



Release Notes for Cisco 3300 Series Mobility Services Engine for Windows or Linux, Release 6.0.202.0

April 2011

These release notes describe open and resolved caveats for software release 6.0.202.0 for Cisco 3300 Series Mobility Services Engines and its two services:

- Context Aware Service (CAS)
- Adaptive Wireless Intrusion Protection System (wIPS).



Note

Before installing this software, see the [“System Requirements” section on page 4](#) for details on compatibility with Cisco Wireless LAN Controllers and Cisco Wireless Control Systems (WCS).



Note

You must purchase licenses from Cisco to retrieve information on tags and clients from access points. See the [“Ordering CAS Client and Tag Licenses for the Mobility Services Engine” section on page 7](#) for details. You must purchase licenses from Cisco to support wIPS monitor mode access points. See the [“Ordering Adaptive wIPS Licenses for the Mobility Services Engine” section on page 8](#).

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Introduction

Cisco 3300 Series Mobility Services Engine and Services

The Cisco 3300 Series Mobility Services Engine currently supports the following services in release 6.0.202.0:

- **Context Aware Service (CAS)**—Allows a mobility services engine to simultaneously track thousands of mobile assets and clients by retrieving contextual information such as location, temperature, and availability from Cisco access points.

CAS relies on two engines for processing the contextual information it receives. The Context Aware Engine for Clients processes data received from Wi-Fi clients and the Context Aware Engine for Tags processes data received from Wi-Fi tags. Both of these engines can be deployed together or separately depending on the business need. This service was introduced in release 5.1.



Note You must purchase licenses from Cisco to retrieve contextual information on tags and clients from access points. See the [“Ordering CAS Client and Tag Licenses for the Mobility Services Engine”](#) section on page 7.

- **Wireless Intrusion Prevention System (wIPS)**—Provides wireless-specific network threat detection and mitigation against malicious attacks, security vulnerabilities, and sources of performance disruption within the CUWN infrastructure. wIPS visualizes, analyzes, and identifies wireless threats, and centrally manages mitigation and resolution of security and performance issues using Cisco monitor mode access points. Proactive threat prevention is also supported to create a hardened wireless network core that is impenetrable by most wireless attacks.



Note You must purchase licenses from Cisco to support wIPS monitor mode access points. See the [“Ordering Adaptive wIPS Licenses for the Mobility Services Engine”](#) section on page 8.



Note Evaluation licenses for 100 clients, 100 tags, and 20 access points (wIPS) come standard on each mobility services engine installed with release 6.0. Evaluation licenses are good for 60 days.



Note CAS and wIPS can operate simultaneously on the Cisco 3350 and 3310 series mobility services engines.

**Note**

See the online version of the *Cisco Context-Aware Software Configuration Guide, Release 6.0*, for details on configuring and monitoring CAS on the mobility services engine at the following URL:
http://www.cisco.com/en/US/docs/wireless/mse/3350/6.0/CAS/configuration/guide/mse_cg60.html

**Note**

See the online version of the *Cisco Wireless Intrusion Prevention System Configuration Guide, Release 6.0* for details on configuring and monitoring wIPS on the mobility services engine at the following URL:
http://www.cisco.com/en/US/docs/wireless/mse/3350/6.0/wIPS/configuration/guide/msecg_wIPS.html

**Note**

See the online versions of the *Cisco 3350 and 3310 Mobility Services Engine Getting Started Guides* for details on the physical installation and initial configuration of the mobility services engines at the following URL:
http://www.cisco.com/en/US/products/ps9742/prod_installation_guides_list.html

Software and AeroScout CLE Compatibility Matrix

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

Table 1 Software and AeroScout CLE Compatibility Matrix

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

Table 1 **Software and AeroScout CLE Compatibility Matrix**

Release Date	WLC	WCS	2710 LBS	MSE 3300	AeroScout CLE
9th Nov 2009	6.0.188.0	6.0.170.0	6.0.97.0	6.0.97.0	3.2.1 (4.0.15.12) or 3.2 (4.0.14.14)
17th Feb 2010	6.0.196.0	6.0.181.0	6.0.101.0	6.0.103.0	3.2.1 (4.0.15.12)
30th August 2010	6.0.199.4	6.0.196.0	6.0.102.0	6.0.105.0	4.2.4.4 or 4.3.1.19
4th April 2011	6.0.202.0	6.0.202.0	6.0.202.0	6.0.202.0	4.2.4.4 or 4.3.1.19
Tentative. TBD					
6th June 2010	7.0.98.0	7.0.164.0	-	7.0.105.0	4.2.3.5 or 4.3.1.19

System Requirements

The following minimum releases are required to configure and monitor CAS on the Cisco 3300 Mobility Services Engine, Cisco WCS, and Cisco Wireless LAN Controller (See [Table 2](#)).

