

# **Release Notes for Cisco 2700 and 2710 Location Appliances for Software Release 5.2.91.0**

#### Last Revised: March 6, 2009

These release notes describe features, enhancements, and caveats for software release 5.2.91.0 for Cisco Location Appliances. This release of location appliance software supports both Cisco 2700 and 2710 location appliances.



Location appliances are identified as *location servers* in Cisco WCS and in supporting documentation.



For details on compatibility with Cisco Wireless LAN Controllers and Cisco Wireless Control Systems (WCS), refer to the "System Requirements" section on page 2 prior to installing this software.



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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# 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.

## **System Requirements**

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

Table 1 summarizes the minimum software release requirements for the Cisco WCS and controller to interoperate with the release 5.2 of the location appliance.

System	Minimum Software Release
Controller	Release 5.2.157.0 (or later), Release 5.1.151.0 (or later), or Release 4.2.130 (or later). <b>Note</b> Controller release 5.0.x is not compatible with location appliance release 5.1.x.
Cisco WCS	Release 5.2.110 (or later).
Cisco WCS Navigator	Release 1.4.110 or later.

Table 1 Minimum Software Requirements

### **Backwards Compatibility of Location Appliance Software**

Location appliance software is backwards compatible with the previous two location appliance releases. Therefore, you can only upgrade two releases forward. For example, you can directly upgrade from release 4.0 and 5.1 to 5.2 but you cannot directly upgrade to release 5.2 from releases earlier than 4.0.

### **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:

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 releases 5.2 cannot be restored on any location appliance running an earlier software release. Before you upgrade a location appliance to 5.2, Cisco recommends 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 5.2.91.0 for location appliances.

### **Operational Notes**

The following operational notes are relevant to this release.

#### 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 mobility services engine 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.eisco.com/an/US/products/ps6386/prod\_installation\_guides\_list.html

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#### 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.

#### 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

#### Synchronization Required When Upgrading to Release 5.1 or Importing CAD Floor Images

When upgrading to release 5.2 from release 5.x (and earlier) synchronization is required after the software upgrade. Synchronization is also required after upgrading to release 5.2 if the floor images used in Cisco WCS are CAD images.

#### Deleting Admin User Causes Loss of Connectivity to Cisco WCS

If the admin user is removed from the location appliance, the connection to Cisco WCS is lost. Additionally, you cannot recreate the user at the System > Accounts > User window as it is no longer available (CSCsv03394).

Refer to the workaround for CSCsv03394 in the Open Caveats section for details on how to recover from this occurrence.

#### **Release 4.1 of AeroScout MobileView Required for Northbound Notifications**

If a release of AeroScout MobileView *earlier than 4.1* is in use, incorrect responses are sent to those northbound notifications received from the mobility services engine. Northbound notifications are then resent by the mobility services engine, overloading the notification queue and resulting in reports of dropped notifications (CSCsx56618).

### **Configuration Changes for Greater Location Accuracy**

In some RF environments, where location accuracy is around 60 to 70%, or where incorrect client or tag floor location map placements occur, you might need to modify the moment RSSI thresholds in the *aes-config.xml* file in the *opt/locserver/conf/* directory of the location server (CSCsw17583).

The RSSI parameters that might need modification are:

- locp-individual-rssi-change-threshold
- locp-aggregated-rssi-change-threshold
- locp-many-new-rssi-threshold-in-percent
- locp-many-missing-rssi-threshold-in-percent

#### **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.

### Mandatory Setting Required on Intel 802.11n and 802.11 b/g/n Client Cards for Accurate Calibration

The Cisco CX RM option within Intel's Enterprise Security Profile must be enabled to ensure adequate calibration data points are collected for Intel 802.11n and 802.11 b/g/n client cards.

You can use the Intel Client Software PROSET package to enable the Cisco CX RM option in the Enterprise Security Profile (CSCsl40623).

#### WCS Screen Changes

- Location sensors are now identified as Wi-FI TDOA receivers in menus and screens.
- IP addresses are required when adding chokepoints and Wi-Fi TDOA receivers to maps.
- Horizontal and vertical (x,y) coordinates can be entered for Wi-Fi TDOA receiver map placement in addition to manual placement.

### **New Feature Support**

This section describes the new features supported in location appliance release 5.2.91.0.

### **WCS Location Template**

You can define a location template for assignment to multiple controllers. You can set the following general and advanced parameters on the location template.

