



Basic Configuration

This chapter describes interfaces you can use to initially configure your bridge with basic settings. You can use a web-browser interface, a command-line interface through a terminal emulator or a Telnet session, or a Simple Network Management Protocol (SNMP) application. Consult Chapter 2 in the *Cisco Aironet 350 Series Bridge Software Configuration Guide* for SNMP instructions and for complete descriptions of these interfaces.

This chapter includes the following sections:

- [Before You Start](#)
- [Summary of Configuration Steps](#)
- [Using the IP Setup Utility](#)
- [Entering Basic Settings](#)
- [Default Basic Settings](#)

Before You Start

Before configuring the bridge, ask your network administrator for the following information:

- The service set identifier (SSID) to be used for the bridge.
- A system name for the bridge. The name should describe the location or principal users of the bridge.
- If your network does not use DHCP to assign IP addresses, you will need an IP address for the bridge.
- If your network uses subnets, you will need a default gateway and an IP subnet mask for the bridge.
- The bridge's MAC address, which is printed on the label on the bottom of the bridge.

Summary of Configuration Steps

You use the Express Setup page to assign basic settings to the bridge. For instructions on setting up security, filtering, and other bridge features, consult the *Cisco Aironet 350 Series Bridge Software Configuration Guide* on the bridge CD.

Follow these steps to enter the basic bridge settings:

1. Connect the bridge as described in the *Quick Start Guide: Cisco Aironet 350 Series Bridge*.
2. Use the bridge's IP address through an Internet browser or a Telnet session to open the bridge's management system. If your network uses a DHCP server, use the IP Setup Utility (IPSU) to find the bridge's DHCP-assigned IP address. The [“Using the IP Setup Utility”](#) section on page 3-2 describes how to use IPSU.

You can also use a 9-pin, straight-through, male-to-female serial cable to connect your computer's COM1 or COM2 port to the serial port on the back of the bridge and use a terminal emulator to open the management system. The [“Using a Terminal Emulator”](#) section on page 3-9 describes using a terminal emulator to assign basic settings.

3. Enter basic settings on the Express Setup page.

Using the IP Setup Utility

The IP Setup utility (IPSU) allows you to find the bridge's IP address when it has been assigned by a DHCP server. You can also use IPSU to set the bridge's IP address and SSID if they have not been changed from the default settings.

**Note**

You must run IPSU from a computer on the same subnet as the bridge.

The sections below explain how to obtain and install the utility, how to use it to find the bridge's IP address, and how to use it to set the IP address and the SSID.

Obtaining and Installing IPSU

IPSU is available on the Cisco web site. Follow these steps to obtain and install IPSU:

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- Step 1** Use your Internet browser to access the Cisco Software Center at the following URL:
<http://www.cisco.com/public/sw-center/sw-wireless.shtml>
- Step 2** Locate the bridge utilities section and click on the **Windows** link.
- Step 3** Click on the file, **IPSUvxxxxx.exe**. The *xxxxxx* identifies the software package version number.
- Step 4** Read and accept the terms and conditions of the Software License Agreement.
- Step 5** Download and save the file to a temporary directory on your hard drive and then exit the Internet browser.
- Step 6** Double-click **IPSUvxxxxx.exe** in the temporary directory to expand the file.
- Step 7** Double-click **Setup.exe** and follow the steps provided by the installation wizard to install IPSU.
The IPSU icon appears on your computer desktop.
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Finding the Bridge's IP Address

If your bridge receives an IP address from a DHCP server, use IPSU to find its IP address. Follow these steps to find the bridge's IP address:

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- Step 1** When the utility window opens, make sure **Get IP addr** is selected in the Function box.
- Step 2** Enter the bridge's MAC address in the Device MAC ID field. The bridge's MAC address is printed on the label on the bottom of the unit. It should contain six pairs of hexadecimal digits. Your bridge's MAC address might look like the following example:
0040963029b9



Note The MAC address field is not case-sensitive.

