# **ArubaOS 8.5.0.0**



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# **Revision History**

The following table provides the revision history of this document.

 Table 1: Revision History

Revision	Change Description
Revision 06	Updated the links in the <b>Related Documents</b> section.
Revision 05	Added AOS-185103 under Known Issues section.
Revision 04	<ul> <li>Added AOS-183536 under Resolved Issues section.</li> <li>Added AOS-157396 under Resolved Issues section.</li> <li>Added a limitation regarding captive portal in the Known Issues section.</li> <li>Updated the description of AOS-155389 under Known Issues section.</li> <li>Added a note regarding MU-MIMO support in 510 Series APs.</li> </ul>
Revision 03	Removed AOS-185867 from Known Issues section, and AOS-155092 from Resolved Issues section.
Revision 02	Added content for bug AOS-183745 as a limitation.
Revision 01	Initial release.

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This ArubaOS release notes includes the following topics:



Throughout this document, branch controller and local controller are termed as managed device.

- New Features and Enhancements on page 9
- Supported Platforms on page 16
- Regulatory Updates on page 19
- Resolved Issues on page 20
- Known Issues and Limitations on page 51
- Upgrade Procedure on page 59

## **Important Points Before Upgrading to ArubaOS 8.5.0.0**

DPI classification is not initialized after a controller is upgraded from ArubaOS 8.4.0.0, 8.4.0.1, or 8.4.0.2 to ArubaOS 8.5.0.0. The affected platforms are 7200 Series controllers.

An additional reboot of the affected platform is required to initialize DPI classification.

To check the status of DPI classification after upgrading an affected platform from ArubaOS 8.4.0.0, 8.4.0.1, or 8.4.0.2 to ArubaOS, 8.5.0.0, issue the **show firewall | include dpi** command. In the following example, DPI classification is disabled:

If DPI classification is enabled, further action is not needed. However, if DP classification is disabled, issue the **show datapath utilization** and check if the DPI classification CPUs are initialized. In the following example, the DPI classification CPUs are disabled:

```
(host) #show datapath utilization

Datapath CPU Allocation Summary
Slow Path (SP) : 1, Slow Path Gateway (SPGW) : 1
Fast Path (FP) : 17, Fast Path Gateway (FPGW) : 1
DPI : 0, Crypto (CRYP) : 0
Slow Path Spare (SPSPARE) : 0
```

If the DPI classification CPUs are not initialized, reboot the affected platform by:

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- Issuing the reload command.
- Power cycling the controller.

## **Related Documents**

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

- ArubaOS Getting Started Guide
- ArubaOS User Guide
- ArubaOS CLI Reference Guide
- ArubaOS Migration Guide
- ArubaOS API Guide
- Aruba Mobility Master Licensing Guide
- Aruba Virtual Appliance Installation Guide
- Aruba Mobility Master Hardware Appliance Installation Guide

## **Supported Browsers**

The following browsers are officially supported for use with the ArubaOS 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 58 or later on Windows 7, Windows 8, Windows 10, and macOS
- Apple Safari 9.0 or later on macOS
- Google Chrome 67 or later on Windows 7, Windows 8, Windows 10, and macOS

# **Contacting Support**

**Table 2:** Contact Information

Main Site	arubanetworks.com
Support Site	support.arubanetworks.com
Airheads Social Forums and Knowledge Base	community.arubanetworks.com

North American Telephone	1-800-943-4526 (Toll Free) 1-408-754-1200
International Telephone	arubanetworks.com/support-services/contact-support/
Software Licensing Site	<u>Ims.arubanetworks.com</u>
End-of-life Information	arubanetworks.com/support-services/end-of-life/
Security Incident Response Team	Site: <u>arubanetworks.com/support-services/security-bulletins/</u> Email: <u>aruba-sirt@hpe.com</u>

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This chapter describes the features and enhancements introduced in this release.

#### **AP Platform**

### **530 Series Campus Access Points**

The Aruba530 Series campus APs (AP-534, and AP-535) are high-performance, multi-radio wireless devices that can be deployed in either controller-based or controller-less network environments. These APs deliver high performance concurrent 2.4 GHz and 5 GHz 802.11ax Wi-Fi (Wi-Fi 6) functionality with 4x4 MIMO radios, while also supporting legacy 802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac wireless services.

Wired Ethernet ports located on the back of the 530 Series campus APs are used to connect the device to the wired networking infrastructure (wired speeds up to 5 Gbps are supported by both ports) and to provide POE power (802.3at class 4 or 802.3bt class 5) to the device. These APs also support 802.11w standard in tunnel mode with WPA3 security mode.

In addition to both the Wi-Fi radios, the 530 Series campus APs are equipped with Bluetooth Low Energy (BLE) radio that provide the following capabilities:

- Location beacon applications
- IoT gateway applications

For complete technical details refer 530 Series Campus APs Datasheet. For installation instructions, refer Aruba530 Series Campus APs Installation Guide.

## **550 Series Campus Access Points**

The Aruba550 Series campus APs (AP-555) are high-performance, multi-radio wireless devices that can be deployed in either controller-based or controller-less network environments. These APs deliver high-performance concurrent 2.4 GHz 802.11ax Wi-Fi (Wi-Fi 6) functionality with 4x4 MIMO radio and 5 GHz 802.11ax Wi-Fi (Wi-Fi 6) functionality with 8x8 MIMO radio, while also supporting legacy 802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac wireless services. These APs also support 802.11w standard in tunnel mode with WPA3 security mode.

Wired Ethernet ports located on the back of the 550 Series campus APs are used to connect the device to the wired networking infrastructure (wired speeds up to 5 Gbps are supported by both ports) and to provide POE power (802.3at class 4 or 802.3bt class 5) to the device.

In addition to both the Wi-Fi radios, 550 Series campus APs are equipped with Bluetooth Low Energy (BLE) radio that provide the following capabilities:

- Location beacon applications
- IoT gateway applications

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For complete technical details refer 550 Series Campus APs Datasheet. For installation instructions, refer 550 Series Campus Access Points Installation Guide.

### **Enhancements to 510 Series Campus Access Points**

The Aruba 510 Series campus APs now support the following features:

- Orthogonal Frequency Division Multiple Access (OFDMA)
- ClientMatch
- Cellular modem support
- Hotspot
- Mesh



The 510 Series Campus Access Points do not support UL MU-MIMO and DL MU-MIMO.

For complete technical details refer 510 Series Access Points Datasheet. For installation instructions, refer 510 Series Access Points Installation Guide.

### **Enhancements to Management Frame Protection**

The management frame protection parameters in the SSID profile cannot be configured for WPA3 opmodes in the command-line interface, they are set automatically based on the opmode. Hence, the descriptions of these parameters are enhanced to indicate that they are configurable only for WPA2 opmodes.

#### **Mute AP Radio**

Starting from this release, the rf dot11a-radio-profile and rf dot11g-radio-profile commands include the am-tx-mute parameter. Enable the amtx-mute parameter to prevent an AP that operates in the AM or spectrum mode from creating spurious transmissions during AP boot. By default, the am-tx-mute is disabled.

## **Support for New 4G Modems**

Starting from ArubaOS 8.5.0.0, the following 4G modems are supported on Remote APs:

- ZTE MF823 4G modem
- Huawei F8372 4G modem
- Huawei K5160 4G modem

#### **WIDS Containment Enhancements**

Air Monitor now sends tarpit or deauthentication containment frames for rogue APs and prevents clients from associating with rogue APs to mitigate possible security threats in a wireless network.

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#### **Controller Platform**

## **Support for 4G Modems on 7000 Series Controllers**

Starting from ArubaOS 8.5.0.0, the following 4G modems are supported on 7000 Series controllers:

- ZTE MF823 4G modem
- Huawei E8372 4G modem
- Huawei K5160 4G modem

## **Authentication**

## Support for 256-bit Encryption with WPA3 Enterprise in non-CNSA Mode

ArubaOS supports 256-bit encryption with WPA3 enterprise in non-CNSA mode.

## Support for WPA3 and Enhanced-Open Security Enhancements on AP-534, AP-535, and AP-555 Access Points

The AP-534, AP-535, and AP-555 access points support the WPA3 (including the optional CNSA mode) and the optional enhanced-open security enhancements as specified in the certification programs of Wi-Fi Alliance.

### 802.11ax capability on ClientMatch

Starting from this release, any 802.11ax capable STAs can be matched with 802.11ax capable radios dynamically resulting in better throughput and spectral efficiency. 802.11ax clients are best compatible with 802.11ax capable radios, resulting in better throughput and spectral efficiency. When an 802.11ax client is associated with a lower radio, ClientMatch pushes the client to the best compatible 802.11ax radio for advanced capabilities. Though STA is in good health, and is 802.11ax capable, it still sometimes connects to lower radios. ClientMatch finds a potential 802.11ax radio on the same band and the client moves to the new 802.11ax radio. The **rf arm-profile** command has been modified to include the **cm-he-min-signal** parameter.

#### **BLE**

#### **Aruba Sensor Value**

An AP classifies and parses the content of advertisement and scan response frames and reports the BLE telemetry to subscribers.

## BluConsole

ArubaOS supports iOS BluConsole mobile application that allows a user to access the serial console of an AP over BLE.

Before establishing a BLE connection, the BluConsole mobile application requests user permission to pair with an AP. Bonding is not performed until the user allows permission. User is requested permission every time the BluConsole mobile application connects to an AP.

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### **BLE Functionality**

BLE functionality is enabled on ArubaOS 203H Series, 203R Series, 210 Series/220 Series (external USB-based BLE radio), 207 Series, 300 Series, 510 Series, 530 Series and 550 Series FIPS APs.

#### **Branch Office**

## **Support for Wi-Fi Uplink**

The ArubaOS Uplink Manager supports Wi-Fi uplink that provides connectivity of an AP running ArubaOS to an external wireless network or a managed device by using a third-party AP, such as a Mi-Fi device. This requires the Aruba AP running ArubaOS to work as a standard Wi-Fi client.

## **Controller-Datapath**

## **Enhanced Visibility for Application and Datapath Health**

Starting with ArubaOS 8.5.0.0, the following list of new AMON messages are introduced to determine and assess the datapath CPU utilization and health.

- AMON\_SOS\_RES\_UTIL\_MESSAGE
- AMON\_SOS\_CPU\_UTIL\_STATS\_MESSAGE
- AMON SOS DEBUG DMA MESSAGE
- AMON\_SOS\_BWM\_MESSAGE
- AMON\_SOS\_MAINT\_CNTR\_MESSAGE
- AMON SOS CNTR DESC MESSAGE
- AMON\_SOS\_CNTR\_VAL\_MESSAGE

## Cluster

### **Optimizing Cluster Load Balancing Thresholds**

When any new managed device, including the managed device that comes up after a failover, is added to an existing cluster, it is considered for load balancing and accordingly, APs and clients are moved to balance the load in the cluster.

The load balancing thresholds are optimized to the following:

- Active client rebalance threshold: This threshold is set to 20%.
- Standby client rebalance threshold: This threshold is set to 40%.
- Active AP rebalance threshold: This threshold is set to 20%.
- **Active AP rebalance count:** The active AP rebalance count is set to 50.

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■ AP total load balance threshold: The total load balance threshold is set to 40%.

## **VRRP ID and Passphrase**

Cluster allows users to set the starting value of VRRP ID and passphrase for a virtual IP in the cluster profile to avoid VRRP conflict in CoA. That is, Cluster VRRP members will be assigned consecutive VRRP IDs starting from the value configured.

Following parameters can be set by the user in the cluster configuration profile:

- Specify the starting VRRP ID
- Specify the VRRP passphrase for securing the VRRP session

## **DHCP Option 82**

## **DHCP Option 82 Sub-option 5**

DHCP option 82 sub-option 5 can be used to relay non-routeable guest network users into corporate network to obtain IP addresses.

### **GRE Tunnels**

## **Configuring Tunnel Keepalives**

GRE tunnel will now support ICMP based health-check feature to monitor the status of WAN reachability from remote uplink.

#### IoT

## **Reporting Sensor Values**

Some sensor values are reported periodically to the configured server. The reporting interval is configured in the IoT transport profile. However, some sensor values are reported immediately without waiting for the next reporting interval. For example, events based on intrusion, fire, water level, and so on are reported immediately.

## **Support for Favendo Sensors**

ArubaOS supports Favendo sensors to provide IoT-based location services. The BLE relay process in Aruba AP handles telemetry streams to servers that provide location services.

### **Support for HanVit Sensors**

ArubaOS supports HanVit sensors to provide IoT-based location services. The BLE relay process in Aruba AP handles telemetry streams to servers that provide location services.

