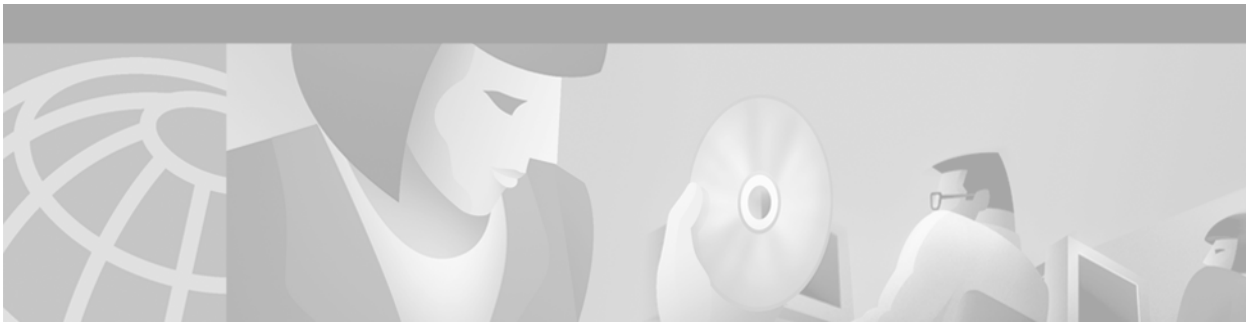

Release Notes for Cisco Aironet Client Utilities (Version 2.20) and Drivers (Version 2.20) for Windows CE

Contents

This document contains the following sections:

Introduction

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

- Version 2.20 of the Cisco Aironet client utilities for Windows CE
- Version 2.20 of the Cisco Aironet client adapter driver for Windows CE

The client utilities, driver, and help files are released together in a single file entitled WinCE2.11-PCM-LMC-v2.20.exe (for Windows CE 2.11) or WinCE3.0-PCM-LMC-v2.20.exe (for Windows CE 3.0).

CISCO SYSTEMS

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Important Notes

Note If your device is running Windows CE 3.0 version 2002 and your RADIUS server account specifies a domain, you must enter the domain name in the Wireless Login Module screen. To do so, enter the domain name before the username and separate the two with a forward slash (e.g., *domain/username*).

Note In the Site Survey Tool (SST) utility, the Percent Retries field on the Site Survey - Active Mode screen displays the percentage of packets that were retried for transmission. This value is calculated as follows: (number of retries x 100) / number of packets sent. If a lot of packets get lost, the number of retries could be greater than the number of packets sent. In this case, the Percent Retries field would show a value greater than 100%.

System Requirements

Client utility release 2.20 and driver release 2.20 can be used only with Cisco Aironet 340, 350, and 4800 Series Wireless LAN Client Adapters (PC cards and LM cards) and the following Windows CE devices:

- Handheld PC (HPC) running Windows CE 2.11 with an ARM, StrongARM, Mips, SH3, SH4, or x86 processor
- Handheld PC (HPC) running Windows CE 3.0 with an ARM, StrongARM, Mips, SH4, or x86 processor
- Pocket PC (PPC) running Windows CE 3.0 with an ARM, StrongARM, Mips, or SH3 processor

Upgrading to a New Client Utility and Driver Release

This section describes how to upgrade to client utility release 2.20 and driver release 2.20 for Windows CE.

Note The client utilities and help files are installed with the driver.

Uninstalling the Current Driver and Client Utilities

Cisco recommends that you uninstall the existing driver and client utilities for your client adapter before upgrading to more recent versions. This section provides instructions for uninstalling your client adapter's current driver and client utilities. The instructions vary depending on your client adapter's current driver version.

Uninstalling Driver Version 1.40 for Windows CE 2.11

Step 1 Terminate any Cisco Aironet applications running on the Windows CE device and eject the client adapter.

Step 2 Select **Start > Programs > Cisco > Cisco Aironet Uninstall**. The Cisco Aironet Uninstall screen appears.

Step 3 Select the **Uninstall Cisco Aironet Wireless LAN Adapter** checkbox.

Step 4 Click **OK**. The utility informs you that the adapter has been uninstalled. The registry entries (but no files) are removed.

Step 5 Delete the **aironet.dll** driver file and the following help files from the \Windows directory of the Windows CE device: **AuthType.htm**, **CEM.htm**, **Cisco Setup.htm**, **ClieName.htm**, **DataRate.htm**, **DHCP.htm**, **InfrStru.htm**, **LEAP.htm**, **LeapLogin.htm**, **PSMode.htm**, **SSID.htm**, **TxPowe.htm**, **WEP.htm**, and **WorldMode.htm**.

Step 6 Delete the following client utility files, which are probably in the \Windows\Programs\Cisco directory on the Windows CE device: **Aironet Client Utility.exe**, **Cisco Aironet Uninstall.exe**, **Cisco Link Status.exe**, **Client Encryption Manager.exe**, **Client Statistics Utility.exe**, **Load New Firmware.exe**, and **Site Survey Tool.exe**.

