AOS-W Instant 8.10.0.9

Release Notes

Alcatel·Lucent
Enterprise

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Contents

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:

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For the list of terms, refer to the Glossary.

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:

Web Browser	Operating System
Microsoft Edge (Microsoft Edge 92.0.902.62 and Microsoft EdgeHTML 18.19041) or later	▪ Windows 10 or later ▪ macOS
Firefox 107.0.1 or later	▪ Windows 10 or later ▪ macOS
Apple Safari 15.4 (17613.1.17.1.13) or later	▪ macOS
Google Chrome 108.0.5359.71 or later	▪ Windows 10 or later ▪ 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, Alcatel-Lucent 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*

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

This chapter describes the features, enhancements, and behavioral changes introduced in this release.

New Features and Enhancements

This section describes the features and enhancements introduced in this release.

Addition of New Telemetry for Transmitted MPDU

The tracking of MPDUs has been added to the radio/vap/client stats section of Central. This allows users to see the total Tx MPDU Transmitted as a value in their consoles. Users may check the MPDUs through the **show ap debug radio-stats**, **show ap bss-stats**, and **show ap debug client-stats** commands, followed by **|include MPDU** in the CLI of their Instant APs.

Behavioral Changes

This release does not introduce any changes in AOS-W Instant behaviors, resources, or support that would require you to modify the existing system configurations after updating to 8.10.0.9.

The following table displays the OAW-IAP platforms supported in AOS-W Instant 8.10.0.x release.

Table 3: *Supported OAW-IAP Platforms*

OAW-IAP Platform	Minimum Required AOS-W Instant Software Version
OAW-650 Series — OAW-AP655	AOS-W Instant 8.10.0.0 or later
OAW-630 Series — OAW-AP635	AOS-W Instant 8.9.0.0 or later
OAW-500H Series — OAW-AP503H OAW-560 Series — OAW-AP565 and OAW-AP567	AOS-W Instant 8.7.1.0 or later
OAW-500H Series — OAW-AP505H OAW-518 Series — OAW-AP518 OAW-AP570 Series — OAW-AP574, OAW-AP575, and OAW-AP577 OAW-570EX Series — OAW-AP575EX and OAW-AP577EX	AOS-W Instant 8.7.0.0 or later
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
OAW-AP203H Series — OAW-AP203H	AOS-W Instant 6.5.3.0 or later
OAW-AP203R Series — OAW-AP203R and OAW-AP203RP OAW-AP360 Series — OAW-AP365 and OAW-AP367	AOS-W Instant 6.5.2.0 or later
OAW-AP207 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

This chapter provides information on the Alcatel-Lucent products that are not supported for a particular release.

AOS-W Instant 8.10.x.x is the last release that supports the following AP platforms:

- OAW-AP203H Series
- OAW-AP203R Series
- OAW-AP207 Series
- OAW-AP320 Series
- OAW-AP330 Series
- OAW-AP340 Series
- OAW-AP387

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 OAW-IAP Command Line Interface (CLI) and execute the **show ap allowed-channels** 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 myportal.al-enterprise.com.

The following DRT file version is part of this release:

- DRT-1.0_88424

The following issues are resolved in this release.

Table 4: *Resolved Issues in AOS-W Instant 8.10.0.9*

Bug ID	Description	Reported Version
AOS-236100	Some OAW-IAPs did not display the BSSID table after using the **process restart stm sigsegv** command. The fix ensures that the information is displayed accurately. This issue was observed in APs running AOS-W Instant 8.10.0.0 or later versions.	AOS-W Instant 8.10.0.0
AOS-240080	After configuring multiple DNS IP servers by using a separating comma, the **Overview > Summary > DNS NAME SERVERS** section of the Central UI showed an incorrect number of DNS servers. The fix ensures the saved configuration is displayed accurately in the UI. This issue was observed in Instant APs managed by Central running AOS-W Instant 8.11.1.0 or later versions.	AOS-W Instant 8.11.1.0
AOS-242249 AOS-244271	Multiple client devices connecting to OAW-IAP315 access points were not obtaining an IP address. After rebooting the AOS-W Instant APs, the clients devices obtained the IP address. This was caused by a memory leak when DMO was enabled and **air-time-fairness-mode config preferred-access**. The fix ensures the AOS-W Instant APs perform as expected. This issue was observed in AOS-W Instant APs running AOS-W Instant 8.9.0.2 or later versions.	AOS-W Instant 8.9.0.2
AOS-243414	OAW-IAPs did not send updated DNS parameters to Central???. The fix ensures the APs send the accurate information to Central???. This issue was observed in APs running AOS-W Instant 8.7.1.5 or later versions.	AOS-W Instant 8.7.1.5
AOS-245401	HE capabilities were configured on the beacon and probe response for **2.4GHz** radio even though the **HE** knob was disabled. The fix ensures that HE capabilities are not configured on the beacon and probe response when the **HE** knob is disabled. This issue was observed in OAW-AP500 Series access points running AOS-W Instant 8.9.0.0 or later versions.	AOS-W Instant 8.10.0.6
AOS-245417	Some access points configured as a mesh portal transmitted at reduced power levels despite being set to full power. The issue was observed after the APs were rebooted and powered up with the 5 GHz band disabled under all WLAN profiles. The fix ensures the APs work as expected. This issue was observed in OAW-AP575 access points running AOS-W Instant 8.10.0.6 or later versions.	AOS-W Instant 8.10.0.6

