Release Notes for Cisco 2700 and 2710 Location Appliances, Release 6.0.202.0

April 2011

These release notes describe caveats and important notes for maintenance software release 6.0.202.0 for Cisco Location Appliances. This release of location appliance software supports both Cisco 2700 and 2710 location appliances.

Note Location appliances are identified as *location servers* on the Cisco WCS interface and in supporting documentation.

Note For details on compatibility with Cisco Wireless LAN Controllers and Cisco Wireless Control Systems (WCS), refer to the "System Requirements" section on page 3 before installing this software.

Note Refer to the online version of the *Cisco 2700 Series Location Appliance Getting Started Guide* for details on the physical installation and initial configuration of the location appliance at: http://www.cisco.com/en/US/products/ps6386/prod_installation_guides_list.html

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These release notes contain the following sections:

Introduction

Location appliances compute, collect, and store historical location data using Cisco wireless LAN controllers and access points to track the physical location of wireless devices. The collected location data can be viewed in GUI format in Cisco WCS.

Software and AeroScout CLE Compatibility Matrix

Table 1 lists the compatibility matrix for the various releases of WCS, Controllers, 2710 Location Based Services, MSE 3300 Series, and AeroScout CLE.

Table 1   Software and AeroScout CLE Compatibility Matrix

Release Date	WLC	WCS	2710 LBS	MSE 3300	AeroScout CLE
22nd June 2007	4.1.171.0	4.1.83.0	3.0.37.0		
13th August 2007	4.1.185.0	4.1.91.0	3.0.42.0		
26th Oct 2007	4.2.61	4.2.62.0	3.1.35.0		
28th Jan 2008	-	4.2.62.11	-		
14th March 2008	4.2.112.0	4.2.81.0	3.1.36.0		
27th May 2008	4.2.130	4.2.97.0	3.1.38.0		
29th Sep 2008	4.2.176.0	4.2.110.0	3.1.42.0		
14th Feb 2008	5.0.148.0	5.0.56.0	4.0.32.0		
15th April 2008	-	-	4.0.33.0		
1st August 2008	5.0.148.2	5.0.72.0	4.0.38.0		
21st July 2008	4.2.130	5.1.64.0	5.1.30.0	5.1.30.0	2.1 (4.0.10.5)
9th Jan 2009	5.1.163.0	5.1.65.4	5.1.35.0	5.1.35.0	2.1 (4.0.10.5)
24th Nov 2008	5.2.157.0	5.2.110.0	5.2.91.0	5.2.91.0	2.2.1 (4.0.13-18)
10th Feb 2009	5.2.178.0	5.2.130.0	5.2.91.0	5.2.91.0	2.2.1 (4.0.13-18)
25th June 2009	5.2.193.0	5.2.148.0	5.2.100	5.2.100	2.2.1 (4.0.13-18)
11th June 2009	6.0.182.0	6.0.132.0	6.0.85.0	6.0.85.0	3.2.1 (4.0.15.12) or 3.2 (4.0.14.14)
9th Nov 2009	6.0.188.0	6.0.170.0	6.0.97.0	6.0.97.0	3.2.1 (4.0.15.12) or 3.2 (4.0.14.14)
17th Feb 2010	6.0.196.0	6.0.181.0	6.0.101.0	6.0.103.0	3.2.1 (4.0.15.12)
30th August 2010	6.0.199.4	6.0.196.0	6.0.102.0	6.0.105.0	4.2.4.4
6th June 2010	7.0.98.0	7.0.164.0	-	7.0.105.0	4.2.3.5
14th April 2011	7.0.116.0	7.0.172.0	-	7.0.201.0	-

System Requirements

You can install this software release on any 2700 or 2710 location appliance.

Table 2 summarizes the minimum software release requirements for the Cisco WCS and controller to interoperate with release 6.0.202.0 of the location appliance.

