

AOS-W Instant 8.7.1.5

Release Notes

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Enterprise

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Contents	3
Revision History	4
Release Overview	5
Related Documents	5
Supported Browsers	5
Terminology Change	6
Contacting Support	6
New Features and Enhancements	7
Supported Hardware Platforms	8
Regulatory Updates	9
Resolved Issues	10
Known Issues	12
Limitations	12
Known Issues	12
Upgrading an OAW-IAP	16
Upgrading an OAW-IAP Using OmniVista 3600 Air Manager Management Platform	16
Upgrading an OAW-IAP Image Manually Using WebUI	17
Upgrading an OAW-IAP Image Manually Using CLI	20
Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.7.1.x	20

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 9](#)
- [Resolved Issues on page 10](#)
- [Known Issues on page 12](#)
- [Upgrading an OAW-IAP on page 16](#)

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:

- 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*

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 8.7.1.0 release.

Table 3: *Supported OAW-IAP Platforms*

OAW-IAP Platform	Minimum Required AOS-W Instant Software Version
500H Series — AP-503H 560 Series — AP-565 and AP-567	AOS-W Instant 8.7.1.0 or later
500H Series — OAW-AP505H OAW-AP518 — OAW-AP518 OAW-AP570 Series — OAW-AP574, OAW-AP575, and OAW-AP577 570EX Series — AP-575EX and AP-577EX	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-AP387 Series — OAW-AP387 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 OAW-AP370EX Series — AP-375EX and AP-375EX	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 and AP-303HR 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

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 chapter describes the issues resolved in this release.

Table 4: Resolved Issues in AOS-W Instant 8.7.1.5

Bug ID	Description	Reported Version
AOS-214836	Clients authenticating using a RADIUS server experienced delay in the authentication process and sometimes required multiple retries before a successful authentication. This issue occurred when the RADIUS server was configured as an FQDN address. The fix ensures that clients authenticate as expected when RADIUS server is configured as FQDN address. This issue was observed in APs running AOS-W Instant 8.6.0.5 or later versions.	AOS-W Instant 8.6.0.5
AOS-214877	The uplink port of an OAW-IAP was disabled by the Switch because of loop protection when the AP switched from mesh mode to Ethernet uplink. The fix ensures that the AP can successfully switch from mesh mode to Ethernet uplink. This issue was observed in APs running AOS-W Instant 8.3.0.0 or later versions.	AOS-W Instant 8.3.0.0
AOS-219576	Clients connected to an Instant AP were randomly disconnected from the network with the reason: internal only . However clients rejoined the network immediately after the disconnection. The fix ensures that the clients remain connected to the OAW-IAP and are not disconnected randomly. This issue was observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8
AOS-219705	Clients were unable to pass traffic after they disconnect and rejoin an SSID network. This issue occurred when ClearPass Policy Manager was used for authentication. The fix ensures that clients are able to pass traffic as expected after disconnecting and rejoining the network. This issue was observed in APs running AOS-W Instant 8.6.0.7 or later versions.	AOS-W Instant 8.6.0.7
AOS-220089	An OAW-IAP assigned a default role to users when the vendor specific attribute defined in the set-role parameter in the SSID profile contained a blank space. The fix ensures that the OAW-IAP understands the blank space between words in the set-role parameter and assigns the correct user role. This issue was observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8
AOS-221524	Clients connected to an OAW-IAP were unable to access the Internet. This issue occurred when the MAC address of a member AP was mistakenly cached as the DNS server IP. The fix ensures that the correct DNS server IP is cached by the conductor AP and clients are serviced as expected. This issue was observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8

Table 4: Resolved Issues in AOS-W Instant 8.7.1.5

Bug ID	Description	Reported Version
AOS-221595	The DNS requests of clients were dropped by the OAW-IAP. The debug log lists the reason for DNS packet drop as: route lookup failure . The fix ensures that the OAW-IAP processes DNS requests of clients as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.6.0.8
AOS-222127	The first client connecting to an SSID configured with download-role was assigned the default role instead of the role received from the ClearPass Policy Manager server. The fix ensures that the first client connecting to an SSID configured with download-role is assigned the role received from the ClearPass Policy Manager server. This issue was observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8
AOS-224257	A member AP failed to update the VPN tunnel route when it was elected as the conductor AP. The fix ensures that the newly elected conductor AP updates the VPN tunnel route as expected. This issue was observed in APs running AOS-W Instant 8.6.0.11 or later versions.	AOS-W Instant 8.6.0.11

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

Limitations

This section describes the limitations in AOS-W Instant 8.7.1.5.

