AOS-W 8.6.0.4

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Contents

Revision History

The following table provides the revision history of this document.

Table 1: *Revision History*

Revision	Change Description
Revision 01	Initial release.

This AOS-W release notes includes the following topics:

| NOTE | Throughout this document, branch switch and local switch are termed as managed device. |

- New Features and Enhancements on page 8
- Supported Platforms on page 9
- Regulatory Updates on page 12
- Resolved Issues on page 13
- Known Issues and Limitations on page 14
- Upgrade Procedure on page 24

For a list of terms, refer Glossary.

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

Contacting Support

Table 2: *Contact Information*

Contact Center Online	
Main Site	https://www.al-enterprise.com
Support Site	https://businessportal2.alcatel-lucent.com
Email	ebg_global_supportcenter@al-enterprise.com
Service & Support Contact Center Telephone	
North America	1-800-995-2696
Latin America	1-877-919-9526
EMEA	+800 00200100 (Toll Free) or +1(650)385-2193
Asia Pacific	+65 6240 8484
Worldwide	1-818-878-4507

New Features and Enhancements in AOS-W 8.6.0.4

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

Supported Platforms in AOS-W 8.6.0.4

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 8.6.0.4*

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 8.6.0.4*

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
MC-VA-xxx Virtual OmniAccess Mobility Controllers	MC-VA-10, MC-VA-50, MC-VA-250, MC-VA-1K, MC-VA 4K, MC-VA 6K

NOTE MC-VA-4K and MC-VA-6K are not orderable SKUs. However, you can scale up by installing multiple instances of MC-VA-1K. For example to deploy 4K APs on a single Mobility Controller Virtual Appliance, you need to add four MC-VA-1K licenses.

AP Platforms

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

Table 5: *Supported AP Platforms in AOS-W 8.6.0.4*

AP Family	AP Model
OAW-AP100 Series	OAW-AP104, OAW-AP105
OAW-AP103 Series	OAW-AP103
OAW-AP110 Series	OAW-AP114, OAW-AP115
OAW-AP130 Series	OAW-AP134, OAW-AP135
OAW-AP 170 Series	OAW-AP175AC, OAW-AP175AC-F1, OAW-AP175DC, OAW-AP175DC-F1, OAW-AP175P, OAW-AP175P-F1
OAW-AP200 Series	OAW-AP204, OAW-AP205
OAW-AP203H Series	OAW-AP203H
OAW-AP205H Series	OAW-AP205H
OAW-AP207 Series	OAW-AP207
OAW-AP203R Series	OAW-AP203R, OAW-AP203RP
OAW-AP210 Series	OAW-AP214, OAW-AP215
OAW-AP 220 Series	OAW-AP224, OAW-AP225
228 Series	OAW-AP228
OAW-AP270 Series	OAW-AP274, OAW-AP275, OAW-AP277

Table 5: *Supported AP Platforms in AOS-W 8.6.0.4*

AP Family	AP Model
OAW-AP300 Series	OAW-AP304, OAW-AP305
OAW-AP303 Series	OAW-AP303
OAW-AP303H Series	OAW-AP303H
OAW-AP310 Series	OAW-AP314, OAW-AP315
OAW-AP318 Series	OAW-AP210AP-318
OAW-AP320 Series	OAW-APAP-324, 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-AP387	OAW-AP387
500 Series	OAW-AP504, OAW-AP505
510 Series	OAW-AP514, OAW-AP515
530 Series	OAW-AP534, OAW-AP535
550 Series	OAW-AP555
OAW-RAP3 Series	OAW-RAP3WN, OAW-RAP3WNP
OAW-RAP100 Series	OAW-RAP108, OAW-RAP109
OAW-RAP155 Series	OAW-RAP155, OAW-RAP155P

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.

Regulatory Updates in AOS-W 8.6.0.4

The following DRT file version is part of this release:

- DRT-1.0_74687

Resolved Issues in AOS-W 8.6.0.4

This chapter describes the issues resolved in this release.