- Step 3** Click **Get IP Address**.
- Step 4** When the bridge's IP address appears in the IP Address field, write it down.
If IPSU reports that the IP address is 10.0.0.1, the default IP address, then the bridge did not receive a DHCP-assigned IP address. Steps for assigning an IP address are included in the "Default IP Address" section in Chapter 3 of the *Cisco Aironet 350 Series Bridge Software Configuration Guide*.
- Step 5** To check the IP address, browse to the bridge's browser-based management pages. Open an Internet browser.
- Step 6** Enter or paste the bridge's IP address in the browser's location or address field. Press **Enter**. The bridge's home page appears.
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Setting the Bridge's IP Address and SSID

If your bridge does not receive an IP address from a DHCP server, or if you want to change the default IP address, use IPSU to assign an IP address. You can set the bridge's SSID at the same time.



Note

The computer you use to assign an IP address to the bridge must have an IP address of its own.



Note

IPSU can only change the bridge's IP address and SSID from their default settings. After the IP address and SSID have been changed, IPSU cannot change them again.

Follow these steps to assign an IP address and an SSID to the bridge:

- Step 1** Double-click the **IP Setup** icon on your computer desktop. (If IPSU is not installed on your computer, follow the steps in the [“Obtaining and Installing IPSU”](#) section on page 3-2 to install it.)
- Step 2** When the utility window opens, make sure **Set Parameters** is selected in the Function box.
- Step 3** Enter the bridge's MAC address in the Device MAC ID field. The bridge's MAC address is printed on the label on the bottom of the unit. It should contain six pairs of hexadecimal digits. Your bridge's MAC address might look like the following example:

0040963029b9



Note

The MAC address field is not case-sensitive.

- Step 4** Enter the IP address you want to assign to the bridge in the IP Address field.
- Step 5** Enter the SSID you want to assign to the bridge in the SSID field.



Note

You cannot set the SSID without also setting the IP address. You can set the IP address without setting the SSID, however.

- Step 6** Click **Set Parameters**.
- Step 7** To test the IP address, open an Internet browser.
- Step 8** Enter or paste the bridge's IP address in the browser's location or address field. Press **Enter**. The bridge's home page appears.

Entering Basic Settings

This section provides instructions for performing a basic configuration of your bridge using your Internet browser, the bridge's serial port, or a Telnet session.



Note

Consult Chapter 2 in the *Cisco Aironet 350 Series Bridge Software Configuration Guide* for instructions on using SNMP to configure the bridge.

Using an Internet Browser

This section describes how to use your Internet browser to configure the bridge with basic settings. To quickly configure the bridge, you can enter all the bridge's essential settings for basic operation on the Express Setup page (see [Figure 3-1](#)).


Note

The bridge is compatible with Microsoft Internet Explorer versions 4.0 or later and Netscape Communicator versions 4.0 or later.

Figure 3-1 The Express Setup Page

BR350 Express Setup

Cisco 350 Series Bridge

Home Map Help Uptime: 13:11:36

System Name: BR350

MAC Address: 00:40:96:31:55:c1

Configuration Server Protocol: None

Default IP Address: 10.84.137.48

Default IP Subnet Mask: 255.255.255.192

Default Gateway: 10.84.137.1

Radio Service Set ID (SSID): tsunami

Role in Radio Network: Root Bridge

Optimize Radio Network For: Throughput Range Custom

Ensure Compatibility With: 2Mb/sec Clients non-Aironet 802.11

SNMP Admin. Community:

Apply OK Cancel Restore Defaults

[Home][Map][Login][Help]

Cisco 350 Series Bridge © Copyright 2000 Cisco Systems, Inc. credits

Follow these steps to enter basic settings with an Internet browser:

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- Step 1** Open your Internet browser.
 - Step 2** Enter or paste the bridge's IP address in the browser's location field. Press **Enter**.
 - Step 3** When the bridge's Summary Status page appears, click **Setup**. When the Setup page appears, click **Express Setup**.



Note If the bridge is new and its factory configuration has not been changed, the Express Setup page appears instead of the Summary Status page when you first browse to the bridge.

- Step 4** Enter a system name for the bridge in the System Name field. A descriptive system name makes it easy to identify the bridge on your network; for example: *Factory Bridge*.
- Step 5** Select a configuration server protocol from the Configuration Server Protocol pull-down menu. The configuration server protocol you select should match your network's method of IP address assignment. The **Configuration Server** link takes you to the Boot Server Setup page, which you use to configure the bridge to work with your network's BOOTP or DHCP servers for automatic assignment of IP addresses.