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### **Support for Zigbee 802.15.4 SoluM USB Dongle**

ArubaOS supports Zigbee 802.15.4 SoluM USB dongles. A SoluM Zigbee dongle plugs into the USB port of an Aruba AP and transfers electronic shelf label data from computer, server, or cloud to electronic shelf label tags through the AP. The USB port of the AP works as a wired Ethernet port and supports bridge and tunnel modes.

#### IPv6

### **IPv6 Support for Dynamic Authorization**

For configuring RFC-3576 RADIUS server, the managed device now supports IPv6 address based DAC for disconnect, session timeout, and CoA message requests, and identifies user sessions based on the user's IPv6 address.

#### **Remote Access Points**

#### **EST Enrollment**

Remote Access Points will use the Corporate DNS server to resolve DNS requests for EST enrollment.

## **Spectrum Analysis**

## Support for Spectrum Analysis on 530 Series and 550 Series Access Points

The 530 Series and 550 Series access points support spectrum analysis in both spectrum monitor and hybrid modes.

### WebUI

## **Configuring AP Image Preload**

Starting from this release, AP Image Preload can be configured by navigating to **Maintenance > Software Management** in the **Managed Network** node hierarchy.

## **Configuring Mobility Master Layer-3 Redundancy**

Mobility Master Layer-3 redundancy can be configured by navigating to **Configuration > Redundancy >L3 Redundancy** in the **Mobility Master** node hierarchy.

## **Configuring Radio Resource Profile**

Starting from this release, the radio resource 802.11k profile can configured by navigating to **Configuration > System > Profiles > All Profiles > Wireless LAN > 802.11k** in the **Managed Network** node hierarchy.

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## **Configuration Support for MultiZone**

MultiZone can now be configured using the WebUI by navigating to **Configuration > AP Group Name > MultiZone** in the **Managed Network** node hierarchy.

#### **VIA VPN Client Authentication**

The VIA connection profile now supports **EAP-GTC** authentication option that can be configured by navigating to **Configuration > System > Profiles > All Profiles > Other Profiles > VIA Connection** in the **Managed Network** node hierarchy.

#### **WebUI Session ID**

WebUI Session ID will contain a mix of uppercase, lowercase letters and numbers to prevent unauthorized intrusion into a pre-authenticated user session through brute-force attack.

#### **WLAN SSID Profile**

## **WLAN Ageout Refresh Direction**

The refresh direction of an SSID profile for a client is bidirectional by default. Starting from ArubaOS 8.5.0.0, the ageout refresh direction of SSID profile can be configured to use either bidirectional, receive-only, or transmit-only data frames.

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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 ArubaOS 8.5.0.0

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

# **Mobility Controller Platforms**

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

 Table 4: Supported Mobility Controller Platforms in ArubaOS 8.5.0.0

Mobility Controller Family	Mobility Controller Model		
7000 Series Hardware Mobility Controllers	7005, 7008, 7010, 7024, 7030		
7200 Series Hardware Mobility Controllers	7205, 7210, 7220, 7240, 7240XM, 7280		
MC-VA-xxx Virtual Mobility Controllers	MC-VA-50, MC-VA-250, MC-VA-1K		

## **AP Platforms**

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

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 Table 5: Supported AP Platforms in ArubaOS 8.5.0.0

AP Family	AP Model
100 Series	AP-104, AP-105
103 Series	AP-103
110 Series	AP-114, AP-115
130 Series	AP-134, AP-135
170 Series	AP-175AC, AP-175AC-F1, AP-175DC, AP-175DC-F1, AP-175P, AP-175P-F1
200 Series	AP-204, AP-205
203H Series	AP-203H
205H Series	AP-205H
207 Series	AP-207
203R Series	AP-203R, AP-203RP
210 Series	AP-214, AP-215
220 Series	AP-224, AP-225
228 Series	AP-228
270 Series	AP-274, AP-275, AP-277
300 Series	AP-304, AP-305
303 Series	AP-303
303H Series	AP-303H
310 Series	AP-314, AP-315
318 Series	AP-318
320 Series	AP-324, AP-325

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 Table 5: Supported AP Platforms in ArubaOS 8.5.0.0

AP Family	AP Model
330 Series	AP-334, AP-335
340 Series	AP-344, AP-345
360 Series	AP-365, AP-367
370 Series	AP-374, AP-375, AP-377
AP-387	AP-387
510 Series	AP-514, AP-515
530 Series	AP-534, AP-535
550 Series	AP-555
RAP 3 Series	RAP-3WN, RAP-3WNP
RAP 100 Series	RAP-108, RAP-109
RAP 155 Series	RAP-155, RAP-155P

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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 controller 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 support.arubanetworks.com.

The following DRT file version is part of this release:

■ DRT-1.0\_70076

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# Chapter 5 Resolved Issues

This chapter describes the issues resolved in this release.

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-127536 AOS-136297 AOS-136925 AOS-137646 AOS-182194	154286 165482 166256 167120	<b>Symptom:</b> Clients lost wireless connectivity randomly. As a result, buffer allocation failure increased. The fix ensures that the wireless connectivity to the clients is steady and connected at all times. <b>Scenario:</b> This issue was observed in APs running ArubaOS 8.0.0.0 or later versions in a master-standby topology.	Controller- Datapath	All platforms	ArubaOS 8.0.0.0
AOS-129107 AOS-146556 AOS-146683 AOS-147450 AOS-147541 AOS-147618 AOS-147743 AOS-148047 AOS-148154 AOS-150880 AOS-158210 AOS-158618	156245 179056 180324 180464 180594 180774 181215 181366 183219 184967 195117 195656	Symptom: The status of an AP was displayed as DOWN in the WebUI but displayed as UP when the show ap database long command was executed. The fix ensures that the status of the AP is displayed correctly in the WebUI and command-line interface.  Scenario: This issue was observed in managed devices running ArubaOS 8.4.0.0.	AP Platform	All platforms	ArubaOS 8.4.0.0
AOS-136651	165908	Symptom: A Mobility Master crashed and rebooted unexpectedly. The log file listed the reason for the event as Control Processor Kernel Panic. The fix ensures that the Mobility Master works as expected. Scenario: This issue occurred because of a softlock. This issue was observed in Mobility Masters running ArubaOS 8.1.0.2 or later versions. New Duplicates: AOS-185700, AOS-185346, AOS-183067, AOS-182050, AOS-158026, , AOS-156881, AOS-156569, AOS-153358, AOS-152641, AOS-152535, AOS-152349, AOS-151349, AOS-149849, AOS-148015, AOS-147717, AOS-147592, AOS-146130, AOS-145643, AOS-145491, AOS-145264, AOS-143656, AOS-143582, AOS-143172, AOS-143136, , AOS-142405, AOS-140614, AOS-140008, AOS-157396 Old Duplicates: , 170224, 171074, 171396, 173372, 174322, 174370, 174917, 175009, 177151, 177457, 177662, 178307, 180558, 180741, 181173, 183588, 185596, 186993, 187232, 187418, 188367, 193202, 193903 and 194859	Controller- Platform	All platforms	ArubaOS 8.1.0.2

