

Using Configuration Builder, Show Commands, and Health Monitor

CiscoWorks Windows is a suite of integrated PC-based network configuration and diagnostic tools for small to medium-sized networks or remote workgroups.

This chapter contains the following sections on CiscoWorks Windows applications and features:

- Starting Applications
- Using Configuration Builder
- Using Show Commands
- Using Health Monitor
- Using Online Help

The CiscoWorks Windows Show Commands and Health Monitor applications can run only under Castle Rock's SNMPc, HP OpenView Professional Suite, or HP OpenView Network Node Manager. Configuration Builder and CiscoView can run as standalone applications or within the SNMPc, HP OpenView Professional Suite, or HP OpenView Network Node Manager platforms.

Note For detailed information on all CiscoWorks Windows applications, see the context-sensitive online help system. This comprehensive help system provides procedures, overview material, and links to related information.

Starting Applications

To start an application in CiscoWorks Windows, go to the toolbar and double-click the application icon. If the icon is grayed out, or if the icon is not displayed, the application is not supported on this device.

Using Configuration Builder

Configuration Builder allows you to create configuration files for multiple Cisco routers, access servers, hubs, and devices without having to remember complicated command-line syntax for the devices. You can use Configuration Builder to configure Cisco devices with the most common Cisco IOS features. See Table 2-1 through Table 2-9 for an overview of supported Configuration Builder features. You can also launch Configuration Builder as a standalone application by opening the Configuration Builder icon in your CiscoWorks Windows program group or by clicking the Configuration Builder icon in the CiscoView toolbar.

Note Advanced features or features added to Cisco IOS releases later than those listed in online help are supported through the Configuration Builder Add Commands window. See the online help for details.

Configuration Builder provides the following features:

- Multiple device configuration windows

You can configure multiple devices simultaneously for remote source-route bridging and Synchronous Data Link Control (SDLC) transport. For example, when you configure a new router into an existing remote source-route bridging (SRB) virtual ring group, configuration files of all devices in the same virtual ring group are automatically updated.

- Configuration snap-ins

You can quickly export or import predefined priority queuing lists, Internet Protocol (IP) or Internetwork Packet Exchange (IPX) access lists, IPX Service Advertisement Protocol (SAP) filters, and AppleTalk filters into multiple configuration files. This ensures consistency among devices that share common configuration parameters.

- Duplicate address and configuration checking

You can check for duplicate IP, IPX, and AppleTalk addresses in all open configuration files. You can also check for valid entries for common configuration parameters such as addresses, costs for DECnet and Open Shortest Path First (OSPF), and AppleTalk cable ranges.

- Guided configuration

You can automatically move through the sequence of dialog boxes that need to be filled out to create a configuration file. To do so, complete the initial configuration dialog box and then do *one* of the following after you complete each configuration dialog box:

- Press the **F2** key.
- Click the **Step** icon from the toolbar in the main window.
- Select the **Guided Configuration** command from the Global menu.

- Learn hardware capability

You can detect the model, software version and image type, and the number and type of installed interfaces on the router you are configuring. You can also learn the number of lines on an access server and whether a hub is connected to a device. This information is automatically placed in the configuration file.

- Remote configuration capability

You can configure remote devices if the PC is running a WINSOCK-compliant TCP/IP stack and has TCP/IP access to the router you are configuring. The router must have the following minimum configuration:

- IP routing enabled
- An IP address assigned to an interface
- Enable and virtual terminal passwords

Using Configuration Builder

- Configure access servers

You can perform the following configuration tasks for Cisco hubs and access servers:

- Grouping and ungrouping lines
- Using expert mode to quickly configure related features
- Configuring chat scripts
- Using list boxes to quickly select device features and modem communication parameters
- Configuring lines for IP, IPX, or AppleTalk Remote Access (ARA) protocols to allow flexibility for remote users to log in
- Configuring terminal services
- Setting up security
- Configuring dial-on-demand routing (DDR) to include asynchronous or synchronous serial lines and assigning them to a rotary group
- Configuring protocol translation to enable connections between hosts and resources running different protocols

Note For detailed information on all Configuration Builder features, see the context-sensitive online help. This comprehensive help system provides procedures, overview material, and links to related information. Open Configuration Builder and select **Help**.

