



Release Notes for Cisco Aironet Client Adapter Install Wizard, Version 1.0 for Windows

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Introduction

This document describes system requirements, important notes, new and changed information, installation and upgrade procedures, and caveats for the following releases of Cisco Aironet client adapter software:

- Install Wizard version 1.0
- Firmware version 5.02.19
- PCM/LMC/PCI card driver version 8.3
- Mini PCI and PC-Cardbus card driver version 3.5
- Aironet Client Utility (ACU) version 6.0
- Aironet Client Monitor (ACM) version 2.0
- LEAP security module version 6.0
- PEAP security module version 1.01
- EAP-SIM security module version 1.0


Note

Firmware version 5.02.19 does not include support for rogue access point detection. If you require this feature, use ACU to upgrade to firmware version 5.02.20 after the Install Wizard has been installed.

System Requirements

You need the following in order to install the above client adapter software releases:

- One of the following Cisco Aironet client adapters:
 - 340, 350, or 4800 series PC, LM, or PCI card
 - 350 series mini PCI card
 - PC-Cardbus (CB20A) card
- A computer running Windows 98, 98 SE, NT, 2000, Me, or XP


Note

Windows NT Service Pack 6 or greater is required for computers running Windows NT.


Note

PC-Cardbus cards are not supported for use with Windows NT.


Note

All drivers and supporting software (Card and Socket Services) for the PC card slot or Cardbus slot must be loaded and configured.

- A display with a minimum resolution of 800 x 600

- 35 MB of free hard disk space (minimum)



Note The Install Wizard terminates if you attempt to install it on a computer that has less than 35 MB of hard disk space.

- A maximum of eight network connections if your computer is running Windows 98 or 98 SE
- The Microsoft 802.1X supplicant, if your wireless network uses EAP-TLS, PEAP, or EAP-SIM authentication
- If your wireless network uses PEAP authentication with a One-Time Password (OTP) user database:
 - SofToken version 1.3, 2.0, or greater from Secure Computing; SecurID version 2.5 from RSA; or hardware token from OTP vendors
 - Your software token PIN or hardware token password
- If your wireless network uses EAP-SIM authentication:
 - PCSC-compliant smartcard reader installed in your computer's Type II or Type III PC card slot
 - Gemplus SIM+ smartcard inserted in the reader
 - The SIM card's PIN
- Access points to which your client adapter may attempt to authenticate must use the following firmware versions or greater: 11.23T (340 and 350 series access points), 12.2(4)JA (1100 series access points), or 11.54T (1200 series access points).
- All necessary infrastructure devices (such as access points, servers, gateways, user databases, etc.) must be properly configured for any authentication type you plan to enable on the client.

Important Notes

Customized Installation Images (Notice to IT Professionals)



Caution

Use caution when bundling the client adapter software into a customized installation image. If the registry settings are modified, the software may not install and uninstall properly.

Firmware Is Upgraded Automatically

After you install the Install Wizard file on a Windows computer, the firmware of any client adapter that is inserted into that computer may be automatically upgraded to version 5.02.19. Both of the client adapter's LEDs light continuously while the firmware upgrade occurs.



Caution

Do not eject the client adapter while the firmware is being upgraded.

**Note**

If you uncheck the **Automatically Load New Firmware When NDIS Driver Is Updated** check box on the ACU Preferences screen, the firmware will not be upgraded when future client adapters are inserted. However, this option is radio-type and, for PC-Cardbus cards, slot dependent. Therefore, if you insert a client adapter of a different card type (such as a 340 instead of a 350) or insert the same PC-Cardbus card into a different slot, the firmware will be upgraded unless you uncheck this parameter for the new card type.

Using Client Adapters with Both Windows and Windows CE Devices

If you insert a client adapter that has been upgraded to firmware version 5.02.19 into a Windows CE device, the adapter functions only if the device is running Windows CE client adapter driver and client utility version 2.30 or greater.

Uninstalling Software Components

All profiles are deleted if you use the Uninstall All Components option on the Cisco Aironet Wireless LAN Client Adapter Installation Wizard screen to uninstall the client adapter software. Cisco recommends that you use the Profile Manager's export feature to save your profiles before uninstalling the software.

Inserting and Removing Client Adapters

The following rules apply when inserting and removing client adapters:

- If you start ACU while a client adapter of one radio type is inserted (such as a 340 series PC card) and then eject the card and replace it with a card of another radio type (such as a 350 series PC card), ACU indicates that "Your Wireless LAN Adapter is not inserted" until ACU is shut down and restarted.
- 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.

Windows Wireless Network Connection Icon Shows Unavailable Connection (Windows XP Only)

If your computer is running Windows XP and you configured your client adapter using ACU, the Windows Wireless Network Connection icon in the Windows system tray may be marked with a red *X* and show an unavailable connection even though a wireless connection exists. This is caused by a conflict between ACU and Windows XP's wireless network settings. Simply ignore the Windows icon and use the ACM icon to check the status of your client adapter's wireless connection.

Cisco Aironet Software Requires Completion of Encryption Authorization Form

In order to access Cisco Aironet software from the Software Center on Cisco.com, you must now fill out a form to receive authorization to download encrypted software. Registered Cisco.com users are required to fill out the form only once while public users must do so once each session, each time software is downloaded. A form is automatically created for public users. The form for registered Cisco.com users is located at the following URL:

http://www.cisco.com/cgi-bin/Software/Crypto/crypto_main.pl

Supporting Documentation

Version -05 of the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows* pertains specifically to versions of the software that are available through the Install Wizard. If you are using, installing, or upgrading to versions of client adapter software that do not use the Install Wizard, refer to the previous version of this manual (-04) for information and instructions.

