



Using the Console System

This chapter describes the console system of the bridge. This system contains all commands necessary to configure and monitor the operation of the bridge.

Here's what you'll find in this chapter:

- [Starting a Telnet Session, page 2-2](#)
- [Main Menu, page 2-2](#)
- [Web Access, page 2-5](#)
- [About the Menus, page 2-6](#)

Starting a Telnet Session

Follow these steps to configure the bridge with a Telnet session:

-
- Step 1** On your computer's Start menu, choose **Programs > Accessories > Telnet**.
If Telnet is not listed in your Accessories menu, click **Start > Run**, type **Telnet** in the entry field, and press **Enter**.
- Step 2** When the Telnet window appears, click **Connect** and select **Remote System**. In Windows 2000, the Telnet window does not contain pull-down menus. To start the Telnet session in Windows 2000, type **open** followed by the bridge's IP address, and skip to Step 4.
- Step 3** In the Host Name field, type the bridge's IP address provided by the IP Finder utility. (See the bridge's hardware installation guide for detailed instructions on using the IP Finder Utility.)
- Step 4** Click **Connect**.
-

Main Menu

After the bridge is assigned an IP address and is connected wirelessly to the infrastructure, you can connect to the console system from a remote PC or host by using the Telnet program. When the connection is made, the Main menu displays. The console system is organized as a set of menus. Each selection in a menu list can lead to a submenu or displays a command that configures or displays information controlling the bridge. Here is the Main menu.

| Main Menu | | |
|--------------------------------|-----------|------------------------------------|
| Option | Value | Description |
| 1 - Configuration | [menu] | - General configuration |
| 2 - Statistics | [menu] | - Display statistics |
| 3 - Association | [menu] | - Association table maintenance |
| 4 - Filter | [menu] | - Control packet filtering |
| 5 - Logs | [menu] | - Alarm and log control |
| 6 - Diagnostics | [menu] | - Maintenance and testing commands |
| 7 - Privilege | [write] | - Set privilege level |
| 8 - Close | | - Close the telnet session |
| 9 - Help | | - Introduction |
| Enter an option number or name | | |
| > █ | | |

44793

Each menu contains the following elements:

- **Title line:** contains the product name, firmware version and menu name. It also contains the unique name assigned to the bridge. See Chapter 6 "Setting Network Identifiers."
- **Option column:** displays the menu options and option number.
- **Value column:** displays either the value as [menu] or displays the current settings for the option. If the value is [menu], there are additional submenus available.
- **Description column:** provides a brief description of each option on the menu.
- **Enter an option number or name >:** the cursor prompt used to type an option number, name, or command.

To select an item from the menu, type either the number displayed beside the selection or the name listed in the option column and then press **Enter**. If you use the name method, you need to type only enough characters to make the name unique from the other selection names in the menu. The **Backspace** key deletes a single character and the **Delete** key deletes the entire line.

Submenus

If the selection is a submenu, the new menu will display. You can choose a selection from this menu or return to the previous menu by pressing the **Escape** key. To return to the Main menu, type the **equal sign (=)** at the cursor prompt.

Commands and Information

If your selection is a command, you might be prompted for the following information before it executes:

- **Token:** a list of one or more fixed strings. To select a particular token, you need to type only enough of the starting characters of the token for it to be uniquely identified from the other tokens in the list.

```
Enter one of [off, readonly, write] : w
```

You need to type only: **o**, **r**, or **w** and then press **Enter**.

- **String:** an arbitrary amount of characters. The prompt indicates the allowable size range of the string.

```
Enter a name of from 1 to 10 characters: "abc def"
```

If the string contains a space, enclose the string in quotation marks. To type an empty string, type two quotation marks with nothing between them.

- **Decimal integer:** a number. The prompt will indicate the range of allowed values.

```
Enter a size between 1 and 100 : 99
```

- **Hexadecimal integer:** a number specified in hexadecimal using the characters 0-9 and a-f or A-F.

```
Enter a hex number between 1h and ffh : 1a
```

- **Network address:** an infrastructure or MAC level address of up to 12 characters.

```
Enter the remote network address : 4096123456
```

- **IP address:** an Internet address in the form of four numbers from 0 through 255 separated by dots (.). Leading zeros in any of the numbers may be omitted.

```
Enter an IP address : 192.200.1.50
```

When all information is typed, the command executes. If the information typed changed a configuration item, the new value is displayed in the menus.

Some configuration commands allow only one of two fixed values. When the menu item is selected, the opposite value to the current value is chosen. For example, if the configuration item is only a selection between on and off, and the current value is on, then selecting the menu option selects the off value.

Some commands that have a severe effect on the operation of the bridge (such as the **Restart** command) prompt to be sure you want to execute the command.

```
Are you sure [y/n] :
```

If you type anything other than a **y** or a **Y** the command is not executed.

If you are being prompted for information, you can cancel the command and return to the menu by pressing the **Escape** key.



Caution

Changes to radio parameters take effect immediately. If your Telnet or browser session is accessing the bridge over a radio link, you could lose the session because the bridge may no longer be associated to an access point on the network. If this happens, it is necessary to change the access point's radio parameters to reestablish the radio link. You can also use a crossover cable to attach the bridge to the Ethernet port on a PC to configure it.

