



Using the Management Interfaces

This chapter describes the interfaces you can use to configure the bridge. You can use a web-browser interface, a command-line interface through a terminal emulator or a Telnet session, or an Simple Network Management Protocol (SNMP) application. The bridge's management system web pages are organized the same way for the web browser and command-line interfaces. The examples in this manual show the web-browser interface.

This chapter contains the following sections:

- [Using the Web-Browser Interface, page 2-2](#)
- [Using the Command-Line Interface, page 2-4](#)
- [Using SNMP, page 2-8](#)

Using the Web-Browser Interface

The web-browser interface contains management pages that you use to change bridge settings, upgrade and distribute firmware, and monitor and configure other wireless devices on the network.


Note

The bridge management system is fully compatible with Microsoft Internet Explorer versions 4.0 or later and Netscape Communicator versions 4.0 or later. Earlier versions of these browsers cannot use all features of the management system.

Using the Web-Browser Interface for the First Time

Use the bridge's IP address to browse to the management system. See the *Quick Start Guide: Cisco Aironet Multifunction Bridges* for instructions on assigning an IP address to the bridge.

Follow these steps to begin using the web-browser interface:

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- Step 1** Start the browser.
- Step 2** Enter the bridge's IP address in the browser **Location** field (Netscape Communicator) or **Address** field (Internet Explorer) and press **Enter**.

If the bridge has not been configured, the Express Setup page appears. If the bridge has been configured, the Summary Status page appears.

Using the Management Pages in the Web-Browser Interface

The system management pages use consistent techniques to present and save configuration information. Navigation buttons appear at the top of the page, and configuration action buttons appear at the bottom. You use the navigation buttons to display other management pages, and you use the configuration action buttons to save or cancel changes to the configuration.


Note

It's important to remember that clicking your browser's Back button is the same as clicking **Cancel**: if you make changes on a management page, your changes are not applied when you click **Back**. Changes are only applied when you click **Apply** or **OK**.

Table 2-1 lists the page links and buttons that appear on most management pages.

Table 2-1 Common Buttons on Management Pages

Button/Link	Description
Navigation Links	
Home	Displays the Summary Status page.
Map	Opens the Map window, which contains links to every management page.
Network	Displays the Network Ports page.

Table 2-1 Common Buttons on Management Pages (continued)

Button/Link	Description
Associations	Displays the Association Table page, which provides a list of all devices on the wireless network and links to the devices.
Setup	Displays the Setup page, which contains links to the management pages with configuration settings.
Logs	Displays the Event Log page, which lists system events and their severity levels.
Help	Displays the online help for the current window and the online help table of contents.
Login	Logs you into the bridge's management system for access to all pages and features appropriate for your user level.
Configuration Action Buttons	
Apply	Saves changes made on the page and remain on the page.
OK	Saves changes made on the page and return to the previous page.
Cancel	Discards changes to the page and return to the previous page.
Restore Defaults	Returns all settings on the page to their default values.

Navigating with the Map Windows

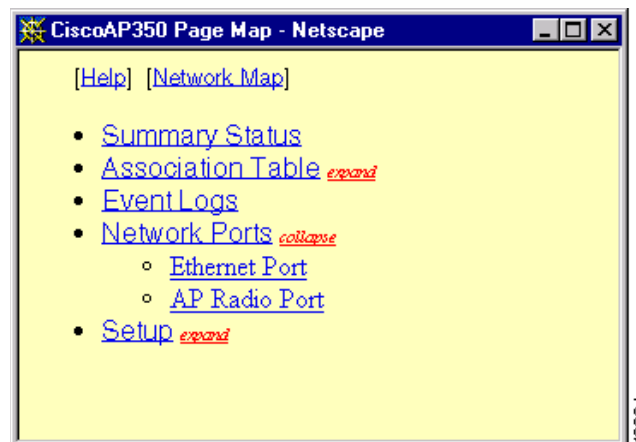
The Map window appears when you click **Map** at the top of any management page. You can use the Map window to jump quickly to any system management page, or to a map of your entire wireless network.



