AOS-W Instant 8.6.0.13 Release Notes



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The following table provides the revision history of this document.

Table 1: Revision History

Revision	Change Description
Revision 01	Initial release.

This AOS-W Instant release notes includes the following topics:

- New Features and Enhancements on page 7
- Supported Hardware Platforms on page 8
- Regulatory Updates on page 10
- Resolved Issues on page 11
- Known Issues on page 12
- Upgrading an OAW-IAP on page 15

Related Documents

The following guides are part of the complete documentation for the Alcatel-Lucent user-centric network:

- Alcatel-Lucent AP Software Quick Start Guide
- AOS-W Instant User Guide
- AOS-W Instant CLI Reference Guide
- AOS-W Instant REST API Guide
- AOS-W Instant Syslog Messages Reference Guide
- Alcatel-Lucent OAW-IAP Troubleshooting Guide

Supported Browsers

The following browsers are officially supported for use with the AOS-W Instant WebUI:

- Microsoft Internet Explorer 11 on Windows 7 and Windows 8
- Microsoft Edge (Microsoft Edge 38.14393.0.0 and Microsoft EdgeHTML 14.14393) on Windows 10
- Mozilla Firefox 48 or later on Windows 7, Windows 8, Windows 10, and macOS
- Apple Safari 8.0 or later on macOS
- Google Chrome 67 or later on Windows 7, Windows 8, Windows 10, and macOS

Terminology Change

As part of advancing HPE's commitment to racial justice, we are taking a much-needed step in overhauling HPE engineering terminology to reflect our belief system of diversity and inclusion. Some legacy products and publications may continue to include terminology that seemingly evokes bias against specific groups of people. Such content is not representative of our HPE culture and moving forward, Aruba will replace racially insensitive terms and instead use the following new language:

Usage	Old Language	New Language
Campus Access Points + Controllers	Master-Slave	Conductor-Member
Instant Access Points	Master-Slave	Conductor-Member
Switch Stack	Master-Slave	Conductor-Member
Wireless LAN Controller	Mobility Master	Mobility Conductor
Firewall Configuration	Blacklist, Whitelist	Denylist, Allowlist
Types of Hackers	Black Hat, White Hat	Unethical, Ethical

Contacting Support

 Table 2: Contact Information
 Particular

Contact Center Online		
Main Site	https://www.al-enterprise.com	
Support Site	https://businessportal.al-enterprise.com	
Email	ebg_global_supportcenter@al-enterprise.com	
Service & Support Contact Center Telephone		
North America	1-800-995-2696	
Latin America	1-877-919-9526	
EMEA	+800 00200100 (Toll Free) or +1(650)385-2193	
Asia Pacific	+65 6240 8484	
Worldwide	1-818-878-4507	

Chapter 2 New Features and Enhancements

There are no new features or enhancements in this release.

The following table displays the OAW-IAP platforms supported in AOS-W Instant 8.6.x release.

Table 3: Supported OAW-IAP	Platforms
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OAW-IAP Platform	Minimum Required AOS-W Instant Software Version
OAW-AP500 Series — OAW-AP504 and OAW-AP505	AOS-W Instant 8.6.0.0 or later
OAW-AP530 Series — OAW-AP534 and OAW-AP535 OAW-AP550 Series — OAW-AP535	AOS-W Instant 8.5.0.0 or later
OAW-AP303 Series — OAW-AP303P OAW-AP510 Series — OAW-AP514 and OAW-AP515	AOS-W Instant 8.4.0.0 or later
OAW-AP303 Series — OAW-AP303 OAW-AP318 Series — OAW-AP318 OAW-AP340 Series — OAW-AP344 and OAW-AP345 OAW-AP370 Series — OAW-AP374, OAW- AP375, and OAW-AP377	AOS-W Instant 8.3.0.0 or later
203H Series — OAW-AP203H	AOS-W Instant 6.5.3.0 or later
203R Series — OAW-AP203R and OAW- AP203RP OAW-AP303H Series — OAW-AP303H OAW-AP360 Series — OAW-AP365 and OAW-AP367	AOS-W Instant 6.5.2.0 or later
207 Series — OAW-IAP207 OAW-AP300 Series — OAW-IAP304 and OAW-IAP305	AOS-W Instant 6.5.1.0-4.3.1.0 or later
OAW-AP310 Series — OAW-IAP314 and OAW-IAP315 OAW-AP330 Series — OAW-IAP334 and OAW-IAP335	AOS-W Instant 6.5.0.0-4.3.0.0 or later
OAW-AP320 Series — OAW-IAP324 and OAW-IAP325	AOS-W Instant 6.4.4.3-4.2.2.0 or later
OAW-IAP228 OAW-AP270 Series — OAW-IAP277	AOS-W Instant 6.4.3.1-4.2.0.0 or later
OAW-AP210 Series — OAW-IAP214 and OAW-IAP215	AOS-W Instant 6.4.2.0-4.1.1.0 or later

