Preface

This guide helps you to install and minimally configure your Cisco Aironet 802.11a/b/g Wireless LAN Client Adapter (CB21AG or PI21AG) on a device that is running the Microsoft Windows 2000, XP, or Vista operating system.

Note Windows 2000, XP, and Vista are the only supported operating systems.

For additional information about the client adapter on a device that is running Windows 2000 or XP, see the *Cisco Aironet 802.11a/b/g Wireless LAN Client Adapters (CB21AG and PI21AG) Installation and Configuration Guide* (OL-4211-03 or later).

For additional information about the client adapter on a device that is running Windows Vista, see the *Cisco Aironet 802.11a/b/g Wireless LAN Client Adapters (CB21AG and PI21AG) Installation and Configuration Guide for Windows Vista* (OL-16534-01).

Note The Cisco.com URLs for this guide and others are included in the Links.htm file on the CD that shipped with your client adapter. The links in this file are active, so you can use your browser to go to them.

Introduction to the Client Adapters

The Cisco Aironet CB21AG and PI21AG client adapters are radio modules that provide transparent wireless data communications between fixed, portable, or mobile devices and other wireless devices or a wired network infrastructure. The client adapters are fully compatible when used in devices supporting “plug-and-play” (PnP) technology.

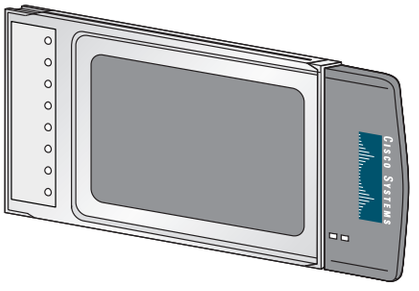
The primary function of the client adapters is to transfer data packets transparently through the wireless infrastructure by communicating with access points that are connected to a wired LAN. The adapters operate similarly to a standard network product except that the cable is replaced with a radio connection and an access point is required to make the connection to the wire. No special wireless networking functions are required, and all existing applications that operate over a network can operate using the adapters.

Caution Cisco Aironet CB21AG and PI21AG client adapter software is incompatible with other Cisco Aironet client adapter software. The Aironet Desktop Utility (ADU), which is available on devices running Windows 2000 or XP, must be used with CB21AG and PI21AG cards. The Aironet Client Utility (ACU) must be used with the Cisco Aironet 350 and CB20A client adapters.

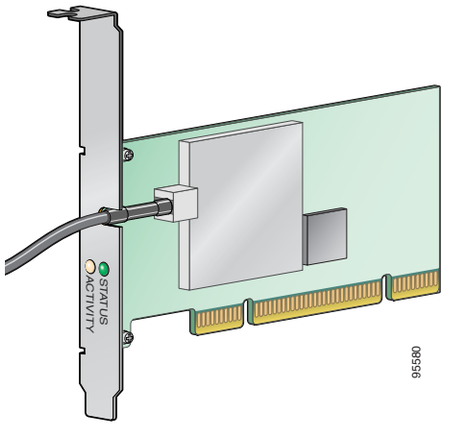
Types of Client Adapters

This document covers the two client adapters described below:

- **PC-Cardbus card** (model number: AIR-CB21AG) An IEEE 802.11a/b/g-compliant 2.4- and 5-GHz 54-Mbps client adapter card radio module with a Cardbus interface that can be inserted into any device equipped with an external 32-bit Cardbus slot. Host devices can include laptops and notebook computers.



- **PCI card** (model number: AIR-PI21AG)
  An IEEE 802.11a/b/g-compliant 2.4- and 5-GHz 54-Mbps client adapter card radio module that can be inserted into any device equipped with an empty PCI expansion slot, such as a desktop personal computer.



Software Components

The client adapters have two major software components: a driver and client utilities. These components are installed together by running a single executable Install Wizard file that is available from the CD that shipped with your client adapter or from Cisco.com.

Driver

The driver provides an interface between a computer's operating system and the client adapter, thereby enabling the operating system and the applications it runs to communicate with the adapter.

Client Utilities

The client utilities are optional applications that interact with the client adapter's radio to adjust settings and display information. For the CB21AG and PI21AG on a device that is running Windows 2000 or XP, the two primary client utilities are Aironet Desktop Utility (ADU) and Aironet System Tray Utility (ASTU). Once installed, ASTU is accessible from an icon in the Windows system tray. For the CB21AG and PI21AG on a device that is running Windows Vista, you also can adjust settings and display information using the Windows Vista diagnostic application.

Unpacking the Client Adapter

Each client adapter is shipped with the following items:

- 1-dBi gain antenna permanently attached by a 6.6-ft. (2.0-m) cable, antenna base, low-profile bracket, two mounting screws, and two plastic wall anchors (PCI cards only)
- Cisco Aironet 802.11a/b/g Wireless Adapters (CB21AG and PI21AG) CD

If any item is missing or damaged, notify your Cisco representative.

