



Release Notes for Cisco Aironet Client Adapter Install Wizard, 1.1 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 client adapter Install Wizard version 1.1 and the following software included in the Install Wizard file:

- Firmware version 5.20.17
- PC, LM, and PCI card driver version 8.3
- Mini PCI and PC-Cardbus card driver version 3.5
- Aironet Client Utility (ACU) version 6.1
- Aironet Client Monitor (ACM) version 2.1
- LEAP security module version 6.0
- PEAP security module version 1.01
- EAP-SIM security module version 1.0



Note Refer to the [“New EAP-SIM Supplicant Available” section on page 7](#) for information about a new EAP-SIM supplicant.

System Requirements

You need the following in order to install Install Wizard version 1.1:

- One of the following Cisco Aironet client adapters:
 - 340 or 350 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 pixels
- 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



Note These requirements will be different if you use the new EAP-SIM supplicant available from the ftpeng FTP server. Refer to the [“New EAP-SIM Supplicant Available”](#) section on page 7 for details.

- Access points to which your client adapter may attempt to authenticate must use the following software versions or greater: firmware version 12.00T (340, 350, and 1200 series access points) or IOS release 12.2(4)JA (1100 series access points).



Note To use the fast secure roaming feature supported in client adapter firmware version 5.20.17, access points must use IOS release 12.2(11)JA or greater.

- 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

The Install Wizard automatically upgrades the client adapter firmware to the version included in the Install Wizard file.

**Note**

Applications such as AirMagnet and Wild Packets may fail after the firmware is upgraded. To resolve this problem, use ACU to downgrade the firmware to the previous version. Older versions of client adapter firmware are available from the Software Center on Cisco.com.

Using Client Adapters with Both Windows and Windows CE Devices

If you insert a client adapter that has been upgraded to firmware version 5.20.17 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 for 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 condition 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 fill out a form to receive authorization to download encrypted software. Registered Cisco.com users are required to fill out the form only once, but 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 at the following URL:

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

Supporting Documentation

Version OL-1394-06 of the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows* pertains specifically to versions of the software that are included in Install Wizard version 1.1. If you are using, installing, or upgrading to previous versions of client adapter software, refer to a previous version of this manual for information and instructions.

New and Changed Information

Disable Firmware Checking Parameter Added to Install Wizard

A new parameter called Disable Firmware Checking has been added to the Custom Installation screen of the Install Wizard. This parameter affects the firmware that is bundled with the driver, not the firmware that is included in the Install Wizard.

The Disable Firmware Checking parameter controls whether the driver (whenever it loads) installs the firmware with which it is bundled. (The driver loads each time you insert a client adapter or reboot your computer.) The parameter can be set to one of the following values:

- **Yes**—Prevents the driver from installing the firmware with which it is bundled, enabling the client adapter to retain its current firmware version. This is the default value.
- **No**—Causes the driver to install the firmware with which it is bundled if that firmware is newer than the firmware that is currently installed in the client adapter.



Caution

Both of the client adapter's LEDs light continuously while the firmware upgrade occurs. Do not eject the client adapter while the firmware is being upgraded.