Configuration Builder Files

Configuration Builder generates and stores the following files in the *Install-Dir*\bin\data directory

where *Install-Dir* is the name of the directory in which CiscoWorks Windows is installed:

- | | |
|-------|------------------------------|
| *.cdf | Configuration files (binary) |
| *.cfg | Configuration files (text) |

**.cbk* Configuration backup files

snmpghost.chl SNMP host names file

zones.apt AppleTalk zones file

Configuration Builder generates and stores the following files in the *Install-Dir*\bin\data\snapi directory

where *Install-Dir* is the name of the directory where CiscoWorks Windows is installed:

**.aal* AppleTalk access lists

**.ial* IP access lists

**.nal* IPX access lists

**.nsl* IPX SAP filter lists

**.pql* Priority queuing lists

The \data\srb directory files **.srb* define remote source-route bridging (SRB) groups.

The \data\sdlc directory files **.s* define SDLC tunnel groups.

Configuration Builder Main Window

The number and types of network icons displayed in the Configuration Builder main window vary according to your network configuration. The Configuration Builder main window consists of the following elements:

- **Title bar**—Displays the application name and the name of the active router configuration. The active configuration name is the router host name, followed by the file name in brackets.
- **Menu bar**—Provides access to all Configuration Builder dialog boxes. Table 2-1 through Table 2-9 describe the options under each menu.
- **Toolbar**—Contains the Guided Configuration icon in addition to the standard Create File, Open File, Save File, Print File, and Help icons. You can use the Guided Configuration icon or the F2 key to activate the guided configuration.
- **Protocol list box**—Used to select a routing protocol with configuration windows. The configuration window indicates whether interfaces are enabled for the specified routing protocol. For example, if IP is the selected protocol, you can double-click any interface icon to open the IP Routing Configuration window.
- **Configuration windows**—Appear within the main window and contain router model, Cisco software version and image type, and interface status information.
- **Configuration file icons**—Display for any open configuration window that is iconized.

Table 2-1 Configuration Builder File Menu Items

Item	Explanation
New	Create a new configuration file.
Open	Open an existing file.
Close	Close an existing file.
Save	Save changes to a file.
Save Backup	Back up a configuration file.
Save As Text	Save a configuration file as a text file.
Delete	Delete a configuration file.

Table 2-1 Configuration Builder File Menu Items (Continued)

Item	Explanation
Communication Timeouts	Specify the timeouts to be used for data transfer from the Configuration Builder to the router.
Send	Send a configuration file to a local or remote router.
Print	Print a configuration file.
Print Setup	Set up printer parameters.
Exit	Exit Configuration Builder.

Table 2-2 Configuration Builder Global Menu Items

Item	Explanation
Guided Configuration	Step through the guided configuration.
Basic	Set basic system parameters, including host names, passwords, and banners.
SNMP	Specify SNMP parameters for network management data, set community strings, and restrict SNMP access to the device.
Priority Queuing	Create new priority output queuing lists or import snap-in lists.
Modify Interfaces	Add or delete device interfaces and specify device type, software version, and image type. Specify device interfaces and lines. Change the sequence of the guided configuration.
Add Commands	Configure advanced features and features added in later Cisco IOS releases.
Hub	Enable hub configuration features.

Using Configuration Builder

Table 2-3 Configuration Builder Routing Menu Options

Item	Explanation
IP:	
Configuration	Configure primary and secondary IP addresses.
Routing Protocols	Configure Routing Information Protocol (RIP), Interior Gateway Routing Protocol (IGRP), and/or OSPF.
Access Lists	Create new access lists, export or import snap-in lists.
DECnet:	
Configuration	Configure DECnet area numbers, node numbers, and cost.
Options	Set the minimum cost within an area and the maximum cost between areas.
AppleTalk:	
Configuration	Configure AppleTalk addresses, cable ranges, and zones.
Distribute-Out Filters	Create access lists for filtering AppleTalk packets.
IPX:	
Configuration	Configure IPX addresses.
Access Lists	Create new access lists, export or import snap-in lists.
SAP Filters	Create new SAP filters, export or import snap-in lists.
XNS	Configure XNS addresses.
Banyan VINES	Configure Banyan VINES metrics.
ISO CLSN(OSI)	Configure CLNS NSAP addresses.