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-136899 AOS-138540 AOS-144429 AOS-144507 AOS-185841	166228 168270 175990 176096	<b>Symptom:</b> The <b>mDNS</b> process in a managed device was unresponsive and the managed device showed high CPU utilization. The fix ensures that the <b>mDNS</b> process works as expected. <b>Scenario:</b> This issue was observed in managed devices running ArubaOS 8.0.0.0.	AirGroup	All platforms	ArubaOS 8.0.0.0
AOS-137345 AOS-156729	166773 193017	Symptom: The profmgr process in a Mobility Master crashed unexpectedly. The fix ensures that the Mobility Master works as expected.  Scenario: This issue occurred when the device configuration settings were replaced with new configuration settings. This issue was observed in Mobility Masters running ArubaOS 8.0.1.0 or later versions.	Configuration	All platforms	ArubaOS 8.0.1.0
AOS-138525 AOS-182893	168251	Symptom: The WebUI displayed the details of a standby controller even when the redundancy configuration on the active Mobility Master was deleted. The fix ensures that the WebUI does not display the details of the deleted controller.  Scenario: This issue occurred when the master-redundancy configuration was removed completely from either the command-line interface or the WebUI. This issue was observed in Mobility Masters running ArubaOS 8.2.0.0 or later versions.	Configuration	All platforms	ArubaOS 8.2.0.0
AOS-138677	168457	Symptom: The license count in Mobility Master > Licenses page page of the WebUI did not reflect the ACR license usage. The fix ensures that the WebUI reflects the license count.  Scenario: This issue occured when the license count was not communicated to the applications running on Standby Mobility Master. This issue was observed in Mobility Master running ArubaOS 8.2.0.0 or later versions.	Licensing	All platforms	ArubaOS 8.2.0.0
AOS-140742 AOS-148350	170839 177178 180034 189649	Symptom: The output of the show ap monitor ap-list command displayed corrupt SSID information for an AP. The fix ensures that the AP does not process the corrupt packets and displays the correct SSID. Scenario: This issue occurred when the AP tried to process some corrupt packets. This issue was observed in AP-325 access points running ArubaOS 8.0.0.0 or later versions.	AP-Wireless	AP-325 access points	ArubaOS 8.0.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-140806 AOS-157745	171339 194445	Symptom: A managed device rebooted with the initial device configuration although the updated configuration was available in the Mobility Master. The fix ensures that the managed device is updated with the configuration changes in the Mobility Master.  Scenario: This issue was observed in managed devices running ArubaOS 8.1.0.4 or later versions in a Mobility Master-Managed Device topology in a multi-version deployment.	Configuration	All platforms	ArubaOS 8.1.0.4
AOS-141552 AOS-150776 AOS-155236	172339 184826 190869	Symptom: Active APs were not displayed in the Dashboard > Access Points page in the WebUI. The fix ensures that the active APs are displayed in the WebUI.  Scenario: This issue was observed in managed devices running ArubaOS 8.3.0.3 or later versions.	Configuration	All platforms	ArubaOS 8.3.0.3
AOS-143093 AOS-157338	174267 193794	Symptom: A VIA client was unable to establish VPN tunnel with the managed device. The log file listed the reason for the event as Dropping VPN session because we have exceeded the VPN license-limit of 4096. This issue is resolved by not incrementing the VPN license count for VPN tunnels.  Scenario: This issue occurred when the VPN license was incorrectly incremented. This issue was observed in managed devices running ArubaOS 8.0.0.0.	IPsec	All platforms	ArubaOS 8.0.0.0
AOS-143134 AOS-158329	173924 174100 174320 175992 176293 177665 178689 179464 181469 187116	<b>Symptom:</b> An AP did not support fast recovery. This issue is resolved by adding support for fast recovery in the AP. <b>Scenario:</b> This issue was observed in AP-303H, AP-305, AP-315, AP-325, and AP-335 access points running ArubaOS 8.2.0.0 or later versions.	AP-Wireless	AP-303H, AP- 305, AP-315, AP-325 , and AP-335 access points	ArubaOS 8.2.0.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-144329 AOS-152686 AOS-157335	175881 187479 193791	Symptom: The datapath process in a managed device crashed unexpectedly. The fix ensures that the managed device works as expected.  Scenario: This issue occurred when the IPv6 header length was not considered during IPv6 packet reassembly. This issue was observed in managed devices running ArubaOS 8.2.2.3.	Controller- Datapath	All platforms	ArubaOS 8.2.2.3
AOS-145323 AOS-156161	177236 192313	Symptom: Incorrect user count was displayed when the show global_user_table command was executed. However, the correct user count was displayed in the WebUI dashboard. The fix ensures that the correct user count is displayed.  Scenario: This issue was observed in Mobility Masters running ArubaOS 8.3.0.0 or later versions.	Base OS Security	All platforms	ArubaOS 8.3.0.0
AOS-145737 AOS-183813	177788	Symptom: A client experienced a slow network or network connectivity issue although the number of sessions in the AP did not reach the maximum value. The fix ensures that clients get a better network experience.  Scenario: This issue was observed in AP-315 access points running ArubaOS 8.0.0.0.	AP Datapath	AP-315 access points	ArubaOS 8.0.0.0
AOS-145910	178014	<b>Symptom</b> : A few managed devices sent RADIUS accounting request packets to ClearPass without class attributes. The fix ensures that class attributes are not missing. <b>Scenario</b> : This issue was observed in managed devices running ArubaOS 8.2.0.2.	Base OS Security	All platforms	ArubaOS 8.2.0.2
AOS-145954 AOS-185421	178070	Symptom: ARM process crashed in the Mobility Master unexpectedly. The fix ensures that the Mobility Master works as expected.  Scenario: This issue occurred when the show ap virtual-beacon-report all, arm move-sta or arm cellular-move-sta commands were executed. This issue was observed in Mobility Masters running ArubaOS 8.3.0.0 or later versions.	ARM	All platforms	ArubaOS 8.3.0.0
AOS-146144 AOS-152880 AOS-154088 AOS-155582 AOS-156758 AOS-157371	178324 187744 189352 191419 193052 193868	Symptom: APs were rebooting randomly. The log files for the event listed the reason as <b>Reboot caused by kernel panic: Fatal exception</b> . The fix ensures that the APs work as expected.  Scenario: This issue occurred when EIRP table was not sent to the AP when either 2G or 5G channel list was empty. This issue was observed in APs running ArubaOS 8.3.0.0 or later versions.	AP regulatory	All platforms	ArubaOS 8.3.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-146322 AOS-148352 AOS-151203 AOS-151296 AOS-151376 AOS-151817 AOS-153999 AOS-155288 AOS-157690 AOS-157995 AOS-184617	178564 181633 185403 185528 185629 186229 189219 190944 194367 194811	Symptom: A Mobility Master Virtual appliance crashed unexpectedly due to a memory corruption. The fix ensures that the Mobility Master works as expected.  Scenario: This issue was observed in a Mobility Master Virtual Appliance running ArubaOS 8.1.0.0 or later versions.	Logging	All platforms	ArubaOS 8.1.0.0
AOS-146331 AOS-183502 AOS-184796 AOS-185200	178574	<b>Symptom:</b> The <b>datapath</b> process in a controller crashed and rebooted unexpectedly. The fix ensures that the managed device works as expected. <b>Scenario:</b> This issue was observed in 7280 controllers running ArubaOS 8.3.0.0 or later versions.	Controller Datapath	7280 controllers	ArubaOS 8.3.0.0
AOS-148897 AOS-146448 AOS-145866	178737	Symptom: There was an increase in the number of AP events. When the show ap database-summary and show lc-cluster load distribution commands are executed, the user is unable to retrieve the correct count of Active and Standby APs within cluster managed devices. As a result there is drastic change in number of GSM events generated when the AP comes up or fails over. This fix ensures that each AP has only two GSM events when it comes up.  Scenario: This issue is observed in access points running ArubaOS 8.2.1.0 or later versions.	Cluster-Manager	All platforms	ArubaOS 8.2.1.0
AOS-146612 AOS-146617	178963 178968	<b>Symptom:</b> A client got deauthenticated by an AP after the channel was changed from non-DFS channel to DFS channel. Enhancements to the wireless driver resolved the issue. <b>Scenario:</b> This issue was observed in AP-345 access points running ArubaOS 8.3.0.0 or later versions.	AP-Wireless	AP-345 access points	ArubaOS 8.3.0.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-146616 AOS-147492	178967 180383	Symptom: A client was deauthenticated unexpectedly. The log file listed the reason for the event as UAC down. This issue is resolved by allowing the AP to send the initial hello message to the UAC three times.  Scenario: This issue occurred when the response from a UAC to an AP for the initial hello message did not reach the AP. This issue was observed in managed devices running ArubaOS 8.2.1.0 in a cluster topology.	Station Management	All platforms	ArubaOS 8.2.1.0
AOS-146624 AOS-155236	178976 190869	Symptom: Active APs were not displayed in the Dashboard > Access Points page in the WebUI. Scenario: This issue was observed in managed devices running ArubaOS 8.3.0.3 or later versions.	Configuration	All platforms	ArubaOS 8.3.0.3
AOS-146670 AOS-157311 AOS-182295	179034 193759	Symptom: Clients experience poor performance with 300 Series access points. Enhancements to the wireless driver has resolved this issue.  Scenario: The issue occured in 300 Series access points running ArubaOS 8.0.0.0 or later versions.	AP-Wireless	300 Series access points	ArubaOS 8.0.0.0
AOS-147036 AOS-155499 AOS-158129 AOS-158444	179623 191227 195002 195448	Symptom: A Mobility Master crashed and rebooted unexpectedly. The log file lists the reason for the event as Reboot Cause: Datapath timeout (SOS Assert) (Intent:cause:register 54:86:0:20). The fix ensures that the Mobility Master works as expected.  Scenario: This issue occurred because of a race condition while upgrading the hardware caches. This issue was observed in Mobility Master running ArubaOS 8.4.0.0 or later versions.	Controller Datapath	All platforms	ArubaOS 8.4.0.0
AOS-147039 AOS-156717	179627 193004	Symptom: The FPAPPs process was stuck in a managed device. The fix ensures that the managed device works as expected.  Scenario: This issue occurred when the initial full-setup wizard was used to switch a 7205 controller that was running in stand-alone mode to a managed device and an invalid netmask was added. This issue was observed in 7205 controllers running ArubaOS 8.2.1.0.	L2 Forwarding	7205 controllers	ArubaOS 8.2.1.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-147120	179786	Symptom: A managed device denied Wi-Fi calling when the deny_amat_internal netdestination ACL was added above the voipapplications-acl ACL. This issue is resolved by adding the AppRF-based ACL before any deny ACL.  Scenario: This issue was observed in managed devices running ArubaOS 8.2.0.2.	UCC	All platforms	ArubaOS 8.2.0.2
AOS-147186 AOS-152832 AOS-153857 AOS-155657 AOS-155875 AOS-157746 AOS-182979 AOS-184932 AOS-184932	179873 182372 182612 187365 187691 189031 189590 189886 191516 191814 192933 194228 194446 195207 195472	Symptom: Clients were unable to resolve ARP requests. The fix ensures that the clients are able to resolve ARP requests.  Scenario: This issue occurred because the AP memory utilization rate was high, leading to drop in client traffic. This issue was observed in access points running ArubaOS 8.3.0.0.	AP Datapath	All platforms	ArubaOS 8.3.0.0
AOS-147232 AOS-158495 AOS-184142	179942 195511	Symptom: A client was unable to send or receive traffic to or from an AP. The fix ensures that the AP sends a PAPI message to the User Anchor Controller (UAC) and the clients are able to send or receive traffic to or from the AP.  Scenario: This issue occurred when the station management process in an AP sent a PAPI message to the AP Anchor Controller (AAC) instead of the UAC. This issue was observed in a cluster topology running ArubaOS 8.2.1.0 with 802.11r enabled.	Station Management	All platforms	ArubaOS 8.2.1.0
AOS-147511	180406	<b>Symptom:</b> A client received IPv6 router advertisements randomly from different VLANs. The fix ensures that the client receives router advertisement on its derived vlan. <b>Scenario:</b> This issue was observed in managed devices running ArubaOS 8.2.1.0 or later versions.	IPv6	All platforms	ArubaOS 8.2.1.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-147702 AOS-182669 AOS-183922	180722	Symptom: A controller displayed high memory utilization. This issue is resolved by displaying the correct memory utilization and available memory.  Scenario: This issue occurred when a controller displayed a lower value for available memory than free memory. This issue was observed in 7010 controllers running ArubaOS 8.2.1.0.	Controller- Platform	All platforms	ArubaOS 8.2.1.0
AOS-148264 AOS-153070 AOS-155566 AOS-183668	181536 188000 191385	Symptom: APs were not broadcasting SSID and multiple radio resets were observed. The fix ensures that the ARM or AirMatch changes the channel immediately after a radar notification is received.  Scenario: This issue occurred as the ARM or AirMatch unable to change the channel when a radar notification was received. This issue was observed in access points running ArubaOS 8.2.0.0 or later versions.	ARM	All platforms	ArubaOS 8.2.0.0
AOS-148675 AOS-158300	182073 195240	Symptom: An AP crashed and rebooted unexpectedly. The log file listed the reason for the event as Kernel panic - not syncing: Rebooting the AP because of FW ASSERT: rcRateFind+229;ratectrl_11ac.c:2394. Enhancements to the wireless driver resolved this issue. Scenario: This issue occurred while the driver tried to parse the opcode notification from a client that is not yet associated to the AP. This issue was observed in AP-305 and AP-315 access points running ArubaOS 8.2.1.0 or later versions.	AP-Wireless	AP-305 and AP- 315 access points	ArubaOS 8.2.1.0
AOS-149092 AOS-157746	182612 194446	Symptom: A client was unable to resolve ARP requests. The fix ensures that the clients are able to resolve ARP requests.  Scenario: This issue occurred because the AP memory utilization rate was high, leading to drop in client traffic. This issue was observed in access points running ArubaOS 8.3.0.0 or later versions.	AP Datapath	All platforms	ArubaOS 8.3.0.0
AOS-149097 AOS-156713	182618 193000	Symptom: The denyall user role was not propagated to a managed device in a cluster setup, after a configuration synchronization. The fix ensures that the denyall user role is propagated to all the managed devices.  Scenario: This issue is observed in managed devices running ArubaOS 8.2.2.2 or later versions.	Configuration	All platforms	ArubaOS 8.2.2.2

