

Aruba Instant

6.4.4.8-4.2.4.21



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Revision History

The following table lists the revisions of this document.

Table 1: *Revision History*

Revision	Change Description
Revision 01	Initial release.

Aruba Instant 6.4.4.8-4.2.4.21 is a patch release that introduces fixes to the issues found 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 6.4.4.6-4.2.4.0 User Guide*.

Chapter Overview

[What's New in this Release on page 8](#) lists the regulatory information, feature enhancements, fixed issues, and the outstanding issues in Aruba Instant 6.4.4.8-4.2.4.21 release.

[Features in Previous Releases on page 13](#) describes the features and enhancements in previous Aruba Instant 6.4.4.x-4.2.4.x releases.

[Known Issues on page 12](#) lists the known issues identified in the 6.4.4.x-4.2.4.x releases.

[Issues Resolved in Previous Releases on page 15](#) lists the issues fixed in the previous Aruba Instant 6.4.4.x-4.2.4.x releases.

For list of terms, see [Glossary](#).

Supported Browsers

The following browsers are officially supported for use with Instant Web User Interface (WebUI):

- Microsoft Internet Explorer 10.x and 11 on Windows 7 and Windows 8
- Mozilla Firefox 23 or later on Windows Vista, Windows 7, Windows 8, and macOS
- Apple Safari 5.1.7 or later on macOS

Contacting Support

Table 2: *Contact Information*

Main Site	arubanetworks.com
Support Site	https://asp.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	lms.arubanetworks.com
End-of-life Information	arubanetworks.com/support-services/end-of-life/
Security Incident Response Team	Site: arubanetworks.com/support-services/security-bulletins/ Email: aruba-sirt@hpe.com

This chapter lists the regulatory information, features and enhancements, fixed issues, and outstanding issues in the Aruba Instant 6.4.4.8-4.2.4.21 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 3: *DRT Versions*

Instant Release Version	Applicable DRT Version
Instant 6.4.4.8-4.2.4.21	1.0_84965
Instant 6.4.4.8-4.2.4.20	1.0_82868
Instant 6.4.4.8-4.2.4.19	1.0_79919
Instant 6.4.4.8-4.2.4.18	1.0_78620
Instant 6.4.4.8-4.2.4.17	1.0_75772
Instant 6.4.4.8-4.2.4.16	1.0_73578
Instant 6.4.4.8-4.2.4.15	1.0_72670
Instant 6.4.4.8-4.2.4.14	1.0_70267
Instant 6.4.4.8-4.2.4.13	1.0_69377
Instant 6.4.4.8-4.2.4.12	1.0_68143
Instant 6.4.4.8-4.2.4.11	1.0_64134
Instant 6.4.4.8-4.2.4.10	1.0_62496
Instant 6.4.4.8-4.2.4.9	1.0_61527
Instant 6.4.4.8-4.2.4.8	1.0_60114
Instant 6.4.4.8-4.2.4.7	1.0_59783
Instant 6.4.4.8-4.2.4.6	1.0_58258
Instant 6.4.4.8-4.2.4.5	1.0_57815
Instant 6.4.4.8-4.2.4.4	1.0_57223
Instant 6.4.4.8-4.2.4.3	1.0_56643
Instant 6.4.4.8-4.2.4.2	1.0_56050
Instant 6.4.4.8-4.2.4.1	1.0_55489
Instant 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 asp.arubanetworks.com.

New Features and Enhancements

Enhancement for OpenDNS Server

Aruba Instant now supports chunked transfer encoding in HTTP responses. This ensures that IAPs can connect to the OpenDNS server without facing any issues.

Resolved Issues in this Release

Table 4: *Wi-Fi Driver Fixed Issue*

Bug ID	Description
AOS-236847	IAP-210 Series, IAP-220 Series, IAP-228 Series, and IAP-270 Series devices were blocked when attempting to scan specific channels. This issue occurred because the regulatory file allowed the IAP to operate in channels that were not allocated to it. This issue was observed in APs with a DRT version that included channel 177 in the list of allowed channels. The fix ensures that an AP only scans and moves to channels that are allowed. This issue was observed in APs running Aruba Instant 6.4.4.8-4.2.4.21 or later versions.

Known Issues

There are no known issues identified in this release.

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.

Disabling TLS RSA Cipher Suites

Starting from Aruba Instant 6.4.4.8-4.2.4.11, the following TLS RSA cipher suites are disabled to ensure complete forward confidentiality and to prevent the Return of Bleichenbacher's Oracle Threat (ROBOT) attacks in IAPs:

- TLS_RSA_WITH_AES_256_CBC_SHA256
- TLS_RSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_128_CBC_SHA

This enhancement impacts functionalities such as OpenFlow, RadSec, SSH, WebUI, Authentication, Captive Portal, AirWave, Central, and Activate.

Support for Huawei E3372H-153 Modem on IAP-205H

Starting from Instant 6.4.4.8-4.2.4.5, the Huawei E3372H-153 modem is supported on IAP-205H access points.

WebUI Enhancement

The WPA Enterprise AES setting was not available in the Instant UI. A new field is added in the Instant UI for the WPA Enterprise AES setting.

Wildcard Server Certificate Support for Captive Portal

Instant 6.4.4.8-4.2.4.4 now supports the wildcard server certificate for captive portal authentication.

New Command for Using VC IP Address as Source IP Address

The following command is introduced in Instant 6.4.4.8-4.2.4.4 to use the VC IP address as the source IP address for a TFTP session.