Table 4: *Resolved Issues in AOS-W Instant 8.10.0.9*

Bug ID	Description	Reported Version
AOS-246617	After upgrading to AOS-W Instant 8.10.0.7, some APs crashed and rebooted unexpectedly, disconnecting every 2-3 hours due to IPv6 packet synchronization problems. The crash logs listed the reason for the error as **Panic:Ktrace core monitor: cpu3 hung for 45 seconds, hung cpu count: 1 Warm-reset.** The fix ensures that the APs work as expected. This issue was observed in OAW-AP515 access points running AOS-W Instant 6.5.4.0 or later versions.	AOS-W Instant 8.10.0.7
AOS-247151	The output of the **show backup-config** command did not include configuration details for OAW-AP635 access points. The fix ensures that the output of the **show backup-config** command includes the configuration details. This issue was observed in OAW-AP635 access points running AOS-W Instant 6.5.4.0 or later versions.	AOS-W Instant 8.11.1.0

This chapter describes the known issues and limitations observed in this release.

Limitations

This section describes the limitations in AOS-W Instant 8.10.0.9.

OAW-AP635 and OAW-AP655 Access Points

OAW-AP635 and OAW-AP655 access points have the following limitations:

- All radios for OAW-AP635 and OAW-AP655 access points currently do not support spectrum analysis.
- Hotspot and Air Slice configuration is not supported on the 6 GHz radio.
- 802.11mc responder and initiator functionality is not supported on any radio.
- Users can configure only up to 4 VAPs on the 6 GHz radio, instead of 16 VAPs.
- A maximum of 512 clients can be associated on any radio instead of 1024.

Air Slice

Air Slice is partially enabled on OAW-AP500 Series and OAW-AP510 Series access points. However, WMM boost will be functional even if Air Slice high-priority queuing is disabled.

Airtime Fairness Mode

Airtime Fairness Mode is not supported in 802.11ax access points.

AP Hostname Character Limit Extension

The number of ASCII characters allowed in the OAW-IAP hostname is increased from 32 to 128 characters. The following configuration settings do not support the new limit of 128 ASCII characters in AOS-W Instant 8.8.0.0 and later versions:

- The AP Name field in Role Derivation or VLAN Derivation.
- The AP Name field in beacon and probe response frames.
- The AP Name field in the **show ap mesh link** and **ap mesh neighbor** commands.

Dynamic Multicast Optimization Unsupported with VLAN Derivation

AOS-W Instant does not support Dynamic Multicast Optimization when the SSID is configured with VLAN derivation.

Inbound Firewall

The **apip-all** configuration is not supported by the **inbound-firewall** command in OAW-IAP cluster deployments. It is only supported in standalone or single-AP modes of deployment.

Unified Communications Manager

UCM does not prioritize NAT traffic.

Known Issues

Following are the known issues observed in this release.

