Release Notes for Cisco Wireless Control System 3.2.40.0 for Linux

December 6, 2005

These release notes describe open caveats for the Cisco Wireless Control System 3.2.40.0 for Linux, which comprises part of the Cisco Unified Wireless Network Solution (Cisco UWN).

The Cisco Wireless Control System is hereafter referred to as *Cisco WCS*.

Contents

These release notes contain the following sections.

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Cisco Unified Wireless Network Solution Components

The following components are part of the Cisco Unified Wireless Network Solution (Cisco UWN):

- Operating system (Wireless LAN Controller and Cisco Aironet Lightweight Access Point)
- Cisco Wireless Control System (Cisco WCS), 3.2.40.0
- Cisco 2700 Series Location Appliances
- Cisco 2000 Series Wireless LAN Controllers
- Cisco 4100 Series Wireless LAN Controllers
- Cisco 4400 Series Wireless LAN Controllers
- Cisco Wireless Services Modules (WiSMs) for Cisco Catalyst 6500 Series Switches
- Cisco WLAN Controller Network Modules for Cisco Integrated Services Routers
- Cisco Aironet 1000 Series Lightweight Access Points
- Cisco Aironet 1130 Series Lightweight Access Points
- Cisco Aironet 1200 Series Lightweight Access Points
- Cisco Aironet 1230 Series Lightweight Access Points
- Cisco Aironet 1240 Series Lightweight Access Points
- Cisco Aironet 1500 Series Lightweight Outdoor Access Points

Requirements for Cisco WCS

The following server hardware and software is required to support Cisco WCS for Linux:

- Requirements for Cisco WCS Server – Cisco WCS can be run on a workstation/server class system:
  - For up to 500 Cisco Aironet lightweight access points: 2.4 GHz Pentium with 1 GB RAM.
  - For over 500 Cisco Aironet lightweight access points: dual processors (at least 2.4 GHz each) with minimum 2 GB RAM.
  - 20-GB of free space on your hard drive.

  The following operating system is supported:
  - Red Hat Enterprise Linux ES 3.0.
- Requirements for Cisco WCS User Interface – The Cisco WCS user interface requires Internet Explorer 6.0/SP1 or later, with the Flash plugin. The Cisco WCS user interface has been tested and verified using Internet Explorer 6.0 on a Windows workstation.

Software Information

Cisco WCS 3.2.40.0 is now available. As new releases become available for Cisco WCS, consider upgrading.

Finding the Software Release

To find the software release Cisco WCS is running, refer to the *Cisco Wireless Control System Configuration Guide.*

Upgrading to New Software

For instructions on installing a new Cisco WCS software release, refer to the instructions in the *Cisco Wireless Control System Configuration Guide.*

New Features

The following new features are available in the Cisco WCS 3.2.40.0 release:

- Link aggregation group (LAG) support on Cisco 4400 Series Wireless LAN Controllers and Cisco Wireless Services Modules (WiSMs).
- VPN Termination Module for Cisco 4400 Series Wireless LAN Controllers.
- Guest tunneling support on Cisco 2000 Series Wireless LAN Controllers.
- Multicast upgrades.
- Cisco WCS database backup improvements.
- Cisco WCS start up improvements. Now supports starting up as a service.
- Auto-synchronization between Cisco 2700 series location appliances and Cisco WCS.
- New hardware platform support: Cisco Wireless Services Modules (WiSMs) for Cisco Catalyst 6500 Series Switches and Cisco WLAN Controller Network Modules (WLCs) for Cisco Integrated Services Routers.

For more information, refer to the following location:

http://www.cisco.com/en/US/products/ps6305/prod_bulletins_list.html

Important Notes

This section describes important information about Cisco WCS.

Cisco WCS Upgrade

Cisco WCS for Linux supports database upgrades only from the following official Cisco WCS releases: 3.0.101.0, 3.0.105.0, 3.1.33.0, 3.2.23.0, and 3.2.25.0.

Compatibility

This release of Cisco WCS for Linux is compatible with wireless LAN controller and Cisco Aironet lightweight access point operating system 3.0 or later.

Single Cisco WCS per Wireless LAN Controller

The Cisco Unified Wireless Network Solution is designed so that one instance of Cisco WCS can be used to configure, monitor, and operate each set of wireless LAN controllers. This design ensures that the wireless LAN controllers are properly represented in Cisco WCS (CSCsc42249).

MCS7800 Servers

Cisco MCS7800 servers are not supported as Cisco WCS servers.

Changing Static WEP Key Indexes

Changing the static WEP key index on a WLAN fails.

Workaround: Change the WEP key index by deleting the WLAN and recreating the WLAN with the correct WEP key index.