Additional Requirements

In addition to the items shipped with the client adapter, you also need the following items in order to install and use the adapter:

- For the CB21AG or PI21AG on a device running Windows 2000 or XP:
  - A 300-MHz (minimum) computer equipped with a 32-bit Cardbus slot or an empty PCI expansion slot
  - Service Pack 4 for Windows 2000
  - Service Pack 2 for Windows XP (Professional, Home)
  - 20 MB of free hard disk space (minimum)
  - 128 MB of RAM or greater (recommended)
- For the CB21AG or PI21AG on a device running Windows Vista:
  - A computer with a 1-GHz 32-bit (x86) or 64-bit (x64) processor
  - Windows Vista Service Pack 1 or Windows Vista with Microsoft KB932063 and KB935222 hotfixes. The software supports Microsoft Windows Vista Business, Enterprise, and Ultimate operating systems.
  - 40 GB hard drive with at least 15 GB of available space
  - 1 GB of system memory
- The appropriate tools for removing your computer's cover and expansion slot dust cover and for mounting the antenna base (for PCI cards)

- The following information from your system administrator:
  - The logical name for your workstation (also known as *client name*)
  - The protocols necessary to bind to the client adapter
  - The case-sensitive service set identifier (SSID) for your RF network
  - If your network setup does not include a DHCP server, the IP address, subnet mask, and default gateway address of your computer
  - The wired equivalent privacy (WEP) keys of the access points with which your client adapter will communicate, if your wireless network uses static WEP for security
  - The username and password for your network account
  - Protected access credentials (PAC) file if your wireless network uses EAP-FAST authentication with manual PAC provisioning

Installing the Client Adapter

You must perform the following procedures in the order listed here:

1. Inserting a Client Adapter, page 8
2. Obtaining the Latest Software for Client Adapters on Devices Running Windows 2000, XP, or Vista, page 21
3. Installing the Client Adapter Software on Devices Running Windows 2000 or XP, page 23, or Installing the Client Adapter Software on Devices Running Windows Vista, page 29

Inserting a Client Adapter

Follow these steps to insert a PC-Cardbus card or PCI card into your computer.

Inserting a PC-Cardbus Card

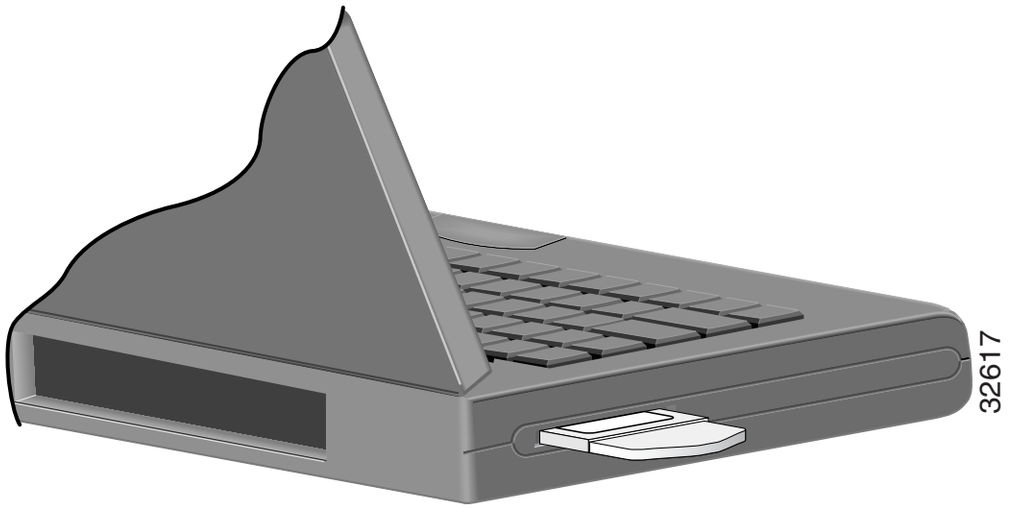
Step 1 Before you begin, examine the card. One end has a dual-row, 68-pin connector. The card is keyed so it can be inserted only one way into the Cardbus slot, which is on the left or right side of the computer depending on the model.

Step 2 Turn on your computer and let the operating system boot up completely.

Step 3 Hold the card with the Cisco logo facing up and insert it into the Cardbus slot, making sure that the card is fully seated (see Figure 1). The LED is green when the card is inserted properly.

Caution Do not force the card into your computer's Cardbus slot. Forcing it will damage both the card and the slot.

Figure 1 Inserting a PC-Cardbus Card into a Computer



Step 4 If the Found New Hardware Wizard window appears, click **Cancel**.

Step 5 Go to the "Finding the Latest Version of the Install Wizard" section on page 17.

Inserting a PCI Card

You must perform the following in the order listed below to insert a PCI card:

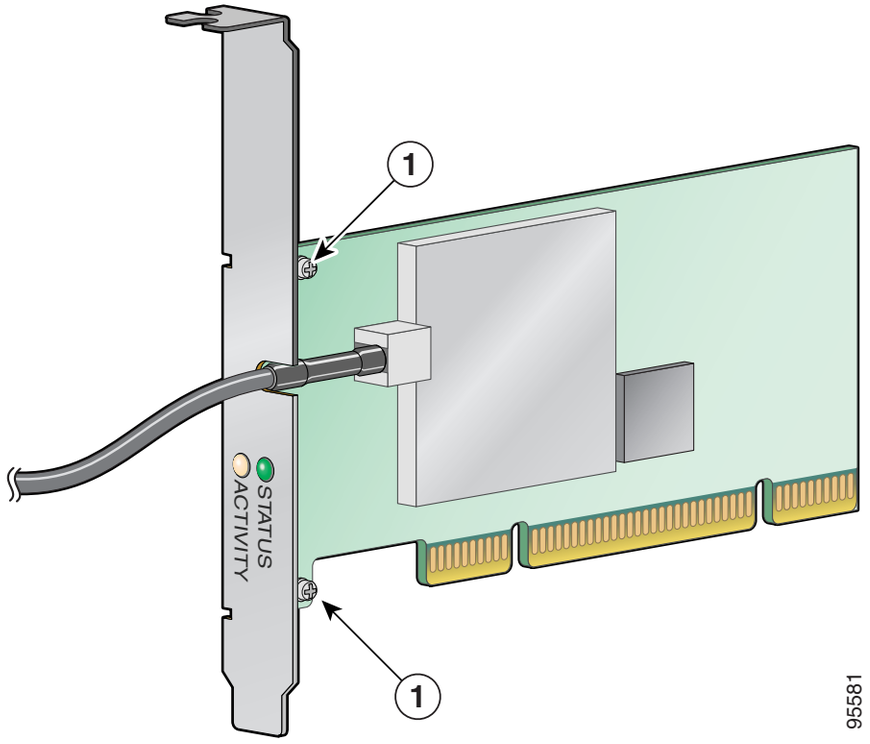
- Changing the Bracket (if required), page 11
- Inserting the Card, page 12
- Assembling the Antenna, page 15
- Mounting the Antenna, page 17