New and Changed Information

Install Wizard

An Install Wizard file is now available for the Cisco Aironet client adapters. This file (named *Windows-Client-Installation-Wizard-1.exe*) is a self-extracting executable file that enables you to install or upgrade Cisco Aironet client adapter firmware, drivers, utilities, and security modules all at once.

This file can be run on a Windows 98, 98 SE, NT, 2000, Me, or XP computer and can be used with any of the following client adapter types:

- 340, 350, and 4800 series PC, LM, and PCI cards
- 350 series mini PCI cards
- PC-Cardbus (CB20A) cards

Prior to the release of the Install Wizard file, each software component had to be installed separately.

Aironet Client Monitor (ACM)

The functionality of ACM, an optional application that is accessible from an icon in the Windows system tray, has been expanded in the 2.0 release. ACM now provides a small subset of the features available through ACU. Specifically, it enables you to access status information about your client adapter and perform basic tasks. ACM has three GUI components: an icon, a tool tip window, and a pop-up menu.

ACM Icon







The appearance of the ACM icon has changed since the previous release, but it continues to indicate the connection status of the client adapter. [Table 1](#) interprets the different appearances of the ACM icon.



Note

If more than one client adapter is installed, an ACM icon appears in the system tray for each adapter.

Table 1 *Interpreting the ACM Icon*

Icon	Description
	The client adapter's radio is turned off.
	The client adapter is not associated to an access point.
	The client adapter is associated to an access point, but the user is not authenticated.
	The client adapter is associated to an access point, and the link quality is excellent or good.
	The client adapter is associated to an access point, and the link quality is fair.
	The client adapter is associated to an access point, and the link quality is poor.

ACM Tool Tip Window

The tool tip window appears when you hover the cursor over the ACM icon. This window displays the following information:

- Active profile
- SSID of the access point to which the client adapter is associated
- Connection status of the client adapter
- Link quality
- Link speed
- Client adapter type
- Client adapter IP address

ACM Pop-Up Menu

The pop-up menu appears when you right-click the ACM icon. This menu provides options that enable you to perform the following tasks:

- Find the ACM version number and access online help
- Exit ACM
- Activate ACU and the troubleshooting utility
- Determine when ACM runs and select the options that appear on the ACM pop-up menu
- Turn the client adapter's radio on or off
- Force the client adapter to try to reauthenticate using the username and password of the current profile
- Select the active profile for the client adapter
- Display the connection status of the client adapter

Troubleshooting Utility

The new Cisco Wireless LAN Adapter Troubleshooting Utility enables you to identify and resolve configuration and association problems with your client adapter.

To activate the troubleshooting utility, select **Troubleshooting** from the ACU Options drop-down menu or the ACM pop-up menu and click **Start**. The utility performs a series of eight tests to check the operation of your client adapter and then displays the results.

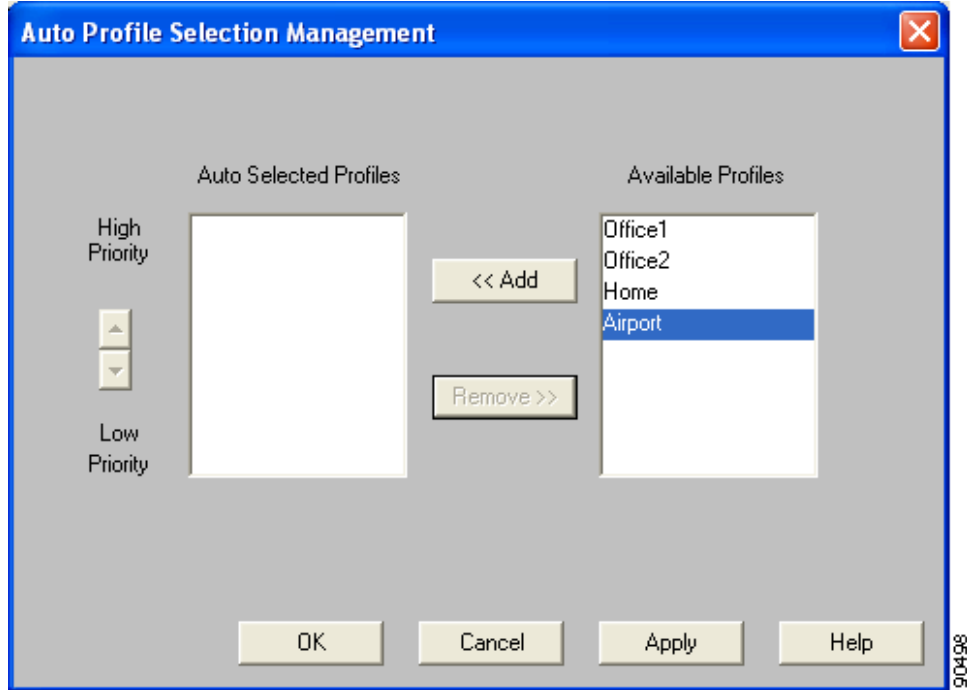
The utility also features a **Detailed Report** button that enables you to see more detailed information and a **Save** button that enables you to save the report to a file. The report contains possible repair suggestions and valuable information that, if necessary, could be used by TAC to analyze any problems.

Prioritizing Profiles in Auto Profile Selection

ACU's Profile Manager now enables you to prioritize the profiles that you include in auto profile selection. Follow the steps below.

-
- Step 1** Click the ACU **Select Profile** icon. The Select Profile screen appears.
- Step 2** Click the **Manage** button next to the Use Auto Profile Selection option. The Auto Profile Selection Management screen appears (see [Figure 1](#)).

