



Avaya WLAN 8100 Release Notes

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Chapter 1: Purpose of this document

This document provides the latest information on the Avaya WLAN 8100 product and documentation suites as well as information on the installation of software upgrades.

Purpose of this document

Chapter 2: New in this Release

The following sections detail what's new in Avaya Wireless LAN (WLAN) 8100 for Release 1.1.1. The following list identifies the new features introduced in this release.

Fixes

Release 1.1.1 provides fixes for Release 1.1 known issues.

Captive Portal stability improvements

Release 1.1.1 address a number of defects in the Captive Portal functionality to improve overall Captive Portal usability and system stability. Refer to the Resolved Issues chapter for a detailed list of all resolved limitations.

Note:

The WLAN 8100 Captive Portal functionality is dependent on the wireless client generating a HTTP or HTTPS request. If the client browser does not resolve the domain name, the client does not generate a HTTP/HTTPS request and the wireless clients do not receive the Captive Portal login page.

New in this Release

Chapter 3: Avaya WLAN 8100 Documentation Suite

This section contains a description of the Avaya WLAN 8100 documentation suite. Refer to this section for an explanation of the documents, their use, and what information they contain.

Avaya WLAN 8100 documentation packaging

Avaya technical publications are organized according to a set of job functions. The following list outlines how the Avaya WLAN 8100 documentation suite is organized.

- **Product fundamentals**

- *Avaya WLAN 8100 Regulatory Information — WC 8180* (NN47251-101)
- *Avaya WLAN 8100 Fundamentals* (NN47251-102)
- *Avaya WLAN 8100 Regulatory Information — AP 8120* (NN47251-104)
- *Avaya WLAN 8100 Quick Start Guide* (NN47251-106)
- *Avaya WLAN 8100 WC 8180 CLI Reference* (NN47251-107)
- *Avaya WLAN 8100 WC 8180 GUI Reference* (NN47251-108)

- **Planning and engineering**

- *Avaya WLAN 8100 Planning and Engineering* (NN47251-200)

- **Installation and commissioning**

- *Power Supply Unit for Wireless Controller 8100 Series* (NN47251-105)
- *Avaya WLAN 8100 Installation — AP 8120 Series* (NN47251-302)
- *Avaya WLAN 8100 Installation — WC 8180* (NN47251-303)
- *Avaya WLAN 8100 Installation — SFPs and XFPs* (NN47251-306)

- **Operations**

- *Avaya WLAN 8100 Configuration* (NN47251-305)

- **Upgrades and patches**

- *Avaya WLAN 8100 Release Notes* (NN47251-400)
- *Upgrading the Wireless Controller Diagnostics Image to Release 1.0.2.0* (NN47251-401)

- **Fault and performance management**

- *Avaya WLAN 8100 Troubleshooting* (NN47251-700)
- *Avaya WLAN 8100 Logs Reference* (NN47251-701)

Roadmap

This section lists and describes the documentation available for the Avaya WLAN 8100 product suite.

Product fundamentals

Product fundamentals documentation includes overview and reference information about the product and product documentation. The following table lists the product fundamentals documents in the Avaya WLAN 8100 documentation suite.

Title	Description
<i>Avaya WLAN 8100 Regulatory Information — WC 8180</i> (NN47251-101)	This document provides regulatory information for the Avaya WLAN 8100 wireless controller (WC 8180).
<i>Avaya WLAN 8100 Fundamentals</i> (NN47251-102)	This document provides an overview of the technologies and features used in the Avaya WLAN 8100 product suite.
<i>Avaya WLAN 8100 Regulatory Information — AP 8120</i> (NN47251-104)	This document provides regulatory information for the Avaya WLAN 8100 access point (AP 8120). This document also provides safety considerations and installation instructions for the AP 8120 hardware.
<i>Avaya WLAN 8100 Quick Start Guide</i> (NN47251-106)	This document provides the information and procedures necessary to quickly complete the initial configuration of the WC 8180 and AP 8120.
<i>Avaya WLAN 8100 WC 8180 CLI Reference</i> (NN47251-107)	This document provides information and procedures for the configuration and management of the WLAN wireless controller 8180 using the command line interface (CLI).
<i>Avaya WLAN 8100 WC 8180 GUI Reference</i> (NN47251-108)	This document provides information and procedures for the configuration and management of the WLAN wireless controller 8180 using the wireless management system (WMS).

Title	Description
<i>Avaya WLAN 8100 Regulatory Information — AP 8120 with External Antenna</i> (NN47251-109)	This document provides regulatory information for the Avaya WLAN 8100 AP 8120 with External Antenna

Installation and commissioning

Installation and commissioning documentation provides information and procedures for installing the product hardware and software, and performing the initial configuration.

Title	Description
<i>Power Supply Unit for Wireless Controller 8100 Series</i> (NN47251-105)	This document provides information on how to install the power supply unit (PSU) for the WLAN WC 8180.
<i>Avaya WLAN 8100 Installation - AP 8120 Series</i> (NN47251-302)	This document provides information and procedures for the physical installation of the AP 8120 and the AP8120 with External Antenna.
<i>Avaya WLAN 8100 Installation - WC8180</i> (NN47251-303)	This document provides information and procedures for the physical installation of the WC 8180.
<i>Avaya WLAN 8100 Installation -SPFs and XFPs</i> (NN47251-306)	This document provides installation instructions and technical specifications for small form factor pluggable (SFP) transceivers and 10 gigabit SFP (XFP) transceivers.

