# Aruba Instant 6.4.4.8-4.2.4.2

aruba

a Hewlett Packard
Enterprise company

Release Notes

# Contents

Aruba Instant 6.4.4.8-4.2.4.2 is a patch release that introduces enhancements and fixes to the issues found in the previous release.

For information on upgrading IAPs to the new release version, refer to the *Upgrading an IAP* topic in the *Aruba Instant 6.4.4.6-4.2.4.0 User Guide.*

## Contents

## Contacting Support

**Table 1:** *Support 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)<br>1-408-754-1200 |
| International Telephones | arubanetworks.com/support-services/aruba-support-program/contact-support/ |
| Software Licensing Site | licensing.arubanetworks.com |
| End-of-life Information | arubanetworks.com/support-services/end-of-life/ |
| Security Incident Response Team (SIRT) | Site: arubanetworks.com/support-services/security-bulletins/<br>Email: sirt@arubanetworks.com |

This chapter lists the regulatory information, and fixed issues in the Aruba Instant 6.4.4.8-4.2.4.2 release.

## Regulatory Domain Updates

The following table lists the DRT file versions supported by Instant 6.4.4.x-4.2.4.x releases:

**Table 2:** *DRT Versions*

| Instant Release Version | Applicable DRT Version |
|---|---|
| 6.4.4.8-4.2.4.2 | 1.0_56050 |
| 6.4.4.8-4.2.4.1 | 1.0_55489 |
| 6.4.4.6-4.2.4.0 | 1.0_54870 |

For a complete list of countries certified with different AP models, see the respective DRT release notes at support.arubanetworks.com.

> This software release resolves the issue described in HPE Aruba Support Advisory ARUBA-SA-20160516-01, available for download from the **Announcements** section of the Aruba support site support.arubanetworks.com. All impacted devices are back in compliance.

## Resolved Issues in this Release

The following issues are fixed in the Instant 6.4.4.8-4.2.4.2 release.

### ALE

**Table 3:** *ALE Fixed Issue*

| Bug ID | Description |
|---|---|
| 145729 | **Symptom**: The **Age** field in the RSSI client message was not accurate. The issue is resolved by changing the calculation logic of the field.<br>**Scenario**: This issue affected deployments in which IAPs were being used in combination with the ALE server for location-based services, resulting in inaccurate location calculations of the ALE server. This issue was observed in all the IAPs running a software version prior to Instant 6.4.4.8-4.2.4.2. |

### CLI

**Table 4:** *CLI Fixed Issue*

| Bug ID | Description |
|---|---|
| 144944 | **Symptom**: The VPN routing profile of an IAP accepted invalid entries during CLI configuration. The issue is resolved by running a check on the CLI parameters, so that the IAP displays an error message when the users enter invalid parameters.<br>**Scenario**: This issue was observed when the IAP-VPN profile accepted values such as ASCII and special characters without displaying an error message in the CLI. This issue was not limited to a specific IAP model or Instant software version. |

## Datapath/Firewall

**Table 5:** *Datapath/Firewall Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 139022 | **Symptom**: IAPs crashed and rebooted while receiving certain multicast packets from the SSID profile. The fix ensures that IAPs do not crash while receiving the multicast packets.<br>**Scenario**: This issue was found in IAPs with the Dynamic Multicast Optimization (DMO) feature enabled. This issue was observed in IAP-325 access points running Instant 6.4.4.3-4.2.2.0 and later releases. |
| 146155 | **Symptom**: When the SSID, WLAN access rule, and user-defined Src-NAT rule were in use, the bandwidth control did not have any effect on the clients associated to slave IAPs. The issue is resolved by changing the bandwidth control logic of the IAPs.<br>**Scenario**: This issue was observed in all the IAPs running a software version prior to Instant 6.4.4.8-4.2.4.2. |

## Platform

**Table 6:** *Platform Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 145808<br>136228 | **Symptom**: IAPs in a cluster rebooted as they were running out of memory. The fix ensures that IAPs use the memory space appropriately.<br>**Scenario**: This issue was observed in IAP-205 and IAP-275 access points running a software version prior to Instant 6.4.4.8-4.2.4.2. |

