

AOS-W 8.7.1.4 Release Notes



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The following table lists the revision numbers and the corresponding changes that were made in this release:

Table 1: *Revision History*

Revision	Change Description
Revision 01	Initial release.

This AOS-W release notes includes the following topics:

- New Features and Enhancements
- Supported Platforms
- Regulatory Updates
- Resolved Issues
- Known Issues and Limitations
- Upgrade Procedure

For a list of terms, refer [Glossary](#).

Related Documents

The following guides are part of the complete documentation for the Alcatel-Lucent user-centric network:

- *AOS-W Getting Started Guide*
- *AOS-W User Guide*
- *AOS-W CLI Reference Guide*
- *AOS-W API Guide*
- *Alcatel-Lucent Mobility Master Licensing Guide*
- *Alcatel-Lucent Virtual Appliance Installation Guide*
- *Alcatel-Lucent AP Software Quick Start Guide*

Supported Browsers

The following browsers are officially supported for use with the AOS-W 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 9.0 or later on macOS
- Google Chrome 67 on Windows 7, Windows 8, Windows 10, and macOS

Terminology Change

As part of advancing Alcatel-Lucent Enterprise's commitment to racial justice, we are taking a much-needed step in overhauling ALE 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 ALE culture and moving forward, ALE will replace racially insensitive terms and instead use the following new language:

Usage	Old Language	New Language
Campus Access Points + Controllers	Master-Slave	Conductor-Member
Instant Access Points	Master-Slave	Conductor-Member
Switch Stack	Master-Slave	Conductor-Member
Wireless LAN Controller	Mobility Master	Mobility Conductor
Firewall Configuration	Blacklist, Whitelist	Denylist, Allowlist
Types of Hackers	Black Hat, White Hat	Unethical, Ethical

Contacting Support

Table 2: *Contact Information*

Contact Center Online	
Main Site	https://www.al-enterprise.com
Support Site	https://businessportal.al-enterprise.com
Email	ebg_global_supportcenter@al-enterprise.com
Service & Support Contact Center Telephone	
North America	1-800-995-2696
Latin America	1-877-919-9526
EMEA	+800 00200100 (Toll Free) or +1(650)385-2193
Asia Pacific	+65 6240 8484
Worldwide	1-818-878-4507

Chapter 3

New Features and Enhancements in AOS-W 8.7.1.4

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

This chapter describes the platforms supported in this release.

Mobility Master Platforms

The following table displays the Mobility Master platforms that are supported in this release:

Table 3: *Supported Mobility Master Platforms in AOS-W 8.7.1.4*

Mobility Master Family	Mobility Master Model
Hardware Mobility Master	MM-HW-1K, MM-HW-5K, MM-HW-10K
Virtual Mobility Master	MM-VA-50, MM-VA-500, MM-VA-1K, MM-VA-5K, MM-VA-10K

OmniAccess Mobility Controller Platforms

The following table displays the OmniAccess Mobility Controller platforms that are supported in this release:

Table 4: *Supported OmniAccess Mobility Controller Platforms in AOS-W 8.7.1.4*

OmniAccess Mobility Controller Family	OmniAccess Mobility Controller Model
OAW-40xx Series Hardware OmniAccess Mobility Controllers	OAW-4005, OAW-4008, OAW-4010, OAW-4024, OAW-4030
OAW-4x50 Series Hardware OmniAccess Mobility Controllers	OAW-4450, OAW-4550, OAW-4650, OAW-4750, OAW-4750XM, OAW-4850
OAW-41xx Series Hardware OmniAccess Mobility Controllers	OAW-4104, OAW-4112
MC-VA-xxx Virtual OmniAccess Mobility Controllers	MC-VA-10, MC-VA-50, MC-VA-250, MC-VA-1K

AP Platforms

The following table displays the AP platforms that are supported in this release:

Table 5: *Supported AP Platforms in AOS-W 8.7.1.4*

AP Family	AP Model
OAW-AP200 Series	OAW-AP204, OAW-AP205

Table 5: Supported AP Platforms in AOS-W 8.7.1.4

AP Family	AP Model
OAW-AP203H Series	OAW-AP203H
OAW-AP203R Series	OAW-AP203R, OAW-AP203RP
OAW-AP205H Series	OAW-AP205H
OAW-AP207 Series	OAW-AP207
OAW-AP210 Series	OAW-AP214, OAW-AP215
OAW-AP 220 Series	OAW-AP224, OAW-AP225
OAW-AP228 Series	OAW-AP228
OAW-AP270 Series	OAW-AP274, OAW-AP275, OAW-AP277
OAW-AP300 Series	OAW-AP304, OAW-AP305
OAW-AP303 Series	OAW-AP303, OAW-AP303P
OAW-AP303H Series	OAW-AP303H, OAW-AP303HR
OAW-AP310 Series	OAW-AP314, OAW-AP315
OAW-AP318 Series	OAW-AP318
OAW-AP320 Series	OAW-AP324, OAW-AP325
OAW-AP330 Series	OAW-AP334, OAW-AP335
OAW-AP340 Series	OAW-AP344, OAW-AP345
OAW-AP360 Series	OAW-AP365, OAW-AP367
OAW-AP370 Series	OAW-AP374, OAW-AP375, OAW-AP377
OAW-AP370EX Series	OAW-AP375EX, OAW-AP377EX
OAW-AP387	OAW-AP387
OAW-AP500 Series	OAW-AP504, OAW-AP505
OAW-AP500H Series	OAW-AP503H, OAW-AP505H
510 Series	OAW-AP514, OAW-AP515, OAW-AP518
OAW-AP530 Series	OAW-AP534, OAW-AP535

Table 5: *Supported AP Platforms in AOS-W 8.7.1.4*

AP Family	AP Model
OAW-AP550 Series	OAW-AP555
OAW-AP560 Series	OAW-AP565, OAW-AP567
OAW-AP570 Series	OAW-AP574, OAW-AP575, OAW-AP577

This chapter contains the Downloadable Regulatory Table (DRT) file version introduced in this release.

Periodic regulatory changes may require modifications to the list of channels supported by an AP. For a complete list of channels supported by an AP using a specific country domain, access the switch Command Line Interface (CLI) and execute the **show ap allowed-channels country-code <country-code> ap-type <ap-model>** command.

For a complete list of countries and the regulatory domains in which the APs are certified for operation, refer to the Downloadable Regulatory Table or the DRT Release Notes at businessportal2.alcatel-lucent.com.

The following DRT file version is part of this release:

- DRT-1.0_80433

The following issues are resolved in this release.

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-183519	—	Some APs were incorrectly marked as down in datazone switches. The fix ensures that the switches display the correct status of APs. This issue was observed in stand-alone switches running AOS-W 8.3.0.4 or later versions.	AOS-W 8.3.0.4
AOS-197210	—	WebUI took a long time to display data. The fix ensures that the WebU displays data without any delay. This issue was observed in stand-alone switches running AOS-W 8.5.0.3 or later versions.	AOS-W 8.5.0.3
AOS-200762	—	Users were unable to disable Prohibit IP spoofing firewall feature. The fix ensures that users are able to disable the Prohibit IP spoofing feature. This issue when the ARP request frame got flooded as a broadcast ARP instead of unicast ARP. This issue was observed in Mobility Masters running AOS-W 8.3.0.0 or later versions.	AOS-W 8.3.0.0
AOS-202308 AOS-216193 AOS-219439	—	A few clients took a long time to roam between APs. The fix ensures that clients do not take a long time to roam between APs. This issue was observed in stand-alone switches running AOS-W 8.7.0.0 or later versions.	AOS-W 8.7.0.0
AOS-203077 AOS-203232	—	Configurations committed using the firewall cp command were not synchronized on the standby Mobility Master. This issue occurred when static firewall entries were deleted. The fix ensures that the configurations committed using the firewall cp command are synchronized on the standby Mobility Master. This issue is observed in Mobility Masters running AOS-W 8.6.0.3 or later versions.	AOS-W 8.6.0.3
AOS-203115 AOS-217219	—	The IAP-VPN tunnel was down and the error message, Failed to create internal-iap IP user entry and user entry due to too many user entries 128 was displayed. This issue occurred when the user table had 128 entries. The fix ensures that the stand-alone switches work as expected. This issue was observed in stand-alone switches running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-203168	—	Some managed devices running AOS-W 8.6.0.3 or later versions frequently disconnected from the cluster. Also, the cluster heartbeats were randomly missed on managed devices which led to packet loss. The fix ensures that the managed devices work as expected.	AOS-W 8.6.0.3
AOS-204241	—	Some managed devices logged spurious DHCP DEBUG messages. The fix ensures that the managed devices work as expected. This issue was observed in managed devices running AOS-W 8.5.0.8 or later versions.	AOS-W 8.5.0.8
AOS-205319	—	Some APs running AOS-W 8.6.0.5 or later versions crashed and rebooted unexpectedly. The log file listed the reason as Reboot caused by kernel panic: Fatal exception in interrupt . The fix ensures that the APs work as expected. Duplicates: AOS-206993, AOS-216577, AOS-218524, AOS-220039, and AOS-220917	AOS-W 8.6.0.5
AOS-206216 AOS-213940 AOS-214072 AOS-220300	—	Some APs running AOS-W 8.6.0.6 crashed unexpectedly. The log file listed the reason for the event as, reboot caused by Firmware Assert - ar_wal_tx_de.c:68 . The fix ensures that the APs work as expected.	AOS-W 8.6.0.6
AOS-206389 AOS-216860	—	The SAPD process crashed on managed devices running AOS-W 8.6.0.5 or later versions. The fix ensures that the managed devices work as expected.	AOS-W 8.6.0.5
AOS-206537	—	The H flag indicating standby tunnel was not displayed in the output of the show datapath tunnel-table command and this resulted in a network loop. The fix ensures that the H flag is displayed in the output of the show datapath tunnel-table command. This issue was observed in Mobility Masters running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-206907	—	Some OAW-AP303H access points running AOS-W 8.5.0.5 or later versions crashed and rebooted unexpectedly. The log file lists the reason for the event as Kernel panic - not syncing: assert . The fix ensures that the APs work as expected.	AOS-W 8.5.0.5
AOS-207775 AOS-215946	—	The auth process crashed on managed devices running AOS-W 8.5.0.9 or later versions. The fix ensures that the managed devices work as expected.	AOS-W 8.5.0.9
AOS-207841	—	Some managed devices running AOS-W 8.7.0.1 or later versions experienced configuration failures. The fix ensures that the managed devices work as expected.	AOS-W 8.7.0.1