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-149433 AOS-155617 AOS-154112 AOS-157342	183072 189384 191463 193798	Symptom: A managed device rebooted unexpectedly. The log file listed the reason for the event as Reboot Cause: Datapath timeout (Heartbeat Initiated) (Intent:cause:register 53:86:0:2c). The fix ensures that a managed device processes the FTP traffic and works as expected.  Scenario: This issue occurred when FTP traffic was sent to a managed device. This issue was observed in managed devices running ArubaOS 8.3.0.5.	Controller- Datapath	All platforms	ArubaOS 8.3.0.5
AOS-149983 AOS-153622	183788 188706	<ul> <li>Symptom: Some APs that were listed in the output of the show ap database command were not displayed in the WebUI. The fix ensures that the correct list of APs is listed in the output of the show ap database command and the WebUI.</li> <li>Scenario: This issue occured when:         <ul> <li>an AP was deleted on the Mobility Master because of a conflict between GSM add or delete events coming from two different managed device that are cluster members.</li> <li>an AP was deleted by a managed device that is not the active managed device for that AP.</li> </ul> </li> <li>This issue was observed managed devices running ArubaOS 8.3.0.0 in a cluster topology.</li> </ul>	AP-Platform	All platforms	ArubaOS 8.3.0.0
AOS-150041 AOS-154398	183866 189730	Symptom: A client did not connect to the SSID after the managed device was upgraded from ArubaOS 8.0.0.0. The fix ensures that the country code is added to the beacon frames for the 2.5 GHz radio. For the 5 GHz radio, enable 802.11k so that the country code information is present in the beacon frames of SSIDs that are broadcasted using the non-DFS channels.  Scenario: This issue occurred because the country code information was not in the beacon frames. This issue was observed in managed devices running ArubaOS 8.0.0.0 or later versions.	Controller- Platform	All platforms	ArubaOS 8.0.0.0
AOS-151275	185499	<b>Symptom:</b> Managed devices at the branch office are unable to receive IP address from the branch uplink pool. The fix ensures that the managed devices receive IP address from the branch uplink pool. <b>Scenario:</b> This issue was observed in managed devices running ArubaOS 8.2.1.0 or later versions.	IPsec	All platforms	ArubaOS 8.2.1.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-149433 AOS-154112 AOS-155617 AOS-157342 AOS-158217	189384 183072 191463 193798 195126	Symptom: The datapath process in a managed device crashed and rebooted unexpectedly. The fix ensures that the datapath process works as expected.  Scenario: This issue occured when a client sends FTP traffic and NAT is applied. This issue was observed in managed devices running ArubaOS 8.3.0.0 or later versions.	DPI	All platforms	ArubaOS 8.3.0.0
AOS-150797	184849	Symptom: Clients were unable to make or receive calls. A Network busy error message is displayed. The fix ensures that the clients are able to make or receive calls.  Scenario: This issue occurred when WMM was disabled on the managed device. This issue was observed in AP-315 access points running ArubaOS 8.2.1.1.	WMM	AP-315 access points	ArubaOS 8.2.1.1
AOS-151420	185687	<b>Symptom:</b> APs crashed and reboot unexpectedly. The log files lists the reason for the event as <b>Fatal exception: Data Cache Parity Error</b> . Enhancements to wireless driver resolved the issue. <b>Scenario:</b> This issue was observed in AP-335 access points running ArubaOS 8.2.1.1 or later versions.	AP-Wireless	AP-335 access points	ArubaOS 8.2.1.1
AOS-151880 AOS-155002 AOS-179663	186310 190526 185931	Symptom: An AP sent multicast traffic to clients at a lower rate. This issue is resolved by updating the rate table entry for the multicast traffic to the correct rate.  Scenario: This issue occurred when bcmc-optimization was enabled and DMO was disabled. This issue was observed in AP-303P and AP-515 access points running ArubaOS 8.4.0.0.	AP-Wireless	AP-303P and AP-515 access points	ArubaOS 8.4.0.0
AOS-152427 AOS-153919	187098 189112	Symptom: A Mobility Master recorded high CPU utilization rate and affected services. This issue is resolved by optimizing the DNS lookup. Scenario: This issue occurred when a large number of netdestinations with name-based entries were configured on a Mobility Master. These netdestination names were resolved to the DNS IP address which in turn retained the firewall DNS names and led to high CPU utilization. This issue was observed in Mobility Masters running ArubaOS 8.0.0.0 or later versions.	Controller- Datapath	All platforms	ArubaOS 8.0.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-152638 AOS-183468 AOS-183550 AOS-183551 AOS-184610 AOS-186877 AOS-186916	187409	Symptom: A few managed devices crashed and rebooted unexpectedly. The log file listed the reason for the event as datapath timeout (Fpapps Initiated) (Intent:cause:register 51:86:50:2). This issue is resolved by optimizing the ARP data that is sent to the Mobility Master.  Scenario: This issue occurred because OpenFlow from the managed device sent all ARP packets to the Mobility Master. This issue was observed in a Mobility Master running ArubaOS 8.2.0.0 or later versions.	Controller- Datapath	All platforms	ArubaOS 8.4.0.0
AOS-152745	187566	Symptom: Some APs detected false radar signals and changes radio channels frequently. The fix ensures that false radar signals are not detected and thereby reducing the frequency of change in radio channels.  Scenario: This issue was observed in AP-228, AP-305, 320 Series, and AP-340 access points running ArubaOS 8.3.0.1 or later versions.	AP-Wireless	AP-228, AP-305, 320 Series, and AP-340 access points	ArubaOS 8.3.0.1
AOS-152827	187685	<b>Symptom</b> : User was unable to delete a banner via configuration using CLI or WebUI. The fix ensures that the banner can be deleted. <b>Scenario</b> : This issue was observed in managed devices running ArubaOS 8.3.0.2 or later versions.	Configuration	All platforms	ArubaOS 8.3.0.2
AOS-153169 AOS-184045 AOS-184530	188130	<b>Symptom:</b> AP crashed and rebooted unexpectedly. The log files listed the reason for the event as <b>kernel panic: softlockup: hung tasks</b> . The fix ensures that only 32 packets are processed in one batch. <b>Scenario:</b> This issue occurred because the firewall processed too many packets in one batch. This issue was observed in AP-303H access points running ArubaOS 8.3.0.1 or later versions.	AP Datapath	AP-303H access points	ArubaOS 8.3.0.1
AOS-153188 AOS-183906	188152	Symptom: The AP_INFO AMON message of an AP provided incorrect and outdated information on opmode, ap_model, ap_uptime, and Ims_ip parameters. The issue was resolved by not forwarding AMON messages on the UAC.  Scenario: This issue was observed in AP-345 access points running ArubaOS 8.3.0.0 or later versions.	AP-Platform	AP-345 access points	ArubaOS 8.3.0.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-153348 AOS-156975 AOS-182581	188356 193317	<b>Symptom:</b> Clients reconnected to the AP frequently as the effective rates and advertised rates were not the same. Enhancements to the wireless driver resolved the issue. <b>Scenario:</b> This issue was observed in 510 Series access points running ArubaOS 8.4.0.0 or later versions.	AP-Wireless	510 Series access points	ArubaOS 8.4.0.0
AOS-153533 AOS-179571 AOS-181276 AOS-181402 AOS-184537	188590 185520 192894 193585	Symptom: Incorrect memory corruption was detected during fast recovery process of an AP. Enhancements to wireless driver resolved the issue.  Scenario: This issue occurred when an AP crashed and rebooted unexpectedly due to a kernel panic. This issue was observed in AP-305 access points running ArubaOS 8.3.0.0 or later versions	AP-Wireless	AP-305 access points	ArubaOS 8.3.0.0
AOS-153839	189012	Symptom: License synchronizing message, Status: Error, License syncing is already in progress, please try later, was displayed as an error instead of a warning or an information. The fix ensures that the status is displayed as Status: License syncing is already in progress, please try later instead of an error.  Scenario: This issue was observed in Mobility Masters running ArubaOS 8.4.0.0.	Licensing	All platforms	ArubaOS 8.4.0.0
AOS-153844	189017	<b>Symptom:</b> 802.11b clients were unable to pass traffic. Enhancements to the wireless driver resolved the issue. <b>Scenario:</b> This issue was observed in AP-305 access points running ArubaOS 8.3.0.0 or later versions.	AP-Wireless	AP-305 access points	ArubaOS 8.3.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-154188 AOS-154532 AOS-154830 AOS-154935 AOS-155110 AOS-155535 AOS-155931 AOS-155938 AOS-155940 AOS-155941 AOS-156258 AOS-156922 AOS-156934 AOS-156984 AOS-156984	189486 189904 190298 190450 190674 191271 191783 191880 191887 191889 191889 192340 193253 193265 19327 194309	Symptom: A managed device crashed and rebooted unexpectedly. The log file listed the reason for this event as Reboot Cause: Datapath timeout (SOS Assert) (Intent:cause:register 54:86:50:2). The fix ensures that the managed device works as expected.  Scenario: This issue occurred in a cluster setup when an IPv6 client initiated and stopped multiple FTP transfers. This issue was observed in 7200 Series controllers running ArubaOS 8.3.0.2 or later versions.	Controller- Datapath	7200 Series controllers	ArubaOS 8.3.0.2
AOS-154221 AOS-158240	189523 191049	<b>Symptom:</b> An AP that terminated on a managed device with CPsec enabled did not come up after a cluster failover. The fix ensures that the AP works as expected. <b>Scenario:</b> This issue occurred when a cluster failover message timed out in the AP after a cluster failover. This issue was observed in access points running ArubaOS 8.2.0.0 or later versions.	AP-Platform	All platforms	ArubaOS 8.2.0.0
AOS-154324	189646	Symptom: The Fing mobile application discovered a connected client although the deny-inter-user-traffic and deny-inter-user-bridging was enabled. This issue is resolved by denying ARP packet request when BCMC optimization is enabled and untrusting both the ingress and egress traffic when either deny-inter-user-traffic or deny-inter-user-bridging is enabled.  Scenario: This issue occurred when BCMC optimization was enabled in a managed device and the Fing mobile application sent an ARP packet to all the IP addresses in a subnet. This issue was observed in managed devices running ArubaOS 8.0.0.0	Multicast	All platforms	ArubaOS 8.0.0.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-154564 AOS-155770 AOS-156549	189952 192768 191667	Symptom: The SNMP process crashed on a controller unexpectedly. The fix ensures that the SNMP process works as expected.  Scenario: This issue was observed in 7220 series controller running ArubaOS 8.2.1.1 or later versions.	SNMP	All platforms	ArubaOS 8.2.1.1
AOS-154665	190094	<b>Symptom:</b> A client connected to an AP displayed low signal strength. The fix ensures that an error message is displayed where it confirms that the Front End Module (FEM) is defective. <b>Scenario:</b> This issue occurred in 340 Series access points running ArubaOS 8.3.0.3 or later versions.	AP-Wireless	340 Series access points	ArubaOS 8.3.0.3
AOS-154735	190181	Symptom: An AP crashed and rebooted unexpectedly. The log files listed the reason for the event as <b>kernel panic</b> : <b>softlockup</b> : <b>hung tasks</b> . Enhancements to the wireless driver resolved the issue.  Scenario: This issue was observed in AP-203H access points running ArubaOS 8.3.0.0 or later versions.	AP-Wireless	AP-203H access points	ArubaOS 8.3.0.0
AOS-154973 AOS-155578	190491 191415	<b>Symptom:</b> APs crashed and rebooted unexpectedly. The log files listed the reason for the event as <b>kernel panic:</b> Fatal exception at worker_thread+0x1ec/0x3f8. The fix ensures that the APs work as expected. <b>Scenario:</b> This issue was observed in AP-303H and AP-305 access points running ArubaOS 8.2.0.0 or later versions.	AP-Wireless	AP-303H and AP-305 access points	ArubaOS 8.2.0.0
AOS-151284 AOS-183263	185508	Symptom: The WebUI was unresponsive after adding an additional license. The fix ensures that the WebUI works as expected.  Scenario: This issue occurred when a user attempted to add an additional license and the Mobility Master already had 230 licenses.  This issue was observed in Mobility Masters running ArubaOS 8.3.0.1.	Licensing	All platforms	ArubaOS 8.3.0.1
AOS-155015 AOS-182098	190542	Symptom: A radio experienced a high number of resets in APs. Enhancements to the wireless driver resolved this issue.  Scenario: This issue occurred when the APs were in Air Monitor mode. This issue was observed in AP-335 access points running ArubaOS 8.3.0.0 or later versions.	AP-Wireless	AP-335 access points	ArubaOS 8.3.0.0
AOS-155272 AOS-157838	190922 194576	<b>Symptom:</b> A managed device crashed unexpectedly. The fix ensures that the managed device works as expected. <b>Scenario:</b> This issue occurred because of authentication failure. This issue was observed in managed devices running ArubaOS 8.2.0.0 or later versions.	Base OS Security	All platforms	ArubaOS 8.2.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-155570 AOS-157636 AOS-182455	191405 194286	Symptom: A controller returned error message: Country Code file creation failed when saving configuration. The fix ensures that the controller works as expected.  Scenario: This issue occured during the initial setup of the controller because of an attempt to create the country code file in a directory that did not exist. This issue was observed in controllers running ArubaOS 8.4.0.0 or later versions.	Controller- Platform	All platforms	ArubaOS 8.4.0.0
AOS-155627 AOS-155881	191480 191822	Symptom: Mesh APs did not have licenses and the log files displayed a no mesh license error message on the managed device. The <b>show license client-table</b> command output also displayed an incorrect value for used licenses. The fix ensures that the managed device works as expected.  Scenario: This issue was observed in managed devices running ArubaOS 8.2.0.0 or later versions.	AP-Platform	All platforms	ArubaOS 8.2.0.0
AOS-155632 AOS-157337 AOS-157417 AOS-158610	191489 193793 193945 195645	Symptom: A controller crashed and rebooted unexpectedly. The log file listed the reason for the event as <b>Reboot Cause: Kernel Panic (Intent:cause:register 12:86:70:4)</b> . Enhancements to the wireless driver resolved this issue.  Scenario: This issue was observed in 7240XM controllers running ArubaOS 8.2.2.3.	Controller- Platform	7240XM controllers	ArubaOS 8.2.2.3
AOS-156712 AOS-157661	192999 194318	<b>Symptom</b> : A few mesh APs were unable to consume licenses when virtual APs were enabled or disabled in the network. The fix ensures that mesh APs are able to consume licenses dynamically. <b>Scenario</b> : This issue was observed in APs connected to managed devices running ArubaOS 8.3.0.0 or later versions in Mesh mode.	AP-Platform	All platforms	ArubaOS 8.3.0.0
AOS-157075	193445	Symptom: A user was unable to view the list of AirGroup servers in the WebUI. The fix ensures that the list of AirGroup servers is available in the WebUI.  Scenario: This issue occurred when a client connected to an AP and moved to another AP. This issue was observed in 7240 controllers running ArubaOS 8.2.0.0 or later versions.	AirGroup	7240 controllers	ArubaOS 8.2.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-157308 AOS-158209	193755	<b>Symptom</b> : The <b>wlsxWlanRadioTable</b> SNMP did not show all radio types. The fix ensures that the <b>wlsxWlanRadioTable</b> SNMP displays all radio types. <b>Scenario</b> : This issue is observed in managed devices running ArubaOS 8.2.1.0.	Station Management	All platforms	ArubaOS 8.2.1.0
AOS-157767 AOS-155877 AOS-184056	191816	Symptom: A managed device crashed and rebooted unexpectedly. The log file listed the reason for the event as Reboot Cause: Kernel Panic (Intent:cause:register 12:86:0:20). The fix ensures that the managed device works as expected.  Scenario: This issue was observed in 7000 Series and 7200 Series controllers running ArubaOS 8.2.2.0 or later versions.	Controller- Platform	7000 Series and 7200 Series controllers	ArubaOS 8.2.2.0
AOS-155987 AOS-157010	191958 193361	Symptom: The ap_name field appeared blank in reporting_radio, radio_history, and ap_info collection parameters. The fix ensures that the correct ap_name field is displayed.  Scenario: This issue was observed in APs running ArubaOS 8.3.0.3 or later versions.	AirMatch	All platforms	ArubaOS 8.3.0.3
AOS-156079	192111	Symptom: The Disassociation Timer value of 802.11v BSS Transition Management Request was incorrect. The fix ensures that the Disassociation Timer value is set to the default value of 100. Scenario: This issue was observed in a Mobility Master Virtual Appliance running ArubaOS 8.4.0.0 or later versions.	ARM	All platforms	ArubaOS 8.4.0.0
AOS-156080 AOS-182758	192112	Symptom: A managed device showed Skype error messages in the HTTPD logs and dropped XML messages that were meant for UCM. The visibility of Skype for Business call records were missing from the WebUI. The fix ensures that the managed device works as expected and does not drop the XML messages that are meant for UCM.  Scenario: This issue was observed in managed devices running ArubaOS 8.2.2.2.	Web Server	All platforms	ArubaOS 8.2.2.2
AOS-156087	192121	Symptom: Some devices incorrectly triggered roaming behavior due to the static value of the BTM request disassociation timer. Enhancements to 802.11v BTM Request's Disassociation Timer value resolved this issue.  Scenario: This issue was observed in managed devices running ArubaOS 8.4.0.0.	ARM	All platforms	ArubaOS 8.4.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-156104 AOS-156587 AOS-178581 AOS-180782	192143 192814 180455 191142	<b>Symptom:</b> An AP rebooted unexpectedly. The log file listed the reason for the event as <b>external watchdog reset</b> . Enhancements to the wireless driver resolved the issue. <b>Scenario:</b> This issue was observed in AP-207 access points running ArubaOS 8.3.0.0 or later versions.	AP-Wireless	AP-207 access points	ArubaOS 8.3.0.0
AOS-156162 AOS-158131	192223 195005	Symptom: Managed devices crashed and rebooted unexpectedly. The log file listed the reason for the event as dds process died. The fix ensures that the managed device works as expected.  Scenario: This issue occurred when the pre-shared key was not configured while enabling HA with state sync feature. This issue was observed in managed devices running ArubaOS 8.3.0.3 or later versions.	HA-Lite	All platforms	ArubaOS 8.3.0.3
AOS-156267 AOS-158169	192349 195066	Symptom: The mDNS process in a managed device consumed more memory than the typical threshold limit. This issue is resolved by avoiding memory leak in the mDNS process.  Scenario: This issue occurred because of a memory leak in the mDNS process. This issue was observed in managed devices running ArubaOS 8.2.2.0 or later versions.	AirGroup	All platforms	ArubaOS 8.2.2.0
AOS-156646 AOS-157540	192901 194140	<b>Symptom:</b> APs were unable to connect to the managed device. The fix ensures that the APs work as expected. <b>Scenario:</b> This issue was observed in AP-370 series access points running ArubaOS 8.2.0.0 or later versions.	AP-Platform	AP-370 series access points	ArubaOS 8.2.0.0
AOS-156834 AOS-158306	193152 195249	Symptom: Cluster manager process crashed frequently on a managed device. The fix ensures that managed devices work as expected in a cluster setup.  Scenario: This issue was observed in managed devices running ArubaOS 8.3.0.2 in a cluster setup.	Cluster-manager	All platforms	ArubaOS 8.3.0.2
AOS-156838	193158	Symptom: User was unable to reprovision an AP. This issue is resolved by keeping the original characters and not converting them to a different format.  Scenario: This issue occurred when a special character in a German keypad is used in the AP name. This issue was observed in APs connected to managed devices running ArubaOS 8.2.2.1.	Configuration	All platforms	ArubaOS 8.2.2.1