## PPPoE

**Table 7:** *PPPoE Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 140549 | **Symptom**: PPPoE session was not working when the uplink port of an IAP was fluctuating. The fix ensures that PPPoE works even when there are multiple fluctuations at the uplink port of the IAP.<br>**Scenario**: This issue was observed in all the IAPs running a software version prior to Instant 6.4.4.8-4.2.4.2. |

## Wi-Fi Driver

**Table 8:** *Wi-Fi Driver Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 132990 | **Symptom**: Wireless services were unstable when the Ethernet port of the RAP-109 access point was fluctuating. The fix ensures that clients receive stable wireless services from the RAP.<br>**Scenario**: This issue was observed in RAP-109 access points running a software version prior to Instant 6.4.4.8-4.2.4.2. |

## 3G/4G Management

**Table 9:** *3G/4G Management Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 142944 | **Symptom**: A 320U 4G modem was not working when connected to an IAP. This issue is resolved by a change in condition to match the module name of the modem.<br>**Scenario**: This issue was observed in 320U modems connected to RAP-155 access points running a software version prior to Instant 6.4.4.8-4.2.4.2. |

# Known Issues

The following known issues are identified in the Instant 6.4.4.x-4.2.4.x releases:

## AppRF

**Table 10:** *AppRF Known Issue*

| Bug ID | Description |
|--------|-------------|
| 120228 | **Symptom**: The Skype application is not getting blocked when the App enforcement ACL is configured.<br>**Scenario**: This issue occurs with IAPs that support the App enforcement feature, and is observed in all the IAPs running Instant 6.4.3.1-4.2.0.0 or later versions.<br>**Workaround**: None. |

This chapter describes the features and enhancements introduced in previous Aruba Instant 6.4.4.x-4.2.4.x releases.

## Features and Enhancements

The following features and enhancements were introduced in Instant 6.4.4.x-4.2.4.x releases.

### Support for Telus Aircard 340U Modem

Starting from Instant 6.4.4.8-4.2.4.1, the Telus Aircard 340U modem is supported.

### Support for Hotspot 2.0 on IAP-325 Access Points

Starting from Instant 6.4.4.6-4.2.4.0, the Hotspot 2.0 (Passpoint Release 1) feature is supported on IAP-325 access points. For more information, see:

- *Hotspot Profiles* in *Aruba Instant 6.4.4.6-4.2.4.0 User Guide*.

### Enhancement to Routing Profile Capability

A new field called **metric** has been added as part of the routing profile configuration. When two or more routes with the same destination are available for data transfer, the route with the lowest metric value takes precedence. For more information, see:

- *Configuring Routing Profiles* in *Aruba Instant 6.4.4.6-4.2.4.0 User Guide.*
- **routing-profile** command in *Aruba Instant 6.4.4.6-4.2.4.0 CLI Reference Guide.*

### Enhancement for Disabling Default Auto Topology Rules

Starting from Instant 6.4.4.6-4.2.4.0, the auto topology rules can be disabled using the Instant UI and CLI. For more information, see:

- *Configuring Firewall Settings to Disable Auto Topology Rules* in *Aruba Instant 6.4.4.6-4.2.4.0 User Guide.*
- **Firewall** command in *Aruba Instant 6.4.4.6-4.2.4.0 CLI Reference Guide.*
- **show Firewall** command in *Aruba Instant 6.4.4.6-4.2.4.0 CLI Reference Guide.*

### Enhancement to ALE Monitoring Capabilities

Starting from Instant 6.4.4.6-4.2.4.0, ALE monitoring capabilities have been enhanced to receive notifications on the Wireless Backup Unit (WBU) stats and status of LTE 3G/4G modems. ALE is now notified with the following monitoring statistics:

- A LTE 3G/4G modem is plugged in or unplugged from the IAP USB port.
- The modem is incorrectly plugged in to the USB port of the slave IAP instead of the master IAP.
- The current status of the SIM card used in the modem.
- The current status of the uplink in use when the modem is connected to the master IAP.
- The WBU Rx or Tx bytes from the modem traffic when there is an uplink connectivity between the modem and the master IAP.

Additionally, the Master IAP will now notify ALE through hearbeat messages indicating the status (UP or DOWN) of the slave IAPs.

## Allow Zero Touch Provisioning When NTP Server is Unreachable

Starting from Instant 6.4.4.6-4.2.4.0, zero-touch provisoning is allowed even when the NTP server is unavailable.