Figure 1 Auto Profile Selection Management Screen



Step 3 All the profiles that you created are listed in the Available Profiles box. Highlight each one that you want to include in auto profile selection and click the **Add** button. The profiles move to the Auto Selected Profiles box.

The following rules apply to auto profile selection:

- You must include at least two profiles in the Auto Selected Profiles Box.
- The profiles must specify an SSID; otherwise, they cannot be selected in the Available Profiles box.
- Profiles cannot specify multiple SSIDs. If they do, they cannot be selected in the Available Profiles box.
- Each profile that is included in auto profile selection must have a unique SSID. For example, if Profile A and Profile B both have “ABCD” as their SSID, only Profile A or Profile B can be included in auto profile selection.



Note If you ever want to remove a profile from auto profile selection, highlight the profile in the Auto Selected Profiles box and click the **Remove** button. The profile moves to the Available Profiles box.

Step 4 The first profile in the Auto Selected Profiles box has the highest priority while the last profile has the lowest priority. To change the order (and priority) of your auto-selectable profiles, highlight the profile that you want to move and click the **High Priority** or **Low Priority** arrow to move the profile up or down, respectively.

When auto profile selection is enabled, the client adapter scans for an available network. The profile with the highest priority and the same SSID as one of the found networks is the one that is used to connect to the network. If the connection fails, the client adapter tries the next highest priority profile that matches the SSID and so on.

Step 5 Click **OK** to save your changes.

Reauthenticate Menu Option

The Reauthenticate option has been added to the Commands drop-down menu in ACU. This option can be used to force your client adapter to try to reauthenticate using the username and password of the current profile.

LEAP Authentication Status Screen

The LEAP Authentication Status screen now displays the success or failure of each stage in the LEAP authentication process. In addition, the screen also includes a **Shown minimized next time** option that causes the screen to appear minimized in the Windows system tray on future LEAP authentication attempts.

Other Changes

The following changes have also been made to the client adapter software for Windows:

- Windows 95 is not supported in this software release.
- EAP-MD5 authentication is not supported in this software release.
- PC-Cardbus cards now support PEAP and EAP-SIM authentication.
- Profiles that use a saved LEAP username and password can be included in auto profile selection.
- The title bar at the top of the Aironet Client Utility screen now shows the profile that is being used by the client adapter.
- Some 340 series cards may improperly display a *radio_name* of 4800 in the ACU status bar.

Installing or Upgrading the Client Adapter Software

Follow the steps below to install or upgrade the client adapter software on a computer running Windows 98, 98 SE, 2000, Me, or XP. If your computer is running Windows NT, follow the installation instructions in version -05 of the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows*.


Note

You do not need to uninstall any previous versions of Cisco Aironet client adapter software (firmware, drivers, or utilities) prior to installing the Install Wizard.

Step 1 Use your computer's web browser to access the following URL:

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

Step 2 Select **Option #2: Aironet Wireless Software Display Tables**.


Note

You can download software from the Software Selector tool instead of the display tables. To do so, select **Option #1: Aironet Wireless Software Selector**, follow the instructions on the screen, and go to [Step 6](#).

Step 3 Select **Cisco Aironet Wireless LAN Client Adapters**.

Step 4 Under Aironet Client Installation Wizard Files (For Windows), select **Aironet Client Adapter Installation Wizard for Windows**.

Step 5 Select the Install Wizard file.

Step 6 Read and accept the terms and conditions of the Software License Agreement.

Step 7 Select the file again to download it.

Step 8 Save the file to your computer's hard drive.

Step 9 Insert the client adapter into your computer if it is not already inserted.


Caution

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

Step 10 If a driver is not currently installed for your client adapter, the Found New Hardware Wizard screen appears. Click **Cancel**.

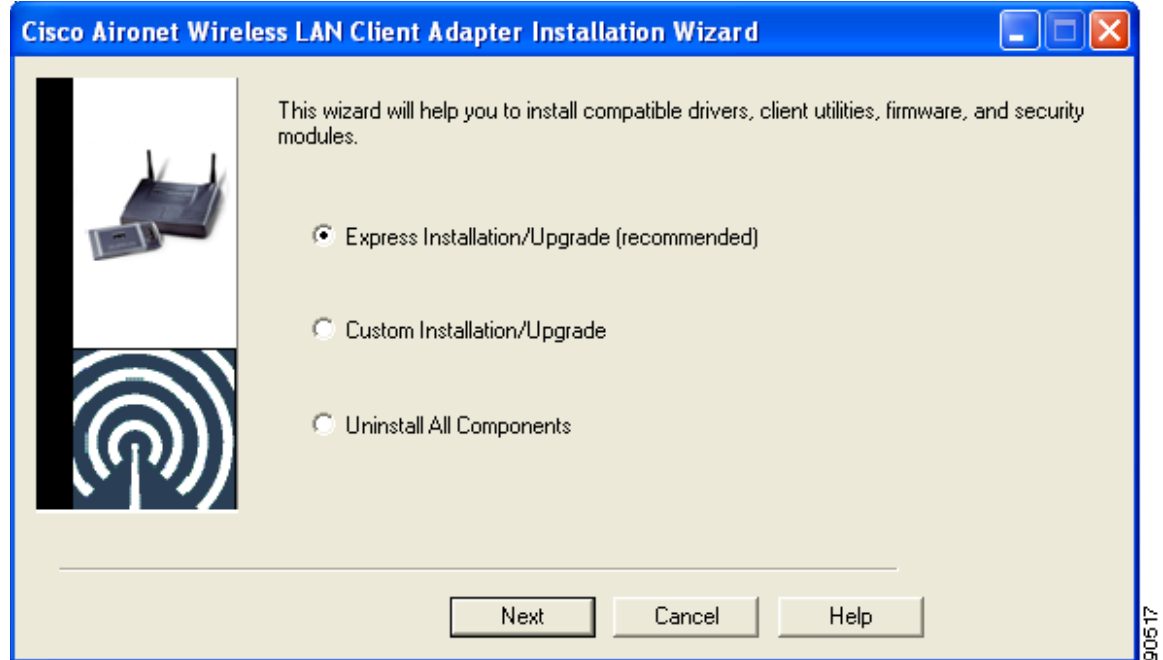
Step 11 Find the Install Wizard file using Windows Explorer, double-click it, and extract its files to a folder.