Table 2-4 Configuration Builder Access Server Menu Options

Item	Explanation
Line Characteristics:	
Chat Script Manager	Configure modem or login chat scripts.
Line Configuration	Configure line characteristics for TTY and auxiliary lines.
Remote Node:	
Extended BootP Manager	Configure an access server for BootP to allow Serial Line Internet Protocol (SLIP) and Point-to-Point Protocol (PPP) requests from clients.
ARA	Configure AppleTalk Remote Access (ARA).
Line Configuration	Configure remote nodes for TTY and auxiliary lines.

Table 2-4 Configuration Builder Access Server Menu Options (Continued)

Item	Explanation
Terminal Services:	
LAT Manager	Configure Local Area Transport (LAT).
XRemote Manager	Configure XRemote protocol.
Line Configuration	Configure terminal services for console, TTY, auxiliary, and virtual terminal lines.
Security:	
Local User Name Manager	Assign usernames and passwords.
TACACS Manager	Configure login method, line passwords, PPP authentication, and assign IP access lists.
Line Configuration	Configure security for console, TTY, auxiliary, and virtual terminal lines.
Dial-on-Demand:	
Dialer Rotary Group	Configure the dialer rotary group.
IP	Configure DDR for IP.
IPX	Configure DDR for IPX.
Protocol Translation	View configuration protocol translation features.

Table 2-5 Configuration Builder Bridging Menu Items

Item	Explanation
Transparent Bridging:	
Configuration	Configure transparent bridging.
Bridge Groups	Create bridge groups and set spanning-tree and circuit options.
Source-Route:	
Simple	Configure simple SRB options.
Remote	Configure remote SRB options. Remote source-route bridging provides multiple router configuration capability. That is, equivalent statements in the configuration files of devices in the same virtual ring are automatically updated.
SR/TLB	Configure source-route translational bridging (SR/TLB).

Using Configuration Builder

Table 2-6 Configuration Builder WAN Menu Items

Item	Explanation
Wide-Area Protocols	Configure WAN protocols, including High-Level Data Link Control (HDLC), PPP, X.25, Frame Relay, and Switched Multimegabit Data Service (SMDS).
Dial-on-Demand	Configure DDR destination subnet, subnet mask, telephone numbers, destination router IP address, and timers.
Dial Backup	Configure dial backup interfaces and delay options.
SDLC Transport	Configure devices for SDLC transport, a subset of serial tunneling (STUN). Provides multiple router configuration capability. That is, equivalent statements in the configuration files of other SDLC devices are automatically updated.

Table 2-7 Configuration Builder View Menu Items

Item	Explanation
By Protocol	Display configuration options grouped by protocol type.
By Interface	Display configuration options grouped by interface.
Configuration	Display the configuration as a text file.
Toolbar	Display or hide the toolbar.
Status Bar	Display or hide the status bar.
Expert Mode	Select expert mode to enable an additional path for configuring global access server features.

Table 2-8 Configuration Builder Window Menu Items

Item	Explanation
Cascade	Resize and layer windows so that each title bar is visible.
Tile	Resize and arrange horizontally.
Arrange Icons	Arrange icons evenly.
File selection	Select a previously opened configuration file.

Table 2-9 Configuration Builder Help Menu Items

Item	Explanation
Contents	Open the Configuration Builder online help table of contents.
Cisco Support Information	Find out how to contact Cisco Systems for product support and how to obtain additional documentation.
Using Help	Learn how to use the online help.
About Configuration Builder	Display Configuration Builder software release and copyright information.

Using Show Commands

The Show Commands application allows you to quickly display detailed system and protocol information for routers without having to remember complicated command-line syntax for each device. See Table 2-10 through Table 2-15 for an overview of supported Show Commands features. You can launch Show Commands by clicking on the Show icon in the CiscoView toolbar.

Note For detailed information on all Show Commands features, see the context-sensitive online help. This comprehensive help system provides procedures, overview material, and links to related information. Open the Show Commands application and select **Help**.