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-207915	—	Some OAW-AP500 Series access points running AOS-W 8.6.0.4 or later versions crashed and rebooted unexpectedly. The log file listed the reason for the event as AP Reboot reason: BadAddr:ecf47526bb436b6e PC:wlc_mutx_bw_policy_update+0x156c/0x2938 [wl_v6] Warm-reset. The fix ensures that the APs work as expected. Duplicates: AOS-208119, AOS-209128, AOS-210182, AOS-210217, AOS-211247, AOS-211252, AOS-211715, AOS-211774, AOS-212111, AOS-212235, AOS-212557, AOS-212741, AOS-212930, AOS-212961, AOS-214656, AOS-214965, AOS-215250, AOS-215656. AOS-217649, and AOS-217692.	AOS-W 8.6.0.4
AOS-208337	—	The airmatch_recv process crashed on Mobility Master Virtual Appliances running AOS-W 8.5.0.7 or later versions. The fix ensures that the Mobility Master Virtual Appliances work as expected. Duplicates: AOS-209348, AOS-212655, AOS-213442, AOS-219341, and AOS-221406	AOS-W 8.5.0.7
AOS-208421	—	Some managed devices running AOS-W 8.5.0.10 crashed and rebooted unexpectedly. The log file listed the reason for the event as Reboot Cause: Soft Watchdog reset. The fix ensures that the managed devices work as expected. Duplicates: AOS-209367, AOS-209509, AOS-209606, AOS-211577, AOS-211772, AOS-211879, and AOS-212502.	AOS-W 8.5.0.10
AOS-208696	—	The profmgr process crashed after configuring LACP and the error message, Module profmgr is busy was displayed. The fix ensures that the Mobility Masters work as expected. This issue is observed in Mobility Masters running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-208740 AOS-213754	—	The profmgr process crashed on a few Mobility Master running AOS-W 8.5.0.11 or later versions. The fix ensures that the Mobility Masters work as expected.	AOS-W 8.5.0.11
AOS-208846	—	Clients connected to bridge mode SSIDs were unable to receive IP addresses and pass traffic. The fix ensures that clients are able to receive IP addresses. This issue was observed in stand-alone switches running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-209086 AOS-216862	—	The Dot1x process crashed on managed devices running AOS-W 8.5.0.0 or later versions. The fix ensures that the managed devices work as expected.	AOS-W 8.5.0.0
AOS-209093 AOS-210452	—	Some managed devices running AOS-W 8.7.0.0 or later versions generated multiple AMON receiver errors. The fix ensures that the managed devices work as expected.	AOS-W 8.7.0.0

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-209130	—	Stale user entries were not removed from the user-table and hence, new users could not connect to the managed device. The fix ensures that the managed device works as expected. This issue was observed in managed devices running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-209165	—	The Configuration > AP Groups page did not sort the list of AP groups based on when they were created, and hence the newly created AP groups were displayed at the bottom of the table. The fix ensures that the WebUI sorts the list of AP groups. This issue was observed in managed devices running AOS-W 8.3.0.0 or later versions.	AOS-W 8.3.0.0
AOS-209626	—	A few clients experienced connectivity issue. The fix ensures seamless connectivity. This issue was observed in managed device running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-209686	—	The show ap remote client status command displayed the KRx value as 0. The fix ensures that the command displays the correct KRx value. This issue was observed in Mobility Masters running AOS-W 8.8.0.0.	AOS-W 8.8.0.0
AOS-209797 AOS-218932	—	Some Mobility Master Hardware Appliance running AOS-W 8.6.0.4 or later versions intermittently returned high values for SNMP walk for OID ifOutDiscards . The fix ensures that the Mobility Master Hardware Appliance does not return incorrect values for SNMP walk for OID ifOutDiscards .	AOS-W 8.6.0.4
AOS-209912	—	A few managed devices failed to filter and drop spoofed ARP responses from the clients that sent ARP response for the IP address that did not belong to the clients. The user entry for the other IP address was present on the managed devices but not in the route cache table. The fix ensures that the managed devices are able to stop ARP spoofing attacks for such clients. This issue was observed in managed devices running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5
AOS-209996	—	Some APs running AOS-W 8.5.0.9 or later versions crashed and rebooted unexpectedly. The log file listed the reason for the event as Reboot caused by kernel panic: __bug . The fix ensures that the APs work as expected.	AOS-W 8.5.0.9
AOS-210198	—	The Dashboard > Security > Detected Radio page of the WebUI displayed incorrect number of Clients . The fix ensures that the WebUI does not display incorrect number of Clients . This issue was observed in Mobility Masters running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-210515 AOS-219060	—	The blmgr process crashed on Mobility Masters running AOS-W 8.6.0.5 or later versions. The fix ensures that the Mobility Masters work as expected.	AOS-W 8.6.0.5
AOS-210845	—	Some OAW-AP535 and OAW-AP555 access points running AOS-W 8.6.0.6 or later versions crashed and rebooted unexpectedly. The log file listed the reason for the reboot as kernel panic: Take care of the TARGET ASSERT first . Enhancements to the wireless driver resolved the issue. Duplicates: AOS-219154, AOS-220187, AOS-221165, AOS-217214, and AOS-217871	AOS-W 8.6.0.6
AOS-210922	—	The auth process crashed on stand-alone switches running AOS-W 8.5.0.10 or later versions and APs rebooted unexpectedly. The log file listed the reason for the reboot as Unable to set up IPSec tunnel, Error:RC_ERROR_IKEV2_TIMEOUT . The fix ensures that the stand-alone switches work as expected.	AOS-W 8.5.0.10
AOS-210945 AOS-213441	—	Some stand-alone switches running AOS-W 8.6.0.4 or later versions crashed and rebooted unexpectedly. The log file listed the reason for the event as Kernel Panic (Intent:cause:register 12:86:e0:2) . The fix ensures that the stand-alone switches work as expected.	AOS-W 8.6.0.4
AOS-210963	—	Some OAW-AP203R access points running AOS-W 8.7.0.0 or later versions did not send wireless tarpit / deauth frames even if IDS wireless containment is configured. The fix ensures that the APs work as expected.	AOS-W 8.7.0.0
AOS-210990	—	Some managed devices sent BPDUs when STP was globally disabled. The fix ensures that the managed devices do not send BPDUs when STP is globally disabled. This issue was observed in managed devices running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.4
AOS-210992	—	The Mobility Master displayed an error message, Flow Group delete: id not found after an upgrade. This issue occurred when logging levels were not configured correctly. The fix ensures that the Mobility Masters work as expected. This issue was observed in Mobility Masters running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5
AOS-211437 AOS-218454	—	It took a long time to synchronize configurations between a stand-alone switch and a standby switch running AOS-W 8.6.0.8. The fix ensures that configurations between a stand-alone switch and a standby switch do not take a long time to synchronize configurations.	AOS-W 8.6.0.8