Table 6: *Resolved Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-200871 AOS-202284	—	After upgrading the managed devices to AOS-W 8.6.0.3, a large number of SNMP traps were sent to OmniVista 3600 Air Manager and the SNMP trap **wlsxAPChannelChange** did not display the **wlsxTrapAPARMChangeReason** field. The fix ensures that excessive SNMP traps are not sent to OmniVista 3600 Air Manager and the trap **wlsxAPChannelChange** displays all the fields.	AOS-W 8.6.0.3

Known Issues and Limitations in AOS-W 8.6.0.4

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

Known Issues

Following are the known issues observed in this release.

Table 7: *Known Issues in AOS-W 8.6.0.4*

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-152326 AOS-187297 AOS-187406 AOS-187549	186957	The beacon displays the country code information intermittently for 5 GHz non-DFS channel. This issue occurs when 802.11h is enabled in the radio profile. This issue is observed in 510 Series access points running AOS-W 8.3.0.0 or later versions.	AOS-W 8.4.0.0
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
AOS-155037	190571	A OAW-RAP fails to boot up. This issue occurs in a OAW-RAP with EST key type, **X9.62/SECG curve**. This issue is observed in OAW-AP303H access points running AOS-W 8.3.0.3 or later versions.	AOS-W 8.3.0.3
AOS-156085 AOS-157704	192119 194393	A few managed devices are unable to obtain the switch-IP address during boot up after an upgrade. This issue is observed in managed devices running AOS-W 8.1.0.0 or later versions.	AOS-W 8.1.0.0
AOS-182073 AOS-183743	—	An AP crashes and reboots unexpectedly. The log files lists the reason for the event as **Reboot caused by kernel panic: Rebooting the AP because of FW ASSERT**. This issue is observed in OAW-AP315 access points running AOS-W 8.3.0.5 or later versions.	AOS-W 8.3.0.5