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-156839 AOS-157104	193159 193492	Symptom: The output of the show aaa authentication-server radius statistics command displayed incorrect data for ExpAuthTm, Uptime, and SEQ columns. The fix ensures that the correct data is displayed for these columns.  Scenario: This issue occurred when the RADIUS server did not send any request to the managed device. This issue was observed in managed devices running ArubaOS 8.4.0.0 or later versions.	Base OS Security	All platforms	ArubaOS 8.4.0.0
AOS-156874 AOS-156918 AOS-157515	193195 193249 194093	Symptom: A managed device crashed and rebooted unexpectedly. The log file listed the reason for the event as <b>Datapath timeout (SOS Assert) (Intent:cause:register 54:86:50:2)</b> . The fix ensures that the managed devices works as expected.  Scenario: This issue was observed in 7240XM controllers running ArubaOS 8.2.2.0 or later versions.	Controller- Datapath	7240XM controllers	ArubaOS 8.2.2.0
AOS-156878	193199	Symptom: A controller crashed when collecting support logs. The fix ensures that the controller works as expected.  Scenario: This issue occurred when the show openflow debug ports command was executed. This issue was observed in 7240 controllers running ArubaOS 8.2.2.1.	SDN-Platform	7240 controllers	ArubaOS 8.2.2.1
AOS-157024	193378	Symptom: The all deviceClass filter is applied by default to an IoT transport profile and when this filter is removed, it is not saved in configuration on the managed device.  Scenario: This issue occurs when a Telemetry-HTTPS or Telemetry-Websocket IoT transport profile is created. This issue was observed in managed devices running ArubaOS 8.4.0.0 in Mobility Master-Managed Device topology	BLE	All platforms	ArubaOS 8.4.0.0
AOS-157049 AOS-185234	193416	Symptom: A controller crashed and rebooted unexpectedly. The log file listed the reason for this event as Reboot Cause: Halt reboot (Intent:cause:register 38:86:50:2). The fix ensures that the controller works as expected.  Scenario: This issue occurred when the halt command was executed on the controller. This issue was observed in stand-alone controllers running ArubaOS 8.3.0.0 or later versions.	Controller- Platform	All platforms	ArubaOS 8.3.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-157056	193423	Symptom: The authentication process in a managed device crashed and the APs rebooted. The fix ensures that the managed device works as expected.  Scenario: This issue occurred when an existing bridge-forwarding mode client joined as a split-tunnel-mode client. This issue was observed in managed devices running ArubaOS 8.2.1.0.	Base OS Security	All platforms	ArubaOS 8.2.1.0
AOS-157071	193441	Symptom: The Station Management process crashed continuously in the managed device because the database upgrade in a managed device failed. This issue is resolved by ensuring that a database upgrade is triggered when boot partition is changed.  Scenario: This issue occurred when a managed device running ArubaOS 8.4.0.0 version was downgraded to ArubaOS 8.3.0.0 or lower versions, and then the ap gap-db reinit-db command was executed. Post this, the managed device was again upgraded to ArubaOS 8.4.0.0 by changing the boot partition. This issue was observed in managed devices running ArubaOS 8.4.0.0.	Database	All platforms	ArubaOS 8.4.0.0
AOS-157162 AOS-183803 AOS-184508	193561	<ul> <li>Symptom: An AP was unable to form a UAC tunnel with a managed device after a failover. The log file listed the following reasons for the issue:         <ul> <li>Dynamic BSS tunnel could not be setup</li> <li>Denied; AP not found in STM</li> </ul> </li> <li>The fix ensures that the AP forms UAC tunnel with the managed device.</li> <li>Scenario: This issue occurred when the AP channel updates were not registered with STM process. This issue was observed in managed devices running ArubaOS 8.2.2.3 or later versions.</li> <li>Symptom: An AP was unable to form a UAC tunnel with a managed device.</li> </ul>	Cluster-Manager	All platforms	ArubaOS 8.2.2.3
AOS-157155	193553	Symptom: The NTP server failed to synchronize after upgrading the managed devices to ArubaOS 8.3.0.0 version. The fix ensures that the NTP server synchronizes with the managed device.  Scenario: This issue was observed in managed devices running ArubaOS 8.3.0.0 or later versions.	VLAN	All platforms	ArubaOS 8.3.0.0
AOS-157233	193662	Symptom: Device model name was displayed incorrectly in the Dashboard > Controllers > Model page in the WebUI. The fix ensures that the device model name is displayed correctly.  Scenario: This issue was observed in managed devices running ArubaOS 8.2.2.0 or later versions.	VRRP	All platforms	ArubaOS 8.2.2.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-157288	193726	<b>Symptom:</b> The <b>show ap arm state</b> command returned results in XML format instead of JSON format when accessing the controller through REST API. Enhancements to REST API has resolved this issue. <b>Scenario:</b> This issue was observed in controllers running ArubaOS 8.2.1.0 or later versions.	ARM	All platforms	ArubaOS 8.2.1.0
AOS-157293	193731	Symptom: The preserve-vlan parameter of the wlan virtual-ap command did not work as expected. The fix ensures that the preserve-vlan parameter will allows the clients to retain their previous VLAN assignment if the clients disassociate and re-associate to the same or a different AP.  Scenario: This issue was observed in Mobility Master running ArubaOS 8.2.2.2 or later versions.	Station Management	All platforms	ArubaOS 8.2.2.2
AOS-157356	193833	<b>Symptom:</b> The <b>firewall dns-name cache</b> command filled up and caused service interruptions. This issue is resolved by automatically clearing the IP address list entries every 24 hours. <b>Scenario:</b> This issue was observed in managed devices running ArubaOS 8.0.0.0	Controller- Datapath	All platforms	ArubaOS 8.0.0.0
AOS-157348 AOS-157458	193815 194006	Symptom: The output of the show license server-table command displayed incorrect count of used licenses for APs. As a result, the APs failed to boot and went into inactive and unlicensed state. The fix ensures that the correct license count is displayed and the APs work as expected.  Scenario: This issue occurred when the centralized licensing server incorrectly added the licenses from standby Mobility Master. This issue was observed in Mobility Masters running ArubaOS 8.2.0.0 or later versions in a master-standby topology.	Licensing	All platforms	ArubaOS 8.2.0.0
AOS-157563 AOS-158459	194178 195465	Symptom: A managed device crashed and rebooted unexpectedly. The log files listed the reason for the event as, Reboot Cause: Datapath timeout (Fpapps Initiated) (Intent:cause:register 51:86:50:4). The fix ensures that the managed device works as expected. Scenario: This issue was observed in managed devices running ArubaOS 8.2.1.1 or later versions.	Controller Datapath	All platforms	ArubaOS 8.2.1.1

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-157606	194237	Symptom: A management user was unable to login to the managed device by authenticating through a Radius server. This issue is resolved by retrieving the current NAS-Port-type from the managed device at the start of the authentication process.  Scenario: This issue occurred when the NAS-Port-type was changed to ASYNC from VIRTUAL. This issue was observed in managed devices running ArubaOS 8.3.0.3 or earlier versions.	Radius	All platforms	ArubaOS 8.3.0.3
AOS-157654	194307	Symptom: An AP crashed and rebooted unexpectedly. The log file listed the reason for the event as <b>kernel panic: Fatal exception in interrupt</b> . The fix ensures that the AP works as expected.  Scenario: This issue was observed in AP-215 access points running ArubaOS 8.2.2.2.	SDN	AP-215 access points	ArubaOS 8.2.2.2
AOS-157770	194484	<b>Symptom:</b> The managed devices sent TACACS login request using the OSPF IP address instead of the loopback IP address. The fix ensures that the managed device sends the TACACS login requests using the loopback IP address. <b>Scenario:</b> This issue was observed in managed devices running ArubaOS 8.4.0.0.	TACACS	All platforms	ArubaOS 8.4.0.0
AOS-157797 AOS-158350 AOS-158521	194518 195313 195540	Symptom: The mDNS process in a managed device was in a non-responsive state. This issue is resolved by deleting and relearning the client details with the properties of the new island when a client roams between islands.  Scenario: This issue occurred when AirGroup was enabled in an island topology and a client roamed across islands. This issue was observed in managed devices running ArubaOS 8.2.2.3.	AirGroup	All platforms	ArubaOS 8.2.2.3
AOS-157815 AOS-158647	195690 194552	Symptom: VOIP phones did not get ARP broadcasts randomly as the STM process was deleting existing VLANs from the tunnel. The fix ensures that the STM process does not delete VLANs from the tunnel when an update is received for a user from authentication server with initial VLAN and assigned VLAN.  Scenario: This issue occurred when tunneled node was configured on the managed device. This issue was observed in managed devices running ArubaOS 8.2.2.3 or later versions.	Tunnel-node- manager	All platforms	ArubaOS 8.2.2.3