Changing the Bracket

The PCI card is shipped with a full-profile bracket attached. If the PC into which you are inserting the PCI card requires the card to use a low-profile bracket, follow these steps to change brackets.

Step 1 Unscrew the two screws that attach the bracket to the card. See Figure 2.

Figure 2 Changing the PCI Card Bracket



1	Bracket screws

Step 2 Slide the bracket away from the card; then tilt the bracket to free the antenna cable.

Caution Do not pull on the antenna cable or detach it from the PCI card. The antenna is meant to be permanently attached to the card.

Step 3 Hold the low-profile bracket to the card so that the LEDs slip through their corresponding holes on the bracket.

Step 4 Insert the screws that you removed in Step 1 into the holes on the populated side of the card near the bracket (see Figure 2) and tighten.

Inserting the Card

Step 1 Turn off the PC and all its components.

Step 2 Remove the computer cover.

Step 3 On most Pentium PCs, PCI expansion slots are white. Refer to your PC documentation for slot identification.

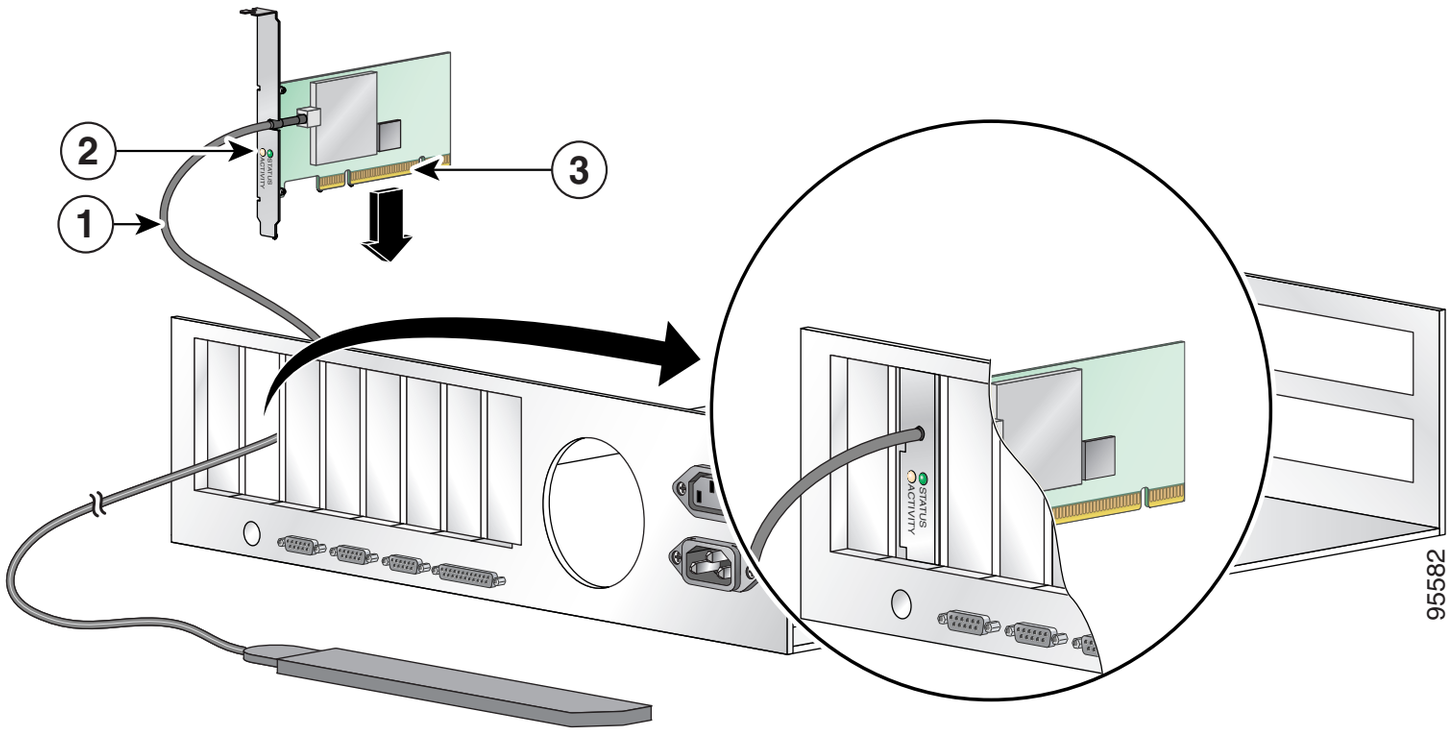
Step 4 Remove the screw from the top of the CPU back panel above an empty PCI expansion slot. This screw holds the metal bracket on the back panel.