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-211545 AOS-217654	—	Some APs running AOS-W 8.5.0.10 or later versions crashed and rebooted unexpectedly. The log file listed the reason for the event as kernel panic: Fatal exception in interrupt . The fix ensures that the APs work as expected.	AOS-W 8.5.0.10
AOS-211587 AOS-216068 AOS-222052	—	High CPU utilization was observed in udbserver and postgres processes. The fix ensures that the managed devices work as expected. This issue was observed in managed devices running AOS-W 8.7.1.0 or later versions.	AOS-W 8.7.1.0
AOS-211622 AOS-211728 AOS-220433	—	Some stand-alone switches running AOS-W 8.3.0.14 or later versions crashed and rebooted unexpectedly. The log files listed the reason for the event as, Reboot Cause: Datapath timeout (Fpapps Initiated) (Intent:cause:register 51:86:0:2c) . The fix ensures that the stand-alone switches work as expected.	AOS-W 8.3.0.14
AOS-211730 AOS-220327	—	Users were unable to map server certificate as switch certificate on a secondary Mobility Master running AOS-W 8.5.0.10 or later versions. The fix ensures that users are able to map server certificate as switch certificate on a secondary Mobility Master.	AOS-W 8.5.0.10
AOS-212198	—	Some OAW-RAP3WN OAW-RAPs running AOS-W 8.5.0.8 or later versions rebooted unexpectedly. This issue occurred when the time between the controller and the OAW-RAP was not in synchronization. The fix ensures that the OAW-RAPs work as expected.	AOS-W 8.5.0.8
AOS-212423	—	High bandwidth usage was observed on a few clients. The fix ensures optimal bandwidth usage. This issue occurred when AP ports in split tunnel forwarding mode were moved to tunnel forwarding mode. This issue was observed in managed devices running AOS-W 8.3.0.0 or later versions.	AOS-W 8.3.0.0
AOS-212904	—	Users were unable to access the L3 redundant switch using CLI and the error message, Permission path (/) is Invalid for user (ads.jvicentini) was displayed. The fix ensures that the users are able to access the L3 redundant switch using CLI. This issue was observed in standby Mobility Masters running AOS-W 8.5.0.10 or later versions.	AOS-W 8.5.0.10
AOS-212935	—	Temporary ACL was applied to user roles even if the disaster-recovery mode was disabled. This issue occurred when configuration changes in disaster-recovery mode were not submitted using the write memory command. The fix ensures that the managed devices work as expected. This issue was observed in managed devices running AOS-W 8.3.0.6 or later versions.	AOS-W 8.3.0.6

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-212936	—	Some users experienced network outage. The fix ensures that users do not experience network outage. This issue was observed in managed devices running AOS-W 8.6.0.6 or later versions.	AOS-W 8.6.0.6
AOS-212991	—	The use-ip-for-calling-station parameter of the aaa authentication-server radius command did not work as expected for VIA clients. The fix ensures that the aaa authentication-server radius command works as expected. This issue was observed in stand-alone switches running AOS-W 8.6.0.6 or later versions.	AOS-W 8.6.0.6
AOS-213011 AOS-219946	—	Packet loss was observed for a few clients during a cluster failover. This issue was observed in managed devices running AOS-W 8.0.0.0 or later versions. The fix ensures that the managed devices work as expected.	AOS-W 8.5.0.10
AOS-213041 AOS-215501	—	A managed device did not classify web-cc and DPI traffic. The fix ensures that the managed device classifies web-cc and DPI traffic. This issue was observed in managed devices running AOS-W 8.5.0.10 or later versions.	AOS-W 8.5.0.10
AOS-213115	—	Some managed devices running AOS-W 8.5.0.10 crashed and rebooted unexpectedly. The log file lists the reason for the event as Reboot caused by kernel panic: Take care of the HOST ASSERT first . The fix ensures that the managed devices work as expected.	AOS-W 8.5.0.10
AOS-213307	—	L2 GRE ICMP keepalive response was sent outside the tunnel and hence, it was dropped by the firewall. This issue was observed in managed devices running AOS-W 8.5.0.1 or later versions. The fix ensures that the managed devices work as expected.	AOS-W 8.6.0.6
AOS-213337	—	A few AP-325 access points running AOS-W 8.5.0.10 or later versions crashed unexpectedly. The log files list the reason for the event as Reboot caused by kernel panic: Fatal exception in interrupt . The fix ensures that the APs work as expected.	AOS-W 8.5.0.10
AOS-213492	—	Some APs running AOS-W 8.6.0.6 logged the error message, assoc response: try later when MBO was enabled. The fix ensures that the APs work as expected.	AOS-W 8.6.0.6
AOS-213784	—	A server received multiple GSM radio lookup failed, error(error_htbl_key_not_found) notifications for all BSSIDs. This issue is resolved by moving the GSM lookup failure logs to user-debug category. This issue was observed in a Mobility Masters running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-213924 AOS-217233	—	Mobility Controller Virtual Appliances running AOS-W 8.7.0.0 or later versions displayed incorrect VLAN ID details for some wired users. The fix ensures that the Mobility Controller Virtual Appliances display correct VLAN IDs.	AOS-W 8.7.0.0
AOS-214243 AOS-215775	—	Some managed devices running AOS-W 8.6.0.7 or later versions crashed and rebooted unexpectedly. The log file listed the reason for the event as Reboot Cause: Kernel Panic (Intent:cause:register 12:86:b0:2) . This issue occurred due to a race condition. The fix ensures that the managed devices work as expected.	AOS-W 8.6.0.7
AOS-214391 AOS-217130 AOS-217832	—	Some APs were unable to come up on a managed device. This issue occurred when UDP 8209 traffic was sent without establishing IPsec tunnels. The fix ensures that the APs are able to come up on a managed device. This issue was observed in managed devices running AOS-W 8.5.0.8 or later versions.	AOS-W 8.5.0.8
AOS-214416	—	Some stand-alone switches running AOS-W 8.6.0.6 or later versions displayed the error message, An internal system error has occurred at file main.c function rx_handler line 1517 error sxdr_read_str_safe szFunctionName failed . The fix ensures that the stand-alone switches work as expected.	AOS-W 8.6.0.6
AOS-214434	—	Some APs were unable to come up on a managed device. This issue occurred when UDP 8209 traffic was sent without establishing IPsec tunnels. The fix ensures that the APs are able to come up on a managed device. This issue was observed in managed devices running AOS-W 8.5.0.8 or later versions.	AOS-W 8.5.0.8
AOS-214510 AOS-219139	—	A few clients were disconnected from the network. The log files listed the reason for the event as Wlan driver excessive tx fail quick kickout . The fix ensures seamless connectivity. This issue was observed in managed devices running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5
AOS-214963	—	Some APs running AOS-W 8.5.0.11 or later versions detected false radar. The fix ensures that the APs work as expected.	AOS-W 8.5.0.11
AOS-214977 AOS-220420	—	Memory leak was observed in arci-cli-helper process. This issue occurred while running an API script. The fix ensures that the APs work as expected. This issue was observed in APs running AOS-W 8.5.0.8 or later versions.	AOS-W 8.5.0.8

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-215012 AOS-215567	—	The AP debug counters, Total Bootstraps and Reboots were not reset after upgrading the managed devices to AOS-W 8.5.0.11 or later versions. The fix ensures that the AP debug counters are reset. This issue was observed in managed devices running AOS-W 8.5.0.11 or later versions.	AOS-W 8.5.0.11
AOS-215021	—	The Channel Width Capability configured on OmniVista 3600 Air Manager was not available in the Dashboard > Overview > Wireless Clients page of the WebUI. The fix ensures that the WebUI displays the Channel Width Capability . This issue is observed in managed devices running AOS-W 8.6.0.6 or later versions.	AOS-W 8.6.0.6
AOS-215048 AOS-218412	—	A few clients were unable to connect to 802.1X SSIDs. The fix ensures seamless connectivity. This issue was observed in managed devices running AOS-W 8.5.0.10 or later versions.	AOS-W 8.5.0.10
AOS-215073	—	Some OAW-AP515 access points running AOS-W 8.5.0.8 or later versions went down and kept rebooting. The fix ensures that the APs work as expected.	AOS-W 8.5.0.8
AOS-215495	—	Some OAW-AP535 access points running AOS-W 8.5.0.5 or later versions displayed the error message, ARM Channel 40 Physical_Error_Rate 0 MAC_Error_Rate 84 Frame_Retry_Rate 0 arm_error_rate_threshold 70 arm_error_rate_wait_time 90 . The fix ensures that the APs work as expected.	AOS-W 8.5.0.5
AOS-215498	—	Some OAW-AP535 access points running AOS-W 8.5.0.11 or later versions detected false radar. The fix ensures that the APs work as expected.	AOS-W 8.5.0.11
AOS-215546	—	The CLI did not trigger session timeout even if paging was enabled. The fix ensures that the CLI triggers session timeout. This issue was observed in Mobility Masters and managed devices running AOS-W 8.0.0.0 or later versions.	AOS-W 8.6.0.5
AOS-216525	—	A few OAW-4112 controllers running AOS-W 8.6.0.0 or later versions experienced traffic drop when the client and server were on different VLANs. The fix ensures that the OAW-4112 controllers work as expected.	AOS-W 8.6.0.4
AOS-216874 AOS-219841	—	The virtual MAC address of jVLAN got deleted from the bridge table and hence, resulted in a network outage. The fix ensures that the managed devices work as expected. This issue was observed in managed devices running AOS-W 8.5.0.11 or later versions.	AOS-W 8.5.0.11