Note Cisco recommends assigning a static IP address to your bridge to simplify network management and to prevent delays in receiving an address through DHCP. To assign a static IP address to your bridge, select None from the Configuration Server Protocol pull-down menu and enter the IP address for the bridge in the Default IP Address field.

The Configuration Server Protocol pull-down menu options include:

- None—This setting is used when you want to manually assign a static IP address to your bridge or your network does not have a working automatic system for IP address assignment.
- BOOTP—With Bootstrap Protocol, IP addresses are hard-coded based on MAC addresses.
- DHCP—With Dynamic Host Configuration Protocol, IP addresses are “leased” for predetermined periods of time.

- Step 6** Enter an IP address in the Default IP address field. If DHCP is not enabled, the IP address you enter in this field will be the bridge's static IP address. If DHCP or BOOTP is enabled, the address you enter in this field provides the IP address only when no server responds with an IP address for the bridge.
- Step 7** Enter an IP subnet mask in the Default IP Subnet Mask field to identify the subnetwork so the bridge's IP address can be recognized on the LAN. If DHCP or BOOTP is not enabled, this field is the subnet mask. If DHCP or BOOTP is enabled, this field provides the subnet mask only when no server responds to the bridge's DHCP or BOOTP request.
- Step 8** Enter the IP address of your default internet gateway in the Default Gateway field. The entry 255.255.255.255 indicates no gateway. Clicking the **Gateway** link takes you to the Routing Setup page, which you use to configure the bridge to communicate with the IP network routing system.
- Step 9** Enter an SSID for the bridge in the Radio Service Set ID (SSID) field. The SSID is a unique identifier that client devices use to associate with the bridge. The SSID can be any alphanumeric entry from 2 to 32 characters long.
- Step 10** Select a network role for the bridge from the Role in Radio Network pull-down menu. The menu contains the following options:

- **Root Bridge**—One bridge in each group of bridges must be set as the root bridge. A root bridge only accepts associations from non-root bridges, access points, and client devices. The root bridge cannot associate with another root bridge.
- **Non-Root Bridge w/Clients**—Use this setting for non-root bridges that accept associations from client devices and for bridges acting as repeaters. A non-root bridge (with clients) can connect to a wired LAN. A non-root bridge (with clients) only accepts associations from non-root bridges, access points, and client devices. A non-root bridge (with clients) will only associate to another bridge (root or non-root).

**Note**

Bridges set to non-root do not receive dynamic WEP keys for their data transmissions. Non-root bridges use the static WEP keys configured in their management systems.

- **Non-Root Bridge w/o Clients**—Use this setting for non-root bridges that should not accept associations from client devices. A non-root bridge (without clients) can connect to a wired LAN and only associates to another bridge (root or non-root).
- **Root Access Point**—Use this setting to set up the bridge as a rugged access point connected to the wired LAN. A root access point only accepts associations from non-root access points and client devices. A root access point cannot associate with another root access point or root bridge. When you select Root Access Point, the bridge's Spanning-Tree Protocol (STP) function is disabled.
- **Repeater Access Point**—Use this setting to set up the bridge as a rugged repeater access point. A repeater access point is not connected to the wired LAN; it is placed within radio range of an access point connected to the wired LAN to extend the range of your infrastructure or to overcome an obstacle that blocks radio communication. A repeater access point can associate to other access points (root or repeater) and bridges (root and non-root with clients). It will accept associations from other repeater access points and client devices. When you select Repeater Access Point, the bridge's STP function is disabled.
- **Site Survey Client**—Use this setting when performing a site survey for a repeater access point. When you select this setting, clients are not allowed to associate and the bridge's STP function is disabled.

Step 11 Select an Optimize Radio Network For option to assign either preconfigured settings or customized settings for the bridge radio:

- **Throughput**—Maximizes the data volume handled by the bridge but might reduce the bridge's range.
- **Range**—Maximizes the bridge's range but might reduce throughput.
- **Custom**—The bridge will use the settings you enter on the Root Radio Hardware page. Click the **Custom** link to go to the Root Radio Hardware page.

Step 12 To automatically configure the bridge to be compatible with other devices on your wireless LAN, select an Ensure Compatibility With option:

- **2Mb/sec clients**—Select this setting if your network contains Cisco Aironet devices that operate at 2 Mbps.
- **non-Aironet 802.11**—Select this setting if the bridge is operating as an access point and there are non-Cisco Aironet devices on your wireless LAN.