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-156788 AOS-157820	193096 194558	Symptom: An AirGroup user was unable to discover Chromecast devices. This issue is resolved by allowing an AirGroup user to discover Chromecast devices irrespective of the case used in the AirGroup server name.  Scenario: This issue occurred because the AirGroup server name was case sensitive. This issue was observed in managed devices running ArubaOS 8.0.0.0.	AirGroup	All platforms	ArubaOS 8.0.0.0
AOS-158157	195039	Symptom: AP groups created below the managed network heirarchy did not appear in the AP group drop-down list box in the Managed Network > Configuration > Access Points > Whitelist > Campus AP Whitelist > Add New Campus AP whitelist page of the WebUI. Enhancements to the WebUI has resolved this issue.  Scenario: This issue was observed in Mobility Masters running ArubaOS 8.4.0.0 or later versions.	WebUI	All platforms	ArubaOS 8.4.0.0
AOS-158180 AOS-158565 AOS-182719 AOS-183629 AOS-184955 AOS-185312 AOS-185342	195080 195592	Symptom: The AP licenses were falsely utilized in a mesh setup. The fix ensures that mesh releases relevant licenses instead of consuming the existing ones.  Scenario: This issue occurred when the existing mesh point consumed licenses during reboot and when there was a radar detection. This issue was observed in managed devices running ArubaOS 8.2.2.3 or later versions.	AP-platform	All platforms	ArubaOS 8.2.2.3
AOS-158204	195106	<b>Symptom</b> : OFA process crashed in a controller unexpectedly. The fix ensures that the controllers work as expected. <b>Scenario</b> : This issue was observed in 7240 controllers running ArubaOS 8.2.2.3 in a cluster setup.	Controller- Platform	7240 controllers	ArubaOS 8.2.2.3
AOS-158207	195111	Symptom: An incorrect redirected URL was displayed during an external captive portal authentication. The fix ensures that the correct redirected URL is displayed on the captive portal page.  Scenario: This issue was observed in AP-205 access points running ArubaOS 8.2.0.0 or later versions.	Captive Portal	AP-205 access points	ArubaOS 8.2.0.0
AOS-158227	195138	<b>Symptom:</b> A few AP-225 showed inconsistent EIRP values for 2.4 GHz radio. The fix ensures that the correct EIRP values are displayed. <b>Scenario:</b> This issue was observed in AP-225 running ArubaOS 8.2.0.0 or later versions.	AP- Wireless-2xx	AP-225 access points	ArubaOS 8.2.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-158254 AOS-184144	195177	Symptom: Some managed devices dropped ARP packets while trying to route traffic to a specific hop IP address. The fix ensures that the managed devices work as expected.  Scenario: This issue occurred when policy-based routing picked the incorrect next-hop destination address to route the packets. This issue was observed in managed devices running ArubaOS 8.4.0.0 in a Mobility Master-Managed Device topology.	Policy-Based Routing	All platforms	ArubaOS 8.4.0.0
AOS-158274	195201	Symptom: The Override icon in the WPA passphrase and Retype fields in Configuration > System > Profiles > SSID profile still appeared even after manually entering the passphrase and enabling "Remove Override". The fix ensures that the override icon does not appear in the password fields across the WebUI.  Scenario: This issue was observed in Mobility Master running ArubaOS 8.4.0.0 or later versions.	WebUI	All platforms	ArubaOS 8.4.0.0
AOS-158311	195264	Symptom: A managed device did not prompt an error or show restriction when configuring a VRRP authentication key. The fix ensures that an error is displayed if a VRRP authentication key is configured with more than 8 characters.  Scenario: This issue occurred when the VRRP authentication key contained more than 8 characters. This issue was observed in managed devices running ArubaOS 8.2.1.0.	VRRP	All platforms	ArubaOS 8.2.1.0
AOS-158360	195329	<b>Symptom:</b> Managed device crashed unexpectedly. The log file for the event listed the reason as <b>kernel panic</b> . The fix ensures that the managed devices work as expected. <b>Scenario:</b> This issue was observed in managed devices running ArubaOS 8.3.0.0 or later versions.	Controller-Plat- form	All platforms	ArubaOS 8.3.0.0
AOS-158455	195461	Symptom: The output of the show configuration system-commands pending command displayed committed configuration details instead of pending configuration details. The fix ensures that the command displays the pending configuration details.  Scenario: This issue was observed in a Mobility Master Virtual Appliance running ArubaOS 8.2.1.0 or later versions.	Controller- Platform	All platforms	ArubaOS 8.2.1.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-158599 AOS-182977	195633	Symptom: Mobility Master crashed and rebooted unexpectedly. The log file lists the reason for the event as, Reboot Cause: Datapath timeout (SOS Assert) (Intent:cause:register 54:86:50:4). The fix ensures that theMobility Master works as expected.  Scenario: This issue was observed in Mobility Master rrunning ArubaOS 8.2.0.0 or later versions.	Controller- Datapath	All platforms	ArubaOS 8.2.0.0
AOS-158603	195637	Symptom: Some APs failed to come up on the managed device. The fix ensures that the AP functions as expected.  Scenario: This issue occurred when the managed devicewas upgraded from ArubaOS 8.3.0.4 to ArubaOS 8.4.0.0. This issue was observed in managed devices running ArubaOS 8.4.0.0 or later versions.	AP-Platform	All platforms	ArubaOS 8.4.0.0
AOS-181974	_	Symptom: The packetin_dispatcher process crashed multiple times on a Mobility Master Virtual Appliance. The fix ensures that the Mobility Master Virtual Appliance works as expected.  Scenario: This issue was observed in Mobility Master Virtual Appliances running ArubaOS 8.2.2.3 or later versions.	SDN-Platform	All platforms	ArubaOS 8.2.2.3
AOS-181953	_	Symptom: Mobility Master crashed and rebooted unexpectedly. The log file listed the reason for the event as Reboot Cause: Datapath timeout (Heartbeat Initiated) (Intent:cause:register 53:86:50:2). The fix ensures that the Mobility Master works as expected.  Scenario: This issue was observed in Mobility Master running ArubaOS 8.3.0.4 or later versions.	Controller Datapath	All platforms	ArubaOS 8.3.0.4
AOS-181971	_	Symptom: APs experienced PSM watchdog timeouts every few seconds. The fix ensures that traffic test does not cause PSM watchdog timeouts.  Scenario: This issue occurred when a traffic test was conducted on clients running DDMO converted video streams. This issue was observed in 510 Series access points running ArubaOS 8.4.0.1 or later versions.	AP-Wireless	510 Series access points	ArubaOS 8.4.0.1
AOS-182023	_	Symptom: The Dashboard page in the WebUI displayed the A controller is required for information to be displayed error message. The fix ensures that the Dashboard page does not display the error message.  Scenario: This issue was observed in Mobility Master running ArubaOS 8.2.1.0 or later versions.	Configuration	All platforms	ArubaOS 8.2.1.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-182031	_	<b>Symptom</b> : A random increase in the unicast traffic resulted in packet loss. This issue is resolved by fixing the reason for the asymmetric routing which caused unicast flooding. <b>Scenario</b> : This issue was observed in managed devices running ArubaOS 8.2.2.3 or later versions.	Controller- Datapath	All platforms	ArubaOS 8,2,2.3
AOS-182091 AOS-183253 AOS-183255 AOS-184627	_	Symptom: The mDNS process in a managed device crashed and the managed device rebooted unexpectedly. The fix ensures that the mDNS process works as expected.  Scenario: This issue was observed in Mobility Master running ArubaOS 8.2.1.0 or later versions.	AirGroup	All platforms	ArubaOS 8.3.0.4
AOS-182911	_	Symptom: An AP crashed and rebooted unexpectedly. The log file listed the reason for this event as <b>kernel panic: Fatal exception in interrupt</b> . The fix ensures that the AP works as expected.  Scenario: This issue was observed in 300 Series access points running ArubaOS 8.3.0.4 or later versions.	AP-Wireless	300 Series access points	ArubaOS 8.3.0.4
AOS-182928 AOS-183355	_	Symptom: A controller crashed unexpectedly. The fix ensures that the mDNS process does not leak memory and the controller works as expected.  Scenario: This issue occurred because the mDNS process in the controller leaked memory. This issue was observed in 7240 controllers running ArubaOS 8.3.0.0.	AirGroup	7240 controllers	ArubaOS 8.3.0.0
AOS-182929	_	Symptom: The PIM module in 7200 Series controller crashed unexpectedly. Enhancements to the PIM module has resolved this issue.  Scenario: This issue occurred due to a condition of dangling reference. This issue was observed in 7200 Series controllers running ArubaOS 8.2.2.3 or later versions in a Mobility Master - Managed Device topology with clustering and IGMP enabled.	PIM-SM	7200 Series controllers	ArubaOS 8.2.2.3
AOS-183023 AOS-185198 AOS-185429	_	Symptom: A client was unable to view AirGroup servers in a centralized AirGroup deployment. The fix ensures that the client is able to view AirGroup servers.  Scenario: This issue occured because of an error in the policy lookup. This issue was observed in Mobility Masters running ArubaOS 8.4.0.0 or later versions.	AirGroup	All platforms	ArubaOS 8.4.0.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-183171	_	<b>Symptom</b> : A mesh link could not be established when AP-275 was used as a mesh point. The fix ensures that AP-275 acting as a mesh point connects to the mesh portal successfully. <b>Scenario</b> : This issue was observed in AP-275 access points running ArubaOS 8.3.0.0 or later versions.	Mesh	AP-275 access point	ArubaOS 8.3.0.0
AOS-183148 AOS-183454 AOS-183782 AOS-184700 AOS-185163	_	<b>Symptom:</b> Some APs crashed and rebooted unexpectedly. The log file listed the reason for the event as <b>Reboot reason: fatal exception in interrupt.</b> The fix ensures that the APs work as expected. <b>Scenario:</b> This issue was observed in AP-214, AP-215, and AP-315 access points running ArubaOS 8.0.0.0 or later versions.	AP-Platform	AP-214, AP-215, and AP-315 access points	ArubaOS 8.0.0.0
AOS-183227 AOS-185109	_	Symptom: The ip-session access-list rule were not getting pushed from a managed device to the Mobility Master. The fix ensures that the ip-session access-list rules get pushed.  Scenario: This issue was observed when a controller was upgraded from a 6.x version to an 8.x version. This issue was observed in managed devices running ArubaOS 8.3.0.6 or later versions.	Configuration	All platforms	ArubaOS 8.3.0.6
AOS-183309	_	Symptom: Managed devices crashed and rebooted unexpectedly. The log file listed the reason for the event as Reboot Cause: Datapath timeout (Heartbeat Initiated). The fix ensures that the managed devices work as expected.  Scenario: This issue was observed in managed devices running ArubaOS 8.2.2.3 or later versions.	Controller- Datapath	All platforms	ArubaOS 8.2.2.3
AOS-183508	_	<b>Symptom:</b> An AP crashed and rebooted unexpectedly. The log file listed the reason for this event as <b>Warm-reset</b> . Enhancements to the wireless driver resolved this issue. <b>Scenario:</b> This issue was observed in AP-345 access points running ArubaOS 8.3.0.6 or later versions.	AP-Wireless	AP-345 access points	ArubaOS 8.3.0.6
AOS-183549 AOS-184354	_	<b>Symptom</b> : Managed devices crashed and rebooted unexpectedly. The log files listed the reason for the event as <b>Datapath timeout (SOS Assert) (Intent:cause:register 54:86:50:2)</b> . The fix ensures that the managed devices work as expected. <b>Scenario</b> : This issue was observed in managed devices running ArubaOS 8.3.0.0 in a cluster setup.	Controller- Datapath	All platforms	ArubaOS 8.3.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-183601	_	<b>Symptom:</b> Some APs advertised incorrect protection flag in their beacons. Enhancements to the wireless driver resolved the issue. <b>Scenario:</b> This issue occurred when 802.11g, 802.11n, or 802.11ac clients were connected to 2.4 GHz radios and low rates of 1 Mbps were removed from the Tx rate of SSID profiles. This issue was observed in AP-305 and AP-315 access points running ArubaOS 8.3.0.0 or later versions.	AP-Wireless	AP-305 and AP- 315 access points	ArubaOS 8.3.0.0
AOS-183640 AOS-184351 AOS-184539 AOS-184540	_	Symptom: The mDNS process in a Mobility Master Virtual Appliance crashed unexpectedly. This issue is resolved by fixing the memory leak in the mDNS process.  Scenario: This issue occurred when the show airgroup aps or tar logs techsupport command was executed. This issue was observed in a Mobility Master Virtual Appliance running ArubaOS 8.2.2.4 or later versions.	AirGroup	All platforms	ArubaOS 8.2.2.4
AOS-183717	121422	Symptom: A managed device crashed and rebooted unexpectedly. The log files listed the reason for the event as, Reboot Cause: Datapath timeout (Heartbeat Initiated) (Intent:cause:register 53:86:50:4). The fix ensures that the managed device works as expected.  Scenario: This issue was observed in managed devices running ArubaOS 8.2.2.3 or later versions.	Controller Datapath	All platforms	ArubaOS 8.2.2.3
AOS-183885	_	Symptom: The telemetry API did not include the Enocean user data type and the BLE local name in the output of the <b>show ap debug ble-table</b> command. The fix ensures that the telemetry API includes the Enocean user data type and the BLE local name in the output of the <b>show ap debug ble-table</b> command.  Scenario: This issue was observed in access points running ArubaOS 8.4.0.0.	loT	All platforms	ArubaOS 8.4.0.0
AOS-183962 AOS-184518	_	Symptom: IKE Overlay routes for client traffic were missing from the VPN Concentrator and the managed device. Hence, the managed device got disconnected from the Mobility Master. The fix ensures that the IKE Overlay routes are available and the connection is restored between the managed device and the Mobility Master.  Scenario: This issue was observed in 7220 and 7008 controllers running ArubaOS 8.3.0.0 or later versions.	lpsec	7220 and 7008 controllers	ArubaOS 8.3.0.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-184032	_	Symptom: An AP crashed and rebooted unexpectedly. The log file listed the reason for this event as Reboot caused by kernel panic: Fatal exception in interrupt: PC is at asap_bw_mgmt_reset_desc_count. Enhancements to the wireless driver resolved the issue. Scenario: This issue was observed in AP-315 access points running ArubaOS 8.3.0.0 or later versions.	AP-Wireless	AP-315 access points	ArubaOS 8.3.0.0
AOS-184093	_	<b>Symptom:</b> The <b>cellular handoff assist</b> feature did not work even though the clients reached the Signal-to-Noise Ratio threshold rate. The fix ensures that the <b>cellular handoff assist</b> feature is triggered. <b>Scenario:</b> This issue was observed in AP-305, AP-315, and AP-318 access points running ArubaOS 8.2.0.0 or later versions.	ARM	AP-305, AP-315, and AP-318 access points	ArubaOS 8.2.0.0
AOS-184265 AOS-184964	_	Symptom: A Mobility Master displayed Name-server already exists error message when more than one DNS server was added under Configuration > System > General > Domain Name System tab in the WebUI. The fix ensures that this error message is not displayed and more than one DNS servers can be added.  Scenario: This issue occurred due to an error in API response for ipv6_domain_lookup. This issue was observed in Mobility Masters running ArubaOS 8.4.0.0 or later versions.	Configuration	All platforms	ArubaOS 8.4.0.0
AOS-184287	_	Symptom: The command show ap client trail-info displayed the deauth reason as Client- match instead of cellular handoff assist. The fix ensures that the command works as expected.  Scenario: This issue was observed in Mobility Master running ArubaOS 8.0.0.0 or later versions.	ARM	All platforms	ArubaOS 8.0.0.0
AOS-184545	_	Symptom: An AP crashed and rebooted unexpectedly. The log file listed the reason for this event as <b>kernel panic</b> : <b>softlockup</b> : <b>hung tasks</b> . Reducing the batch size to 64 resolves this issue.  Scenario: This issue occurred when the AP processed large batch files leading to lock stall detection and causing panic. This issue was observed in AP-303H access points running ArubaOS 8.0.0.0 or later versions.	AP Datapath	AP-303H access points	ArubaOS 8.0.0.0