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-182847	—	A few users are unable to copy the **WPA Passphrase** field and **High-throughput** profile to a new SSID profile in the **Configuration > System > Profiles > Wireless LAN > SSID > <SSID_Profile>** option of the WebUI. This issue occurs when a new SSID profile is created from an existing SSID profile in the WebUI. This issue is observed in managed devices running AOS-W 8.4.0.0 in a Mobility Master-Managed Device topology.	AOS-W 8.4.0.0
AOS-184947 AOS-192737	—	The jitter and health score data are missing from the **Dashboard > Infrastructure > Uplink > Health** page in the WebUI. This issue is observed in Mobility Master running AOS-W 8.4.0.4 or later versions.	AOS-W 8.4.0.4
AOS-184977 AOS-188242 AOS-188378 AOS-197491	—	The output of basic commands such as **show version**, **show clock**, and **show image version** are unable to display any information and the default gateway details are missing in a managed device. This issue occurs when the **/tmp** directory runs out of memory because of too many logs from the Policy Manager. This issue is observed in managed devices running AOS-W 8.4.0.0 or later versions.	AOS-W 8.4.0.0
AOS-188090 AOS-196004 AOS-199152	—	The **Dashboard > Overview > Clients** page of the WebUI displays incorrect usage values intermittently. This issue is observed in Mobility Master Virtual Appliances running AOS-W 8.4.0.0 or later versions.	AOS-W 8.4.0.0
AOS-188898 AOS-198730 AOS-200227	—	The **postgres** module crashes on a switch. This issue is observed in managed devices running AOS-W 8.2.1.0 or later versions.	AOS-W 8.2.2.6
AOS-190071 AOS-190372	—	A few users are unable to access the 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:** ■ Remove web category from the ACL rules and apply **any any any permit** policy. ■ Disable WebCC on the user role. ■ Change the VLAN of user role from trunk mode to access mode.	AOS-W 8.4.0.0
AOS-191216 AOS-196523 AOS-199160	—	A managed device crashes and reboots unexpectedly. The log file lists the reason for the event as **Reboot Cause: Kernel Panic (Intent:cause:register 12:86:e0:2).** This issue is observed in managed devices running AOS-W 8.5.0.4 or later versions.	AOS-W 8.5.0.4
AOS-191394	—	APs crash and reboot unexpectedly. The log file lists the reason for the event as **Reboot caused by kernel panic: Take care of the TARGET ASSERT first**. This issue is observed in 500 Series access points running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-191612	—	The mac address of users connected using VIA is not sent to ClearPass Policy Manager for authentication. This issue is observed when IKE V2 with EAP-FTC is used for VIA authentication. This issue is observed in Mobility Masters running AOS-W 8.5.0.1 or later versions.	AOS-W 8.5.0.1
AOS-192568 AOS-192736	—	A few clients are unable to connect to APs even though High-Efficiency was disabled on all the SSID profiles of the APs. This issue is observed in OAW-AP515 access points running AOS-W 8.5.0.0 or later versions.	AOS-W 8.5.0.1
AOS-192725 AOS-190476 AOS-196004	—	The **Dashboard > Overview** page of the WebUI displays incorrect number of users intermittently. This issue is observed in Mobility Masters running AOS-W 8.3.0.8 or later versions.	AOS-W 8.3.0.8
AOS-192738 AOS-197047	—	The Mobility Master list in the WebUI incorrectly displays the mac address of the primary Mobility Master for the secondary Mobility Master. This issue is observed in Mobility Masters running AOS-W 8.3.0.10 or later versions.	AOS-W 8.3.0.10
AOS-193033 AOS-198921 AOS-198953	—	Some clients are not redirected to the captive portal page. This issue occurs because the **Nginx** process fails due to a race condition. This issue is observed in managed devices running AOS-W 8.4.0.2 or later versions.	AOS-W 8.4.0.2
AOS-193184	—	L2 connected managed devices move to L3 connected state after upgrade. This issue is observed in managed devices running AOS-W 8.5.0.2 or later versions.	AOS-W 8.5.0.2
AOS-193775 AOS-194581 AOS-197372	—	A mismatch of AP count and client count is observed between the Mobility Master and the managed device. This issue is observed in Mobility Masters running AOS-W 8.3.0.0 or later versions.	AOS-W 8.5.0.2
AOS-193840	—	The managed device loses connectivity to IPv6 gateway intermittently. This issue is observed in managed devices running AOS-W 8.3.0.6 or later versions.	AOS-W 8.3.0.6
AOS-193883 AOS-197756	—	A few APs are unable to use DHCP IPv6 addresses and option 52 for master discovery. This issue occurs when the APs do not clear the previous LMS entries after the upgrade. This issue is observed in access points running AOS-W 8.3.0.8 or later versions. **Workaround:** Delete the IPv4 addresses from ap system profile using the command, **ap system-profile** and from high availability profiles using the command, **ha.**	AOS-W 8.3.0.8
AOS-194370	—	High memory utilization is observed in the **cluster manager** process of managed devices. This issue is observed in managed devices running AOS-W 8.4.0.2 or later versions in a cluster setup.	AOS-W 8.4.0.2