Upgrades and patches

Upgrade and patch documentation describes the software upgrade process.

Title	Description
<i>Avaya WLAN 8100 Release Notes</i> (NN47251-400)	This document provides the latest information on the Avaya WLAN 8100 product and documentation suites as well as information on the installation of software upgrades.
<i>Upgrading the Wireless Controller Diagnostics Image to Release 1.0.2.0</i> (NN47251-401)	This document provide information and procedures on how to upgrade the WLAN 8100 system to Release 1.0.2.0 software.

Operations

Operations documentation describes the configuration and management of Avaya WLAN 8100 devices.

Title	Description
<i>Avaya WLAN 8100 Configuration</i> (NN47251-305)	This document provides workflows and procedures for the configuration and management of the WLAN 8100 wireless controller (WC 8180). You can perform these procedures through the command line interface (CLI), wireless management system (WMS), and EDM interfaces.

Fault and performance management

Fault and performance management documentation enables you to manage faults, and measure and optimize the performance of the product.

Title	Description
<i>Avaya WLAN 8100 Troubleshooting</i> (NN47251-700)	This document provides troubleshooting information and procedures for the WLAN 8100 wireless controller (WC 8180) and the access points (AP 8120, AP 8120 with External Antenna, and AP 8120-O).

Chapter 4: Changing WLAN 8100 software

This chapter contains instructions on changing WLAN 8100 software including upgrading the Wireless LAN Management System (WMS), Wireless Controller, Access Points, and the Wireless Controller Diagnostics images.

Software Image Files Released with Release 1.1.1

Component	File Name	File Size (bytes)
WC8180 Image	wc8180_1.1.1.021s.img	49,525,752
WC8180 Diagnostics	wc8180_1.0.2.0_diag.bin	3,152,332
Access Point External Image	AP8120-Upgrade_1_1_1_021.tar	8,744,960
WMS Windows 32Bit	WLAN8100_WMS_1.1.1.021_Windows_32bit.exe	188,017,346
WMS Windows 64Bit	WLAN8100_WMS_1.1.1.021_Windows_64bit.exe	187,999,852
WMS Linux	WLAN8100_WMS_1.1.1.021_Linux.bin	213,197,317

Software Image Files Released with Release 1.1.0

Component	File Name	File Size (bytes)
WC8180 Image	wc8180_1.1.0.133s.img	49,513,064
WC8180 Diagnostics	wc8180_1.0.2.0_diag.bin	3,152,332
Access Point External Image	AP8120-Upgrade_1_1_0_133.tar	8,734,720
WMS Windows 32Bit	WLAN8100_WMS_1.1.0.133_Windows_32bit.exe	195,070,151
WMS Windows 64Bit	WLAN8100_WMS_1.1.0.133_Windows_64bit.exe	195,071,771
WMS Linux	WLAN8100_WMS_1.1.0.133_Linux.bin	230,525,556

! Important:

You are required to upgrade the WC 8180 Diagnostics Image to version 1.0.2.0 after upgrading the WC 8180 to version 1.1.0 or 1.1.0 software.

! Important:

You are required to upgrade the WMS to version 1.1.1 to manage WC 8180 after upgrading to version 1.1.1 software.

! Important:

Avaya recommends all upgrades to be performed in a scheduled maintenance window. The WLAN 8100 Release 1.1.1 supports upgrades from all 1.0.x (including 1.0.0, 1.0.1, 1.0.2, and 1.0.3) code streams.

Upgrading the WLAN Management System to Release 1.1.1

About this task

You can use WLAN Management System (WMS) Release 1.1.1 to manage Mobility Domains with Wireless Controllers on Releases 1.0.0, 1.0.1, 1.0.2, and 1.1.0. WMS release 1.1.1 supports Wireless Controller Releases 1.0.0, 1.0.1, 1.0.2, 1.0.3, 1.1.0, and 1.1.1.

Complete the following procedure to perform to upgrade the WMS to Release 1.1.1.

Procedure

1. Uninstall the old WMS on the server

! Important:

You perform a WMS Backup during the uninstall process. The WMS database that is backed up through the WMS browser Administration section is only supported on the current installation and you cannot use it to restore the configuration after the upgrade.

- a. Launch the WMS Uninstaller, and choose one of the following:
 - In Windows, go to **Start > Programs > WMS > Uninstall WMS**
 - In Linux: **`./opt/Avaya/WMS/uninstall_WMS/Uninstall WMS`**
- b. Backup the WMS Database, Log, SMX, and License.

! Important:

Choose a **default backup directory path** when you are asked to backup the database, Log, SMX and license. If you choose a different path, **do not** use the **WMS application default paths: `C:\Program Files\Avaya\WMS`** for Windows or **`/opt/Avaya/WMS`** for Linux. If you use the same location as the default WMS application path, the backup files are removed after the WMS is uninstalled

The **default backup locations** from the WMS Un-install are as follows:

- WIN 2008: `C:\`
- WIN 2003: In Rel 1.0.x: `C:\Documents and Settings\Administrator`; In Rel 1.1: `C:\`
- Linux: `/`

The sub-directory is created appropriately i.e. C:\Log, C:\smx-repository, C:\Licenses. The SQL Database is placed under C:\

*** Note:**

For Linux Installations, you must manually move the License file from the **wms/lsm** directory to a folder outside the WMS directory. The wms/lsm directory is removed during WMS uninstall of Releases 1.0.0, 1.0.1, 1.0.2, 1.0.3, or 1.1.x. A manual backup is not required for Windows server deployments.

