



Release Notes for Cisco 2700 Series Location Appliances for Software Release 1.2.17.0

August 22, 2005

These release notes describe features, enhancements, and caveats for software release 1.2.17.0 for Cisco 2700 Series Location Appliances. This release of location appliance software interoperates with Cisco Wireless LAN Solution versions 3.1 and 3.0.

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Introduction

Location appliance software release 1.2.17.0 supports Cisco 2700 Series Location Appliances that interoperate with Cisco Wireless LAN Solution version 3.1 and 3.0. Location appliances enhance the built-in Cisco WCS Location capabilities by computing, collecting and storing historical location data, which can be displayed in Cisco WCS. In this role, the location appliance acts as a server to one or more Cisco WCS servers, collecting, storing, and passing on data from its associated Cisco Wireless LAN Controllers.

System Requirements

You can install this software release on any 2700 series location appliance.

Upgrading to this Software Release

For instructions on using Cisco WCS to install this software on location appliances, refer to the “Downloading Application Code to a Location Appliance using Cisco WCS” section in the “Operating Location Appliances” chapter in the *Cisco Wireless LAN Solution Product Guide*.

Click this link to browse to that document:

http://www.cisco.com/en/US/products/ps6386/tsd_products_support_series_home.html

Backup of Release 1.2.17.0 Cannot Restore Previous Releases

A backup from this release of location appliance software cannot be restored on a location appliance running an earlier release. Before you upgrade a location appliance to this release, Cisco recommends that you create a backup for the earlier release and archive it in case you need to revert an upgraded system to an earlier release.

New Features

This section lists new features in this release.

Location Appliance Backup Scheduler

You can use the location appliance backup scheduler feature in Cisco WCS to schedule automatic backups of the location appliances managed by WCS.

Support for Additional Access Point Antennas

These access point antennas are supported in this release:

- AIR-ANT1000—Cisco 1000 series access point integrated antenna
- Antennas on 802.11a radio modules in 1200 series access points

- AIR-ANT1728—Omnidirectional ceiling-mounted antenna
- AIR-ANT1729—Wall-mounted patch antenna
- AIR-ANT2012—Wall-mounted diversity patch antenna
- AIR-ANT2410Y-R—Yagi master or wall-mounted antenna
- AIR-ANT5959—Omnidirectional diversity ceiling-mounted antenna
- Integrated omnidirectional antennas in 1130AG series access points
- AIR-ANT5135D-R—Omnidirectional dipole antenna
- AIR-ANT5145V-R—Omnidirectional diversity antenna
- AIR-ANT5160V-R—Omnidirectional antenna
- AIR-ANT3549—Wall-mounted patch antenna
- AIR-ANT4941—Omnidirectional dipole antenna
- AIR-ANT2506—Omnidirectional mast-mounted antenna
- AIR-ANT3213—Omnidirectional diversity pillar-mounted antenna

Improved Calibration for Location Algorithm

The calibration algorithm in this release has been updated to provide improved accuracy for all location functions.

Absolute RSSI Time Cutoff Enhancement

In earlier releases of location appliance software, Received Signal Strength Indication (RSSI) samples were dropped based on the RSSI value relative to the newest RSSI sample. In this release, the location appliance considers an absolute time cutoff so that if a sample is older than an absolute specific time it is dropped regardless of the relative time setting.

Important Notes

This section describes important information about location appliances.

Default Username and Password Are *root* and *password*

You must enter a username and password when you log into the location appliance console. The default username for administrator login is *root*, and the default password is *password*. Both the username and password are case sensitive.

Pushing a WCS Calibration Model to the Location Appliance

To push a Cisco WCS Calibration model to the location appliance, edit the Floor Area to change the model or go to the model and apply to Floor Areas, and then synchronize the change to the location appliance.

Refresh Rate for Maps Depends on Connection Speed

The maps displayed in Cisco WCS refresh at the rate of your network connection speed. For example, if you are dialing in across a 52-Kbps line, maps refresh slowly.

Changing the Default Speed and Port Settings

The location appliance default speed and port configuration is 100BASE-Tx-FD. To verify the current speed and port configuration, enter `/sbin/mii-tool`. The command output might look like this example:

```
eth0: negotiated 100baseTx-FD flow-control, link ok
eth1: negotiated 100baseTx-FD, link ok
```

To configure the location appliance autonegotiate for any other speed, enter this command:

```
mii-tool -r
```

Caveats

This section lists open and resolved caveats in location appliance release 1.2.17.0.

Open Caveats

These caveats are open in this release:

- CSCar14829—Because of the method used to calculate RSSI samples for the location appliance, RSSI samples sometimes fail to show some actual client locations.
- CSCsa96308—When contributing access points are synchronized with the location server, changing the location of the contributing access points does not affect the location from the location appliance.
- CSCsb03912—When you synchronize WCS and location appliance databases, any Calibration Model defined in WCS will be pushed to the location appliance. However, when you synchronize an empty WCS database with a non-empty location appliance database, the Calibration Models will be pulled into WCS but the location datapoints will not be pulled into WCS.
- CSCsb04645—The host-access, time-based rule is dependent on the host time. For example, you could configure this host-access, time-based rule on a Cisco WCS with IP address 10.1.3.14:

```
10.1.3.14/32          Start access: 14:20          End access: 14:30
```

The times in the rule, 14:20 and 14:30, depend on the machine time on the Cisco WCS at IP address 10.1.3.14.