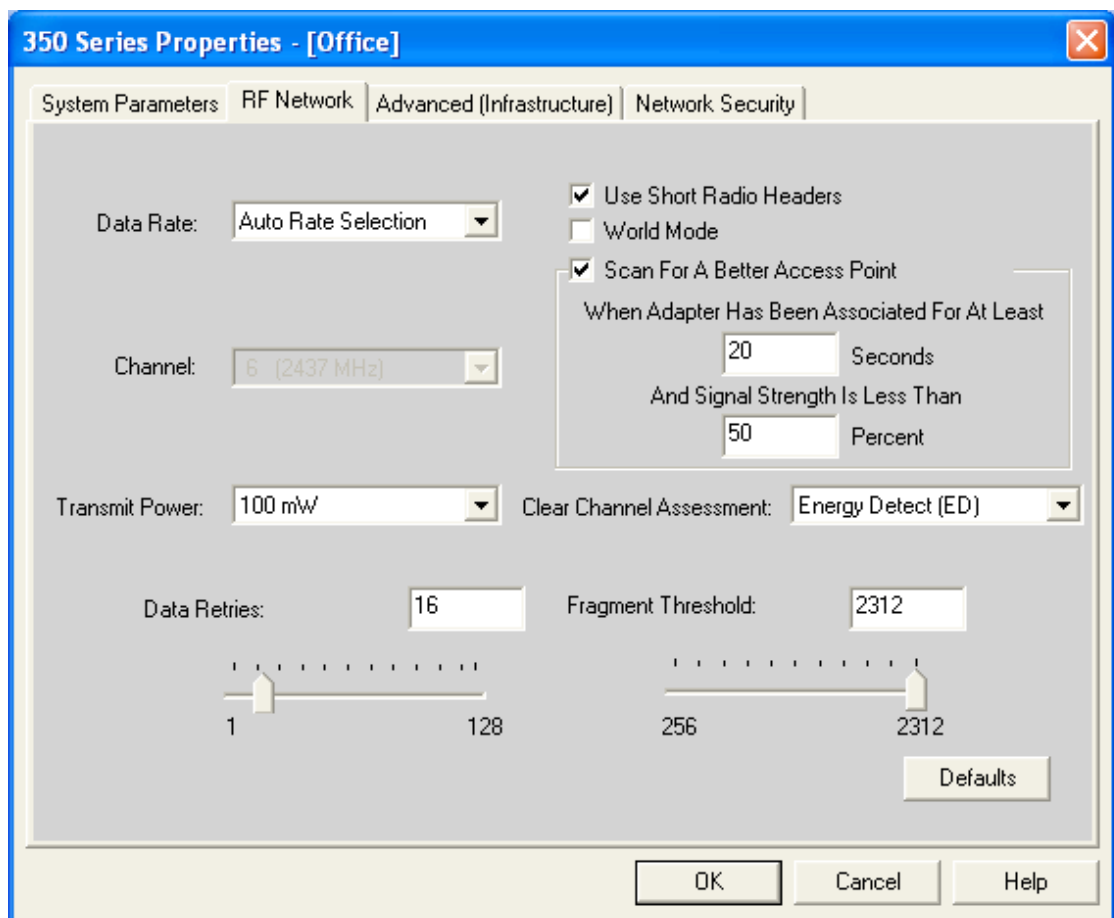
Note

The Disable Firmware Checking parameter is functionally equivalent to the **Automatically Load New Firmware When NDIS Driver Is Updated** parameter on the ACU Preferences screen. The parameter that is set last is the one that governs how the driver behaves.

Ability to Specify When Client Scans for a Better Access Point

The Scan For A Better Access Point parameter on ACU's RF Network screen now enables you to specify when the client begins scanning (see [Figure 1](#)).

Figure 1 RF Network Screen



If you check the Scan For A Better Access Point check box, the client looks for a better access point if the signal strength of its associated access point is less than the specified value after the specified time and switches associations if it finds one.

Example: If the default values of 20 seconds and 50% are used, the client begins monitoring the strength of the signal received from its associated access point 20 seconds after becoming associated. The monitoring continues once per second. If the client detects a signal strength reading below 50%, it scans for a better access point.

Support for Fast Secure Roaming

Some applications that run on a client device may require fast roaming between access points. Voice applications, for example, require seamless roaming to prevent delays and gaps in conversation. Support for fast secure roaming is now available for LEAP-enabled clients in client adapter firmware version 5.20.17.

During normal operation, LEAP-enabled clients mutually authenticate with a new access point by performing a complete LEAP authentication, including communication with the main RADIUS server. However, when you configure your wireless LAN for fast secure roaming, LEAP-enabled clients securely roam from one access point to another without the need to reauthenticate with the RADIUS server. Using Cisco Centralized Key Management (CCKM), an access point that is configured for wireless domain services (WDS) uses a fast rekeying technique that enables client devices to roam from one access point to another in under 150 milliseconds (ms). Fast secure roaming ensures that there is no perceptible delay in time-sensitive applications such as wireless Voice over IP (VoIP), enterprise resource planning (ERP), or Citrix-based solutions.

This feature does not need to be enabled on the client adapter; it is supported automatically in client adapter firmware version 5.20.17. However, it must be enabled on the access point.



Note

IOS release 12.2(11)JA or greater is required to enable fast roaming on the access point. Refer to the documentation for your access point for instructions on enabling this feature.



Note

If the Microsoft 802.1X supplicant is installed on your computer, you must disable one or two Windows parameters in order for this feature to operate correctly. Refer to the “[Enabling LEAP](#)” section of the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows* (version OL-1394-06) for details.