Table 2 **Minimum Software Requirements**

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

1. Release 5.2 is the minimum software requirement for the controller, WCS, and mobility services engine to support the Cisco Adaptive Wireless Intrusion Prevention System.

Upgrading to This Software Release

For instructions on automatically downloading the software using WCS or for manually downloading the software using a local or remote connection, See the “Updating Mobility Services Engine Software” section in Chapter 2 of the *Cisco 3350 Mobility Services Engine Getting Started Guide* and *Cisco 3310 Mobility Services Engine Getting Started Guide*.

You can find these documents at the following URL:

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

This section contains the following topics:

- [Upgrading from Release 5.x to 6.0.202.0, page 5](#)
- [Compressed Software Image, page 7](#)
- [Updated Software Version Shown in WCS after Polling, page 7](#)
- [CAS and wIPS License Requirements, page 7](#)
- [Ordering Adaptive wIPS Licenses for the Mobility Services Engine, page 8](#)
- [Operational Notes for a Mobility Services Engine, page 9](#)

Upgrading from Release 5.x to 6.0.202.0



Caution

The number of supported clients, tags, and access points (wIPS) is reset to 100 clients, 100 tags, and 20 access points when you upgrade to release 6.0. All tracking beyond these limits is lost. These limits correspond to the 60-day evaluation licenses that are standard on mobility services engines.



Caution

You must back up the mobility services engine database before upgrading from release 5.x to 6.x to preserve client, tag, and access point configurations. You can restore the database after the software upgrade.

To upgrade to release 6.0.202.0, follow these steps:

Step 1

Register the Product Authorization Key (PAK).

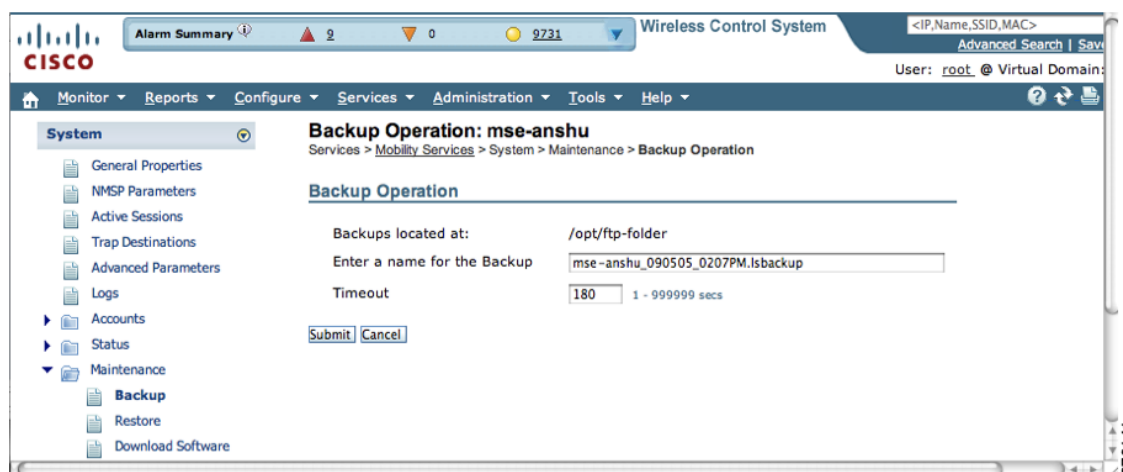
- Client and wIPS licenses are registered at the following URL:
<https://tools.cisco.com/SWIFT/Licensing/PrivateRegistrationServlet>
- Tag licenses are registered at the following URL: <http://www.aeroscout.com/support>

Step 2

Back up the mobility services engine database and the AeroScout database:

- a. To back up the mobility services database (network designs controller configurations, clients, and access points), follow these steps:
 1. Choose **Services > Mobility Services**.
 2. Click the name of the mobility services engine for which you want to back up the database.
 3. Choose **System > Maintenance > Backup** from System left sidebar menu.
 4. Enter a name for the backup file. Click **Submit** (see [Figure 1](#)).
- b. To back up the AeroScout database (tag licenses, chokepoints, and TDOA receivers) See to the *AeroScout Context-Aware Engine for Tags, for Cisco Mobility Services Engine User's Guide* at: <http://www.aeroscout.com/support>

Figure 1 *System > Maintenance Window*



Step 3 Download release 6.0.202.0:

- a. Choose **Services > Mobility Services**.
- b. Click the name of the mobility services engine on which you want to upgrade the software.
- c. Choose **System > Maintenance > Download Software**.
- d. Select either an uploaded image or browse and upload an image. Click **Download**.