2. Install the WMS 1.1.1 on the server

Double-click on the WMS executable file and follow the installation steps.

3. Restore the WMS Database, SMX files, and License

During installation, select the Database, SMX files, and License file that you would like to restore when the option is presented.

4. Verify the WMS Upgrade

- a. Verify all the domains are visible and can be monitored through the WMS.
- b. Verify that License file is restored. In the WMS browser, the bottom bar should display the number of licenses installed —> Licensed to monitor [xx] APs.
- c. If **Site View** is setup, verify that the SMX files are restored. Click **Monitoring > Site Views > Site Model**. Highlight the SMX file to be activated, then click **Activate**.

Upgrading the Wireless Controller image

In a multiple controller domain environment, Avaya recommends to upgrade the AMDC , the BMDC, and then the Peer Controllers.

Complete the following procedure to perform an upgrade of the Wireless Controller image.

Procedure

1. Backup the current configuration (Binary) to the TFTP server or USB drive

```
WC8180# copy config tftp address <tftp server address>
filename <config file name to use>
```

OR

```
WC8180# copy config usb filename <config file name to use>
```

2. Backup the ASCII configuration to the TFTP server or USB drive

The ASCII configuration is required if the current configuration has to be restored on a the WC controller running version 1.1.1. The Binary configuration saved with

Releases 1.0.0, 1.0.1, 1.0.2, or 1.0.3 versions are not compatible with version 1.1.1.

```
WC8180# copy running-config tftp address <tftp server address> filename <config file name to use>
```

OR

```
WC8180# copy running-config usb filename <config file name to use>
```

3. Download the 1.1.1 image to the Wireless Controller

```
WC8180# download address <tftp server address> secondary image <file name>
```

The image download begins followed by Saving the Image to the system.

The previous primary image is moved to secondary image and the new image is set as the primary image.

The Wireless Controller resets after the image download is complete.

If you use the no-reset option, the Wireless Controller will not reset to the new image.

The total Download and Saving process can take about 15 to 20 minutes depending on the TFTP server and network.

4. If you used the no-reset option during Step 3, reset the Controller to upgrade to the new image

```
WC8180#show boot image — Verify the new image is set to primary.
```

```
WC8180# boot primary
```

The Controller upgrades to the new image.

5. Repeat Steps 1 to 4 for all the Wireless Controllers in the Mobility Domain

6. Verify that the Wireless Controller Image update is successful.

- a. Verify Controller booted with the correct Image

```
WC8180# show sys-info > Verify that the software version is correct.
```

- b. Verify the wireless functionality

```
WC8180# show wireless > Verify that wireless is enabled.
```

```
WC8180# show wireless controller status > Verify that on the AMDC, the Domain Role shows up as AMDC
```

```
WC8180# show wireless domain peer-controller status > Verify that on AMDC, Peer Controller state is correct.
```

```
WC8180# show wireless ap status > Verify that the APs that were managed prior to the upgrade are in a managed state.
```

The time that it takes to have all the APs managed depends on the total number of APs in the network.

Note: If it is observed that the configuration is not restored after the image upgrade is complete, please restore the configuration from the ASCII configuration saved during STEP 2.

*** Note:**

Release 1.1.0 has a known limitation (wi00988841) in which the controller image download process does not program the controller or AP image correctly. You can verify for this issue by using the **show wireless controller status** command. This limitation is resolved in Release 1.1.1. **Workaround:** Repeat step 3 of the download process.

7. Upgrade the Access Point image

```
WC8180# wireless domain ap image-update start
```

The download initiates on the new AP Image to the Access Points. After the image download is complete, the APs reset based on the configuration of the **domain ap image-update reset-group-size**.

8. Verify that the AP Image upgrade is successful

```
WC8180# show wireless ap status>
```

Verify that all the APs that were managed prior to the upgrade are in a managed state and the **Need Image Upgrade** flag is set to **No**.

```
WC8180# show wireless ap status detail>
```

Verify that the software version points to the new upgraded software image.

Importing policies from the Wireless Controller into the WMS

After the Wireless Controller upgrade is complete, you must Import Policies into the WMS from the AMDC in the Mobility Domain

Navigate to **WMS > Configuration > Mobility Domains > Import Policies** and enter the management IP of the AMDC.

Upgrading the Wireless Controller Diagnostics image to Release 1.1.0

Use the following procedure to upgrade the Wireless Controller Diagnostics image to a Release 1.1.0 image.

When using the Diagnostics menu to upgrade a Diagnostics image on Wireless Controllers running Releases 1.0.0, 1.0.1 or 1.0.2 code streams, refer to the instructions listed in the Diagnostics image upgrade document on the support portal.

! Important:

You can upgrade the Diagnostics image using CLI only after the Wireless Controller is upgraded to the Release 1.1.0 image.

