



Configuring the Base Station

This chapter describes the initial configuration of the base station by using a wireless PC running the Cisco Aironet Base Station Configuration Utility (BSCU) or an Internet browser using a Cisco Aironet radio card or another vendor's IEEE 802.11 DSSS radio card. For complete instructions for using the BSCU, see the *Cisco Aironet 340 Series Base Station Software Configuration Guide*.

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Before You Start

This section lists the information you should have before you configure the base station. It also provides information on how to configure the wireless PCs to communicate with the base station. Your network administrator or Internet service provider (ISP) should be able to provide any missing information.

Choose the operating mode of the base station from the following options:

Cable or DSL Modem mode—connects to an ISP through a cable or digital subscriber line (DSL) modem.

PPP-over-Ethernet mode—connects to an ISP by using Point-to-Point Protocol over a cable or DSL modem.

Telephone Dial-Up mode—connects to an ISP by using the optional built-in modem to establish a connection over a telephone line.

Access Point mode—connects to an Ethernet LAN or single PC. The base station operates as a pass-through device, forwarding traffic from the wired LAN to the wireless PCs and vice-versa.

For radio parameters, gather the following information:

Service Set Identifier (SSID)—a special unique name assigned to a wireless radio network for identification purpose. All wireless PCs must use the same name to communicate with the base station.

Wired Equivalent Protection (WEP) Key—encryption key all wireless PCs must use to communicate with the base station.

For Telephone Dial-Up mode, gather the following information:

Login username—name of the ISP account; for example, if your e-mail address is `jd@ISPname.net`, your username is typically *jd*.



Note In some ISP systems, the login username might have a longer format, similar to *username@ISPname.net* or *username@netname.ISPname.net*.

Login password—password associated with the ISP account.

Phone number—dial-in telephone number for the ISP, including any required numbers to access an outside line or to disable call waiting, such as 9 or *70.

Tone or pulse dial—telephone line setting used by the modem.

Domain name—domain name of the ISP network, such as *ISPname.net*.

For Cable or DSL Modem mode, gather the following information:

Base station name—name assigned to the base station. In some systems, the ISP might assign a specific device name.

Auto DHCP—enabled when an external DHCP server is used to assign IP addresses.

Base station IP address—ISP-assigned external IP address.

Base station subnet mask—ISP-assigned subnet mask.

Default gateway—ISP-assigned gateway.

Domain Name System (DNS) server 1—ISP-assigned primary server.

DNS server 2—ISP-assigned secondary server.

Domain name—domain name of the ISP network, such as *ISPname.net*.

For PPP-over-Ethernet mode, gather the following information:

Login username—name of the ISP account; for example, if your e-mail address is `jd@ISPname.net`, your username is typically *jd@ISPname.net*.



Note In some ISP systems, the login username might have a longer format, similar to *username@ISPname.net* or *username@netname.ISPname.net*.

Login password—password associated with the ISP account.

Service name—name of the ISP.

Domain name—domain name of the ISP network; for example, `ISPname.net`.

For Access Point operation, gather the following information:

Base station name—name assigned to the base station.

Auto DHCP—indicates whether an external DHCP server is used.

Base station IP address—base station assigned IP address.



Note In Access Point mode, the Base station IP address is used on both the wired and wireless networks.

Subnet Mask—base station network subnet mask.

Default Gateway—network gateway.

DNS Server 1—network primary server.

DNS Server 2—network secondary server.

Configure a Wireless PC for Network Communications

For you to communicate with the base station, the radio card in the wireless PC must be installed and operational. The wireless PC and radio card must also be properly configured as described in the following sections.

To revise the network parameters of a wireless PC, refer to the Help guides of your operating system and to Appendix D, “Wireless PC Network Settings.”

Follow these steps to configure the radio card by using the Windows operating system:

Step 1 In the PC’s TCP/IP Protocol Properties, set your radio card as follows:

Click the **Obtain an IP address from the DHCP server** radio button.