Step 4 Install release 6.0.202.0 using the mobility services engine CLI using one of the following options:

- To overwrite existing software, enter:

```
/etc/init.d/msed stop
cd /opt/installers
./<mse software file name>
```

- To perform a fresh install, enter:

```
/etc/init.d/msed stop
cd/opt/mse/uninstall
```

Enter the following once in the uninstall directory:

```
./uninstall
```

Enter **no** when prompted to keep the old database:

```
cd/opt/installers
./<mse software file name>
```

Step 5 Restore the mobility services engine and AeroScout database:

- a. To restore the mobility services database, follow these steps:
 1. Choose **Services > Mobility Services**.
 2. Click the name of the mobility services engine on which you upgraded the software.
 3. Choose **System > Maintenance > Restore**.
 4. Choose the file to restore from the drop-down list. Click **Submit**.
- b. To restore the AeroScout database see the *AeroScout Context-Aware Engine for Tags, for Cisco Mobility Services Engine User's Guide* at the following URL:

<http://www.aeroscout.com/support>

Step 6 Install licenses:

See Chapter 2 of the *Context-Aware Services Configuration Guide, Release 6.0* at the following URL:

http://www.cisco.com/en/US/docs/wireless/mse/3350/6.0/CAS/configuration/guide/msecg_ch2_CAS.html

Compressed Software Image

If you download the mobility services engine image *.gz file using WCS, the mobility services engine 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 Software Version Shown in WCS after Polling

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

CAS and wIPS License Requirements

For complete details on ordering and downloading licenses see the *Cisco 3300 Series Mobility Services Engine Licensing and Ordering Guide for Context-Aware Mobility Software, and Adaptive wIPS, Release 6.0* at the following URL:

http://www.cisco.com/en/US/prod/collateral/wireless/ps9733/ps9742/data_sheet_c07-473865.html

- Client and wIPS licenses are installed from WCS (Administration > License Center).
 - See Chapter 2 of the *Cisco Context-Aware Service Configuration Guide, Release 6.0* and *Cisco Adaptive Wireless Intrusion Prevention System, Release 6.0*, respectively.
- Tag licenses are installed using the *AeroScout System Manager*. see the “Installing Tag Licenses” section in Chapter 2 of *Cisco Context-Aware Service Configuration Guide, Release 6.0*.

Ordering CAS Client and Tag Licenses for the Mobility Services Engine

CAS software licenses are based on the number of Wi-Fi client and Wi-Fi tag devices tracked. The Cisco 3350 Mobility Services Engine allows for the tracking of up to 18,000 devices (combined count of Wi-Fi clients and Wi-Fi tags) and the Cisco 3310 Mobility Services Engine allows for the tracking of up to 2,000 devices (combined count of Wi-Fi clients and Wi-Fi tags).

Licenses for Cisco Compatible Extensions (CX) tags (version 1 or later) and clients are offered independently. The client license also includes tracking of rogue clients and rogue access points.

Licenses for tags and clients are offered in quantities ranging from 1,000 to 12,000 units and can be combined to meet the location tracking requirements of a CAS deployment. For example, combining the AIR-CAS-3KC-K9, AIR-CAS-12KC-K9, and AIR-CAS-1KT-K9 licenses provide tracking of 15,000 Wi-Fi clients and 1,000 Wi-Fi tags on a Cisco 3350 (see [Table 3](#)).

CAS License Ordering Summary

Order numbers for client and tag licenses are summarized in [Table 3](#).

Table 3 Order Numbers for Client and Tag Licenses

Order Number	Licenses
Client Licenses¹	
AIR-CAS-1KC-K9	License for tracking 1000 client devices.
AIR-CAS-3KC-K9	License for tracking 3000 client devices.
AIR-CAS-6KC-K9	License for tracking 6000 client devices.
AIR-CAS-12KC-K9	License for tracking 12,000 client devices.
Tag Licenses	
AIR-CAS-1KT-K9	License for tracking 1000 tag devices.
AIR-CAS-3KT-K9	License for tracking 3000 tag devices.
AIR-CAS-6KT-K9	License for tracking 6000 tag devices.
AIR-CAS-12KT-K9	License for tracking 12,000 tag devices.

