

# Release Notes for Cisco Wireless Control System for Windows or Linux, Release 6.0.202.0

#### April 2011

These release notes describe open caveats for the Cisco Wireless Control System 6.0.202.0 for Windows or 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.

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## **Cisco Unified Wireless Network Solution Components**

The following components are part of the Cisco UWN Solution and are compatible in this release:

- Operating system (Wireless LAN Controller and Cisco Aironet Lightweight Access Point)
- Cisco Wireless Control System (Cisco WCS)
- Cisco Mobility Services Engine
- Cisco WCS Navigator
- Cisco 2700 Series Location Appliance
- Cisco 2000 Series Wireless LAN Controllers
- Cisco 2100 Series Wireless LAN Controllers
- Cisco 4400 Series Wireless LAN Controllers
- Cisco 5500 Series Wireless LAN Controllers
- Catalyst 3750G Wireless LAN Controller Switches
- Cisco Wireless Services Modules (WiSMs) for Cisco Catalyst 6500 Series Switches
- Cisco WLAN Controller Network Modules for Cisco Integrated Services Routers
- Cisco Aironet 1000, 1100, 1130, 1140, 1200, 1230, 1240, 1250, 1310, 1500, and 1524 Series Lightweight Access Points
- Cisco Aironet 1310 and 1410 Bridges
- Cisco Aironet Access Points running Lightweight Access Point Protocol (LWAPP) or Control and Provisioning of Wireless Access Points protocol (CAPWAP)

## **Requirements for Cisco WCS**

The following server hardware and software is required to support Cisco WCS for Windows or Linux.

### **Server Hardware Requirements**

Cisco WCS can be run on a workstation or server, and access points can be distributed unevenly across controllers.

- High-end server—Supports up to 3000 Cisco Aironet lightweight access points, 1250 standalone access points, and 750 Cisco wireless LAN controllers.
  - 3.16-GHz Intel Xeon Quad processor.
  - 8-GB RAM.
  - 200 GB minimum free disk space is needed on your hard drive.
- Standard server—Supports up to 2000 Cisco Aironet lightweight access points, 1000 standalone access points, and 450 Cisco wireless LAN controllers.
  - 3.2-GHz Intel processor.
  - 2.13-GHz Intel Quad Core X3210 processor.
  - 2.16-GHz Intel Core2 processor.

- **-** 4-GB RAM.
- 80 GB minimum free disk space is needed on your hard drive.
- Low-end server—Supports up to 500 Cisco Aironet lightweight access points, 200 standalone access points, and 125 Cisco wireless LAN controllers.
  - 3.06-GHz Intel processor.
  - 1.86-GHz Intel Dual core processor.
  - 2-GB RAM.
  - 50 GB minimum free disk space is needed on your hard drive.



For all server levels, AMD processors equivalent to the listed Intel processors are also supported.



The free disk space listed is a minimum requirement, but several variables (such as backups) impact the disk space.

### **Operating Systems Requirements**

The following operating systems are supported:

 Windows 2003/SP2 and Windows 2003 R2/SP2 32-bit installations with all critical and security Windows updates installed.

Windows 2003/SP2 64-bit installations are not supported. A 32-bit operating system running on a 64-bit capable hardware is supported.

Windows 2003 32-bit installations provide support for up to 64 GB of RAM if Physical Address Extension (PAE) is enabled. See the Windows documentation for instructions on enabling this mode.

- Red Hat Linux Enterprise Server 5.X 32-bit operating system installations.
  - Red Hat Linux Enterprise Server 5.X 64-bit operating system installations are not supported. A 32-bit operating system running on a 64-bit capable hardware is supported.
- Windows 2003 and Red Hat Linux version support on VMware ESX version 3.0.1 and above with either local storage or SAN over fiber channel.
  - Individual operating systems running Cisco WCS in VMware must follow the specifications for the size of Cisco WCS that you intend to use.

### **Client Requirements**

The Cisco WCS user interface requires Internet Explorer 7.0 or later releases with the Flash plugin or Mozilla Firefox 3 or later releases.