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 8.7.1.5:

- 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.

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 8.7.1.5*

Bug ID	Description	Reported Version
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 5: Known Issues in AOS-W Instant 8.7.1.5

Bug ID	Description	Reported Version
AOS-204171	<p>Clients intermittently experience high latency when the AP is connected to the backup Switch after a failover event. This issue occurs under the following scenarios:</p> <ul style="list-style-type: none"> ■ The AP attempts to re-connect to the primary Switch. ■ Fast failover is enabled on the AP. <p>This issue is observed in 203R Series access points running AOS-W Instant 8.3.0.0 or later versions.</p>	AOS-W Instant 8.3.0.0
AOS-206000 AOS-223537	<p>Some member APs generate a core file when the OAW-IAP is rebooted. This issue occurs when AppRF is enabled on the AOS-W Instant cluster. This issue is observed in APs running AOS-W Instant 8.6.0.9 or later versions.</p>	AOS-W Instant 8.6.0.9
AOS-208474	<p>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.</p>	AOS-W Instant 8.6.0.5
AOS-208648	<p>The system log of an OAW-IAP has a lot of Swarm quit factory default status by : ssid_config messages. This issue is observed in APs running AOS-W Instant 8.7.0.0 or later versions.</p>	AOS-W Instant 8.7.0.0
AOS-209051	<p>Clients are unable to send and receive traffic when AOS-W Instant clusters are configured with L3 mobility. This issue occurs under the following scenarios:</p> <ul style="list-style-type: none"> ■ 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. <p>This issue is observed in APs running AOS-W Instant 8.6.0.4 or later versions.</p>	AOS-W Instant 8.6.0.4
AOS-210290	<p>An OAW-IAP fails to update the service ID of AirGroup services when the service ID is configured through the AOS-W Instant WebUI. This issue occurs when the name of the service ID contains a "." character. This issue is observed in APs running AOS-W Instant 8.7.0.0 or later versions.</p>	AOS-W Instant 8.7.0.0
AOS-210440	<p>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.</p> <p>Workaround: Create an administrator password without special characters.</p>	AOS-W Instant 8.6.0.5
AOS-210688	<p>Apple devices are unable to connect to OAW-IAP225 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-IAP225 access points running AOS-W Instant 8.6.0.5 or later versions.</p>	AOS-W Instant 8.6.0.5
AOS-210717 AOS-212956	<p>The Client-view heatmap window in Dashboard > Clients page of the AOS-W Instant WebUI does not display any data. This issue occurs when the number of client match history records exceeds 300. This issue is observed in APs running AOS-W Instant 8.7.0.0 or later versions.</p>	AOS-W Instant 8.7.0.0

Table 5: Known Issues in AOS-W Instant 8.7.1.5

Bug ID	Description	Reported Version
AOS-216114 AOS-218476	OAW-IAPs in a cluster report the signal value as 0 in the output of show clients command. This issue occurs when disable-arm-wids-functions is turned on in the cluster. This issue is observed in APs running AOS-W Instant 8.7.1.1 or later versions.	AOS-W Instant 8.7.1.1
AOS-217468	The webUI of an OAW-IAP freezes when a new configuration change is applied through the webUI or the CLI. When this issue occurs, the CLI of the conductor AP and the member APs become inaccessible. This issue is observed in APs running AOS-W Instant 8.7.1.1 or later versions.	AOS-W Instant 8.7.1.1
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-217840 AOS-222203	Some OAW-AP500 Series access points crash and reboot unexpectedly. The log file lists the reason for reboot as: Panic:Out of memory Warm-reset . This issue is observed in OAW-AP500 Series access points running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8
AOS-218761 AOS-224026	The webUI of the OAW-IAP fails to sort APs according to client count when clicking on the Clients column label in the Dashboard > Access Points page of the AOS-W Instant webUI. This issue is observed in APs running AOS-W Instant 8.7.1.1 or later version.	AOS-W Instant 8.7.1.1
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 running AOS-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-219592	Clients receive router advertisement packets from VLANs other than the 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-219797	An OAW-IAP fails to download the firmware update and returns the error message: ERROR 400: Bad Request . This issue occurs when a firmware upgrade is attempted from the webUI. This issue is observed in APs running AOS-W Instant 8.3.0.0 or later versions. Workaround: Use the AOS-W Instant CLI to download the firmware update.	AOS-W Instant 8.7.1.0
AOS-220622	An OAW-IAP randomly generates mini_httpd error messages. These messages are displayed in the output of show log debug command and are also sent to the syslog server. This issue is observed in APs running AOS-W Instant 8.7.1.3 or later versions.	AOS-W Instant 8.7.1.3