1. All client licenses include tracking of rogue clients and rogue access points.

Ordering Adaptive wIPS Licenses for the Mobility Services Engine

Adaptive wIPS software licenses are based on the number of full-time monitoring access points (often referred to as *monitor mode access points*) that are deployed in the network. The licenses may be combined to arrive at the number of monitor mode access points required to run the Adaptive wIPS deployment. For example, combining AIR-WIPS-AP-5, AIR-WIPS-AP-25, and AIR-WIPS-AP-500 licenses provides support for 530 monitor mode access points.

Adaptive wIPs License Ordering Summary

Order numbers for Adaptive wIPS licenses are summarized in [Table 4](#).

Table 4 Order Numbers for Adaptive wIPS Licenses

Order Number	Licenses
AIR-WIPS-AP-5	License for 5 monitor mode Cisco access points.
AIR-WIPS-AP-25	License for 25 monitor mode Cisco access points.
AIR-WIPS-AP-100	License for 100 monitor mode Cisco access points.

Table 4 **Order Numbers for Adaptive wIPS Licenses**

Order Number	Licenses
AIR-WIPS-AP-500	License for 500 monitor mode Cisco access points.
AIR-WIPS-AP-UNL1 or AIR-WIPS-AP-2000	License for 2000 monitor mode Cisco access points. Note Cannot be combined with other wIPS licenses.

Important Notes

This section describes important information about the operational notes and navigation changes for CAS, wIPS, and the mobility services engine for release 6.0.202.0.

Features and operational notes are summarized separately for the mobility services engine, CAS, and wIPS.

This section contains the following topics:

- [Operational Notes for a Mobility Services Engine, page 9](#)
- [Operational Notes for CAS, page 10](#)
- [Operational Notes for wIPS, page 13](#)
- [WCS Screen and Navigation Changes, page 13](#)

Operational Notes for a Mobility Services Engine

This section lists the operational notes for an mobility services engine and consists of the following topics:

- [Automatic Installation Script for Initial Setup, page 9](#)
- [Parameter Changes During Upgrade from 5.0.x to 6.0.202.0, page 10](#)
- [Controller and Associated Mobility Services Engine Must be Mapped to the Same NTP and WCS Server, page 10](#)
- [Mandatory Default Root Password Change, page 10](#)
- [Networks with Large Access Point Deployments Might Experience Slower Location Updates, page 10](#)

Automatic Installation Script for Initial Setup

An automatic setup wizard is available to help you initially set up the mobility services engine.

An example of the complete automatic setup script is provided in the *Cisco 3350 Mobility Services Engine Getting Started Guide* and *Cisco 3310 Mobility Services Engine Getting Started Guide*.

You can find these documents online at:

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

Parameter Changes During Upgrade from 5.0.x to 6.0.202.0

You will notice a change in the tracking limits when you:

1. Configure tracking limits in 5.0.x.
2. Upgrade to 6.0.202.0.

If limits are greater than licensed counts, limits are removed and licensed counts are enforced instead.

(CSCtd57386).

Controller and Associated Mobility Services Engine Must be Mapped to the Same NTP and WCS Server

Communications between the mobility services engine, 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, WCS, and the mobility services engine.

The mobility services engine and its associated controllers must be mapped to the same NTP server and the same WCS server.

Local time zones can be configured on a mobility services engine to assist network operations center personnel in locating events within logs.



Note

You can configure NTP server settings during the automatic installation script. See the *Cisco 3350 Mobility Services Engine Getting Started Guide* or *Cisco 3310 Mobility Services Engine Getting Started Guide* for details on the automatic installation script. You can find these documents online at:

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

Mandatory Default Root Password Change

You must change the default root password of the mobility services engine during the automatic installation script to ensure optimum network security.