To avoid conflicts, we recommend that wired and wireless devices be configured for DHCP so that IP address information is automatically provided. However, you can click **Specify an IP address** to manually enter IP address information as follows:

IP Address—unique IP address ranging from 192.168.200.102 to 192.168.200.254 that is not used by any other device on the LAN.



Note When configured for Access Point mode, the IP address is dependent upon the wired network settings and must not be used by any other wired or wireless device.

Subnet Mask—255.255.255.000.

Default Gateway—base station IP address (typically 192.168.200.1).

Step 2 Close the Network windows. It might be necessary to reboot your PC before the changes are effective.

Configure a Radio Card

If you are configuring a base station by using a PC equipped with a Cisco Aironet radio card, continue to the “Install the BSCU” section on page 3-7.

If the radio card is provided by another vendor, the wireless network parameters, such as the SSID and the WEP encryption key, must be the same for all the wireless PCs. Use that vendor’s utilities and procedures to configure the radio card (see Configuring Another Vendor’s Radio Card).

Configuring Another Vendor’s Radio Card

Use the utilities provided by the vendor of your IEEE 802.11 DSSS radio card to configure the card using the following settings (default settings shown):

Service Set Identifier (SSID)—**tsunami**

Wired Equivalent Protection (WEP) Key—**30313233343536373839303132**

Network Type—**Infrastructure**

Data Rate—**Auto**

Authentication Type—**Open**

Encryption—**Enabled** or **OFF**

Verify the encryption capability of your radio card prior to enabling encryption. The base station default parameters are set to 128-bit encryption and mixed-cell operation. To support IEEE 802.11 DSSS radio cards that do not provide 128-bit encryption or mixed-cell operation, these radio cards should have encryption set to off.

If encryption is enabled:

Set Encryption—**128 bits**

Set Association—**Allow mixed cells**

The base station is ready to be configured. Continue configuring the base station by using an Internet browser (see the “Configure the Base Station” section on page 3-8).

Install the BSCU

BSCU is a utility that is installed from the Cisco Aironet 340 Series Base Station CD shipped with the device. It can be used to configure your Cisco Aironet radio card as well as the base station. When you use BSCU to modify the parameters for the base station, the parameters in the Cisco Aironet radio card on that PC are automatically changed to match the base station parameters.

The BSCU supports the following operating systems:

- Microsoft Windows 95
- Microsoft Windows 98
- Microsoft Windows NT
- Microsoft Windows 2000
- Microsoft Windows ME

Follow these steps to install the BSCU:

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- Step 1** Put the CD in the CD-ROM drive of the computer you are using to configure the base station.
 - Step 2** Use Windows Explorer to display the contents of the CD.
 - Step 3** Double-click the **BSCU** folder.
 - Step 4** Double-click the **setup.exe** file. The installation wizard appears.
 - Step 5** Follow the steps in the installation wizard.
 - Step 6** When requested by the installation wizard, select **Talk To A Base Station To Access The Internet**.

The *Talk Directly To Other Computers* option is used to communicate with another wireless PC. It does not apply when a base station is used on the network.

Configure the Base Station

After the wireless PC and radio card have been configured for network communications, you can configure the base station. This section describes the processes for configuring the base station by using the BSCU or an Internet browser.

Select the method you want to use to make configuration changes:

Cisco Aironet Base Station Configuration Utility (BSCU)—see the “Configuring the Base Station By Using BSCU” section.

Internet browser—see the “Configuring the Base Station By Using an Internet Browser” section.

Configuring the Base Station By Using BSCU

Configure the base station by using the Set up Base Station dialog box in the BSCU. The base station network communications parameters, such as SSID and WEP encryption key, are automatically entered in the Cisco Aironet radio card.