Table 5: *Known Issues in AOS-W Instant 8.10.0.9*

Bug ID	Description	Reported Version
AOS-195769	In some OAW-IAPs set up with dynamic VLAN assignment, ARP or GARP traffic is unexpectedly sent to wireless clients, even if they are connected to a different VLAN and VAP. This issue is observed in the following scenarios: ■ When the broadcast packets from VLAN 1 and all of the clients on the SSID are on VLAN 2, the packets are sent to all VAPs belonging to the same SSID. ■ When the SSID has two VAPs that belong to the same VLAN, but only one VAP has clients on that VLAN, the traffic is forwarded to both VAPs. ■ When all of the VAPs of a given SSID have clients on different VLANs, the packets are broadcasted to all VLANs. This issue is observed in Instant 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 controller after a failover event. This issue occurs under the following scenarios: ■ The AP attempts to re-connect to the primary controller. ■ 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-216683 AOS-235758	OAW-IAPs in a cluster generate a corrupted core dump file. This issue is observed in access points running AOS-W Instant 8.6.0.17 or later versions.	AOS-W Instant 8.6.0.17
AOS-219784	An OAW-IAP randomly transmits beacons in the wrong channel. This issue is observed in access points running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8
AOS-220890	MPSK-Local SSID is broadcasted as Open SSID in Instant APs running AOS-W Instant versions lower than 8.7.0.0. This issue is observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant8.6.0.8
AOS-224170 AOS-225601	Some member APs in a cluster appears as down in the OmniVista 3600 Air Manager UI. This issue is observed in OmniVista 3600 Air Manager-managed APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.6.0.0
AOS-226584	Wi-Fi 6 clients connected to a OAW-AP500 Series access point experience slow download speeds. This issue occurs when 802.11r option is enabled on the SSID. This issue is observed in OAW-AP500 Series APs running AOS-W Instant 8.6.0.9 or later versions.	AOS-W Instant 8.6.0.9

Table 5: *Known Issues in AOS-W Instant 8.10.0.9*

Bug ID	Description	Reported Version
AOS-228967	The SSID is unable to configure the **Station Ageout Time** to a value over 3600 seconds. This issue is observed in APs running AOS-W Instant 8.7.1.4 or later versions.	AOS-W Instant 8.7.1.4
AOS-231019	Some APs fail to reconnect after an LTE outage. The output of the **show cell status** command is missing information. This issue is observed in IAP-505H access points running AOS-W Instant 8.7.1.7 or later versions.	AOS-W Instant 8.7.1.7
AOS-231129	AOS-W Instant APs do not send the cold and warm SNMP traps when expected. This issue is observed in APs running AOS-W Instant 8.0.0.0 or later versions.	AOS-W Instant 8.6.0.8
AOS-232833	Member APs ignore the proxy configuration when trying to download firmware with the image URL provided by the virtual controller. This issue is observed in APs running AOS-W Instant 8.9.0.0 or later versions.	AOS-W Instant 8.9.0.0
AOS-233095	In OAW-IAP clusters that are configured with a static IP address, the system log is populated with multiple arping ongoing got central rollback messages. This issue occurred in APs that are managed locally and are not managed by Central???. This issue is observed in APs running AOS-W Instant 8.7.1.3 or later versions.	AOS-W Instant 8.7.1.3
AOS-233215	If the TACACS server name contains a space, the OAW-IAP does not save the TACACS server configuration after assigning the TACACS server as the management authentication server. The AP automatically removes the configuration when the client attempts to save the information. This issue is observed in APs running AOS-W Instant 8.9.0.3 or later versions.	AOS-W Instant 8.9.0.3
AOS-233784	When a user connects to the Captive Portal SSID in one accounting session, the RADIUS Acct-Multi-Session-Id changes. This issue is observed in APs running AOS-W Instant 8.9.0.2 or later versions.	AOS-W Instant 8.9.0.2
AOS-234828	An OAW-IAP in a cluster reboots automatically. The log file lists the reason for reboot as: **Critical process /aruba/bin/stm [pid 26061] DIED, process marked as RESTART**. This issue is observed in APs running AOS-W Instant 8.9.0.3 or later versions.	AOS-W Instant 8.9.0.3
AOS-235164 AOS-233149	The AOS-W Instant AP log generates multiple **xhci-hcd xhci-hcd.0.auto: Ring expansion failed: ep_state 3; ring_type 2; trbs 1, free 1; id 0 messages** when connected to USB LTE modems. This issue is observed in APs running AOS-W Instant 8.7.1.9 or later versions.	AOS-W Instant 8.7.1.9
AOS-237822	VLAN pooling does not function as expected when configured on a user role. This issue is observed in Central???-managed OAW-IAPs running AOS-W Instant 8.9.0.3 or later versions.	AOS-W Instant 8.9.0.3
AOS-238137	The **traceroute** command returns the following error message: **Can't find tsgw src ip**. This issue occurs when the OAW-IAP has multiple routing entries in the routing profile. This issue is observed in APs running AOS-W Instant 8.10.0.3 or later versions.	AOS-W Instant 8.10.0.3
AOS-239368	AOS-W Instant APs in a cluster do not retain the configured CPPM username and password. This issue occurs when the APs are rebooted while the password exceeds 23 characters. This issue is observed in APs running AOS-W Instant 8.9.0.2 or later versions.	AOS-W Instant 8.9.0.2