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-216972	—	Some managed devices running AOS-W 8.6.0.7 or later versions forwarded data frames that are larger than the configured IPsec tunnel MTU value. The fix ensures that the managed devices do not forward data frames that are larger than the configured IPsec tunnel MTU value.	AOS-W 8.6.0.7
AOS-217104 AOS-219159	—	ESI redirect failed and traffic was forwarded to the default gateway. The fix ensures that the managed devices work as expected. This issue was observed in managed devices running AOS-W 8.6.0.6 or later versions.	AOS-W 8.6.0.6
AOS-217106	—	The no valid parameter of the ap regulatory-domain-profile command did not work while creating a new regulatory profile. The fix ensures that the no valid parameter of the ap regulatory-domain-profile command works as expected. This issue was observed in controllers running AOS-W 8.0.0.0 or later versions.	AOS-W 8.6.0.7
AOS-217382	—	VRRP flapping was observed in a few Mobility Masters. This issue occurred when the VRRP master could not send periodic advertisements. The fix ensures that the Mobility Masters work as expected. This issue was observed in Mobility Masters running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5
AOS-217539 AOS-219010 AOS-219952 AOS-220918 AOS-221298	—	The auth process crashed on managed devices running AOS-W 8.6.0.6 or later versions. The fix ensures that the managed devices work as expected.	AOS-W 8.6.0.6
AOS-217678 AOS-218131	—	Some APs did not honor the user alias route src-nat ACL and tunneled the traffic to managed devices. The issue occurred when a netdestination alias is configured in the ACL. The fix ensures that the APs work as expected. This issue is observed in APs running AOS-W 8.6.0.7 or later versions.	AOS-W 8.6.0.7
AOS-217703	—	Some managed devices took a long time to boot up after an upgrade. The fix ensures that the managed devices do not take a long time to boot up. This issue was observed in managed devices running AOS-W 8.6.0.7 or later versions.	AOS-W 8.6.0.7
AOS-218012	—	The Maintenance tab of the WebUI displayed a list of clusters that were not configured for that particular node. The fix ensures that the WebUI does not display clusters that are not configured for a particular node. This issue was observed in Mobility Masters running AOS-W 8.5.0.9 or later versions.	AOS-W 8.5.0.9

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-218070	—	The auth process crashed on managed devices running AOS-W 8.6.0.0 or later versions. The fix ensures that the managed devices work as expected.	AOS-W 8.6.0.0
AOS-218117 AOS-219179	—	The show ntp servers and show ntp status commands displayed the error message, Address family for hostname not supported . However, the WebUI displayed the NTP servers. The fix ensures that the commands do not display the error message. This issue was observed in managed devices running AOS-W 8.6.0.7 or later versions.	AOS-W 8.6.0.7
AOS-218167	—	Users were unable to delete static OSPF aggregate routes. The fix ensures that the users are able to delete static OSPF aggregate routes. This issue was observed in stand-alone switches running AOS-W 8.0.0.0 or later versions.	AOS-W 8.5.0.10
AOS-218208	—	Some clients were unable to connect to APs. The log file listed the reason for the event as, AP is resource constrained . The fix ensures seamless connectivity. This issue was observed in APs running AOS-W 8.5.0.8 or later versions.	AOS-W 8.5.0.8
AOS-218231 AOS-216177	—	Wireless users were unable to find a few wired clients. The fix ensures that the wireless users are able to find the wired clients. This issue was observed in controllers running AOS-W 8.7.1.1 or later versions.	AOS-W 8.7.1.1
AOS-218277 AOS-214428	—	The auth process crashed on managed devices running AOS-W 8.5.0.11 or later versions. Hence, the OAW-RAPs rebooted and VIA users faced connectivity issues. The fix ensures that the managed devices work as expected.	AOS-W 8.5.0.11
AOS-218328 AOS-220026	—	VRRP flapping was observed on managed devices running AOS-W 8.6.0.4 or later versions and hence, clients faced connectivity issues. The fix ensures that the managed devices work as expected.	AOS-W 8.6.0.4
AOS-218488	—	The management VLAN address of the Mobility Master was pointed to the OAW-RAP tunnel. The fix ensures that the management VLAN address is not available in the OAW-RAP tunnel. This issue was observed in Mobility Masters running AOS-W 8.3.0.0 or later versions.	AOS-W 8.3.0.0
AOS-218518 AOS-218880	—	Some managed devices running AOS-W 8.7.1.0 or later versions crashed unexpectedly. The log files list the reason for the event as Reboot reason Datapath timeout (SOS Assert) . The fix ensures that the managed devices work as expected.	AOS-W 8.7.1.0

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-218822	—	High flash memory utilization was observed in Mobility Masters running AOS-W 8.5.0.10 or later versions. The fix ensures that the Mobility Masters work as expected.	AOS-W 8.5.0.10
AOS-219008	—	Some UI endpoints like API page and spectrum page displayed information even before authentication. This issue was observed when the API request came over port 443. The fix ensures that the managed devices work as expected.	AOS-W 8.8.0.0
AOS-219098 AOS-219914	—	Some devices were unable to connect to the network. The fix ensures seamless connectivity. This issue was observed in APs running AOS-W 8.7.1.1 or later versions.	AOS-W 8.7.1.1
AOS-219328	—	SNMP configurations failed and the error message, Error: User (itam_net) should be created before adding to the trap host was displayed. This issue occurred when the SNMP server v3 trap host which had the engine-id same as the engine-id of the switch was removed and added again. The fix ensures that the SNMP configurations do not fail. This issue was observed in managed devices running AOS-W 8.5.0.11 or later versions.	AOS-W 8.5.0.11
AOS-219365	—	Some APs running AOS-W 8.7.0.0 or later versions rebooted sporadically. This issue occurred when the smart antenna feature was enabled. The fix ensures that the APs work as expected.	AOS-W 8.7.1.1
AOS-219390	—	The datapath process crashed on stand-alone controllers running AOS-W 8.7.1.1 or later versions. The log files listed the reason for the event as Reboot Cause: Datapath timeout (SOS Assert) (Intent:cause:register 54:86:50:2) . This issue occurred when the op mode of the SSID profile was changed from WPA3-AES-CCM-128 to WPA3-CNSA. The fix ensures that the stand-alone controllers work as expected.	AOS-W 8.7.1.1
AOS-219423	—	Honeywell Handheld 60SL0 devices were unable to connect to 802.1X SSIDs. The fix ensures seamless connectivity. This issue was observed in managed devices running AOS-W 8.6.0.8 or later versions.	AOS-W 8.6.0.8
AOS-219594	—	The Logon-Webcc process crashed on Mobility Masters running AOS-W 8.7.1.2 or later versions. The fix ensures that the Mobility Masters work as expected.	AOS-W 8.7.1.2
AOS-219627 AOS-218851	—	Clients were unable to connect to 2.4 GHz SSID of some APs. This issue occurred when the MAC address of the Radio 1 was incorrect. The fix ensures seamless connectivity. This issue was observed in APs running AOS-W 8.7.1.1 or later versions.	AOS-W 8.7.1.1

Table 6: Resolved Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-219978 AOS-220568	—	iPhone 12 Pro users experienced poor upstream network performance. This issue occurred when APs operated in tunnel mode. The fix ensures optimal network performance. This issue was observed in APs running AOS-W 8.6.0.9 or later versions in tunnel mode.	AOS-W 8.7.1.2
AOS-220996	—	The switch_daemon process crashed on Mobility Masters running AOS-W 8.7.1.3 or later versions. The fix ensures that the Mobility Masters work as expected.	AOS-W 8.7.1.3
AOS-221018 AOS-220919	—	Some users are unable to connect to SSIDs. This issue occurred in 802.11r and MultiZone enabled configurations. The fix ensures seamless connectivity. This issue was observed in APs running AOS-W 8.5.0.11 or later versions.	AOS-W 8.5.0.11
AOS-221144	—	ARP packets were not forwarded to the uplink switch when bcmc-optimization was enabled on the switches. This issue was observed in Mobility Masters and managed devices running AOS-W 8.5.0.9 or later versions. The fix ensures that the Mobility Masters and managed devices work as expected.	AOS-W 8.5.0.9

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

Limitation

Following are the limitations observed in this release:

Port-Channel Limitation in OAW-4850 switches

On OAW-4850 switches with all the member ports of each port-channel configured from the same NAE (Network Acceleration Engine), if one of the member ports experiences link flap either due to a network event or a user driven action, the rest of the port-channels also observe the link flap for less than a second.