General parameters–Enable RFID tag collection, set the location path loss for calibrating or normal (non-calibrating) clients, measurement notification for clients, tags, and rogue access points, set the RSSI expiry timeout value for clients, tags, and rogue access points.

Advanced parameters–Set the RFID tag data timeout value and enable the location path loss configuration for calibrating client multi-band.

#### Wi-Fi TDOA Receivers for TDOA-based Tag Location Reporting

You can add Wi-Fi Time Difference of Arrival (TDOA) receivers (also known as TDOA sensors) to the location appliance database and position them on Cisco WCS maps.

A Wi-Fi TDOA receiver is an external system designed to receive signals transmitted from a tagged, tracked asset. These signals are forwarded to the location appliance to assist in the location calculation of the asset. Location sensors use TDOA to calculate tag location. This method uses data from a minimum of three location sensors to generate a tagged asset's location.

Cisco WCS Path: Configure > Wi-Fi TDOA Receivers > Add WiFi TDOA Receivers...

#### Import and Export of Wi-FI TDOA Receiver and Chokepoint Map Positioning Information

You can export chokepoint and TDOA receiver map positioning information to a file and then modify the map position of the chokepoints and TDOA receiver within that file. The file contains only those lines describing those chokepoints and TDOA receivers that you want to reposition on the map. When you reimport the file, the modified positions of the chokepoint and TDOA receivers are automatically placed on the map. This approach allows faster repositioning of multiple chokepoints or TDOA receivers on a map than manual repositioning.

You can also export port and import these files between one WCS and another as well as create a file offline for later import into WCS.

- The following format is used when importing and exporting files for the TDOA receiver:
  - [BuildingName], [FloorName], [LSMacAddress], [LSName], [IP Address], [X], [Y], [Z].
- The following format is used when importing and exporting files for the chokepoint:
  - [BuildingName], [FloorName], [CPMacAddress], [CPName], [IPAddress], [Range], [X], [Y], [Z], [IsPerimeter].

**Cisco WCS Path: Monitor > Maps >** *Properties* 

#### **Location Jitter Reduction**

The Smooth Location Filtering option on the WCS Location Parameters page has been replaced by the Location Filtering option.

Location Filtering is applied only to Client, Rogue and Tag elements. Enabling the location filter allows previous location estimates to be used in estimating current location. This reduces location jitter for stationary devices and improves tracking for mobile ones. This option is enabled by default.

**Cisco WCS path: Location Server > Administration** 

### **Location Latency Improvements**

Location tracking calculation and generation times have been improved in the 5.2 release. Users should see location tracking latency fall to less than 10 seconds for most deployments.

## **Caveats**

This section lists open and resolved caveats in location appliance release 5.2.91.0.



There was no release 5.0 for the location appliance.

## **Open Caveats**

The following caveats are open (unresolved) in release 5.2.91.0:

• CSCsk17031—The history page loads slowly when you query the location history of a tag or client.

**Workaround:** You can increase the interval between historical readings of client, tags, and rogue clients and access points. You can also prune the data more frequently (Location Server > Administration > History Parameters).

• CSCsk18826–Cisco WCS might experience slower refresh and rendering times when managing large controller networks (200 or more) because of increased page synchronization requirements. Additionally, the CPU use for the web browser increases substantially and the browser might be unresponsive for a short period of time.

Workaround: None.

• **CSCsk74074**–In some cases, when you select the Synchronize Servers option (Location > Location Servers > *Server Name > Location > Synchronize Server*) for a selected location appliance, it synchronizes all reachable location appliances in addition to the selected location appliance. Eventually an error appears indicating that the location appliances cannot be synchronized because they are unreachable.

Workaround: None.

• **CSCsl40623**–Fewer data points are collected with Intel 802.11n and 802.11 b/g/n client cards during calibration when the Cisco Compatible Client Extension (CX) RM option within the Enterprise Security Profile is not enabled.

**Workaround**: Use the Intel Client Software PROSET package to ensure that the Enterprise Security Profile is selected and that the Cisco Compatible CX RM option in this profile is enabled.

• CSCsm03250–When Cisco WCS logs are downloaded, no logs for the location appliance are downloaded.

**Workaround:** Click on the **Download Logs** menu option from the **Location Appliance** menu to download the missing location appliance logs.

• **CSCso74174**–Online help could not be launched for the location accuracy tool (Tools > Location Accuracy Tool).

**Workaround:** Select **Help** from the Cisco WCS navigation bar. In the online help summary page that appears, select Tools > Location Accuracy Tools.

