# AOS-W Instant 8.6.0.17 Release Notes



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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	<b>7</b>
Supported Hardware Platforms	<b>8</b>
Regulatory Updates	10
Resolved Issues	11
Known Issues Limitations Known Issues	16
Upgrading an OAW-IAP  Upgrading an OAW-IAP Using OmniVista 3600 Air Manager Management Platform  Upgrading an OAW-IAP Image Manually Using WebUI  Upgrading an OAW-IAP Image Manually Using CLI  Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.6.0.x	20 21 23

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 10
- Resolved Issues on page 11
- Known Issues on page 16
- Upgrading an OAW-IAP on page 20

#### **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 C	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

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There are	no new teatures	or ennance	ments in this release.

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
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 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
OAW-IAP228 OAW-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

 Table 3: Supported OAW-IAP Platforms

OAW-IAP Platform	Minimum Required AOS-W Instant Software Version
OAW-AP270 Series — OAW-IAP274 and OAW-IAP275	AOS-W Instant 6.4.0.2-4.1.0.0 or later
OAW-AP 220 Series — OAW-IAP224 and OAW-IAP225	AOS-W Instant 6.3.1.1-4.0.0.0 or later
RAP 155 Series — OAW-RAP155 and OAW-RAP155P	AOS-W Instant 6.2.1.0-3.3.0.0 or later

## **Chapter 4 Regulatory Updates**

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 <a href="maybortal.al-enterprise.com">myportal.al-enterprise.com</a>. The following DRT file version is part of this release:

■ DRT-1.0\_83381

This chapter describes the issues resolved in this release.

**Table 4:** Resolved Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
AOS-199545 AOS-212851	Some OAW-AP500 Series access points reported incorrect data for noise floor measurements. The fix ensures that the AP reports the correct noise floor measurements. This issue was observed in OAW-AP500 Series access points running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.0.0
AOS-206118 AOS-225870 AOS-227203	An OAW-IAP was unable to establish a connection with the RadSec server. The output of the <b>show radius state</b> command displays the status of the RadSec server as <b>INIT</b> . This issue was observed when a certificate was used to securely connect to the RadSec server. The fix ensures that the AP connects to the RadSec server as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.0.0
AOS-206769 AOS-227684	Wireless clients were unable to connect to some SSIDs broadcast by OAW-AP530 Series and OAW-AP550 Series access points. This issue occurred under the following scenarios:	AOS-W Instant 8.7.0.0
	<ul> <li>The wireless client used Intel(R) Dual Band Wireless-AC 3165 Wi-Fi cards.</li> </ul>	
	<ul> <li>The advertise-ap-name field of the SSID contained more that 30 characters.</li> </ul>	
	The fix ensures that wireless clients using Intel(R) Dual Band Wireless-AC 3165 Wi-Fi cards are able to connect to SSIDs regardless of the length of the <b>advertise-ap-name</b> field. This issue was observed in OAW-AP530 Series and OAW-AP550 Series access points running AOS-W Instant 8.6.0.0 or later versions.	
AOS-208474	An OAW-IAP disconnected from a cluster and then rejoined it. The log file lists the reason for the event as: <b>stm   PAPI_Send failed, send_papi_message_with_args, 1215: Resource temporarily unavailable</b> . The fix ensures that the AP stays connected to the cluster. 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-209855 AOS-210214 AOS-211809 AOS-212590 AOS-212823 AOS-214704	Some OAW-IAPs crashed and rebooted unexpectedly. The log file listed the reason for the event as: <b>Kernel panic - not syncing: Fatal exception in interrupt</b> . The fix ensures that the APs work as expected. This issue was observed in APs running AOS-W Instant 8.7.0.0 or later versions.	AOS-W Instant 8.7.0.0