Procedure

1. `WC8180# download address <tftp server address> diag <diagnostics image name>`

The new diagnostics image downloads to the controller and reset the controller.

2. After the controller boots up, verify that the diagnostics image upgrade is successful
`WC8180# show sys-info >` The firmware version should display the new image.

Chapter 5: Captive Portal browser compatibility

Captive Portal functionality is dependent on client devices and browsers. Although WLAN 8100 Captive Portal functionality is expected to work with most client devices and browsers, the following section describes the client platforms and browsers that are tested by Avaya in WLAN 8100 Release 1.1.1.

*** Note:**

The WLAN 8100 Captive Portal functionality is dependent on the wireless client generating a HTTP or HTTPS request. If the client browser does not resolve the domain name, the client does not generate a HTTP/HTTPS request and the wireless clients do not receive the Captive Portal login page.

The following table identifies the compatibility of Windows operating systems and captive portal browsers that are supported in Release 1.1.1.

Windows operating systems and captive portal browsers support matrix

Applications	Windows operating system						
	2000	XP	XP-64 bit	Vista	Vista 64	7	7-64 bit
IE 6	Supp	Supp	Supp	X	X	X	X
IE 7	X	Supp	Supp	Supp	Supp	X	X
IE 8	X	Cert	Supp	Supp	Supp	Supp	Supp
IE 9	X	X	X	Cert	Cert	Cert	Cert
Firefox 3.X	Supp	Supp	Supp	Supp	Cert	Cert	Cert
Firefox 4.X	Supp	Supp	Supp	Supp	Supp	Supp	Supp
Firefox 5.X	Supp	Supp	Supp	Supp	Supp	Supp	Supp
Firefox 6.X	Supp	Supp	Supp	Supp	Supp	Supp	Supp
Firefox 8.X	Supp	Cert	Supp	Cert	Supp	Cert	Cert
Safari 3.0	Supp	Supp	Supp	Supp	Supp	Supp	Supp
Safari 4.0	Supp	Supp	Supp	Supp	Supp	Supp	Supp

Legend:

- Supported — supported in this release.
- Certified — supported and tested in this release.
- X— not applicable.

Chapter 6: Resolved Issues

The following table identifies known issues that are resolved in the current software release 1.1.1.

WI ID	Summary
Captive Portal	
wi00990200	CP: Some clients connected to AP cannot connect to captive portal.
wi00979080	CP users can not even get CP authentication page.
wi00974696	CP: Short DHCP lease time impacts on captive-portal session validation.
wi00940060	Captive Portal gets redirected to the EDM page.
wi00986027	Default captive portal profile locale corrupting when all CPs are deleted at one time.
wi00904833	Wireless Controller System IP can be exposed to the Captive Portal user if System IP is used as the Captive Portal IP. The Captive Portal IP should be different from the Wireless Controller System IP.
wi00600710	While using https as the protocol for Captive Portal, Firefox complains about the certificate serial number and the issuer. Workaround: Please delete any previous certificate from the client browser store and re-launch the browser for Captive Portal to work.
Wireless Controller	
wi00980680	WC8180 crashes WCP critical - Out of memory - Captive Portal.
Wireless LAN Management System	
wi00955364	WLAN 8100 - version 1.1.0.133 : GA code is missing module fragbounce.ko.
wi00600223	Alphanet: Clients frequently associate/disassociate from same or different AP.
wi00968541	16L license only allows 15 AP's to connect, the 16th AP fails.
wi00961676	Retain License file on factory reset.
wi00942973	Interoperability issues between 8100 <> Juniper SBR.
wi00975723	WMS: Able to enter invalid WPA key length without selecting WPA key type.
Access Point	
wi00900160	When the Wireless Controller is downgraded from 1.1 to 1.0.x, external antenna APs AP8120E are also downgraded. However these will be recognized by the controller as AP8120. When the controller is upgraded back to 1.1, this will result in the APs to be unmanaged. Workaround: Delete the corresponding AP Database entry for 8120E and add them back with the database as AP8120. Then the APs will get managed. At this

Resolved Issues

WI ID	Summary
	time, the APs can be upgraded to 1.1. After the APs are upgraded to 1.1, the database entries should be reconfigured to 8120E for these APs.
wi00576644	While AP image update process is in-progress, executing image update for another AP via "wireless ap image-update <mac>" will result in error. Workaround: Please wait for the AP image update to complete before initiating image update for other APs.
Security	
wi00884023	In WMS mapping or un-mapping a certificate and applying policies only applies the configuration to the AMDS and does not push down to BMDC or Peers. Workaround: Force config sync by Right Clicking on Domain Name, Select Domain Actions and Click on Force ConfigSync.

The following table identifies known issues from previous software releases that are resolved in current software release 1.1.1.