• **CSCsr29356**–In some circumstances, access points from different, non-overlapping coverage regions each report a location for the same element (such as a client, tag or rogue client). This disparate location reporting results in an incorrect location calculation for the element.

Workaround: None.

**CSCsr41614**—WCS requires that MAC addresses be entered in the following case-sensitive format: a1:b2:c3:d4:e5:f6

Workaround: For bulk imports of MAC addresses, it is possible to use the built-in functions in Microsoft<sup>®</sup> Excel<sup>TM</sup> to convert the MAC addresses to the format that is accepted by WCS.

CSCsr52241—WCS sometimes generates unnecessary location server log messages similar to this one:

```
7/20/08 18:20:32.122 ERROR[general] [15] Wrong or missing resource type for
managedobj / transportSMTPForm.mailType.enum.0
```

Workaround: None.

• CSCsu39828—If a client is associated to an infrastructure SSID and then moved to a rogue access point using a rogue SSID, the WCS map displays the same client twice—as an infrastructure client and a rogue client. When the interface is turned off, the WCS correctly removes the rogue, but it remains on the WCS map as an infrastructure client.

Workaround: None.

CSCsu43201—If a large burst of notification messages are generated when a location server is started, the server may drop the messages instead of sending them, and an error message is generated in the location server log files.

**Workaround**: Disable notifications when starting the location server, and reenable them once the server is running and stable.

**CSCsu68600**–In some cases, the refresh rate for client location history (when the play function is operating) might take longer to refresh than the default rate of 2 seconds. This generally occurs when the client location history log is large (approximately 100 or more entries). In some cases, the history entries map does not display.

Workaround: Increase the refresh rate or decrease the number of location history entries stored for the client.

• **CSCsv00557**—WCS does not have the ability to verify that a heat map region is drawn correctly. An inaccurately drawn heat map region can cause computation errors in the calculation of the heat map.

Workaround: Deleting incorrectly drawn rails and regions from the Monitor > Map menu will allow calibration to go ahead. Then redraw the rails and regions correctly.

**CSCsv03394**—If the admin user is removed from the location appliance, the connection between the location appliance and Cisco WCS is lost. Additionally, you cannot recreate the user at the System > Accounts > User window as it is no longer available.

Workaround: To recover the admin user, enter the following commands (noted in **bold**) and then restart the location appliance.

Enter the following command to generate *dbuserpass:* 

[root@la ~]# getdatabaseparams

The following displays to the screen:

dbuserpass

Enter the following command and use the generated *dbuserpass* value:

[root@la ~]# /opt/mse/locserver/bin/tools/solid/solsql "tcp 2315" dba dbuserpass

The following displays on the screen:

```
Solid SQL Editor (teletype) v.06.00.1049
Copyright (C) Solid Information Technology Ltd 1993-2008
Connected to 'tcp 2315'.
Execute SQL statements terminated by a semicolon.
Exit by giving command: exit;
```

Enter the following command:

insert into AESUSER (OBJECTID, PARENTID, CHANGEDON, MASK, USERNAME, PASSWORD, PERMISSIONS, GROUPNAME) VALUES (1,0, 1168465726685,0, 'admin', 'admin', 255, 'admin');

The following displays on the screen:

Command completed successfully, 1 rows affected.

Enter the following command:

commit work;

The following displays on the screen:

Command completed successfully, 0 rows affected.

Enter the following command:

#### select \* from aesuser;

The following displays on the screen:

OBJECTID	PARENTID	CHANGEDON	MASK	USERNAME	PASSWORD	PERMISSIONS	GROUPNAME
1	0	1168465726685	0	admin	admin	255	admin

1 rows fetched.

Restart the location appliance.

• **CSCsv06454**–The WCS communication password does not apply during the automatic installation script.

Workaround: Do not delete admin user on location appliance from WCS. See CSCsv03394.

• **CSCsv13564**–When recompute RF prediction is launched, access points with an antenna type of *other* do not display an error message as expected. Instead the RF prediction is calculated and the following error is displayed, "RF Prediction Engine could not retrieve Coverage HeatMaps from the database. Please make sure that the RF Prediction is computed before computing location."

**Workaround:** Configure correct antenna. To do so, click Monitor > Map window, select floor on which access point is resident. From the Select a command drop-down menu (on the floor page), select Position APs and then select the appropriate antenna for the access point (left side panel). Recompute RF prediction.

 CSCsv20136—The location server database truncates the GPS marker coordinates to two decimal places.