Caution Static electricity can damage your PCI card. Before removing the card from its anti-static packaging, discharge static by touching a metal part of a grounded PC.

Step 5 Locate an empty PCI expansion slot inside your computer.

Step 6 Slip your card's antenna through the opening near the empty expansion slot so that it is located outside of the computer. See Figure 3.

Figure 3 Inserting a PCI Card into a PC



1	Antenna cable	**2**	LEDs	**3**	Card edge connector

Step 7 Tilt the card to allow the LEDs to slip through the opening in the CPU back panel. See the enlarged view in Figure 3.

Step 8 Press the card into the empty slot until its connector is firmly seated.

Caution Do not force the card into the expansion slot as this could damage both the card and the slot. If the card does not insert easily, remove it and reinsert it.

Step 9 Reinstall the screw on the CPU back panel and replace the computer cover.

Assembling the Antenna

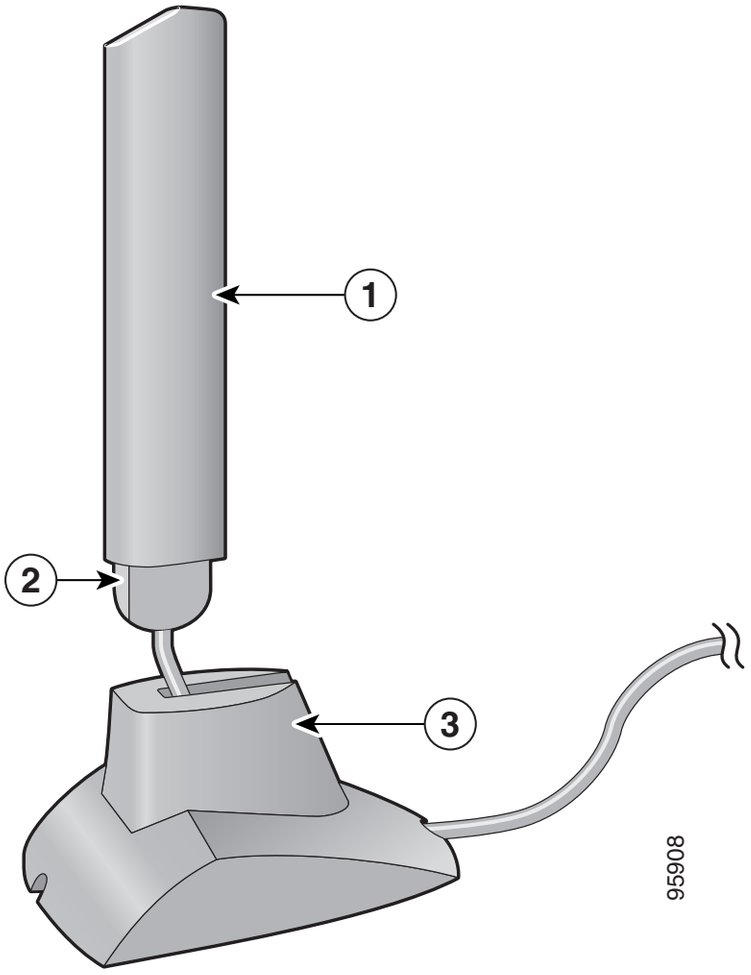
Step 1 Slide the antenna through the opening in the bottom of the antenna base.

Step 2 Position the antenna so its notches are facing the Cisco label on the front of the base. See Figure 4.

Step 3 Press the antenna cable into the receptacle on the top of the base as shown in Figure 4.

Step 4 Press the antenna straight down into the receptacle until it clicks into place.

Figure 4 Inserting the Antenna into Its Base



1	Antenna	**2**	Notch	**3**	Antenna base

Mounting the Antenna

Because the PCI card is a radio device, it is susceptible to RF obstructions and common sources of interference that can reduce throughput and range.

Follow these guidelines to ensure the best performance:

- Place the antenna in an area where large steel structures such as shelving units, bookcases, and filing cabinets will not obstruct radio signals being transmitted or received.
- Place the antenna away from microwave ovens and 2.4- and 5.8-GHz cordless phones. These products can cause signal interference because they operate in the same frequency range as the PCI card.

Follow the instructions in this section to position the PCI card's antenna on a flat horizontal surface or to mount it to a wall.

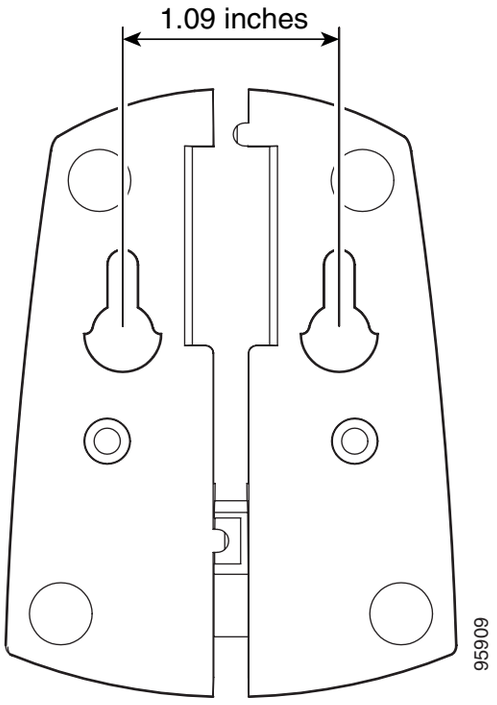
Step 1 If you want to use the antenna on a flat horizontal surface, position the antenna so it is pointing straight up and go to Step 7. If you want to mount the antenna to a wall, go to Step 2.