Cisco WCS Physical Location and IP Addresses

Cisco WCS should be run on a robust desktop or rack-mount Linux machine in a server room, but the Cisco WCS user interface can be run on any Windows workstation.

Workaround: If you need to change the IP parameters on the Cisco WCS workstation, such as the IP address or the default gateway, shut down Cisco WCS before making the change, and start Cisco WCS after your IP configuration changes are complete.

Map Rendering

When you have more than 200 tags, clients, or rogues on a maps page, map page rendering can be slow. The browser may temporarily freeze during the first rendering and when it renders at every refresh interval.

Workaround: Cisco recommends that the user limit the number of visible entries to 200 for each asset type (client, tag, rogue access point, rogue client) and then save that as the default view if more than 200 of any asset type are expected on a map.

Background Policies Time Intervals

The default time intervals for scheduled policies give optimal performance when Cisco WCS is monitoring up to 500 Cisco Aironet lightweight access points.

Workaround: When Cisco WCS is monitoring more than 500 Cisco lightweight access points, increase the time intervals to the following values:

- Device Status Policy—12 minutes
- Statistics—30 minutes
- Client Statistics—30 minutes
- Rogue AP—120 minutes

Manually Executing Scheduled Tasks

Manually executing scheduled tasks (device status, client statistics, rogue access point, and statistics) do not run immediately if any of the other tasks are already running. Instead, Cisco WCS queues and executes them as soon as the running tasks are completed.

Workaround: Wait for the manually executed scheduled tasks to complete.

Polling Intervals

The poll interval for Cisco 2700 series location appliances is the time between polls (CSCar15324). When the poll interval is set to 1 second, and the actual poll takes 20 seconds, the start of each poll is 21 seconds apart.

Workaround: Wait for the polling interval to complete.

Slow Imports of FPE Files with More Than 200 Walls

Importing a floor plan editor (FPE) file with more than 200 walls can be slow, and the browser may not report any status or redirect you to any other page.

Workaround: Do not click anywhere on the map page for at least 5 minutes before you try to verify that the file is imported.

Calibrating the Location Model Using Cisco Aironet 802.11a/b/g Wireless Cardbus Adapter Clients

Cisco Aironet 802.11a/b/g Wireless Cardbus Adapter (AIR-CB21AG) clients are not ideal for calibrating the location model (CSCsb52149). The AIR-CB21AG clients do not send the SSID in the probe request when the Broadcast SSID is disabled on the wireless LAN controller.

Workaround: Use an approved wireless client.

Restoring an Upgraded Cisco 2700 Series Location Appliance to an Earlier Release

A backup from the latest release of Cisco 2700 series location appliance software cannot be restored on a location appliance running an earlier release (CSCsb54606).

Workaround: Before you upgrade a location appliance to the latest release, Cisco recommends that you create a backup for the earlier release and archive it in case you need to return an upgraded location appliance to an earlier release.

Managing Cisco Wireless Services Modules using Cisco WCS

Unlike other wireless LAN controllers, Cisco Wireless Services Modules (WiSMs) use their service ports to communicate with the Cisco Catalyst 6500 series switch supervisor. The Cisco WCS server uses the WiSM data port to connect to and control the WiSM and its associated Cisco lightweight access points (CSCsb49178).

Using the Cisco WCS Map Editor Tool

Creating a map directly by using a file image from the floor plan editor (FPE) tool is no longer allowed in Cisco WCS. The option to import this type of file is not present in the user interface and attempting to import the file causes Cisco WCS to generate a message indicating that the user needs to enter a valid JPG or PNG image (CSCsb04081). The workaround is to create a map with a regular image and later use the option to edit the floor and reimport the map image with an FPE file. The FPE tool is no longer supported in Cisco WCS. Users are encouraged to use the new Map Editor tool provided within Cisco WCS to draw obstacles, etc.

Caveats

This section lists open caveats in Cisco WCS 3.2.40.0 for Linux.

Open Caveats

These caveats are open in Cisco WCS 3.2.40.0 for Linux:

- CSCar13120—Cisco WCS fails with a null pointer exception because it cannot resolve the name-address of the network DNS server. The Cisco WCS software appears to have conflicts with a DNS name resolution server running on the same Cisco WCS server. The server is configured for DHCP, which receives a name-address resolution from a network server but Cisco WCS attempts to resolve the name-address locally.

  Workaround: Run the DNS server on another workstation, fix the name resolution problem on the Cisco WCS server, or remove the local DNS server.

- CSCar13328—Null pointer exception is being logged to the stderr file when starting Cisco WCS on a Linux system with Cisco WCS and a DHCP server running.

  Workaround: Disable DHCP on the Linux system running Cisco WCS.