To enter the parameters in the base station, do the following:

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- Step 1** If it is not already running, double-click **BSCU**.
 - Step 2** Click the **Base Station** pull-down menu.
 - Step 3** Click **Set up Base Station**. The Set up Base Station dialog box appears.
 - Step 4** Click **Edit Base Station Settings**. The Base Station Properties dialog box appears.
 - Step 5** Enter the SSID in the SSID field using 1 to 32 ASCII characters (printable keyboard characters). This value identifies the base station radio network and must be used by all wireless PCs communicating with the base station.
 - Step 6** Verify the encryption capability of your radio card. If your radio card does not provide 128-bit WEP encryption, the Enable Encryption (WEP) box is grayed out and not selectable. This means you are not able to use encryption when communicating with the base station, you should go to Step 9. If your radio card supports 128-bit WEP encryption, the **Enable Encryption (WEP)** box is initially selected (checked).

Encryption provides protection against unauthorized accesses by wireless devices because communication messages are encoded by using this key. The same WEP encryption key must be used by all wireless devices communicating with the base station.

- Step 7** Click the WEP Encryption Key Entry Method to set the WEP key to ASCII or hexadecimal.
- Step 8** Enter the WEP encryption key. For additional information on the WEP encryption key, see Chapter 2, “WEP Key Conversion,” in the Cisco Aironet 340 Series Base Station Software Configuration Guide.

The WEP encryption key is visible when it is entered, but once it is saved and the BSCU is reopened, the field is blank.

- a. When using the ASCII entry method, enter the WEP encryption key in the Encryption Key field, using 1 to 13 characters (printable keyboard characters).
- b. When using the hexadecimal entry method, enter the WEP encryption key in the Encryption Key field, using 1 to 26 characters (0 to 9 and A to F or a to f).

- Step 9** Record these settings, and click **Next** to display the Base Station Properties screen.

- Step 10** Select the radio button that corresponds to one of the following connection options:

Use Built-in 56K Modem for Internet Connection—see the “Telephone Dial-Up (Modem) Configuration” section.

Use Cable or DSL Modem for Internet Connection—see the “Cable or DSL Modem Configuration” section.

Use PPP over Ethernet for Internet Connection—see the “PPP-over-Ethernet Configuration” section.

Use Access Point for Wireless Clients Only—see the “Access Point Configuration” section.

- Step 11** Click **Next**, and continue with the corresponding procedure.
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Telephone Dial-Up (Modem) Configuration

The Telephone Dial-Up (Modem) Configuration dialog box sets the appropriate options for telephone dial-up.



Caution

When the base station is configured for dial-up operation, *do not connect* it to a wired LAN being supported by another DHCP server. This might produce conflicting IP address assignments on the wired LAN because the base station DHCP server function supports both wireless and wired devices in dial-up mode.



Note

The base station does not support the America Online proprietary dial-in protocol.

From the Dial-up Modem Properties dialog box, enter the parameters as follows:

Step 1 Enter the Login User Name (1 to 50 characters); the name of the ISP account.



Note In some ISP systems, the login username might have a longer format, similar to *username@ISPname.net* or *username@netname.ISPname.net*.

Step 2 Enter the Login Password (1 to 50 characters); the password used to access the ISP account.

Step 3 Enter the Phone Number (1 to 50 characters); the telephone number used for dial-in accesses.

Step 4 Enter the Domain Name (1 to 50 characters); the ISP domain name, such as *ISPname.net*.

Step 5 Click the radio button to select **Tone Dialing** or **Pulse Dialing**. This defines how the modem dials telephone numbers.

- Step 6** Click the **On** or **Off** radio button to select the **Dial On Demand** status. We recommend that you set the parameter to *On*. When set to *On*, Dial On Demand allows the built-in modem to automatically connect to the ISP when an application sends Internet traffic, such as when an Internet browser attempts to access a Web site.



Note When set to *Off*, you must manually initiate the connection by clicking **Connect** on the BSCS screen.