Step 2 Drill two holes in the wall that are 1.09 in. (2.8 cm) apart. Figure 5 shows the distance between the mounting holes on the bottom of the antenna base.

Step 3 Tap the two supplied wall anchors into the holes.

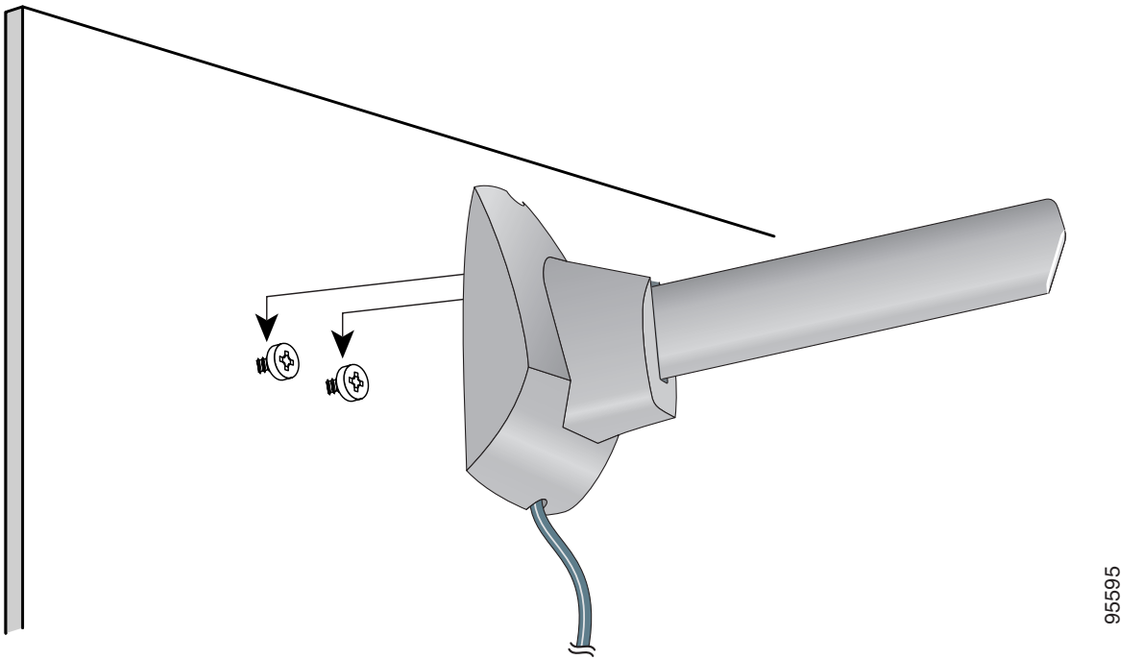
Step 4 Drive the two supplied screws into the wall anchors, leaving a small gap between the screw head and the anchor.

Figure 5 Bottom of Antenna Base



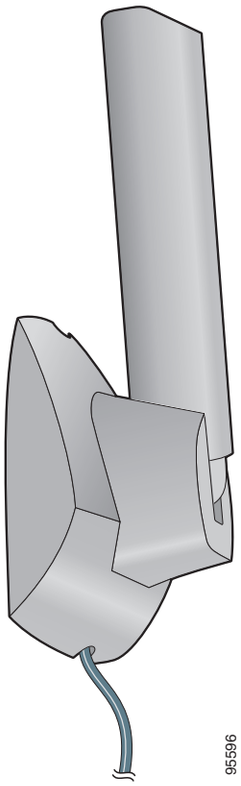
Step 5 Position the mounting holes on the bottom of the antenna base over the screws (see Figure 6) and pull down to lock in place.

Figure 6 Mounting the Antenna



Step 6 The antenna rotates 90 degrees from its base. For optimal reception, position the antenna so that it is pointing straight up (see Figure 7).

Figure 7 Rotating the Antenna



Step 7 Boot up your PC. The LED is green when the card is inserted properly.

Step 8 If the Found New Hardware Wizard window appears, click **Cancel**.

Step 9 Go to the "Obtaining the Latest Software for Client Adapters on Devices Running Windows 2000, XP, or Vista" section on page 21.

Obtaining the Latest Software for Client Adapters on Devices Running Windows 2000, XP, or Vista

The software is provided on the CD that shipped with your client adapter; however, Cisco recommends retrieving it from Cisco.com to ensure that you have the latest version.

- To obtain the software on the CD, open the FileList.txt file on the CD root directory.
- To obtain the latest software version from Cisco.com, follow these steps:

Step 1 Make sure that you have a Cisco.com username and password.

Step 2 If you do not have a Cisco.com username and password, go to Cisco's main page (http://www.cisco.com) and click **Register** (top). Follow the instructions to create a username and password.

Step 3 Use your computer's web browser to access the following URL:

http://www.cisco.com/public/sw-center/

Step 4 Click **Wireless Software**.

Step 5 Click **Client Adapters and Client Software**.

Step 6 Click **Cisco Aironet Wireless LAN Client Adapters**.

Step 7 Click either **Cisco Aironet 802.11a/b/g CardBus Wireless LAN Client Adapter (CB21AG)** or **Cisco Aironet 802.11a/b/g PCI Wireless LAN Client Adapter (PI21AG)**. Both links lead to the same software release.

