

AOS-W Instant

6.4.3.4-4.2.1.1



Release Notes

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AOS-W Instant 6.4.3.4-4.2.1.1 is a patch release that introduces any new enhancements, and fixes to the issues identified in the previous releases.

For information on upgrading OAW-IAPs to the new release version, refer to the *Upgrading an OAW-IAP* topic in the *AOS-W Instant 6.4.3.4-4.2.1 User Guide*.

Contents

- [What's New in this Release on page 6](#) lists the regulatory information, any new features and enhancements, and fixed issues in Instant 6.4.3.4-4.2.1.1 release.
- [Features and Enhancements in Previous Releases on page 7](#) describes the features and enhancements added in previous 6.4.x.x-4.2.1.x releases.
- [Issues Resolved In Previous Releases on page 11](#) lists the issues fixed in previous Instant 6.4.x.x-4.2.1.x releases.

Contacting Support

Table 1: Contact Information

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

This chapter lists the regulatory information, features, enhancements, fixed issues, known issues and limitations identified in the AOS-W Instant 6.4.3.4-4.2.1.1 release.

Regulatory Domain Updates

The following table lists the DRT file versions supported by Instant 6.4.3.x-4.2.1.x releases:

Table 2: *DRT Versions*

Instant Release Version	Applicable DRT Version
6.4.3.4-4.2.1.1	1.0_52480
6.4.3.4-4.2.1.0	1.0_52480

For a complete list of countries certified with different AP models, see the respective DRT release notes at service.esd.alcatel-lucent.com.

Resolved Issues in this Release

The following issues are fixed in the Instant 6.4.3.4-4.2.1.1 release.

Authentication

Table 3: *Authentication Fixed Issue*

Bug ID	Description
129304 127348 128118 130490	<p>Symptom: Client devices running the Android 6.0+ or Windows 10 software were unable to connect to the 802.1x SSID of the OAW-IAP. The fix ensures that the client devices are able to connect to the 802.1x SSID.</p> <p>Scenario: This issue occurred when 802.1x termination was enabled on the OAW-IAP and was observed in all OAW-IAPs running Instant 6.4.3.4-4.2.1.0 release.</p>

Datapath/Firewall

Table 4: *Datapath/Firewall Fixed Issue*

Bug ID	Description
125170	<p>Symptom: When the show speed-test data command was executed while the speed test was in progress, the output was either blank or an error message was displayed on the CLI. The fix ensures that the output for the show speed-test data command is displayed correctly.</p> <p>Scenario: This issue was observed on all OAW-IAPs that support the speed-test function (OAW-IAP109, OAW-IAP205, and OAW-IAP225) running Instant 6.4.3.4-4.2.1.0 release.</p>

This chapter describes the features and enhancements introduced in previous AOS-W Instant 6.4.3.x-4.2.1.x releases.

Features and Enhancements

This section describes the features and enhancements introduced in Instant 6.4.3.x-4.2.1.x releases.

Support for Cell Size Reduction feature on OAW-IAPs

The Cell Size Reduction feature allows you to manage dense deployments and to increase overall system performance and capacity by shrinking an OAW-IAP's receive coverage area, thereby minimizing co-channel interference and optimizing channel reuse. This feature can be configured using the OAW-IAP CLI.

For more information, see:

- *Configuring Cell Size Reduction using the CLI* in the *AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*.
- **rf dot11a-radio-profile**, **rf dot11g-radio-profile**, and **show radio config** commands in the *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*.

Support for configuring up to 16 Captive Portal Profiles

Starting with Instant 6.4.3.4-4.2.1.0, you can configure up to 16 external captive portal profiles. A new option called **Switch IP** has been included to use the VC IP as the Switch IP in the external captive portal redirect URL.

For more information, see:

- *Creating a Captive Portal Profile* in the *AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*.
- **wlan external-captive portal** command in the *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*.

Time Based Services

Starting with Instant 6.4.3.4-6.2.1.0, users can configure time range profiles using the OAW-IAP UI and CLI. These Time Range Profiles can be enabled on a nOAW-IAP to allow or deny access to an SSID only during a specific period of time.

For more information, see:

- *Configuring Time Range Profiles* in the *AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*.
- **time-range**, **show time-profile** and **show time-range** commands in the *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*.