- CSCar13891—Client search by IP Address takes a long time because rate limiting on the wireless LAN controller starts too quickly, which causes SNMP timeouts.

  Workaround: Change the SNMP timeout values so that SNMP does not timeout during queries. Use 2 seconds and retry 4 for reasonable performance.

- CSCar13919—Wireless LAN Controllers added to Cisco WCS are lost after reboot. When any change in the Cisco WCS database is quickly followed by an abnormal termination of Cisco WCS (such as a hard reboot of the system), the newly changed information is absent when Cisco WCS is restarted.

  Workaround: Shut down Cisco WCS properly so it commits the transactions to the database on the disk.

- CSCsa93250—Resizing a floorplan using "Edit Floor" does not resize coverage areas. This problem can be reproduced by changing the width or height for a given floor.

  Workaround: Use the Map Editor for floor resizing. This is not recommended since it does not maintain aspect ratio. The purpose of the **Floor > Edit** page is to change image, floor name, or other properties.

- CSCsb15455—Cisco WCS shows timestamps for location server details and history pages based on the Cisco WCS locale and not based on the location server timestamp.

  Workaround: If the location server is in one time zone locating objects across multiple time zones, and if a user is in a different time zone accessing the information through Cisco WCS, the time stamps are based on the second Cisco WCS time zone timestamps. The time is correct for all the objects located in the second Cisco WCS time zone.

- CSCsb17095—Adding an invalid IP address as a network route shows added to WCS, but not to the wireless LAN controller. Adding invalid IP network routes like 0.0.0.0 causes this problem.

  Workaround: Do not add invalid IP addresses as network routes.

- CSCsb35470—In the Cisco WCS map editor, zooming is not context specific based on your mouse pointer location.

  Workaround: Use the scroll bar to move anywhere on the floor map after zooming.

- CSCsb39611—The uninstaller fails with an error of "unable to locate executable." When you install Cisco WCS, if you place two spaces together in the path name, such as "C:\WCS 31" the install is completed correctly, but the uninstaller fails.

  Workaround: Remove one of the extra spaces in the pathname and the uninstaller should work properly.

- CSCsb41890—Under Monitor > Device > Access Points > (any AP) > 802.11a or 802.11b/g, at the bottom of the page there is a table titled Radio MAC Address. It should be titled Rx Neighbors.

  Workaround: There is no workaround in this release. This bug will be fixed in a future release.

- CSCsb98820—Certain security combinations set from Cisco WCS result in SNMP errors, such as Layer 2 802.1x and Layer 3 VPN passthrough with webauth.

  Workaround: These combinations of security settings are not supported, please choose another combination.

- CSCsc06090—Slow performance when a rogue access point policy is enabled. For some systems with a large number of Cisco lightweight access points and wireless LAN controllers, the Rogue AP scheduled task can take up to 45 minutes to complete.

  Workaround: Do the following:

  - Disable Rogue AP in the scheduled task list.
  - In the trap control template, disable channel update under Auto RF update and push the modified template to all wireless LAN controllers.
  - For both 802.11a and 802.11b, increase the RRM interference threshold.

- CSCsc07883—On the Network Summary page in the Most Recent Rogue APs table, the SSID is missing.

  Workaround: Click on the MAC Address to see the alarm details and if the SSID is known it is listed in the alarm.

- CSCsc22389—The wireless LAN controller system name changes after some time when originally entered from the controller web interface or CLI. This happens only when there is a mismatch between the system name on the controller and in Cisco WCS. When this happens, Cisco WCS overwrites the system name in the controller.

  Workaround: If the wireless LAN controller is added to Cisco WCS then only change the system name from Cisco WCS. Refresh the configuration from the controller to maintain the same configuration settings on the controller and in Cisco WCS.

- CSCsc23186—Cisco WCS cannot be installed when username contains special characters, such as exclamation marks (!).

  Workaround: Install after logging in as a user with no special characters in your username.

- CSCsc26437—When importing a Cisco WCS 2.2.85.0 AP Placement file (*.do) into Cisco WCS 3.0 or later, Cisco WCS displays error messages.

  Workaround: Reimport the AP Placement file, and Cisco WCS should complete the import successfully.

- CSCsc32975—When the monitor is set for a maximum resolution of 800 x 600 pixels and the browser size is maximized, the information in the Client Summary page overlaps the left-hand menu bar.

  Workaround: Change the monitor resolution to at least 960 pixels width.

- CSCsc35784—The transmit power control adjustment levels 3, 4 and 5 are not supported on Cisco Aironet 1500 series lightweight outdoor access points in the band from 5745 to 5825 MHz. The transmit power control adjustment levels 4 and 5 are not supported on Cisco Aironet 1500 series lightweight outdoor access points which operate in the 5500 to 5700 MHz band and at 2.4 GHz.