Workaround: None.

• **CSCsv29199**–If an FTP download to the location server fails because the interface is down or the system cannot be reached, an incorrect and unrelated message returns. For example, the following incorrect message might display "Unable to download software image. Reason: Failed to find the file image filename in the directory /opt/loc/locserver/../../installers," rather than a message that the FTP file transfer failed due to the location server being unreachable.

Workaround: Check to see if location server is reachable and if interface is UP.

• **CSCsv29428**–TFTP servers might mistakenly display as FTP servers on the FTP download image page (Configure > Controllers > Controller > Download software (FTP).

Workaround: None.

• **CSCsw17583**–In some RF environments, where location accuracy is around 60 to 70% or where incorrect client or tag floor location placements occur, you might need to modify the moment RSSI thresholds in the *aes-config.xml* file in the *opt/locserver/conf/* directory of the location server.

**Workaround:** Contact TAC with assistance in modifying the RSSI threshold parameters in the *aes-config.xml* file on the location server.

• **CSCsx56618**–If a release of AeroScout MobileView *earlier than 4.1* is in use, incorrect responses are sent to those northbound notifications received from the mobility services engine. Northbound notifications are then resent by the mobility services engine, overloading the notification queue and resulting in reports of dropped notifications.

Workaround: Install release 4.1 of AeroScout MobileView.

### **Resolved Caveats**

The following caveats are resolved in release 5.2.91.0.

- **CSCsk88806**—When selecting the Location Readiness or Voice Readiness option for a map without any access points, WCS was not correctly relocating the user to the default Monitor > Maps page.
- **CSCs108696**–Users were unable to change the name of WCS calibration models in WCS 4.x releases.
- **CSCsl32412**–If the user included special characters in a floor name, it would cause conversion errors on the map name for SOAP/XML.
- **CSCsm56708**–At the Monitor > Security > Rogue Clients window, information for *First Heard* is not accurate, the rogue access points's MAC address was reported as all zeros and no information was supplied for the access point. Additionally, no information was reported for the access point that reported the client. (Note: *Last Reported* is unresolved and is being tracked under CSCsm56708).
- **CSCsm83788**—When more than 20 rails and regions were added to a floor, the cursor response in the Map editor grew progressively slower as rails, regions, or other elements were added.
- **CSCso43692**–In some cases synchronization did not properly occur after access points, TDOA receivers or chokepoints were moved to other buildings or campuses. The location appliance removed the element from the former site but did not properly add it to the new site.
- CSCso73789-Clients were seen as *Not set* in maps when the import asset information option was used.
- **CSCso97850**–Location accuracy tool would return inaccurate results or fail when it ran (scheduled or on demand accuracy test). Test accuracy always reported 0.0% accuracy.
- CSCso99286–Database was not updated with the current tag information.
- CSCsq71288–Client statistics listed under location history were blank. Client statistics did appear under Monitor Clients > Statistics.

- CSCsr00359-A superuser was not able to import civic information. Permission is no longer denied.
- **CSCsr20910**–Calibration of a large number of elements (greater than 500) would cause a slowdown in WCS.
- **CSCsu46050**–When data became corrupted due to a difficult migration or other problem, the Map Editor/Planning tool would sometimes fail to launch.
- **CSCsu49105**–Location accuracy tool would return inaccurate results or fail when it ran (scheduled or on demand accuracy test) when the meters dimension was used. When a successful scheduled run occurred the floor size was inaccurate.
- CSCsu60684–In some cases, the ethernet0 port would fail initialization after initial install.
- **CSCsu74965**–Wi-Fi TDOA receivers information was not sent to the location appliance after synchronization. TDOA receivers in question were installed outside and mapped on outdoor maps in WCS.
- CSCsu79949—Users were not prompted for the building name and floor name when adding datapoints and applying them to maps on the Monitor->Maps->RF Calibration Models->Model Name->Add Data Points page.
- **CSCsu81117**–Client and tags MAC addresses entered and labeled as *disallowed* on the filtering parameters window in WCS, would display on the floor map and under location history in error.
- **CSCsv00465**–Heatmap calculations would hang and calculations did not occur due to underlying processes.

The following caveats are resolved in release 5.1.30.0 or earlier.

