AOS-W Instant 8.10.0.4

Release Notes

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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:

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 Alcatel-Lucent's commitment to racial justice, we are taking a much-needed step in overhauling Alcatel-Lucent 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 Alcatel-Lucent 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://myportal.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

There are no new features or enhancements introduced in this release.

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_84965

This release addresses critical issues that are specific to a few APs running AOS-W 8.10.0.3. For more information, refer to the AOS-W 8.10.0.4 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

This section describes the limitations in AOS-W Instant 8.10.0.4.

OAW-AP635 and OAW-AP655 Access Points

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

- Wi-Fi uplink configuration is not supported on the 6 GHz radio channel.
- All radios for OAW-AP635 and OAW-AP655 access points currently do not support spectrum analysis.
- Hotspot and Airslice 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.

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 4: *Known Issues in AOS-W Instant 8.10.0.4*

Bug ID	Description	Reported Version
AOS-204171	Clients intermittently experience high latency when the AP is connected to the backup Switch after a failover event. This issue occurs in the following scenarios: ■ The AP attempts to re-connect to the primary Switch. ■ Fast failover is enabled on the AP. This issue is observed in OAW-AP203R Series access points running AOS-W Instant 8.3.0.0 or later versions.	AOS-W Instant 8.3.0.0
AOS-214836 AOS-223454	Clients authenticating using a RADIUS server experience delay in the authentication process and sometimes require multiple retries before a successful authentication. This issue occurs when a proxy server is between the AP and the CPPM server. 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-215807	Some OAW-IAPs and Intel Centrino N-6235 clients are unable to connect to the network. This issue occurs because 802.11h radio configuration is advertised though it is not configured on the OAW-IAP. This issue is observed in OAW-AP515 access points running AOS-W Instant 8.5.0.0 or later versions.	AOS-W Instant 8.7.1.0
AOS-218704 AOS-220857	Some VoIP calls are not sent to the server to be recorded. This issue occurs when: ■ The server recording the calls is behind the Switch. ■ Some APs in the cluster are rebooted. 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-219784	An OAW-IAP randomly transmits beacons in the wrong channel. 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-220079 AOS-220311	Clients are not redirected to the Captive Portal page when the network is configured with role based Captive Portal. Instead they are redirected to a page that displays the error message: **Err_too_many_re-directs**. This issue is observed in APs running AOS-W Instant 8.8.0.0.	AOS-W Instant 8.8.0.0
AOS-220890	MPSK-Local SSID is broadcasted as Open SSID in OAW-IAPs 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 Instant 8.6.0.8
AOS-222053	Multicast traffic from a mesh portal OAW-IAP to a mesh point AP is dropped intermittently. This issue is observed in APs running AOS-W Instant 8.7.1.2 or later versions.	AOS-W Instant 8.7.1.2
AOS-224170 AOS-225601	Some member APs in a cluster appear 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 4: *Known Issues in AOS-W Instant 8.10.0.4*

Bug ID	Description	Reported Version
AOS-228967	Users could not configure the **Station Ageout Time** to a value greater than 3600 seconds in the SSID settings. 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-230044 AOS-234556	OAW-AP505H access points crash and reboot unexpectedly. The log file lists the reason for reboot as: **Kernel panic - not syncing: Fatal exception**. This issue is observed in OAW-AP505H access points running AOS-W Instant 8.10.0.0.	AOS-W Instant 8.10.0.0
AOS-230900 AOS-231081 AOS-231941	OAW-IAPs operating as the Virtual Switch crash and reboot unexpectedly. The log file lists the reason for reboot as: **Reboot caused by kernel panic: Take care of the TARGET ASSERT first**. This issue is observed in OAW-AP530 Series and OAW-AP550 Series access points running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.1.7
AOS-231019 AOS-232063	An OAW-IAP fails to reconnect after an LTE outage. The output of the **show cell status** command is missing information. This issue is observed in APs running AOS-W Instant 8.6.0.16 or later versions.	AOS-W Instant 8.7.1.7
AOS-232833	Member APs ignore the proxy configuration when trying to download firmware with the image URL provided by the virtual Switch. 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-233215	If the TACACS server name contains space, the OAW-IAP does not save the TACACS server configuration after assigning the TACACS server as the management auth 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-233772	OAW-AP505 access points cannot perform 802.1X authentication for Aruba 2930F Switch Series and Aruba 2930M Switch Series. This issue is observed in APs running AOS-W Instant 8.7.1.8 or later versions.	AOS-W Instant 8.7.1.8
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-235761	An OAW-IAP reboots unexpectedly. This issue occurs after the process core dump of the sh process. This issue is observed in APs running AOS-W Instant 8.6.0.17 or later versions.	AOS-W Instant 8.6.0.17
AOS-236116	The **copy core-file tftp** command only copies the core files and ignores the radio crash files. This issue occurs despite radio crash files being present. This issue is observed in APs running AOS-W Instant 8.6.0.16 or later versions.	AOS-W Instant 8.6.0.16
AOS-236369	In OAW-IAP clusters, the power for the 2.4 GHz and 5 GHz radio bands is displayed as a value that is different from the configured value. This issue occurs when: ■ The AP is powered by POE AT.	AOS-W Instant 8.9.0.3

Table 4: *Known Issues in AOS-W Instant 8.10.0.4*

Bug ID	Description	Reported Version
	■ Tri-radio and **ipm** are enabled. This issue is observed in OAW-AP535 access points running AOS-W Instant 8.6.0.0 or later versions.	

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

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 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.