 Table 3: Supported OAW-IAP Platforms

OAW-IAP Platform	Minimum Required AOS-W Instant Software Version
OAW-AP270 Series — OAW-IAP274 and OAW-IAP275	AOS-W Instant 6.4.0.2-4.1.0.0 or later
OAW-AP 220 Series — OAW-IAP224 and OAW-IAP225	AOS-W Instant 6.3.1.1-4.0.0.0 or later
RAP 155 Series — OAW-RAP155 and OAW- RAP155P	AOS-W Instant 6.2.1.0-3.3.0.0 or later

This chapter contains the Downloadable Regulatory Table (DRT) file version introduced in this release.

Periodic regulatory changes may require modifications to the list of channels supported by an AP. For a complete list of channels supported by an AP using a specific country domain, access the Switch Command Line Interface (CLI) and execute the **show ap allowed-channels country-code <country-code> ap-type <ap-model>** command.

For a complete list of countries and the regulatory domains in which the APs are certified for operation, refer to the Downloadable Regulatory Table or the DRT Release Notes at businessportal2.alcatel-lucent.com. The following DRT file version is part of this release:

DRT-1.0_81131

This release addresses critical issues that are specific to Switches running AOS-W 8.5.0.10 or later versions. For more information, refer to the *AOS-W 8.6.0.13 Release Notes*. There are no AOS-W Instant issues resolved in this release. This chapter describes the known issues and limitations observed in this release.

Limitations

Important Update on OAW-AP210 Series, OAW-AP 220 Series, OAW-AP228, and OAW-AP270 Series Access Points

The OAW-AP210 Series, OAW-AP 220 Series, OAW-AP228, and OAW-AP270 Series access points will be deprecated for future releases and include the following limitations in AOS-W Instant 8.6.0.x, which is the last supported software version for these access points:

- No support for BLE interface (with USB)
- The DPI engine used for AppRF will have limitations in terms of enhancements and fixes in the future.
- These APs use WolfSSL libraries in AOS-W Instant 8.6.0.0 and not OpenSSL.
- No support for WPA3 security.

All of these platforms have already been marked as end-of-sale. Please review the end-of-sale and end-of-support dates for these platforms <u>here</u>.

Known Issues

Following are the known issues observed in this release.

Table 4: Known Issues in AOS-W Instant 8.6.0.13	Table 4	: Known Issu	ies in AOS-W Ins	stant 8.6.0.13
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Bug ID	Description	Reported Version
AOS-192469	An AP does not tag voice and video traffic with the WMM values defined in the SSID profile. Instead, the AP uses the default DSCP tags of 48 and 40 for voice and video traffic respectively. This issue is observed in APs running AOS-W Instant 8.3.0.0 or later versions.	AOS-W Instant 8.3.0.0
AOS-192604	Traffic between clients within the same subnet VLAN is subject to source NAT. This issue occurs because the master AP performs source NAT on local traffic. This issue is observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.6.0.0
AOS-197400	An OAW-IAP fails to switch uplink interfaces during an uplink failover event. This issue occurs when the OAW-IAP is configured with two Ethernet uplinks. This issue is observed in APs running AOS-W Instant 8.6.0.1 or later versions.	AOS-W Instant 8.6.0.1