New EAP-SIM Supplicant Available

A new EAP-SIM supplicant is available for download from the ftpeng FTP server. This new supplicant is an upgrade to the one included in the Install Wizard file. It provides new features, supports more recent versions of the EAP-SIM draft standard, and can be used with standard GSM-SIM cards as well as Gemplus SIM+ smartcards.

The new supplicant overwrites any previous EAP-SIM supplicant settings. If you plan to install the Cisco Aironet Install Wizard file after the new supplicant is installed, either perform an express installation or make sure the EAP-SIM option is not selected on the Custom Installation screen. Otherwise, the EAP-SIM supplicant included in the Install Wizard file overwrites the new supplicant's settings.

You can access the new EAP-SIM supplicant at the following URL:

<ftp://ftpeng.cisco.com/ftp/pwlan/eapsim/CiscoEapSim.dll>

Installing or Upgrading Client Adapter Software

Follow the steps below to use Install Wizard version 1.1 to install or upgrade 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 OL-1394-06 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) or previous versions of the Install Wizard prior to installing Install Wizard version 1.1.

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 Adapter Installation Wizard (For Windows), select **Aironet Client Adapter Installation Wizard for Windows**.

Step 5 Select version 1.1 of 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**.

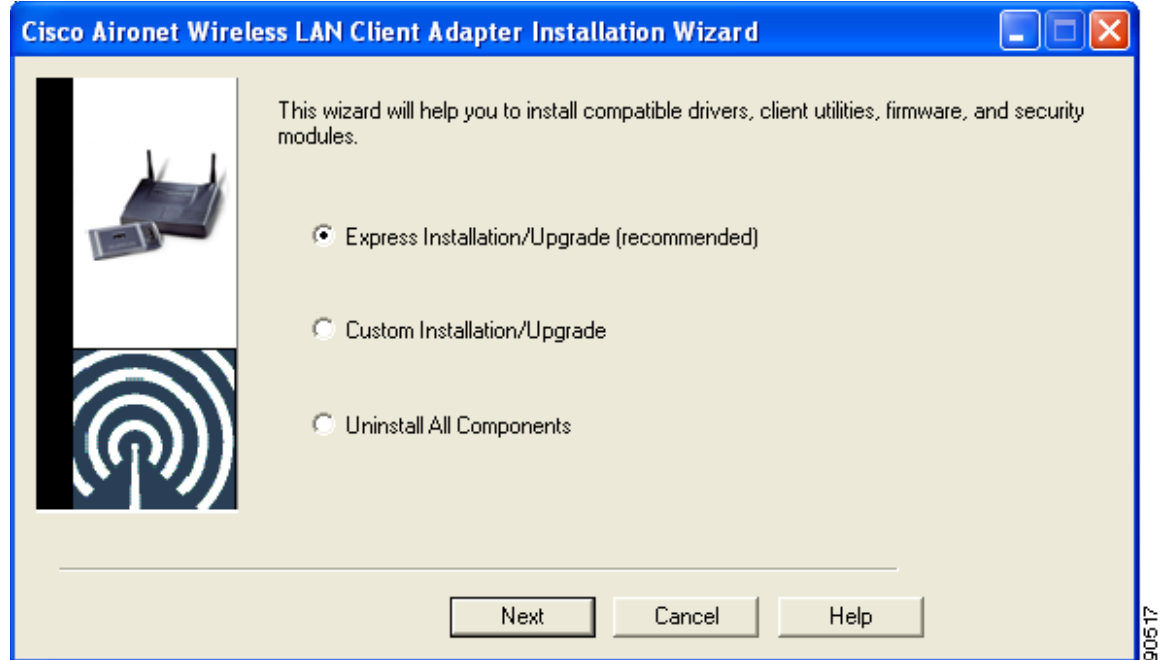
Step 11 Find the Install Wizard file using Windows Explorer, double-click it, and extract its files to a folder.


Note

To extract the files, click **Browse** on the WinZip Self-Extractor screen, select the folder in which you want the files to be placed, and click **OK** and **Unzip**. After the files are 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 1](#).
- **Custom Installation/Upgrade**—Enables you to specify which software components are installed and to change the default values of certain parameters.