Step 13 To use Simplified Network Management Protocol (SNMP), enter a community name in the SNMP Admin. Community field. This name automatically appears in the list of users authorized to view and make changes to the bridge's management system.

Click the **SNMP** link to go to the SNMP Setup page, where you can edit other SNMP settings.

You can define other SNMP communities with User Management. The "Security Setup" section in Chapter 3 of the *Cisco Aironet 350 Series Bridge Software Configuration Guide* describes User Management.

Step 14 Click **OK**. The Setup page appears. If you changed the Role in Radio Network setting, your bridge reboots.

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.

Common Functions with the CLI

The CLI pages use consistent techniques to present and save configuration information. [Table 3-1](#) lists the functions that appear on most CLI pages, and [Figure 3-2](#) shows a CLI page example.

Table 3-1 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> .

Figure 3-2 CLI Page Example

```

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 enter names and settings that appear in brackets you go to that page or setting. HyperTerminal goes to the page or setting as soon as it recognizes a unique name, so you need to enter only the first few characters in the page or setting name. To go from the home page to the Setup page, for example, you would only need to enter s. To return to the home page, you only need to press =.

Applying Changes to the Configuration

The console interface'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, you only need to enter **ap** and press **Enter**.

Using a Terminal Emulator

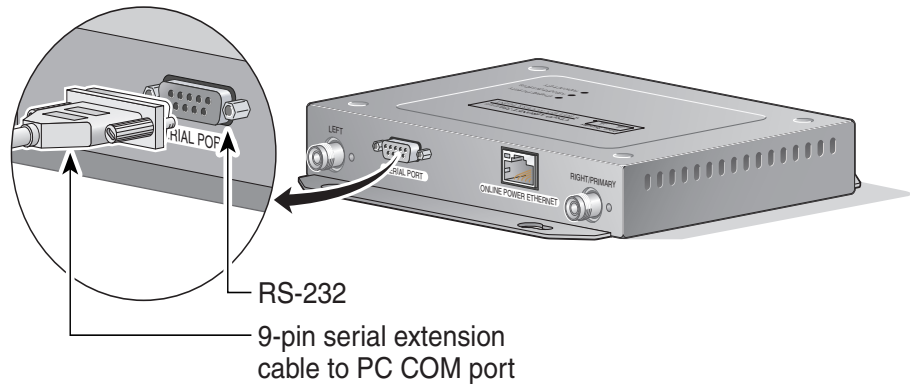
This section provides instructions for using the bridge's serial port with a terminal emulator to configure the bridge.

Assigning Basic Settings

Follow these steps to assign basic settings to the bridge with a terminal emulator such as Microsoft's HyperTerminal.

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- Step 1** Connect a 9-pin, male-to-female, straight-through serial cable (provided with your bridge) to the COM port on a computer and to the RS-232 serial port on the back of the bridge. [Figure 3-3](#) shows the location of the bridge's serial port.

Figure 3-3 Connecting the Serial Cable



Step 2 Open the terminal emulator.

- Step 3** 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 4** Press **=** to display the home page of the bridge. If the bridge is new and its factory configuration has not been changed, the Express Setup page appears; if the bridge has been configured, the Summary Status page appears.
- Step 5** If you are on the Summary Status page, press **s** to select Setup, then press **ex** to select the Express Setup page.
- Step 6** Press **n** and then press **Enter** to select System Name. Enter a system name for the bridge and press **Enter**. A descriptive system name makes it easy to identify the bridge on your network; for example: *Factory Bridge*.
- Step 7** Press **t** and then press **Enter** to select Terminal Type. Press **t** to select teletype display or press **a** to select ANSI display for the console interface. Press **Enter** after you make your selection.
- Step 8** Press **pr** and then press **Enter** to select Config Server Protocol.

**Note**

Cisco recommends assigning a static IP address to your bridge to simplify network management and to prevent delays in receiving an address through DHCP. To assign a static IP address to your bridge, select None from the Configuration Server Protocol menu and enter the IP address for the bridge in the Default IP Address field.

Select one of the following options:

- Press **n** to select None. This setting is used when you want to manually assign a static IP address to your bridge or your network does not have a working automatic system for IP address assignment.
 - Press **b** to select BOOTP—With Bootstrap Protocol, IP addresses are hard-coded based on MAC addresses.
 - Press **d** to select DHCP—With Dynamic Host Configuration Protocol, IP addresses are “leased” for predetermined periods of time. Press **Enter** after you make your selection.
- Step 9** Press **ad** and then press **Enter** to select IP Address. Enter an IP address for the bridge. If DHCP is not enabled, the IP address you enter is the bridge’s static IP address. If DHCP is enabled, the address you enter provides the IP address only when no DHCP server responds with an IP address for the bridge. Press **Enter** when you have completed your entry.
- Step 10** Press **su** and then press **Enter** to select IP Subnet Mask. Enter an IP subnet mask to identify the subnetwork so the bridge’s IP address can be recognized on the LAN. If DHCP is not enabled, the subnet you enter is the static subnet mask. If DHCP is enabled, your entry provides the subnet mask only when no DHCP server responds to the bridge’s DHCP request. Press **Enter** when you have completed your entry.