No Support for Unique Local Address over IPv6 Network

The IPv6 addresses for interface tunnels do not accept unique local addresses.

Known Issues

Following are the known issues observed in this release:

Table 7: *Known Issues in AOS-W 8.7.1.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-151022 AOS-188417	185176	The output of the show datapath uplink command displays incorrect session count. This issue is observed in managed devices running AOS-W 8.1.0.0 or later versions.	AOS-W 8.1.0.0
AOS-151355	185602	A few managed devices are unable to pass traffic to the nexthop VPN concentrator (VPNC) using policy-based routing. This issue is observed in managed devices running AOS-W 8.0.1.0 or later versions.	AOS-W 8.0.1.0
AOS-153742 AOS-194948	188871	A stand-alone switch crashes and reboots unexpectedly. The log files list the reason for the event as Hardware Watchdog Reset (Intent:cause:register 51:86:0:8) . This issue is observed in OAW-4010 switches running AOS-W 8.5.0.1 or later versions in a Mobility Master-Managed Device topology.	AOS-W 8.5.0.1

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-190071 AOS-190372	—	A few users are unable to access websites when WebCC is enabled on the user role. This issue occurs in a Per User Tunnel Node (PUTN) setup when the VLAN of user role is in trunk mode. This issue is observed in OAW-4005 switches running AOS-W 8.4.0.0. Workaround: Perform the following steps to resolve the issue: 1. Remove web category from the ACL rules and apply any any any permit policy. 2. Disable WebCC on the user role. 3. Change the VLAN of user role from trunk mode to access mode.	AOS-W 8.4.0.0
AOS-199545 AOS-212851	—	Some APs report low noise floor after upgrading the cluster to AOS-W 8.7.1.0 or later versions.	AOS-W 8.7.1.0
AOS-199884	—	Mobility Master logs the following error message, PAPI_Free: This buffer 0x4f6c48 may already be freed and PAPI_Free: Bad state index 0 state 0x1 . This issue is observed in Mobility Masters running AOS-W 8.5.0.5 or later versions.	AOS-W 8.5.0.5
AOS-201166 AOS-207939 AOS-209042	—	A switch crashes and reboots unexpectedly when the HTTPD process is restarted. The log files list the reason for the event as Reboot cause: Nanny rebooted machine - httpd_wrap process died (Intent:cause:register 34:86:0:2c) . This issue is observed in stand-alone switches running AOS-W 8.2.0.0 or later versions.	AOS-W 8.5.0.2
AOS-201376	—	The measured power, Meas. Pow column in the show ap debug ble-table command does not get updated when the TX power of an AP is changed. This issue is observed in APs running AOS-W 8.5.0.6 or later versions.	AOS-W 8.5.0.6
AOS-202552 AOS-203990	—	The Dashboard > Traffic Analysis > AppRF page of the WebUI displays Unknown for WLANs, Roles, and Devices. This issue is observed in Mobility Masters running AOS-W 8.3.0.0 or later versions.	AOS-W 8.3.0.0
AOS-203517 AOS-204709	—	The Datapath process crashes on managed devices unexpectedly. The log file lists the reason for the event as Reboot Cause: Datapath timeout (SOS Assert) (Intent:cause:register 54:86:50:2) . This issue occurs when data packets undergo multiple GRE encapsulation. This issue is observed in managed devices running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-203614 AOS-209261	—	The Mobility Master dashboard does not display the number of APs and clients present in the network. This issue is observed in Mobility Masters running AOS-W 8.6.0.2 or later versions.	AOS-W 8.6.0.2

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-204187	—	The command, vpn-peer peer-mac does not support Suite-B cryptography for custom certificates. This issue is observed in Mobility Masters running AOS-W 8.2.2.8 or later versions.	AOS-W 8.2.2.8
AOS-206537	—	The H flag indicating standby tunnel is not displayed in the output of the show datapath tunnel-table command and this results in a network loop. This issue is observed in Mobility Masters running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-206541	—	The Maintenance > Software Management page does not display the list of all managed devices that are part of a cluster. This issue is observed in Mobility Masters running AOS-W 8.5.0.8 or later versions.	AOS-W 8.5.0.8
AOS-206752	—	The console log of OAW-4450 switches running AOS-W 8.5.0.9 or later versions displays the ofald sdn ERRS ofconn_rx:476 <10.50.1.26:6633> socket read failed, err:Resource temporarily unavailable(11) message.	AOS-W 8.5.0.9
AOS-206765 AOS-208978	—	A few show commands fail to display any output. This issue is observed in managed devices running AOS-W 8.7.0.0 or later versions.	AOS-W 8.7.0.0
AOS-206795	—	A user is unable to rename a node from the Mobility Master node hierarchy. This issue is observed in Mobility Masters running AOS-W 8.3.0.7 or later versions. Workaround: Restart profmgr process to rename the node.	AOS-W 8.3.0.7
AOS-206890	—	The body field in the Configuration > Services > Guest Provisioning page of the WebUI does not allow users to add multiple paragraphs for email messages. This issue is observed in Mobility Masters running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-206902 AOS-208241	—	AirGroup users are unable to connect to Sonos speakers. This issue is observed in managed devices running AOS-W 8.5.0.9 or later versions.	AOS-W 8.5.0.9
AOS-206929	—	The show global-user-table command does not provide an IPv6 based filtering option. This issue is observed in Mobility Masters running AOS-W 8.7.0.0 or later versions.	AOS-W 8.7.0.0
AOS-206930	—	Some Mobility Masters running AOS-W 8.7.0.0 or later versions allow to configure the same IPv6 address twice. This issue occurs when the user enters the same IPv6 address in a different format.	AOS-W 8.7.0.0

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-207006 AOS-215138	—	APs go down and UDP 8209 traffic is sent without UDP 4500 traffic. This issue is observed in managed devices running AOS-W 8.6.0.4 or later versions.	AOS-W 8.6.0.4
AOS-207245	—	Some managed devices running AOS-W 8.5.0.8 or later versions crash and reboot unexpectedly. The log file lists the reason for the event as Hardware Watchdog Reset (Intent:cause:register 53:86:0:802c) .	AOS-W 8.5.0.8
AOS-207303	—	Users are unable to add a managed device to an existing cluster of managed devices configured with rap-public-ip address. This issue is observed in managed devices running AOS-W 8.7.0.0 or later versions.	AOS-W 8.7.0.0
AOS-207366	—	The show advanced options menu is not available in the Configuration > Access Points > Campus APs page of the WebUI. This issue occurs when more than one AP is selected. This issue is observed in Mobility Masters running AOS-W 8.3.0.13.	AOS-W 8.3.0.13
AOS-207691	—	CLI displays incorrect IP address for a TACACS server. This issue is observed in managed devices running AOS-W 8.3.0.8 or later versions. Workaround: Restart the profmgr process for CLI to display the correct IP address.	AOS-W 8.3.0.8
AOS-207692	—	Some managed devices running AOS-W 8.6.0.4 or later versions log multiple authentication error messages.	AOS-W 8.6.0.4
AOS-208420	—	Users are unable to log in to CLI of a switch. This issue occurs when the password has special characters, < and/or >. This issue is observed in switches running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.5
AOS-208597	—	The show ap mesh monitor stats command returns 0 for output. This issue is observed in Mobility Masters running AOS-W 8.7.0.0 or later versions.	AOS-W 8.7.0.0
AOS-209273	—	The Dashboard > Infrastructure page of the WebUI does not display the data in graphical charts for mesh APs. This issue is observed in Mobility Masters running AOS-W 8.7.0.0 or later versions	AOS-W 8.7.0.0
AOS-209276	—	The show datapath crypto counters command displays the same output parameter, AESCCM Decryption Invalid Replay Co twice. This issue is observed in Mobility Masters running AOS-W 8.5.0.0 or later versions.	AOS-W 8.5.0.10
AOS-209879 AOS-220470	—	The trusted vlan add command removes all the existing trusted VLANs. This issue is observed in managed devices running AOS-W 8.6.0.8 or later versions.	AOS-W 8.6.0.8