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-194381	—	Some managed devices loose the route-cache entries and drop the VRRP IP addresses sporadically. This issue is observed in managed devices running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-194846	—	The commands **show ap arm history** and **show airmatch debug optimization** do not display the output. This issue is observed in Mobility Masters running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-194911	—	Incorrect flag output is displayed for APs configured with 802.1X authentication when the **show ap database** command is executed. This issue is observed in APs running AOS-W 8.5.0.2 or later versions.	AOS-W 8.5.0.2
AOS-194930	—	The **Auth Sub-type** column under **Managed Network > Dashboard > Overview > Clients** table displays **None** though the authentication sub-type is **EAP-PEAP**. This issue occurs in some 802.1X authenticated users after a failed station reauthentication attempt. This issue is observed in managed devices running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-194964	—	A few users are unable to clone the configuration from an existing group to a new group in a Mobility Master. This issue is observed in Mobility Masters running AOS-W 8.4.0.1 or later versions. **Workaround:** Execute the **rf dot11a-radio-profile <profile name>** command to change the operating mode of the AP from am-mode to ap-mode.	AOS-W 8.5.0.2
AOS-195089	—	The DNS traffic is incorrectly getting classified as Thunder and is getting blocked. This issue occurs when the DNS traffic is blocked and peer-peer ACL is denied for users. This issue is observed in managed devices running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-195177	—	Managed devices frequently generate internal system error logs. This issue occurs when the **sapd** process reads a non-existent interface. This issue is observed in OAW-4650 switches running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-195228	—	The device status is always displayed as inactive when SNMP walk is performed. This issue is observed in stand-alone switches running AOS-W 8.5.0.2 or later versions.	AOS-W 8.5.0.2
AOS-195434	—	An AP crashes and reboots unexpectedly. The log files list the reason for the event as **Reboot caused by kernel panic: Fatal exception**. This issue is observed in APs running AOS-W 8.5.0.0 o or later versions in a Mobility Master-Managed Device topology.	AOS-W 8.5.0.2
AOS-195526	—	Some clients are unable to get the DHCP addresses. This issue occurs because the ACE entries of the logon role ACL changes to **Deny all** when the PEFNG feature is disabled. This issue is observed in managed devices running AOS-W 8.3.0.8 or later versions.	AOS-W 8.3.0.8

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-195939	—	UBT users are assigned **logon** role when they receive the same IP addresses. This issue is observed in managed devices running AOS-W 8.5.0.2 or later versions.	AOS-W 8.5.0.2
AOS-196115	—	Users are unable to configure untrusted VLAN in the **Configuration > Interfaces > Ports** page of the WebUI. This issue is observed in Mobility Masters running AOS-W 8.5.0.0 or later versions.	AOS-W 8.5.0.0
AOS-196457	—	High radio noise floor is observed on APs. This issue is observed on OAW-AP515 access points running AOS-W 8.5.0.2 or later versions.	AOS-W 8.5.0.2
AOS-196560 AOS-197671	—	APs crash and reboot unexpectedly. The log files list the reason for the event as **Reboot caused by kernel panic: Fatal exception in interrupt**. This issue is observed in 500 Series access points running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0
AOS-196593	—	APs crash and reboot unexpectedly. The log file lists the reason for the event as **reboot caused by Kernel panic - not syncing: Fatal exception in interrupt PC is at 0x000C7461.** This issue is observed in OAW-AP335 access points running AOS-W 8.3.0.8 or later versions.	AOS-W 8.3.0.8
AOS-196697 AOS-199833	—	APs crash and reboot unexpectedly. The log file lists the reason for the event as **PC is at wlc_apps_psq+0xc/0x6ec [wl_v6];LR is at wlc_apps_release_count+0xb4/0x164 [wl_v6].** This issue is observed in OAW-AP505 access points running AOS-W 8.3.0.8 or later versions.	AOS-W 8.3.0.8
AOS-196864	—	Adding a new VLAN ID connects L3 but displays that the connected VLAN ID fails with a different ID. This issue is observed when new VLANs are added and the total number of VLANs are 100/101, 200/201, 300/301 and likewise. This issue is observed in managed devices running AOS-W 8.5.0.3 or later versions.	AOS-W 8.5.0.3
AOS-196878 AOS-197216	—	The **Datapath** process crashes on a managed device. The log file lists the reason for the event as **wlan-n09-nc1.gw.illinois.edu.** This issue is observed in managed devices running AOS-W 8.5.0.2 or later versions.	AOS-W 8.5.0.2
AOS-197023	—	Mobility Master sends incorrect AP regulatory-domain-profile channel changes to the managed device during the initial configuration propagation. This issue is observed in Mobility Masters running AOS-W 8.0.0.0 or later versions. **Workaround:** The following are recommended: In the CLI, execute the **ap regulatory-domain-profile** command to create an AP regulatory-domain- profile without any channel configuration, save the changes and later add or delete channels as desired. In the WebUI, create an AP regulatory-domain-profile with default channel selected, save the changes and later add or delete channels as desired in the **Configuration > AP Groups** page.	AOS-W 8.5.0.4
AOS-197048	—	Some clients face degraded Wi-Fi download speed after the managed device resumes function post standby mode. This issue occurs when the AP does not setup an aggregation session. This issue is observed in managed devices running AOS-W 8.3.0.8 or later versions.	AOS-W 8.3.0.8