Table 5: Known Issues in AOS-W Instant 8.7.1.5

Bug ID	Description	Reported Version
AOS-222157 AOS-222841	Some OAW-AP345 access points randomly become unresponsive and the APs report high memory utilization during this period. This issue was observed in OAW-AP345 access points running AOS-W Instant 8.6.0.7 or later versions.	AOS-W Instant 8.6.0.7
AOS-222904	USB clients connected to an OAW-IAP become inactive when the OAW-IAP is rebooted. This issue is observed in APs running AOS-W Instant 8.6.0.6 or later versions. Workaround: Disable and re-enable the USB port to make the USB clients active on the OAW-IAP.	AOS-W Instant 8.6.0.6
AOS-223269 AOS-223720	OAW-IAPs send mesh debug messages of EMERGENCY status to the syslog server when only messages of CRITICAL and WARNING are configured in the syslog server. This issue is observed in APs running AOS-W Instant 8.7.0.0 or later versions.	AOS-W Instant 8.7.1.4

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



While upgrading an OAW-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 16](#)
- [Upgrading an OAW-IAP Image Manually Using WebUI on page 17](#)
- [Upgrading an OAW-IAP Image Manually Using CLI on page 20](#)
- [Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.7.1.x on page 20](#)

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 AP 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_8.7.1.x_xxxx
AP-503H, OAW-AP504, OAW-AP505, OAW-AP505H, AP-565, and AP-567.	AlcatelInstant_Gemini_8.7.1.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_8.7.1.x_xxxx
OAW-IAP334 and OAW-IAP335	AlcatelInstant_Lupus_8.7.1.x_xxxx
OAW-AP534, OAW-AP535, and OAW-AP535	AlcatelInstant_Scorpio_8.7.1.x_xxxx
OAW-AP303, OAW-AP303H, 303P Series, OAW-IAP304, OAW-IAP305, OAW-AP365, and OAW-AP367	AlcatelInstant_Ursa_8.7.1.x_xxxx
OAW-AP203H, OAW-AP203R, OAW-AP203RP, and OAW-IAP207	AlcatelInstant_Vela_8.7.1.x_xxxx

- b. To upgrade firmware using the URL of an image file:
- c. Select the **Image URL** option to obtain an image file from a HTTP, TFTP, or FTP URL.
- d. 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_8.7.1.x_xxxx
 - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/AlcatelInstant_Hercules_8.7.1.x_xxxx
 - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/AlcatelInstant_Hercules_8.7.1.x_xxxx
 - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://alcatel:123456@<IP-address>/AlcatelInstant_Hercules_8.7.1.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_8.7.1.x_xxxx
AP-503H, OAW-AP504, OAW-AP505, OAW-AP505H, AP-565, and AP-567.	AlcatelInstant_Gemini_8.7.1.x_xxxx
OAW-IAP314, OAW-IAP315, OAW-IAP324, OAW-IAP325, OAW-AP374, OAW-AP375, OAW-AP377, OAW-AP318, and OAW-AP387	AlcatelInstant_Hercules_8.7.1.x_xxxx
OAW-IAP334 and OAW-IAP335	AlcatelInstant_Lupus_8.7.1.x_xxxx
OAW-AP534, OAW-AP535, and OAW-AP535	AlcatelInstant_Scorpio_8.7.1.x_xxxx
OAW-AP303, OAW-AP303H, 303P Series, OAW-IAP304, OAW-IAP305, OAW-AP365, and OAW-AP367	AlcatelInstant_Ursa_8.7.1.x_xxxx
OAW-AP203H, OAW-AP203R, OAW-AP203RP, and OAW-IAP207	AlcatelInstant_Vela_8.7.1.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_8.7.1.x_xxxx
 - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/AlcatelInstant_Hercules_8.7.1.x_xxxx
 - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/AlcatelInstant_Hercules_8.7.1.x_xxxx
 - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://alcatel:123456@<IP-address>/AlcatelInstant_Hercules_8.7.1.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_8.7.1.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_8.7.1.x_xxxx
```

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 8.7.1.x

Before you upgrade an OAW-IAP running AOS-W Instant 6.5.4.0 or earlier versions to AOS-W Instant 8.7.1.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.