AOS-W Instant 8.6.0.8



Copyright Information

Alcatel-Lucent and the Alcatel-Lucent Enterprise logo are trademarks of Alcatel-Lucent. To view other trademarks used by affiliated companies of ALE Holding, visit:

https://www.al-enterprise.com/en/legal/trademarks-copyright

All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Neither ALE Holding nor any of its affiliates assumes any responsibility for inaccuracies contained herein. (2021)

Open Source Code

This product includes code licensed under the GNU General Public License, the GNU Lesser General Public License, and/or certain other open source licenses.

Contents	3
Revision History	
Release Overview	5
Supported Browsers	5
Contacting Support	6
New Features and Enhancements	7
Supported Hardware Platforms	8
Supported OAW-IAPs	8
Regulatory Updates	10
Resolved Issues	11
Known Issues	12
Upgrading an OAW-IAP	15
Upgrading an OAW-IAP Using OmniVista 3600 Air Manager Management Platform	15
Upgrading an OAW-IAP Image Manually Using WebUI	16
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 8.6.0.x	20

Revision History

The following table provides the revision history of this document.

 Table 1: Revision History

Revision	Change Description
Revision 01	Initial release.

4 | Contents AOS-W Instant 8.6.0.8 | Release Notes

This Alcatel-Lucent 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

For the list of terms, refer to the Glossary.

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

Contacting Support

 Table 2: Contact Information

Contact Center Online		
Main Site	https://www.al-enterprise.com	
Support Site	https://businessportal2.alcatel-lucent.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	

6 | Release Overview AOS-W Instant 8.6.0.8 | Release Notes

Chapter 2 **New Features and Enhancements**

There are no new features or enhancements in this release.

Supported OAW-IAPs

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

Table 3: Supported OAW-IAP Platforms

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
■ OAW-AP203H Series — OAW-AP203H	AOS-W Instant 6.5.3.0 or later
 OAW-AP203R 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
 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

 Table 3: Supported OAW-IAP Platforms

OAW-IAP Platform	Minimum Required AOS-W Instant Software Version
OAW-IAP228OAW-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
■ OAW-AP270 Series — OAW-IAP274 and OAW-IAP275	AOS-W Instant 6.4.0.2-4.1.0.0 or later
■ OAW-AP220 Series — OAW-IAP224 and OAW-IAP225	AOS-W Instant 6.3.1.1-4.0.0.0 or later
■ OAW-RAP155 Series — OAW-RAP155 and OAW-RAP155P	AOS-W Instant 6.2.1.0-3.3.0.0 or later

9 | Supported Hardware Platforms AOS-W Instant 8.6.0.8 | Release Notes

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 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 service.esd.alcatel-lucent.com.

The following DRT file version is part of this release:

■ DRT-1.0_79055

This release includes fixes for CVE-2020-25705, and the following CVEs referenced in ARUBA-PSA-2021-007:

- CVE-2019-5317
- CVE-2019-5319
- CVE-2020-24635
- CVE-2020-24636
- CVE-2021-25143
- CVE-2021-25144
- CVE-2021-25145
- CVE-2021-25146
- CVE-2021-25148
- CVE-2021-25149
- CVE-2021-25150
- CVE-2021-25155
- CVE-2021-25156
- CVE-2021-25157
- CVE-2021-25158
- CVE-2021-25159
- CVE-2021-25160
- CVE-2021-25161
- CVE-2021-25162

Known Issues and Limitations in AOS-W Instant 8.6.0.8

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

Limitations

Important Update on OAW-AP210 Series, OAW-AP220 Series, OAW-AP228, and OAW-AP270 Series Access Points

The OAW-AP210 Series, OAW-AP220 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 here.

Known Issues

Following are the known issues observed in this release.

 Table 4: Known Issues in AOS-W Instant 8.6.0.8

Bug ID	Description	Reported Version
AOS-153932 AOS-211583	An OAW-IAP reloads with a different subnet mask configuration when a configuration update is performed in the network and is unreachable from other networks. This issue occurs because the AP inherits a wrong subnet mask from the DHCP server. This issue is observed in APs running AOS-W Instant 8.6.0.4 or later versions. Workaround: Reboot the AP to receive the correct subnet mask configuration.	AOS-W Instant 8.6.0.4
AOS-190757	An OAW-IAP fails to classify YouTube UDP traffic as webcategory Streaming-media and allows users access to YouTube when webcategory -Streaming Media is denied by an access rule. This issue is observed in APs running AOS-W Instant 8.5.0.1 or later versions.	AOS-W Instant 8.5.0.1
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
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 OAW-AP203R Series access points running AOS-W Instant 8.3.0.0 or later versions.	AOS-W Instant 8.3.0.0

13 | Known Issues AOS-W Instant 8.6.0.8 | Release Notes

 Table 4: Known Issues in AOS-W Instant 8.6.0.8

Bug ID	Description	Reported Version
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
AOS-214199	An OAW-IAP fails to establish an SSL connection with OpenDNS servers. This issue occurs due to an incompatibility with the content-header message sent by the OpenDNS server. This issue is observed in APs running AOS-W Instant 8.5.0.11 or later versions.	AOS-W Instant 8.5.0.11

This chapter describes the AOS-W Instant software upgrade procedures and the different methods for upgrading the image on the OAW-IAP. 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 20
- Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.6.0.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.

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 Alcatel-Lucent 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  cprofile 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:
- Select the **Image file** option. This method is only available for single-class OAW-IAPs.