Table 4: Known Issues in AOS-W Instant 8.6.0.13

Bug ID	Description	Reported Version
AOS-201901	An AP changes all access rules to deny when the configuration is restored through the CLI from a Windows TFTP server. This issue occurs when the Windows configuration retrieved from the TFTP server includes newline (\n) and carriage return (\r) characters. This issue is observed in APs running AOS-W Instant 8.5.0.0 or later versions.	AOS-W Instant 8.5.0.0
AOS-203766	 An AP fails to commit AirGroup settings configured using the AOS-W Instant webUI. This issue occurs under the following conditions: When the number of AirGroup services exceeds 16. When the number of service IDs exceeds 32. This issue is observed in APs running AOS-W Instant 8.6.0.0 or later versions. 	AOS-W Instant 8.6.0.0
AOS-204171	 Clients intermittently experience high latency when the AP is connected to the backup Switch after a failover event. This issue occurs under the following conditions: The AP attempts to re-connect to the primary Switch. Fast failover is enabled on the AP. This issue is observed in 203R Series access points running AOS-W Instant 8.3.0.0 or later versions. 	AOS-W Instant 8.3.0.0
AOS-206840 AOS-209687	The checksum ID and radio information of an AP is not updated on the Virtual Switch. This issue occurs in APs that are configured with a static channel. This issue is observed in OAW-AP300 Series, OAW-AP315, OAW-AP320 Series, OAW-AP330 Series, OAW-AP360 Series, and OAW- AP370 Series access points running AOS-W Instant 8.4.0.6 or later versions.	AOS-W Instant 8.4.0.6
AOS-208474	An OAW-IAP frequently disconnects itself from the cluster and then rejoins it. The log file lists the reason for the event as: stm PAPI_Send failed, send_papi_message_with_args, 1215: Resource temporarily unavailable . This issue is observed in APs running AOS-W Instant 8.6.0.5 or later versions.	AOS-W Instant 8.6.0.5
AOS-209051	 Clients are unable to send traffic when the AOS-W Instant clusters are configured with L3 mobility. This issue occurs under the following scenarios: The client is connected to a cluster other than the home cluster. The network experiences high latency due to an overload caused by a broadcast storm. This issue is observed in APs running AOS-W Instant 8.6.0.4 or later versions. 	AOS-W Instant 8.6.0.4
AOS-210440	Administrator authentication fails when accessing the OAW-IAP through the WebUI. This issue occurs when the administrator password includes special characters such as " or '. This issue is observed in APs running AOS-W Instant 8.6.0.5 or later versions. Workaround: Create a different administrator password without special characters.	AOS-W Instant 8.6.0.5

Table 4: Known Issues in AOS-W Instant 8.6.0.13

Bug ID	Description	Reported Version
AOS-210688	Apple devices are unable to connect to OAW-AP225 access points operating as Virtual Switches in mesh deployments. This issue occurs when the AP advertises a Channel Switch Announcement and remains in the same channel. This issue is observed in OAW-AP225 access points running AOS-W Instant 8.6.0.5 or later versions.	AOS-W Instant 8.6.0.5
AOS-216445	Clients connected to the mesh portal AP are unable to reach devices connected to the mesh point AP and vice versa. This issue occurs when the client roams from a source mesh AP to another mesh AP and back to the source mesh AP. This issue is observed in OAW-AP387 access points running AOS-W Instant 8.6.0.6 or later versions.	AOS-W Instant 8.6.0.6
AOS-217829	The new webUI in OAW-IAPs does not update the status of member APs when they are disconnected from the network. This issue is observed in APs running AOS-W Instant 8.6.0.4 or later versions.	AOS-W Instant 8.6.0.4
AOS-218974	iPhone clients running iOS 14 or later versions are unable to connect to SSIDs when a HotSpot2.0 profile is mapped to it. This issue occurs when a HotSpot 2.0 profile is not configured on the iOS device. This issue is observed in APs runningAOS-W Instant 8.6.0.4 or later versions. Workaround: Configure a Hotspot 2.0 profile in the iOS device.	AOS-W Instant 8.6.0.4
AOS-219576	Clients connected to an OAW-IAP are randomly disconnecting from the network with the reason: internal only . Clients rejoin the network immediately after the disconnection. This issue is observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8
AOS-219592	Clients receive router advertisement packets from VLANs other than their assigned VLAN. This issue is observed in SSIDs configured with Dynamic VLAN assignment. This issue is observed in APs running AOS- W Instant 8.6.0.7 or later versions.	AOS-W Instant 8.6.0.7
AOS-219705	Clients are unable to pass traffic when they disconnect and rejoin an SSID network. This issue occurs when ClearPass Policy Manager is used for authentication. This issue is observed in APs running AOS-W Instant 8.6.0.7 or later versions.	AOS-W Instant 8.6.0.7
AOS-220089 AOS-220908	An OAW-IAP assigns users to a default role when the vendor specific attribute defined in the set-role parameter in the SSID profile contains a blank space. This issue is observed in APs running AOS-W Instant 8.6.0.8 or later versions. Workaround: Use '_' character instead of blank characters when specifying the vendor-specific attribute in the set-role parameter in the SSID profile.	AOS-W Instant 8.6.0.8
AOS-222172	The first client connecting to an SSID configured with download-role is assigned the default role instead of the role received from the ClearPass Policy Manager server. This issue is observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8

