

# Release Notes for Cisco Aironet Client Utilities, Version 5.05.001 for Windows

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## Introduction

This document describes system requirements, installation and upgrade procedures, new information, and caveats for the 5.05.001 release of the Cisco Aironet client utilities for Windows (Aironet Client Utility [ACU]).



## **Important Notes**



ACU release 5.05.001 can be used with any of the client adapters listed in the "System Requirements" section below; however, the PC-Cardbus card (CB20A) does not support the new features included in this release (PEAP and EAP-SIM authentication).

Note

As of September 2002, Windows XP is the only operating system supported for use with EAP-TLS, EAP-MD5, PEAP, and EAP-SIM authentication in conjunction with ACU.

Note

If you install Service Pack 1 for Windows XP and use ACU profiles that are configured for host-based EAP, follow these steps:

1. Select your profile in ACU.

2. Access the Wireless Network Connection Properties screen in Windows XP and select the **Wireless Networks** tab.

3. Select the Use Windows to configure my wireless network settings check box.

4. Select the SSID for which your ACU profile is configured from the list of preferred networks or add the SSID if it is not already created.

- 5. Click Properties.
- 6. Select the **Enable network access control using IEEE 802.1X** check box.
- 7. Select the appropriate EAP type and click **OK**.
- 8. Deselect the Use Windows to configure my wireless network settings check box and click OK.

## **System Requirements**

You will need the following in order to install and use ACU release 5.05.001:

- One of the following Cisco Aironet client adapters:
  - 340 or 350 series PC, LM, or PCI card
  - 350 series mini PCI card (MPI350)
  - PC-Cardbus card (CB20A)

Note

PC-Cardbus cards do not support PEAP and EAP-SIM authentication.

• A computer running Windows 95, 98, NT, 2000, Me, or XP



PC-Cardbus cards must be used with Windows 98, 2000, Me, or XP.



**Note** If your wireless network uses EAP-TLS, EAP-MD5, PEAP, or EAP-SIM authentication, your computer must run Windows XP.

• A display with a minimum resolution of 800 x 600 pixels

- 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
- The latest driver and firmware combination for your client adapter:
  - PCM/LMC/PCI card driver version 8.2.3 or greater and firmware version 4.25.30 or greater
  - Mini PCI card driver version 3.4.9 or greater and firmware version 5.00.03 or greater
  - PC-Cardbus card driver version 3.4.19 or greater and firmware version 4.99 or greater
- To ensure compatibility between devices, access point firmware version 11.23T for Cisco Aironet 340 and 350 Series Access Points and 11.54T for Cisco Aironet 1200 Series Access Points



Note The RADIUS accounting feature for EAP-SIM authentication is supported in access point firmware version 11.23T for 340 and 350 series access points and in version 11.56T for 1200 series access points. Version 11.56T will be available after September 2002.

• All necessary infrastructure devices (such as access points, servers, gateways, user databases, etc.) must be properly configured for the authentication type you plan to enable on the client

## Installing or Upgrading to a New ACU Release

This section describes how to initially install or upgrade to the 5.05.001 ACU release. If ACU has never been installed on your computer or if ACU version 4.13 or greater is currently installed, follow the instructions in the "Installation/Upgrade Procedure" section below.



If a version of ACU prior to 4.13 is installed on your computer, follow the instructions in the *Cisco* Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows to uninstall it; then follow the steps in the "Installation/Upgrade Procedure" section to install version 5.05.001.

## **Determining the Current ACU Version**

To determine the version of ACU that your client adapter is currently using, open ACU; then click the **About** icon or select the **About** Aironet Client Utility option from the Help drop-down menu. The About Aironet Client Utility screen appears and displays the current version of ACU.

### Installation/Upgrade Procedure

Follow the steps below to install/upgrade ACU on Windows 95, 98, NT, 2000, Me, or XP.

- **Step 1** Close any Windows programs that are running.
- Step 2 Perform one of the following:
  - If you are installing ACU from the CD that shipped with your client adapter, follow the steps below:
    - a. Insert the CD into your computer's CD-ROM drive.
    - b. Select Start > Run, enter the following path (where D is the letter of your CD-ROM drive): D:\Aironet Client Utility\Setup.exe, and click OK. The Aironet Client Utility Setup screen and the InstallShield Wizard appear.
    - c. Go to Step 3.
  - If you are installing ACU from a bundled file on Cisco.com, follow the steps below:
    - **a**. Using Windows Explorer, locate the folders that were extracted from the bundle and double-click the ACU folder.
    - b. Select Start > Run, enter or browse to the path where the ACU files are located (for example, C:\temp\setup.exe), and click OK. The Aironet Client Utility Setup screen and the InstallShield Wizard appear.
    - c. Go to Step 3.
  - If you are installing ACU from an individual file on Cisco.com, follow the steps below:
    - a. Use the computer's web browser to access the following URL: http://www.cisco.com/public/sw-center/sw-wireless.shtml
    - b. Click the link for Cisco Aironet Wireless LAN Client Adapters.
    - c. Click the link for the Windows utility.
    - d. Select the latest ACU file.
    - e. Read and accept the terms and conditions of the Software License Agreement.
    - f. Select the ACU file again to download it.
    - g. Save the file to your computer's hard drive.
    - h. Locate the file using Windows Explorer, double-click it, and extract its files to a folder.
    - i. Select **Start** > **Run**, enter or browse to the path where you extracted the files (for example, C:\temp\setup.exe), and click **OK**. The Aironet Client Utility Setup screen and the InstallShield Wizard appear.
    - j. Go to Step 3.
- Step 3 When the Welcome screen appears, click Next.