- Step 11** Press **g** and then press **Enter** to select Default Gateway. Enter the IP address of your default internet gateway. The entry *255.255.255.255* indicates no gateway. Press **Enter** when you have completed your entry.
- Step 12** Press **ra** and then press **Enter** to select Radio Service Set ID (SSID). Enter an SSID for the bridge. The SSID is a unique identifier that client devices use to associate with the bridge. The SSID can be any alphanumeric entry from 2 to 32 characters long. Press **Enter** when you have completed your entry.

Step 13 Press **ro** and then press **Enter** to select Role in Radio Network. The network roles include the following options:

- Root Bridge—Type **root b** and then press **Enter** to select this setting. One bridge in each group of bridges must be set as the root bridge. A root bridge only accepts associations from non-root bridges, access points, and client devices. The root bridge cannot associate with another root bridge.
- Non-Root Bridge w/Clients—Type **non-root bridge w/c** and then press **Enter** to select this setting. Use this setting for non-root bridges that accept associations from client devices and for bridges acting as repeaters. A non-root bridge (with clients) can connect to a wired LAN. A non-root bridge (with clients) only accepts associations from non-root bridges, access points, and client devices. A non-root bridge (with clients) will only associate to another bridge (root or non-root).



Note

Bridges set to non-root do not receive dynamic WEP keys for their data transmissions. Non-root bridges use the static WEP keys configured in their management systems.

- Non-Root Bridge w/o Clients—Type **non-root bridge w/o** and then press **Enter** to select this setting. Use this setting for non-root bridges that should not accept associations from client devices. A non-root bridge (without clients) can connect to a wired LAN and only associates to another bridge (root or non-root).
- Root Access Point—Type **root a** and then press **Enter** to select this setting. Use this setting to set up the bridge as a rugged access point connected to the wired LAN. A root access point only accepts associations from non-root access points and client devices. A root access point cannot associate with another root access point or root bridge. When you select Root Access Point, the bridge's Spanning-Tree Protocol (STP) function is disabled.
- Repeater Access Point—Press **r** and then press **Enter** to select this setting. Use this setting to set up the bridge as a rugged repeater access point. A repeater access point is not connected to the wired LAN; it is placed within radio range of an access point connected to the wired LAN to extend the range of your infrastructure or to overcome an obstacle that blocks radio communication. A repeater access point can associate to other access points (root or repeater) and bridges (root and non-root with clients). It will accept associations from other repeater access points and client devices. When you select Repeater Access Point, the bridge's STP function is disabled.
- Site Survey Client—Press **s** and then press **Enter** to select this setting. Use this setting when performing a site survey for a repeater access point. When you select this setting, clients are not allowed to associate and the bridge's STP function is disabled.

Step 14 Press **op** and then press **Enter** to select Optimize Radio Network For. These options assign either preconfigured settings or customized settings for the bridge radio:

- Throughput—Press **t** and then press **Enter** to select this setting. Maximizes the data volume handled by the bridge but might reduce the bridge's range.
- Range—Press **r** and then press **Enter** to select this setting. Maximizes the bridge's range but might reduce throughput.
- Custom—Press **c** and then press **Enter** to select this setting. The bridge will use the settings you enter on the Root Radio Hardware page. Chapter 3 of the *Cisco Aironet 350 Series Bridge Software Configuration Guide* describes the Root Radio Hardware page.

- Step 15** Use the Ensure Compatibility With setting to automatically configure the bridge to be compatible with other devices on your wireless LAN:
- 2Mb/sec clients—Press **2** and then press **Enter** to select this setting. Select this setting if your network contains Cisco Aironet devices that operate at 2 Mbps.
 - non-Aironet 802.11—Press **no** and then press **Enter** to select this setting. Select this setting if the bridge is operating as an access point and there are non-Cisco Aironet devices on your wireless LAN.