This chapter describes the AOS-W Instant software upgrade procedures and the different methods for upgrading the image on the OAW-IAP.



While upgrading anOAW-IAP, you can use the image check feature to allow the OAW-IAP to find new software image versions available on a cloud-based image server hosted and maintained by Alcatel-Lucent. The location of the image server is fixed and cannot be changed by the user. The image server is loaded with the latest versions of the AOS-W Instant software.

Topics in this chapter include:

- Upgrading an OAW-IAP Using OmniVista 3600 Air Manager Management Platform on page 15
- Upgrading an OAW-IAP Image Manually Using WebUI on page 16
- Upgrading an OAW-IAP Image Manually Using CLI on page 18
- Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.6.0.x on page 19

Upgrading an OAW-IAP Using OmniVista 3600 Air Manager Management Platform

If the multi-class OAW-IAP network is managed by OmniVista 3600 Air Manager, image upgrades can only be done through the OmniVista 3600 Air Manager WebUI. The OAW-IAP images for different classes must be uploaded on the AMP server. If new OAW-IAPs joining the network need to synchronize their software with the version running on the virtual Switch, and if the new OAW-IAP belongs to a different class, the image file for the new OAW-IAP is provided by OmniVista 3600 Air Manager. If OmniVista 3600 Air Manager does not have the appropriate image file, the new OAW-IAP will not be able to join the network.



The virtual Switch communicates with the OmniVista 3600 Air Manager server if OmniVista 3600 Air Manager is configured. If OmniVista 3600 Air Manager is not configured on the OAW-IAP, the image is requested from the Image server.

HTTP Proxy Support through Zero Touch Provisioning

OAW-IAPs experience issues when connecting to OmniVista 3600 Air Manager, or Activate through the HTTP proxy server which requires a user name and password. The ideal way to provide seamless connectivity for these cloud platforms is to supply the proxy information to the OAW-IAP through a DHCP server.

Starting with AOS-W Instant 8.4.0.0, besides being able to authenticate to the HTTP proxy server, the factory default OAW-IAPs can also communicate with the server through a HTTP proxy server DHCP which does not require authentication.

In order for the factory default OAW-IAP to automatically discover the proxy server, you need to configure the HTTP proxy information in the DHCP server option. The OAW-IAP will receive the proxy information and store it in a temporary file.

To retrieve the port and the proxy server information, you need to first configure the DHCP **option 60** to **ArubaInstantAP** as shown below:

```
(Instant AP)(config)# ip dhcp <profile_name>
(Instant AP)("IP DHCP profile-name")# option 60 ArubaInstantAP
```

Secondly, use the following command to configure the proxy server:

(Instant AP) (config) # proxy server <host> <port> [<username> <password>]

Use the text string **option 148 text server=host_ ip,port=PORT,username=USERNAME,password=PASSWORD** to retrieve the details of the proxy server.