Note If your browser or email programs initiate auto-dial, it might be necessary to reconfigure the programs to use a LAN connection rather than a dial-up connection to prevent them from attempting to directly dial the ISP.

- Step 7** Enter the amount of idle time (in minutes) in the Idle Time Hang-up field. If there is no traffic in this time period, the base station disconnects from the ISP and hangs up the telephone line. The default setting of 10 minutes is sufficient for most systems.
- Step 8** Select the country where the modem operates by using the up and down buttons on the **Country** selection box. For North American sites, the default USA option is correct.



Note If your operating country is not shown, contact Technical Support for assistance.

- Step 9** Click **Next**.
- Step 10** Click **OK**. The base station configuration is complete when you see the base station wireless network IP address (192.168.200.1) on the status line at the bottom of the screen. Your Cisco Aironet radio card was also programmed with corresponding settings to the base station.
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Cable or DSL Modem Configuration

The Cable or DSL Modem Properties dialog box sets the appropriate options to connect the base station to an ISP. The base station external IP address is controlled by the ISP.

- Step 1** Enter the Base Station Name (1 to 50 ASCII characters); the device name used to identify the base station.



Note A blank entry box (no visible value) results in the base station name being replaced with a null entry (no assigned name).



Note A new name is activated when the base station power is cycled by removing and reconnecting the power cable.



Note Some ISP systems might require a specific name be used for identification purposes.

- Step 2** Click **Yes** or **No** to select the **Obtain IP Address Automatically** option.

If you click **Yes**, the base station automatically requests an IP address for use on the external network. This is the easiest and recommended method. Additional parameters are not required, and you can go to Step 4.

If you click **No**, you must enter the IP address parameters provided by your ISP for external communications as follows:

- a. Enter the Base Station IP Address. This is the external IP address the base station uses on the Internet. The external IP address must match the IP address provided by the ISP.



Note The base station IP address on the internal wireless network is 192.168.200.1.

- b. Enter the Subnet Mask. The format is xxx.xxx.xxx.xxx, for example 255.255.255.0.

- c. Enter the IP address for the Default Gateway.
 - d. Enter the IP address for DNS Server 1. This is the primary DNS server.
 - e. Enter the IP address for DNS Server 2. This is the secondary DNS server.
- Step 3** Enter the Domain Name (1 to 50 characters); the ISP domain name, such as ISPname.net.
- Step 4** Click **Next**. The parameters are accepted.
- Step 5** Click **OK**. The base station configuration is complete when you see the base station wireless network IP address (192.168.200.1) on the status line at the bottom of the screen. Your Cisco Aironet radio card was also programmed with corresponding settings to the base station.
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PPP-over-Ethernet Configuration

The PPP-over-Ethernet Properties dialog box sets the appropriate options for access an ISP account through an Ethernet connection.

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- Step 1** Enter the Login User Name (1 to 50 characters); the name of the ISP account.



Note In some ISP systems, the login username might have a longer format similar to *username@ISPname.net* or *username@netname.ISPname.net*.

- Step 2** Enter the Login Password (1 to 50 characters). This password accesses the ISP account.
- Step 3** Enter the Service (1 to 50 characters); the name of the ISP service used for this connection.
- Step 4** Enter the Domain Name (1 to 50 characters); the ISP domain name, such as ISPname.net.

- Step 5** Click **Next**. The parameters are accepted.
- Step 6** Click **OK**. The base station configuration is complete when you see the base station wireless network IP address (192.168.200.1) on the status line at the bottom of the screen. Also, your Cisco Aironet radio card was programmed with corresponding settings to the base station.
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Access Point Configuration

The Access Point dialog box sets the appropriate options for access to the wireless and wired LANs. To avoid conflicts, the parameters must be obtained from the network administrator, the person who setup the wired network, or automatically obtained through an external DHCP server.

- Step 1** Select **Yes** or **No** for the **Obtain IP Address Automatically** option.