WI ID	Summary
Wireless Controller	
wi00898413	During External AP Image Upgrade, in some instances when the External Web Server is not responding correctly, the Wireless Controller fails to display an Error. Controller displays an Error when Web server is not reachable or the File is not available on the Web server.
wi00900158	Intermittently, MDC Controller Password is reset to "None". When this happens, the controller will not be able to join or leave the domain. Issue is not easily reproducible. Workaround is to reconfigure the password on the controller by issuing the command "no controller mdc-capable" and then "controller mdc-capable" this command will ask to create a password for the domain.
Captive Portal	
wi00576206	Captive Portal Client Associated with the AP continues to receive multicast traffic even after the Captive Portal session is closed.
wi00927481	While using CP IP Interface Feature, Captive Portal Session is not cleared on the controller hosting the CP IP correctly when the Captive Portal Client is associated to an AP managed by a different Wireless Controller and the client disconnects. The session is deleted after the CP Client Idle Time out or Session Time out expires.
wi00882613	Upon upgrading to 1.1.0.0 it is required to upgrade the APs as well before Captive Portal Clients can connect to the network. Not upgrading the APs will result in clients connecting to the Captive Portal SSID having Open access to the network.
Security	
wi00880664	When controller is not set up to with NTP Server, then Self signed certificates generated on the controller have a certificate validation date that is always starting from 2000/1/01.

WI ID	Summary
	Workaround: Avaya recommends to configure the Wireless Controller with NTP Server.
wi00873112	Self Signed Certificate generation time on the WC8100 depends on the Key size and could take above 1 minute to generate a certificate. CLI/EDM configuration operation during this time could result in a Timeout.
WMS	
wi00908543	Using WMS version 1.1 to configure WC version 1.0.x could result in certain configuration parameters (Monitoring->>wireless ap->select an ap and click Action to change power or channel) to fail due to limitations on the WC 8100 1.0.x software. Workaround: Use the CLI or EDM to do the configuration.
Diffserv Policies	
N/A	
Traps/Syslog	
N/A	
CLI	
wi00898859	CLI Command "show wireless domain ap database country-code XX" can take a very long time based on the number of APs in the mobility domain - (about 7 min with 4K APs).
wi00896985	AMDC does not show ap-profile status as "Associated" if the AP assigned to that ap-profile is managed from Peer WC. Need to check "associated" status from Peer"
wi00600206	In some instances the CLI output for "show wireless domain peer-controller status" on AMDC displays wrong number of APs managed by the peer controllers. CLI command "show wireless ap status" gives the correct number of APs managed in the domain on the AMDC and the command shows the number of APs managed by the switch on the peer controllers.
wi00928850	When you use the "Default" command in CLI to default the age-out parameters under "Security Wids" context, it sets the age-out value to 1440 mins instead of 24 mins.
E911	
N/A	
EDM	
N/A	

Resolved Issues

Chapter 7: Known Issues

The following table identifies known issues that are present in the current software release 1.1.1.

WI ID	Summary
CLI	
wi00991894	CLI: Wireless->security->user-db, can create a user without entering a password.
Captive Portal	
wi00991444	CP: Improper CP-login page displays when connecting with two different CP enabled SSIDs.
wi00987755	WMS-CP: Unable to see captive portal locale settings when locale code is changed from the CLI.
wi00976242	Operational State for CP-ID is not updating properly after mapping and unmapping network profile.
Wireless LAN Management System	
wi00975819	WMS: Monitoring->Wireless controllers shows AP Primary/Secondary image version instead of Controller Primary/Secondary image version.
wi00889532	WMS: Cannot select radius auth-profile for WpaEnterprise, when selecting CP user-validation as "local" or "open".

The following table identifies known issues that are present from previous software releases.

Wi Number	Description
Wireless Controller	
wi00600170	802.1p Priority for non-IP Packets is not honored by the WC 8180 and treats them similar to non prioritized traffic. This issue is not observed for IP Packets and the 802.1p Priority is honored as expected.
wi00882939	While WMS is running, Controller Host CPU spikes can be observed every 10 minutes (or WMS polling Interval). The CPU utilization will return to normal value once WMS poll is complete. CLI responses could be delayed during these spikes.
wi00896183	Jumbo frames ingressing from a Wireless Client do not get forwarded out to the Wired Network by the Wireless Controller.
wi00909047	Doing configuration changes that would require config sync in a large scale setup with thousands of users connected could impact domain stability. It is

Known Issues

Wi Number	Description
	recommended not to make configuration changes in a live environment with thousands of clients connected to the Wireless network.
wi00575545	Downloading the controller image from a USB will be very slow. Workaround: Avaya recommends to download the image from a TFTP server through the LAN interfaces.
wi00600595	IPFix functionality on the WC8180 allows monitoring of Wireless traffic with the Source/Destination Address of the Access Point. The traffic from the Wireless End Points is encapsulated by the Access Point, and IP Fix does not provide statistics for Individual Wireless End Points.
wi00671088	In some instances when Peer Controllers come up after a reboot, they display config out-of-sync, however they have the correct configuration and are operating as expected. This is expected to be due to the ordering of certain configuration. Workaround: Manually executing a config-sync from the AMDC will resolve the out-of-sync state.
wi00909674	When the Wireless Controller is moved from one mobility domain to another, it is recommended to clean up the configuration on the Wireless Controller by doing defaulting the box configuration.
wi00904073	In some instances it was observed that the controller is stuck in Programming/Saving State during Image Download.
wi00909612	When restoring an ascii backup to a system, the restore fails when creating vlan. Workaround: Edit the ascii config file and remove the vlan, for example vlan 20, (the vlan already exists on the system) from the line. Or, restore using binary config if one is available.
Mobility Domain	
wi00575533	Due the limited number of non overlapping channels available on the 2.4GHz Band using channel bonding (40MHz mode) could result in connectivity issues for some of the older adaptors. Workaround: Avaya recommends to use 40MHz Mode on the 5GHz Radio and use 20MHz Mode on the 2.4GHz Radio on the AP.
wi00928786	When auto-promote is enabled for the domain, the Domain AP Database could display the country-code as US (For North America) and DE (for Europe) even though the Domain Country Code is set to a non US country in NA (non DE country in Europe). This does not impact the AP functionality. The managed AP table (show wireless ap country-code in CLI or WMS Monitoring, Access Points in WMS) shows the correct country code. This discrepancy in Domain AP Database (show wireless domain ap database in CLI or WMS, Configuration, Devices, APs in WMS) can be avoided if Access Points are manually added to the domain ap database.
wi00929515	AP Country Code consistency check with Default AP Profile Country Code while importing Domain AP Database entries from a CSV file.
Access Point	