Note

To extract the files, click **Browse** on the WinZip Self-Extractor screen, select the folder where you want the files to be placed, click **OK** and **Unzip**. After the files have been extracted, click **OK** to close the screen.

Step 12 Close Windows Explorer. The Cisco Aironet Wireless LAN Client Adapter Installation Wizard screen appears (see [Figure 2](#)).

Figure 2 Cisco Aironet Wireless LAN Client Adapter Installation Wizard Screen



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



Note To ensure compatibility among software components, Cisco recommends that you perform an express installation. If you perform a custom installation, Cisco recommends that you install all components.

- **Express Installation/Upgrade (recommended)**—Silently installs the client adapter firmware, drivers, client utilities, and security modules using the default values listed in [Table 2](#).
- **Custom Installation/Upgrade**—Enables you to specify which software components are installed and to change the default values of certain parameters.

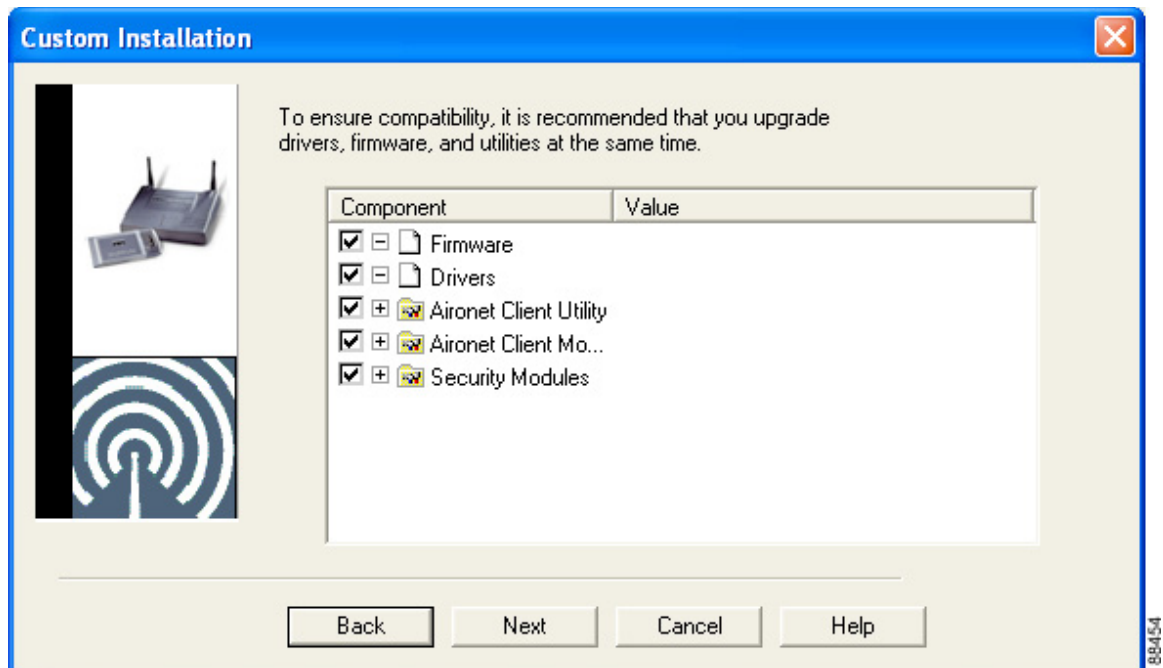
Step 14 If a message appears indicating that you may be required to restart your computer at the end of the installation process, click **OK**.



Note If you click **Cancel**, the installation process terminates.

Step 15 If you selected an express installation, go to [Step 17](#). If you selected a custom installation, the Custom Installation screen appears (see [Figure 3](#)).

Figure 3 Custom Installation Screen



Step 16 Follow the steps below to make selections on this screen.

- a. Make sure a check mark appears beside every software component that you want to install. For every component that is checked, the Install Wizard installs its version of that component. Every component that is not checked remains as it currently is on your system.



Note Click the + sign beside the Security Modules option to reveal the available security components.



Note Some components are dependent on others. Therefore when you select or deselect these components, the settings of other components may change. A dependency notice appears when this occurs.

- b. Click the + sign beside each component to view additional parameters. The current value of each parameter appears in the Value field.
- c. To change the value of any parameter, click its current value in the Value field. A screen appears that lets you change the existing value.
- d. Enter or select a new value and click **OK**. [Table 2](#) describes each component and its parameters and lists any default value.

