



Release Notes for Cisco Aironet 350 and CB20A Client Adapter Firmware 5.60.08

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Introduction

This document describes system requirements, important notes, new and changed information, upgrade instructions, and caveats for Cisco Aironet 350 and CB20A client adapter firmware version 5.60.08.



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System Requirements

You need these items in order to install Cisco Aironet 350 and CB20A client adapter firmware 5.60.08:

- A computer running Windows 2000 or XP



Note Client adapter firmware 5.60.08 is not supported for use with Windows 95, 98, 98 SE, NT, or Me; Windows CE; Linux; or Mac OS.

- One of these Cisco Aironet client adapters:
 - 350 series PC, LM, PCI, or mini PCI card
 - CB20A PC-Cardbus card



Note Client adapter firmware 5.60.08 is not supported for use with Cisco Aironet 340 series client adapters.

- Cisco Aironet 350 and CB20A Install Wizard version 1.5, which includes PC, LM, and PCI card driver version 8.6; mini PCI and PC-Cardbus card driver version 3.9; ACU version 6.4; ACM version 2.4; LEAP security module version 6.4; EAP-FAST security module version 1.0; PEAP security module version 1.2; and EAP-SIM security module version 1.0
- Access points to which your client adapter may attempt to authenticate must use the following firmware versions or later: 12.00T (340, 350, and 1200 series access points) or Cisco IOS Release 12.2(4)JA (1100 series access points).



Note To use WPA or fast roaming, access points must use Cisco IOS Release 12.2(11)JA or later. To use radio management (RM), access points must use Cisco IOS Release 12.2(13)JA or later.

Important Notes

Not Supported on Windows CE, Linux, or Mac OS Operating Systems

Client adapter firmware 5.60.08 is not supported for use on Windows CE, Linux, or Mac OS operating systems.

New and Changed Information

Support for Wi-Fi Multimedia (Windows 2000 and XP Only)

Wi-Fi Multimedia (WMM) is a component of the IEEE 802.11e wireless LAN standard for quality of service (QoS). It specifically supports priority tagging and queuing. QoS is an access point feature that enables networking professionals to provide preferential treatment to certain traffic at the expense of other traffic. Without QoS, the access point offers best-effort service to each packet, regardless of the packet contents or size. Implementing QoS in a wireless LAN makes network performance more predictable and bandwidth usage more effective.

Cisco recommends that you enable WMM if your computer is running a time-sensitive application for QoS-aware clients such as voice or video (for example, Cisco IP SoftPhone).

QoS and WMM must be enabled on the access point to which the client will associate. These features are supported on the access point in Cisco IOS Release 12.3(2)JA or later. Refer to the documentation for your access point for instructions on enabling these features.

WMM is supported automatically in client adapter firmware 5.60.08, PC/LM/PCI card driver 8.6, and mini PCI/CB20A card driver 3.9, which are included in Install Wizard 1.5. However, you must enable the Windows QoS Packet Scheduler to ensure WMM support. Follow the instructions in the *Cisco Aironet 350 and CB20A Wireless LAN Client Adapters Installation and Configuration Guide for Windows* (OL-1394-09) to enable the QoS Packet Scheduler:

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

**Note**

The QoS Packet Scheduler must be installed before you can enable it. It comes preinstalled on Windows XP; however, you must install it on Windows 2000.

Upgrading to a New Firmware Version

**Caution**

To minimize the risk of a power failure during the firmware flashing process, which could render your client adapter inoperable, Cisco recommends that your computer be plugged into AC power or have a fully charged battery at the start of flashing. If a power failure does occur, follow the instructions in the “[Obtaining Technical Assistance](#)” section to contact TAC for assistance.

This section describes how to upgrade to client adapter firmware 5.60.08 on a computer running the Windows 2000 or XP operating system.

Finding the Firmware Version

To find the firmware version that your client adapter is currently using, open ACU and click the **Status** icon. The Firmware Version field on the Status screen shows the firmware version.

Upgrading the Firmware

Follow these steps to upgrade your client adapter's firmware to version 5.60.08.


Note

When you upgrade your client adapter's firmware using ACU, the Automatically Load New Firmware When NDIS Driver Is Updated parameter on the Aironet Client Utility Preferences screen becomes disabled (or unchecked) automatically to prevent the newly loaded firmware from being overwritten by the driver. If you ever want to enable this parameter, you must recheck the check box.

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

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

Step 2 Choose **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, choose **Option #1: Aironet Wireless Software Selector**, follow the instructions on the screen, and go to [Step 7](#).

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

Step 4 Under Individual Files, find the client adapter firmware.

Step 5 Click the link that corresponds to your client adapter's model number (such as 350 series).

Step 6 Click the 5.60.08 firmware file for your specific client adapter type (such as CB or MPI).


Note

The firmware for PC, LM, and PCI cards is labeled *PCMCIA-LMC-PCI*, the firmware for mini PCI cards is labeled *mini PCI* or *MPI*, and the firmware for PC-Cardbus cards is labeled *CB*.

Step 7 Complete the encryption authorization form; then read and accept the terms and conditions of the Software License Agreement.

Step 8 Click the firmware file again to download it.

Step 9 Save the file to a floppy disk or to your computer's hard drive.

