



Release Notes for Cisco Aironet Client Utilities, Version 1.5.x for Linux

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Introduction

This document describes system requirements, upgrade procedures, new features, and caveats for the 1.5.x release of the Cisco Aironet client utilities for Linux. This release includes the following versions of the individual Linux utilities:

- Aironet Client Utility (ACU), Version 1.5.6
- Bcard Utility, Version 1.5.1
- Leapset Utility, Version 1.5.1 (initial release)
- Leapscript Utility, Version 1.5.1 (initial release)
- Leaplogin Utility, Version 1.5.1 (initial release)



This release introduces the new features discussed in the “New Features” section on page 3 and resolves the caveats listed in the “Resolved Caveats” section on page 5.

System Requirements

Release 1.5.x of the Cisco Aironet client utilities can be used with only Cisco Aironet 340, 350, 4500, and 4800 Series Wireless LAN Adapters (PC cards, LM cards, and PCI client adapters) and Linux kernel version 2.2.xx or 2.4.xx.

Important Notes

Please read the following important notes before installing and using the latest client utilities.

Remove Old Files Before Running ACU Version 1.5.6

The `/etc/ethX.cfg` files in previous versions of ACU are not compatible with version 1.5.6 and can cause problems if ACU finds them and attempts to load them. Please remove any old `/etc/ethX.cfg` files prior to running ACU version 1.5.6 for the first time.

EthX.cfg File Is Preconfigured for 30-mW Operation

The supplied default `ethX.cfg` file contains a power setting of 30 mW for compatibility between Cisco Aironet 340 and 350 Series Wireless LAN Adapters. For 350 series client adapters, use ACU if you want to set a higher power level.

Volatility of LEAP Credentials

If you use LEAP authentication, be advised that the LEAP credentials (username and password) are not stored in the `/etc/ethX.cfg` files. Even though the client may be configured through the `bcard` utility to associate to a LEAP-enabled access point, the client will not LEAP authenticate. To authenticate, either manually restart ACU and enter your LEAP credentials via the `Commands > Set LEAP Information` menu option or use one of the new LEAP credential utilities.

**Note**

One possible solution is to set the LEAP credentials via the `bcard` and `leapscript` utilities. To do so, add a line after the call to `bcard` that calls `leapscript` with your username and password.

Upgrading to a New Client Utility Release

This section describes how to upgrade to Linux client utility release 1.5.x.

Determining the Client Utility Release

From the client utility's Commands pull-down menu, select **About** to determine the release of the utility that you are using.

**Note**

The previous release of the Linux client utilities (ACU 1.4 and CEM 1.3) did not include an About menu option.

Upgrade Procedure

When you install the client adapter driver for Linux, the client utilities are also installed. Follow the instructions in the *Release Notes for Cisco Aironet Client Adapter Drivers, Version 1.5.2 for Linux* to install both the driver and the client utilities.

Using the Client Utilities

For instructions on using the client utilities for Cisco Aironet 340 and 350 Series Wireless LAN Adapters, access the *Cisco Aironet Wireless LAN Adapters Software Configuration Guide* at the following URL:
http://www.cisco.com/univercd/cc/td/doc/product/wireless/airo_350/350cards/pc350scg/index.htm

Then click the link for the section that pertains to the operating system you are using.

**Note**

The software configuration guide has not yet been updated to include information on the features introduced in this release.

New Features

This section describes new features in Linux client utility release 1.5.x.

Support Added for Linux Kernel Version 2.4.xx

The Linux client utilities can now be used on systems running either kernel version 2.2.xx or 2.4.xx.

Integration of CEM into ACU

The functionality of the Client Encryption Manager (CEM) utility has been incorporated into ACU.

Password Required for WEP Key Configuration

A password is now required to alter the client adapter's WEP key configuration. The default password is *Cisco* (uppercase *C*, lowercase *isco*).

Introduction of Three LEAP Credential Utilities

Three LEAP credential utilities (*leaplogin*, *leapset*, and *leapscript*) are included in the 1.5.x release. Each utility provides a different interface for entering LEAP credentials.

Leaplogin - An X window application for configuring LEAP credentials. A graphical dialogue box prompts you for your LEAP username and password.

Leapset - An interactive command line utility for configuring LEAP credentials. This utility prompts you for your LEAP username and password.

Leapscript - A non-interactive utility for configuring LEAP credentials designed for inclusion in shell scripts. (In the shell script, the LEAP password will be in clear text, so ensure that the permissions on the script are appropriate.)



Note The LEAP username and password do not need to be the same as those for your Linux user account.

Information on the Bcard Utility

Bcard is a Linux-specific utility that reads a previously saved client adapter configuration (which was set in ACU) from a file and configures additional client adapters using that information. It is designed primarily for use in computer startup files to allow the computer to reconfigure client adapters without user intervention.