XML-API Server Configuration Enhancement

Starting with Instant 6.4.3.4-4.2.1.0 release, users can now configure up to 8 XML API server entries on anOAW-IAP. You can also create XML API requests with appropriate authentication commands.

For more information, see *Configuring anOAW-IAP for XML API Integration* and *Creating an XML API Request* sections in the *AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*.

Uplink Bandwidth Monitoring

OAW-IAP uses Iperf3 as a TCP or UDP client to run a speed test and measure the bandwidth on an uplink. Iperf3 runs on the VC IP of the cluster and the speed test results are published to ALE. You may choose to configure and execute a speed test during boot time and additionally at specific time intervals in the CLI configuration mode or execute the speed test at any preferred time using the CLI Privileged EXEC mode.

For more information, see:

- *Uplink Bandwidth Monitoring* in the *AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*.
- **speed-test** and **speed-test <server>** commands in the *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*.

Modulation Rates Configuration

In Instant 6.4.3.4-4.2.1.0, the OAW-IAP CLI allows you to enable and disable modulation rates for a radio band, High Throughput (HT) Modulation and Coding Scheme (MCS) set, and a combination of VHT MCS and spatial streams as a VHT MCS rate set for a WLAN SSID profile. For example, the 802.11g band supports the modulation rate including 1, 2, 5, 6, 9, 11, 12, 18, 24, 36, 48, 54Mbps and 802.11a band supports a modulation rate set including 6, 9, 12, 18, 24, 36, 48, 54Mbps. The OAW-IAP CLI now allows you to configure the modulation rates for these bands.

You can also configure an HT MCS rate set, so that the SSID does not broadcast the disabled MCS rates list for 802.11n clients. For 802.11ac clients, only 10 MCS rates supported in the 802.11ac mode and OAW-IAPs use a combination of VHT MCS and spatial streams to convey the supported MCS rates.

The following configuration parameters are introduced in the **wlan ssid-profile** command to allow the administrators to configure modulation rates, HT MCS, and VHT MCS.

- a-basic-rates
- a-tx-rates
- g-basic-rates
- g-tx-rates
- supported-mcs-set
- vht-support-mcs-map

Short Preamble Configuration

In Instant the 6.4.3.4-4.2.1.0, the OAW-IAP CLI allows you to enable or disable the transmission and reception of short preamble frames. By default, short preamble frames are enabled for all WLAN SSID clients.

To disable short preamble frames, use the **short-preamble-disable** parameter in the **wlan ssid-profile** command.

Support for New Modems

Starting from Instant 6.4.3.4-4.2.1.0, OAW-IAPs support Huawei E3372 and Alcatel L800 4G modems.

Very High Throughput Configuration

In Instant 6.4.3.4-4.2.1.0, OAW-IAPs allow you to enable or disable Very High Throughput (VHT) function on devices that support VHT. VHT is enabled by default on 802.11ac series OAW-IAPs. However, you can disable VHT if you want the 802.11ac IAPs to function as 802.11n OAW-IAPs.

You can configure VHT on SSID or a 5 GHz radio profile. If you enable or disable VHT on an SSID, the configuration is applicable only to the clients connecting through that SSID. To disable or enable VHT on all SSIDs, configure VHT on the 5 GHz radio profile.

For more information, see:

- *Configuring WLAN Settings for an SSID Profile and Configuring Radio Settings in AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*
- The **wlan ssid-profile** and **rf dot11a-radio-profile** commands in *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*

FCC Compliance Statement

The **About** tab in the Maintenance window now displays FCC compliance statement for the OAW-IAPs operating in the US regulatory domain.

Cellular SIM PIN Locking Feature Enhancements

In the previous Instant release, the SIM PIN lock and PIN renewal commands were available in the **cellular-uplink-profile** configuration mode in the OAW-IAP CLI. In Instant 6.4.3.4-4.2.1.0, the following commands for locking, unlocking, and renewing SIM PIN are removed from the **cellular-uplink-profile** configuration mode and added under the configuration mode:

- **pin-enable** and **no pin-enable**
- **pin-puk**
- **pin-renew**

For more information, see *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*

U-APSD Support for WMM Clients

To extend the battery life and enable powersaving on WLAN clients, OAW-IAPs now support Unscheduled Automatic Power Save Delivery (U-APSD) for the clients that support WMM. The U-APSD or the WMM power save feature is enabled by default on all SSIDs.