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-209936 AOS-215097	—	Mobility Masters running AOS-W 8.6.0.6 or later versions display some BSSIDs as rouge BSSIDs even after manually white-listing the BSSIDs.	AOS-W 8.6.0.6
AOS-209977	—	SNMP query with an incorrect string fails to record the offending IP address in the trap or log information. This issue is observed in managed devices running AOS-W 8.5.0.10 or later versions.	AOS-W 8.5.0.10
AOS-210416 AOS-210480	—	The show ap client trail-info command displays incorrect VLAN(s) values. This issue is observed in Mobility Masters running AOS-W 8.5.0.8 or later versions.	AOS-W 8.5.0.8
AOS-210482	—	Some managed devices running AOS-W 8.3.0.6 or later versions display the error message, Invalid set request while configuring ESSID for a Beacon Report Request profile.	AOS-W 8.3.0.6
AOS-210490	—	Some managed devices running AOS-W 8.5.0.8 or later versions display the error message, Error: Tunnel is part of a tunnel-group while deleting a L2 GRE tunnel which is not a part of any tunnel group.	AOS-W 8.5.0.8
AOS-210638	—	The ARM process crashes on managed devices running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5
AOS-210992	—	The Mobility Master displays an error message, Flow Group delete: id not found after an upgrade. This issue occurs when logging levels are not configured correctly. This issue is observed in Mobility Masters running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5
AOS-211658	—	A few clients are unable to connect to OAW-AP535 access points running AOS-W 8.6.0.5 or later versions in a cluster setup. This issue occurs when WMM and HT configurations are enabled.	AOS-W 8.6.0.5
AOS-211720	—	The STM process crashes on managed devices and hence, APs failover to another cluster. This issue is observed in managed devices running AOS-W 8.5.0.5 or later versions.	AOS-W 8.5.0.5
AOS-211863	—	Some APs do not come up on managed devices. This issue occurs when the forwarding mode is changed to bridge mode. the name of the ACL reaches the maximum size of 64 bytes. This issue is observed in managed devices running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5
AOS-212038	—	The show memory <process-name> command does not display information related to the dpagent process. This issue is observed in managed devices running AOS-W 8.6.0.5 or later versions.	AOS-W 8.6.0.5

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-212255	—	Some APs are stuck in Not in Progress state during cluster live upgrade. This issue is observed in managed devices running AOS-W 8.5.0.10 or later versions.	AOS-W 8.5.0.10
AOS-212310 AOS-219441	—	WebCC and NTPd processes are in busy state in stand-alone switches running AOS-W 8.5.0.12 or later versions. This issue occurs when a DNS server or an NTP Server is unreachable.	AOS-W 8.5.0.12
AOS-212591	—	Some managed devices running AOS-W 8.7.1.0 crash and reboot unexpectedly. The log file lists the reason for the event as Reboot Cause: Kernel Panic (Intent:cause:register 12:86:b0:2) .	AOS-W 8.7.1.0
AOS-212605 AOS-218721	—	Some APs running AOS-W 8.6.0.9 or later versions crashes unexpectedly. The log files list the reason for the event as wlc_key_get_info+0x4/0x60 [wl_v6] .	AOS-W 8.7.1.1
AOS-215461 AOS-220709	—	Database synchronization fails between standby and stand-alone switches running AOS-W 8.6.0.9 or later versions. The log files list the reason for the event as Standby switch did not acknowledge the WMS database restore request .	AOS-W 8.6.0.9
AOS-215498	—	Some OAW-AP535 access points running AOS-W 8.5.0.11 or later versions detect false radar.	AOS-W 8.5.0.11
AOS-215852	—	Mobility Masters running AOS-W 8.6.0.6 or later versions log the error message, ofa: 07765 ofproto INFO Aruba-SDN: 1 flow_mods 28 s ago (1 modifications) . This issue occurs when openflow is enabled and when 35 seconds is configured as UCC session idle timeout.	AOS-W 8.6.0.6
AOS-216133	—	Clients are unable to connect to APs on A-band channels. This issue is observed in APs running AOS-W 8.7.1.0 or later versions.	AOS-W 8.7.1.0
AOS-216512	—	The DHCP client / station related AMON message sends the mask, server IP address, and client IP address in a reverse order to the AirWave server. This issue is observed in Mobility Masters running AOS-W 8.6.0.6 or later versions.	AOS-W 8.6.0.6
AOS-216622	—	A few APs incorrectly display the restricted flag, p = Restriction mode in POE-AF/AT in the AP database even if the Ethernet port is disabled. This issue is observed in APs running AOS-W 8.7.0.0 or later versions.	AOS-W 8.7.0.0
AOS-216764	—	Users are not redirected to the captive portal page. This issue is observed in managed devices running AOS-W 8.7.1.0 or later versions in a cluster setup.	AOS-W 8.7.1.0

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-216766	—	Some APs generate sapd coredump. This issue is observed in APs running AOS-W 8.5.0.11 or later versions.	AOS-W 8.5.0.11
AOS-217807	—	OAW-RAPs take a long time to come up on a managed device. This issue occurs due to a delay in whitelist-db synchronization between the Mobility Master and managed devices, and when external authentication is enabled for OAW-RAPs. This issue is observed in managed devices running AOS-W 8.6.0.5 or later versions in a cluster setup.	AOS-W 8.6.0.5
AOS-218162	—	The wired Ethernet port does not form GRE tunnel with the managed device. This issue is observed in managed devices running AOS-W 8.7.1.1 or later versions.	AOS-W 8.7.1.1
AOS-218254 AOS-218875	—	Some managed devices running AOS-W 8.7.1.0 or later versions crashes unexpectedly. The log files list the reason for the event as Reboot Cause: Kernel Panic (Intent:cause:register 12:86:e0:2).	AOS-W 8.7.1.0
AOS-218328 AOS-220026	—	VRRP flapping is observed on managed devices running AOS-W 8.6.0.4 or later versions and hence, clients face connectivity issues.	AOS-W 8.6.0.4
AOS-218404 AOS-212330	—	Some APs are unable to ping a few clients. This issue is observed in APs running AOS-W 8.5.0.11 or later versions.	AOS-W 8.5.0.11
AOS-218621	—	Some APs running AOS-W 8.7.1.1 or later versions crashes unexpectedly. The log files list the reason for the event as AP Reboot reason: BadAddr:6c0094119461 PC:wlc_ampdu_rcv_addba_resp+0x240/0x838 [wl_v6] Warm-reset.	AOS-W 8.7.1.1
AOS-218622	—	Some APs running AOS-W 8.6.0.6 or later versions crashes unexpectedly. The log files list the reason for the event as PC:aruba_wlc_ratesel_getcurrate+0x24/0xd0 [wl_v6] Warm-reset.	AOS-W 8.7.1.1
AOS-218646	—	Ascom i63 phones connected to OAW-AP515 access points running AOS-W 8.6.0.7 or later versions experience degraded audio quality.	AOS-W 8.6.0.7
AOS-218795	—	Downloadable user roles are not downloaded and hence, user roles are not assigned to the tunnel-node users. This issue is observed in managed devices running AOS-W 8.7.1.2 or later versions.	AOS-W 8.7.1.2
AOS-219034	—	Clients connecting to HT-enabled SSIDs connect as non-HT clients. This issue is observed in APs running AOS-W 8.6.0.6 or later versions.	AOS-W 8.6.0.6

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-219112	—	UBT clients hop between VLANs. This issue is observed in managed devices running AOS-W 8.7.1.1 or later versions.	AOS-W 8.7.1.1
AOS-219178	—	Clients connecting to the anchor controller are unable to receive IP addresses. This issue is observed in managed devices running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-219214	—	The validuser acl list gets reordered in stand-alone controllers running AOS-W 8.6.0.8 or later versions.	AOS-W 8.6.0.8
AOS-219379	—	Some OmniAccess Mobility Controllers are unable to connect to Mobility Controller Virtual Appliance. The log files list the reason for the event as <WARN> [fpapps] handleMasterIpMsg: Ignoring duplicate Uplink update from CFGM: ip x.x.x.x sec_master_ip 0.0.0.0 role 3; This issue is observed in OmniAccess Mobility Controllers running AOS-W 8.7.1.1 or later versions.	AOS-W 8.7.1.1
AOS-219383	—	The Configuration > License > License Usage tab does not display the license details. This issue is observed in stand-alone controllers running AOS-W 8.5.0.12 or later versions.	AOS-W 8.5.0.12
AOS-219384	—	Some APs running AOS-W 8.7.1.1 or later versions crashes unexpectedly. The log files list the reason for the event as PC is at wlc_nar_dotxstatus+0x450.	AOS-W 8.7.1.1
AOS-219725	—	Some APs running AOS-W 8.7.1.1 or later versions crashes unexpectedly. The log files list the reason for the event as PC is at wlc_nar_detach+0x8c.	AOS-W 8.7.1.1
AOS-219936	—	The stand-alone controller displays the error message, Module Profile Manager is busy. Please try later while configuring netdestination. This issue is observed in stand-alone controllers running AOS-W 8.7.1.1 or later versions.	AOS-W 8.7.1.1
AOS-220108	—	The OFA process crashes on Mobility Master Virtual Appliances running AOS-W 8.6.0.6 or later versions. This issue occurs when the show openflow debug ports command is executed.	AOS-W 8.6.0.6
AOS-220183	—	The user table does not list the PUTN users and the error message, Dropping bridge miss rcvd for dormant PUTN user is displayed. This issue is observed in managed devices running AOS-W 8.7.1.0 or later versions.	AOS-W 8.7.1.0
AOS-220293	—	Some APs running AOS-W 8.7.1.1 or later versions crash unexpectedly. The log files list the reason for the event as aruba_wlc_ratesel_getmaxrate+0x34.	AOS-W 8.7.1.1