If you select **Yes**, the base station automatically requests an IP address by using DHCP; this is the easiest and recommended method. Additional parameters are not required.



Note In Access Point mode, the base station IP address is used on both the wireless and wired LANs.

To configure the base station, the wireless PC must be on the same subnet. If you choose to obtain the IP address automatically, you should also choose that setting for the TCP/IP properties of the radio card. (See Appendix D, “Wireless PC Network Settings.”)

If you select **No**, you must manually enter the network parameters needed by the base station to establish external LAN communications as follows:

- a. Enter the Base Station IP Address. This is the base station IP address used for both the wired and wireless networks.
- b. Enter the Subnet Mask. The format is xxx.xxx.xxx.xxx, for example 255.255.255.0.
- c. Enter the IP address for the Default Gateway.
- d. Enter the IP address for DNS Server 1. This is the primary DNS server.

- e. Enter the IP address for DNS Server 2. This is the secondary DNS server.
- Step 2** Click **Next**. The parameters are accepted.
- Step 3** Click **OK**. The base station configuration is complete when you see the base station wireless network IP address on the status line at the bottom of the screen. Your Cisco Aironet radio card was also programmed with corresponding settings to the base station.
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Configuring the Base Station By Using an Internet Browser

A wireless PC can use an Internet browser to initially configure the base station. Unlike the BSCU, when you configure the base station by using an Internet browser, the radio card parameters are not automatically changed to match the base station settings.

Before using the Internet browser, the wireless PC must be associated with the base station. (A properly configured wireless PC radio card automatically associates with the base station.)

To configure the base station by using an Internet browser, do the following:

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- Step 1** Open an Internet browser window.
- Step 2** Enter 192.168.200.1 (the base station default IP address) in the browser location field. If you are using Netscape, the field is labeled Netsite or Location; if you are using Microsoft Internet Explorer, the field is labeled Address.
- Step 3** Press **Enter**.
- The base station main menu screen appears (see Figure 3-1).

Figure 3-1 Internet Main Menu

Cisco BSM340 V8.48 - 192.168.200.001	
Item	Value
SSID - Service set identification	a string of at least 1 characters <input type="text" value="tsunami"/>
WEP encryption key in ASCII	off or a key <input type="text"/>
WEP encryption key in hex	off or a key <input type="text"/>
Use new SSID and key	
Operating mode	cable_DSL_modem , accesspoint , PPP over ethernet or dialup
Base station name	a string <input type="text"/>
Obtain network address automatically	off or on
Log and alarm history	
Load new firmware via browser	<input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Send"/>

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**Caution**

Do not click [Use new SSID and key](#) until all other base station configuration parameters are changed. The base station is being configured through a wireless connection using the default SSID and WEP encryption key. Enabling a new SSID and WEP encryption key

interrupts connectivity to the device. To communicate with the base station, the parameters in the wireless device must exactly match the base station settings.

- Step 4** If the value of the SSID field is *tsunami* (the default setting), we recommend that you enter a new SSID using 1 to 32 ASCII characters (printable keyboard characters). Press **Enter**.
- The SSID identifies the base station radio network and must be used by all wireless devices communicating with the base station.
- Step 5** Optionally, you are able to disable encryption or enter a new WEP encryption key (in ASCII or hexadecimal format).
- Step 6** The WEP encryption key used must be exactly the same on all wireless devices. Encryption provides protection against unauthorized accesses by wireless devices because messages are encoded with the WEP encryption key. For additional information on the WEP encryption key, see Chapter 2, “WEP Key Conversion,” in the *Cisco Aironet 340 Series Base Station Software Configuration Guide*.
- a. To disable encryption, click **off** in one of the WEP encryption key entry boxes.
 - b. To enter a new encryption key, select the desired entry method (ASCII or hex).
 - To use ASCII, click in the *WEP encryption key in ASCII* entry box, enter 1 to 13 ASCII characters (printable keyboard characters), and press **Enter**.
 - To use hex, click in the *WEP encryption key in hex* entry box, enter 1 to 26 hex characters (0 to 9 and A to F), and press **Enter**. The alpha characters are not case sensitive.
- Step 7** Record the old and new SSID and WEP encryption key values.
- Step 8** Click the desired operating mode. The operating mode specifies the type of communication connection used by the base station.

