



## Lab 2.4.3 Install a WLAN Adapter Card

Estimated Time: 15 Minutes

Number of Team Members: six teams with two students per team

### Objective

The student will learn the procedures for installing the client adapter in the PC for wireless networking.

### Scenario

Install a wireless LAN adapter (WLAN) card in a laptop, desktop, or both.



## Preparation

This lab will require the following materials:

- Desktop or Laptop PC
- One Cisco Aironet PCI352, CB20A, or PCM 352 Client Adapter Network Interface Card.
- One PC installed with a Microsoft Operating System
- One Screwdriver for PCI card installation
- Instructor should preconfigure SSIDs on the APs and determine the IP addresses needed for the PCs or laptop computers that are used in this lab

### Step 1 Installing the client adapter card in a laptop

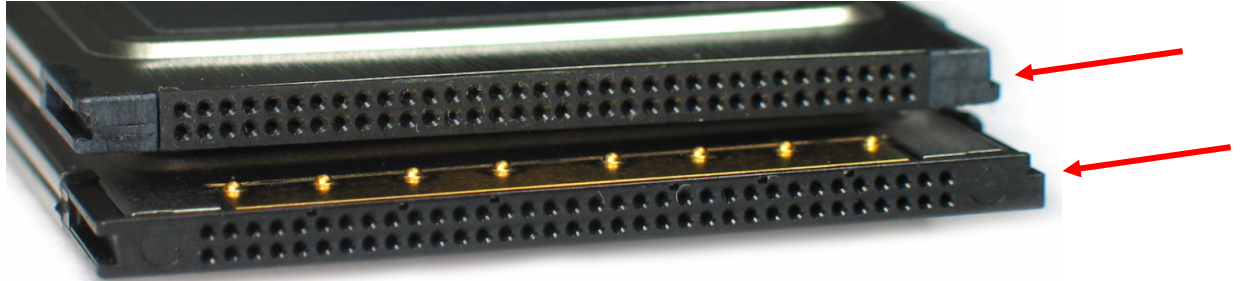
Before installing a new adapter card into the laptop, the laptop may need to have an integrated wireless NIC disabled. To disable an integrated wireless NIC, click on the **Start** button and select the **Control Panel** option. If in Classic View, select **Network Connections** or the appropriate Network Control panel. If in Category View, select the **Network and Internet Connections** category and select **Network Connections**. Right-click on the integrated wireless adapter and select **Disable**.

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**Note** When inserting a wireless NIC into a laptop, the power can be on or off.

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Insert the Cisco Aironet PCM 352 Client Adapter into the PCMCIA slot. The CB20A installs into the Laptop PC cardbus slot. A CardBus adapter will not fit completely into a PCMCIA laptop slot. This may be a problem on older laptops. A PCMCIA adapter, however, will fit in a PCMCIA slot or a CardBus slot. Below is a comparison of the cards.



Notice the different shape on the right hand side of the cards.

a. Which card is located in the top of the graphic?

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b. Which card is located on bottom?

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## Step 2 Installing the client adapter card in a desktop

- a. Turn off the PC and all the components.
- b. Remove the computer cover.
- c. 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.
- d. Examine the client adapter. The antenna connector and the LEDs face out of the computer and are visible when the cover is placed back on. Prior to installing the card, check to make sure the 2-dB dipole 'rubber ducky' antenna has been removed to prevent damage during the card insertion.
- e. Tilt the adapter to allow the antenna connector and LEDs to slip through the opening in the CPU back panel.
- f. Press the client adapter into the empty slot until the connector is firmly seated. Install the screw.



- g. Reinstall the screw on the CPU back panel and replace the computer cover.
- h. Attach the 2-dB dipole antenna to the adapter antenna connector until it is finger-tight.



- i. For optimal reception, position the antenna so it is straight up.
- j. Boot up the computer and proceed to Step 3. Install the drivers for Windows.

### Step 3 Install the drivers for Windows

- a. After the client adapter is installed into the computer, Windows automatically detects it and briefly opens the Found New Hardware window.
- b. The Found New Hardware Wizard window opens and indicates that the wizard will help to install the driver.
- c. Click **Next**. Another window opens and asks what the wizard should do.
- d. Select the recommended **Search for a suitable driver for my device** and click **Next**.
- e. Select CD-ROM drives. Deselect all other options. Insert the Cisco Aironet Series Wireless LAN Adapters CD into the computer CD-ROM drive. Click **Next**.
- f. The wizard finds the installation files on the CD and displays the search results.
- g. When the client adapter driver is displayed, click **Next** to copy the required files.
- h. When Windows has finished the installation, click **Finish**.
- i. Remove the CD from the computer CD-ROM drive.

### Step 4 Configure the SSID through Windows

- a. Double-click **My Computer**, **Control Panel**, and **System**. For Windows XP, click **Start>My Computer>Control Panel>System**. See your instructor for instructions for other operating systems
- b. In the System Properties window, click the **Hardware** tab.
- c. Click **Device Manager**.
- d. In the Device Manager window, double-click **Network Adapters**.

- e. Right-click the **Cisco Systems 350 Series PCMCIA Wireless LAN adapter, or the applicable Aironet Card**.
- f. Click **Properties**.
- g. In the client adapter Properties window, click the **Advanced** tab.
- h. In the Advanced window, select **Client Name**. Type the unique client name of the computer in the Value dialog box.
- i. Select **SSID**. Type the RF network SSID, as assigned by the instructor, in the Value dialog box. Remember the SSID is case-sensitive. Click **OK**.

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**Note** The Service Set Identifier (SSID) is a unique identifier that stations must use to be able to communicate with an AP. The SSID can be any alphanumeric entry up to a maximum of 32 characters.

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### Step 5 Complete the driver installation without a DHCP server

- a. Double-click **My Computer, Control Panel, and Network and Dial-up Connections**. For Windows XP, click **Start>Control Panel** then double-click **Network and Dial-up Connections**. See your instructor for instructions for other operating systems
- b. Right-click **Local Area Connection**.
- c. Click **Properties, Internet Protocol (TCP/IP), and Properties**.
- d. Click **Use the following IP address** and enter the IP address, subnet mask, and default gateway address of the computer which can be obtained from the instructor. Click **OK**.
- e. In the Local Area Connection Properties window, click **OK**.
- f. If prompted to restart the computer, click **Yes**.
- g. The driver installation is complete.

### Step 6 Verify the TCP/IP settings

- a. Select **Start > Run** and enter the following:
- b. On Win2000 or XP, enter **cmd** to bring up the command prompt. While at the command prompt, type in **ipconfig /all** to verify the IP settings.
- c. On Win9x, enter the **winipcfg** command from **Start>Run** and press **Enter**

### Step 7 (Optional) Installing on other operating systems

The URLs below provide information for installing the Aironet Client Adapter card on non-Windows Operating Systems:

- a. [http://www.cisco.com/en/US/products/hw/wireless/ps4555/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/hw/wireless/ps4555/products_installation_and_configuration_guides_list.html)
- b. <http://www.cisco.com/en/US/products/hw/wireless/ps4555/ps448/index.html>