The following table describes the supported image file format for different OAW-IAP models:

16 | Upgrading an OAW-IAP AOS-W Instant 8.6.0.8 | Release Notes

Access Points	Image File Format
OAW-RAP155 Series — OAW-RAP155, OAW-RAP155P	AlcatelInstant_Aries_8.6.0.x_xxxx
OAW-AP210 Series — OAW-IAP214, OAW-IAP215 OAW-AP220 Series — OAW-IAP224, OAW-IAP225 OAW-IAP228 OAW-AP270 Series — OAW-IAP274, OAW-IAP275, OAW-IAP277	AlcatelInstant_Centaurus_8.6.0.x_xxxx
OAW-AP310 Series — OAW-IAP314, OAW-IAP315 OAW-AP318 Series — OAW-AP318 OAW-AP320 Series — OAW-IAP324, OAW-IAP325 OAW-AP370 Series — OAW-AP374, OAW-AP375, OAW-AP377	AlcatelInstant_Hercules_8.6.0.x_xxxx
OAW-AP330 Series — OAW-IAP334, OAW-IAP335	AlcatelInstant_Lupus_8.6.0.x_xxxx
OAW-RAP100 Series — OAW-RAP108, OAW-RAP109 OAW-AP100 Series — OAW-IAP103 OAW-AP110 Series — OAW-IAP114, OAW-IAP115	AlcatelInstant_Pegasus_8.6.0.x_xxxx
OAW-AP303 Series — OAW-AP303, OAW-AP303P OAW-AP303H Series — OAW-AP303H OAW-AP300 Series — OAW-IAP304, OAW-IAP305 OAW-AP360 Series — OAW-AP365, OAW-AP367	AlcatelInstant_Ursa_8.6.0.x_xxxx
OAW-AP203H Series — OAW-AP203H OAW-AP203R Series — OAW-AP203R, OAW- AP203RP OAW-AP207 Series — OAW-IAP207	AlcatelInstant_Vela_8.6.0.x_xxxx
OAW-AP340 Series — OAW-AP344, OAW-AP345 OAW-AP510 Series — OAW-AP514, OAW-AP515	AlcatelInstant_Draco_8.6.0.x_xxxx
OAW-AP530 Series — OAW-AP534, OAW-AP535 OAW-AP550 Series — OAW-AP535	AlcatelInstant_Scorpio_8.6.0.x_xxxx

- Select the **Image URL** option. Select this option to obtain an image file from a HTTP, TFTP, or FTP URL.
 - 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.

- 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. Under **Manual** section, perform the following steps:
- Select the **Image file** option. This method is only available for single-class OAW-IAPs.

The following table describes the supported image file format for different OAW-IAP models:

Access Points	Image File Format
OAW-RAP155 Series — OAW-RAP155, OAW- RAP155P	AlcatelInstant_Aries_8.6.0.x_xxxx
OAW-AP210 Series — OAW-IAP214, OAW-IAP215 OAW-AP220 Series — OAW-IAP224, OAW-IAP225 OAW-IAP228 OAW-AP270 Series — OAW-IAP274, OAW-IAP275, OAW-IAP277	AlcatelInstant_Centaurus_8.6.0.x_xxxx
OAW-AP310 Series — OAW-IAP314, OAW-IAP315 OAW-AP318 Series — OAW-AP318 OAW-AP320 Series — OAW-IAP324, OAW-IAP325 OAW-AP370 Series — OAW-AP374, OAW-AP375, OAW-AP377	AlcatelInstant_Hercules_8.6.0.x_xxxx
OAW-AP330 Series — OAW-IAP334, OAW-IAP335	AlcatelInstant_Lupus_8.6.0.x_xxxx

18 | Upgrading an OAW-IAP AOS-W Instant 8.6.0.8 | Release Notes

Access Points	Image File Format
OAW-RAP100 Series — OAW-RAP108, OAW-RAP109 OAW-AP100 Series — OAW-IAP103 OAW-AP110 Series — OAW-IAP114, OAW-IAP115	AlcatelInstant_Pegasus_8.6.0.x_xxxx
OAW-AP303 Series — OAW-AP303, OAW-AP303P OAW-AP303H Series — OAW-AP303H OAW-AP300 Series — OAW-IAP304, OAW-IAP305 OAW-AP360 Series — OAW-AP365, OAW-AP367	AlcatelInstant_Ursa_8.6.0.x_xxxx
OAW-AP203H Series — OAW-AP203H OAW-AP203R Series — OAW-AP203R, OAW- AP203RP OAW-AP207 Series — OAW-IAP207	AlcatelInstant_Vela_8.6.0.x_xxxx
OAW-AP340 Series — OAW-AP344, OAW-AP345 OAW-AP510 Series — OAW-AP514, OAW-AP515	AlcatelInstant_Draco_8.6.0.x_xxxx
OAW-AP530 Series — OAW-AP534, OAW-AP535 OAW-AP550 Series — OAW-AP535	AlcatelInstant_Scorpio_8.6.0.x_xxxx

- Select the **Image URL** option. Select this option to obtain an image file from a HTTP, TFTP, or FTP URL.
 - 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.

- 3. 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.
- 4. Click **Upgrade Now** to upgrade the OAW-IAP to the newer version.
- 5. 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.

20 | Upgrading an OAW-IAP AOS-W Instant 8.6.0.8 | Release Notes