Table 7: Known Issues in AOS-W 8.7.1.4

New Bug ID	Old Bug ID	Description	Reported Version
AOS-220398	—	A few clients in bridge mode are unable to connect to WPA2-PSK SSIDs. This issue is observed in stand-alone switches running AOS-W 8.6.0.8 or later versions.	AOS-W 8.6.0.8
AOS-220552	—	The Configuration > Services > Clusters page of the WebUI does not display the status of live upgrade. This issue occurs when the cluster profile name has a blank spaces. This issue is observed in Mobility Masters running AOS-W 8.6.0.9 or later versions.	AOS-W 8.6.0.9
AOS-221005	—	Some stand-alone switches running AOS-W 8.7.1.2 or later versions are stuck in reboot loop. The log files list the reason for the event as Nanny rebooted machine - fpapps process died (Intent:cause:register 34:86:50:2).	AOS-W 8.7.1.2
AOS-221225	—	OAW-AP387 access points running AOS-W 8.7.1.1 or later versions reboots unexpectedly. The log files list the reason for the event as Reboot caused by kernel panic: Fatal exception.	AOS-W 8.7.1.1
AOS-221352	—	Some mesh links report incorrect RSSI values. This issue is observed in APs running AOS-W 8.7.0.0 or later versions.	AOS-W 8.7.0.0
AOS-221478 AOS-221569 AOS-221572	—	The auth process crashes on managed devices running AOS-W 8.5.0.9 or later versions. This issue occurs when the show auth-tracebuf mac command is executed.	AOS-W 8.5.0.9
AOS-221507	—	Some OAW-AP515 access points running AOS-W 8.7.1.3 or later versions crashes unexpectedly. The log files list the reason for the event as BadAddr:fffffc12c30ca80 PC: _alloc_skb+0x110/0x1c8 Warm-reset.	AOS-W 8.7.1.3

This chapter details software upgrade procedures. It is recommended that you schedule a maintenance window for the upgrade.



Read all the information in this chapter before upgrading your Mobility Master, managed device, master switch, or stand-alone switch.

Important Points to Remember

To upgrade your managed device or Mobility Master:

- Schedule the upgrade during a maintenance window and notify your community of the planned upgrade. This prevents users from being surprised by a brief wireless network outage during the upgrade.
- Avoid making any changes to your network, such as configuration changes, hardware upgrades, or changes to the rest of the network during the upgrade. This simplifies troubleshooting.
- Know your network and verify the state of the network by answering the following questions:
 - How many APs are assigned to each managed device? Verify this information by navigating to the **Dashboard > Access Points** page in the WebUI, or by executing the **show ap active** or **show ap database** commands.
 - How are those APs discovering the managed device (DNS, DHCP Option, Broadcast)?
 - What version of AOS-W runs on your managed device?
 - Are all managed devices running the same version of AOS-W?
 - What services are used on your managed device (employee wireless, guest access, OAW-RAP, wireless voice)?
- Resolve any existing issues (consistent or intermittent) before you upgrade.
- If possible, use FTP to load AOS-W images to the managed device. FTP is faster than TFTP and offers more resilience over slow links. If you must use TFTP, ensure the TFTP server can send over 30 MB of data.
- Always upgrade the non-boot partition first. If you encounter any issue during the upgrade, you can restore the flash, and switch back to the boot partition. Upgrading the non-boot partition gives you a smoother downgrade path, if required.
- Before you upgrade to this version of AOS-W, assess your software license requirements and load any new or expanded licenses that you might require. For a detailed description of these new license modules, refer the *Alcatel-Lucent Mobility Master Licensing Guide*.
- Multiversion is supported in a topology where the managed devices are running the same version as the Mobility Master, or two versions lower. For example multiversion is supported if a Mobility Master is running AOS-W 8.5.0.0 and the managed devices are running AOS-W 8.5.0.0, AOS-W 8.4.0.0, or AOS-W 8.3.0.0.

Memory Requirements

All Alcatel-Lucent managed devices store critical configuration data on an onboard compact flash memory module. Ensure that there is always free flash space on the managed device. Loading multiple large files such as JPEG images for RF Plan can consume flash space quickly. Following are best practices for memory management:

- Do not proceed with an upgrade unless 100 MB of free memory is available. Execute the **show memory** command to identify the available free memory. To recover memory, reboot the managed device. After the managed device comes up, upgrade immediately.
- Do not proceed with an upgrade unless 150 MB of flash space is available. Execute the **show storage** command to identify the available flash space. If the output of the **show storage** command indicates that there is insufficient flash memory, free some used memory. Copy any log files, crash data, or flash backups from your the managed device to a desired location. Delete the following files from the managed device to free some memory:
 - **Crash data:** Execute the **tar crash** command to compress crash files to a file named **crash.tar**. Use the procedures described in [Backing up Critical Data on page 35](#) to copy the **crash.tar** file to an external server. Execute the **tar clean crash** command to delete the file from the managed device.
 - **Flash backups:** Use the procedures described in [Backing up Critical Data on page 35](#) to back up the flash directory to a file named **flash.tar.gz**. Execute the **tar clean flash** command to delete the file from the managed device.
 - **Log files:** Execute the **tar logs** command to compress log files to a file named **logs.tar**. Use the procedures described in [Backing up Critical Data on page 35](#) to copy the **logs.tar** file to an external server. Execute the **tar clean logs** command to delete the file from the managed device.



In certain situations, a reboot or a shutdown could cause the managed device to lose the information stored in its flash memory. To avoid such issues, it is recommended that you execute the **halt** command before power cycling.

Deleting a File

You can delete a file using the WebUI or CLI.

In the WebUI

From the Mobility Master, navigate to **Diagnostic > Technical Support > Delete Files** and remove any aging log files or redundant backups.

In the CLI

```
(host) #delete filename <filename>
```

Backing up Critical Data

It is important to frequently back up all critical configuration data and files on the flash memory to an external server or mass storage device. You should include the following files in these frequent backups:

- Configuration data
- WMS database
- Local user database
- Licensing database
- Custom captive portal pages
- x.509 certificates
- Log files
- Flash backup

Backing up and Restoring Flash Memory

You can backup and restore the flash memory using the WebUI or CLI.

In the WebUI

The following steps describe how to back up and restore the flash memory:

1. In the Mobility Master node hierarchy, navigate to the **Maintenance > Configuration Management > Backup** page.
2. Click **Create Backup** to backup the contents of the flash memory to the **flashbackup.tar.gz** file.
3. Click **Copy Backup** to copy the file to an external server.

You can copy the backup file from the external server to the flash memory using the file utility in the **Diagnostics > Technical Support > Copy Files** page.

4. To restore the backup file to the flash memory, navigate to the **Maintenance > Configuration Management > Restore** page and click **Restore**.

In the CLI

The following steps describe how to back up and restore the flash memory:

1. Execute the following command in the **enable** mode:

```
(host) #write memory
```

2. Execute the following command to back up the contents of the flash memory to the **flashbackup.tar.gz** file.

```
(host) #backup flash
Please wait while we take the flash backup.....
File flashbackup.tar.gz created successfully on flash.
Please copy it out of the controller and delete it when done.
```

3. Execute either of the following command to transfer the flash backup file to an external server or storage device.

```
(host) #copy flash: flashbackup.tar.gz ftp: <ftphost> <ftpusername> <ftpuserpassword>
<remote directory>
```

```
(host) #copy flash: flashbackup.tar.gz usb: partition <partition-number>
```

You can transfer the flash backup file from the external server or storage device to the flash memory by executing either of the following command:

```
(host) #copy tftp: <tftphost> <filename> flash: flashbackup.tar.gz
```

```
(host) #copy usb: partition <partition-number> <filename> flash: flashbackup.tar.gz
```

4. Execute the following command to untar and extract the **flashbackup.tar.gz** file to the flash memory.

```
(host) #restore flash
Please wait while we restore the flash backup.....
Flash restored successfully.
Please reload (reboot) the controller for the new files to take effect.
```

Upgrading AOS-W

Upgrade AOS-W using the WebUI or CLI.



Ensure that there is enough free memory and flash space on your Mobility Master or managed device. For details, see [Memory Requirements on page 34](#).



