AOS-W Instant 8.12.0.1

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:

- What's New on page 7
- Supported Platforms on page 8
- Regulatory Updates on page 11
- Resolved Issues on page 12
- Known Issues and Limitations on page 13
- Upgrading an OAW-IAP on page 14

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

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

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 8.12.0.1.

Supported Platforms in AOS-W Instant 8.x

This section displays the supported platforms in AOS-W Instant 8.x. The **minimum version supported** column displays the minimum AOS-W Instant 8.x version that can be run on a platform. The **latest version supported** column displays the newest AOS-W Instant 8.x version that can be run on a certain device. Patch releases do not affect platform support. For example, a device which **latest supported version** is 8.10.0.x can run on any 8.10.0.x version, such as 8.10.0.2 or 8.10.0.10.

Access Point Platforms

Access Points			AOS-W 8.x Versions Supported	
AP Family	**AP Series**	**AP Model**	**Minimum**	**Latest**
6xx	670 Series	OAW-AP675, OAW-AP675EX, OAW-AP677, OAW-AP677EX, OAW-AP679, OAW-AP679EX	8.12.0.x	8.12.0.x
	OAW-650 Series	OAW-AP655	8.10.0.x	8.12.0.x
		AP-654	8.11.2.x	8.12.0.x
	OAW-630 Series	OAW-AP635	8.9.0.x	8.12.0.x
		AP-634	8.11.2.x	8.12.0.x
	OAW-AP610 Series	OAW-AP615	8.11.0.x	8.12.0.x
	600 Series	AP-605H	8.12.0.x	8.12.0.x

Access Points			AOS-W 8.x Versions Supported	
AP Family	AP Series	AP Model	Minimum	Latest
5xx	OAW-580 Series	OAW-AP-584, OAW-AP585, OAW-AP585EX, OAW-AP587, OAW-AP587EX	8.10.0.x	8.12.0.x
	OAW-AP570 Series	OAW-AP574, OAW-AP575, OAW-AP577	8.7.0.x	8.12.0.x
	OAW-560 Series	OAW-AP565, OAW-AP567	8.7.1.x	8.12.0.x
	OAW-AP550 Series	OAW-AP535	8.5.0.x	8.12.0.x
	OAW-AP530 Series	OAW-AP534, OAW-AP535	8.5.0.x	8.12.0.x
	OAW-AP510 Series	OAW-AP518	8.7.0.x	8.12.0.x
		OAW-AP514, OAW-AP515	8.4.0.x	8.12.0.x
	OAW-AP500 Series	OAW-AP504, OAW-AP505	8.6.0.x	8.12.0.x
		OAW-AP505H	8.7.0.x	8.12.0.x
		OAW-AP503H	8.7.1.x	8.12.0.x
		OAW-AP503	8.11.1.x	8.12.0.x

Access Points			AOS-W 8.x Versions Supported	
AP Family	AP Series	AP Model	Minimum	Latest
3xx	380 Series	OAW-AP387	8.4.0.x	8.10.0.x
	OAW-AP370 Series	OAW-AP374, OAW-AP375, OAW-AP377, OAW-AP375EX, OAW-AP377EX, OAW-AP375ATEX	8.3.0.x	8.12.0.x
	OAW-AP360 Series	OAW-AP365, OAW-AP367	8.3.0.x	8.12.0.x
	OAW-AP340 Series	OAW-AP344, OAW-AP345	8.3.0.x	8.10.0.x
	OAW-AP330 Series	OAW-AP334, OAW-AP335	8.1.0.x	8.10.0.x
	OAW-AP320 Series	OAW-APAP-324, OAW-AP325	8.0.0.x	8.10.0.x
	OAW-AP310 Series	OAW-AP318	8.3.0.x	8.12.0.x
		OAW-AP314, OAW-AP315	8.1.0.x	8.12.0.x
	OAW-AP300 Series	OAW-AP304, OAW-AP305	8.1.0.x	8.12.0.x
		OAW-AP303H, AP-303HR	8.2.0.x	8.12.0.x
		OAW-AP303P	8.4.0.x	8.12.0.x
		OAW-AP303	8.3.0.x	8.12.0.x
2xx	OAW-AP270 Series	OAW-AP274, OAW-AP275, OAW-AP277	8.0.0.x	8.10.0.x
	OAW-AP 220 Series	OAW-AP224, OAW-AP225, OAW-AP228	8.0.0.x	8.10.0.x
	OAW-AP210 Series	OAW-AP214, OAW-AP215	8.0.0.x	8.10.0.x
	OAW-AP200 Series	OAW-AP207	8.1.0.x	8.10.0.x
		OAW-AP203H, OAW-AP203R, OAW-AP203RP	8.2.0.x	8.10.0.x

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 networkingsupport.hpe.commyportal.al-enterprise.com.