Using a web browser running on Windows 2003 to access the Cisco WCS web GUI is not recommended because Windows 2003 security settings may cause browsing problems.

The client running the browser must have a minimum of 1 GB of RAM and a 2-GHz processor. The client device should not be running any CPU or memory-intensive applications.



The minimum screen resolution recommended for both Cisco WCS and Navigator use is 1024 x 768 pixels.

Table 1 lists the WCS supported versions of controller, location, and mobility services engine (MSE),

Table 1 WCS Versions

WCS Version	Supported Controller Versions	Supported Location Server Versions	Supported MSE Versions	Release Date	Upgrade Supported From <sup>1</sup>	Operating System Requirement
6.0.202.0	6.0.202.0 6.0.199.4 6.0.199.0 (pulled from CCO) 6.0.196.0 6.0.188.0 6.0.182.0 6.0.108.0 5.2.193.0 5.2.178.0 5.2.157.0 5.1.163.0 5.1.151.0 4.2.209.0 4.2.207.0 4.2.205.0 4.2.173.0 4.2.173.0 4.2.112.0 4.2.99.0 4.2.61.0	6.0.202.0	6.0.202.0	April 2011	6.0.196.0 6.0.181.0 6.0.170.0 6.0.132.0 5.2.148.0 5.2.130.0 5.2.125.0 5.2.110.0 5.1.65.4 5.1.64.0 4.2.128.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit

Table 1 WCS Versions (continued)

WCS Version	Supported Controller Versions	Supported Location Server Versions	Supported MSE Versions	Release Date	Upgrade Supported From <sup>1</sup>	Operating System Requirement
6.0.196.0	6.0.199.4 6.0.199.0 (pulled from CCO) 6.0.196.0 6.0.188.0 6.0.182.0 6.0.108.0 5.2.193.0 5.2.178.0 5.2.157.0 5.1.163.0 5.1.151.0 4.2.209.0 4.2.207.0 4.2.205.0 4.2.176.0 4.2.173.0 4.2.112.0 4.2.99.0 4.2.61.0	6.0.102.0	6.0.105.0	15 July 2010	6.0.181.0 6.0.170.0 6.0.132.0 5.2.148.0 5.2.130.0 5.2.125.0 5.2.110.0 5.1.65.4 5.1.64.0 4.2.128.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
6.0.181.0	6.0.196.0 6.0.188.0 6.0.182.0 6.0.108.0 5.2.193.0 5.2.178.0 5.2.157.0 5.1.163.0 5.1.151.0 4.2.207.0 4.2.205.0 4.2.176.0 4.2.173.0 4.2.112.0 4.2.99.0 4.2.61.0	6.0.101.0	6.0.103.0	17 Feb 2010	6.0.170.0 6.0.132.0 5.2.148.0 5.2.130.0 5.2.125.0 5.2.110.0 5.1.65.4 5.1.64.0 4.2.128.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/RHEL on ESX 3.0.1 and above No support for 64 bit

Table 1 WCS Versions (continued)

WCS Version	Supported Controller Versions	Supported Location Server Versions	Supported MSE Versions	Release Date	Upgrade Supported From <sup>1</sup>	Operating System Requirement
6.0.170.0	6.0.188.0 6.0.182.0 6.0.108.0 5.2.193.0 5.2.178.0 5.2.157.0 5.1.163.0 5.1.151.0 4.2.207.0 4.2.205.0 4.2.176.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	6.0.97.0	6.0.97.0	8 Nov 2009	6.0.132.0 5.2.148.0 5.2.130.0 5.2.125.0 5.2.110.0 5.1.65.4 5.1.64.0 4.2.128.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
6.0.132.0	6.0.182.0 6.0.108.0 5.2.178.0 5.2.157.0 5.1.163.0 5.1.151.0 4.2.205.0 4.2.176.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	6.0.85.0	6.0.85.0	11 June 2009	5.2.130.0 5.2.125.0 5.2.110.0 5.1.65.4 5.1.64.0 4.2.128.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
5.2.148.0	5.2.193.0 5.2.178.0 5.2.157.0 5.1.151.0 5.0.148.2 5.0.148.0 4.2.207.0 4.2.205.0 4.2.173.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	5.2.100.0	5.2.100.0	25 June 2009	5.2.130.0 5.2.125.0 5.2.110.0 5.1.65.4 5.1.64.0 5.0.72.0 5.0.56.2 5.0.56.0 4.2.128.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit