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

Networks with Large Access Point Deployments Might Experience Slower Location Updates

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

Operational Notes for CAS

This section lists the operational notes for a mobility services engine and consists of the following topics:

- [Synchronization Required When Upgrading to Release 6.0.202.0 or Importing CAD Floor Images, page 11](#)

- [Floor Change or Minimum Distance Required for Location Transitions to Post to History Log, page 11](#)
- [Release 4.1 of AeroScout MobileView Required for Northbound Notifications, page 11](#)
- [WCS Online Help Outlines Incorrect Software Download Procedure, page 11](#)
- [WCS Online Help Outlines Incorrect Software Download Procedure, page 11](#)
- [Non-Cisco Compatible Extensions Tags Not Supported, page 12](#)
- [Cisco Compatible Extensions, Version 1 Tags Required at a Minimum, page 12](#)
- [Monitoring Information Varies for Clients and Tags, page 12](#)
- [Calibration Models and Data Apply Only to Clients, page 12](#)
- [Advanced Location Parameters Apply Only to Clients, page 12](#)
- [Location History Timestamps Match Browser Location, page 12](#)
- [PDAs with Limited Probe Requests Might Affect Location, page 12](#)
- [Mandatory Setting Required on Intel 802.11n and 802.11 b/g/n Client Cards for Accurate Calibration, page 13](#)

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

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

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

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

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

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

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).

The workaround for this is to upgrade to Mobile View version 4.1(CSCsx56618).

WCS Online Help Outlines Incorrect Software Download Procedure

In WCS online help (OLH), the steps in the "Downloading Software to a Mobility Services Engine Using WCS" section mistakenly notes commands for downloading an *aeroscout-engine*. The *aeroscout-engine* is now bundled within the mobility services engine software. See Chapter 9 of the *Cisco Context-Aware Service Configuration Guide, Release 6.0* for the correct download steps.

Non-Cisco Compatible Extensions Tags Not Supported

The mobility services engine does not support non-Cisco CX Wi-Fi tags. Additionally, these non-compliant tags are not used in location calculations or shown on WCS maps.

Cisco Compatible Extensions, Version 1 Tags Required at a Minimum

Only Cisco CX version 1 tags (or later) are used in location calculations and mapped in WCS.

Monitoring Information Varies for Clients and Tags

On the Monitor > Clients page (when Location Debug is enabled), you can view information on the last heard access point and its corresponding (Received Signal Strength Indication) RSSI reading. This information is not available on the Monitor > Tags page.

Calibration Models and Data Apply Only to Clients

Calibration models and data apply only to clients. Calibration for tags is done using the *AeroScout System Manager*.

See Chapter 7, “Context-Aware Planning and Verification” in the *Cisco Context-Aware Software Configuration Guide, Release 6.0* for more details on client calibration.

See the *AeroScout Context-Aware Engine for Tags, for Cisco Mobility Services Engine User's Guide* at the following link:

<http://www.aeroscout.com/support>

Advanced Location Parameters Apply Only to Clients

Settings for advanced location parameters related to RSSI, chokepoint usage, location smoothing, and assignment of outside walls on floors, are not applicable to tags.

See the “Editing Advanced Location Parameters” section in Chapter 7 of the *Cisco Context-Aware Software Configuration Guide, Release 6.0*.

Navigation Path: Services > Mobility Services > Device Name > Context Aware Service > Advanced > Location Parameters.

Location History Timestamps Match Browser Location

The WCS timestamp is based on the browser's location and not on the mobility services engine settings. Changing the time zone on WCS or on the mobility services engine does not change the timestamp for the location history.

PDA's 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 is not always 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 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).

Operational Notes for wIPS

This section lists the operational notes for a mobility services engine.

Mobility Services Engine with wIPS Service Enabled Mistakenly Allows a Controller to be Assigned to Multiple MSEs

When wIPS is configured on the mobility services engine, often a controller can be assigned to more than one mobility services engine in error. By design, a controller can only be assigned to one mobility services engine and an error appears in the WCS window when you synchronize a mobility services engine and a controller (CSCsx38955).

WCS Screen and Navigation Changes

- *Services* replaces *Mobility* in the navigation bar of WCS.
- A centralized license center to install and view license status is available (Administration > License Center).
- A *Switches* tab is a new synchronize option to support the new wired Catalyst switch and wired client feature (Services > Synchronize Services).

New Feature Support

The new features for the mobility services engine, CAS, and wIPS are summarized under separate headings.

This section consists of the following topics:

- [Cisco 3355 Mobility Services Engine Support, page 13](#)
- [Common CAS and wIPS Features, page 14](#)
- [Context-Aware Software Features, page 14](#)
- [Adaptive Wireless Intrusion Prevention Software Features, page 15](#)

Cisco 3355 Mobility Services Engine Support

The 6.0.202.0 release supports Cisco 3355 Mobility Services Engine.