This chapter describes the issues fixed in previous Aruba Instant 6.4.4.x-4.2.4.x releases.

## Issues Resolved in 6.4.4.8-4.2.4.1

AirWave

**Table 11:** *AirWave Fixed Issue*

| Bug ID | Description |
|---|---|
| 140313 | **Symptom**: AirWave managing IAPs did not display some of the interfering IAPs. The fix ensures that the interfering IAPs are displayed on AirWave. <br>**Scenario**: This issue occurred when a large number of interfering IAPs were present in the same physical area of the WLAN network. This issue was not limited to a specific IAP model or Instant software version. |

### AppRF

**Table 12:** *AppRF Fixed Issue*

| Bug ID | Description |
|---|---|
| 143257 | **Symptom**: DPIMGR trace logging spiked memory usage on the IAP. This issue is resolved by moving the syslog message from error log to debug level. <br>**Scenario**: This issue occurred when the brightcloud DNS resolve process started before trace logging of DPIMGR, which triggered default trace logging to grow and caused memory spike in IAPs running Instant 6.4.4.4-4.2.3.0 and later versions. |

### Datapath/Firewall

**Table 13:** *Datapath/Firewall Fixed Issues*

| Bug ID | Description |
|---|---|
| 138649 | **Symptom**: IAP-225 access points crashed and rebooted with the reason: **Reboot caused by kernel panic: Fatal exception in interrupt.** This issue is resolved by preventing the watchdog timer from getting triggered when the bridge entries are deleted. <br>**Scenario**: The watchdog timer was triggered when the bridge entries were deleted. This issue was observed in IAP-225 access points running a software version prior to Instant 6.4.4.8-4.2.4.1. |
| 143390 | **Symptom**: Clients connecting to RAP-109 using a 3G or 4G uplink were unable to get an IP address from all Ethernet ports with enet0-bridging enabled. This issue is resolved by bringing up the br0 port when enet0-bridging is enabled. <br>**Scenario**: The br0 port is down when enet0-bridging is enabled. This issue was observed in RAP-109 access points running a software version prior to Instant 6.4.4.8-4.2.4.1. |
| 144543 | **Symptom**: Apple devices connected to the slave IAPs via the guest VLAN were intermittently losing connectivity to the network. The fix ensures that the Apple devices are able to connect to the network without intermittency issues. <br>**Scenario**: This issue was observed in all IAPs running Instant 6.4.4.4-4.2.3.0 and later versions. |

## SNMP

**Table 14:** *SNMP Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 140180 | **Symptom**: The Object aiRadioStatus value was always 1 irrespective of the radio status. The fix ensures that the Object aiRadioStatus is 0 when the radio is disabled and 1 when the radio is enabled. However, when mesh is enabled on the IAP, the object aiRadioStatus will be 1 even when the radio is disabled.<br>**Scenario**: This issue was not limited to a specific IAP model or Instant software version. |

## STM

**Table 15:** *STM Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 136795 | **Symptom**: STM core files were found in several IAPs as a result of the memory being cleared twice. This issue is resolved by preventing the memory from being cleared twice when the auth-server ip address is changed.<br>**Scenario**: This issue occurred when multiple IAPs were used and DRP was enabled on the SSID profile. This issue was not limited to a specific IAP model or Instant software version. |

## UI

**Table 16:** *UI Fixed Issues*

| Bug ID | Description |
|--------|-------------|
| 137227 | **Symptom**: Users were getting an error message when they tried logging in to the IAP UI using Internet Explorer 11. The warning message has been removed to resolve this issue.<br>**Scenario**: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.1. |
| 140803 | **Symptom**: One of the ACL parameters was incorrectly displaying as **scanning activieren** instead of **scanning deaktivieren** in the German version of the IAP UI.<br>**Scenario**: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.1. |

## Wi-Fi Driver

**Table 17:** *Wi-Fi Driver Fixed Issue*

| Bug ID | Description |
|--------|-------------|
| 129829 | **Symptom**: External wi-fi devices were intermittently not displayed in the IDS table after they were re-classified as valid. The fix ensures that the external wi-fi devices are displayed in the IDS table until the device entry expires.<br>**Scenario**: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.1. |