**Table 6:** Resolved Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-184851	_	Symptom: The login-fcgi process in a controller crashed unexpectedly. This issue is resolved by increasing the array size to 128K for processing request parameters.  Scenario: This issue occurred when http requests larger than 8k were processed, leading to a segmentation fault. This issue was observed in stand-alone controllers running ArubaOS 8.4.0.0 or later versions.	Captive Portal	7280 controllers	ArubaOS 8.4.0.0
AOS-185346	_	Symptom: A Mobility Master crashed and rebooted unexpectedly. The log file listed the reason for the event as Control Processor Kernel Panic. Enhancements to the wireless driver resolved this issue. Scenario: This issue occurred due to a softlock causing the crash. This issue was observed in 7200 Series controllers running ArubaOS 8.2.0.0 or later versions.  Old Duplicates: 170224, 171074, 171396, 173372, 174322, 174370, 174917, 175009, 177151, 177457, 177662, 178307, 180558, 180741, 181173, 183588, 185596, 186993, 187232, 187418, 188367, 192790, 193202, 194859	Captive Portal	7200 Series controllers	ArubaOS 8.2.0.0
AOS-183445	_	Symptom: The usage graph was not displayed in the Dashboard > Overview page of a managed device. The fix ensures that the usage graph is displayed as expected.  Scenario: This issue occurred because of invalid data for the BSSID statistics and a large number of AMON_BSSID_TUNNEL_STATS_ MESSAGE packets. This issue was observed in managed devices running ArubaOS 8.4.0.0 or later versions.	Controller- Datapath	All platforms	ArubaOS 8.4.0.0

**Table 6:** Resolved Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-185187	_	Symptom: An AP crashed and rebooted unexpectedly. The log file listed the reason for this event as PC is at wlc_chanctxt_set_passive_use+0x6d4. Adding a missing check to the source code resolved this issue.  Scenario: This issue was observed in 510 Series access points running ArubaOS 8.4.0.0 or later versions.	AP-Wireless	510 Series access points	ArubaOS 8.4.0.0
AOS-183536	_	Symptom: A few users were unable to connect to the wireless network, and the syslog server displayed the RADIUS: Error in getting available Sequence Number for Server:srv-10.166.24.65-oa (Maximum reached) error message. The fix ensures that the sequence numbers are returned back to the pool and users are able to connect to the wireless network.  Scenario: This issue occurred when the sequence numbers were leaked during EAP-TLS fragmentation due to which the RADIUS requests were not sent to the authentication server from the managed device. This issue was observed in managed devices running ArubaOS 8.4.0.0 or later versions.	RADIUS	All platforms	ArubaOS 8.4.0.0

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

## Limitations

Following are the limitations observed in this release.

## No Support for Command-Line Authorization for TACACS and TACACS+ Authentication

Command-line authorization of local management user accounts is currently not supported for TACACS and TACACS+ authentication.

## **No Support for Captive Portal**

Captive portal is not supported for the split-tunnel mode Virtual APs and wired APs, when cluster is enabled.

### **Known Issues**

Following are the known issues observed in this release.

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**Table 7:** Known Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS- 150970	138292	Symptom: The show rft result command displays No result to show as output.  Scenario: This issue occurs because the RFT feature is not supported in 802.11ax devices. This issue is observed in AP-535 and AP-555 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-535 and AP-555 access points	ArubaOS 8.5.0.0
AOS- 155389 AOS- 155482 AOS- 182832	191076 191205	<ul> <li>Symptom: A 7280 controller reports uplink negotiation failure on 40G and 1G ports; affecting services.</li> <li>Scenario: This issue occurs due to:         <ul> <li>An oversubscribed 1G port.</li> <li>bcmc-optimization allow-unknown-unicast configuration under interface vlan &lt;&gt;</li> <li>Controller experiencing a flood of unicast traffic</li> <li>Subsequent flapping of either the uplink or 1G port.</li> <li>This issue is observed in 7280 controllers running ArubaOS 8.0.0.0 or later versions.</li> </ul> </li> <li>Workaround:         <ul> <li>Use 10G channels instead of 1G channels.</li> </ul> </li> <li>Use one of the following port combinations that are supported on a 7280 controller: 40G and 10G, or 40G and 40G, or 10G and 10G channels.</li> </ul>	Controller- Platform	7280 controllers	ArubaOS 8.0.0.0
AOS- 155632 AOS- 157337 AOS- 157417 AOS- 158610	191489 193793 193945 195645	Symptom: A controller crashes and reboots unexpectedly. The log file lists the reason for the event as Reboot Cause: Kernel Panic (Intent:cause:register 12:86:70:4).  Scenario: This issue is observed in 7240XM controllers running ArubaOS 8.2.2.3.  Workaround: None.	Controller- Platform	7240XM controllers	ArubaOS 8.2.2.3

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**Table 7:** Known Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS- 157358 AOS- 157430 AOS- 157520 AOS- 157602 AOS- 183568 AOS- 185118	193835 193958 194106 194233	Symptom:A 7200 Series controller crashes and the log file states the reason as Reboot Cause: Kernel Panic (Intent:cause:register 12:86:40:2) Scenario: This issue is observed in 7200 Series controllers running ArubaOS 8.3.0.1 or later versions. Workaround: None.	Controller- Platform	7200 Series controllers	ArubaOS 8.3.0.1
AOS- 183117 AOS- 183777 AOS- 183581 AOS- 185027 AOS- 186155	194395	Symptom: An AP crashes and reboots unexpectedly. The log file lists the reason for this event as BadAddr:ff0202020203ee PC:phy_ac_noise_unregister_impl+0x360/0x678 [wl] Warm-reset. Scenario: This issue is observed in 340 Series access points running ArubaOS 8.3.0.3 or later versions. Workaround: None.	AP-Wireless	340 Series access points	ArubaOS 8.3.0.3
AOS- 183123	_	Symptom: The % symbol is not displayed for cluster client threshold values in Configuration > System > Profiles > Cluster page of the WebUI. Scenario: This issue is observed in managed devices running ArubaOS 8.5.0.0 in a cluster setup. Workaround: None.	Cluster-Manager	All platforms	ArubaOS 8.5.0.0
AOS- 183179	_	Symptom: Video multicast frames gets transmitted at the rate of 24 Mbps even when the configuration is set at 54 Mbps.  Scenario: This issue is observed in AP-555 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-555 access points	ArubaOS 8.5.0.0

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**Table 7:** Known Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS- 183244 AOS- 183758 AOS- 185673	_	<b>Symptom:</b> An AP crashes and reboots unexpectedly. The log file lists the reason for the event as <b>FW assert at tbd.c:39</b> . <b>Scenario:</b> This issue occurs while enabling or disabling dot11k profile. This issue is observed in AP-535 access points running ArubaOS 8.5.0.0. <b>Workaround:</b> None.	AP-Wireless	AP-535 access points	ArubaOS 8.5.0.0
AOS- 183317	_	Symptom: A few APs detect false radars. Scenario: This issue is observed in AP-555 access points running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	AP-555 access points	ArubaOS 8.5.0.0
AOS- 183878	_	Symptom: The total load percentage of managed devices are not displayed in the logs although more APs are added to the managed devices.  Scenario: This issue is observed in managed devices running ArubaOS 8.5.0.0 in a cluster setup.  Workaround: None.	Cluster-Manager	All platforms	ArubaOS 8.5.0.0
AOS- 184450	_	Symptom: Clients connected to APs are getting deauthenticated. Scenario: This issue occurs when bi-directional traffic is introduced among High Efficiency clients due to which the APs are unable to send data to the clients. This issue is observed in APs running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	All platforms	ArubaOS 8.5.0.0
AOS- 184834	_	Symptom: The AP and client entries are not displaying zero although the managed device is disabled or shut down.  Scenario: This issue is observed in managed devices running ArubaOS 8.5.0.0 in a cluster setup.  Workaround: None.	Cluster-Manager	All platforms	ArubaOS 8.5.0.0
AOS- 184705	_	Symptom: Some clients get disassociated from the network and get reassociated after few seconds.  Scenario: This issue is observed in AP-534, AP-535, and AP-555 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-534, AP- 535, and AP- 555 access points	ArubaOS 8.5.0.0

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**Table 7:** Known Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS- 184795	_	Symptom: APs are not moving to the standby list when the load balancing thresholds are met. Scenario: This issue is observed APs connected to managed devices running ArubaOS 8.5.0.0 in a cluster setup. Workaround: None.	Cluster-Manager	All platforms	ArubaOS 8.5.0.0
AOS- 184921	_	<b>Symptom:</b> Few wired clients are unable to connect to APs. <b>Scenario:</b> This issue occurs when the wired clients are connected to the first Ethernet port of the APs. This issue is observed in AP-555 and AP-535 access points running ArubaOS 8.5.0.0. <b>Workaround:</b> None.	AP-Platform	AP-555 and AP-535 access points	ArubaOS 8.5.0.0
AOS- 185103	_	Symptom: The Outstanding Requests parameter value is incremented unexpectedly in the output of the show aaa authentication-server radius statistics command.  Scenario: This issue is observed in managed devices running ArubaOS 8.5.0.0 or later versions with EAP fragmentation enabled.  Workaround: Restart the 802.1x process by issuing the following two commands:  show processes   include dot1x process restart dot1x1	802.1x	All platforms	ArubaOS 8.5.0.1
AOS- 185115	_	Symptom: Some clients are getting disconnected from the APs when the 2.4 GHz radio is reset.  Scenario: This issue occurs when multiple APs are configured across 2.4 GHz and 5 GHz radios. This issue is observed in APs running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	All platforms	ArubaOS 8.5.0.0
AOS- 185184	_	<ul> <li>Symptom: An AP crashes and reboots unexpectedly. The log file lists the reason for this event as Kernel panic; BUG: soft lockup - CPU#0 stuck.</li> <li>Scenario: This issue occurs when:</li> <li>the frame size is smaller and the throughput is higher.</li> <li>the type of frames or destination do not matter as long as the data is sent to the AP's Ethernet port.</li> <li>This issue is observed in 530 Series and 550 Series access points running ArubaOS 8.5.0.0.</li> <li>Workaround: None.</li> </ul>	AP-Wireless	530 Series and 550 Series access points	ArubaOS 8.5.0.0