Table 2 Software Components and Their Parameters

Component or Parameter	Description
Firmware	<p>Installs the firmware version included in the Install Wizard file.</p> <p>Default: Checked</p> <p>Note When you use the Install Wizard to install the client adapter driver, the firmware is also installed automatically. See the “Firmware Is Upgraded Automatically” section on page 3 for additional information.</p>
Drivers	<p>Installs the driver version included in the Install Wizard file.</p> <p>Default: Checked</p>
Aironet Client Utility	<p>Installs the ACU version included in the Install Wizard file.</p> <p>Default: Checked</p>
Installation Path	<p>Determines the path where the ACU software will be installed. You can change the default by entering a new path.</p> <p>Default: C:\Program Files\Cisco Systems\Aironet Client Utility</p>
Program Folder	<p>Determines the program folder where the ACU software will be installed. You can change the default by entering a new folder name.</p> <p>Default: Cisco Systems</p>
Place Icon on Desktop	<p>Causes the installation program to add an ACU icon to your computer’s desktop to provide quick access to the utility.</p> <p>Options: Yes or No</p> <p>Default: Yes</p>
Allow Non-Administrator Users to Save Settings to the Registry	<p>Enables users without administrative rights to modify profiles in ACU and save them to the registry on computers running Windows NT, 2000, or XP.</p> <p>Options: Yes or No</p> <p>Default: Yes</p> <p>Note This option is not available for Windows 98, 98 SE, and Me because these versions of Windows do not support different classes of users.</p>

Table 2 *Software Components and Their Parameters (continued)*

Component or Parameter	Description
Aironet Client Monitor	Installs the ACM version included in the Install Wizard file. Default: Checked
Installation Path	Determines the path where the ACM software will be installed. You can change the default by entering a new path. Default: C:\Program Files\Cisco Systems\Aironet Client Monitor
Program Folder	Determines the program folder where the ACM software will be installed. You can change the default by entering a new folder name. Default: Cisco Systems
Auto Start	Determines whether ACM starts automatically every time Windows boots. Options: Yes or No Default: Yes Note If you select No, you can later activate ACM by using Windows Explorer to find the path where the ACM software is installed and double-clicking ACUMon.exe .
Start After Install	Determines whether ACM starts automatically after ACM is installed. Options: Yes or No Default: Yes Note If you select No, you can later activate ACM by using Windows Explorer to find the path where the ACM software is installed and double-clicking ACUMon.exe .

Table 2 Software Components and Their Parameters (continued)

Component or Parameter	Description																								
Program Feature Overrides	<p>Determines which ACM components are enabled. If any components are not selected now and you later want to use them, you must run this installation program again and enable them.</p> <p>Components: See the table below</p> <p>Options per component: Enable or Disable</p> <p>Default per component: Enable</p>																								
	<table border="1"> <thead> <tr> <th>Component</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>About Box (Help)</td> <td>Displays the ACM version number and enables you to access the online help.</td> </tr> <tr> <td>Exit Program</td> <td>Closes ACM for all client adapters.</td> </tr> <tr> <td>Launch Aironet Client Utility</td> <td>Activates ACU, if it was installed.</td> </tr> <tr> <td>Troubleshooting</td> <td>Activates the troubleshooting utility, which enables you to identify and resolve configuration and association problems with your client adapter.</td> </tr> <tr> <td>Preferences</td> <td>Enables you to determine when ACM runs and to select the options that appear on the ACM pop-up menu.</td> </tr> <tr> <td>Turn Radio On/Off</td> <td>Turns the client adapter's radio on or off.</td> </tr> <tr> <td>Reauthenticate</td> <td>Forces your client adapter to try to reauthenticate using the username and password of the current profile.</td> </tr> <tr> <td>Select Profile</td> <td>Enables you to select the active profile for your client adapter.</td> </tr> <tr> <td>Auto Profile Selection</td> <td>Causes the client adapter's driver to automatically select a profile from the list of profiles that were set up in ACU to be included in auto profile selection.</td> </tr> <tr> <td>Other Configuration Application</td> <td>Enables an application other than ACU to configure the client adapter.</td> </tr> <tr> <td>Show Connection Status</td> <td>Provides information on the current status of your client adapter.</td> </tr> </tbody> </table>	Component	Description	About Box (Help)	Displays the ACM version number and enables you to access the online help.	Exit Program	Closes ACM for all client adapters.	Launch Aironet Client Utility	Activates ACU, if it was installed.	Troubleshooting	Activates the troubleshooting utility, which enables you to identify and resolve configuration and association problems with your client adapter.	Preferences	Enables you to determine when ACM runs and to select the options that appear on the ACM pop-up menu.	Turn Radio On/Off	Turns the client adapter's radio on or off.	Reauthenticate	Forces your client adapter to try to reauthenticate using the username and password of the current profile.	Select Profile	Enables you to select the active profile for your client adapter.	Auto Profile Selection	Causes the client adapter's driver to automatically select a profile from the list of profiles that were set up in ACU to be included in auto profile selection.	Other Configuration Application	Enables an application other than ACU to configure the client adapter.	Show Connection Status	Provides information on the current status of your client adapter.
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Table 2 Software Components and Their Parameters (continued)

Component or Parameter	Description
Menu Options (Defaults)	<p>Determines which options are displayed on the ACM pop-up menu.</p> <p>Menu options: About Box (Help), Exit Program, Launch Aironet Client Utility, Troubleshooting, Turn Radio On/Off, Reauthenticate, Select Profile, Show Connection Status</p> <p>Options per menu option: Show or Hide</p> <p>Default per menu option: Show</p>
Security Modules	
LEAP	<p>Installs the LEAP supplicant version included in the Install Wizard file. Installing the LEAP supplicant enables you to create a profile in ACU that uses LEAP authentication. If this option is not selected now and you later want to use LEAP, you must run this installation program again and select this option.</p> <p>Default: Checked</p> <p>Note If you select LEAP on a Windows XP device, Windows XP's fast user switching feature is disabled.</p>
Allow Saved LEAP User Name and Password	<p>Enables you to create a profile in ACU that uses a saved (rather than temporary) username and password for LEAP authentication. When such a profile is used, the saved username and password are used to start the LEAP authentication process, and you are not prompted to enter them.</p> <p>Options: Yes or No</p> <p>Default: Yes</p>
EAP-SIM	<p>Installs the EAP-SIM supplicant version included in the Install Wizard file. Installing the EAP-SIM supplicant enables the client to support EAP-SIM authentication. If this option is not selected now and you later want to use EAP-SIM, you must run this installation program again and select this option.</p> <p>Default: Unchecked</p> <p>Note To enable EAP-SIM authentication, your computer must run Windows 2000 with the Microsoft 802.1X supplicant installed or Windows XP.</p>