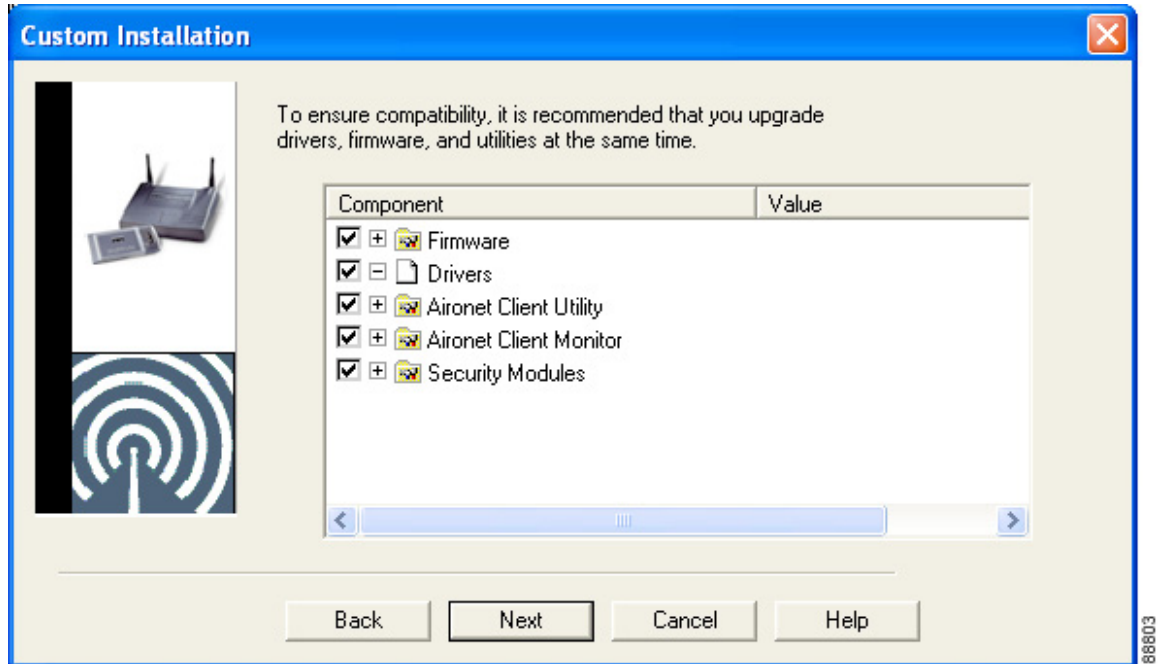
Step 14 If a message appears indicating that you may be required to restart your computer at the end of the installation process, click **OK**.



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 1](#) describes each component and its parameters and lists any default value.

Table 1 Software Components and Their Parameters

Component or Parameter	Description						
Firmware	Installs the firmware version included in the Install Wizard file. Default: Checked						
Disable Firmware Checking	The Disable Firmware Checking parameter affects the firmware that is bundled with the driver, not the firmware that is included in the Install Wizard. It controls whether the driver (whenever it loads) installs the firmware with which it is bundled. Note The driver loads each time you insert a client adapter or reboot your computer. Options: Yes or No Default: Yes						
	<table border="1"> <thead> <tr> <th>Disable Firmware Checking</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>Prevents the driver from installing the firmware with which it is bundled, enabling the client adapter to retain its current firmware version.</td> </tr> <tr> <td>No</td> <td>Causes the driver to install the firmware with which it is bundled if that firmware is newer than the firmware that is currently installed in the client adapter.</td> </tr> </tbody> </table>	Disable Firmware Checking	Description	Yes	Prevents the driver from installing the firmware with which it is bundled, enabling the client adapter to retain its current firmware version.	No	Causes the driver to install the firmware with which it is bundled if that firmware is newer than the firmware that is currently installed in the client adapter.
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	Note The Disable Firmware Checking parameter is functionally equivalent to the Automatically Load New Firmware When NDIS Driver Is Updated parameter on the ACU Preferences screen. The parameter that is set last is the one that governs how the driver behaves.						
Drivers	Installs the driver version included in the Install Wizard file. Default: Checked						
Aironet Client Utility	Installs the ACU version included in the Install Wizard file. Default: Checked						
Installation Path	Determines the path where the ACU software will be installed. You can change the default by entering a new path. Default: C:\Program Files\Cisco Systems\Aironet Client Utility						
Program Folder	Determines the program folder where the ACU software will be installed. You can change the default by entering a new folder name. Default: Cisco Systems						

Table 1 Software Components and Their Parameters (continued)