- Step 16** Press **sn** and then press **Enter** to select SNMP Admin. Community. Enter an SNMP community name. This name automatically appears in the list of users authorized to view and make changes to the bridge's management system. Press **Enter** when you have completed your entry.
- You can define other SNMP communities with User Management. The “Security Setup” section in Chapter 3 of the *Cisco Aironet 350 Series Bridge Software Configuration Guide* describes User Management.
- Step 17** Press **ap** and press **Enter** to apply your basic settings. If you changed the Role in Radio Network setting, your bridge reboots.
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Using a Telnet Session

This section provides instructions for using a Telnet session to configure the bridge. The Telnet interface to the bridge is the same as the terminal emulator interface, except for setting-up and closing the session.

Assigning Basic Settings

Follow these steps to assign basic settings to the bridge using a Telnet session:

-
- Step 1** On your computer's Start menu, select **Start > Run**, type **Telnet** followed by the bridge's IP address and press **Enter**.
- Step 2** Press **=** to display the home page of the bridge. If the bridge is new and its factory configuration has not been changed, the Express Setup page appears; if the bridge has been configured, the Summary Status page appears.
- Step 3** If you are on the Summary Status page, press **s** to select Setup, then press **ex** to select the Express Setup page.
- Step 4** Press **n** and then press **Enter** to select System Name. Enter a system name for the bridge and press **Enter**. A descriptive system name makes it easy to identify the bridge on your network; for example: *Factory Bridge*.
- Step 5** Press **t** and then press **Enter** to select Terminal Type. Press **t** to select teletype display or press **a** to select ANSI display for the console interface. Press **Enter** after you make your selection.
- Step 6** Press **pr** and then press **Enter** to select Config Server Protocol.



Note

Cisco recommends assigning a static IP address to your bridge to simplify network management and to prevent delays in receiving an address through DHCP. To assign a static IP address to your bridge, select None from the Configuration Server Protocol menu and enter the IP address for the bridge in the Default IP Address field.

Select one of the following options:

- Press **n** to select None. This setting is used when you want to manually assign a static IP address to your bridge or your network does not have a working automatic system for IP address assignment.
- Press **b** to select BOOTP—With Bootstrap Protocol, IP addresses are hard-coded based on MAC addresses.
- Press **d** to select DHCP—With Dynamic Host Configuration Protocol, IP addresses are “leased” for predetermined periods of time.

Press **Enter** after you make your selection.

- Step 7** Press **ad** and then press **Enter** to select IP Address. Enter an IP address for the bridge. If DHCP is not enabled, the IP address you enter is the bridge’s static IP address. If DHCP is enabled, the address you enter provides the IP address only when no DHCP server responds with an IP address for the bridge. Press **Enter** when you have completed your entry.
- Step 8** Press **su** and then press **Enter** to select IP Subnet Mask. Enter an IP subnet mask to identify the subnetwork so the bridge’s IP address can be recognized on the LAN. If DHCP is not enabled, the subnet you enter is the static subnet mask. If DHCP is enabled, your entry provides the subnet mask only when no DHCP server responds to the bridge’s DHCP request. Press **Enter** when you have completed your entry.
- Step 9** Press **g** and then press **Enter** to select Default Gateway. Enter the IP address of your default internet gateway. The entry 255.255.255.255 indicates no gateway. Press **Enter** when you have completed your entry.
- Step 10** Press **ra** and then press **Enter** to select Radio Service Set ID (SSID). Enter an SSID for the bridge. The SSID is a unique identifier that client devices use to associate with the bridge. The SSID can be any alphanumeric entry from 2 to 32 characters long. Press **Enter** when you have completed your entry.
- Step 11** Press **ro** and then press **Enter** to select Role in Radio Network. The network roles include the following options:
- Root Bridge—Type **root b** and then press **Enter** to select this setting. One bridge in each group of bridges must be set as the root bridge. A root bridge only accepts associations from non-root bridges, access points, and client devices. The root bridge cannot associate with another root bridge.