# Issues Resolved in 6.4.4.6-4.2.4.0

## AirGroup

**Table 18:** *AirGroup Fixed Issue*

| Bug ID | Description |
|---|---|
| 139943 | **Symptom**: AirPrint information was not getting displayed on the AirGroup server list of the IAP. This issue is resolved by a change in code that records the response sent to the IAP query.<br>**Scenario**: This issue was observed in IAP-205 devices running a software version prior to Instant 6.4.4.6-4.2.4.0. |

## AirWave

**Table 19:** *AirWave Fixed Issue*

| Bug ID | Description |
|---|---|
| 136986 | **Symptom**: IAPs were sending the tx power and channel information to AirWave ven when the 2.4 GHz and 5 GHz radios were disabled. The fix ensures the IAP does not report the tx power, radio channel, noise floor, and channel busy values to AirWave when the radios are disabled.<br>**Scenario**: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.6-4.2.4.0. |

## ARM

**Table 20:** *ARM Fixed Issue*

| Bug ID | Description |
|---|---|
| 139165 | **Symptom**: The 2.4 GHz channels were disabled in IAPs that support the Nigerian country code. The issue is resolved by removing the code that is used to validate DRT content of the IAP.<br>**Scenario**: This issue was observed in IAP-205 devices running a software version prior to Instant 6.4.4.6-4.2.4.0. |

## Datapath/Firewall

**Table 21:** *Datapath/Firewall Fixed Issues*

| Bug ID | Description |
|---|---|
| 138095 | **Symptom**: After upgrading the software version from Instant 6.4.2.6-4.1.1.6 to 6.4.3.4-4.2.1.0, MAC users were experiencing delays in connecting to the network. The fix ensures that the users are able to connect to the newtork without delay.<br>**Scenario**: This issue occurred as there was a delay in receiving the DHCP IP address from the server and was observed in all IAPs running Instant 6.4.3.4-4.2.1.0 and later versions. |
| 136169 | **Symptom**: Some clients were getting a higher bandwidth than the allocated limit. The fix ensures that the bandwidth does not exceed the allocated limit.<br>**Scenario**: This issue occurred as the bandwidth contract for some of the IAPs in the cluster was not taking effect correctly. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.6-4.2.4.0. |

## Hotspot 2.0

**Table 22:** *Hotspot 2.0 Fixed Issues*

| Bug ID | Description |
|---|---|
| 139116 | **Symptom**: IAPs failed to send 3GPP-PLMN values in the ANQP response frame. The fix ensures that correct values for the 3GPP-PLMN element are sent by the IAP.<br>**Scenario**: This issue was observed in IAP-205H access points running Instant 6.4.4.4-4.2.3.0 and later versions. |
| 138670 | **Symptom**: Clients failed to automatically connect to IAPs even after the hotspot feature was configured in the IAPs. The fix ensures that an automatic connection between the hotspot clients and IAPs is successful.<br>**Scenario**: This issue occurred as the IAPs were not adding hotspot information elements into the beacon.. This issue was observed in IAPs running Instant 6.4.3.4-4.2.1.0 and later versions. |

## L2/L3 Mobility

**Table 23:** *L2/L3 Mobility Fixed Issue*

| Bug ID | Description |
|---|---|
| 137726 | **Symptom**: Clients were unable to pass traffic after successfully roaming from one IAP to another in the cluster. This issue is resolved by making a change in the code to use the client information in the user path when programming the user entry for the home IAP.<br>**Scenario**: This issue occurred as the user entry was cleared from the home IAP when the client roamed from one IAP to another in the network and was not limited to a specific IAP model or software version. |