Table 1 WCS Versions (continued)

WCS Version	Supported Controller Versions	Supported Location Server Versions	Supported MSE Versions	Release Date	Upgrade Supported From <sup>1</sup>	Operating System Requirement
5.2.130.0	5.2.178.0 5.2.157.0 5.1.151.0 5.0.148.2 5.0.148.0 4.2.176.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	5.2.91.0	5.2.91.0	21 Feb 2009	5.2.125.0 5.2.110.0 5.1.65.4 5.1.64.0 5.0.72.0 5.0.56.2 5.0.56.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
5.2.125.0	5.2.178.0 5.2.157.0 5.1.151.0 5.0.148.2 5.0.148.0 4.2.176.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	5.2.91.0	5.2.91.0	10 Feb 2009	5.2.110.0 5.1.65.4 5.1.64.0 5.0.72.0 5.0.56.2 5.0.56.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x Windows/RHEL on ESX 3.0.1 and above No support for 64 bit
5.2.110.0	5.2.157.0 5.1.151.0 5.0.148.2 5.0.148.0 4.2.176.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	5.2.91.0	5.2.91.0	24 Nov 2008	5.1.64.0 5.0.72.0 5.0.56.2 5.0.56.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.1 RHEL 5.0 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
5.1.65.4	5.1.163.0 5.1.151.0 5.0.148.2 5.0.148.0 4.2.176.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	5.1.35.0	5.1.35.0	9 Jan 2009	5.1.64.0 5.0.72.0 5.0.56.2 5.0.56.0 4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.x RHEL 5.x Windows/RHEL on ESX 3.0.1 and above No support for 64 bit

Table 1 WCS Versions (continued)

WCS Version	Supported Controller Versions	Supported Location Server Versions	Supported MSE Versions	Release Date	Upgrade Supported From <sup>1</sup>	Operating System Requirement
5.1.64.0	5.1.151.0 5.0.148.2 5.0.148.0 4.2.176.0 4.2.173.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0	5.1.30.0	5.1.30.0	21 July 2008	5.0.56.2 5.0.56.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0	Windows 2003 SP2 32-bit RHEL 5.1 RHEL 5.0 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
5.0.72.0	5.0.148.2 5.0.148.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0 4.1.185.0 4.1.171.0	4.0.38.0	Not Applicable	5 Aug 2008	5.0.56.2 5.0.56.0 4.2.62.11 4.2.62.0 4.1.91.0 4.1.83.0	Windows 2003 SP2 32-bit RHEL 5.1 RHEL 5.0 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
5.0.56.2	5.0.148.0 4.2.61.0 4.1.x.x	4.0.33.0	Not Applicable	14 Apr 2008	5.0.56.0 4.2.62.11 4.2.62.0 4.1.91.0 4.1.83.0	Windows 2003 SP2 32-bit RHEL 5.0 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
5.0.56.0	5.0.148.0 4.2.61.0 4.1.x.x	4.0.32.0	Not Applicable	16 Feb 2008	4.2.62.11 4.2.62.0 4.1.91.0 4.1.83.0	Windows 2003 SP2 32-bit RHEL 5.0 Windows/RHEL on ESX 3.0.1 and above No support for 64 bit

Table 1 WCS Versions (continued)