- Step 9** Go to the procedure for the selected operating mode.
- Cable or DSL Modem—see “Cable or DSL Modem or Access Point Configuration” section on page 3-18.
 - PPP-over-Ethernet—see “PPP-over-Ethernet Configuration” section on page 3-20.
 - Telephone Dial-Up—see “Telephone Dial-Up Configuration” section on page 3-21.
 - Access Point—see “Cable or DSL Modem or Access Point Configuration” section on page 3-18.
- Step 10** Click **Use new SSID and key**. Changing the SSID or WEP encryption key fields in the base station deactivates the connection with the wireless device. You must make corresponding changes to all wireless PCs to continue communications with the base station.
- Step 11** The base station configuration is complete, and you can close the Internet browser.
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Cable or DSL Modem or Access Point Configuration

Entering the parameters used for Cable or DSL Modem mode or Access Point mode is the same. The parameters used to access an ISP account when using a cable or DSL modem are typically gathered from the ISP, but most can be automatically obtained from an external DHCP server.

In Access Point mode, wireless devices can access the wired LAN and use the network resources on the wired LAN. Typically, these values are gathered from the network administrator, the person who setup the wired network, or automatically obtained through an external DHCP server.

To enter the parameters, do the following:

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- Step 1** If needed, enter a new name in the **Base station name** field, and press **Enter**. This is the device name used to identify the base station. In some cases, an ISP might require a specific name.

The default base station name is BSM340_XXXXXX or BSE340_XXXXXX, where XXXXXX is the last 6 digits of the base station MAC address. BSM denotes a base station with an integrated modem, and BSE denotes an Ethernet-only base station. The base station name can be from 1 to 16 ASCII characters (printable keyboard characters).

Step 2 Click **On** or **Off** to set the **Obtain network address automatically** field.

On (the default) specifies that the base station automatically obtains IP address information from a DHCP server. To avoid conflicts, we recommend that wired and wireless devices be configured for DHCP so that the IP address information is automatically supplied.

**Caution**

In Access Point mode, when you click the *On* option, the base station automatically obtains a new IP address from a DHCP server and your wireless connection to the base station is terminated. You need to determine the new IP address assigned to the base station before you can re-establish a connection. For additional information, see “Using the IP Setup Utility” section of the *Cisco Aironet 340 Series Base Station Software Configuration Guide*.

Off specifies that the entries are manually entered. If you selected Off, enter the IP address values as described in Manual IP Address Information.

Step 3 Return to Step 10, page 18.

Manual IP Address Information

This section describes the process for manually entering the IP address values. To configure the base station, the wireless PCs must be in the same subnetwork as the base station.

To enter the parameters, do the following:

Step 1 Enter the base station IP address in the **Internet address** field, and press **Enter**. In cable or DSL modem mode, this is the external IP address used by the base station on the Internet. In Access Point mode, this is the IP address used by the base station on both the wired and wireless networks.

- Step 2** Enter the subnet mask in the **Internet subnet mask** field, and press **Enter**. This mask identifies the external subnet number. A typical form for the entry is 255.255.255.0.
- Step 3** Enter the default gateway IP address in the **Internet default gateway** field, and press **Enter**. This is the IP address for the Internet gateway used for routing messages to external networks.
- Step 4** Enter the IP address of the primary DNS server in the **DNS server 1** field, and press **Enter**. This is the IP address of the primary DNS server.
- Step 5** Enter the IP address of the secondary DNS server in the **DNS server 2** field, and press **Enter**. This is the IP address of the primary DNS server.
- Step 6** Enter the domain name in the **Domain Name** field (1 to 50 characters), such as ISPname.net, and press **Enter**.
- Step 7** Return to Step 10, page 18.
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PPP-over-Ethernet Configuration

The PPP over Ethernet mode allows the base station to connect to an ISP supporting PPP over a cable or DSL modem connection.