Bcard has no required parameters. It attempts to configure all detected Cisco Aironet client adapters at once.

Using Bcard

Bcard is most useful when inserted in a startup script such as */etc/pcmcia/network* on a RedHat system. A slight delay to give the client adapter time to properly power up may be required.

An example of such usage is shown here in a snippet from a modified RedHat */etc/pcmcia/network* file:

```
case "${action:?}" in
  `start`)
    #
    # We don't do *anything* here. We get a hotplug event when the ethX device
    # is registered, and we bring the device up there
    #
    # need to delay slightly to allow radio to stabilize
    sleep 2
    # now re-load the previous saved configuration
    /opt/cisco/bin/bcard
  ;;
```

Online Help Added to ACU

Online help can now be accessed from almost every screen in ACU. (The help files are contained in the helpml.tar.gz file, which should be unpacked in /opt/cisco by the installation scripts.)

Resolved Caveats

The following caveats are resolved by Linux client utility release 1.5.x.

ACU Is Unable to Start Ad-Hoc Cell Properly

If a Linux client machine initiates an ad-hoc cell, any client that later joins the cell is unable to communicate with other members of the cell. If a Windows client machine initiates the ad-hoc cell, a Linux client may join it and is able to pass data (CSCdu23096). This caveat is resolved in version 1.5.6 of ACU.

Online Help Is Not Available in ACU

Although there are Help buttons on the ACU screens, they have no effect because no online help is available (CSCdt11139). This caveat is resolved in version 1.5.6 of ACU.

ACU Defaults to Shared Key Authentication in Home Mode

ACU defaults to using shared key authentication when you enable home mode. The client is not allowed to connect to the Cisco Aironet 340 Series Base Station because it requires open authentication (CSCdt50574). This caveat is resolved in version 1.5.6 of ACU.

ACU Prevents Clients without WEP from Entering Home Mode

A client adapter using either 0- or 128-bit WEP should be able to communicate with the Cisco Aironet 340 Series Base Station; however, ACU prevents clients without WEP from entering home mode (CSCdu26046). This caveat is resolved in version 1.5.6 of ACU.

Inability to Configure ACU to Use Shared Keys

ACU is unable to activate shared key authentication. If the Shared Key option is chosen, the client adapter's amber LED blinks, indicating a configuration error (CSCdt50567). This caveat is resolved in version 1.5.6 of ACU.

Inability to Disable Home Encryption in ACU

If you are using a 128-bit WEP-capable client adapter in home mode with encryption turned on and then replace the client adapter with a non-WEP-capable client adapter, a configuration error results, and ACU does not allow you to disable home encryption (CSCdu27714). This caveat is resolved in version 1.5.6 of ACU.

Inability to Disable Shared Key Authentication

If you are using a WEP-capable client adapter with WEP enabled and shared key authentication and then replace the client adapter with a non-WEP-capable client adapter, ACU does not allow you to disable shared key authentication (CSCdu27710). This caveat is resolved in version 1.5.6 of ACU.

Client Fails to Connect When 128-Bit WEP Is Set in ACU

When 128-bit WEP is set in ACU, the client is unable to connect and is eventually disabled (CSCdu03163). This caveat is resolved in version 1.5.6 of ACU.



Note Cisco always uses ACU to set WEP keys and recommends the use of our client utilities over the /proc interface configuration. The /proc interface has not been tested, so this caveat may be unresolved for this interface.

CEM Corrupts WEP Keys

CEM version 1.3 appears to function properly and writes WEP keys to the client adapter, but the client is unable to pass data to an access point using those keys (CSCdt50553). This caveat is resolved in version 1.5.6 of ACU.

Inability to Enter LEAP Credentials Outside of ACU

The only way to enter a username and password for LEAP authentication is within ACU (CSCdt11139). No provisions exist for a Linux machine without X or for offering LEAP authentication without allowing users access to the full capabilities of ACU. This caveat is resolved by the introduction of the leapset and leapscript utilities (versions 1.5.1).

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/support/bugtools/>.

Troubleshooting

For the most up-to-date, detailed troubleshooting information, refer to the Cisco TAC website at <http://www.cisco.com/tac>. Select **Wireless LAN** under Top Issues.

Related Documentation

For more information about Cisco Aironet client adapters, refer to the following documents:

- *Quick Start Guide: Cisco Aironet Wireless LAN Adapters*
- *Cisco Aironet Wireless LAN Adapters Hardware Installation Guide*
- *Cisco Aironet Wireless LAN Adapters Software Configuration Guide*

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

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

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

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 CCO users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

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. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

Cisco.com

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Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

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

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

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

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

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

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

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

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.

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

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