Backwards Compatibility of Location Appliance Software

Table 2   Minimum Software Requirements

Service	System	Minimum Software Release
Context-Aware Software and Wireless Intrusion Prevention System[1]	Mobility services engine	6.0.202.0
	Controller	6.0.202.0
		6.0.199.4
		5.2.157.0 and 5.2.178.0
		5.1.151.0 and 5.1.163.0
		4.2.130 (or later)
		Note Release 5.0.x is not supported with release 6.0 and above
	Cisco WCS	6.0.202.0
		6.0.196.0
	Cisco WCS Navigator	1.5.202.0
		1.5.196.0

1.

Location appliance software is backwards compatible with release 5.1 and 5.2. Therefore, you can only upgrade two releases forward. For example, you can directly upgrade from release 5.1 and 5.2 to 6.0 but you cannot directly upgrade to release 6.0 from releases earlier than 5.1.

Upgrading to this Software Release

For instructions for using either Cisco WCS or for manually downloading this software to location appliances, refer to the "Updating Location Appliance Software" section in the "Installation and Configuration" chapter of the *Cisco 2700 Series Installation and Configuration Guide* (78-17180-03 and later). You can find this document at this URL:

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

Backup of Software Cannot be Restored on Earlier Releases

A backup of location appliance software release 6.0 (or above) cannot be restored on any location appliance running an earlier software release. Before you upgrade a location appliance to 6.0.202.0, we recommend that you create a backup of the earlier release and archive it. This enables you to convert an upgraded system to an earlier release, if necessary.

Location Appliance Image is Compressed

If you download the server image *.gz file using Cisco WCS, the location appliance automatically decompresses (unzips) it, and you can proceed with the installation as before.

If you manually download the compressed *.gz file using FTP, you must decompress the files before running the installer. These files are compressed under the LINUX operating system and must be decompressed using the *gunzip* utility program. The unzip method you use is defined by the filename you are trying to unzip.

To make the bin file executable, use the following command:

chmod +x filename.bin

Updated Location Appliance Software Version Shown in Cisco WCS after Polling

After a software update, the new location appliance software version does not immediately appear in location appliance queries on Cisco WCS. Up to five minutes is required for the new version to appear. Cisco WCS, by default, queries the location appliance every five minutes for status.

Important Notes

This section describes important information about new features and operational notes for software release 6.0.202.0 for location appliances.

Operational Notes

The following operational notes are relevant to this release.

Automatic Installation Script for Initial Setup

An automatic setup wizard is available to step you through the initial setup of the location appliance.

An example of the complete automatic setup script (and manual setup process) is provided in the *Cisco 2700 Series Getting Started Guide*. You can find this document online at:

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

Mandatory Default Root Password Change

You must change the default root password during initial configuration of the location appliance to ensure optimum network security.

- You are prompted to change the password during the setup script.

- You can also change the password using the Linux command, **passwd**.

Synchronization Required When Upgrading to Release 6.0.202.0 or Importing CAD Floor Images

When upgrading to release 6.0.202.0 from release 5.x (and earlier), you must synchronize after the software upgrade and also when CAD generated floor images are imported into Cisco WCS.

Controller and Associated Location Appliances Must be Mapped to the Same NTP and WCS Server

Communications between the location appliance, Cisco WCS, and the controller are in universal time code (UTC). Configuring NTP on each system provides devices with the UTC time. An NTP server is required to automatically synchronize time between the controller, Cisco WCS and the location appliance.

The location appliance and its associated controllers must be mapped to the same NTP server and the same Cisco WCS server.

Local time zones can be configured on a location appliance to assist network operations center (NOC) personnel in locating events within logs.

Note You can configure NTP server settings during the automatic installation script. Refer to the *Cisco 2700 Series Location Appliance Getting Started Guide* for details on the automatic installation script. You can find this document online at:
http://www.cisco.com/en/US/products/ps6386/prod_installation_guides_list.html

Networks with Large Access Point Deployments Might Experience Slower Location Updates

In networks with a large number of access points (approximately 2000 or more), location appliances might experience a slow down in location calculation and heatmap updates for clients, tags, and access points (CSCsk18810).

Floor Change or Minimum Distance Required for Location Transitions to Post to History Log

When history logging is enabled for any or all elements (client stations, asset tags, and rogue clients and rogue access points), a location transition for an element is only posted if it changes floors or the element's new location is at least 30 feet or 10 meters from its original location.