## Platform

**Table 24:** *Platform Fixed Issues*

| Bug ID | Description |
|---|---|
| 140867 | **Symptom**: When clients upgraded anIAP, the RTLS server displayed an error message. This issue is resolved by enabling the server compatibility settings of the RTLS server.<br>**Scenario**: This issue was observed in IAP-103 access points running a software version prior to Instant 6.4.4.6-4.2.4.0. |
| 142400 | **Symptom**: IAPs were continuously crashing every 2 to 3 minutes, causing productivity issues with the clients. This issue is resolved by introducing a mechanism to lock the bridge entry of the IAP.<br>**Scenario**: This issue occurred due to a kernel panic in the IAP code, resulting in continuous rebooting of the IAPs. This issue was observed in IAP-325 access points running Instant 6.4.4.4-4.2.3.0 and later versions. |
| 135787 | **Symptom**: When a multicast server tried to send a file to the client through an IAP, the client failed to receive the entire file. This issue is resolved by applying a condition to verify the DHCP/DNS packets.<br>**Scenario**: This issue occurred when the IAPs dropped a section of the fragmented packets during file transfer. This issue was observed in IAPs running a software version prior to Instant 6.4.4.6-4.2.4.0. |
| 137637 | **Symptom**: IAP-225 devices crashed and rebooted with a response: Reboot caused by Kernel panic: asset. This issue is resolved by removing the L3 mobility tunnel creation for the CL2 VLAN.<br>**Scenario**: This issue occurred as the memory space was low and was observed in all IAP running a software version prior to Instant 6.4.4.6-4.2.4.0. |

## 3G/4G Management

**Table 25:** *3G/4G Management Fixed Issue*

| Bug ID | Description |
|---|---|
| 137180 | **Symptom**: Clients using Windows laptops and mobile devices were unable to access certain websites while being connected to an IAP. The issue is resolved by checking and updating the MSS value of the TCP packets that are received from the IAP.<br>**Scenario**: This issue was observed in all IAPs running Instant 6.4.3.1-4.2.0.0 and later versions. |

## UI

**Table 26:** *UI Fixed Issues*

| Bug ID | Description |
|---|---|
| 140506 | **Symptom**: The following error was displayed when the user tried to create a periodic time-based service profile using a certain condition: **End day must be later than start day**. This issue is resolved by changing the code for validating when a time-based service profile is created.<br>**Scenario**: This issue was observed in all IAPs running Instant 6.4.4.4-4.2.3.1 and later versions. |
| 141593 | **Symptom**: The column under the **RF Dashboard** that displays the signal strength of the IAP clients was missing in the Instant UI. The fix ensures that the signal strength of the clients is displayed in the UI.<br>**Scenario**: This issue was observed in all IAPs running Instant 6.4.4.4-4.2.3.0. |
| 141757 | **Symptom**: IAP clients were still active even after they were manually disconnected using the Instant UI. The fix ensures that the manual disconnect of clients using the UI is successful.<br>**Scenario**: This issue occurred as the information and the status of the client was not erased when the disconnect operation was performed using the UI. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.6-4.2.4.0. |

## VC Management

**Table 27:** *VC Management Fixed Issue*

| Bug ID | Description |
|---|---|
| 138089 | **Symptom**: IAPs were experiencing a delay in establishing a connection with the SSH server when the reverse dns lookup failed. This issue is resolved by preventing the SSH server from performing a reverse dns lookup, to avoid the delay prior to establishing a connection with the IAP.<br>**Scenario**: The issue occurred due to multiple retry attempts by the SSH server to perform a reverse dns lookup before establishing a connection with the IAP. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.6-4.2.4.0. |

## VPN

**Table 28:** *VPN Fixed Issues*

| Bug ID | Description |
|---|---|
| 132490 | **Symptom**: In a Distributed L3 network, windows clients were unable to open a few sites when connected to the wired network of the IAP. This issue is resolved by enabling MSS clamping in the upstream direction.<br>**Scenario**: The issue occurred as the MSS clamping was enabled only in the downstream direction for the Distributed L3 clients. This issue was not limited to a specific IAP model or software version. |
| 138468 | **Symptom**: IAP clients were unable to connect to the corporate network. This issue is resolved by ensuring that the master IAPs receive the correct DHCP IP subnets from the VPN tunnel in the corporate network.<br>**Scenario**: The issue was observed in all IAPs running Instant 6.4.3.4-4.2.1.0 and later versions. |

## Wi-Fi Driver

**Table 29:** *Wi-Fi Driver Fixed Issue*

| Bug ID | Description |
|---|---|
| 138582 | **Symptom**: Clients were unable to connect to the 5 GHZ radio channel and the error logs revealed there were TX Radio and Antenna probe failures. The fix enures the clients are now able to connect to the 5 GHz radio channel without errors.<br>**Scenario**: This issue was observed in all IAPs running running a software version prior to Instant 6.4.4.6-4.2.4.0. |