For more information on U-APSD configuration, see:

- *Configuring WMM U-APSD in AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*
- The **wlan ssid-profile** command in *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*

DHCP Enforcement

The administrators can now block traffic for OAW-IAP clients that do not obtain IP address from DHCP by using the **enforce-dhcp** parameter in the **wlan ssid-profile** command.

For more information, see:

- *Enforcing DHCP in AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*
- The **wlan ssid-profile** command in *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*

RADIUS Server IP Configuration for Balancing CPPM Server Load

To improve the guest user experience and balance the CPPM server load, the administrators can now configure the IP address of a RADIUS server when configuring additional parameters for guest registration on the ClearPass Guest Login page.

For more information, see *Configuring RADIUS Attribute for CPPM Server Load Balancing in AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*.

Dynamic TACACS Proxy

A new checkbox called TACACS has been included under Dynamic Proxy which allows the Virtual Controller network to use the VC IP address for communication with external TACACS servers.



When `dynamic-tacacs-proxy` is enabled on the OAW-IAP, the TACACS server cannot identify the slave OAW-IAP that generates the TACACS traffic as the source IP address is changed.

For more information, see *Configuring System Parameters* in *AOS-W Instant 6.4.3.4-4.2.1.0 User Guide*

Dynamic TACACS Proxy command in the *AOS-W Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*

Traps to Notify the Status of the External Captive Portal Server

In Instant 6.4.3.4-4.2.1.0, two new traps are added to notify OmniVista Management Platform (AMP) and Central about the status of the external captive portal server.

- `wlsxPortalServerDown` — This trap is generated when the external captive portal server is down.
- `wlsxPortalServerUp` — This trap is generated when the external captive portal server comes up.

For more information on these traps, see **aruba-instant.my** MIB file.

This chapter describes the issues fixed in previous AOS-W Instant 6.4.3.x-4.2.1.x releases.

Issues Resolved in 6.4.3.4-4.2.1.0

Datapath/Firewall

Table 5: *Datapath/Firewall Fixed Issue*

Bug ID	Description
126377	<p>Symptom: OAW-IAPs were dropping client ARP packets when the client VLAN was deleted from the VLAN multicast table. This issue is resolved if the client exists on the OAW-IAP, since the OAW-IAP does not delete the client VLAN from the VLAN multicast table.</p> <p>Scenario: This issue was not limited to a specific OAW-IAP model or Instant software version.</p>

Mesh

Table 6: *Mesh Fixed Issue*

Bug ID	Description
122099	<p>Symptom: When the 5 GHz radio of anOAW-IAP was configured to run in the legacy-mode (non-802.11n mode), the 802.11ac mesh link was still working in the VHT mode. This issue is resolved by adding check logic to notify the OAW-IAP when the legacy mode is changed.</p> <p>Scenario: This issue was found in OAW-IAP2xx series access points running Instant 6.4.3.1-4.2.0.0 release.</p>

Platform

Table 7: *Platform Fixed Issue*

Bug ID	Description
126717	<p>Symptom: OAW-IAP crashed with a fatal exception due to kernel panic. This issue is resolved by forwarding the valid ACE parameters to the sp_log.</p> <p>Scenario: In datapath, the maximum number of Access Control Entries (ACE) that can be programmed is 512. In this scenario, the SWARM_MAX_ACE_PER_ACL size was extended to 1024, as there were multiple DHCP servers and domain name Access Control Lists (ACL). This issue was observed in all OAW-IAPs running Instant 6.4.3.1-4.2.0.2 release.</p>

Wi-Fi Driver

Table 8: *Wi-Fi Driver Fixed Issue*

Bug ID	Description
126767	<p>Symptom: AnOAW-IAP-205 device crashed due to Kernel panic. This issue is resolved by making a change in the OAW-IAP code to identify the action frames with invalid pointers and dropping those packets.</p> <p>Scenario: This issue was observed in OAW-IAP205 and OAW-IAP215 access points running Instant 6.4.3.1-4.2.0.0 release.</p>