Rolling Upgrade on OAW-IAPs with OmniVista 3600 Air Manager

Starting from AOS-W Instant 8.4.0.0, Rolling Upgrade for OAW-IAPs in standalone mode is supported with OmniVista 3600 Air Manager. The upgrade is orchestrated through NMS and allows the OAW-IAPs deployed in standalone mode to be sequentially upgraded such that the APs upgrade and reboot one at a time. With Rolling Upgrade, the impact of upgrading a site is reduced to a single AP at any given point in time. This enhances the overall availability of the wireless network. For more information, see *OmniVista 3600 Air Manager 8.2.8.2 AOS-W Instant Deployment Guide* and *OmniVista 3600 Air Manager 8.2.8.2 Release Notes*.

Upgrading an OAW-IAP Image Manually Using WebUI

You can manually obtain an image file from a local file system or from a remote server accessed using a TFTP, FTP or HTTP URL.

In the Old WebUI

To manually check for a new firmware image version and obtain an image file:

- 1. Navigate to **Maintenance** > **Firmware**.
- 2. Under Manual section, perform the following steps:
 - a. To update firmware using a downloaded image file:
 - i. Select the **Image file** option. This method is only available for single-class OAW-IAPs.
 - ii. Click on **Browse** and select the image file from your local system. The following table describes the supported image file format for different OAW-IAP models:

Access Points	Image File Format
OAW-AP344, OAW-AP345, OAW-AP514, OAW-AP515, OAW-AP518, OAW-AP574, OAW-AP575, AP-575EX, OAW-AP577, and AP-577EX	AlcatelInstant_Draco_8.6.0.x_xxxx
AP-503H, OAW-AP504, OAW-AP505, OAW-AP505H, AP- 565, and AP-567.	AlcatelInstant_Gemini_8.6.0.x_xxxx

Access Points	Image File Format
OAW-IAP314, OAW-IAP315, OAW-IAP324, OAW-IAP325, OAW-AP374, OAW-AP375, OAW-AP377, OAW-AP318, and OAW-AP387	AlcatelInstant_Hercules_8.6.0.x_xxxx
OAW-IAP334 and OAW-IAP335	AlcatelInstant_Lupus_8.6.0.x_xxxx
OAW-AP534, OAW-AP535, and OAW-AP535	AlcatelInstant_Scorpio_8.6.0.x_xxxx
OAW-AP303, OAW-AP303H, 303P Series, OAW-IAP304, OAW-IAP305, OAW-AP365, and OAW-AP367	AlcatelInstant_Ursa_8.6.0.x_xxxx
OAW-AP203H, OAW-AP203R, OAW-AP203RP, and OAW-IAP207	AlcatelInstant_Vela_8.6.0.x_xxxx

- b. To upgrade firmware using the URL of an image file:
 - i. Select the **Image URL** option to obtain an image file from a HTTP, TFTP, or FTP URL.
 - ii. Enter the image URL in the **URL** text field. The syntax to enter the URL is as follows:
 - HTTP http://<IP-address>/<image-file>. For example, http://<IPaddress>/AlcatelInstant_Hercules_8.6.0.x_xxxx
 - TFTP tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/AlcatelInstant_ Hercules_8.6.0.x_xxxx
 - FTP ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/AlcatelInstant_ Hercules_8.6.0.x_xxxx
 - FTP ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<alcatel:123456>@<IP-address>/AlcatelInstant_Hercules_8.6.0.x_xxxx



The FTP server supports both **anonymous** and **username:password** login methods.

Multiclass OAW-IAPs can be upgraded only in the URL format, not in the local image file format.

- 3. Clear the **Reboot all APs after upgrade** check box if required. This check box is selected by default to allow the OAW-IAPs to reboot automatically after a successful upgrade. To reboot the OAW-IAP at a later time, clear the **Reboot all APs after upgrade** check box.
- 4. Click **Upgrade Now** to upgrade the OAW-IAP to the newer version.