Wi Number	Description
wi00600511	The AP Link LED color does not always follow the specification. In some instances the LED was Green indicating 100 mbps link even though the link was operational at 1000 mbps and should have been Blue.
Captive Portal	
wi00891828	When Captive Portal IP Interfaces are deleted and re-created multiple times, wpsProcessCplpUpdates or wdpmCplInterfaceSet Error Messages can be observed intermittently and the operation fails. Retrying the operation will be successful.
wi00928771	Configuration with non-default values set for Captive Portal HTTPS port and Max-Bandwidth change after upgrading from ver 1.0.x to ver 1.1.0. These values have to be reconfigured after the upgrade.
wi00891116	<p>In scenarios where Captive Portal Message strings are customized with longer than 254 characters, show running-config and copy running-config commands do not display/copy the customized strings correctly. This could cause an issue when configurations are restored using the saved ASCII configuration files. This will not impact Captive Portal Customization functionality in run time.</p> <p>Workarounds: The following Workarounds are available: 1) In case of restoring configuration on the same software release, restore the configuration from binary configuration file. 2) The configuration can also be restored through WMS 3) If the above two workarounds are not acceptable, Captive Portal customization via the Downloaded Locale File is recommended.</p>
wi00906368	In scenarios where the Captive Portal Client fails to download the Captive Portal HTML File correctly, the Captive Portal Page displays some garbage characters.
wi00884585	Intermittently Captive Portal Sessions cannot be de-authenticated using the "wireless captive-portal client-deauthenticate captive-portal-profile <id>" command. Use "wireless captive-portal client-deauthenticate network-profile <id>" to de-authenticate clients.
Security	
wi00576447	Wildcard entries are not supported for MAC Entries in the MAC Database on the WC 8180.
WMS	
wi00576035	WMS takes about 3 minutes to update the MDC Capable Flags if the value is modified via CLI.
wi00600720	<p>In scenarios where the JPEG file of the Floor Plan used in SMD has a lot of white space around the actual floor plan, importing that into WMS for RF Monitoring will result RF Views incorrectly mapped onto the Floor Plan.</p> <p>Workaround: Avaya recommends to crop additional white spaces around the Floor Plans within the JPEG before using it for RF Planning and Monitoring.</p>

Known Issues

Wi Number	Description
wi00600742	In some situations the AP Radio Power Levels displayed in the WMS RF Views is different from that displayed via "show wireless ap radio status" command in the CLI.
wi00664791	WMS with Internet Explorer 8 does not display policy names correctly in some instances as policy names appear to be overlapped.
wi00601329	Not able to monitor RF-Views in WMS when logging into WMS using the credentials for a Role - User.
wi00900592	WMS: Monitoring Clients in WMS does not work if http port on WC is non-default
wi00925454	Under WMS Monitoring Tabs, Sorting entries only sorts contents on the active page of the Tab instead of all the entries in the Tab.
wi00883059	Captive Portal Redirect URL configuration with "%" character is not accepted through WMS. Workaround: To configure URL with special characters use CLI or EDM.
wi00926746	WMS uninstall process removes the avaya/wms/backup folder and erases any backup files stored in that directory. Workaround : Avaya recommends to save the backup file to a folder outside avaya/wms folder to be able to restore WMS configuration after upgrade/re-installation.
wi00929392	Workaround: For Linux WMS installations: move the wms/lsm directory to a different location before installing the new version. The WMS installation process on Linux can fail if the wms/lsm directory is present during installation.
wi00664681	In WMS, when a new Radio Profile is created in bgn mode and channel bandwidth set to 40MHz, applying the configuration incorrectly applies the channel bandwidth as 20MHz to the controller. Workaround: Applying the configuration a second time pushes the 40MHz configuration to the controller.
wi00929502	In WMS, setting an Image Version as Active (set to "True" under Domain Name (Right Click) and Edit Settings/AP Image Download for active filename) is not always applied to the controller. Workaround: Retrying the Apply Policies, pushes the configuration to the controller.
wi00929519	Rel 1.1 WMS saves Alarms Data to the backup SQL File. If there are a lot of Traps in the database at the time of backup, the SQL File size can become large (above 750MB) and restoration can take a long time (above 30 minutes) or fail in some instances.
wi00897369	Site Model Designer may not work correctly in non-US/English localized Windows. Workaround: Use a US/English localized O/S to launch SMD.
wi00908763	WMS RF Views do not take Cable Length for External Antenna AP into account when displaying coverage area in the floor plans.