WCS Version	Supported Controller Versions	Supported Location Server Versions	Supported MSE Versions	Release Date	Upgrade Supported From <sup>1</sup>	Operating System Requirement
4.2.128.0	4.2.207.0 4.2.205.0 4.2.176.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0 4.1.185.0 4.1.171.0 4.0.216.0 4.0.206.0 4.0.179.11 4.0.179.8 4.0.155.0	3.1.43.0	Not Applicable	13 May 2009	4.2.110.0 4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0 4.1.91.0 4.1.83.0 4.0.100.0 4.0.97.0 4.0.96.0 4.0.81.0 4.0.66.0	Windows 2003 SP2 32-bit RHEL 4.0 RHEL 5.0 (5.1 and later no supported) Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
4.2.110.0	4.2.176.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0 4.1.185.0 4.1.171.0 4.0.216.0 4.0.206.0 4.0.179.11 4.0.179.8 4.0.155.0	3.1.42.0	Not Applicable	29 Sep 2008	4.2.97.0 4.2.81.0 4.2.62.11 4.2.62.0 4.1.91.0 4.1.83.0 4.0.100.0 4.0.97.0 4.0.96.0 4.0.87.0 4.0.81.0 4.0.66.0	Windows 2003 SP2 32-bit RHEL 4.0 RHEL 5.0 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
4.2.97.0	4.2.176.0 4.2.130.0 4.2.112.0 4.2.99.0 4.2.61.0 4.1.185.0 4.1.171.0 4.0.216.0 4.0.206.0 4.0.179.11 4.0.179.8 4.0.155.0	3.1.38.0	Not Applicable	3 Jun 2008	4.2.81.0 4.2.62.11 4.2.62.0 4.1.91.0 4.1.83.0 4.0.100.0 4.0.97.0 4.0.96.0 4.0.87.0 4.0.81.0 4.0.66.0	Windows 2003 SP2 32-bit RHEL 4.0 RHEL 5.0 Windows/RHEL on ESX 3.0.1 and above No support for 64 bit

Table 1 WCS Versions (continued)

WCS Version	Supported Controller Versions	Supported Location Server Versions	Supported MSE Versions	Release Date	Upgrade Supported From <sup>1</sup>	Operating System Requirement
4.2.81.0	4.2.99.0 4.2.61.0 4.1.185.0 4.1.171.0 4.0.216.0 4.0.206.0 4.0.179.11 4.0.179.8 4.0.155.0	3.1.36.0	Not Applicable	17 Mar 2008	4.2.62.11 4.2.62.0 4.1.91.0 4.1.83.0 4.0.100.0 4.0.97.0 4.0.96.0 4.0.87.0 4.0.81.0 4.0.66.0	Windows 2003 SP2 32-bit RHEL 4.0 RHEL 5.0 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
4.2.62.11	4.2.61.0 4.1.185.0 4.1.171.0 4.0.216.0 4.0.206.0 4.0.179.11 4.0.179.8 4.0.155.0	3.1.35.0	Not Applicable	25 Jan 2008	4.2.62.0 4.1.91.0 4.1.83.0 4.0.100.0 4.0.97.0 4.0.96.0 4.0.87.0 4.0.81.0 4.0.66.0	Windows 2003 SP2 32-bit RHEL 4.0 Update 5 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit
4.2.62.0	4.2.61.0 4.1.185.0 4.1.171.0 4.0.216.0 4.0.206.0 4.0.179.11 4.0.179.8 4.0.155.0	3.1.35.0	Not Applicable	9 Nov 2007	4.1.91.0 4.1.83.0 4.0.100.0 4.0.97.0 4.0.96.0 4.0.87.0 4.0.81.0 4.0.66.0	Windows 2003 SP2 32-bit RHEL 4.0 Update 5 Windows/ RHEL on ESX 3.0.1 and above No support for 64 bit

<sup>1.</sup> All 5.2.x releases posted after 5.2.148.0 will not be eligible for upgrade to Release 6.0.202.0.

## **Cisco WCS on WLSE Appliance**

Cisco WCS on a WLSE appliance supports up to 1500 Cisco Aironet lightweight access points and 161 Cisco wireless LAN controllers. The required processor is a 3.16-GHz Intel Xeon processor (or AMD equivalent) with 3 GB of RAM and 38 GB of free hard drive space.