Step 7 Delete the **Cisco** directory from \Windows\Programs.

Step 8 Go to the "Loading a New Driver and Client Utilities" section on page 4 for instructions on loading the new driver and client utilities.

Uninstalling Driver Version 1.50 or Later for Windows CE 2.11 or 3.0

Step 1 Eject the client adapter and remove it from the Windows CE device.

Step 2 Select **Start > Settings > Control Panel > Remove Programs** (on an HPC device) or **Start > Settings > System** tab **> Remove Programs** (on a PPC device).

Step 3 Select **Cisco Wireless LAN Adapter**.

Step 4 Click **Remove**.

Step 5 When asked to verify your decision to remove the adapter, click **Yes**.

Step 6 Click **OK**. The driver, client utilities, registry entries, and Cisco directory are removed.

Step 7 Go to the "Loading a New Driver and Client Utilities" section on page 4 for instructions on loading the new driver and client utilities.

Loading a New Driver and Client Utilities

Follow the instructions below to install driver version 2.20 and client utility version 2.20 for your client adapter.

Step 1 Make sure that the client adapter is removed from the Windows CE device.

Step 2 Use a serial or USB cable to connect your Windows CE device to a laptop or PC running Microsoft ActiveSync. A message appears on the Windows CE device indicating that it is connecting to the host. After the Windows CE device is connected, the New Partnership window appears on the laptop or PC. This window asks if you want to set up a partnership.

Note Cisco recommends that you install the latest version of ActiveSync.

Step 3 Perform one of the following:

- If you want to establish a partnership that allows you to synchronize files between the laptop or PC and the Windows CE device, select **Yes**, click **Next**, and follow the instructions on the screen to specify the files to be synchronized and to finish setting up the partnership.
- If you do not want to synchronize files and want to connect as a "guest," select **No** and click **Next**. The screen indicates that you are connected as a guest.

Step 4 Use the laptop or PC's web browser to access the following URL:

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

Step 5 Locate the section for client adapter drivers and utilities.

Step 6 Click the link for Windows CE 2.11 or 3.0, depending on which version of Windows CE your device is running.

Step 7 Select the **WinCE2.11-PCM-LMC-v2.20.exe** or **WinCE3.0-PCM-LMC-v2.20.exe** file.

Step 8 Read and accept the terms and conditions of the Software License Agreement.

Step 9 Select the **WinCE2.11-PCM-LMC-v2.20.exe** or **WinCE3.0-PCM-LMC-v2.20.exe** file to download it.

Step 10 Save the file to a floppy disk or to the hard drive of your laptop or PC.

Step 11 Use Windows Explorer to locate the saved file.

Step 12 Double-click the *.exe file for your version of Windows CE (**WinCE2.11-PCM-LMC-v2.20.exe** or **WinCE3.0-PCM-LMC-v2.20.exe**). The application creates an Install directory under the ActiveSync directory, extracts the .cab files contained in the *.exe file, and copies them to the Install directory.

Step 13 Click **Next** to start the Windows CE Application Manager (CeAppMgr). CeAppMgr interrogates the Windows CE device to determine its processor type.

Note If a Windows CE device is not connected to the laptop or PC (as instructed in Step 2), click **Exit** to quit the setup program and connect a Windows CE device or click **Next** to continue the installation. If you select **Next**, a message appears indicating that the software will be downloaded the next time a mobile device is connected. Click **OK**. The next time a Windows CE device is connected to the laptop or PC via ActiveSync, CeAppMgr starts automatically, and you are prompted to install the software. If you select **Exit**, click **OK** to shut down CeAppMgr and start again beginning with Step 1.

Step 14 When a dialog box appears asking if you want to install the client adapter using the default application installation directory, click **Yes**. The default directory is \Windows\Programs\Cisco on HPC devices or \Windows\Start Menu\Programs\Cisco on PPC devices.

Note If you click **No** on an HPC device, CeAppMgr transfers the *.cab file to the Windows CE device and executes it. This process takes awhile and shows no evidence of activity. Eventually a screen appears on the Windows CE device that asks you where the application files should be installed.

A message and a progress bar appear indicating that the client adapter is being installed. CeAppMgr copies the processor-specific *.cab file to the Windows CE device. Then the driver and help files are copied to the \Windows directory, and the client utilities are installed in the \Windows\Programs\Cisco directory on HPC devices or the \Windows\Start Menu\Programs\Cisco directory on PPC devices. Shortcuts to ACU and CEM are automatically added to the desktop on HPC devices.

Step 15 When the installation process is complete on the laptop or PC, a message appears asking you to check the screen of the Windows CE device to see if any additional steps are required to complete the installation. Click **OK** to terminate the installation process on the laptop or PC.

Step 16 Complete any required steps on the Windows CE device.

Step 17 Disconnect the Windows CE device.

Step 18 Insert the client adapter (with the Cisco logo facing up) into the PC card slot of the Windows CE device.