Table 2 Software Components and Their Parameters (continued)

Component or Parameter	Description
PEAP	<p>Installs the PEAP supplicant version included in the Install Wizard file. Installing the PEAP supplicant enables the client to support PEAP authentication. If this option is not selected now and you later want to use PEAP, you must run this installation program again and select this option.</p> <p>Default: Unchecked</p> <p>Note To enable Cisco PEAP authentication, your computer must run Windows 2000 with the Microsoft 802.1X supplicant installed or Windows XP.</p> <p>Note Service Pack 1 for Windows XP and the Microsoft 802.1X supplicant for Windows 2000 include Microsoft's PEAP supplicant, which supports a Windows username and password only and does not interoperate with Cisco's PEAP supplicant. To use Cisco's PEAP supplicant, install the Install Wizard file after Service Pack 1 for Windows XP or the Microsoft 802.1X supplicant for Windows 2000. Otherwise, Cisco's PEAP supplicant is overwritten by Microsoft's PEAP supplicant.</p>

- e. When you are finished making selections, click **Next**.

Step 17 The installation process begins, and you are notified as each component is installed. Perform one of the following:

- If the following message appears, click **OK** and then either insert your client adapter or reboot your computer: "The installation will complete and applications will be installed when a wireless LAN client adapter is inserted. If an adapter is already inserted, remove and reinsert the adapter or reboot the machine."

The Found New Hardware screen appears. Depending on your computer's operating system, you may have to click **Next**. The driver and other software components are installed. Then an ACM icon appears in the Windows system tray (unless you changed the default value during installation). Perform one of the following:

- If a message appears asking if you wish to reboot now, click **Yes**.



Note To ensure that your client adapter software is installed properly, Cisco recommends that you click **Yes** to reboot your computer now.

- If a message appears indicating that the system is about to reboot, click **OK** and allow your computer to restart.

- If a message appears asking if you wish to reboot now, click **Yes**.



Note To ensure that your client adapter software is installed properly, Cisco recommends that you click **Yes** to reboot your computer now.

- If a message appears indicating that the system is about to reboot, click **OK** and allow your computer to restart.

Step 18 If you want to install a second client adapter, allow your computer to reboot completely; then insert the second adapter into your computer. Depending on your computer's operating system, one of the following scenarios occurs:

- The Found New Hardware Wizard screen appears. Depending on your computer's operating system, you may have to click **Next**. The driver and other software components are installed, and another ACM icon appears in the Windows system tray. Click **Yes** or **OK** when a message appears about rebooting your computer.



Note To ensure that your client adapter software is installed properly, Cisco recommends that you reboot your computer now.

- The driver and other software components are installed, and another ACM icon appears in the Windows system tray. Click **Yes** or **OK** when a message appears about rebooting your computer.



Note To ensure that your client adapter software is installed properly, Cisco recommends that you reboot your computer now.

Step 19 If your computer is not connected to a DHCP server and you plan to use TCP/IP, follow the steps below for your operating system. If you have more than one client adapter installed, repeat this step for each adapter.

- **Windows 98, 98 SE, and Me**—Double-click **My Computer**, **Control Panel**, and **Network**. Select **TCP/IP > Cisco Systems Wireless LAN Adapter**. Click the **Properties** button, select **Specify an 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**. In the Network window, click **OK**.
- **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**, **Internet Protocol (TCP/IP)**, and **Properties**. Click **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**. In the Local Area Connection Properties window, click **OK**.
- **Windows XP**—Right-click **Wireless Network Connection** and click **Properties**. Select **Internet Protocol (TCP/IP)** and click **Properties**. Select **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**.

Step 20 If you are prompted to restart your computer, click **Yes**. The installation is complete.

Finding Version Numbers

Follow the instructions in this section to find the version numbers of your client adapter's software components.

Finding the Install Wizard Version

Follow the steps below to find the version of the Install Wizard that is currently installed for your client adapter.

-
- Step 1** Open Windows Explorer.
 - Step 2** Find the Install Wizard files.
 - Step 3** Right-click the **Setup.exe** file.
 - Step 4** Click **Properties**.
 - Step 5** Click the **Version** tab. The version of the currently installed Install Wizard file is shown in the File version field.
-

Finding the Firmware and Driver Versions

To find the versions of the driver and firmware that are currently installed for your client adapter, click the ACU **Status** icon. The NDIS Driver Version field on the Status screen shows the current driver version, and the Firmware Version field shows the current firmware version.

Finding the ACU Version

To find the version of ACU that is currently installed for your client adapter, click the ACU **About** icon. The current ACU version appears on the About Aironet Client Utility screen.

Finding the ACM Version

To find the version of ACM that is currently installed for your client adapter, right-click the **ACM** icon and select the **About** option. The current ACM version appears on the About screen.

Caveats

This section describes resolved and open caveats for the software components in this release.

Resolved Caveats

Resolved ACU Caveats

The following caveats are resolved in ACU release 6.0.