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-197127	—	A managed device crashes and reboots unexpectedly. The log file lists the reason for this event as **Datapath timeout (Fpapps Initiated) (Intent:cause:register 51:86:50:2).** This issue is observed in OAW-4x50 Series switches running AOS-W 8.3.0.7 or later versions in a cluster setup. **Duplicates:** AOS-197060, AOS-197130, AOS-197137, AOS-197161, AOS-197163, AOS-198720, AOS-201821	AOS-W 8.3.0.7
AOS-197215	—	Users are unable to delete the **Weekend** entry under **Start Day** of **Time range** field in the WebUI. This issue occurs when the users create a new policy rule in the **Configuration > Roles & Policies > Policies > <policy_name> > <new_policy_rule>** page, and select **Access control** radio button in the **Rule type** field of the WebUI. This issue is observed in Mobility Masters running AOS-W 8.2.2.6 or later versions.	AOS-W 8.2.2.6
AOS-197565	—	APs crash and reboot unexpectedly. The log file lists the reason for the event as **Dump capture kernel:AP rebooted caused by cold HW reset(power loss).** This issue is observed in access points running AOS-W 8.5.0.0 or later versions.	AOS-W 8.5.0.2
AOS-197631	—	Policy-based routing is not applied when IPsec map is configured as nexthop. This issue is observed in managed devices running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0
AOS-197812	—	A mismatch of user roles is observed in the WebUI and CLI of the Mobility Master and managed device. This issue occurs when UDR is configured to assign user role to clients. This issue is observed in both Mobility Masters and managed devices running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0
AOS-197912	—	Multicast traffic is not forwarded to the clients when UAC and AAC are different. This issue occurs when the VLANs assigned by radius server are different from the VLANs configured in the virtual-ap profile. This issue is observed in managed devices running AOS-W 8.3.0.7 or later versions.	AOS-W 8.3.0.7
AOS-197945	—	Access points crash and reboot unexpectedly. The log file lists the reason for the events as, **BadAddr:ffff00000010 PC:wlc_dump_aggfifo+0x1160/0x12b0 [wl_v6] Warm-reset.** This issue occurs due to memory corruption. This issue is observed in OAW-AP514 and OAW-AP515 access points running AOS-W 8.5.0.3 or later versions.	AOS-W 8.5.0.3
AOS-198007	—	APs are unable to ping managed devices and the APs keep switching between clusters. This issue is observed in access points running AOS-W 8.3.0.8 or later versions.	AOS-W 8.3.0.8
AOS-198024	—	Users are unable to access any page after the fifth page using the **Maintenance > Access Point** page in the WebUI. This issue is observed in stand-alone switches running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0
AOS-198157	—	A stand-alone switch crashes and reboots unexpectedly. The log file lists the reason for the event as **Reboot Cause: Datapath timeout (Intent:cause: 86:56)**. This issue is observed in stand-alone switches running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-198218	—	After reboot, the GRE tunnel of a standby switch is UP instead of DOWN in a VRRP instance and this results in network loop. This issue is observed in managed devices running AOS-W 8.5.0.3 or later versions.	AOS-W 8.5.0.3
AOS-198266	—	MAC authenticated clients are unable to reauthenticate even after enabling reauthentication. This issue is observed in stand-alone switches running AOS-W 8.5.0.5 or later versions.	AOS-W 8.5.0.5
AOS-198281	—	The details of the **Up** time under **Managed network > Dashboard > Access Points > Access Points** table does not get updated correctly. This issue is observed in Mobility Masters running AOS-W 8.2.2.6 or later versions.	AOS-W 8.2.2.6
AOS-198475	—	Users are unable to upgrade the Mobility Master Virtual Appliance to AOS-W 8.5.0.0 or later versions. This issue is observed in Mobility Master Virtual Appliance running AOS-W 8.5.0.5 or later versions.	AOS-W 8.5.0.5
AOS-198483	—	WebUI does not have an option to map the **rf dot11-60GHz-radio-profile** to an AP group. This issue is observed in Mobility Masters running AOS-W 8.5.0.4 or later versions.	AOS-W 8.5.0.4
AOS-198488	—	An AP reboots unexpectedly and sets an **F** flag. This issue occurs when an 801.1X client is connected to the AP in bridge mode or tunnel mode for wired 802.1X authentication. This issue is observed in OAW-AP205H and OAW-AP303H access points running AOS-W 8.5.0.3 or later versions.	AOS-W 8.5.0.3
AOS-198511	—	A few managed devices display an error, **Similar name certificate already exists on the same or different path. upload with a different name** when a new certificate was uploaded. This issue occurs when the same new certificate is uploaded with its old name because the certificate manager receives the **crypto pki-import** command twice for a single certificate addition. This issue is observed in managed devices running AOS-W 8.4.0.5 or later versions.	AOS-W 8.4.0.5
AOS-198605	—	A few APs fail to transition to a standby managed device during a datacenter failover. This issue is observed in managed devices running AOS-W 8.3.0.10 or later versions.	AOS-W 8.3.0.10
AOS-198787 AOS-198929	—	A OAW-RAP does not come up on a managed device when Verizon U730L modem is used. This issue is observed in managed devices running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0
AOS-198834 AOS-200088 AOS-200555 AOS-201312	—	Some managed devices crash and reboot unexpectedly. The log file lists the reason for the event as **rebooted due to Soft Watchdog reset (Intent:cause:register de:86:70:4).** This issue is observed in OAW-4750XM switches running AOS-W 8.3.0.10 or later versions.	AOS-W 8.3.0.10
AOS-198849 AOS-198850	—	Users are unable to configure 2.4 GHz radio profile in the **Configuration > System > Profiles > 2.4 GHz radio profile** page and the WebUI displays the error message, **Feature is not enabled in the license.** This issue is observed in stand-alone switches running AOS-W 8.5.0.3 or later versions.	AOS-W 8.5.0.3

