

# Release Notes for Cisco Aironet Client Adapter Drivers, Version 8.01.06 for Windows

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# Introduction

This document describes system requirements, installation/upgrade procedures, new and changed information, and caveats for the 8.01.06 release of the Cisco Aironet client adapter driver for Windows.

# **System Requirements**

You must have a Cisco Aironet 340, 350, or 4800 series PC card, LM card, or PCI card to install the 8.01.06 driver, and you must use Windows 95, 98, NT, 2000, Me, or XP.

Driver release 8.01.06 must be used with ACU version 5.01.001 or greater and firmware version 4.25.23 or greater.



# Installing or Upgrading to a New Driver Release

This section describes how to initially install or upgrade to the 8.01.06 driver release. If you have not previously installed a Cisco Aironet client adapter driver on your computer, follow the instructions in the "Installing a New Driver" section. If you are upgrading your current client adapter driver, follow the instructions in the "Upgrading the Driver" section.

# **Installing a New Driver**

For instructions on installing a new driver on Windows 95, 98, NT, 2000, Me, or XP, follow the steps below.

- Step 1 Access the Cisco Aironet Wireless LAN 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
- Step 2 Select Installing the Client Adapter and Installing the Driver.
- **Step 3** Follow the instructions for your operating system.

## **Upgrading the Driver**

#### **Determining the Current Driver Version**

To determine the version of the driver that your client adapter is currently using, open ACU; then click the **Status** icon or select **Status** from the Commands drop-down menu. The driver version is displayed in the Status screen.

## **Upgrade Procedure**

For instructions on upgrading your current version of the Cisco Aironet client adapter driver on Windows 95, 98, NT, 2000, Me, or XP, follow the steps below.

- Step 1 Access the Cisco Aironet Wireless LAN Adapters Installation and Configuration Guide for Windows at the following URL:
  - $http://www.cisco.com/univercd/cc/td/doc/product/wireless/airo\_350/350cards/windows/incfg/index.htm$
- Step 2 Select Routine Procedures, Driver Procedures, and Upgrading the Driver.
- **Step 3** Follow the instructions for your operating system.

# **New and Changed Information**

This section describes new and changed information for release 8.01.06 of the Cisco Aironet client adapter driver for Windows.

## Windows XP Support

Driver release 8.01.06 is the first driver to be offered on Cisco.com that supports Windows XP.

# **Support for Enhanced Security**

Client firmware release 4.25.23 and Windows driver release 8.01.06 support three new security features designed to prevent sophisticated attacks on your wireless network's WEP keys. Access point firmware version 11.10T or greater is required to enable these security features.

- Message Integrity Check (MIC) MIC prevents bit-flip attacks on encrypted packets. During a bit-flip attack, an intruder intercepts an encrypted message, alters it slightly, and retransmits it, and the receiver accepts the retransmitted message as legitimate. MIC adds a few bytes to each packet to make the packets tamper-proof.
- WEP key hashing This feature defends against an attack on WEP in which the intruder uses the initialization vector (IV) in encrypted packets to calculate the WEP key. WEP key hashing removes the predictability that an intruder relies on to determine the WEP key by exploiting IVs.
- Broadcast key rotation EAP authentication provides dynamic unicast WEP keys for client devices
  but uses static broadcast, or multicast, keys. When you enable broadcast WEP key rotation, the
  access point provides a dynamic broadcast WEP key and changes it at the interval you select. When
  you enable this feature, only wireless client devices using LEAP or EAP-TLS authentication can
  associate to the access point. Client devices using static WEP (with open, shared key, or EAP-MD5
  authentication) cannot associate.



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If you enable MIC or WEP key hashing on the access point, your client adapter's driver and firmware must support these features; otherwise, the client will not be able to associate.



Refer to the Cisco Aironet Access Point Software Configuration Guide for instructions on enabling these security features on the access point.

#### **Documentation**

The documentation for the 340 and 350 Series Cisco Aironet Wireless LAN Adapters is changing with this release. Prior versions of client adapter software for Windows are documented in the Cisco Aironet Wireless LAN Adapters Hardware Installation Guide and the Cisco Aironet Wireless LAN Adapters Software Configuration Guide, both of which also contain information for Windows CE, Linux, and Macintosh. Now one Windows-specific document is available. This document is entitled Cisco Aironet Wireless LAN Adapters Installation and Configuration Guide for Windows.