- **CSCsh47150**—Moving a building from one location to another within a campus no longer causes synchronization errors. The synchronization page indicated that the building already existed and attempted to pull it. If you initiated a synchronization at this time, then it sometimes resulted in an inaccurate mapping of access points. Workaround was to unassign the campus or building elements from the location appliance, synchronize and then reassign the campus or building elements and then synchronize again.
- CSCsh79227—When connectivity between the location appliance and the controller was lost, alerts were not reported in Cisco WCS. Alerts were only reported when Cisco WCS lost connectivity to a controller.
- **CSCsi12681**—In cases where secure shell (SSH) versions earlier than 4.2, which did not support the GSSAPIDelegateCredentials option, were installed on the location appliance, third party security scanners would indicate security problems.
- **CSCsi17755**—When the time in the location appliance was updated manually to adjust for daylight savings time, Cisco WCS did not display the manually entered time.
- **CSCsi21064**—Chokepoint heatmap circles on the map did not automatically resize after using the zoom in and out feature. Chokepoint mapping was only accurate when displaying in the default map size.
- **CSCsi34248**—The test fire function did not work for location change and battery level notifications. Test-fire verifies that an event notification is sent by the location appliance when a defined event definitions is triggered.
- CSCsi45791—When the battery remaining percentage (%) value was unknown (binary 1111), Cisco WCS displayed the battery remaining percentage (%) in the Battery Life field for Cisco CX version1 asset tags as "-1%" rather than the correct value of "unknown."
- **CSCsi46367** For some asset tags, the location history function (Monitor > Tags > *Location History*) did not automatically display any tag entries beyond the first listed when the play button was clicked.

- CSCsi51747—Cisco WCS did not display a tamper count for tampering notifications received from the Cisco CX version1 tags.
- **CSCsj54172**—SNMP initialization failed and subsequent initialization of the location module failed when the /etc/hosts file did not have an entry for the location appliance's host name and IP address. The location appliance would continue to run but SNMP polling and location calculation did not occur and did not report in the log file.
- **CSCsj71650**—The serial console port on the location appliance could hang when connected to certain models of USB serial converters.
- **CSCsj99244**–The location server backup function in release 4.2 of Cisco WCS (Location > Location Servers > Maintenance > Backup) did not work on Japanese Windows 2003 SP2. The workaround was to modify the AM/PM portion of the backup file name to English before performing the backup. For example, given the backup file name, *ls-sanity\_071015\_0410AM.lsbackup* (shown in English) you would change the "AM" portion of the file text.
- **CSCsk62082**–In some cases, enabling one of the location smoothing options (less, average, more or max smoothing) on a location appliance sometimes resulted in inaccurate location calculations for elements (Location > Location Server > Location Server > Server Name > Advanced > Location Parameter). Workaround was to turn off smoothing.
- **CSCsk71342**–When sorting on the controller or profile name column headings on the Clients detail window (Monitor > Clients > *Total Clients*), an error message similar to the following appeared: "No clients found on the location server(s) for the chosen criteria. Make sure that you have location servers added to Cisco WCS otherwise search on WCS Controllers." No sorting errors existed for the other column headings on the Clients detail window.
- CSCsk71692–After clicking a map icon on the Monitor > Maps > Map Name window to open a fullscreen view of that map, you are unable to exit that view. The workaround was to enter the Cisco WCS IP address into the browser URL field.
- **CSCsk74908**–After enabling limiting for clients and tags on the Tracking Parameters window (Location > Location Server > *Location Server* > *Administration*> *Tracking Parameters*), the calculation for "not tracked" elements was not always reflected correctly. This item was not displayed or supported on the Tracking Parameters window of Cisco WCS in release 4.2 but was incorrectly noted as supported in the Cisco WCS online help.
- **CSCsk79730**–When multiple location appliances were added to Cisco WCS and one or more location appliances were not reachable, then the user could not launch Monitor Lite. This happened only when a location appliance in the network was unreachable. The workaround was to log into Cisco WCS as an admin user and remove the unreachable location appliance from the All Location Servers summary window (Location > Location Servers) and then login as a Monitor Lite user. Monitor Lite would then launch correctly.
- **CSCsk83415**–When a location object was returned through the SOAP API, the floorHierarchy element list was always empty rather than returning campus, building, floor, and group elements. This generally occurred whenever a location object was requested. The workaround was for users to view the hierarchy within the fullHierarchy and simpleHierarchy elements in the location object. The location object information is presented in a string format and is separated by a bar (l).
- **CSCsk87607**–When a location accuracy test was tracking a large number of elements and it was left in the enabled state for a number of days, large log files would fill the logs directory. A subsequent download of a given log file would time-out given the size of the file. The workaround was to log into the location appliance via SSH and move or remove log files of the following format: rf-MAC-address.log (rf-00-0c-cc-5c-07-18.log) from the /opt/locserver/logs directory.