The Windows CE device should configure the client adapter, and the green LED on the adapter should blink. If this does not happen, remove the client adapter, reset the Windows CE device, and reinsert the client adapter.

Step 19 The Cisco Wireless LAN Adapter Settings dialog box appears. (If the dialog box does not appear, select **Start**, **Settings**, **Control Panel**, **Network**, the **Adapters** tab, the Cisco Aironet wireless LAN adapter, and **Properties** on HPC devices or **Start**, **Settings**, the **Connections** tab, **Network**, and the Cisco Aironet wireless LAN adapter on PPC devices.)

Perform one of the following:

- If your device is connected to a DHCP server, select **Obtain an IP address via DHCP** or **Use server-assigned IP address** and click **OK**.
- If your device is not connected to a DHCP server, select **Specify an IP address** or **Use specific IP address** and follow the steps below:
  - **a.** Enter the IP address, subnet mask, and default gateway address you want to assign to your device. They can be obtained from your system administrator.
  - **b.** Select the **Name Servers** tab and enter the primary and secondary DNS and WINS you want to assign to your device. They can be obtained from your system administrator.
  - **c.** Click **OK**.

Step 20 Double-click the **Cisco ACU icon** or select **Start > Programs > Cisco > Aironet Client Utility** to open ACU.

Step 21 Select **SSID** under Property. Enter your RF network's case-sensitive SSID in the Value box.

Step 22 Select **Client Name** under Property. Enter your Windows CE device's unique client name in the Value box.

Step 23 Select **Data Rates** under Property. Make sure that **Auto** is selected in the list of options in the Value box.

Step 24 Click **OK**. The driver and client utility installation is complete. If the installation was successful, the client adapter's green LED blinks.

Note Refer to the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows CE* for information on configuring your client adapter.

New and Changed Information

This section describes new and changed information for client utility release 2.20 and driver release 2.20 for Windows CE.

Support for HPC Devices with SH4 Processors

The Cisco Aironet client adapter driver and utilities for Windows CE 3.0 now support handheld PCs (HPCs) with SH4 processors.

Support for Message Integrity Check (MIC)

Windows CE driver version 2.20 supports MIC, a new security feature designed to prevent sophisticated attacks on your wireless network's WEP keys. MIC does not need to be enabled on the client adapter; it is supported automatically in the driver version listed above. However, it must be enabled on the access point.

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.

The ACU screen displays the word "(MIC)" next to the current status if MIC is supported by the client adapter's driver and is enabled on the access point. If MIC is enabled, MIC statistics are provided by the Client Statistics Utility (CSU).

Note Access point firmware version 11.10T or greater is required to enable MIC. Refer to the *Cisco Aironet Access Point Software Configuration Guide* for instructions on enabling MIC on the access point.

Note If you enable MIC on the access point, your client adapter's driver must support MIC; otherwise, the client will not be able to associate.

Caveats

This section describes resolved and open caveats for client utility release 2.20 and driver release 2.20 for Windows CE.

Resolved Caveats

The following caveats are resolved in client utility release 2.20 and driver release 2.20.

WLM Fails to Run After Device Is Reset

If the Windows CE device is reset, the Wireless Login Module (WLM) utility terminates before the user can enter the LEAP username and password (CSCdv61350). This caveat is resolved in driver release 2.20.

LEAP Password Is Visible During Entry

The LEAP password is visible during entry when auto-complete is used (CSCdw03552). This caveat is resolved in client utility release 2.20.

Open Caveats

The following are known caveats for client utility release 2.20 and driver release 2.20.

Screen Flickers When Client Adapter Uses Max PSP Mode

The screen of the Windows CE device flickers when the client adapter is set to operate in Max PSP mode (CSCdw03420). This caveat will be resolved in a future release.

Overlapping Icons in the Cisco Folder

After you install the driver and client utilities, the icons for the utilities overlap one another in the Cisco folder (CSCdw03461).

Incorrect Error Message Displays If ActiveSync Is Not Installed on the Laptop or PC

If you double-click the WinCE2.11-PCM-LMC-v*x.xx*.exe or WinCE3.0-PCM-LMC-v*x.xx*.exe file to install the latest version of the Windows CE driver and client utilities but ActiveSync is not installed on the laptop or PC to which the Windows CE device is connected, a message appears indicating that the ceutil.dll file cannot be found. However, the message should read, “Windows CE Services not found on this computer. Setup cannot continue and will now exit” (CSCdv50211).

Click **OK** to acknowledge the message and terminate the installation utility. Then install ActiveSync on the laptop or PC and start the driver installation procedure again.

Note ActiveSync can be obtained from the CD that shipped with your Windows CE device, from the device manufacturer, or from Microsoft; however, Cisco recommends that you install the latest version of ActiveSync.

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 for Windows CE, refer to the *Cisco Aironet Wireless LAN Client Adapters Installation and Configuration Guide for Windows CE*.

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 Wireless LAN Client 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.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

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.