Step 8 When prompted, enter your Cisco.com username and password, and click **OK**.

Step 9 Click **Windows 2000**, **Windows XP**, or **Windows Vista**.

Step 10 Under Available Releases, determine whether the Install Wizard file on Cisco.com has a later version number than the file on the CD. If it does, proceed to the next step. If it does not, use the Install Wizard file on your CD.

Step 11 Click the link with the latest release number.

Step 12 Click the software file. For Windows 2000 and XP, the file name is **WinClient-802.11a-b-g-Ins-Wizard-v*xx*.exe**, where ***xx*** is the version number. For Windows Vista, the file name is **WinClient-802.11a-b-g-Vista-Ins-Wizard-v*xx*.exe**, where ***xx*** is the version number.

Step 13 Click **Download**.

Step 14 Read the terms and conditions of the Software License Agreement. Click **Agree** to accept the terms and condition, or click **Decline** not to accept. Save the file to your device.

Installing the Client Adapter Software on Devices Running Windows 2000 or XP

Follow these steps to use the Install Wizard to install the client adapter driver and utilities on a device that is running Windows 2000 or XP.

Caution Do not eject your client adapter at any time during the installation process, including during the reboot.

Step 1 If you are installing the client adapter software from the CD that shipped with the client adapter, insert the CD into your computer's CD-ROM drive.

Step 2 Use Windows Explorer to find the Install Wizard file on the CD or on your computer's hard drive.

Step 3 Double-click the Install Wizard file (WinClient-802.11a-b-g-Ins-Wizard-v*xx*.exe). The "Starting InstallShield Wizard" message appears followed by the Preparing Setup window and the Cisco Aironet Installation Program window.

Step 4 Click **Next**. The Setup Type window appears.

Step 5 Choose one of the following options:

Note To ensure compatibility among software components, Cisco recommends that you install the client utilities and driver.

- **Install Client Utilities and Driver**—Installs the client adapter driver and client utilities.
- **Install Driver Only**—Installs only the client adapter driver. If you choose this option, go to Step 16.
- **Make Driver Installation Diskette(s)**—Enables you to create driver installation diskettes.

Step 6 Click **Next**. The Install Site Survey Utility window appears.

Step 7 Check the **Install Cisco Aironet Site Survey Utility** check box if you want to install a stand-alone utility, separate from ADU, that helps you to determine the best placement of infrastructure devices within your wireless network.

Note Refer to Appendix F of the *Cisco Aironet 802.11a/b/g Wireless LAN Client Adapters (CB21AG and PI21AG) Installation and Configuration Guide* for instructions on using the utility.

Step 8 If a message appears indicating that you are required to restart your computer at the end of the installation process, click **Yes**.

Note If you click **No**, you are asked to confirm your decision. If you proceed, the installation process terminates.

Step 9 When the Choose Destination Location window appears, perform one of the following:

- If you chose the first option in Step 5, click **Next** to install the client utility files in the C:\Program Files\Cisco Aironet directory.

Note If you want to install the client utilities in a different directory, click **Browse**, choose a different directory, click **OK**, and click **Next**.

- If you chose the Make Driver Installation Diskette(s) option in Step 5, insert a floppy disk into your computer and click **Next** to copy the driver to the diskette. Go to Step 16.

Note To copy the driver to a different drive or directory, click **Browse**, choose a new location, click **OK**, and click **Next**.

Step 10 The Select Program Folder window appears. Click **Next** to add program icons to the Cisco Aironet program folder.

Note If you want to specify a different program folder, choose a folder from the Existing Folders list or type a new folder name in the Program Folder field and click **Next**.

Step 11 If your computer is running Windows 2000, go to Step 16. If your computer is running Windows XP, the window titled IMPORTANT: Please Read! appears.

Step 12 Read the information displayed and click **Next**. The Choose Configuration Tool window appears.

Step 13 Choose one of the following options and click **Next**:

- **Cisco Aironet Desktop Utility (ADU)**—Enables you to configure your client adapter using ADU.
- **Third-Party Tool**—Enables you to configure your client adapter using a third-party tool, such as the Microsoft Wireless Configuration Manager in Windows XP.

Note If you choose Cisco Aironet Desktop Utility (ADU) above, the Microsoft Wireless Configuration Manager is disabled. If you ever manually enable it, you are prompted to disable it whenever ADU is activated.

Step 14 If you chose Cisco Aironet Desktop Utility (ADU) in Step 13, go to Step 16. If you chose Third-Party Tool, the Enable Tray Icon window appears.

Step 15 Check the **Enable Cisco Aironet System Tray Utility (ASTU)** check box if you want to be able to use ASTU even though you have chosen to configure your client adapter through a third-party tool instead of ADU and click **Next**.

Step 16 When prompted to reboot your computer after the software is installed, click **Yes**.

Step 17 When prompted to insert the card, insert it if you haven't already done so and click **OK**. The installation process begins, and you are notified as each software component is installed.

Step 18 When a message appears indicating that your computer needs to be rebooted, click **OK** and allow your computer to restart.

Step 19 If the Windows Found New Hardware Wizard appears after your computer reboots, click **Next**, allow the wizard to install the software for the client adapter, and click **Finish**.

Step 20 If your network setup does not include a DHCP server and you plan to use TCP/IP, follow one of these steps for your operating system.