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-198991	—	Users are unable to add VLAN to an existing trunk port using the **Configuration > Interfaces >VLANs** page of the WebUI. This issue is observed in Mobility Masters running AOS-W 8.6.0.1 or later versions.	AOS-W 8.6.0.2
AOS-199012 AOS-198865	—	A managed device crashes and reboots unexpectedly. The log file lists the reason for the event as **Reboot Cause: Datapath timeout (SOS Assert) (Intent:cause:register 54:86:50:4)**. This issue is observed in managed devices running AOS-W 8.4.0.4 or later versions.	AOS-W 8.4.0.4
AOS-199381	—	Users are unable to connect to the backup SSID of a OAW-RAP. This issue occurs when the users try to connect after an AP reboot. This issue is observed in OAW-RAPs running AOS-W 8.6.0.1 or later versions.	AOS-W 8.6.0.2
AOS-199420	—	ClientMatch steered clients to APs that are deployed in different clusters. This issue is observed in access points running AOS-W 8.2.2.2 or later versions.	AOS-W 8.2.2.2
AOS-199423	—	Some L3 redundant Mobility Masters witness **profmgr** error logs. This issue occurs when the Mobility Master is upgraded to a later version of AOS-W. This issue is observed in Mobility Masters running AOS-W 8.5.0.5-FIPS.	AOS-W 8.5.0.5
AOS-199492	—	A few APs do not get displayed in the **show airgroup aps** command output and the **auto-associate policy** stops working as expected. This issue occurs when the AirGroup domain is in distributed mode and is not validated in a cluster deployment. This issue is observed in managed devices running AOS-W 8.6.0.0 or later versions.	AOS-W 8.6.0.0
AOS-199539	—	All the profiles listed under an AP group get marked as default except the VAP profile. This issue is observed in managed devices running AOS-W 8.5.0.4 or later versions. **Workaround:** Run **ccm-debug full-config-sync** command on the effected managed device.	AOS-W 8.5.0.4
AOS-199878 AOS-198897 AOS-200006 AOS-200080	—	An AP crashes and reboots unexpectedly. The log file lists the reason for this event as **Reboot caused by kernel panic: CPU stall**. This issue is observed in OAW-AP303H access points running AOS-W 8.5.0.4 or later versions.	AOS-W 8.5.0.4
AOS-200071 AOS-201068	—	Some clients are getting **U-APSD disabled in association** response though they are able to connect to an SSID without any issues. This issue does not allow the client to enter power saving mode and reduces the talk time from 12 hours to 3 hours. This issue is observed in access points running AOS-W 8.3.0.0 or later versions. **Workaround:** Disable the 802.11r profile in the configurations using the **no dot11r** command.	AOS-W 8.6.0.2
AOS-200187	—	Mobility Master is assigning duplicate IP addresses to Branch office switches from the VLAN pool. This issue is observed in Mobility Masters running AOS-W 8.5.0.5 or later versions.	AOS-W 8.5.0.5