- CSCdy20384—ACU shows poor beacons received when access point beacon period exceeds 1000
When the access point beacon period is greater than 1000 (1 second), ACU shows the beacons received as poor. If the access point's beacon period is set to a value greater than 1000 (1 second), you must change the client refresh interval to a value greater than 1 second to ensure that the client receives the beacons.
- CSCdy20207—Deleted profile still active
When a profile is deleted in ACU, the client adapter remains associated and authenticated using that profile. To resolve this problem, reboot your computer or eject and reinsert the adapter.
- CSCdx80082—Manual LEAP login does not work with two client adapters installed
If two client adapters are installed in your computer and you select the Manually Prompt for LEAP User Name and Password option for one card, this card never authenticates. To resolve this problem, select the Use Saved User Name and Password option or the Use Windows User Name and Password option instead.
- CSCdy21279—Site survey screens display incorrect frequency for channel 14
The frequency for channel 14 is displayed as 2477 MHz instead of 2484 MHz on the ACU site survey screens.
- CSCdx19759—Windows XP's Remote Desktop Connection feature does not work with ACU
After ACU is installed, Windows XP's Remote Desktop Connection feature does not work. This caveat has been resolved in ACU release 6.0. However, you must continue to uncheck the No Network Connection Unless User Is Logged In check box on the LEAP Settings screen if you want to use the Remote Desktop Connection feature.
- CSCdx78715—Non-Administrative Users Cannot Edit ACU Profiles on Some Laptops
On some laptops, non-administrative users are unable to modify profiles in ACU, although the Allow Non-Administrator Users to Save Profiles to the Registry option was selected during installation.
- CSCdx67605—Rainbow iKey is not recognized when LEAP is installed
Rainbow iKey does not function with LEAP enabled on the client adapter.
- CSCdx55881—ACU 5.x with LEAP experiences slow performance with Novell clients
The performance of ACU 5.x installations with LEAP is slower than those same installations were under ACU 4.x with LEAP when used in conjunction with Novell Netware clients.

Resolved Driver Caveats

The following caveats are resolved in mini PCI and PC-Cardbus card driver release 3.5.

- CSCdy19375, CSCdy21644, and CSCdy23691—PC-Cardbus card LEAP authenticates before user credentials are entered

If the PC-Cardbus card uses a profile that specifies that you be automatically or manually prompted for the LEAP username and password and then the card is switched to another profile that also uses LEAP, the card authenticates automatically using the first profile's credentials, and you are not prompted to enter a new username and password. To resolve this problem, reboot your computer.

- CSCdy09887—Client cannot associate after ACU is uninstalled on Windows 2000

If you uninstall ACU on a computer running Windows 2000 and then configure the client adapter using the Advanced tab on the Windows Properties screen, the client adapter cannot associate to its access point. To resolve this problem, uninstall the client adapter's driver and then reinstall it.

- CSCdy17076—Windows crashes after restarting client adapter

If you use ACU to restart the client adapter while the computer is receiving data, Windows may crash, causing a blue screen to appear. To resolve this problem, reboot the computer.

- CSCdy18212—Auto profile selection does not work properly on Windows Me

If you have more than one profile set up for auto profile selection on a computer running Windows Me, the client adapter fails to automatically switch profiles after the SSID of the first profile is changed and the client adapter subsequently disassociates from its access point. To associate using another profile, you must manually select that profile in the Use Selected Profile drop-down box.

Open Caveats

Open Install Wizard Caveats

The following caveats have not been resolved in Install Wizard release 1.0.

- CSCea38113—Non-writable destination drive causes Install Wizard to fail

If you designate a non-writable drive (such as your computer's CD-ROM drive) as the destination folder for ACU, the Install Wizard stops and does not complete. No error message or warning is displayed. To resolve this problem, terminate the Install Wizard using the Windows task manager or reboot your computer.

- CSCea05142—Second adapter causes IRQ error message at reboot (Windows NT)

If you install more than one Cisco Aironet client adapter on a Windows NT computer, an IRQ error message appears after the second adapter is installed and the computer reboots. To resolve this problem, you must guarantee a unique IRQ assignment for each card.

- CSCin33977—Install Wizard is not uninstalling all components

If you select the Uninstall All Components option on the Cisco Aironet Wireless LAN Client Adapter Installation Wizard screen, some components may not be uninstalled.

- CSCdz78845—Sniffer Pro 4.7 or earlier is incompatible with client adapter software

Random crashes may occur if the client adapter is used with Sniffer Pro versions earlier than 4.7. To resolve this problem, unbind the Sniffer Protocol driver from your client adapter or update your version of Sniffer Pro.

Open ACU Caveats

The following caveat has not been resolved in ACU release 6.0.

- CSCin07193—ACU fails to operate when the site survey or link test is running and you remove the client adapter

If you click the Start button on the Site Survey or Linktest screen and then remove the client adapter, ACU fails to operate.

Open Driver Caveats

The following caveat has not been resolved in mini PCI and PC-Cardbus card driver release 3.5.

- CSCdx81363—Compaq device locks up during FTP transfers

The Compaq EVO N180 locks up while performing continuous FTP transfers. To work around this problem, reboot your computer. To completely resolve the problem, install BIOS version 0F12 or greater in your EVO N180 device.

Open Security Module Caveats

The following caveats have not been resolved in LEAP security module release 6.0, PEAP security module release 1.01, and EAP-SIM security module release 1.0.

- CSCin33638—LEAP login screen does not appear

The LEAP login screen may not appear after logging into Windows or may appear briefly and then disappear. Select **Reauthenticate** from the ACU Commands drop-down menu.