- **Windows 2000—**Double-click **My Computer**, **Control Panel**, and **Network and Dial-up Connections**. Right-click **Local Area Connection *x*** (where *x* represents the number of the connection). Click **Properties**. In the Components Checked Are Used by This

Connection field, click **Internet Protocol (TCP/IP)** and **Properties**. Choose **Use the following IP address** and enter the IP address, subnet mask, and default gateway address of your computer (which can be obtained from your system administrator). Click **OK** twice.

- **Windows XP**—Double-click **My Computer**, click **Control Panel**, click **Network and Internet Connections**, and click **Network Connections**. Right-click the Cisco Aironet wireless network connection (for example, **Wireless Network Connection** or **Wireless Network Connection 2**). Click **Properties**. In the This Connection Uses the Following Items field, select **Internet Protocol (TCP/IP)** and click **Properties**. Choose **Use the following IP address** and enter the IP address, subnet mask, and default gateway address of your computer (which can be obtained from your system administrator). Click **OK** to save your changes and close the Internet Protocol (TCP/IP) Properties window. Click **OK** to close the properties window for the Cisco Aironet wireless network connection.

Step 21 If you are prompted to restart your computer, click **Yes**.

Step 22 Go to the "Configuring the Client Adapter on Devices Running Windows 2000 or XP" section on page 30 to configure your client adapter.

Installing the Client Adapter Software on Devices Running Windows Vista

Follow these steps to use to install the client software on a device that is running Windows Vista.

Step 1 Double-click **WinClient-802.11a-b-g-Vista-Ins-Wizard-v*xx*.exe**, where ***xx*** is the version number. The Cisco Aironet Installation Program window appears.

Step 2 Click **Next**. Another Cisco Aironet Installation Program window appears. This window states that the installation program installs the driver automatically when the client adapter is inserted.

Step 3 Click **OK**. A Setup Status Window appears. Allow the installation program to run. An InstallShield Wizard Complete window appears.

Step 4 Click **Finish**.

Step 5 Go to the "Configuring the Client Adapter on Devices Running Windows Vista" section on page 33 to configure your client adapter.

Configuring the Client Adapter on Devices Running Windows 2000 or XP

This section provides instructions for using Cisco's Aironet Desktop Utility (ADU) to configure your client adapter.

Note Refer to Appendix E of the *Cisco Aironet 802.11a/b/g Wireless LAN Client Adapters (CB21AG and PI21AG) Installation and Configuration Guide* if you are planning to configure your client adapter through the Microsoft Wireless Configuration Manager in Windows XP rather than ADU.

Note Refer to Chapters 4 and 5 of the *Cisco Aironet 802.11a/b/g Wireless LAN Client Adapters (CB21AG and PI21AG) Installation and Configuration Guide* if you need additional information on creating and managing profiles and setting specific configuration parameters.

Opening Profile Manager

To open ADU's profile manager, double-click the **Aironet Desktop Utility** icon on your desktop and click the **Profile Management** tab.

Creating a New Profile

Follow these steps to create a new *profile* (or saved configuration) for your client adapter.

Step 1 Click **New** on the Cisco Aironet Desktop Utility (Profile Management) window. The Profile Management (General) window appears.

Step 2 Enter a name for your new profile (such as *Office*, *Home*, etc.) in the Profile Name field.

Step 3 Perform one of the following:

- If you want this profile to use the default values, click **OK**. The profile is added to the profiles list on the Cisco Aironet Desktop Utility (Profile Management) window.
- If you want to change any of the configuration parameter settings (for example, to values specified by your system administrator), select the **General**, **Advanced**, and **Security** tabs and change any

desired parameter values. Click **OK** when you are done making changes.

The profile is added to the profiles list on the Cisco Aironet Desktop Utility (Profile Management) window.

Note The profiles for PC-Cardbus cards are tied to the slot in which the card is inserted. Therefore, you must always insert your PC-Cardbus card into the same slot, create profiles for both slots, or export the profiles from one slot and import them for the other slot.

Selecting the Active Profile

Follow these steps to specify the profile that your client adapter is to use.

Step 1 Open ADU and click the **Profile Management** tab.

Step 2 Select a profile for the client adapter to use by clicking that profile in the profiles list.

Step 3 Click **Activate** to save your selection. The client adapter starts using that profile. The active profile is designated by a radio icon in the profiles list.

Note To use ASTU instead of ADU to select the active profile, right-click the ASTU icon, select the **Select Profile** option, and select a profile. The active profile is designated by a check mark.

Configuring the Client Adapter on Devices Running Windows Vista

This section provides instructions for creating a profile for a CB21AG or PI21AG on devices that are running Windows Vista.

Step 1 Choose **Start > Control Panel > Network and Sharing Center**. The Networking and Sharing Center window appears.

Step 2 Click **Set up a connection or network**. The Choose a connection option dialog box appears.

Step 3 Click **Manually connect to a wireless network**.

Step 4 Click **Next**. The Choose a wireless adapter dialog box appears.

Step 5 From the drop-down list, choose the adapter that corresponds to the CB21AG or PI21AG.

Note Client adapters in the Choose a wireless adapter drop-down list might be generically named and difficult to identify (for example, *Wireless Network Connection or Wireless Network Connection 2*). If you have multiple client adapters on your device, choose **Network and Sharing Center > Manage network connections**. In the Views drop-down list, choose **Details** to see the generic name that corresponds to each client adapter. When you view the details of available network connections, the client adapter is identified in the Device Name column.

Step 6 Click **Next**. The Enter information for the wireless network you want to add dialog box appears.

Step 7 Enter all required information, such as the network name, the security type, and the encryption type, in the fields in this dialog box.

