

Aruba Instant

6.4.3.4-4.2.1.2



Release Notes

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Aruba Instant 6.4.3.4-4.2.1.2 is a patch release that introduces any new enhancements, and fixes to the issues identified in the previous releases.

For information on upgrading IAPs to the new release version, refer to the *Upgrading an IAP* topic in the *Aruba Instant 6.4.3.1-4.2.1 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 6.4.3.4-4.2.1.2 release.
- [Known Issues and Limitations on page 7](#) lists the known issues and limitations identified in the 6.4.x.x-4.2.1.x releases.
- [Features and Enhancements in Previous Releases on page 8](#) describes the features and enhancements added in previous 6.4.x.x-4.2.1.x releases.
- [Issues Resolved In Previous Releases on page 12](#) lists the issues fixed in previous Instant 6.4.x.x-4.2.1.x releases.

Contacting Support

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 Telephones	http://www.arubanetworks.com/support-services/support-program/contact-support
Software Licensing Site	licensing.arubanetworks.com/login.php
End of Support Information	http://www.arubanetworks.com/support-services/end-of-life-products/end-of-life-policy/
Security Incident Response Team (SIRT)	http://www.arubanetworks.com/support-services/security-bulletins/
Support Email Addresses	
Americas, EMEA, and APAC	support.arubanetworks.com
SIRT Email Please email details of any security problem found in an Aruba product.	sirt@arubanetworks.com

This chapter lists the regulatory information, features, enhancements, fixed issues, known issues and limitations identified in the Aruba Instant 6.4.3.4-4.2.1.2 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 1: *DRT Versions*

Instant Release Version	Applicable DRT Version
6.4.3.4-4.2.1.2	1.0_52480
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 support.arubanetworks.com.

Resolved Issues in this Release

The following issues are fixed in the Instant 6.4.3.4-4.2.1.2 release.

AirWave

Table 2: *AirWave Fixed Issue*

Bug ID	Description
126970	<p>Symptom: IAPs were unable to apply the new hostname pushed by the AirWave Management Platform (AMP). A change in the IAP code has resolved this issue.</p> <p>Scenario: This issue occurred when the hostname included 31 characters and was observed in all IAPs running Instant 6.4.3.4-4.2.1.0 release and earlier versions.</p>

Datapath/Firewall

Table 3: *Datapath/Firewall Fixed Issue*

Bug ID	Description
126980	<p>Symptom: VLAN tagged packets bridged out to the IAP had an incorrect default CoS (802.1p priority) value of three. This issue is resolved by fixing a VLAN tagging issue when the DSCP value in the ACL was set to zero.</p> <p>Scenario: This issue occurred when the SSID was directing traffic in the bridge mode and the CoS value of the associated VLAN was set to three by default. This issue was not limited to a specific IAP model or software version.</p>

Known Issues and Limitations

The following known issues and limitations are identified in the Instant 6.4.3.x-4.2.1.x releases.

Maximum Configurable Year for Absolute Time Range Profiles

When creating an absolute time-range profile, the year selected for the Start Day and End Day cannot exceed 2037.

Known Issues

The following Known Issue is identified in the Instant 6.4.3.4-4.2.1.0 release:

VC Management

Table 4: VC Management Known Issue

Bug ID	Description
128737	<p>Symptom: When assigning a time-range profile to an SSID, the IAP UI throws a "Profile Not Found" error if the time-range profile name is configured with a special character " or a blank space.</p> <p>Scenario: This issue is found on IAPs running Instant 6.4.3.4-4.2.1.0 release.</p> <p>Workaround: Avoid configuring the time-range profile names with a special character " or blank space.</p>

This chapter describes the features and enhancements introduced in previous Aruba 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 IAPs

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

For more information, see:

- *Configuring Cell Size Reduction using the CLI* in the *Aruba 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 *Aruba 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 *Aruba Instant 6.4.3.4-4.2.1.0 User Guide*.
- **wlan external-captive portal** command in the *Aruba 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 IAP UI and CLI. These Time Range Profiles can be enabled on an 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 *Aruba Instant 6.4.3.4-4.2.1.0 User Guide*.
- **time-range**, **show time-profile** and **show time-range** commands in the *Aruba 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 an IAP. You can also create XML API requests with appropriate authentication commands.

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

Uplink Bandwidth Monitoring

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 *Aruba Instant 6.4.3.4-4.2.1.0 User Guide*.
- **speed-test** and **speed-test <server>** commands in the *Aruba 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 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 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 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 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, IAPs support Huawei E3372 and Alcatel L800 4G modems.

Very High Throughput Configuration

In Instant 6.4.3.4-4.2.1.0, 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 IAPs. However, you can disable VHT if you want the 802.11ac IAPs to function as 802.11n 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 Aruba Instant 6.4.3.4-4.2.1.0 User Guide*
- The **wlan ssid-profile** and **rf dot11a-radio-profile** commands in *Aruba 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 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 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 *Aruba 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, 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 Aruba Instant 6.4.3.4-4.2.1.0 User Guide*
- The **wlan ssid-profile** command in *Aruba Instant 6.4.3.4-4.2.1.0 CLI Reference Guide*

DHCP Enforcement

The administrators can now block traffic for 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 Aruba Instant 6.4.3.4-4.2.1.0 User Guide*
- The **wlan ssid-profile** command in *Aruba 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 Aruba 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 IAP, the TACACS server cannot identify the slave IAP that generates the TACACS traffic as the source IP address is changed.

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

Dynamic TACACS Proxy command in the *Aruba 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 AirWave 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 Aruba Instant 6.4.3.x-4.2.1.x releases.

Issues Resolved in 6.4.3.4-4.2.1.1

Authentication

Table 5: *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 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 IAP and was observed in all IAPs running Instant 6.4.3.4-4.2.1.0 release.</p>

Datapath/Firewall

Table 6: *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 IAPs that support the speed-test function (IAP-109, IAP-205, and IAP-225) running Instant 6.4.3.4-4.2.1.0 release.</p>

Issues Resolved in 6.4.3.4-4.2.1.0

Datapath/Firewall

Table 7: *Datapath/Firewall Fixed Issue*

Bug ID	Description
126377	<p>Symptom: 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 IAP, since the IAP does not delete the client VLAN from the VLAN multicast table.</p> <p>Scenario: This issue was not limited to a specific IAP model or Instant software version.</p>

Mesh

Table 8: *Mesh Fixed Issue*

Bug ID	Description
122099	<p>Symptom: When the 5 GHz radio of anIAP 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 IAP when the legacy mode is changed.</p> <p>Scenario: This issue was found in IAP-2xx series access points running Instant 6.4.3.1-4.2.0.0 release.</p>

Wi-Fi Driver

Table 9: *Wi-Fi Driver Fixed Issue*

Bug ID	Description
122099	<p>Symptom: AnIAP-205 device crashed due to Kernel panic. This issue is resolved by making a change in the IAP code to identify the action frames with invalid pointers and dropping those packets.</p> <p>Scenario: This issue was observed in IAP-205 and IAP-215 access points running Instant 6.4.3.1-4.2.0.0 release.</p>