The Windows operating system is not supported with the Cisco WCS on the WLSE appliance.

### **Finding the Software Release**

To find the software release that Cisco WCS is running, see the *Cisco Wireless Control System Configuration Guide*. If Cisco WCS is already installed and connected, verify the software release by choosing **Help > About the Software**.

## **Upgrading Cisco WCS**

This section provides instructions for upgrading Cisco WCS on either a Windows or Linux server. It handles the steps you would normally follow to accomplish a manual upgrade (shut down Cisco WCS, perform a backup, remove the old Cisco WCS version, install the new version, restore the backup, and start Cisco WCS). If you choose to use the installer, it searches for any previous Cisco WCS versions.



You must have software release 4.1.91.0 before you can automatically upgrade to 4.2.

If you choose to use the easy upgrade process, it provides error checking at each step and gives an informative message if an error that causes an exit occurs. An upgrade-*version*.log is also produced and provides corrective measures.



For steps on upgrading Cisco WCS in a high availability environment, see Chapter 14, "Performing Maintenance Operations" of the *Cisco Wireless Control System Configuration Guide*.

### **Using the Installer to Upgrade Cisco WCS for Windows**

To upgrade Cisco WCS (on a Windows platform) using the automated upgrade, follow these steps:

- Step 1 Insert the Windows Cisco WCS CD into the CD-ROM drive and double-click the WCS-STANDARD-K9-6.0.X.Y.exe file where 6.0.X.Y is the software build. If you downloaded the installer from Cisco.com, double-click the WCS-STANDARD-K9-6-0-X-Y.exe file that you downloaded to your local drive. The Install Anywhere window appears and prepares the system for installation. After a few seconds, the Introduction window appears, followed by the license agreement window.
- Step 2 Click the I accept the terms of the License Agreement option to continue. At this point, the install wizard detects whether a previous version of Cisco WCS is installed and specifies whether the current version is eligible for an automated upgrade. If your Cisco WCS version cannot participate in the automated upgrade, you receive such a notice.
- Step 3 If your Cisco WCS version is eligible for an automated upgrade and the previous qualifying version of Cisco WCS is detected, choose **Upgrade** and continue to Step 4. This method is preferred. If your Cisco WCS version is ineligible for an automated upgrade, choose **Install** to end the installer and switch to a manual upgrade. (See the *Cisco Wireless Control System Configuration Guide* for manual upgrade instructions.)

Several of the values from the previous installation are retained as part of the upgrade. These include the following:

- The ports
- The root password

- The root FTP password
- The TFTP server file location
- The FTP server file location
- The multi-homed server interfaces
- **Step 4** In the Choose Install Folder page, choose a folder in which to install the Cisco WCS. It must be a different location than the previous installation. Click **Next** to continue.
- **Step 5** Choose a folder location in which to store the shortcuts. It must be a different location than the previous installation.



If shortcuts should be installed for all users on the server, select the **Install shortcuts for all users** check box.

Step 6 Continue to follow the prompts that appear. You are notified when the system checks for required space, uninstalls previous versions, backs up files, restores, and so on. A prompt appears asking if you are ready to start Cisco WCS as a service. Click Yes.



The upgrade log is located in the standard log directory (\webnms\logs) if the automated upgrade completes. If the automated upgrade did not complete, the upgrade log is located in the user home directory.



If Cisco WCS is configured to use TACACS+ or RADIUS for external authentication, you must update the custom vendor attribute list in the TACACS+ or RADIUS server with any new permissions and virtual-domain information. The attribute list for the appropriate UserGroup can be found at Administration > AAA > UserGroups. Click the **Export** link for the appropriate user group. See Chapter 14 "Performing Maintenance Operations" of the *Cisco Wireless Control System Configuration Guide* for additional information regarding upgrading.