  These levels correspond to -6, -9, and (in the case of 5500 to 5700 MHz) -12 dB from the maximum power, respectively. Power levels 1, 2, and (in the case of 5500 to 5700 MHz) 3 are supported, which correspond to maximum power for the particular data rate and channel, and -3 dB relative to this maximum, at which these adjustment levels provide little or no further reduction in transmit power output.

  Workaround: Set the transmit power level to either 1 or 2 for 5745 to 5825 MHz. Set the transmit power level to either 1, 2, or 3 for all other bands.

- CSCsc38338—When performing backup, restore or download image operations from Cisco WCS to a Cisco 2700 series location appliance with software version 1.x, Cisco WCS may display a timeout error. However, the data is actually transferred.

  Workaround: Upgrade your location appliance to software version 2.0.

- CSCsc39959—When managing a Cisco 2700 series location appliance with software version 1.x using Cisco WCS software version 3.2, searching for specific elements on the location appliance by MAC address, asset name, group, or category returns no results, even though the same elements can be seen in the maps and the overall list.

  Workaround: Upgrade your location appliance to software version 2.0.

- CSCsc39976—Setting Cisco WCS maps from feet to meters does not scale the coverage areas.

  Workaround: Set the units of measurement and then draw the obstacles and coverage areas.

- CSCsc44020—When a Cisco WCS server is equipped with a dual network interface card (NIC), and when **Any Interface** is selected for Cisco WCS to communicate with one or more Cisco 2700 series location appliances during the Cisco WCS installation, downloading location appliance software from Cisco WCS fails.

Workaround: Always choose a specific interface during Cisco WCS installation for communication with a location appliance. Do not choose **Any** during Cisco WCS installation.

- CSCsc44897—Cisco WCS shows incorrect antenna orientation while viewing an object.

  Workaround: None. This is a cosmetic issue only, and does not impair or alter performance.

- CSCsc46598—When performing a Cisco lightweight access point placement planning site survey, some items may show up in the wrong position in the Cisco lightweight access point placement diagram and various items in the printed site survey document may be incorrect.

  Workaround: Click Apply All Changes to save the layout to the Cisco WCS database before printing out a site survey document. Some discrepancies may still appear.

- CSCsc53452—When a Cisco WCS user attempts to retrieve the association history of a client that was formerly associated with a replaced Cisco lightweight access point, the association history cannot be retrieved. Cisco WCS shows an error message with the MAC address of the replaced Cisco lightweight access point saying that it cannot be located.

  Workaround: None.

- CSCsc59180—When a rogue access point is seen in Cisco WCS, and when a user sets the state to Known - External, Cisco WCS displays the access point as Trusted Missing.

  Workaround: None in this release.

- CSCsc59986—Controller config and Cisco WCS are not synchronized after creating dynamic interface with capital letters in name.

  Workaround: Create dynamic interface names without capital letters.

Resolved Caveats

These caveats are resolved in Cisco WCS 3.2.40.0 for Linux:

- CSCar10266—Cisco WCS now starts when the Cisco WCS server has dual network interface cards (NICs).
- CSCar13038—Downloading wireless LAN controller code from Cisco WCS no longer fails when the Cisco WCS server has two interfaces.
- CSCar13518—Configuration Backup Time now allows time 12:00 AM to be set.
- CSCsb06029—Cisco WCS no longer declares a wireless LAN controller as unreachable with no response when the write community string is not set for the wireless LAN controller.
- CSCsb32294—Copy & Replace AP no longer fails with an SNMP error.
- CSCsb93638—Editing the retransmit timeout value of a RADIUS authentication server template now works.
- CSCsb93676—When in Cisco WCS planning mode, newly-added Cisco Aironet lightweight access points now show up in the leftmost corner when the user wants to place them on the maps.
- CSCsb45947—Searching for clients or tags by MAC address in Cisco 2700 series location appliances no longer returns messages indicating that no elements were found when the user enters a partial MAC address or alphanumeric values.
- CSCsb61234—Cisco WCS now finds an antenna type for Cisco Aironet 1500 series lightweight outdoor access points when map positioning.

Troubleshooting

For the most up-to-date, detailed troubleshooting information, refer to the Cisco TAC website at the following location:

http://www.cisco.com/cisco/web/support/index.html

Click **Technology Support**, select **Wireless** from the menu on the left, and click **Wireless LAN**.

Related Documentation

For information on the Cisco Unified Wireless Network Solution and for instructions on how to configure and use the Cisco UWN, refer to the *Cisco Wireless Control System Configuration Guide* and the *Cisco Wireless LAN Controller Configuration Guide.*

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:

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

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