Component or Parameter	Description
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>
Aironet Client Monitor	<p>Installs the ACM version included in the Install Wizard file.</p> <p>Default: Checked</p>
Installation Path	<p>Determines the path where the ACM software will be installed. You can change the default by entering a new path.</p> <p>Default: C:\Program Files\Cisco Systems\Aironet Client Monitor</p>
Program Folder	<p>Determines the program folder where the ACM software will be installed. You can change the default by entering a new folder name.</p> <p>Default: Cisco Systems</p>
Auto Start	<p>Determines whether ACM starts automatically every time Windows boots.</p> <p>Options: Yes or No</p> <p>Default: Yes</p> <p>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.</p>
Start After Install	<p>Determines whether ACM starts automatically after ACM is installed.</p> <p>Options: Yes or No</p> <p>Default: Yes</p> <p>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.</p>

Table 1 *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 is 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 is 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 1 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 create a profile that uses 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 selected, 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> <p>Note If you installed the new EAP-SIM supplicant from the ftpeng FTP server (see the “New EAP-SIM Supplicant Available” section on page 7), make sure the EAP-SIM option is not selected. Otherwise, the EAP-SIM supplicant included in the Install Wizard file overwrites the new supplicant's settings.</p>

Table 1 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 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 **Properties**, 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 File version field shows the version of the currently installed Install Wizard file.
-

Finding the Firmware and Driver Versions

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

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 About screen shows the current ACM version.

Caveats

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

Open Caveats

Open Install Wizard Caveats

The following caveats have not been resolved in Install Wizard version 1.1.

- 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 caveats have not been resolved in ACU version 6.1.

- CSCin41979—Unable to specify packet size in text field on Linktest screen
When you start to enter a value in the Packet Size text field on the Linktest screen, the following message appears, "Please enter an integer between 64 and 2048." Click **OK** and use the slider to change the parameter's value.
- CSCea86777—ACU shows wrong version number and older icon
The Cisco logo on the main ACU screen shows the wrong version number of the utility. However, the About Aironet Client Utility screen, which is accessible from the About icon, displays the correct ACU version number. Also, the ACU icon that appears on your computer's desktop looks as it did prior to the 6.0 release.
- CSCea67790—Client remains associated when profile is removed from auto profile selection
The client remains associated when the profile it is using is removed from the Auto Selected Profiles list in ACU's profile manager. To work around this issue, select the desired profile using the Use Selected Profile option.

- CSCin41402—Multiple LEAP Authentication Status screens may appear
If you repeatedly enter the wrong username or password for LEAP authentication, the LEAP Authentication Status screen may appear multiple times.
- 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 version 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, upgrade the BIOS in your EVO N180 device.

Open Security Module Caveats

The following caveats have not been resolved in LEAP security module version 6.0, PEAP security module version 1.01, and EAP-SIM security module version 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 at the following URL:

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 **Hardware Support** > **Wireless Devices**. Then select your product and **Troubleshooting** to find information on the problem you are experiencing.

Related Documentation

For more information about Cisco Aironet client adapters for Windows, refer to version OL-1394-06 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

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 websites 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 regularly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual or quarterly subscription.

Registered Cisco.com users can order a single Documentation CD-ROM (product number DOC-CONDOCCD=) through the Cisco Ordering tool:

http://www.cisco.com/en/US/partner/ordering/ordering_place_order_ordering_tool_launch.html

All users can order monthly or quarterly subscriptions 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_inpck/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>

- 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).

Documentation Feedback

You can submit comments electronically on Cisco.com. On the Cisco Documentation home page, click **Feedback** at the top of the page.

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

You can submit comments by using the response card (if present) 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:

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

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

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

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The type 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. There is little or no impact to your business operations.
- Priority level 3 (P3)—Operational performance of the network is impaired, but most business operations remain functional. You and Cisco are willing to commit resources during normal business hours to restore service to satisfactory levels.
- Priority level 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively impacted by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.
- Priority level 1 (P1)—An existing network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Cisco TAC Website

The Cisco TAC website provides online documents and tools to help troubleshoot and resolve technical issues with Cisco products and technologies. 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/tac/caseopen>

If you have Internet access, we recommend that you open P3 and P4 cases online so that you can fully describe the situation 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 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 quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access *Packet* magazine at this URL:
<http://www.cisco.com/go/packet>
- iQ Magazine is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. You can access iQ Magazine at this URL:
<http://www.cisco.com/go/iqmagazine>
- Internet Protocol Journal is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating 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. Current offerings in network training are listed at this URL:
http://www.cisco.com/en/US/learning/le31/learning_recommended_training_list.html

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