Option	Description
LEAP	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, select <b>Modify</b> , and select this option.
	Default: Selected
	Note If you select LEAP on a Windows 95, 98, or 98 SE device, Microsoft hot fixes are installed during ACU installation to fix two problems related to the use of LEAP.
	<b>Note</b> If you select LEAP on a Windows XP device, you cannot use the Windows XP fast user switching feature.
Allow Saved LEAP User Name and Password	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.
	Default: Selected
	<b>Note</b> This option is available only if the LEAP option is selected.
PEAP	Installs the PEAP supplicant, which 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, select <b>Modify</b> , and select this option.
	Default: Selected
	Note This option appears for all operating systems except Windows 95; however, your client adapter can authenticate using PEAP only if your computer's operating system is Windows XP.
	Note Service Pack 1 for Windows XP includes 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 ACU version 5.05.001 or greater after Service Pack 1 for Windows XP. Otherwise, it will be overwritten by Microsoft's PEAP supplicant.
EAP-SIM	Installs the EAP-SIM supplicant, which 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, select <b>Modify</b> , and select this option.
	Default: Deselected
	Note This option appears for all operating systems except Windows 95; however, your client adapter can authenticate using EAP-SIM only if your computer's operating system is Windows XP.

Step 4 In the Select Options screen, select as many of the following options as desired and click Next:

Create ACU Icon on your Desktop	Causes the installation program to add an ACU icon to your computer's desktop to provide quick access to the utility.	
	Default: Deselected	
Allow Non-Administrator Users to save profiles to the registry	Enables users without administrative rights to modify profiles in ACU and save them to the registry on computers running Windows NT, 2000, or XP.	
	Default: Selected	
	Note This option is not available for Windows 95, 98, and Me because these versions of Windows do not support different classes of users.	

Step 5 In the Choose Destination Location screen, perform one of the following:

- If you want the ACU program files to be installed in the default location (C:\Program Files, provided C:\Program Files is the default Windows program file folder), click **Next**.
- If you want to specify a different destination for the ACU program files, click **Browse**, select a location, and click **Next**.
- **Step 6** In the Select Program Folder screen, specify a program folder name for ACU by selecting from the list of existing folders (the default name is Cisco Aironet) or entering a new folder name; then click **Next**.

A status screen displays the progress of the installation. Then one of two Setup Complete screens appears, depending on whether Windows needs to be restarted to complete the installation.

- **Step 7** Perform one of the following:
  - If your computer does not need to be rebooted, select either of the following options and click **Finish**:

Option	Description
View the README.TXT file	Opens a read-me file containing information about ACU.
Launch the Aironet Client Utility	Opens ACU so you can configure your client adapter.

• If your computer needs to be rebooted, select Yes, I want to restart my computer now or No, I will restart my computer later and click Finish.

# Note

If you are prompted to reboot your computer, Cisco recommends that you select the Yes, I want to restart my computer now option.

The client utility installation is complete.

### Using ACU

For instructions on using ACU (to create profiles, configure the client adapter, use the diagnostic tools, etc.) with Cisco Aironet client adapters, access 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

## **New and Changed Information**

### Support for PEAP Authentication

Protected Extensible Authentication Protocol (PEAP) authentication is designed to support One-Time Password (OTP), Windows NT or 2000 domain, and LDAP user databases over a wireless LAN. It is based on EAP-TLS authentication but uses a password or PIN instead of a client certificate for authentication. PEAP is enabled or disabled through the operating system and uses a dynamic session-based WEP key, which is derived from the client adapter and RADIUS server, to encrypt data.

If your network uses an OTP user database, PEAP requires you to enter either a hardware token password or a software token PIN to start the EAP authentication process and gain access to the network. If your network uses a Windows NT or 2000 domain user database or an LDAP user database (such as NDS), PEAP requires you to enter your username, password, and domain name in order to start the authentication process. RADIUS servers that support PEAP authentication include Cisco Secure ACS version 3.1 or greater.

Your 2.4-GHz client adapter can authenticate using PEAP only if your computer's operating system is Windows XP and you install the PEAP supplicant during ACU installation.



Refer to the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows* for instructions on enabling and using PEAP authentication.



Service Pack 1 for Windows XP includes 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 ACU version 5.05.001 or greater after Service Pack 1 for Windows XP. Otherwise, it will be overwritten by Microsoft's PEAP supplicant.