The Show Commands application allows you to display the following system information for devices:

- Software version - shows which version of the device you are using
- Device configuration (running memory and nonvolatile random-access memory [NVRAM]) - shows the configuration information of the device, card or port
- Controller status
- Buffer status
- Device voltage and temperature status
- Flash memory status

Show Commands Main Window

The Show Commands main window consists of the following elements:

- Title bar—Displays the Show Commands application name, the active device name, and the name of the current Show Commands window.
- Menu bar—Provides access to all Show Commands dialog boxes. Table 2-10 through Table 2-15 describe the items under each menu.
- Toolbar—Contains Save File, Copy Text, Print File, Window Refresh, Enter Text for Searching, Find Entered Text, and Help icons.

- Status bar—Briefly describes the selected menu item.
- Show Commands palette—Floating window from which you can access all Show Commands options.

Table 2-10 Show Commands File Menu Items

Item	Explanation
Close	Close the Show Commands window.
Save	Save changes to a file.
Save As	Save Show Commands output to a new filename.
Connect	Connect to a specific device.
Print	Send a Show Commands screen display to a printer.
Print Preview	View the file before printing. Zoom in or out and scan pages.
Print Setup	Set printing options.
Exit	Exit the Show Commands application.

Table 2-11 Show Commands Edit Menu Items

Item	Explanation
Copy	Copy text from an active window.
Select All	Select all text within an active window.
Find	Find a keyword within an active window.

Table 2-12 Show Commands View Menu Items

Item	Explanation
Toolbar	Display or hide the toolbar.
Status Bar	Display or hide the status bar.
Show Command Palette	Display or hide the Show Commands Palette floating window.

Using Show Commands

Table 2-13 **Show Commands Show! Menu Items**

Item	Explanation
Show Dialog	Display the Show Commands window, from which you can execute and display output from a specific show command.

Table 2-14 **Show Commands Window Menu Items**

Item	Explanation
Cascade	Resize and layer windows so that each title bar is visible.
Tile	Resize and arrange horizontally.
Arrange Icons	Arrange icons evenly.
Close All	Close all open Show Commands windows.
Refresh	Refresh the active Show Commands window. The time and date are updated.
Window Selection	Select a previously opened Show Commands window.

Table 2-15 **Show Commands Help Menu Items**

Item	Explanation
Contents	Open the online help table of contents.
Help for Current Show Command	Open online help specific to the active window.
Cisco Support Information	Find out how to contact Cisco Systems for product support and how to obtain additional documentation.
Using Help	Learn how to use the online help.
About Show Commands	Display Show Commands software release and copyright information.

Using Health Monitor

Health Monitor is a dynamic fault and performance management tool that provides real-time statistics on device characteristics, interface status and utilization, and protocol utilization. Health Monitor also allows you to customize feedback on device and interface status with settings in the Preferences dialog box:

- Choose fatal and warning thresholds for CPU load and interface types.

Fatal and warning indications are provided by color changes. Color indications are:

- Green (up)
- Yellow (warning)
- Red (fatal)

Color indications are provided within the IfErrors, IfUtilization, IfStatus, and Environment tabs. For the overall health of a device, color indication is also provided within the Health Monitor application icon.

- Select a polling frequency value to control when you receive device and interface feedback.
- Set the no-response timeout value to control the time that Health Monitor waits for a reply from a monitored device.
- Sort interfaces by status or media type.

See Table 2-16 through Table 2-20 for an overview of supported Health Monitor features. To launch Health Monitor, click the **Health Monitor** icon in the CiscoView toolbar.

Note For detailed information on all Health Monitor features, see the context-sensitive online help. The comprehensive help system contains procedures, overview material, and links to related information. Open the Health Monitor application and select **Help**.

Using Health Monitor

Health Monitor provides the following device and interface information:

- **System**
Device type, Cisco IOS version, host name, location, and device contact information; total and available RAM, Flash memory, and NVRAM; reason for the last device restart.
- **Interface errors**
Interface error rates, color warning and fatal threshold indications for interface error rates.
- **Interface utilization**
Interface utilization, and color warning and fatal threshold indications for interface utilization.
- **Interface status**
The number of bytes per protocol that an interface has sent or received; color indication of status: up (green), test (magenta), dormant or waiting for an external event (cyan), administratively down (brown), and operational failure (red).
- **Protocols**
The number of packets per protocol that the device has forwarded.
- **CPU**
The device CPU utilization in 5-second, 1-minute, and 5-minute intervals.
- **Environmental card status**
Air temperature and power supply voltage readings for a device; warning and fatal threshold indications for these readings.