## **Caveats**

This section describes resolved and open caveats for driver release 8.01.06.

#### Resolved Caveats

The following caveats are resolved in driver release 8.01.06.

#### **Upgrading the Driver**

When you use the Windows Update Driver function to upgrade to the new Cisco Aironet driver, the client adapter configuration is set back to the default values. The client adapter must be reconfigured if default values were changed prior to upgrading to the new driver (CSCds60296).

If LEAP was enabled before upgrading to the new driver, the wireless logon still functions correctly and LEAP is enabled after the system is rebooted. However, because WEP is not enabled (default configuration), the client cannot authenticate until the client adapter is reconfigured. This caveat is resolved in driver release 8.01.06.

#### **Auto Configuration Option Ineffective in ACU**

If you have driver version 6.97 and ACU version 4.15.06 (or a greater combination), you will see an Enable Auto Configuration Switching checkbox on the System Parameters screen in ACU. Selecting this box has no effect (CSCdu38754). Its functionality is reserved for future releases. Cisco recommends leaving this box unchecked. This caveat is resolved in Windows driver release 8.01.06 and ACU release 5.01.001 with the introduction of the profile manager feature.

## Firmware Flashing Stops at 23% with an Error

When you attempt to upgrade the client adapter firmware, the process stops at 23% and generates an error (CSCdu49124). This caveat is resolved in driver release 8.01.06.

#### Event Viewer in Windows 2000 Logs Message on PCX500.SYS Driver

The event viewer in Windows 2000 logs an error message on the pcx500.sys driver (CSCdt93358). The client adapter installs and operates properly; however, the error message appears in the event viewer. This caveat is resolved in driver release 8.01.06.

#### PCX500.SYS Driver Generates Random Media Disconnects

In Windows XP, the pcx500.sys driver generates random media disconnects, which can prohibit the copying of large files (CSCdv46849). This caveat is resolved in driver release 8.01.06.

#### PCX500.SYS Driver Generates Erroneous Media Events on Device Enable

The pcx500.sys driver generates erroneous media events when the client adapter is enabled, which causes the netshell to display an incorrect status (CSCdv46864). This caveat is resolved in driver release 8.01.06.

## **Open Caveats**

The following are known caveats for driver release 8.01.06.

#### 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).

#### In Max PSP Mode, Client May Intermittently Lose Ability to Pass Data But Remains Associated

When the client adapter is set to operate in Max PSP mode, it may intermittently lose the ability to pass data although it remains associated to the access point (CSCdv62892).

#### LEAP Authentication Continues after LEAP Support Is Disabled

If a profile that uses LEAP with a saved username and password is selected and then LEAP is disabled through the ACU installation program (by selecting Modify and deselecting the LEAP checkbox), the client adapter continues to LEAP authenticate after the system reboots (CSCdv64355). In fact, the client authenticates before login and remains associated after logoff.

#### 340 Series PCI Driver Does Not Install under Windows NT

When you install driver version 6.97 or greater for a 340 series PCI client adapter on a computer running Windows NT, you must select the PCI 4800 driver. If you select the PCI 340 driver, the installation fails (CSCdu34190).

## **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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. Select **Wireless Technologies** under "Top Issues."

# **Related Documentation**

For more information about 340 and 350 series client adapters, refer to the Cisco Aironet Wireless LAN Adapters Installation and Configuration Guide for Windows.

# **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 CD-ROM package shipped separately from the Cisco Aironet Series Wireless LAN Adapters CD that 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 as an annual subscription.

## **Ordering Documentation**

Cisco documentation is available in the following ways:

 Registered 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 **Leave Feedback** at the bottom of the Cisco Documentation home page. After you complete the form, print it out and fax it to Cisco at 408 527-0730.

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

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you to

- 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

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.

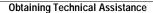
#### Cisco TAC Escalation Center

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.



This document is to be used in conjunction with the documents listed in the "Related Documentation" section.

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