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-200275	—	When the **interface gigabitethernet no description** command is executed, the GE0/0/0 value is sent by default. This issue is observed in managed devices running AOS-W 8.2.2.6 or later versions.	AOS-W 8.2.2.6
AOS-200462	—	A few managed devices do not respond to the SNMP queries from Airwave regarding rogue information. This issue occurs when: ■ there is a mismatch in the message length between **WMS** process and **AM** process. ■ the managed device is running a higher version of AOS-W than that of the AP. This issue is observed in managed devices running AOS-W 8.3.0.8 or later versions.	AOS-W 8.3.0.8
AOS-200733	—	APs crash and reboot unexpectedly. The log file list the reason for the event as **kernel page fault at virtual address 00005654, epc == c0bd7dd4, ra == c0bf95f8.** This issue is observed in APs running AOS-W 8.5.0.3 or later versions.	AOS-W 8.5.0.3
AOS-201042	—	A large number of packet drops are observed in a few APs running AOS-W 8.3.0.6 or later versions. This issue occurs when the AP SAP MTU datapath tunnel is set to 1514.	AOS-W 8.3.0.6
AOS-201171	—	Clients are unable to receive traffic from APs. This issue occurs when large number of clients are associated to APs and when aggressive power saving transitions are observed on the associated clients. This issue is observed in access points AOS-W 8.6.0.3.	AOS-W 8.6.0.3
AOS-201200	—	The **show license-pool-profile** command does not display the output when executed in the **/mm/my node** hierarchy. This issue is observed in Mobility Masters running AOS-W 8.3.0.6 or later versions.	AOS-W 8.5.0.5
AOS-201210	—	When the **show aaa authentication-server radius statistics** command is executed, few RADIUS authentication servers always display the **expAuthTm** value as 0. This issue is observed when the managed devices are upgraded to AOS-W 8.5.0.5 or later versions.	AOS-W 8.5.0.5
AOS-201250	—	Some managed devices crash and reboot unexpectedly. The log file lists the reason for the event as **Nanny rebooted machine - low on free memory.** This issue is not limited to any switch platform or AOS-W release version.	AOS-W 8.5.0.5
AOS-201329	—	In a configuration node hierarchy, CPsec toggling does not work at the lower nodes. This issue occurs when the managed device is downgraded from AOS-W 8.3.0.12 to AOS-W 8.3.0.10. This issue is observed in managed devices running AOS-W 8.3.0.10 or later versions.	AOS-W 8.3.0.10
AOS-201463	—	An AP is unable to receive IPv6 address from IPv6 RA. This issue occurs when static IPv4 addresses are configured on LACP enabled APs. This issue is observed in access points running AOS-W 8.6.0.3. **Workaround:** Do not configure static IPv4 addresses for LACP enabled APs.	AOS-W 8.6.0.3