### Support for EAP-SIM Authentication

EAP-SIM authentication is designed for use in public wireless LANs with clients containing Gemplus SIM+ smartcards in PCSC-compliant smartcard readers. EAP-SIM is enabled or disabled through the operating system and uses a dynamic session-based WEP key, which is derived from the client adapter and RADIUS server, to encrypt data.

EAP-SIM requires you to enter a user verification code, or *PIN*, for communication with the SIM card. You can choose to have the PIN stored in your computer or to be prompted to enter it only after a reboot or prior to every authentication attempt. RADIUS servers that support EAP-SIM include Cisco Access Registrar version 3.0 or greater.

Your 2.4-GHz client adapter can authenticate using EAP-SIM only if your computer's operating system is Windows XP and you install the EAP-SIM supplicant during ACU installation.



Refer to the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows* for instructions on enabling and using EAP-SIM authentication.

## Aironet Client Monitor Icon Added to System Tray

If you install the EAP-SIM supplicant during ACU installation, the Aironet Client Monitor icon appears in the Windows system tray. You can use the icon to turn the client adapter's radio on or off. When you move the cursor over the icon, a message appears indicating whether the client adapter's radio is on or off. Also, a red X appears on the icon when the radio is off.

If the radio is on, double-click the icon to turn the radio off or right-click the icon and select **Turn Radio Off**.

If the radio is off, double-click the icon to turn the radio on or right-click the icon and select **Turn Radio On**.

## Caveats

This section describes resolved and open caveats for ACU release 5.05.001 for Windows.

### **Resolved Caveats**

The following caveat is resolved by ACU release 5.05.001 for Windows.

#### ACU Fails To Operate When Profile with Same Name Is Imported

ACU fails to operate when you attempt to import a profile with the same name as an existing profile (CSCdy17143). This caveat is resolved in ACU release 5.05.001.

### **Open Caveats**

The following are known issues for ACU release 5.05.001 for Windows.

#### 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 (CSCin14279).

#### 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 (CSCdx83279). To resolve this problem, reboot your computer or configure it so that it does not enter hibernate mode.

#### 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 (CSCin16714). 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

#### 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 (CSCdx65896 and CSCdx65873). This is a Microsoft issue and requires a fix to Windows XP.

#### 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 (CSCdy09887). To resolve this problem, uninstall the client adapter's driver and then reinstall it.

#### ACU Freezes in Ad Hoc Mode on Windows Me

If your client adapter is configured for ad hoc mode on a computer running Windows Me, ACU freezes when you open the Status screen or attempt to change the transmit power level on the RF Network screen (CSCdy13608). To resolve this problem, reboot your computer.

#### **Deleted Profile Still Active**

When a profile is deleted in ACU, the client adapter remains associated and authenticated using that profile (CSCdy20207). To resolve this problem, reboot your computer, eject and reinsert the adapter, or disable and re-enable the adapter.

#### 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 (CSCdx80082). To resolve this problem, select the Use Saved User Name and Password option or the Use Windows User Name and Password option instead.

#### Some Laptops Cannot Enter Suspend or Hibernation with ACU Installed

If your laptop is running Windows 98 or Me and has a mini PCI card and ACU version 5.02.005 or greater installed, the unit may not be able to enter suspend or hibernation mode using the timer (CSCdx34586).

#### IP Address of Access Point Is Not Displayed in ACU

The status bar at the bottom of the Aironet Client Utility screen displays the MAC address of the associated access point but not the IP address (CSCin07387).

# 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 (CSCin07193).

#### ACU Does Not Recognize Removal of One Radio Card Type and Insertion of Another

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 (CSCdv67623).

#### PC-Cardbus Card LEAP Authenticates Before User Credentials Are Entered

If the PC-Cardbus card (CB20A) 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 (CSCdy19375, CSCdy21644, and CSCdy23691). To resolve this problem, reboot your computer.

#### 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 (CSCdy20384). 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.

### 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/tac. Select **Wireless Technologies** under Top Issues.

## **Related Documentation**

For more information about Cisco Aironet client adapters, refer to 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**

The following sections explain how to obtain documentation from Cisco Systems.

## World Wide Web

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

http://www.cisco.com

Translated documentation is available at the following 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 is shipped separately from the CD that was included 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 as an annual subscription.

## **Ordering Documentation**

Cisco documentation is available in the following ways:

• Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

http://www.cisco.com/cgi-bin/order/order\_root.pl

Registered Cisco.com users can order the Documentation CD-ROM 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 corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

### **Documentation Feedback**

If you are reading Cisco product documentation on Cisco.com, you can submit technical comments electronically. Click the **Fax** or **Email** option under the "Leave Feedback" at the bottom of the Cisco Documentation home page.

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

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

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

We appreciate your comments.

## **Obtaining Technical Assistance**

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

### Cisco.com

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You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following 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 types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- 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.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

#### **Cisco TAC Web Site**

The Cisco TAC Web Site allows you 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 Web Site, go to the following URL:

#### http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires 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 the following URL to register:

#### http://www.cisco.com/register/

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

#### http://www.cisco.com/tac/caseopen

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

#### **Cisco TAC Escalation Center**

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; 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 will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following 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). In addition, please have available your service agreement number and your product serial number.



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