 Table 4: Resolved Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
AOS-210290	An OAW-IAP failed to update the service ID of AirGroup services when the service ID was configured through the AOS-W Instant webUI. This issue occurred when the name of the service ID contained a "." character. The fix ensures that service ID of AirGroup services are updated as expected when the name of the service ID contains "." character. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.0.0
AOS-210717 AOS-212956	The <b>Client-view heatmap</b> window in <b>Dashboard</b> > <b>Clients</b> page of the AOS-W Instant webUI did not display any data. This issue occurred when the number of client match history record exceeded 300. The fix ensures that the Client-view heatmap displays the information as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.0.0
AOS-217468	The webUI and the CLI of an OAW-IAPs in a cluster were unresponsive. This issue occurred when a configuration change was applied through the webUI or the CLI. The fix ensures that the AOS-W Instant webUI and CLI responds as expected after a configuration change is applied. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.1.1
AOS-218235	The Switch logged random IP and MAC pairing information in its user table in an IAP-VPN deployment. This issue occurred when clients roamed to a different AP in the cluster before completing the DNS process with the source OAW-IAP. The fix ensures that random IP and MAC pairings are not sent to the Switch. 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-218761 AOS-224026	The webUI of the OAW-IAP failed to sort APs according to client count when clicking on the <b>Clients</b> column label in the <b>Dashboard &gt; Access Points</b> page of the AOS-W Instant webUI. The fix ensures that OAW-IAPs are sorted according to their client count when the <b>Clients</b> column label is clicked in the <b>Dashboard &gt; Access Points</b> page of the AOS-W Instant webUI. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later version.	AOS-W Instant 8.7.1.1
AOS-218919	The AOS-W Instant webUI allowed a VLAN to be configured as both the Virtual Switch VLAN and the Centralized, L2 VLAN. This issue occured when the Centralized, L2 VLAN was configured first and the same VLAN was configured as the Virtual Switch VLAN. The fix ensures that a VLAN cannot be configured as both the Virtual Switch VLAN and the Centralized, L2 VLAN. This issue was observed in APs running AOS-W Instant 8.6.0.4 or later versions.	AOS-W Instant 8.6.0.4
AOS-219126 AOS-228444	Some member APs are stuck in the <b>swarm_master_found</b> state and failed to make an OAW-IAP cluster. This issue occurred when the conductor AP was stuck in reboot state which stopped the member APs from joining the cluster. The fix ensures that the conductor AP reboots as expected and member APs join the cluster. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.9.0.0

 Table 4: Resolved Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
AOS-219797	An OAW-IAP failed to download the firmware update and returned the error message: <b>ERROR 400: Bad Request</b> . This issue occurred when a firmware upgrade was attempted from the webUI. The fix ensures that the AP downloads the new firmware version using the webUI. This issue was observed in APs running AOS-W Instant 8.3.0.0 or later versions.	AOS-W Instant 8.7.1.0
AOS-220067 AOS-228453	Some OAW-IAPs crashed and rebooted unexpectedly. The log file listed the reason for reboot as: <b>Reboot Reason: AP Reboot reason: SomeCrash Warm-reset</b> . The fix ensures that the AP works as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.9.0.0
AOS-222127	The first client connecting to an SSID configured with <b>download-role</b> 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 <b>download-role</b> 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-222157 AOS-222841	Some OAW-AP345 access points were unresponsive and reported high memory utilization. The fix ensures that the AP works as expected. 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-222714 AOS-223758	An OAW-AP515 access point crashed and rebooted unexpectedly. The log file listed the reason for reboot as: Reboot Time and Cause: AP Reboot reason: BadAddr:403c02bdbbec8 PC:wlc_key_get_ info+0x10/0x60 [wl_v6] Warm-reset. The fix ensures that the AP works as expected. This issue was observed in OAW-AP515 access points running AOS-W Instant 8.7.0.0 or later versions.	AOS-W Instant 8.7.0.0
AOS-222813 AOS-224555 AOS-225297 AOS-226103 AOS-226107 AOS-226108	Some OAW-AP500 Series access points crashed and rebooted unexpectedly. The log file listed one of the following reasons for reboot:  Reboot Time and Cause: AP Reboot reason: BadAddr:e7c0ceffffffc038 PC:wlc_ratesel_upd_ rxstats+0x214/0x340 [wl_v6] Warm-reset Reboot Time and Cause: AP Reboot reason: BadAddr:390632004016de PC:wlc_pkt_get_txh_hdr+0x0/0x18 [wl_v6] Warm-reset Reboot Time and Cause: AP Reboot reason: InternalError: : 96000021 [#1] SMP PC:_raw_spin_lock_irqsave+0xc/0x40 Warm-reset Reboot Time and Cause: AP Reboot reason: BadAddr:ffffffc000210595 PC:wlc_mutx_txfifo_ complete+0xaec/0xe40 [wl_v6] Warm-reset Reboot Time and Cause: BUGFailureAt:net/core/skbuff.c:281/skb_panic()! Warm-reset The fix ensures that the AP does not reboot randomly and works as expected. This issue was observed in OAW-AP500 Series access points running AOS-W Instant 8.6.0.9 or later versions.	AOS-W Instant 8.7.0.0