Note

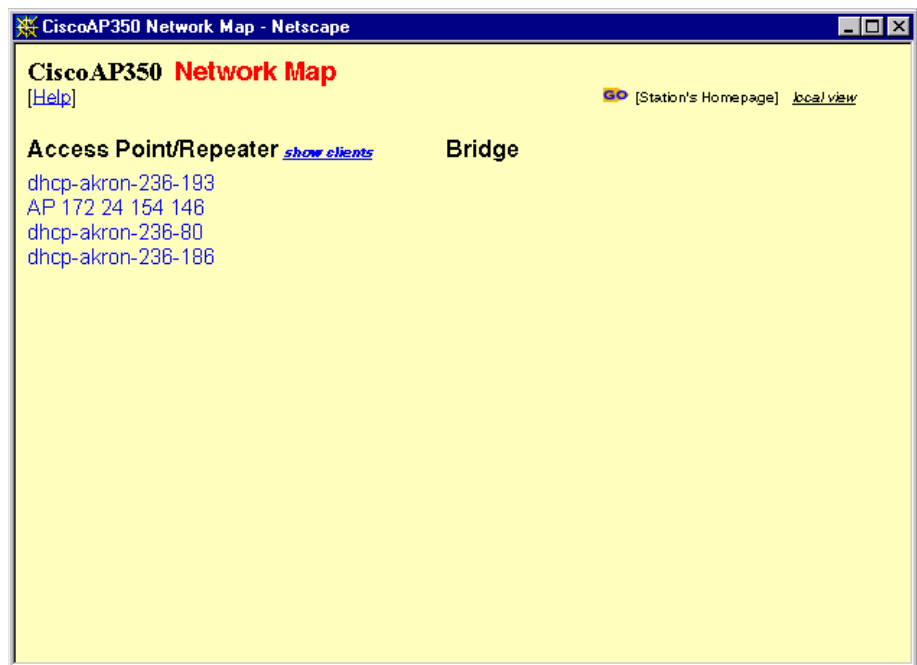
Your Internet browser must have Java enabled to use the map windows.

To display the sub-pages for each main page, click the bullet next to a main page link (Microsoft Internet Explorer), or click **expand** next to a main page link (Netscape Communicator). In [Figure 2-1](#), the sub-pages for the Network Ports page are expanded.

Figure 2-1 Map Window with Network Ports Pages Expanded

The Network Map window appears when you click **Network Map** in the Map window. You use the Network Map window to open a new browser window displaying information for any device on your wireless network. Figure 2-2 shows the Network Map window.

Figure 2-2 The Network Map Window



Click the name of a wireless device to open a new browser window displaying a Station page listing the bridge's local information for that device. Click **Go** beside the device name to open a new browser window displaying that device's home page, if available. Some devices, such as PC Card clients, might not have home pages.

Click **show clients** to display all the wireless client devices on your network. The client names appear under the access point or bridge with which they are associated. If clients are displayed, click **hide clients** to display only non-client devices.

Using the Command-Line Interface

You can use a command-line interface (CLI) to configure your bridge through a terminal emulation program or a Telnet session instead of through your browser. This section provides instructions for Microsoft's HyperTerminal and for Telnet; other programs are similar.

Preparing to Use a Terminal Emulator

To use a terminal emulator to open the CLI, you need to:

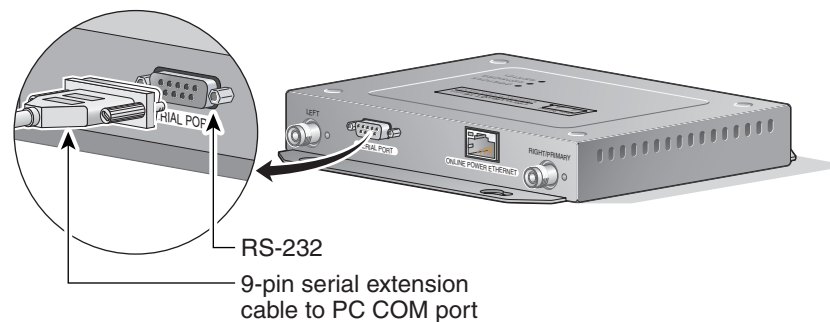
1. Connect a nine-pin, straight-through DB-9 serial cable to the RS-232 serial port on the bridge and to the COM port on a computer.
2. Set up a terminal emulator to communicate with the bridge. Use the following settings for the terminal emulator connection: 9600 baud, 8 data bits, no parity, 1 stop bit, Xon/Xoff flow control.

Use the Console/Telnet Setup page to adjust the console and Telnet connection settings. See the “[Console and Telnet Setup](#)” section on page 11-4 for details on the Console/Telnet Setup page.

Connecting the Serial Cable

Connect a nine-pin, male-to-female, straight-through serial cable to the COM port on a computer and to the RS-232 serial port on the bridge. [Figure 2-3](#) shows the location of the bridge’s serial port.

Figure 2-3 Connecting the Serial Cable



Setting Up the Terminal Emulator

Follow these steps to set up the terminal emulator:

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- Step 1** Open a terminal emulator.
- Step 2** Enter these settings for the connection:
- Bits per second (baud rate): 9600
 - Data bits: 8
 - Parity: none
 - Stop bits: 1
 - Flow control: Xon/Xoff
- Step 3** Press = to display the home page of the bridge. If the bridge has not been configured before, the Express Setup page appears as the home page. If the bridge is already configured, the Summary Status page appears as the home page.
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Changing Settings with the CLI

The CLI pages use consistent techniques to present and save configuration information. [Table 2-2](#) lists the functions that appear on most CLI pages.

Table 2-2 Common Functions on CLI Pages

Function	Description
Press Enter three times	Refreshes the page and cancel changes to settings
Ctrl-R	Refreshes the page and cancel changes to settings
=	Returns to the home page without applying changes
:back	Moves back one page without applying changes
:bottom	Jumps to the bottom of a long page, such as Event Log. When you are at the bottom of a page, this function becomes <i>:top</i> .
:down	Moves down one page length (24 lines) on a long page, such as Event Log. When you are at the bottom of a long page, this function becomes <i>:up</i> .