Wi Number	Description
Diffserv Policies	
wi00600212	In some instances where diffserv policies are not applied to all the network profiles on a radio, then the CLI command ""show wireless diffserv statistics"" does not display client qos statistics. In this scenario, use ""show wireless client qos status"" displays the MAC addresses of all clients to which policies are applied. Workaround: Use the MAC address of a specific client and execute "show wireless diffserv statistics <mac>" to provide the correct statistics for a particular client. "
wi00686010	WMS Diffserv Classifiers Table can be sorted either in Ascending or Descending order. If users do this, then the ordering of the classifiers is modified and it cannot be modified to the required order unless all classifiers are deleted and recreated. However this is a display issue only and the configuration is not applied to the controller. Workaround: Avaya recommends not to sort the classifier table in WMS.
wi00925228	Intermittently Diffserv Policies applied to client via Radius Attributes are not applied correctly. Workaround: Diffserv policies created on the controller are applied as expected.
Traps/Syslog	
wi00576426	Trap message is not generated when a Wireless Client fails MAC Authentication.
wi00890955	The Wireless Controller fails to generate "avWlanAPDeniedAdmissionToMDNoLicense" and "avWlanAPUtilizationOverflow" trap as expected.
CLI	
wi00576289	The CLI command "show wireless managed-switch" can display incorrect information for the number of clients and number of managed aps on the peer switch in some instances. Workaround: Please user CLI commands "show wireless controller status" and "show wireless domain peer-controller status"
wi00575490	The command output for "show wireless ap vap status" is different on AMDC and BMDC. On the BMDC and Peer Controllers the output only displays the VAPs that are configured. On AMDC the total number of VAPs that are allowed on the system are displayed however only the VAPs that are configured have a SSID. This is a display issue and does not impact the system behavior.
wi00600554	On WC8180, "show wireless client status" displays client IP address as 0.0.0.0 in some instances. The controller learns the client IP Address via IP Packets received from the associated client. In instances where the client does not send any IP packets after association or after the client roams to a new AP, the controller will not learn the Client IP address and 0.0.0.0 is displayed in this table.

Known Issues

Wi Number	Description
wi00600799	Intermittently APs managed by the Peer Controllers are not displayed by the AMDC after all the controllers in the domain are reset. WMS and the CLI on Peer controllers will display the complete list of managed APs in this situation.
wi00600411	Clearing domain / controller statistics does not clear the Wireless Diffserv statistics. Stats get cleared when a client either disconnects or roams.
wi00600272	In some instances it is observed that CLI output for "show wireless security wids-wips rouge-ap-classification <mac>" gets stuck for about a minute before the display is complete and the command prompt is returned.
wi00876681	CLI: "show wireless client association controller" displays wrong info when client roams from AMDC to PWC .
wi00927048	In some instances BMDC Peer Controllers do not show accurate information for the number of AP's for AP Database and Known AP Database. The actual entries in the database are accurate.
wi00930198	CLI Command "show wireless captive-portal profile status" on AMDC displays incorrect "Auth User count" when CP clients are associated to Peer CP-IP address.
wi00930200	CLI: CP "Authenticated Users" count shows negative values
wi00928890	CLI: Inconsistent behaviour across CLI's for country code Case (lower upper)
E911	
wi00839411	CPU spikes during E911 auditing.
wi00839405	E911: AP and client auditing did not finish within the configured interval (5 minutes) and could overlap. Workaround: Avaya recommends to configure the interval as 10 minutes or more.
wi00842513	E911 - Roaming traps are not sent to trap receiver during switch failure.
EDM	
wi00600593	EDM fails to create the network profile correctly when the WEP key entered shorter than the required length. Upon correcting the key length, EDM incorrectly creates a network profile with an empty WEP Key value. Workaround: Use the CLI to correct the configuration in this scenario.
wi00600121	Using EDM, users will not be able to clone existing Radio profiles. This is possible via CLI WMS.
wi00600582	While monitoring Graphs for the 10Gig Interfaces, the counter values in some instances were observed to be very large numbers and in some instances negative numbers. In both the cases the value displayed by EDM is invalid.
wi00600583	While monitoring the Port/Device Graphs on EDM, clearing port statistics via CLI does not clear the statistics in EDM.
wi00600540	TACACS+ Configuration is not available via EDM. Please use CLI for TACACS+ Configuration on the Wireless Controller.

Wi Number	Description
wi00600416	EDM cannot be used to reset or update APs managed by the Peer Wireless Controllers. Workaround: Avaya recommends to use either the CLI or WMS to perform domain wide operations.
wi00600204	EDM displays Error message while configuring Radius Profile with type = accounting while adding a server with priority 1. The server is added successfully but EDM does not indicate that.
wi00600241	EDM does not allow AP Campus Field Configuration. Workaround: Use the CLI/WMS to configure this value (if required).
wi00600384	EDM displays invalid error message "CommitFailed" when user tries to configure diffserv policies more than the supported limit. EDM should display correct error message similar to CLI
wi00653845	ASCII configuration download fails when initiated via EDM.
wi00601390	EDM/Wireless/NetworkProfile/Edit Profile/Security Tab/Security Mode=wepStatic - The help information for key length is incorrectly displayed as 13 for ASCII and 26 for HEX. Workaround: The correct key length is 5 for ASCII and 10 for HEX.
wi00601370	EDM/Wireless/Security/WIDPS/RF Scan AP Tab shows Avaya AP OIDs as Unknown.