Health Monitor Main Window

The Health Monitor main window consists of the following elements:

- Title bar—Displays the Health Monitor application name and the name of the current connected device.
- Menu bar—Provides access to all Health Monitor dialog boxes. Table 2-16 through Table 2-19 describe the items under each menu.
- Tabs—Provide access to all Health Monitor tabs. Table 2-20 describes each tab.
- Status bar—Briefly describes the currently selected menu item.

Table 2-16 Health Monitor File Menu Items

Item	Explanation
Connect	Connect to a specific device.
Preferences	Set threshold value, interface sorting, polling frequency, and timeout preferences.
Exit	Exit the application.

Table 2-17 Health Monitor View Menu Items

Item	Explanation
Status Bar	Display or hide the status bar.

Table 2-18 Health Monitor Interface Menu Items

Item	Explanation
Utilization	View interface utilization.
Protocols	Determine interface protocol usage.
Errors	View interface error rates.
Show	View show interface command statistics for an interface.

Using Health Monitor

Table 2-19 Health Monitor Help Menu Items

Item	Explanation
Contents	Open the online help table of contents.
Help on Current Tab	Open online help specific to the active Health Monitor tab.
Cisco Support Information	Find out how to contact Cisco Systems for product support and how to obtain additional documentation.
Using Help	Learn how to use the online help.
About Health Monitor	Display Health Monitor software release and copyright information.

Table 2-20 Health Monitor Tabs

Tab	Explanation
System	View information on restarts, device identification, contact information, and memory usage.
IfErrors	View interface error rates.
IfUtilization	View interface utilization.
IfStatus	Determine interface status (up, down, dormant, failure, or test) and interface protocol usage.
Protocols	View traffic forwarded per protocol for a device.
CPU	Measure the device CPU load.
Environment	Check the device temperature and power supply voltage.

Using Online Help

Context-sensitive online help provides you with step-by-step instructions on how to use CiscoWorks Windows applications. The help system also contains a glossary and keyword search capability. Table 2-21 provides guidelines for accessing help from a number of vantage points.

Table 2-21 Online Help Access

For Information About	Do This
Online help specific products	Select Help>Contents .
How to use the online help	Select Help>Using Help .
How to use CiscoWorks Windows applications	Open the CiscoWorks Windows application and select Help .
Current CiscoWorks Windows applications versions	Select Help>About <i>Application Name</i> .
The current device package version	Select Help>About CiscoView .

Because Configuration Builder, Show Commands, and Health Monitor are independent applications, the online help differs for each.

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

Jumps and Popup Windows

Two key concepts in online help are jumps and popup windows. Click a highlighted, underlined topic to jump to help specific to that topic. If you jump to another topic, you must click **Back** on the menu bar to return to the previous topic. Click a dotted, underlined term to open a popup window, which defines that term. When you finish with a popup window, press **Return** to close the window.

Help Contents Window

The Help Contents window has three functional tabs:

- Contents—Links CiscoWorks Windows device, application, and help topics and subtopics.
- Index—Provides a keyword search of the index.
- Find—Provides a keyword search of the help system.

For information on how to use this window, select **Help>Using 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, copying and pasting text, making online notes about particular help topics, and placing bookmarks.

The button bar contains the following buttons:

- Help Topics—Opens the online help table of contents. Help topics are highlighted and underlined. Click a topic to open a window specific to it. Some topics open popup windows that contain lists of subtopics. Click a subtopic to open a window specific to it.
- Back—Moves you back sequentially to previously opened windows.
- Print—Prints current window.
- << and >> (Browse)—Allows you to browse forward or backward through sets of related help screens, providing quick access to topic overviews.

Overview and See Also Links

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

Exit Help

When you are ready to exit Help, select **File>Exit** from the Help window menu bar.