The following DRT file version is part of this release:

- DRT-1.0_89706

The following issues are resolved in this release.

Table 3: *Resolved Issues in AOS-W Instant 8.12.0.1*

Bug ID	Description	Reported Version
AOS-226754 AOS-252495	An OAW-IAP crashed and rebooted unexpectedly. The log file listed the reason for the event as: **Kernel panic - not syncing: Fatal exception in interrupt**. The fix ensures that the AP functions as expected. This issue was observed in APs running AOS-W Instant 8.10.0.0 or later versions.	AOS-W Instant 8.10.0.7
AOS-251093	OAW-IAPs crashed unexpectedly. The log file lists the reason for the event as: **BadAddr:4b1d88793a8749 PC:asap_firewall_ forward+0xb0fc/0x158d8 [asap_mod] Warm-reset**. The fix ensures that the AP functions as expected. This issue was observed in OAW-AP515 access points running AOS-W Instant 8.10.0.0 or later versions.	AOS-W Instant 8.10.0.9
AOS-251335	In some OAW-AP505 and OAW-AP305 access points, the message **The DRT version is not newer than current DRT table** was displayed in the output of the **show log system** command, even though DRT was up-to-date. The fix ensures that the **show log system** command function as expected even if the WebUI is running. This issue was observed in APs running AOS-W Instant 8.10.0.7 or later versions.	AOS-W Instant 8.10.0.7
AOS-251488	The **syslogd** process failed to execute after the AP was powered off, or the power was reset on the AP. When this issue occurred, log files were not generated and the **show log system** command returned no output. The fix ensures that the **syslogd** process starts when the AP is booted up, and the correct log files are generated. This issue was observed in 600 Series,OAW-AP610 Series,OAW-630 Series,OAW-650 Series, and 670 Series access points running AOS-W Instant 8.10.0.0 or later versions.	AOS-W Instant 8.11.2.1
AOS-251636	OAW-IAPs sent RADIUS requests every five seconds although the **dot1x-timer-idrequest-period** parameter was configured to ten seconds. This issue occurred when the AP did not receive a **rad-response** in five seconds. The fix ensures that the RADIUS requests are sent according to the time configured by the **dot1x-timer-idrequest-period** parameter. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.6.0.23
AOS-252793	When traffic statistics were captured with monitoring systems, the **aiClientTxDataBytes** and **aiClientRxDataBytes** MIB nodes counters were reset to **0**, after the 32-bit limit was reached. The fix ensures that the statistics display as expected. This issue was observed in access points running AOS-W Instant 8.10.0.6 or later versions.	AOS-W Instant 8.10.0.6

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

Known Issues

Following are the known issues observed in this release.

Table 4: *Known Issues in AOS-W Instant 8.12.0.1*

Bug ID	Description	Reported Version
AOS-204171	Clients intermittently experience high latency when the AP is connected to the backup controller after a failover event. This issue occurs in 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-214947	Guest users connected to an OAW-IAP experience slow network performance. This issue is observed in IAP-VPN deployments. When this issue occurs, the CPU utilization of **Firewall Visibility** and **STM** modules in the Switch exceed 130%. This issue is observed in APs running AOS-W Instant 8.6.0.6 or later versions.	AOS-W Instant 8.6.0.6
AOS-241107	Incorrect IPv6 addresses are generated when the software version of the OAW-IAP is upgraded to AOS-W Instant 8.9.0.0 or later versions.	AOS-W Instant 8.11.0.0
AOS-249946 AOS-247154	Some OAW-IAPs crash and reboot unexpectedly due to a UCM segmentation issue, which affects different VoIP applications. This issue is observed in APs running AOS-W Instant 8.10.0.2 or later versions.	AOS-W Instant 8.10.0.2
AOS-252434 AOS-252435	Some OAW-IAPs experience unexpected UCM crashes several times a day due to duplicated MAC addresses in the hash table. This issue is observed in APs running AOS-W Instant 8.10.0.2 or later versions.	AOS-W Instant 8.10.0.2
AOS-253247	The WebUI does not display the menu after logging in due to memory issues. The issue is observed in APs running AOS-W Instant 8.10.0.9 or later versions.	AOS-W Instant 8.10.0.9
AOS-253533	Web traffic is not getting classified by WebCC. The latest version of Google Chrome (124) and other Chromium-based browsers include TLS 1.3 Kyber support enabled by default, which results in a larger Client Hello that gets split in two TCP fragments and is not properly classified by the WebCC engine, impacting any web classification policies. **Note:** While this issue gets addressed, customers that cannot mandate a certain browser version can still build domain or IP-based firewall policies. Alternatively, we advise to integrate the network with a Secure Web Gateway.	AOS-W 8.12.0.0

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 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

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.