Step 8 Click **Next**. The Successfully added <network name> dialog box appears. From this dialog box, you can either connect to a network with the profile you created, or you can change the settings of the profile that you just created.

In Case of Difficulty

If you experience difficulty getting your client adapter installed and running, look for a solution to your problem in the following places:

- ADU's troubleshooting utility. To use this utility, open ADU, choose **Troubleshooting** from the Action drop-down menu, and click **Run Test**. The utility runs and displays the results.
- The Windows Vista diagnostic application.
- The "Troubleshooting chapter" of the *Cisco Aironet 802.11a/b/g Wireless LAN Client Adapters (CB21AG and PI21AG) Installation and Configuration Guide*.
- The Technical Assistance Center (TAC) website. To access this site, go to Cisco.com, click **Technical Support & Documentation** > **Technical Support & Documentation**. Click **Documentation** and then click

Wireless under Product and Support Documentation. Click **Cisco Aironet Wireless LAN Client Adapters** and **Troubleshoot and Alerts** to find information on the problem you are experiencing.

Documentation Feedback

To submit feedback on this document, detach, complete, and mail the response card attached to the back cover or email your comments to bug-doc@cisco.com. We appreciate your comments.

Safety Information

The FCC, with its action in ET Docket 96-8, has adopted a safety standard for human exposure to RF electromagnetic energy emitted by FCC-certified equipment. When used with approved Cisco Aironet antennas, Cisco Aironet products meet the uncontrolled environmental limits found in OET-65 and ANSI C95.1, 1991. Proper operation of this radio device according to the instructions in this document and the installation and configuration guide will result in user exposure substantially below the FCC recommended limits.

- Do not touch or move antenna(s) while the unit is transmitting or receiving.

- Do not hold any component containing a radio such that the antenna is very close to or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; otherwise, the radio may be damaged.
- Use in specific environments:
  - The use of wireless devices in hazardous locations is limited to the constraints posed by the safety directors of such environments.
  - The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).
  - The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.

Warning **Do not operate your wireless network device near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use.**

Warning **In order to comply with FCC RF exposure limits, antennas should be located at a minimum of 7.9 inches (20 cm) or more from the body of all persons.**

Warning **This device has been tested and complies with FCC RF Exposure (SAR) limits in typical laptop computer configurations and this device can be used in desktop or laptop computers with side mounted PC Card slots that can provide at least 0.394 in (1 cm) separation distance from the antenna to the body of the user or a nearby person. Thin laptop computers may need special attention to maintain antenna spacing while operating. This device cannot be used with handheld PDAs (personal digital assistants). Use in other configurations may not ensure compliance with FCC RF exposure guidelines. This device and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter.**

Note Translations of these safety warnings are provided in the Regulatory.pdf file on the CD that shipped with your client adapter.

Regulatory Information

Regulatory information for the CB21AG and PI21AG client adapters is provided in the Regulatory.pdf file on the CD that shipped with your client adapter.

Declaration of Compliance

The Declaration of Compliance for this product relevant to the European Union and other countries following EU Directive 1999/5/EC (R&TTE Directive) can be found in the *Cisco Aironet 802.11a/b/g Wireless LAN Client Adapters (CB21AG and PI21AG) Installation and Configuration Guide.*

Cisco One-Year Limited Hardware Warranty Terms

There are special terms applicable to your hardware warranty and various services that you can use during the warranty period. Your formal Warranty Statement, including the warranties and license

agreements applicable to Cisco software, is available on Cisco.com. Follow these steps to access and download the *Cisco Information Packet* and your warranty and license agreements from Cisco.com.

1. Launch your browser, and go to this URL:

   http://www.cisco.com/univercd/cc/td/doc/es_inpck/cetrans.htm

   The Warranties and License Agreements page appears.

2. To read the *Cisco Information Packet*, follow these steps:

   a. Click the **Information Packet Number** field, and make sure that the part number 78-5235-03B0 is highlighted.

   b. Select the language in which you would like to read the document.

   c. Click **Go**.

      The Cisco Limited Warranty and Software License page from the Information Packet appears.

   d. Read the document online, or click the **PDF** icon to download and print the document in Adobe Portable Document Format (PDF).

Note You must have Adobe Acrobat Reader to view and print PDF files. You can download the reader from Adobe's website: http://www.adobe.com

3. To read translated and localized warranty information about your product, follow these steps:

   a. Enter this part number in the Warranty Document Number field:

      78-10747-01C0

   b. Select the language in which you would like to view the document.

   c. Click **Go**.

      The Cisco warranty page appears.

   d. Read the document online, or click the **PDF** icon to download and print the document in Adobe Portable Document Format (PDF).

You can also contact the Cisco service and support website for assistance:

http://www.cisco.com/public/Support_root.shtml.

Duration of Hardware Warranty

One (1) Year

Replacement, Repair, or Refund Policy for Hardware

Cisco or its service center will use commercially reasonable efforts to ship a replacement part within ten (10) working days after receipt of a Return Materials Authorization (RMA) request. Actual delivery times can vary, depending on the customer location.

Cisco reserves the right to refund the purchase price as its exclusive warranty remedy.

To Receive a Return Materials Authorization (RMA) Number

Contact the company from whom you purchased the product. If you purchased the product directly from Cisco, contact your Cisco Sales and Service Representative.

Complete the information below, and keep it for reference.

Company product purchased from	
Company telephone number	
Product model number	
Product serial number	
Maintenance contract number	