Table 5: *Known Issues in AOS-W Instant 8.10.0.9*

Bug ID	Description	Reported Version
AOS-239411	OAW-IAPs do not accept the serial number of the device as the default password after a factory rest. This issue occurs when the AP is reset using the factory reset command in AP boot mode. This issue is observed in APs running AOS-W Instant 8.9.0.0 or later versions.	AOS-W Instant 8.10.0.0
AOS-239419 AOS-238100	The eth0 link of an OAW-IAP appears offline in the OmniVista 3600 Air Manager UI. This issue is observed in OmniVista 3600 Air Manager-managed APs running AOS-W Instant 8.6.0.18 or later versions.	AOS-W Instant 8.6.0.18
AOS-240096	Clients are unable to connect to the SSID when: ■Two SSID profiles have same the ESSID. ■Both time range profile and SSID Zone are configured on the Instant AP. This issue is observed in Central???-managed APs running AOS-W Instant 8.7.0.0 or later versions.	AOS-W Instant 8.10.0.4
AOS-240530	OAW-IAPs return the following error message **auth_cppm_instant.c, auth_cppm_transform:1859: Dldb Role pf_iap_dur-3008-26: Buffer too large**. This issue occurs when the buffer size of the downloadable user role sent from the ClearPass Policy Manager exceeds 16 KB. This issue is observed in APs running AOS-W Instant 8.10.0.0 or later versions.	AOS-W Instant 8.10.0.4
AOS-243184	An Instant AP displays incorrect country codes in the air capture packet although the correct country code is configured on the AP. This issue is observed in APs running AOS-W Instant 8.10.0.5 or later versions.	AOS-W Instant 8.10.0.5

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

> **NOTE:** 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

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.

> **NOTE:** 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 the 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.

The following procedure describes how to manually check for a new firmware image version and obtain an image file using the webUI:

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, OAW-AP575EX, OAW-AP577, and OAW-AP577EX	Alcatel Instant_Draco_8.10.0.x_xxxx
OAW-AP503H, OAW-AP504, OAW-AP505,	Alcatel Instant_Gemini_8.10.0.x_xxxx

Access Points	Image File Format
OAW-AP505H, OAW-AP565, and OAW-AP567.	
OAW-IAP314, OAW-IAP315, OAW-IAP324, OAW-IAP325, OAW-AP374, OAW-AP375, OAW-AP377, OAW-AP318, and OAW-AP387	Alcatel Instant_Hercules_8.10.0.x_xxxx
OAW-IAP334 and OAW-IAP335	Alcatel Instant_Lupus_8.10.0.x_xxxx
OAW-AP534, OAW-AP535, OAW-AP535, OAW-AP-584, OAW-AP585, OAW-AP585EX, OAW-AP587, OAW-AP587EX	Alcatel Instant_Scorpio_8.10.0.x_xxxx
OAW-AP303, OAW-AP303H, 303P Series, OAW-IAP304, OAW-IAP305, OAW-AP365, and OAW-AP367	Alcatel Instant_Ursa_8.10.0.x_xxxx
OAW-AP203H, OAW-AP203R, OAW-AP203RP, and OAW-IAP207	Alcatel Instant_Vela_8.10.0.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>/Alcate Instant_Hercules_8.10.0.x_xxxx
   - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/Alcatel Instant_Hercules_8.10.0.x_xxxx
   - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/Alcatel Instant_ Hercules_8.10.0.x_xxxx
   - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<alcatel :123456>@<IP-address>/AlcatelInstant_Hercules_8.10.0.x_xxxx

> **NOTE**
> 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

The following procedure describes how 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_8.10.0.x_xxxx
```

The following procedure describes how 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/Alcatel Instant_Hercules_
8.10.0.x_xxxx
```

The following command describes how to view the upgrade information:

```
(Instant AP)# show upgrade info
Image Upgrade Progress
----------------------
Mac IP Address AP Class Status Image Info Error Detail
--- --------- -------- ------ ---------- ------------
d8:c7:c8:c4:42:98 10.17.101.1 Hercules image-ok image file none
Auto reboot :enable
Use external URL :disable
```

Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.10.0.x

Before you upgrade an OAW-IAP running AOS-W Instant 6.5.4.0 or earlier versions to AOS-W Instant 8.10.0.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 myportal.al-enterprise.com.
3. Verify the affected serial numbers of the OAW-IAP units.