- **CSCsk88821**—When creating maps, the floor information for a building was not retained, and Cisco WCS displayed an error. there was no workaround.
- **CSCs138408**–When using the Map Editor, you were unable to resize the map using the link found at the top of the page. Clicking the 'To resize based on available browser space click here' link did not resize the map.
- **CSCsl40623**–Few data points were collected with Intel 802.11n and 802.11 b/g/n client cards during calibration when the Cisco Compatible Client Extension (CX) RM option within the Enterprise Security Profile was not enabled. The workaround was to use the Intel Client Software PROSET package to ensure that the Enterprise Security Profile was selected and that the Cisco Compatible CX RM option in this profile was enabled.
- **CSCsl51342**–A user with super user privileges was denied access to the Edit Location Presence information from Map detail page drop-down menu. A permission denied message displayed. The workaround was to choose Location Presence from the Map list window by checking the required map instead.
- **CSCsl54522**–The port number that displayed in the pop-up when you moved over a client icon on a map often differed from the port number that displayed in the client general properties panel that displayed when you clicked on the client icon on the map. These port values should have been the same in both displays. The workaround was to use the port value that displayed on the client general properties panel.
- **CSCsl63883**–Lower location accuracy was seen for non-Cisco CX compatible AeroScout tags with firmware versions earlier than 0415.
- **CSCsI77797**–The Location Accuracy Tool (Tools > Location Accuracy Tool) did not generate a spatial image when the map was not imported as a GIF file. the workaround was to import maps as JPEG files.
- **CSCsl92801**–In Cisco WCS, when you selected Monitor > Tags, the tag properties page often did not list associated controllers under the controller column despite a successful synchronization with the location appliance. However, tags did display properly on the WCS map and when you entered the *show rfid summary* command for the associated controller. (Controller was enabled with RFID tag tracking).
- **CSCsm03250**–When Cisco WCS logs are downloaded, no logs for the location appliance are downloaded.
- **CSCsm13643**–When the zoom function (larger or smaller) was used on a floor map with multiple tags, the devices did not stay coupled to their actual locations during the window resizing. The Accuracy Tool was used to collect the data.
- **CSCsm93369**—After you assigned a network design to a location server and clicked Synchronize, Cisco WCS returned the synchronize servers page showing the design as unassigned.
- **CSCso05664**–In rare circumstances, the location appliance would become unreachable to Cisco WCS. Problem was identified within the software and modified.
- **CSCso29306**–When a CAD image was imported for use as a floor map, the image was not pushed to the location appliance during synchronization. So when a network design object was retrieved from the location appliance (through APIs or to other Cisco WCS stations) the map image was empty. This only happened when a CAD image was imported as a floor map.
- **CSCsq23489**–When a large number of obstacles (such as walls, doors, cubicles and glass) were defined on a map (using the map editor) synchronization between Cisco WCS and the location appliance would fail. A database error was reported in the log files and a number of the obstacles had erroneous mappings (x,y coordinates).

• **CSCsq61215**–The serial number of the location appliance did not appear on the advanced parameters page of Cisco WCS. (Mobility > Mobility Service Engines > *Server* > System > Advanced Parameters).

## **Closed Caveats**

• CSCsk83459–When starting a location accuracy test, clicking the Start button for two MAC addresses simultaneously might result in unexpected results.

**Workaround:** Start location accuracy tests for MAC addresses at different times (releases 3.135 and earlier) or use the Accuracy Tool (Tools > Accuracy Tool) found in release 4.0.

## 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://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 **Troubleshooting.** Then choose your product (Wireless >Unified Wireless LAN Management > Cisco Wireless Location Appliance) and then select the **Troubleshoot and Alerts** heading on the product page to find information on the problem you are experiencing and other service advisories.

## **Related Documentation**

The following documents are related to location appliances:

- Cisco 2700 Series Location Appliance Getting Started Guide
- Cisco Location Appliance Configuration Guide, Release 5.2
- Cisco Wireless Control System Configuration Guide, Release 5.2
- Cisco Wireless LAN Controller Configuration Guide, Release 5.2



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/web/psa/products/tsd\_products\_support\_configure.html

# **Obtaining Documentation, Support, and Security Guidelines**

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, 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

This document is to be used in conjunction with the documents listed in the Related Documents section.

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