You can also enter diagnostic commands in the CLI. See the [“Using Command-Line Diagnostics” section on page 13-13](#) for information about CLI diagnostic commands.

[Figure 2-4](#) shows a CLI page example.

Figure 2-4 CLI Page Example

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CiscoAP350          Console/Telnet Setup          Uptime: 01:32:53

[Baud Rate   ][9600  ]
[Parity      ][None]
[Data Bits   ][8]
[Stop Bits   ][1]
[Flow Control][SW Xon/Xoff]
[Terminal Type][teletype]
[Columns (64-132)][80  ]
[Lines  (16-50 )][24  ]

[Enable Telnet?][X]

[Apply] [OK]   [Cancel] [Restore Defaults]

[Home] - [Network] - [Associations] - [Setup] - [Logs] - [Help]
[END]

(Auto Apply On) :Back, ^R, =, <ENTER>, or [Link Text]:

```

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Selecting Pages and Settings

When you type names and settings that appear in brackets you jump to that page or setting. HyperTerminal jumps to the page or setting as soon as it recognizes a unique name, so you only need to type the first few characters in the page or setting name. To jump from the home page to the Setup page, for example, you only need to type **se**.

Applying Changes to the Configuration

The CLI's auto-apply feature is on by default, so changes you make to any page are applied automatically when you move to another management page. To apply changes and stay on the current page, type **apply** and press **Enter**.

Navigating the CLI

The organization of the CLI pages is identical to the web-browser pages.

Using a Telnet Session

Follow these steps to browse to the CLI pages with Telnet:

Step 1 On your computer's Start menu, select **Programs > Accessories > Telnet**.

If Telnet is not listed in your Accessories menu, select **Start > Run**, type **Telnet** in the entry field, and press **Enter**.

Step 2 When the Telnet window appears, click **Connect** and select **Remote System**.



Note 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.

Step 3 In the Host Name field, type the bridge's IP address and click **Connect**.



Note Bridge firmware 12.00T and above supports Secure Shell (SSH) sessions. See the ["Using Secure Shell" section on page 11-5](#) for more information.

Using SNMP

You use an SNMP management application to configure the bridge with SNMP. Follow these steps to configure the bridge with SNMP:

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- Step 1** Compile the MIB you need to use in your SNMP management application. MIBs supported by the bridge are listed below in the [Supported MIBs](#) section.
 - Step 2** Use a web browser, a Telnet session, or the console interface to open the Express Setup page in the bridge management system.
 - Step 3** Enter an SNMP community name in the SNMP Admin. Community field and click **OK** or **Apply**.
 - Step 4** Follow this link path to reach the SNMP Setup page:
 - a. On the Summary Status page, click **Setup**.
 - b. On the Setup page, click **SNMP** in the Services section of the page.

Use the SNMP Setup page to enter detailed SNMP settings, such as the SNMP trap destination. See the [“Using SNMP” section on page 2-8](#) for details on the SNMP Setup page.

Supported MIBs

The Cisco Software Center contains a list of supported MIBs for the Cisco Aironet 350 Series.

Follow these steps to download MIB files:

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- Step 1** Browse to <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>.
 - Step 2** Select **Aironet 350** from the **Cisco Wireless LAN** drop-down menu. The list of supported MIBs appears.
 - Step 3** Select the desired MIB.
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The following list summarizes the key MIBs that the bridge supports:

- Standard MIB-II (RFC1213-MIB.my)

Supported branches:

- system (1.3.6.1.2.1.1)
- interfaces (1.3.6.1.2.1.2)
- ip (1.3.6.1.2.1.4)
- tcp (1.3.6.1.2.1.6)
- udp (1.3.6.1.2.1.7)
- snmp (1.3.6.1.2.1.11)

To download this MIB, browse to

<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml> and click **SNMP v1 MIBs**. Scroll down the list of files and select **RFC1213-MIB.my**.

- Cisco Discovery Protocol MIB (CISCO-CDP-MIB-V1SMI.my)
 - Supported branch: ciscoCdpMIB (1.3.6.1.4.1.9.23)

To download this MIB, browse to <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml> and click **SNMP v1 MIBs**. Scroll down the list of files and select **CISCO-CDP-MIB-V1SMI.my**.

- Cisco Aironet Access Point MIB (AWCVX-MIB.my)
 - Supported branch: awcVx (1.3.6.1.4.1.522.3)

You can download the latest release of the access point MIB at the following URL:

<http://www.cisco.com/public/sw-center/sw-wireless.shtml>

- IEEE802dot11-MIB.my:
 - Supported branch: ieee802dot11 (1.2.840.10036)

To download this MIB, browse to

<ftp://ftp.cisco.com/pub/mibs/v1/IEEE802dot11-MIB-V1SMI.my>.