Step 10 Find the file using Windows Explorer, double-click it, and extract the image file to a folder.

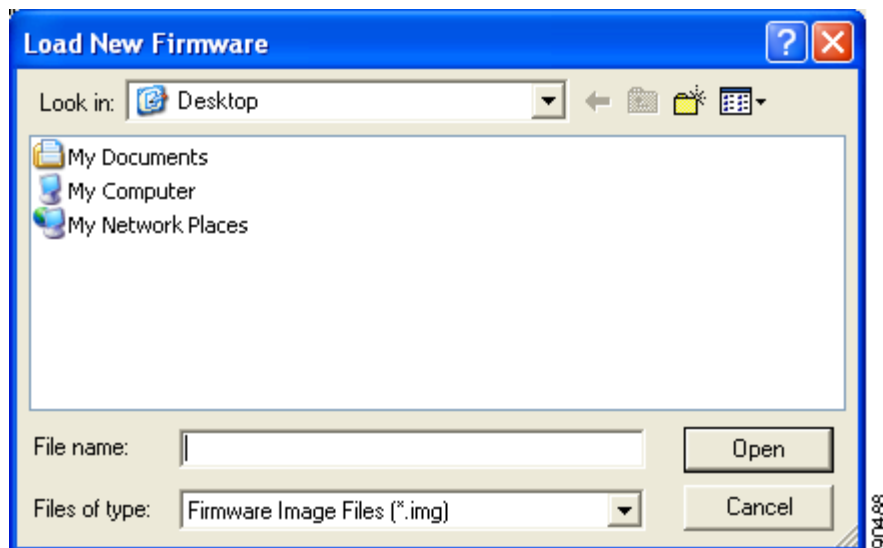

Note

To extract the file, click **Browse** on the WinZip Self-Extractor screen, select the folder in which you want the file to be placed, and click **OK** and **Unzip**. After the file is extracted, click **OK** to close the screen.

Step 11 Make sure the client adapter is installed in your computer and is operational.

Step 12 Open ACU and click the **Load Firmware** icon. The Load New Firmware screen appears (see [Figure 1](#)).

Figure 1 Load New Firmware Screen



- Step 13** Find the location of the new firmware in the Look in box.
- Step 14** Click the firmware image file (*.img) so that it appears in the File name box at the bottom of the screen.
- Step 15** Click the **Open** button. A progress bar appears while the selected image is loaded into the client adapter's Flash memory.
- Step 16** Click **OK** when the "Firmware Upgrade Complete!" message appears. The OK button cannot be selected until the process is complete or an error occurs.

Resolved Caveats

The following caveats are resolved in client adapter firmware 5.60.08.

- CSCed73998—Mini PCI card switches between two access points every 2 to 3 minutes
When a mini PCI card is in an area where adjacent access point channels are overlapping, the card switches between the two access points every 2 to 3 minutes, resulting in high backbone traffic.
- CSCee31325—EAP-FAST radio management clients fail to reauthenticate after WDS reboot
EAP-FAST clients with radio management support may not reauthenticate after the wireless domain services (WDS) device reboots.

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>

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

Related Documentation

For more information about Cisco Aironet 350 and CB20A client adapters, refer to these documents:

- *Cisco Aironet 350 and CB20A Wireless LAN Client Adapters Installation and Configuration Guide for Windows*, OL-1394-09

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

- *Release Notes for Cisco Aironet 350 and CB20A Client Adapter Install Wizard 1.5 for Windows*, OL-6553-01

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

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain 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

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 Ordering tool:
<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, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can submit e-mail comments about technical documentation 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

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, the Cisco Technical Assistance Center (TAC) provides 24-hour-a-day, award-winning technical support services, online and over the phone. Cisco.com features the Cisco TAC website as an online starting point for technical assistance. If you do not hold a valid Cisco service contract, please contact your reseller.

Cisco TAC Website

The Cisco TAC website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The Cisco TAC website is available 24 hours a day, 365 days a year. The Cisco TAC website is located at this URL:

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

Accessing all the tools on the Cisco TAC website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a login ID or password, register at this URL:

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

Opening a TAC Case

Using the online TAC Case Open Tool is the fastest way to open P3 and P4 cases. (P3 and P4 cases are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Case Open Tool automatically recommends resources for an immediate solution. If your issue is not resolved using the recommended resources, your case will be assigned to a Cisco TAC engineer. The online TAC Case Open Tool is located at this URL:

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

For P1 or P2 cases (P1 and P2 cases are those in which your production network is down or severely degraded) or if you do not have Internet access, contact Cisco TAC by telephone. Cisco TAC engineers are assigned immediately to P1 and P2 cases to help keep your business operations running smoothly.

To open a case by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete listing of Cisco TAC contacts, go to this URL:

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

TAC Case Priority Definitions

To ensure that all cases are reported in a standard format, Cisco has established case priority definitions.

Priority 1 (P1)—Your 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.

Priority 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Priority 3 (P3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Priority 4 (P4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

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

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Go to this URL to visit the company store:
<http://www.cisco.com/go/marketplace/>
- 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://cisco.com/univercd/cc/td/doc/pcat/>
- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. 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/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/ipj>
- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:
<http://www.cisco.com/en/US/learning/index.html>

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

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