- CSCin34139—LEAP login screen takes too long to appear

When you select a LEAP profile as the active profile or set a LEAP profile to the highest priority in auto profile selection, the LEAP login screen may take approximately 30 seconds to appear.

- CSCin24968 and CSCea17024—Client takes too long to find domain controller

The final step of the LEAP authentication process may take a long time to complete; however, no harm is caused. Simply minimize the LEAP Authentication Status screen and continue working.

- CSCin14279—Attempts to change the PEAP password are unsuccessful

After you enter your old and new passwords on the PEAP Change Password screen, you are prompted to enter them again.

- CSCin32330—Many PEAP login screens appear when computer is left idle

If you leave your computer idle while it is using PEAP authentication, you may receive three PEAP login screens upon resume. To resolve this problem, cancel the first two login screens and use the last one (which is on top) to log in.

- CSCin32329—FTP fails during roaming when EAP-TLS or PEAP is used (Windows XP)

FTP transfers may fail occasionally during roaming when EAP-TLS or PEAP is used on a Windows XP computer.

- CSCdx65896 and CSCdx65873—ACU and Windows XP show incorrect EAP-SIM authentication state

ACU and the Windows Network Connection icon on the Windows XP taskbar may indicate a connection status when EAP-SIM authentication is still in the pending state or the authentication server fails to respond. This is a Microsoft issue and requires a fix to Windows XP.

- CSCin16714—Smartcard reader fails to work in Toshiba PC
The Toshiba Satellite Pro 6000 Series detects an inserted smartcard reader but is unable to allocate resources. A fix for this issue is available from Microsoft. Refer to Microsoft Knowledge Base Article #Q310772 at the following URL for details:
<http://support.microsoft.com/default.aspx?scid=KB;EN-US;q310772>
- CSCdx83279—Smartcard reader not recognized after Windows XP resumes from hibernation
If you are using EAP-SIM authentication on a computer running Windows XP, your smartcard reader may not be recognized after Windows resumes from hibernation, and one or more error messages may appear. To resolve this problem, reboot your computer or configure it so that it does not enter hibernate mode.

Getting Bug Information on Cisco.com

If you are a Cisco registered user, you can use the Cisco TAC Software Bug Toolkit, which consists of three tools (Bug Navigator, Bug Watcher, and Search by Bug ID Number) that help you to identify existing bugs (or caveats) in Cisco software products.

Access the TAC Software Bug Toolkit today at:

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl

Troubleshooting

For the most up-to-date, detailed troubleshooting information, refer to the Cisco TAC website at

<http://www.cisco.com/en/US/support/index.html>

Select **Wireless Troubleshooting Center** under Tools & Utilities.

Related Documentation

For more information about Cisco Aironet client adapters, refer to version -05 of the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows* at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/wireless/airo_350/350cards/windows/incfg/index.htm

Obtaining Documentation

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

International Cisco web sites can be accessed from this URL:

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

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which may have shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Registered Cisco.com users can order the Documentation CD-ROM (product number DOC-CONDOCCD=) through the online Subscription Store:

<http://www.cisco.com/go/subscription>

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:
<http://www.cisco.com/en/US/partner/ordering/index.shtml>
- Registered Cisco.com users can order the Documentation CD-ROM (Customer Order Number DOC-CONDOCCD=) through the online Subscription Store:
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

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You can e-mail your comments to bug-doc@cisco.com.

You can submit your comments by mail by using the response card behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com, which includes the Cisco Technical Assistance Center (TAC) Website, as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from the Cisco TAC website. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC website, including TAC tools and utilities.

Cisco.com

Cisco.com offers a suite of interactive, networked services that let you access Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com provides a broad range of features and services to help you with these tasks:

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To obtain customized information and service, you can self-register on Cisco.com at this URL:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two levels of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The avenue of support that you choose depends on the priority of the problem and the conditions stated in service contracts, when applicable.

We categorize Cisco TAC inquiries according to urgency:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Cisco TAC Website

You can use the Cisco TAC website to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC website, go to this URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC website. Some services on the Cisco TAC website require a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

<http://tools.cisco.com/RPF/register/register.do>

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC website, you can open a case online at this URL:

<http://www.cisco.com/en/US/support/index.html>

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC website so that you can describe the situation in your own words and attach any necessary files.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The *Cisco Product Catalog* describes the networking products offered by Cisco Systems as well as ordering and customer support services. Access the *Cisco Product Catalog* at this URL:

http://www.cisco.com/en/US/products/products_catalog_links_launch.html

- Cisco Press publishes a wide range of networking publications. Cisco suggests these titles for new and experienced users: *Internetworking Terms and Acronyms Dictionary*, *Internetworking Technology Handbook*, *Internetworking Troubleshooting Guide*, and the *Internetworking Design Guide*. For current Cisco Press titles and other information, go to Cisco Press online at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco monthly periodical that provides industry professionals with the latest information about the field of networking. You can access *Packet* magazine at this URL:
http://www.cisco.com/en/US/about/ac123/ac114/about_cisco_packet_magazine.html
- *iQ Magazine* is the Cisco monthly periodical that provides business leaders and decision makers with the latest information about the networking industry. You can access *iQ Magazine* at this URL:
http://business.cisco.com/prod/tree.taf%3fasset_id=44699&public_view=true&kbns=1.html
- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in the design, development, and operation of public and private internets and intranets. You can access the *Internet Protocol Journal* at this URL:
http://www.cisco.com/en/US/about/ac123/ac147/about_cisco_the_internet_protocol_journal.html
- Training—Cisco offers world-class networking training, with current offerings in network training listed at this URL:
http://www.cisco.com/en/US/learning/le31/learning_recommended_training_list.html

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