To enter the parameters, do the following:

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- Step 1** If needed, enter a new name in the **Base station name** field, and press **Enter**. This is the device name used to identify the base station. In some cases, an ISP might require a specific name.
- The default base station name is BSM340_XXXXXX or BSE340_XXXXXX, where XXXXXX is the last 6 digits of the base station MAC address. BSM denotes a base station with an integrated modem, and BSE denotes an Ethernet only base station.
- Step 2** Enter the login username in the **Login user name** field (1 to 50 characters), and press **Enter**. This name is used to log into the ISP account.
- Step 3** Enter the password used to access the ISP account in the **Login password** field (1 to 50 characters), and press **Enter**.
- Step 4** Enter the name of the ISP service in the **Service** field (1 to 50 characters), and press **Enter**.

- Step 5** Enter the domain name of the ISP in the **Domain name** field (1 to 50 characters), such as ISPname.net, and press **Enter**.
- Step 6** Return to Step 10, page 18.
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Telephone Dial-Up Configuration

The built-in modem allows the base station to connect to an ISP through a dial-up telephone line. The parameters used to access the ISP account are gathered from the ISP.



Caution

The base station does not support the America Online proprietary dial-in protocol.

To enter the parameters, do the following:

- Step 1** If needed, enter a new name in the **Base station name** field, and press **Enter**. This is the device name used to access the ISP account. The name can be from 1 to 16 ASCII characters (printable keyboard characters).
- The default base station name is BSM340_XXXXXX or BSE340_XXXXXX, where XXXXXX is the last 6 digits of the base station MAC address. BSM denotes a base station with an integrated modem, and BSE denotes an Ethernet only base station.
- Step 2** Click **On** or **Off** to set the **Dial on demand** field. *On* (the default) specifies that the modem can automatically dial-up and log-on to the ISP account.
- Off* specifies that you must manually establish the connection by clicking **Start a connection**. You must also click **Stop a connection** to manually hang up the telephone line.
- Step 3** Enter the idle time in the **Minutes of idle time to cause hangup** field, and press **Enter**. This is the amount of time allowed before the modem hangs up an idle telephone connection. The value can be from 1 to 120 minutes. The default is 10 minutes and should be sufficient for most systems.
- Step 4** Enter the login user name in the **Login user name** field, and press **Enter**. This name is used to log into the ISP account. The name can be from 1 to 50 characters.

- Step 5** Enter the password used to access the ISP account in the **Login password** field, and press **Enter**. The password can be from 1 to 50 characters.
- Step 6** Enter the phone number of the ISP in the **Phone number** field and press **Enter**. The number can be a string from 1 to 50 characters.
- Step 7** Click **tone** or **pulse** dialing to set the type of dialing method the modem will use to dial telephone numbers. The default is tone dialing.
- Step 8** Enter the name of the ISP service in the **Service** field, and press **Enter**. The service name can be from 1 to 50 characters.
- Step 9** Enter the domain name of the ISP in the **Domain name** field (1 to 50 characters), such as ISPname.net, and press **Enter**.
- Step 10** Return to Step 10, page 18.
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Base Station Reset

The Reset button on the back of the base station changes the parameters to the default settings listed in Table 3-1.