Commands that Display Information

There are several types of commands that display information to the operator. All displays end with a prompt. If nothing is typed at the prompt for 10 seconds, the display automatically refreshes.

- Single-page non-statistical displays end with the following prompt:

```
Enter space to re-display, q[uit] :
```

Any character other than a space causes the display to exit.

- Single-page statistical displays end with the following prompt:

```
Enter space to re-display, C[lear stats], q[uit] :
```

Typing a capital **C** resets all statistics to zero.

- Multiple-page table displays end with the following prompt:

```
Enter space to redisplay, f[irst], n[ext], p[revious], q[uit] :
```

Parts of the prompt may or may not be present depending on the display. If you are not at the first page of the display, you can type an **f** to return to the first page or **p** to return to the previous page. If you are not at the last page, you can type an **n** to go to the next page.

Command-Line Mode

Another way to move within the console system is to type commands directly from the Main menu. Commands allow you to bypass the menu system and go directly to any level submenu or option. If you are familiar with the options, you can include an option setting as part of the command.

To access the Radio Configuration menu (located two submenus down) but not change a setting, follow these steps:

-
- Step 1** At the Main menu prompt enter **configuration radio**.
 - Step 2** Press **Enter**. The Configuration Radio prompt appears.
 - Step 3** Press **Enter** again. The Configuration Radio menu appears.
-

To access the packet size option from the Radio link test menu (located three submenus down) and set a packet size of 512 bytes, follow these steps:

- Step 1** At the Main menu prompt enter **configuration radio linktest size 512**.
- Step 2** Press **Enter**. The packet size is set and the Main menu appears.

Web Access

The bridge also supports access to the console system through an HTML browser. To start a connection, go to this address:

`http://ip address of bridge/`

This figure shows the bridge's Home page:

Cisco WGB350 V8.56 WGB350_47Eae - 010.000.000.071

| | | | | |
|---|---|---------------------------|-----------------------------|-----------------------------|
| HOME Help | Configuration | Filter | Diagnostics | Statistics |
| Allow Config Changes | Radio Security | Multicast | Linktests | Association |
| | Ethernet Identity | Node | Load | Logs |
| | Console Time | Protocols | | |

Uptime : 0:16:33 IP : 010.000.000.071
MAC: 00409647f5ae

Radio

SID : 2 Bitrate : 1_11 Mb/s Radio : 4800C 40/128WEP
Carrier : US_Can
Power : 100

Parent : No matching SSID

Ethernet

Active : on Rcv/Xmt : 2/0 Pkt/sec

Filters

Multicast : forward (0 set) Protocols : off (0 set)
Source : discard (0 set)

56515

The Home page is the equivalent to the Main menu screen when you access the console system using Telnet. In order to make changes to the bridge, you must click **Allow Config Changes**. When you click a configuration link, its configuration page displays. This figure shows a typical Configuration Ethernet page:

| | | | | |
|-------------------------|---|---------------------------------|-------------------|---------------------|
| Cisco WGB350 V8 56 | | WGB350_47F5ae - 010.000.000.071 | | |
| HOME Help | Configuration | Filter | Diagnostics | Statistics |
| Disallow Config Changes | Radio Security Ethernet Identity Console Time | Multicast Node Protocols | Linktests Load | Association Logs |

| Item | Value |
|-------------------------------|--|
| Connection active | on or off |
| Maximum frame size | a size from 1518 to 4096 <input type="text" value="1518"/> Save |
| Add client address | a network address <input type="text"/> Save or current |
| Remove client address | all or a network address <input type="text"/> Save |
| Display the client addresses | |
| Wired LAN node stale out time | a time in seconds from 5 to 1000 <input type="text" value="700"/> Save |
| Do not stale out client nodes | on or off |

56514

To make changes, enter the values for the parameter you want to change and click **Save**. You must click **Save** for each parameter you change. When you have finished making changes, click **Home** to return to the Home Page.

About the Menus

You can perform the following general functions using menus:

- **Configuration:** configure Ethernet and radio parameters, establish network identifications, enable Extensible Authentication Protocol (EAP), and set SNMP values. See Chapters 2 through 6.
- **Statistics:** provide statistical information such as transmit and receive data throughput, Ethernet and radio errors, and the general status of the bridge. See Chapter 7, “Viewing Statistics.”
- **Association table:** contains the addresses of all radio nodes associated below the bridge on the infrastructure. You may use the association table to display, add, and remove static entries and allow automatic additions to the table. See Chapter 8, “Using the Association Table.”
- **Filter:** control packet filtering. The filter menu allows you to control forwarding of multicast messages by blocking those multicast addresses and protocols that are not used on the radio network. See Chapter 9, “Using Filters.”
- **Logs:** record all events and alarms that occur on the bridge. With the Logs menu, you can view and/or print a history of all log entries, set alarm levels, and determine the type of logs you want to save. See Chapter 10, “Setting Up Event Logs.”
- **Diagnostics:** run link tests between the bridge and other infrastructure nodes to test the quality of the radio link. Use the Diagnostics function to load new code versions of the bridge’s firmware. See Chapter 11, “Performing Diagnostics.”
- **Privilege:** set privilege levels and passwords to restrict access to the console system’s menus and functions. See Chapter 3, “Using the Configuration Menu.”
- **Help:** view a brief help screen outlining the procedures for accessing menus and typing commands.