Common CAS and wIPS Features

Both the CAS and wIPS services can operate on the Cisco 3350, 3355, and 3310 mobility services engines simultaneously. CAS and wIPS can now be deployed with the Cisco 3350, or the 3355, or the 3310 platforms.

These platforms support services separately or concurrently as needed.

For information about the coexistence and scalability of services, see the *Cisco 3300 Series Mobility Services Engine Licensing and Ordering Guide*.

The MSE 3300 Series platform offers the advantage of centralizing support of mobility services within the Cisco WLAN infrastructure and enables third-party application integration through a common API.

Context-Aware Software Features

This section summarizes the features for Context-Aware Software and consists of the following topics:

- [Location Services for Wired Switches and Clients, page 14](#)
- [WCS Supports Backup of Tag, Chokepoint, and TDOA Receiver Configuration Data, page 14](#)

Location Services for Wired Switches and Clients

You can import the location of wired Catalyst stackable switches (3750, 3750-E, 3560, 2960, IE-3000 switches), switch blades (3110, 3120, 3130, 3040, 3030, 3020), and switch ports into the mobility services engine.

The following Catalyst 4000 series are also supported:

WS-C4948, WS-C4948-10GE, ME-4924-10GE, WS-4928-10GE, WS-C4900M, WS-X4515, WS-X4516, WS-X4013+, WS-X4013+TS, WS-X4516-10GE, WS-X4013+10GE, WS-X45-SUP6-E, and WS-X45-SUP6-LE

Once you define a wired switch and synchronize it with a mobility services engine, details on wired clients connected to a wired switch are downloaded to the mobility services engine over the NMSP connection. You can then view wired switches and wired clients using WCS.

Import and display of civic and emergency location information (ELIN) meets specifications of RFC4776 which is outlined at the following URL:

<http://tools.ietf.org/html/rfc4776#section-3.4>



Note

Catalyst stackable switches and switch blades must be operated with Cisco IOS Release 12.2(52)SG.

Navigation Path: Configure > Ethernet Switches

WCS Supports Backup of Tag, Chokepoint, and TDOA Receiver Configuration Data

Release 6.0 and above provides support for backup of Tag, Chokepoint, and TDOA Receiver configuration data. In release 5.2, this feature was not supported.

See the *AeroScout Context-Aware Engine for Tags, for Cisco Mobility Services Engine User's Guide* at the following link for backup process:

<http://www.aeroscout.com/support>

**Note**

Configuration data must be backed up prior to any backup or software update of the mobility services engine. See the [“Upgrading to This Software Release” section on page 4](#).

Navigation Path: Services > Mobility Services > *Device Name* > Maintenance > Backup

Adaptive Wireless Intrusion Prevention Software Features

This section summarizes the features for the wIPS (Adaptive Wireless Intrusion Prevention Software).

Cisco 3350 Cisco 3355 and Cisco 3310 Support

The Cisco wIPS is supported on Cisco 3350, 3355, and 3310 mobility services engines in release 6.0 and above. Previously, wIPS was supported only on the Cisco 3310 in release 5.2.

Caveats

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

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

**Note**

If you are a registered cisco.com user, view Bug Toolkit on cisco.com at the following website:

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

To become a registered cisco.com user, go to the following website:

<http://tools.cisco.com/RPF/register/register.do>

Open Caveats

There are no open caveats for this release of MSE.

Resolved Caveats

[Table 5](#) lists the resolved caveats in release 6.0.202.0.

Table 5 **Resolved Caveats**

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

If You Need More Information

If you need information about a specific caveat that does not appear in these release notes, you can use the Cisco Bug Toolkit to find caveats of any severity. Click the following 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:

<http://www.cisco.com/tac>

Click **Troubleshooting**. Choose your product and then click the **Troubleshoot and Alerts** heading in the product page to find information on the problem you are experiencing and other service advisories.

Related Documentation

The following documents are related to the mobility services engine:

- *Cisco 3350 Mobility Services Engine Getting Started Guide* and *Cisco 3310 Mobility Services Engine Getting Started Guide*
http://www.cisco.com/en/US/products/ps9742/prod_installation_guides_list.html
- *Cisco Context-Aware Software Configuration Guide, Release 6.0*
http://www.cisco.com/en/US/products/ps9742/tsd_products_support_series_home.html
- *Cisco Adaptive Wireless Intrusion Prevention System Configuration Guide, Release 6.0*

http://www.cisco.com/en/US/products/ps9817/products_installation_and_configuration_guides_list.html

Obtaining Documentation and Submitting a Service Request

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

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

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

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