 Table 4: Resolved Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
AOS-222843	The Captive Portal page for some Linux clients displayed an <b>Authentication failed</b> message after a user entered the login credentials. This issue occurred when the AP failed to relay the DNS response. The fix ensures that Linux clients can authenticate successfully using the Captive Portal page. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.1.2
AOS-222909	The <b>show usb-enet</b> command failed to display the list of all USB devices connected to an OAW-IAP cluster. The fix ensures that the <b>show usb-enet</b> command displays the list of all USB devices connected to an OAW-IAP cluster. This issue was observed in OAW-IAP clusters running AOS-W Instant 8.6.0.6 or later versions.	AOS-W Instant 8.6.0.6
AOS-222917 AOS-224979	Clients connected to the OAW-IAP in post authentication role were able to access the AOS-W Instant webUI of the AP using the gateway IP address. This issue occurred when the ACL rules for internal network was defined below ACL rules for web category or AppRF. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.8.0.1
AOS-223701	An OAW-IAP crashed and rebooted unexpectedly. The log file listed the reason for reboot as: <b>WARNING: CPU: 3 PID: 0 at mm/slab.h:308 kfree+0x128/0x148()</b> . The fix ensures that the AP works as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.1.4
AOS-223149 AOS-223754	An OAW-IAP crashed and rebooted unexpectedly. The log file listed the reason for reboot as: SomeCrash Warm-reset / PC is at wlc_wnm_is_wnmsleeping+0x40/0xd8 [wl_v6]. The fix ensures that the AP works as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.1.4
AOS-224801	Clients were unable to pass traffic when the IPSec tunnel switched from the primary server to the secondary server after a failover event. This issue occurred when Centralized, L2 DHCP scope was used. The fix ensures that clients are able to pass traffic as expected in OAW-IAP deployments that used Centralized, L2 DHCP scope. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later version.	AOS-W Instant 8.7.1.1
AOS-225860	Wireless clients were randomly disconnected from the AP. When this occurs, new clients and existing clients were unable to join the SSID. The fix ensures that the AP works as expected and clients remain connected to the network. This issue was observed in APs running AOS-W Instant 8.6.0.9 or later versions.	AOS-W Instant 8.6.0.9
AOS-225862 AOS-225901	Some OAW-IAPs failed to discover the Switch and convert to a OAW-AP when the Switch IP was provided through the DHCP and DNS server. The fix ensures that the AP discovers the Switch as expected and provisions itself as a OAW-AP. This issue was observed in APs running AOS-W Instant 8.6.0.10 or later versions.	AOS-W Instant 8.6.0.10