### **Using the Installer to Upgrade Cisco WCS for Linux**

To upgrade Cisco WCS (on a Linux platform) using the automated upgrade, follow these steps:

- **Step 1** Using the command-line interface, perform one of the following:
  - a. If you are installing from a CD, switch to the /media/cdrom directory.
  - **b.** If you are installing from Cisco.com, switch to the directory in which the install file was downloaded. For example, if the install file was placed in /root/Desktop, enter **cd /root/Desktop**.
- **Step 2** Enter ./WCS-STANDARD-K9-6.0.X.Y.bin (for CD or Cisco.com users) to start the install script. The Install Anywhere message appears and prepares the system for installation. After a few seconds, the Introduction appears, followed by the license agreement statement.
- **Step 3** Accept the license agreement to continue.

At this point, the install wizard detects whether a previous version of Cisco WCS is installed and specifies whether the current version is eligible for an automated upgrade. You receive a notification whether or not your most recent Cisco WCS version is eligible for the automated upgrade.

Step 4 If your Cisco WCS version is eligible for an automated upgrade and the previous qualifying version of Cisco WCS is detected, choose **Upgrade** and continue to Step 6. This method is preferred. If your Cisco WCS version is ineligible for an automated upgrade, choose **Install** to end the installer and switch to a manual upgrade. (See the *Cisco Wireless Control System Configuration Guide* for manual upgrade instructions.)

Several of the values from the previous installation are retained and carried over as part of the upgrade. These include the following:

- The ports
- · The root password
- The root FTP password
- The TFTP server file location
- The FTP server file location
- The multi-homed server interfaces
- **Step 5** Choose a folder in which to install the Cisco WCS. It must be a different location than the previous installation. Click **Next** to continue.
- **Step 6** Choose a folder location to store the shortcuts. It must be a different location than the previous installation.
- Step 7 Continue to follow the prompts that appear. You are notified when the system checks for required space, uninstalls previous versions, backs up files, restores, and so on. A prompt appears asking if you are ready to start Cisco WCS as a service. Click Yes.



Note

The upgrade log is located in the standard log directory (\webnms\logs) if the automated upgrade completes. For an incomplete automated upgrade, the upgrade log is located in the user home directory.



Note

If Cisco WCS is configured to use TACACS+ or RADIUS for external authentication, the custom vendor attribute list should be updated in the TACACS+ or RADIUS server with any new permissions. The attribute list for the appropriate UserGroup can be found at Administration > AAA > UserGroups. Click the **Export** link for the appropriate user group. See Chapter 14, "Performing Maintenance Operations" of the *Cisco Wireless Control System Configuration Guide* for additional information regarding upgrading.

### Restoring the Cisco WCS Database in a High Availability Environment

During installation, you are prompted to determine if a secondary Cisco WCS server would be used for high availability support to the primary Cisco WCS server. If you opted for this high availability environment and enabled it in the Administration > High Availability page, the status appears as HA enabled. Before performing a database restore, you must convert the status to HA not configured.



If the restore is performed while the status is set to HA enabled, unexpected results may occur.

Choose the desired option from the following choices to change the status from *HA enabled* to *HA not configured*:

- Click **Remove** in the HA Configuration page (Administration > High Availability).
- Restart the primary server. Go to the secondary HealthMonitor GUI (https://<SecondaryWCS>:8082) and click Failback.

This procedure is used when one of the following instances has occurred:

- The primary server is down and a failover has not been executed, so the secondary server is in the SecondaryLostPrimary state.
- The primary server is down and a failover is already executed, so the secondary server is in the Secondary Active state.

The primary server will now be in HA Not Configured mode, and you can safely perform a database restore.

## **Important Notes**

This section describes important information about Cisco WCS.

If you change the report repository path under Administration > Settings > Report, then the existing saved download report will no longer work. To fix this problem, manually move the files to the new directory by cutting and pasting the files.

If you are upgrading between different releases of the WCS and Controller, check the SNMP MIBs or OID structures on running controller versions for affected changes of features. Controller should be applying commands based on right MIB versions.

### **Duplicate AP Name**

If you see access points with the same name while applying controller templates or adding them to the map, perform a refresh config. The duplicates in the database will be eliminated.