Cisco Path: Services > Mobility Services > Device Name > Context Aware Service > Administration > History Parameters.

Logs can be viewed at Services > Mobility Services > Device Name > Systems > Log.

Location History Timestamps Match Browser's Location

The Cisco WCS timestamp is based on the browser's location and not on the location appliance settings. Changing the time zone of the Cisco WCS or on the location appliance does not change the timestamp for the location history.

PDAs with Limited Probe Requests Might Affect Location

Many PDAs do not continuously send out probe requests after initial association to the Cisco Unified Wireless Network (CUWN). Therefore, calculating the location accuracy of such PDAs using RSSI readings might not always be optimal.

WCS Screen Changes

- *Services* replaces *Mobility* in the navigation bar of Cisco WCS.

Common Vulnerabilities Exposure Notes

This section lists the notes for common vulnerabilities exposure:

- The CVE-2009-0591 and CVE-2009-0789 are not applicable for Red Hat Enterprise Linux 3. So it is not applicable for location appliance.

- Both Red Hat Enterprise Linux 3 and location server does not use the vulnerable API, and so CVE-2009-0590 is not applicable for location appliance.

Note   The Location Appliance OS is based on Redhat Enterprise Linux 3.

New Features

This maintenance release does not introduce new features.

Caveats

The following sections list Open Caveats and Resolved Caveats in Release 6.0.202.0 for Windows and Linux. For your convenience in locating caveats in Cisco's Bug Toolkit, the caveat titles listed in this section are taken directly from the Bug Toolkit database. These caveat titles are not intended to be read as complete sentences because the title field length is limited. In the caveat titles, some truncation of wording or punctuation might be necessary to provide the most complete and concise description. The only modifications made to these titles are as follows:

- Commands are in **boldface** type.
- Product names and acronyms may be standardized.
- Spelling errors and typos may be corrected.

Note   If you are a registered cisco.com user, view Bug Toolkit on cisco.com at the following website:
http://tools.cisco.com/Support/BugToolKit/
To become a registered cisco.com user, go to the following website:
http://tools.cisco.com/RPF/register/register.do

This section consists of the following topics:

Open Caveats

There are no Open Caveats for this release.

Resolved Caveats

Table 3 lists the resolved caveats in Version 6.0.202.0.

Table 3   Resolved Caveats

ID Number	Caveat Title
CSCtf17352	Location Appliance is unreachable because of out-of-memory in an overloaded sytem.
CSCth61007	False absence notifications are triggered if the device probes slower than configuration value.
CSCti06687	In rare scenario, Location Appliance is unable to start due to database corruption.
CSCtj16545	Location Appliance memory leak occurs due to API calls to GetTagLocationList.
CSCth61002	Location Appliance is potentially affected by industry-wide TLS protocol vulnerability.
CSCtj02186	Location Appliance user/group permissions has issues and needs to be fixed.
CSCtj05181	StackOverFlowException results when using AesQueryCriteria in Query.
CSCtj33754	Location Appliance drops tag CCX payload packets processed out of order.
CSCtb65365	Timer for Absent Data getting set to 0, everytime log preference changes.
CSCth48443	Location Appliance stops tracking Wireless Client when Controller code is 7.0.

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 caveats of any severity. Click this URL to browse to the Bug Toolkit:

http://tools.cisco.com/Support/BugToolKit/

(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.)

Related Documentation

The following documents are related to location appliances:

- *Cisco 2700 Series Location Appliance Getting Started Guide*
- *Cisco Location Appliance Configuration Guide, Release 6.0*
- *Cisco Wireless Control System Configuration Guide, Release 6.0*
- *Cisco Wireless LAN Controller Configuration Guide, Release 6.0*

Note You can see the latest online versions of these documents by selecting the Wireless category and then the appropriate product from the Wireless LAN Controller and Wireless LAN Management > Unified Wireless LAN Management sub-category panels at the following link: http://www.cisco.com/cisco/web/psa/default.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

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