In the New WebUI (AOS-W Instant 8.4.0.0 or later versions)

To manually check for a new firmware image version and obtain an image file:

- 1. Navigate to **Maintenance** > **Firmware**.
- 2. Expand Manual section.
- 3. The firmware can be upgraded using a downloaded image file or a URL of an image file.
 - a. To update firmware using a downloaded image file:
 - i. Select the **Image file** option. This method is only available for single-class OAW-IAPs.
 - ii. Click on **Browse** and select the image file from your local system. The following table describes the supported image file format for different OAW-IAP models:

Access Points	Image File Format
OAW-AP344, OAW-AP345, OAW-AP514, OAW-AP515, OAW-AP518, OAW-AP574, OAW-AP575, AP-575EX, OAW-AP577, and AP-577EX	AlcatelInstant_Draco_8.6.0.x_xxxx
AP-503H, OAW-AP504, OAW-AP505, OAW-AP505H, AP- 565, and AP-567.	AlcatelInstant_Gemini_8.6.0.x_xxxx
OAW-IAP314, OAW-IAP315, OAW-IAP324, OAW-IAP325, OAW-AP374, OAW-AP375, OAW-AP377, OAW-AP318, and OAW-AP387	Alcatelinstant_Hercules_8.6.0.x_xxxx
OAW-IAP334 and OAW-IAP335	AlcatelInstant_Lupus_8.6.0.x_xxxx
OAW-AP534, OAW-AP535, and OAW-AP535	AlcatelInstant_Scorpio_8.6.0.x_xxxx
OAW-AP303, OAW-AP303H, 303P Series, OAW-IAP304, OAW-IAP305, OAW-AP365, and OAW-AP367	AlcatelInstant_Ursa_8.6.0.x_xxxx
OAW-AP203H, OAW-AP203R, OAW-AP203RP, and OAW-IAP207	Alcatelinstant_Vela_8.6.0.x_xxxx

- b. To upgrade firmware using the URL of an image file:
 - i. Select the Image URL option to obtain an image file from a HTTP, TFTP, or FTP URL.
 - ii. Enter the image URL in the **URL** text field. The syntax to enter the URL is as follows:
 - HTTP http://<IP-address>/<image-file>. For example, http://<IP-address>/AlcatelInstant_Hercules_8.6.0.x_xxxx
 - TFTP tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/AlcatelInstant_ Hercules_8.6.0.x_xxxx
 - FTP ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/AlcatelInstant_ Hercules_8.6.0.x_xxxx
 - FTP ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<alcatel:123456>@<IP-address>/AlcatelInstant_Hercules_8.6.0.x_xxxx



The FTP server supports both **anonymous** and **username:password** login methods.

Multiclass OAW-IAPs can be upgraded only in the URL format, not in the local image file format.

- 4. Disable the **Reboot all APs after upgrade** toggle switch if required. This option is enabled by default to allow the OAW-IAPs to reboot automatically after a successful upgrade. To reboot the OAW-IAP at a later time, clear the **Reboot all APs after upgrade** check box.
- 5. Click **Upgrade Now** to upgrade the OAW-IAP to the newer version.
- 6. Click Save.

Upgrading an OAW-IAP Image Manually Using CLI

To upgrade an image using a HTTP, TFTP, or FTP URL:

(Instant AP) # upgrade-image <ftp/tftp/http-URL>

The following is an example to upgrade an image by using the FTP URL :

(Instant AP)# upgrade-image ftp://192.0.2.7/AlcatelInstant_Hercules_8.6.0.x_xxxx

To upgrade an image without rebooting the OAW-IAP:

(Instant AP)# upgrade-image2-no-reboot <ftp/tftp/http-URL>

The following is an example to upgrade an image without rebooting the OAW-IAP:

```
(Instant AP)# upgrade-image2-no-reboot ftp://192.0.2.7/AlcatelInstant_Hercules_
8.6.0.x_xxxx
```

To view the upgrade information:

Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.6.0.x

Before you upgrade an OAW-IAP running AOS-W Instant 6.5.4.0 or earlier versions to AOS-W Instant 8.6.0.x, follow the procedures mentioned below:

- 1. Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x or any version prior to AOS-W Instant 6.5.4.0 to AOS-W Instant 6.5.4.0.
- 2. Refer to the Field Bulletin AP1804-1 at https://businessportal2.alcatel-lucent.com.
- 3. Verify the affected serial numbers of the OAW-IAP units.