 Table 4: Resolved Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
AOS-226071	Clients connected to an AOS-W Instant network randomly encountered a DNS error and lost internet connectivity. The debug log of the OAW-IAP listed the reason for error as: <b>Drop the pkt as we don't know the vlan device on which to send the ARP request</b> . The fix ensures that the AP services clients as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.1.4
AOS-226248	The output of the <b>show datapath user</b> table did not include the information of some clients configured with a static IP address. The fix ensures that the output of <b>show datapath user</b> displays the information of all clients connected to the AP. 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-226870 AOS-226947	Member APs were disconnected from the AOS-W Instant cluster when DTLS was enabled in the Virtual Switch. As a result, clients experienced poor network performance when this issue occurred. The fix ensures that member APs remain connected to the Virtual Switch when DTLS is enabled and work as expected. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	AOS-W Instant 8.7.1.4
AOS-226893 AOS-228067	Some clients connected to an OAW-IAP were unable to access the Internet. This issue occurred when:	AOS-W Instant 8.6.0.11
	the CLI or STM process of the member AP crashed.	
	■ the conductor AP failover occurred.  This caused the member AP to cache the old conductor AP's IP address as the DNS IP address in the datapath and forwarded the DNS request from clients to the old conductor AP instead of the DNS server. The fix ensures that the correct IP routes are reinstalled after a process restart. This issue was observed in APs running AOS-W Instant 8.6.0.0 or later versions.	
AOS-227024 AOS-228564	An OAW-IAP crashed and rebooted unexpectedly. The log file listed the reason for reboot as: <b>Critical process /aruba/bin/stm [pid 26739] DIED, process marked as RESTART</b> . This issue occurred when the OAW-IAP had SSIDs enabled with <b>Download roles</b> option. The fix ensures that the APs work as expected and do not reboot unexpectedly. This issue was observed in APs running AOS-W Instant 8.6.0.12 or later versions.	AOS-W Instant 8.6.0.12
AOS-228704 AOS-229598	An OAW-IAP crashed and rebooted unexpectedly. The log file listed the reason for reboot as: <b>Reboot Time and Cause: Reboot caused by kernel panic: Take care of the TARGET ASSERT first</b> . The fix ensures that the AP works as expected. This issue was observed in APs running AOS-W Instant 8.6.0.15 or later versions.	AOS-W Instant 8.6.0.15

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

#### **Limitations**

### Important Update on OAW-AP210 Series, OAW-AP 220 Series, OAW-AP228, and OAW-AP270 Series Access Points

The OAW-AP210 Series, OAW-AP 220 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 <u>here</u>.

#### **Known Issues**

Following are the known issues observed in this release.

**Table 5:** Known Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
AOS-192469	An OAW-IAP 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 conductor 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 8.6.0.17

Bug ID	Description	Reported Version
AOS-201901	An AP changes all access rules to <b>deny</b> 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 <b>AirGroup services</b> exceeds 16.  When the number of <b>service IDs</b> 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 203R Series access points running AOS-W Instant 8.3.0.0 or later versions.	AOS-W Instant 8.3.0.0
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-209405 AOS-212894 AOS-213220 AOS-214438	An OAW-IAP fails to block certain application and service traffic despite having ACLs configured to block them. This issue occurs with applications and services that use QUIC protocol, which is currently not supported by AppRF. This issue is observed in APs running AOS-W Instant 8.3.0.0 or later versions.  Workaround: Add an ACL rule to deny traffic in UDP ports 443 and 80. This configures the AP to deny traffic when the ACL is applied and forces the application to use TLS instead of QUIC protocol.	AOS-W Instant 8.6.0.9
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-216445	Clients connected to the mesh portal AP are unable to reach devices connected to the mesh point AP and vice versa. This issue occurs when the client roams from a source mesh AP to another mesh AP and back to the source mesh AP. This issue is observed in OAW-AP387 access points running AOS-W Instant 8.6.0.6 or later versions.	AOS-W Instant 8.6.0.6

 Table 5: Known Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
AOS-217185	Clients connected to a member AP are unable to pass IP traffic and new clients connecting to the same AP are unable to receive IP addresses. This issue occurs when the per-AP GRE tunnel connection between the AP and the Switch fails. This issue is observed in IAP-VPN clusters running AOS-W Instant 8.3.0.0 or later versions.	AOS-W Instant 8.3.0.0
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-218436 AOS-219302	Zebra scanners are unable to connect to some OAW-AP510 Series access points. This issue is observed in OAW-AP510 Series access points running AOS-W Instant 8.5.0.7 or later versions.	AOS-W Instant 8.5.0.7
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-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-219576	Clients connected to an OAW-IAP are randomly disconnecting from the network with the reason: <b>internal only</b> . Clients rejoin the network immediately after the disconnection. 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-219592	Clients receive router advertisement packets from VLANs other than their 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-220896	An OAW-IAP generates internal system error messages. The output of the <b>show log system</b> command displays: <b>An internal system error has occurred at file rc_acct_instant.c function clear_client_stats_by_mac line 238</b> . 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-225528 AOS-227751 AOS-229738	The <b>DPI Mgr</b> process of the Virtual Switch AP crashes unexpectedly. This issue is observed in OAW-IAP clusters running AOS-W Instant 8.6.0.11 or later versions.	AOS-W Instant 8.6.0.11
AOS-225567	Clients connected to a member AP are getting disconnected with the deauthentication reason: <b>Internal only</b> . Clients reconnect to the APs immediately after disconnection. When this occurs the status of clients in the OAW-IAP is shown as <b>disconnected</b> . This issue occurs when a large number of SNMP requests are sent to the Virtual Switch. This issue is observed in APs running AOS-W Instant 8.6.0.8 or later versions.	AOS-W Instant 8.6.0.8

