant. If this is the case, you can access the router only through the serial ports. • You might have a TCP/IP stack installed, but Configuration Builder cannot locate the files. Make sure you have specified the TCP/IP stack directory location in the PATH statement in your *autoexec.bat* file. The *app2sock.dll* file and the *a2s4wsoc.dll* file must be in the *\windows\system* directory. • The *app2sock.ini* file must be in the *\windows* directory. In the *app2sock.ini* file, ensure that TRANSPORT=WINSOCK. • The *winsock.dll* file can be located in either the TCP/IP or *\windows\system* directory. Ensure that you only have one copy of the *winsock.dll* file.
In Configuration Builder, a device cannot be connected through TCP/IP.	Connect to the router using the Telnet option of your TCP/IP software or the Telnet supplied with Configuration Builder. If this fails, there might be a problem on your network. Refer to the documentation for your TCP/IP stack.
Long delay (in Learn and Send dialog boxes) in connecting to the router.	Check for intermediate devices that might require input, such as a modem prompting for a password.

Table 6-2   Configuration Builder Troubleshooting Procedures (Continued)

Problem	Explanation
The connection times out, or there is a long delay on a serial connection.	Verify that you have the right console cable for your router. Also check the pinouts on your adapter.
Configuration Builder cannot communicate with the router if the router is in ROM monitor mode.	Exit ROM monitor mode by connecting to the router through the console port. Then enter **b** to load the operating system software. If the configuration register on your router is set to boot to ROM monitor mode, check your router documentation to change the default boot mode.
Configuration Builder menus are missing.	Verify that the *listinit.ini* and *menuname.dat* files are located in your installation directory.
Configuration Builder does not generate configuration commands or generates them in the wrong order.	Verify that the *syntax.ini*, *major.syn*, *protocol.syn*, and *function.syn* files are located in your installation directory.
Device does not display Configuration Builder icon.	Device or Cisco IOS is not supported. Check the release note for more information.

Table 6-2   Configuration Builder Troubleshooting Procedures (Continued)

Problem	Explanation
Configuration Builder hangs if it is running on a Pentium-based machine with a peripheral component interface (PCI) bus and a 16550 Universal Asynchronous Receiver Transmitter (UART) chip.	Ensure that the first-in, first-out (FIFO) queue on the COM port UART you are using is turned off.
	If you are running Microsoft Windows 3.1, do the following:
	• Add the following statement to the [386Enh] section of the *system.ini* file in the *\windows* directory:
	COM*x*FIFO=OFF
	In this example, *x* is the value of the COM port you are using (1, 2, 3, or 4).
	If you are running MS Windows NT, do the following:
	• Run REGEDT32.EXE from the MS Windows Program Manager. (Windows NT 3.51 only.)
	• Navigate to the HKEY_Local_Machine window and select **System>CurrentControlSet>Services>Serial**.
	• Locate the section labeled ForceFifoEnable : REG_DWORD : 1.
	• Double-click on the section, and in the displayed window, change the value to 0.
	• Click **OK**.
	• Reboot your PC.
	If you are running MS Windows for Workgroups, do the following:
	• Obtain the *SERIAL.386* file from Microsoft. This file should be dated February 17, 1994, and should be 10,620 megabytes long.
	• Replace the existing *SERIAL.386* file in the *windows\system* directory with the new *SERIAL.386* file.
	• Reboot your PC.

Show Commands

For CiscoWorks Windows release-specific information, double-click on the **ReadmeFile** icon in your CiscoWorks Windows program group. For additional release information, refer to the release notes. Application-specific caveats are grouped under "Show Commands."

Health Monitor

For CiscoWorks Windows release-specific information, double-click on the **ReadmeFile** icon in your CiscoWorks Windows program group. For additional release information, refer to the release notes. Application-specific caveats are grouped under "Health Monitor."

CiscoView

For CiscoWorks Windows release-specific information, double-click on the **ReadmeFile** icon in your CiscoWorks Windows program group. For additional release information, refer to the CiscoView release notes. Application-specific information is grouped under "CiscoView."

CiscoView opens each device in a separate window by default. On large networks, this can consume too much RAM and slow performance. To decrease the use of RAM for separate windows, you can choose to open devices in the same window by changing operating characteristics. Select **Options>Properties**. Choose Same Window in the *Launch CiscoView in:* option.

Fixing Problems with Displaying a Device

If CiscoView fails to display a device, the following message appears:

```
"<hostname>: unmanageable"
```

This message indicates one of the following conditions:

- The SNMP server is not set in the device. You can still ping the device from the management station.

- You entered an incorrect community string. To reenter a community string, select **Options>Properties**.

- The management station cannot reach and successfully ping the device.

- The timeout value is too low. To change the timeout value, select **Options>Properties** and enter a new timeout value. Doubling the existing timeout value is a good starting point.

- The device package is not up to date. Check your device package and compare the date to the CCO device package version. Upgrade your device package to the latest version, if required.

Reporting Problems to Cisco Systems

If you receive an error message, try to resolve the error by following the recommended action. Check for any release-specific information that might apply to a problem by opening the ReadmeFile icon in your CiscoWorks Windows program group.

Note For information on how to contact Cisco support personnel (phone numbers, Web site, and e-mail addresses), see the "Cisco Support Information" card that came with your product package, or see the "Cisco Support Information" help topic.

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1 To help Cisco Support personnel solve any problems you encountered using CiscoWorks Windows, be prepared to:

— Provide your CiscoWorks Windows serial number and software version.

— Describe the problem behavior or provide the error message text.

— Specify the CiscoWorks Windows application and version in which you are working when the problem occurs.

— Provide the Cisco device model(s) and Cisco IOS version(s) on those devices when the problem occurs.

2 If possible, try to reproduce the problem and explain the steps that allow you to reproduce the problem.

3 Provide information for the platform on which you are running CiscoWorks Windows:

— Castle Rock SNMPc software package (include version number)

— HP OpenView Network Node Manager software package (include version number)

— DOS version and MS Windows software package and version

— WINSOCK-1.1 compliant TCP/IP stack product (include version number)

— Hardware setup (CPU, available RAM, available hard drive space, and serial port or network interface card specifications)