Table 3-1 Default Settings

Parameters	Description
Base station IP address	IP address the base station uses on the wired and wireless networks. The default IP address is <i>192.168.200.1</i> .
SSID	Name used to identify the base station radio network and must be used by all wireless devices. The default is <i>tsunami</i> .
WEP encryption key	Encryption key used to encode data messages. This value must be exactly the same on all wireless devices and the base station. The default is <i>3031323334353637383930313233</i> (hex).
Encryption Key Length	Size of the encryption password. This must be the same on all wireless devices. The default is <i>128 bits</i> (only length supported by base station).
Encryption Enabled/Disabled	Enables or disables the use of encryption in communication messages. The default is <i>Enabled</i> .
Authentication Type	When set to open, the base station attempts to authenticate any wireless device regardless of the encryption setting. The default is <i>Open</i> .
Association	Allows the base station to communicate within a mixed security environment (encryption enabled or disabled). The default is <i>mixed cells allowed</i> .
Operating Mode	Connection type used by the base station. The default is <i>Cable or DSL Modem</i> mode.
Base Station Name	Name used to identify the base station. The default is <i>BSM340_xxxxxx</i> or <i>BSE340_xxxxxx</i> , where <i>xxxxxx</i> is the last 6 characters of the device MAC address.

Configure a Cisco Aironet Radio Card by using BSCU

This section describes how to use the BSCU to configure the Cisco Aironet radio card in your other wireless PCs that were not used to configure the base station. When you use the BSCU to configure the base station, the BSCU uses corresponding settings to automatically configure the wireless PC's radio card.

To configure a radio card by using BSCU, do the following:

Step 1 Double-click **BSCU** on the PC desktop to activate the utility.



Note A warning message might appear, stating that the SSID and WEP encryption key are set to default values. Click **OK**.

Step 2 Click the **Client** pull-down menu.

Step 3 Click **Edit Client Properties**. The properties dialog box displays.

Step 4 Enter the name of the computer in the **Computer Name** field if it is blank. If it is already assigned, the value appears in the field, and we suggest that you do not change it. This name is usually assigned by the network administrator and must be unique for each wireless PC. Changing the computer name might cause other network programs on the PC to be inoperable and the PC user login password to be unrecognized.

Step 5 Enter the base station SSID in the **SSID** field using 1 to 32 ASCII characters (printable keyboard characters). This value identifies the base station radio network and must be used by all wireless devices communicating with the base station.

Step 6 Verify the encryption capability of your radio card. If your radio card does not provide 128-bit WEP encryption, the Enable Encryption (WEP) box is grayed out and not selectable. This means you are not able to use encryption when communicating with the base station; go to Step 9. If your radio card supports 128-bit WEP encryption, the **Enable Encryption (WEP)** box is initially selected (checked).

Encryption provides protection against unauthorized accesses by wireless devices because communication messages are encoded by using this key. The same WEP encryption key must be used by all wireless devices communicating with the base station.

- Step 7** Click the WEP Encryption Key Entry Method desired to select ASCII or hexadecimal entry.
- Step 8** Enter the WEP encryption key. The WEP encryption key is visible when it is entered, but once it is saved and the BSCU is reopened, the field is blank.
- When using the ASCII entry method, enter the WEP encryption key in the Encryption Key field using 1 to 13 characters (printable keyboard characters).
 - When using the hexadecimal entry method, enter the WEP encryption key in the Encryption Key field using 1 to 26 characters (0 to 9 and A to F or a to f).
- Step 9** Record these settings.
- Step 10** Click the **Base Station** radio button in the Network Type area.
- Step 11** Click **OK**. The radio card configuration is complete when you see the base station wireless network IP address on the status line at the bottom of the screen.
-

Default Radio Card Configuration

The **Defaults** button on the bottom of the Wireless Client Network Parameters dialog box sets the radio card parameters as follows:

SSID—30313233343536373839303132 (hex).

Network Type—Base Station

Data Rate—Auto

Authentication Request—Open

Encryption—Enabled

The radio card settings not shown in the dialog box are as follows:

Authentication Type—Open

Association—Mixed Cells allowed

■ **Configure a Cisco Aironet Radio Card by using BSCU**