 Table 5: Known Issues in AOS-W Instant 8.6.0.17

Bug ID	Description	Reported Version
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: <b>Reboot caused by kernel panic: Take care of the TARGET ASSERT first</b> . 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-231083	OAW-IAPs operating as the Virtual Switch crash and reboot unexpectedly. The log file lists the reason for reboot as: <b>Reboot caused by kernel panic: Take care of the TARGET ASSERT first</b> . 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

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 20
- Upgrading an OAW-IAP Image Manually Using WebUI on page 21
- Upgrading an OAW-IAP Image Manually Using CLI on page 23
- Upgrade from AOS-W Instant 6.4.x.x-4.2.x.x to AOS-W Instant 8.6.0.x on page 24

### **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 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:
  - 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_8.6.0.x_xxxx
AP-503H, OAW-AP504, OAW-AP505, OAW-AP505H, AP-565, and AP-567.	AlcatelInstant_Gemini_8.6.0.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_8.6.0.x_xxxx
OAW-IAP334 and OAW-IAP335	Alcatellnstant_Lupus_8.6.0.x_xxxx
OAW-AP534, OAW-AP535, and OAW-AP535	Alcatellnstant_Scorpio_8.6.0.x_xxxx
OAW-AP303, OAW-AP303H, 303P Series, OAW-IAP304, OAW-IAP305, OAW-AP365, and OAW-AP367	AlcatelInstant_Ursa_8.6.0.x_xxxx
OAW-AP203H, OAW-AP203R, OAW-AP203RP, and OAW-IAP207	AlcatelInstant_Vela_8.6.0.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://<IPaddress>/AlcatelInstant\_Hercules\_8.6.0.x\_xxxx
    - TFTP tftp://<IP-address>/<image-file>. For example, tftp://<IPaddress>/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. 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_8.6.0.x_xxxx
AP-503H, OAW-AP504, OAW-AP505, OAW-AP505H, AP-565, and AP-567.	AlcatelInstant_Gemini_8.6.0.x_xxxx
OAW-IAP314, OAW-IAP315, OAW-IAP324, OAW-IAP325, OAW-AP374, OAW-AP375, OAW-AP377, OAW-AP318, and OAW-AP387	AlcatelInstant_Hercules_8.6.0.x_xxxx
OAW-IAP334 and OAW-IAP335	Alcatellnstant_Lupus_8.6.0.x_xxxx
OAW-AP534, OAW-AP535, and OAW-AP535	AlcatelInstant_Scorpio_8.6.0.x_xxxx
OAW-AP303, OAW-AP303H, 303P Series, OAW-IAP304, OAW-IAP305, OAW-AP365, and OAW-AP367	AlcatelInstant_Ursa_8.6.0.x_xxxx
OAW-AP203H, OAW-AP203R, OAW-AP203RP, and OAW-IAP207	AlcatelInstant_Vela_8.6.0.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://<IPaddress>/AlcatelInstant\_Hercules\_8.6.0.x\_xxxx
    - TFTP tftp://<IP-address>/<image-file>. For example, tftp://<IPaddress>/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.

- 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 8.6.0.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:

```
(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 8.6.0.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 myportal.al-enterprise.com.
- 3. Verify the affected serial numbers of the OAW-IAP units.