Table 7: *Known Issues in AOS-W 8.6.0.4*

New Bug ID	Old Bug ID	Description	Reported Version
AOS-201681	—	Data traffic to clients on radio 2 fails. This issue occurs due to cluster failover. This issue is observed in tri-radio enabled OAW-AP555 access points running AOS-W 8.6.0.3. **Workaround:** The following are recommended: ■ Disable the tri-radio mode by disabling the **Split radio** toggle switch in the **Configuration> AP groups > AP group <Name of the AP group>** table. ■ Associate the clients to Radio 0.	AOS-W 8.6.0.3
AOS-202034	—	The **STM** process in a managed device crashes unexpectedly, due to which few APs are unable to connect to the managed device. This issue is observed in managed devices running AOS-W 8.6.0.0 or later versions. **Workaround:** Disable **dual-5ghz-mode** parameter in the **ap system-profile** command.	AOS-W 8.6.0.0
AOS-202110	—	The **Active Controller** field displays a hyphen (-) for some APs under **Dashboard > Infrastructure > Access Devices** page in the WebUI. This issue is observed in Mobility Masters running AOS-W 8.2.0.0 or later versions.	AOS-W 8.5.0.6
AOS-202195	—	A managed device crashes and reboots unexpectedly. The log file lists the reason for the event as **Nanny rebooted machine - isakmpd process died (Intent:cause:register 34:86:50:2).** This issue is observed in managed devices running AOS-W 8.3.0.6 or later versions.	AOS-W 8.3.0.6
AOS-202577	—	AirGroup stops working on managed devices running AOS-W 8.6.0.3 in a cluster setup.	AOS-W 8.6.0.3

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

CAUTION

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

Topics in this chapter include:

Migrating from AOS-W 6.x to AOS-W 8.x

Use the interactive migration tool provided on the customer support site to migrate any AOS-W 6.x deployments to one of the following AOS-W 8.x deployments:

- Master-Local setup to Mobility Master
- All-Master setup to Mobility Master
- Master-Local setup to Master switch Mode in AOS-W 8.x
- Stand-alone switch running AOS-W 8.x

For more information, refer to the *AOS-W 8.x Migration Guide*.

NOTE

Licenses are not migrated by the migration tool from any of the devices to Mobility Master. However, the licenses are preserved when migrating to AOS-W 8.x Master switch Mode or stand-alone switches. For more information on license migration, refer the *Alcatel-Lucent Mobility Master Licensing Guide*.

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 only if the Mobility Master is running two code versions higher than the code versions running on the managed devices. 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 8.3.0.0 and will not be supported if the managed devices are running AOS-W 8.2.0.0 or AOS-W 8.4.0.0.

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 26 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 26 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 26 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.

> **CAUTION**
>
> Ensure that there is enough free memory and flash space on your Mobility Master or managed device. For details, see Memory Requirements on page 25.

> **NOTE**
>
> 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 ccurs 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.

> **NOTE**
>
> 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.

> **NOTE**
>
> 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 26 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 26 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 26.
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:

⚠ CAUTION

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
   ```

⚠️ **CAUTION**

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.