Appendix A: Downgrading the Wireless Controller

About this task

In situations where the WLAN 8100 network needs to be downgraded from 1.1.x to any 1.0.0/1.0.1/1.0.2 Release, complete the following procedure.

! Important:

The WC8180 Rel 1.1.x configuration file is not backward compatible with Rel 1.0 code streams and if used the configuration will default. This could result in loss of connectivity to the controller via Telnet/WMS/EDM.

The Administrator requires console access to the Wireless Controller to restore the controller configuration.

The Administrator requires access to the License file. The License file stored on the controller will be deleted after downgrading and has to be re-installed.

If the configuration from the Controller running Release 1.1.x needs to be saved, follow Step 1 and Step 2.

Procedure

1. **Backup the current configuration (Binary) to the TFTP server or USB drive.**

```
WC8180# copy config tftp address <tftp server address> filename  
<config file name>
```

OR

```
WC8180# copy config usb filename <config file name>
```

2. **Backup the ASCII Configuration to the TFTP server or USB drive**

The ASCII configuration is required if the current configuration has to be restored on a WC running version 1.0.0, 1.0.1, or 1.0.2 software. The Binary configuration saved with 1.1.0 version will not be compatible with 1.0.0, 1.0.1 or 1.0.2 versions.

```
WC8180# copy running-config tftp address <tftp server address>  
filename <config file name>
```

OR

```
WC8180# copy running-config usb filename <config file name>
```

3. **Reset the Wireless Controller to the default configuration**

```
WC8180# boot default
```

Ensure the partial default option is used to retain the management IP and Licenses on the controller.

4. Download the 1.0.x image to the Wireless Controller if required

a. `WC8180# show boot image`

Verify the 1.0.x image that is required for the downgrade is available on the controller. If it is not available, download the required image.

b. `WC8180# download address < tftp server address> secondary < image file name>`

The Wireless Controller resets to factory defaults after the controller boots up with the 1.0.x software image.

5. Restore the configuration on the Wireless Controller

After the Controller is downgraded to the required software, connect to the controller and restore the configuration using the binary configuration file that was saved prior to upgrade to 1.1.x.

a. **Option 1: Using the Binary configuration file saved with the 1.0.x code stream**

Loading the configuration from the USB:

```
WC8180# copy usb config filename <file name>
```

Loading the configuration from the TFTP server:

Do the preliminary controller configuration to get connectivity to the TFTP server.

Download the configuration from the TFTP server

```
WC8180# copy tftp config address <TFTP Server IP> filename <file name>
```

b. **Option 2: Using the ASCII configuration file saved with the 1.1.x code stream**

Loading the configuration from the USB:

```
WC8180# configure usb filename <file name>
```

Loading the configuration from the TFTP server:

```
WC8180# configure network address <TFTP Server IP> filename <file name>
```

6. Restore the License file on the Wireless Controller

You must re-install the License file on the Wireless Controller after the image downgrade from software version 1.1.x to 1.0.x . If the License file is not readily available, it can be downloaded from Avaya Licensing Portal.

a. Loading the License file from the USB

```
WC8180# copy usb license filename <License file name>
```

b. Loading the License file from the TFTP server

```
WC8180# copy tftp license address <TFTP Server IP> filename <License file name>
```

c. Resetting the Wireless Controller after installing the License file.

```
WC8180# boot
```

7. Repeat Steps 1 to 5 for all the Wireless Controllers in the Mobility Domain.

8. Verify that the Wireless Controller image downgrade is successful

- a. Verify that the Controller has the correct image

```
WC8180# show sys-info > Verify that the software version is correct.
```

- b. Verify the wireless functionality

```
WC8180# show wireless > Verify that wireless is enabled
```

```
WC8180# show wireless controller status > Verify that on AMDC, the Domain Role shows up as AMDC
```

```
WC8180# show wireless domain peer-controller status > Verify that on AMDC, the Peer Controller state is correct.
```

```
WC8180# show wireless controller license-info > Verify that the Licenses are loaded correctly.
```

```
WC8180# show wireless ap status > Verify that the APs that were managed prior to the downgrade are in managed state.
```

The time that takes to manage all the APs depends on the total number of APs in the network.

9. Access Point image downgrade

```
WC8180# wireless domain ap image-update start
```

This download initiates on the new AP Image to the Access Points. After the image download is complete, the APs will reset based on the of the `domain ap image-update reset-group-size` configuration.

10. Verify that the AP image downgrade is successful

```
WC8180# show wireless ap status > Verify that all the APs that were managed prior to the image update are in a managed state and the Need Image Upgrade flag is set to No.
```

```
WC8180# show wireless ap status detail > Verify that the software version points to the new software image.
```

11. Import policies from the Wireless Controller into the WMS

After the Wireless Controller downgrade is complete, it is recommended to Import Policies into WMS from the AMDC in the Mobility Domain

Navigate to **WMS > Configuration > Mobility Domains > Import Policies** and enter the management IP of the AMDC.