### **High Availability**

An e-mail address is now optional when you configure high availability. However, if you enter a properly formatted e-mail address, you must also configure a Cisco WCS e-mail server.



High availability is supported on Linux, Windows 2003, and VMware environments. Specific operating system support is listed in the "Operating Systems Requirements" section on page 3.

### **Client Session Report**

The new client session report replaces the existing Client Association and Client Detail Report. If you perform an upgrade, Client Association no longer appears on the Reports menu. The data pertaining to these reports migrates successfully, and saved report entries for Client Association and Client Detail reports are migrated. However, the new ClientSessionInfo table is not populated with data from the previous reporting period; the table is populated with client-related data that occurred after the upgrade. The new client detail report contains the details of association time, disassociation time, and session timeout with details of VLAN, session length, client location, Megabit information used, SNR, RSSI, and throughput.

## Cisco WCS Supported on Windows 2003 English and Japanese Operating Systems Only

Cisco WCS is supported only on English or Japanese versions of the Windows 2003 operating system. Display problems sometimes occur when you install and run Cisco WCS on operating systems translated to other languages or with locale settings other than English or Japanese.

### **Notifications in Junk E-mail Folder**

If a domain name is not set in the e-mail settings, notifications may end up in the junk e-mail. When the primary device is down, no e-mail notifications are received, but the log message indicates that an e-mail was successfully sent.

### **Internet Explorer Error**

When you click certain links that call JavaScript code, you may get an Internet Explorer error as follows:

Problems with this web page might prevent it from being displayed properly or functioning properly. In the future, you can display this message by double-clicking the warning icon displayed in the status bar.

This problem appears if another program has deregistered the dynamic-link library (DLLs). Reregistering them corrects the problem.

To reregister the DLLs, follow these steps:

- **Step 1** Open a command-line window in Windows XP (Start > All Programs > Accessories > Command Prompt).
- **Step 2** Run these commands one at a time in the following order. After each command successfully runs, you should receive a pop-up message that the DllRegisterServer in\_something.dll succeeded.
  - 1. regsvr32 msscript.ocx
  - 2. regsvr32 dispex.dll
  - 3. regsvr32 vbscript.dll
  - 4. regsvr32 scrrun.dll
  - **5.** regsvr32 urlmon.dll
  - **6.** regsvr32 actxprxy.dll

7. regsvr32 shdocvw.dll

**Step 3** Restart the computer.

### **Notes About Google Earth**

When you launch Google Earth, this message appears:

Google Earth could not write to the current cache or myplaces file location. The values will be set as follows:

My Places Path: "C:\Document and Settings\userid\Application Data\Google\GoogleEarth" Cache Path: "C:\Documents and Settings\userid\Local Settings\Application Data\Google\GoogleEarth"

This behavior is expected.

Also, if you visit the AP Details page a second time, you get an "invalid path / googleArthLradDetails was requested" HTTP status message. This Google Earth problem can be resolved by deleting the first AP Details occurrence.

### **Windows XP Cannot Load CAD Files**

Internet Explorer 7 running on Windows XP cannot load CAD files because of missing DLLs (C:\Windows\system\DWMAPI.DLL). These DLLs are present only on Windows Vista.

Take one of the following actions:

- Uninstall IE7 and install IE6.
- Leave IE7 and install the missing DLLs.

### **Deletion of TFTP Server is not Updated in the Configuration Backup**

To add a TFTP server, choose **Configure > Controller Templates**, choose **TFTP server** from the left sidebar menu, and choose **Add TFTP Server** from the drop-down list. To add the TFTP server, enter the name and IP address and click **Save**. If you later delete this TFTP server and back up the configuration (Administration > Background Task > Configuration Backup), the IP address of the TFTP server still appears in the TFTP Server page when only the default server appears.

### **Conflicting Ports Interrupt Cisco WCS Start**

Cisco WCS fails to start if there is a conflicting port in use. You receive a "Failed to start WCS server" message, but you do not receive a list of conflicting ports. Go to WCS/webnms/logs/wcs-0-0.log and view the conflicting ports. Enter the following to get a list of the process IDs associated with each connection:

In Windows XP and Windows Server 2003, enter netstat -na0.