When you navigate to the **Configuration** tab in the WebUI, the managed device might display the **Error getting information: command is not supported on this platform** message. This message is displayed occurs when you upgrade using the WebUI and navigate to the **Configuration** tab after the managed device reboots. This message disappears after clearing the Web browser cache.

In the WebUI

The following steps describe how to upgrade AOS-W from a TFTP server, FTP server, or local file.

1. Download the AOS-W image from the customer support site.
2. Upload the AOS-W image to a PC or workstation on your network.
3. Validate the SHA hash for the AOS-W image:
 - a. Download the **Alcatel.sha256** file from the download directory.
 - b. Load the AOS-W image to a Linux system and execute the **sha256sum <filename>** command. Alternatively, use a suitable tool for your operating system that can generate a **SHA256** hash of a file.
 - c. Verify that the output produced by this command matches the hash value found on the customer support site.



The AOS-W image file is digitally signed and is verified using RSA2048 certificates preloaded at the factory. The Mobility Master or managed device will not load a corrupted AOS-W image.

4. Log in to the AOS-W WebUI from the Mobility Master.
5. Navigate to the **Maintenance > Software Management > Upgrade** page.
 - a. Select the **Local File** option from the **Upgrade using** drop-down list.
 - b. Click **Browse** from the **Image file name** to navigate to the saved image file on your PC or workstation.
6. Select the downloaded image file.
7. Choose the partition from the **Partition to Upgrade** option.
8. Enable the **Reboot Controller After Upgrade** toggle switch to automatically reboot after upgrading. If you do not want to reboot immediately, disable this option.



The upgrade does not take effect until reboot. If you chose to reboot after upgrade, the Mobility Master or managed device reboots automatically.

9. Select **Save Current Configuration**.
10. Click **Upgrade**.
11. Click **OK**, when the **Changes were written to flash successfully** message is displayed.

In the CLI

The following steps describe how to upgrade AOS-W from a TFTP server, FTP server, or local file.

1. Download the AOS-W image from the customer support site.
2. Open an SSH session to your Mobility Master.
3. Execute the **ping** command to verify the network connection between the Mobility Master and the SCP server, FTP server, or TFTP server.

```
(host) # ping <ftphost>
```

or

```
(host) # ping <tftphost>
```

or

```
(host)# ping <scphost>
```

4. Execute the **show image version** command to check if the AOS-W image is loaded on the flash partition. The partition number appears in the **Partition** row; **0:0** is partition 0, and **0:1** is partition 1. The active boot partition is marked as **Default boot**.

```
(host) #show image version
```

5. Execute the **copy** command to load the new image to the non-boot partition.

```
(host)# copy ftp: <ftphost> <ftpusername> <image filename> system: partition <0|1>
```

or

```
(host)# copy tftp: <tftphost> <image filename> system: partition <0|1>
```

or

```
(host)# copy scp: <scphost> <scpusername> <image filename> system: partition <0|1>
```

or

```
(host)# copy usb: partition <partition-number> <image filename> system: partition <0|1>
```

6. Execute the **show image version** command to verify that the new image is loaded.

```
(host)# show image version
```

7. Reboot the Mobility Master.

```
(host)#reload
```

8. Execute the **show version** command to verify that the upgrade is complete.

```
(host)#show version
```

Verifying the AOS-W Upgrade

Verify the AOS-W upgrade in the WebUI or CLI.

In the WebUI

The following steps describe how to verify that the Mobility Master is functioning as expected:

1. Log in to the WebUI and navigate to the **Dashboard > WLANs** page to verify the AOS-W image version.
2. Verify if all the managed devices are up after the reboot.
3. Navigate to the **Dashboard > Access Points** page to determine if your APs are up and ready to accept clients.
4. Verify that the number of APs and clients are as expected.
5. Test a different type of client in different locations, for each access method used.
6. Complete a backup of all critical configuration data and files on the flash memory to an external server or mass storage facility. See [Backing up Critical Data on page 35](#) for information on creating a backup.

In the CLI

The following steps describe how to verify that the Mobility Master is functioning as expected:

1. Log in to the CLI to verify that all your managed devices are up after the reboot.
2. Execute the **show version** command to verify the AOS-W image version.
3. Execute the **show ap active** command to determine if your APs are up and ready to accept clients.
4. Execute the **show ap database** command to verify that the number of APs and clients are as expected.
5. Test a different type of client in different locations, for each access method used.
6. Complete a backup of all critical configuration data and files on the flash memory to an external server or mass storage facility. See [Backing up Critical Data on page 35](#) for information on creating a backup.

Downgrading AOS-W

A Mobility Master or managed device has two partitions, 0 and 1. If the upgrade fails on one of the partitions, you can reboot the Mobility Master or managed device from the other partition.

Pre-requisites

Before you reboot the Mobility Master or managed device with the pre-upgrade AOS-W version, perform the following steps:

1. Back up your Mobility Master or managed device. For details, see [Backing up Critical Data on page 35](#).
2. Verify that the control plane security is disabled.
3. Set the Mobility Master or managed device to boot with the previously saved configuration file.
4. Set the Mobility Master or managed device to boot from the partition that contains the pre-upgrade AOS-W version.

When you specify a boot partition or copy an image file to a system partition, Mobility Master or managed device checks if the AOS-W version is compatible with the configuration file. An error message is displayed if the boot parameters are incompatible with the AOS-W version and configuration files.

5. After switching the boot partition, perform the following steps:
 - Restore the pre-upgrade flash backup from the file stored on the Mobility Master or managed device. Do not restore the AOS-W flash backup file.
 - Do not import the WMS database.
 - If the RF plan is unchanged, do not import it. If the RF plan was changed before switching the boot partition, the changed RF plan does not appear in the downgraded AOS-W version.
 - If any new certificates were added in the upgraded AOS-W version, reinstall these certificates in the downgraded AOS-W version.

Downgrade AOS-W version using the WebUI or CLI.

In the WebUI

The following steps describe how to downgrade the AOS-W version:

1. If the saved pre-upgrade configuration file is on an external FTP or TFTP server, copy the file to the Mobility Master or managed device by navigating to the **Diagnostics > Technical Support > Copy Files** page.
 - a. From **Select source file** drop-down list, select FTP or TFTP server, and enter the IP address of the FTP or TFTP server and the name of the pre-upgrade configuration file.

b. From **Select destination file** drop-down list, select **Flash file system**, and enter a file name (other than default.cfg).

c. Click **Copy**.

2. Determine the partition on which your pre-upgrade AOS-W version is stored by navigating to the **Maintenance > Software Management > Upgrade** page. If a pre-upgrade AOS-W version is not stored on your system partition, load it into the backup system partition by performing the following steps:



You cannot load a new image into the active system partition.

a. Enter the FTP or TFTP server address and image file name.

b. Select the backup system partition.

c. Enable **Reboot Controller after upgrade**.

d. Click **Upgrade**.

3. Navigate to the **Maintenance > Software Management > Reboot** page, select **Save configuration before reboot**, and click **Reboot**.

The Mobility Master or managed device reboots after the countdown period.

4. When the boot process is complete, verify that the Mobility Master or managed device is using the correct AOS-W version by navigating to the **Maintenance > Software Management > About** page.

In the CLI

The following steps describe how to downgrade the AOS-W version:

1. If the saved pre-upgrade configuration file is on an external FTP or TFTP server, use the following command to copy it to the Mobility Master or managed device:

```
(host) # copy ftp: <ftphost> <ftpusername> <image filename> system: partition 1
```

or

```
(host) # copy tftp: <tftphost> <image filename> system: partition 1
```

2. Set the Mobility Master or managed device to boot with your pre-upgrade configuration file.

```
(host) # boot config-file <backup configuration filename>
```

3. Execute the **show image version** command to view the partition on which your pre-upgrade AOS-W version is stored.

```
(host) #show image version
```



You cannot load a new image into the active system partition.

4. Set the backup system partition as the new boot partition.

```
(host) # boot system partition 1
```

5. Reboot the Mobility Master or managed device.

```
(host) # reload
```

6. When the boot process is complete, verify that the Mobility Master or managed device is using the correct AOS-W version.

```
(host) # show image version
```


Before Calling Technical Support

Provide the following information when you call the Technical Support:

- The status of installation (new or existing) and recent changes to network, device, or AP configuration. If there was a configuration change, list the exact configuration steps and commands used.
- A detailed network topology including all the devices in the network with IP addresses and interface numbers.
- The make and model number of the wireless device and NIC, driver date, version, and configuration of the NIC, and the OS version including any service packs or patches.
- The logs and output of the **show tech-support** command.
- The syslog file at the time of the problem.
- The date and time when the problem first occurred. If the problem is reproducible, list the exact steps taken to re-create the problem.
- Any wired or wireless sniffer traces taken during the time of the problem.
- The device site access information.