



Release Notes for Cisco 2700 and 2710 Location Appliances for Software Release 5.2.100.0

Last Revised: June 23, 2009

These release notes describe features, enhancements, and caveats for software release 5.2.100.0 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* in Cisco WCS 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 2 prior to 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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Americas Headquarters:

Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

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 release 5.2.100 of the location appliance.

Table 1 Minimum Software Requirements

System	Minimum Software Release
Controller	5.2.193.0, 5.1.151.0, or 4.2.130. Note Controller release 5.0.x supports location appliance release 5.1.x.
Cisco WCS	5.2.148
Cisco WCS Navigator	1.4.148

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 5.2.100.0 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.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**.

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 there is poor location accuracy or where incorrect client 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 mobility services engine (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 5.2.100.0.

Filtering on Northbound Notifications

Filtering on northbound notifications is supported in release 5.2.100.0. Similar to user-configured conditional notifications, you can limit which event notifications are forwarded.

You can use filtering to focus on specific notifications important to tag monitoring within your network and to limit the overall number of notifications sent. The latter might preserve processing and storage capacity on the northbound platform.



Note

Cisco recommends defining northbound notification filters in the *aes-config.xml* file on the mobility services engine rather than Cisco WCS.

You can filter on six northbound parameters as summarized below:

```
<entry key="send-event-on-location-calc">true</entry>
<entry key="send-event-on-every-beacon">true</entry>
<entry key="send-event-on-vendor">true</entry>
<entry key="send-event-on-emergency">true</entry>
<entry key="send-event-on-chokepoint">true</entry>
<entry key="send-event-on-telemetry">true</entry>
```

To send all six northbound notifications with each beacon, ensure that the *send-event-on-location-calc* and *send-event-on-every-beacon* notification types are marked as *true*.

To limit the number of notifications, edit (but do not delete) the specific event entry in the *aes-config.xml* file by marking it as *false*.

For example, to send emergency and chokepoint notifications, change the other four notification types (location, beacon, vendor, and telemetry) to *false*.

The modified *aes-config.xml* file would read as:

```
<entry key="send-event-on-location-calc">false</entry>
<entry key="send-event-on-every-beacon">false</entry>
<entry key="send-event-on-vendor">false</entry>
<entry key="send-event-on-emergency">true</entry>
<entry key="send-event-on-chokepoint">true</entry>
<entry key="send-event-on-telemetry">false</entry>
```

WCS Location Template

You can define a location template for assignment to multiple controllers and then that configuration is synchronized with multiple mobility services engines. 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 5.2.100.0.



Note

There was no release 5.0 for the location appliance.

Open Caveats

The following caveats are open (unresolved) in release 5.2.100.0:

- **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® Excel™ 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 reenabling 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.

- **CSCsu79969**—When a mobility services engine already has a network design and that design is added or added a second time to Cisco WCS and the network design has the same campus name, synchronization of the network design fails.

Workaround: At the Mobility > Synchronize Services window in Cisco WCS, unassign the network design and synchronize, then reassign the network design and synchronize.

- **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 there is poor location accuracy or where incorrect client 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 mobility services engine.

The RSSI parameters that can be modified are summarized below:

```
<entry key="locp-individual-rssi-change-threshold">5</entry>
<entry key="locp-aggregated-rssi-change-threshold">3</entry>
<entry key="locp-many-new-rssi-threshold-in-percent">20</entry>
<entry key="locp-many-missing-rssi-threshold-in-percent">20</entry>
```

Workaround: Refer to the *Cisco Mobility Services Engine – Context Aware Mobility Solution Deployment Guide* for guidelines on modifying the parameters:

http://www.cisco.com/en/US/products/ps9742/prod_tech_notes_list.html.

Contact TAC with assistance in modifying the RSSI threshold parameters in the *aes-config.xml* file on the mobility services engine.

- **CSCsw94634**—If a controller is already present on the mobility services engine, and the same controller is added to Cisco WCS and the user tries to synchronize, Cisco WCS will display the following message "delete the controller from MSE and assign the controller to MSE". However, there is no delete check box present. As a result, we cannot assign or unassign the controller.

Workaround: Remove the controller from Cisco WCS and synchronize with the mobility services engine with delete option checked. Then add the controller back to Cisco WCS and assign it to the mobility services engine and synchronize.

- **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.

- **CSCta04460**—When users change access point height and/or access point elevation angle values from the default values of 10 ft and 0 degrees, respectively, these changes are not reflected in the calibration data, resulting in an incorrect calibration model. Any floor on which this calibration model is applied, will generate an incorrect heatmap for all its access points

Workaround: None.

Resolved Caveats

The following caveats are resolved in release 5.2.100.0.

- **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. Results varied when using feet and meters as the floor measure.
- **CSCsv71119**—Changes in software ensure that enabling XML mediation traces now omit passwords in the log files.
- **CSCsw34207**—In random interval, sometimes the latest RSSI readings from access points were not always used in location calculations.

- **CSCsx39421**—Each user-configured notification was instantly followed by a *clear* notification. Absence notifications, though showing 1min in the Cisco WCS window (Mobility > Notifications), could take a lot longer to fire as the timer was dependant upon polling interval. This is no longer the case.

Sometimes when a destination was removed and another was added to user configured notifications, the older destination would not get deleted. As a result, this old, down destination would still have events fired to it. Since SOAP timeout is slow, it would slow down other event firings and occasionally cause queue overflows.
- **CSCsx52837**—When rails and regions were in use in releases 5.1.x and 5.2.91 (or earlier), location calculations were often lost or corrupted when rails and regions (inclusion and exclusion) were added, deleted, and added again in succession in Cisco WCS. The following message would display in the logs, “Matrix dimensions must agree.”
- **CSCsx55843**—When several accuracy tests running at the same time completed, WCS would often be unreachable and some services stopped.
- **CSCsy34383**—A number of java exceptions occurred when a mobility services engine or location appliance was rebooted. Changes were made to the software to resolve this issue.
- **CSCsy77490**—When non-Cisco antennas were deployed with Cisco access point in the wireless network, the location for some clients and tags was not being calculated. Generally, the access points with the non-Cisco antennas were on the same floor as the clients and tags whose locations were not calculated correctly. Resolution is to change to a Cisco supported antenna that most closely matches the specifications of the non-Cisco antenna.
- **CSCsz02125**—When a location appliance starts up, it checks the database to determine if there are any pending heatmap calculations due to a system shut down. If there are any such calculations remaining, the mobility services engine will proceed with the calculations. This process can be lengthy if a large number of heatmap calculations are pending. If the user adds new map changes and synchronizes Cisco WCS and the mobility services engine when the pending heatmap calculation is in process, another set of heatmap calculations begins in parallel. This parallel processing of heatmap calculations might cause each calculation process to overwrite the other’s calculated data.

This problem might also happen when it is determined the heatmap computed in the last run was not correct and there is concurrent synchronization from Cisco WCS.

Changes were made in the software to resolve this problem.

The following caveats were 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.
- **CSCsl08696**—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.
- **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.

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://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.)

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*



Note

You can see the latest online versions of these documents at:

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

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