In Linux, enter netstat -nlp.

In the Task Manager, you see the respective PID and can stop the process using the port that Cisco WCS requires.

### **System Error After Upgrade**

After upgrading WCS from 4.2.128.0 to 6.0.202.0, the message, "System Error: Wrong Alarm Type rougueUnclassifiedMinor", appears in the UI.

If you see this error, clear your browser cache.

### **New Features**

There are no new features in this maintenance release.

### **Caveats**

The following sections list open and resolved caveats in Cisco WCS 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.



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

## **Open Caveats**

Table 2 lists the open caveats in Cisco WCS Release 6.0.202.0.

Table 2 Open Caveats

ID Number	Description
CSCtd45012	WCS CLI Templates do not time out.
	Symptom: Certain WLC commands require user input following the command (such as, response to y/n). WCS should answer these without prompting the user, however, for some of the commands that WCS is not aware of, this never happens and WCS waits indefinitely for the next prompt.
	Conditions: This happens when you use those CLIs that would require a response is used in the template.
	Workaround: None
CSCte89900	WCS shows license with AP count 0 while logs are clear.
	Symptom: WCS shows 0 AP count even when 100 AP licenses have been installed in WCS. The logs also does not show any error message.
	Conditions: Unknown error occurs even when license is valid. It works fine on another server.
	Workaround: Move your WCS to another server. Or get the license reissued by TAC.
CSCti75498	Rogue APs are not pushed to the rogue AP ignore list
	Symptom: Cisco Autonomous APs are not pushed to the rogue AP ignore list by WCS.
	Conditions: If the Cisco Autonomous AP is detected as a threat on wired network then it will not be moved to rogue AP ignore list by WCS. However, if its state is again changed back to unclassified then also it will not be in the rogue AP ignore list.
	Workaround: None

### **Resolved Caveats**

Table 3 lists caveats resolved in Cisco WCS Release 6.0.202.0.

Table 3 Resolved Caveats

ID Number	Caveat Title
CSCsz14861	Virtual Domain broken for maps
CSCt142518	Old Security reports should be removed.
CSCt198648	WCS 6.X fails to download 7.X image for the MSE.
CSCtb91371	Non-root users unable to authenticate for AP timers config list page.
CSCtd29026	WCS cannot create static WEP key with same index number on different WLAN.
CSCtf23192	Solid DB 4.50.150 in WCS become unresponsive.
CSCtg97706	WCS: Remove the 5 sec option from the auto refresh on the maps.

Table 3 Resolved Caveats (continued)

ID Number	Caveat Title
CSCth37438	Missing WLCs for CLI template alone in WCS
CSCth37539	Wrong error message displayed while applying 802.11b/g template.
CSCth65673	In SNMPv3, unable to add controllers on WCS & seeing wrong MAC address.
CSCth70299	WCS: untaggedInterfaceWithSamePort error when changing DHCP server address.
CSCth95098	WCS: SSLv2 should be disabled by default.
CSCth95281	WCS adds mobility group members using incorrect MAC address.
CSCti01885	Drop-down window for selecting AP's primary WLC is too small.
CSCtj23398	HA Status toggles between Primary Active & Primary Lost Secondary.
CSCtj26384	WCS not updating SSC after migrating 1230 AP.
CSCtj74549	Failed to add controller to WCS.
CSCtk36070	All user groups show Unknown exception error message.
CSCtn59116	Failed to run report on the Client TSM Report.

### **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, see the Cisco TAC website at the following location:

http://www.cisco.com/cisco/web/psa/troubleshoot.html

Click Wireless and Wireless LAN Management, and then choose Autonomous Wireless LAN and Unified Wireless LAN Management.

### **Related Documentation**

For information on the Cisco Unified Wireless Network Solution and for instructions on how to configure and use the Cisco UWN, see 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, at:

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

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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