- CSCsb15455—Changing the location appliance or the WCS time zone does not change the location history time stamp. The time zone is determined by the browser's locale.
- CSCsb45947—In WCS, searching for clients or tags by MAC address in the location appliance sometimes returns a message indicating that no elements were found, while the same elements can be found on the maps or in the list of all elements. When searching for clients or tags the workaround is to enter the full MAC address value, separating each pair of numbers with colons (for example, 00:00:00:11:11:11).

- CSCsb54606—A backup from this release of location appliance software cannot be restored on a location appliance running an earlier release. Before you upgrade a location appliance to this release, Cisco recommends that you create a backup for the earlier release and archive it in case you need to revert an upgraded system to an earlier release.

Resolved Caveats

These caveats are resolved in this release:

- CSCsa98851—WCS now reports an error when a location appliance fails to respond to commands.
- CSCsb04624—When a host is communicating with the location appliance and a Host Access ACL is modified to exclude the host, the existing host connection is not dropped. When the host attempts to reconnect to the location appliance, the connection will be refused.

If You Need More Information

If you need information about a specific caveat that does not appear in these release notes, you can use the Cisco Bug Toolkit to find select caveats of any severity. Click this URL to browse to the Bug Toolkit:

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl

(If you request a defect that cannot be displayed, the defect number might not exist, the defect might not yet have a customer-visible description, or the defect might be marked Cisco Confidential.)

Troubleshooting

For the most up-to-date, detailed troubleshooting information, refer to the Cisco TAC website at <http://www.cisco.com/tac>. Click **Technology Support**, choose **Wireless** from the menu on the left, and click **Wireless LAN**.

Related Documentation

This section lists documents related to location appliances:

- *Cisco Wireless LAN Solution Product Guide*
- *Cisco WLAN Solution CLI Reference*
- *Cisco 2700 Series Location Appliance Installation and Configuration Guide*

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 at this URL:

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

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Product Documentation DVD

Cisco documentation and additional literature are available in the Product Documentation DVD package, which may have shipped with your product. The Product Documentation DVD is updated regularly and may be more current than printed documentation.

The Product Documentation DVD is a comprehensive library of technical product documentation on portable media. The DVD enables you to access multiple versions of hardware and software installation, configuration, and command guides for Cisco products and to view technical documentation in HTML. With the DVD, you have access to the same documentation that is found on the Cisco website without being connected to the Internet. Certain products also have .pdf versions of the documentation available.

The Product Documentation DVD is available as a single unit or as a subscription. Registered Cisco.com users (Cisco direct customers) can order a Product Documentation DVD (product number DOC-DOCDVD=) from Cisco Marketplace at this URL:

<http://www.cisco.com/go/marketplace/>

Ordering Documentation

Beginning June 30, 2005, registered Cisco.com users may order Cisco documentation at the Product Documentation Store in the Cisco Marketplace at this URL:

<http://www.cisco.com/go/marketplace/>

Nonregistered Cisco.com users can order technical documentation from 8:00 a.m. to 5:00 p.m. (0800 to 1700) PDT by calling 1 866 463-3487 in the United States and Canada, or elsewhere by calling 011 408 519-5055. You can also order documentation by e-mail at tech-doc-store-mkpl@external.cisco.com or by fax at 1 408 519-5001 in the United States and Canada, or elsewhere at 011 408 519-5001.

Documentation Feedback

You can rate and provide feedback about Cisco technical documents by completing the online feedback form that appears with the technical documents on Cisco.com.

You can send comments about Cisco 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.

Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you can perform these tasks:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories and notices for Cisco products is available at this URL:

<http://www.cisco.com/go/psirt>

If you prefer to see advisories and notices as they are updated in real time, you can access a Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed from this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you might have identified a vulnerability in a Cisco product, contact PSIRT:

- Emergencies—security-alert@cisco.com

An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.

- Nonemergencies—psirt@cisco.com

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532



Tip

We encourage you to use Pretty Good Privacy (PGP) or a compatible product to encrypt any sensitive information that you send to Cisco. PSIRT can work from encrypted information that is compatible with PGP versions 2.x through 8.x.

Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one linked in the Contact Summary section of the Security Vulnerability Policy page

at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

The link on this page has the current PGP key ID in use.

Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Technical Support & Documentation website on Cisco.com features extensive online support resources. In addition, if you have a valid Cisco service contract, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not have a valid Cisco service contract, contact your reseller.

Cisco Technical Support & Documentation Website

The Cisco Technical Support & Documentation website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, at this URL:

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

Access to all tools on the Cisco Technical Support & Documentation website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

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



Note

Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support & Documentation website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request 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 list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—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.

Severity 2 (S2)—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.

Severity 3 (S3)—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.

Severity 4 (S4)—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, documentation, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:
<http://www.cisco.com/go/marketplace/>
- *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 at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

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

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

or view the digital edition at this URL:

<http://ciscoiq.texterity.com/ciscoiq/sample/>

- *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>

- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:

<http://www.cisco.com/en/US/products/index.html>

- Networking Professionals Connection is an interactive website for networking professionals to share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:

<http://www.cisco.com/discuss/networking>

- World-class networking training is available from Cisco. You can view current offerings 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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