 - Non-Root Bridge w/Clients—Type **non-root bridge w/c** and then press **Enter** to select this setting. Use this setting for non-root bridges that accept associations from client devices and for bridges acting as repeaters. A non-root bridge (with clients) can connect to a wired LAN. A non-root bridge (with clients) only accepts associations from non-root bridges, access points, and client devices. A non-root bridge (with clients) will only associate to another bridge (root or non-root).



Note

Bridges set to non-root do not receive dynamic WEP keys for their data transmissions. Non-root bridges use the static WEP keys configured in their management systems.

- Non-Root Bridge w/o Clients—Type **non-root bridge w/o** and then press **Enter** to select this setting. Use this setting for non-root bridges that should not accept associations from client devices. A non-root bridge (without clients) can connect to a wired LAN and only associates to another bridge (root or non-root).
- Root Access Point—Type **root a** and then press **Enter** to select this setting. Use this setting to set up the bridge as a rugged access point connected to the wired LAN. A root access point only accepts associations from non-root access points and client devices. A root access point cannot associate with another root access point or root bridge. When you select Root Access Point, the bridge’s Spanning-Tree Protocol (STP) function is disabled.

- Repeater Access Point—Press **r** and then press **Enter** to select this setting. Use this setting to set up the bridge as a rugged repeater access point. A repeater access point is not connected to the wired LAN; it is placed within radio range of an access point connected to the wired LAN to extend the range of your infrastructure or to overcome an obstacle that blocks radio communication. A repeater access point can associate to other access points (root or repeater) and bridges (root and non-root with clients). It will accept associations from other repeater access points and client devices. When you select Repeater Access Point, the bridge's STP function is disabled.
- Site Survey Client—Press **s** and then press **Enter** to select this setting. Use this setting when performing a site survey for a repeater access point. When you select this setting, clients are not allowed to associate and the bridge's STP function is disabled.

Step 12 Press **op** and then press **Enter** to select Optimize Radio Network For. These options assign either preconfigured settings or customized settings for the bridge radio:

- Throughput—Press **t** and then press **Enter** to select this setting. Maximizes the data volume handled by the bridge but might reduce the bridge's range.
- Range—Press **r** and then press **Enter** to select this setting. Maximizes the bridge's range but might reduce throughput.
- Custom—Press **c** and then press **Enter** to select this setting. The bridge will use the settings you enter on the Root Radio Hardware page. Chapter 3 of the *Cisco Aironet 350 Series Bridge Software Configuration Guide* describes the Root Radio Hardware page.

Step 13 Use the Ensure Compatibility With setting to automatically configure the bridge to be compatible with other devices on your wireless LAN:

- 2Mb/sec clients—Press **2** and then press **Enter** to select this setting. Select this setting if your network contains Cisco Aironet devices that operate at 2 Mbps.
- non-Aironet 802.11—Press **no** and then press **Enter** to select this setting. Select this setting if the bridge is operating as an access point and there are non-Cisco Aironet devices on your wireless LAN.

- Step 14** Press **sn** and then press **Enter** to select SNMP Admin. Community. Enter an SNMP community name. This name automatically appears in the list of users authorized to view and make changes to the bridge's management system. Press **Enter** when you have completed your entry.
- You can define other SNMP communities with User Management. The “Security Setup” section in Chapter 3 of the *Cisco Aironet 350 Series Bridge Software Configuration Guide* describes User Management.
- Step 15** Press **ap** and press **Enter** to apply your basic settings. If you changed the Role in Radio Network setting, your bridge reboots.
- Step 16** Close your Telnet session by closing the Telnet window.

Default Basic Settings

Table 3-2 lists the default settings on the bridge's Express Setup page.

Table 3-2 Default Settings on the Express Setup Page

Setting Name	Default Value
System Name	AIR-BR350_XXXXXX (the last six characters of the unit's MAC address)
Terminal Type (Console interface only)	teletype
Config Server Protocol	DHCP
IP address	10.0.0.1
IP Subnet Mask	255.255.255.0
Default Gateway	255.255.255.255
SSID	tsunami
Role in Radio Network	Root Bridge
Optimize Radio Network For	Throughput
Ensure Compatibility With	(not configured)
SNMP Admin. Community	(not configured)