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**Table 7:** Known Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS- 185233	_	Symptom: An AP crashes and reboots unexpectedly. The log file lists the reason for the event as wal_phy_dev_hw.c:4423 Assertion g_disable_phy_m3_assert == TRUE; Thread name: IST1. Scenario: This issue is observed in AP-535 access points running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	AP-535 access points	ArubaOS 8.5.0.0
AOS- 185259	_	Symptom: All radios display poor channel quality under Dashboard > Overview > Radios > CHANNEL QUALITY column. Scenario: This issue is observed in managed devices running ArubaOS 8.5.0.0. Workaround: None.	Station Management	All platforms	ArubaOS 8.5.0.0
AOS- 185262	_	Symptom: Clients are getting disconnected from APs. Scenario: This issue is observed in APs running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	All platforms	ArubaOS 8.5.0.0
AOS- 185597	_	Symptom: An AP crashes and reboots unexpectedly. The log files lists the reason for the event as WLAN FW exception at wal_ba_tx_sm().  Scenario: This issue is observed in AP-555 and AP-535 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-555 and AP-535 access points	ArubaOS 8.5.0.0
AOS- 185696	_	Symptom: An AP stops responding to data frames and cannot decode block acknowledge from the STA leading to packet drop. After a few packets are dropped, the AP starts acknowledging the data frames and the traffic resumes.  Scenario: This issue is observed in AP-535 and AP-555 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-535 and AP-555 access points	ArubaOS 8.5.0.0
AOS- 185707	_	Symptom: An AP crashed and rebooted unexpectedly. The log file may not list the reason explicitly since it is an exceptional condition detected in the software.  Scenario: This issue is observed in AP-555 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-555 access points	ArubaOS 8.5.0.0

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**Table 7:** Known Issues in ArubαOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS- 185779	_	Symptom: A few APs continuously observe wl1: PHYTX error messages with no clients connected. Scenario: This issue is observed in 510 Series access points running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	510 Series access points	ArubaOS 8.5.0.0
AOS- 185833	_	Symptom: A few APs crash unexpectedly. The log file lists the reason for this event as ar_wal_vdev.c:2528 Assertion;Thread ID: 0x0000005e;PC: 0x4b0c9de8.  Scenario: This issue is observed in AP-535 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-535 access points	ArubaOS 8.5.0.0
AOS- 185894	_	Symptom: A few APs that operate in tunnel node incorrectly set the TID of downlink multicast traffic to 0.  Scenario: This issue is observed in AP-555 access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	AP-555 access points	ArubaOS 8.5.0.0
AOS- 185932	_	Symptom: Some clients delete block acknowledge agreement leading to ping timeouts.  Scenario: This issue occurs randomly when clients are still connected. Once a re-negotiation happens, the traffic resumes normally. This issue is observed in 550 Series access points running ArubaOS 8.5.0.0.  Workaround: None.	AP-Wireless	550 Series access points	ArubaOS 8.5.0.0
AOS- 185937	_	Symptom: An Access point crashes and reboots unexpectedly. The log files lists the reason for the event as whal_recv_recovery.c:606 Assertion RX_HW_WDOG_HANG failedparam0 :zero, param1 :zero, param2 :zero. Scenario: This issue is observed in AP-555 and AP-535 access points running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	AP-555 and AP-535 access points	ArubaOS 8.5.0.0
AOS- 186052	_	<b>Symptom:</b> A few APs witness TX mute when a radio reset burst occurs. <b>Scenario:</b> This issue occurs due to a reset in G radio that is triggered due to an interference in the AP's operating channel. This issue is observed in 530 Series and 550 Series access points running ArubaOS 8.5.0.0. <b>Workaround:</b> None.	AP-Wireless	530 Series and 550 Series access points	ArubaOS 8.5.0.0

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**Table 7:** Known Issues in ArubaOS 8.5.0.0

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS- 186095	_	<b>Symptom:</b> A few APs lose association and reconnect back immediately. <b>Scenario:</b> This issue occurs due to a beacon drift. This issue is observed in 530 Series and 550 Series access points running ArubaOS 8.5.0.0. <b>Workaround:</b> None.	AP-Wireless	530 Series and 550 Series access points	ArubaOS 8.5.0.0
AOS- 186096	_	Symptom: Some APs randomly observe radio resets. Scenario: This issue occurs in AP-555 access points running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	AP-555 access points	ArubaOS 8.5.0.0
AOS- 186108	_	<b>Symptom:</b> Some clients are unable to send and receive data. <b>Scenario:</b> This issue occurs when 802.11r is enabled and clients roam between 2.4 GHz and 5 GHz band. This issue is observed in AP-534 and AP-555 access points running ArubaOS 8.5.0.0. <b>Workaround:</b> None.	AP-Wireless	AP-534 and AP-555 access point	ArubaOS 8.5.0.0
AOS- 186144	_	Symptom: A managed device is unable to enable Tunnel Keepalive automatically, even after configuring Tunnel Heartbeat Interval & Tunnel Heartbeat Retries.  Scenario: This issue is observed in managed devices running ArubaOS 8.5.0.0 in a master-local topology.  Workaround: None.	GRE	All platforms	ArubaOS 8.5.0.0
AOS- 186146	_	Symptom: Some APs display active RX even though the radio is off. Scenario: This issue is observed in AP-535 and AP-555 access points running ArubaOS 8.5.0.0. Workaround: None.	AP-Wireless	AP-535 and AP-555 access points	ArubaOS 8.5.0.0
AOS- 186237 AOS- 185529	_	Symptom: The status and channel quality of an AP is displayed as Poor in the Dashboard > Overview > Radios WebUI page of a Mobility Master.  Scenario: This issue is observed in Mobility Masters running ArubaOS 8.5.0.0.  Workaround: None.	Monitoring	All platforms	ArubaOS 8.5.0.0
AOS- 186349	_	Symptom: The command ap image-preload takes any possible maximum value whereas a maximum of only 500 APs can be preloaded at any given time.  Scenario: This issue is observed in Mobility Master running ArubaOS 8.5.0.0.  Workaround: None.	Image Upgrade	All platforms	ArubaOS 8.5.0.0

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



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

#### Topics in this chapter include:

- Migrating from ArubaOS 6.x to ArubaOS 8.x on page 59
- Important Points to Remember and Best Practices on page 59
- Memory Requirements on page 60
- Backing up Critical Data on page 61
- Upgrading ArubaOS on page 63
- Downgrading ArubaOS on page 65
- Before Calling Technical Support on page 67

# Migrating from ArubaOS 6.x to ArubaOS 8.x

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

- Master-Local setup to Mobility Master
- All-Master setup to Mobility Master
- Master-Local setup to Master Controller Mode in ArubaOS 8.x
- Stand-alone controller running ArubaOS 8.x

For more information, refer to the ArubaOS 8.x Migration Guide.



Licenses are not migrated by the migration tool from any of the devices to Mobility Master. However, the licenses are preserved when migrating to ArubaOS 8.x Master Controller Mode or stand-alone controllers. For more information on License migration, refer to *Aruba Mobility Master Licensing Guide*.

# **Important Points to Remember and Best Practices**

To upgrade your managed device or Mobility Master:

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- 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** section of 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 ArubaOS runs on your managed device?
  - Are all managed devices running the same version of ArubaOS?
  - What services are used on the your managed device (employee wireless, guest access, Remote AP, wireless voice)?
- Resolve any existing issues (consistent or intermittent) before you upgrade.
- If possible, use FTP to load ArubaOS 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 ArubaOS, 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 *Aruba Mobility Master Licensing Guide*.

# **Memory Requirements**

All Aruba 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 the best practices for memory requirement:

- 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 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 <u>Backing up Critical Data on page 61</u> to copy the **crash.tar** file to an external server. Execute the **tar clean crash** command to delete the file from the managed device.

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- **Flash backups:** Use the procedures described in <u>Backing up Critical Data on page 61</u> 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 file: Execute the tar logs command to compress log files to a file named logs.tar. Use the procedures described in <a href="Backing up Critical Data">Backing up Critical Data</a> on page 61 to copy the logs.tar files 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 the 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
- Logs
- Flashbackup

## **Backing up and Restoring Flash Memory**

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

#### In the WebUI

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

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- 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 Compact Flash file system, 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 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 backup flash file from the external server or storage device to the compact flash file system 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 compact flash file system.

```
(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.
```

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# **Upgrading ArubaOS**

Upgrade ArubaOS 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 60.



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 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 ArubaOS from a TFTP server, FTP server, or local file:

- 1. Download the ArubaOS image from the customer support site.
- 2. Upload the new software image to a PC or workstation on your network.
- 3. Validate the SHA hash for the ArubaOS image:
  - a. Download the **Aruba.sha256** file from the download directory.
  - b. Load the ArubaOS 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 ArubaOS 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 ArubaOS image.

- 4. Log in to the ArubaOS WebUI from the Mobility Master.
- 5. Navigate to the **Maintenance > Software Management > Upgrade** page.
  - a. Select the Local File from the Upgrade using drop-down list.
  - b. Click **Browse** from **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.

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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 ArubaOS from a TFTP server, FTP server, or local file:

- 1. Download ArubaOS 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 ArubaOS image is loaded on the flash partitions. 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
```

## **Verifying the ArubaOS Upgrade**

Verify the upgrade using the WebUI or CLI.

#### In the WebUI

Log in to the WebUI and navigate to the **Dashboard > WLANs** page to verify the ArubaOS image version.

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

- 1. Log in to the WebUI to verify if all the managed devices are up after the reboot.
- 2. Navigate to the **Dashboard > Access Points** page to determine if your APs are up and ready to accept clients.
- 3. Verify that the number of access points and clients are as expected.
- 4. Test a different type of client in different locations, for each access method used.
- 5. Complete a backup of all critical configuration data and files on the flash memory to an external server or mass storage facility. See Memory Requirements on page 60 for information on creating a backup.

#### In the CLI

Execute the **show version** command to verify the ArubaOS image version. 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 ap active** command to determine if your APs are up and ready to accept clients.
- 3. Execute the **show ap database** command to verify that the number of APs and clients are as expected.
- 4. Test a different type of client in different locations, for each access method used.
- 5. Complete a backup of all critical configuration data and files on the flash memory to an external server or mass storage facility. See <u>Backing up</u> <u>Critical Data on page 61</u> for information on creating a backup.

# **Downgrading ArubaOS**

The 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 the managed device with the pre-upgrade ArubaOS version, perform the following steps:

- 1. Back up your Mobility Master or managed device. For details, see Backing up Critical Data on page 61.
- 2. Verify that the control plane security is disabled.
- 3. Set the Mobility Master or managed device to boot with the previously saved ArubaOS configuration file.
- 4. Set the Mobility Master or managed device to boot from the system partition that contains the pre-upgrade ArubaOS version.

  When you specify a boot partition or copy an image file to a system partition, Mobility Master or managed device checks if the ArubaOS version is compatible with the configuration file. An error message is displayed if the boot parameters are incompatible with the ArubaOS version and configuration files.
- 5. After switching the boot partition, perform the following steps:
  - Restore pre-upgrade flash backup from the file stored on the Mobility Master or managed device. Do not restore the ArubaOS flash backup file.

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- Do not import the WMS database.
- If the RF plan was changed before switching the boot partition, the changed RF plan does not appear in the downgraded ArubaOS version.
- If any new certificates were added in the upgraded ArubaOS version, reinstall these certificates in the downgraded ArubaOS version.

Downgrade ArubaOS version using the WebUI or CLI.

#### In the WebUI

The following steps describe how to downgrade the ArubaOS 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 the **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 the **Select destination file** drop-down list, enter a file name (other than default.cfg).
  - c. Click **Copy**.
- Determine the partition on which your pre-upgrade ArubaOS version is stored by navigating to the Maintenance > Software Management
   Upgrade page. If a pre-upgrade ArubaOS 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** option 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 ArubaOS version by navigating to the **Maintenance > Software Management > About** page.

#### In the CLI

The following section describes how to downgrade the ArubaOS version.

1. If the saved pre-upgrade configuration file is on an external FTP/TFTP server, use the following command to copy it to the controller:

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

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or

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

2. Set the controller 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 ArubaOS version is stored. You cannot load a new image into the active system partition (the default boot).

```
#show image version
```

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 ArubaOS version.

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

## **Before Calling Technical Support**

Provide the following information when you call Technical Support:

- The status of installation (new or existing), and any recent network 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 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.

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