(Instant AP)# download-source vcip



In the above command, the user enters vcip as a string which gets substituted by the real VC IP address when executed.

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 member IAP instead of the conductor 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 conductor IAP.
- The WBU Rx or Tx bytes from the modem traffic when there is an uplink connectivity between the modem and the conductor IAP.

Additionally, the conductor IAP will now notify ALE through heartbeat messages indicating the status (UP or DOWN) of the member IAPs.

Allow Zero-Touch Provisioning When NTP Server is Unreachable

Starting from Instant 6.4.4.6-4.2.4.0, zero-touch provisioning 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 6.4.4.8-4.2.4.20

STM

Table 5: *STM fixed issue*

Bug ID	Description
AOS-229972 AOS-229991 AOS-230192 AOS-230290 AOS-230416 AOS-230554 AOS-230604 AOS-230721 AOS-230725 AOS-230871	Clients were unable to connect to SSIDs that had the 802.11r option enabled. During this period, commands run in the CLI of the affected AP returned the following error message: Module AP STM Low Priority is busy. Please try later. The fix ensures that SSIDs configured with 802.11r option service the client as expected. This issue was observed in APs running Aruba Instant 6.4.4.8-4.2.4.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.19

This release included fixes for vulnerabilities documented in the following CVEs referenced in [ARUBA-PSA-2021-007](#):

- CVE-2019-5317
- CVE-2021-25145

Issues Resolved in 6.4.4.8-4.2.4.18

Platform

Table 6: *Platform Fixed Issue*

Bug ID	Description
AOS-212241	Symptom: An Instant AP failed to communicate with the NTP server and synchronize system time. The fix ensures that the Instant AP connects to the NTP server and synchronizes system time as expected. Scenario: This issue was observed in APs running Aruba Instant 6.4.4.8-4.2.4.16 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.17

Activate

Table 7: Activate Fixed Issue

New Bug ID	Old Bug ID	Description
AOS-170960 AOS-177472 AOS-201318	140548 175139	Symptom: An Instant AP failed to convert to Remote AP when the convert rule was pushed from Activate. The fix ensures that the Instant AP converts to Remote AP as expected. Scenario: This issue was observed in APs running Aruba Instant 6.4.4.4-4.2.3.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.16

Authentication

Table 8: Authentication Fixed Issue

New Bug ID	Old Bug ID	Description
AOS-198121	–	Symptom: The default captive portal, server, and WebUI certificates of an Instant AP were about to expire. The fix ensures that the validity of these default certificates is extended to December 2029. Scenario: This issue was observed in access points running Aruba Instant 6.4.4.8-4.2.4.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.15

Configuration

Table 9: Configuration Fixed Issues

New Bug ID	Old Bug ID	Description
AOS-181492	193906	Symptom: A set of pre-defined commands were vulnerable to manipulation by an unauthorized user, as invalid characters were introduced in the URL and process name. The fix ensures that the URL and process name does not contain special characters. Scenario: This issue was observed in Instant APs running Aruba Instant 6.4.4.8-4.2.4.0 or later versions.
AOS-181509	193932	Symptom: An Instant AP crashed as some special characters were automatically inserted in the WebUI URL. The fix ensures that the special characters are deleted before the URL is processed. Scenario: This issue was observed in Instant APs running Aruba Instant 6.4.4.8-4.2.4.0 or later versions.
AOS-181515	193975	Symptom: An Instant AP crashed unexpectedly. Enhancement to the parsing logic resolved this issue. Scenario: This issue occurred because of a memory segmentation error. This issue was observed in Instant APs running Aruba Instant 6.4.4.8-4.2.4.0 or later versions.

Firewall

Table 10: Firewall Fixed Issue

New Bug ID	Old Bug ID	Description
AOS-185676	—	Symptom: The bandwidth limit contract was not enforced for clients connected to the WLAN SSID. The fix ensures that the bandwidth limit contract is enforced for clients. Scenario: This issue was observed in Instant APs running Aruba Instant 6.4.4.8-4.2.4.0 or later versions.

WebUI

Table 11: WebUI Fixed Issue

New Bug ID	Old Bug ID	Description
AOS-176690	171385	Symptom: The old version of the Instant WebUI returned a blank page. The fix ensures that the old version of the WebUI is visible. Scenario: This issue was observed in Instant APs running Aruba Instant 6.4.4.8-4.2.4.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.14

Wi-Fi Driver

Table 12: Wi-Fi Driver Fixed Issue

Bug ID	Description
AOS-184150	Symptom: Clients were unable to detect the 2.4 GHz network broadcasted by an IAP-103. This issue is resolved by a software enhancement that triggers the AP to reboot and work as expected. Scenario: This issue occurred due to a clock module flaw in old hardware versions of IAP-103, IAP-108 and IAP-109. This issue was observed in IAP-103 running Aruba Instant 4.2.4.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.13

Configuration

Table 13: Configuration Fixed Issue

Bug ID	Description
AOS-182084	Symptom: A CLI command parameter sent in the HTTP GET request triggered a crash. This issue is resolved by filtering out the invalid command parameter from the HTTP GET request. Scenario: This issue occurred because the command parameter entered was invalid. This issue was observed in Instant APs running Aruba Instant 6.4.2.6-4.1.3.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.12

Captive Portal

Table 14: *Captive Portal Fixed Issue*

Bug ID	Description
151119	Symptom: Clients were getting stuck on the captive portal authentication page when they use external captive portal over HTTP. The fix ensures that the captive portal authentication is successful. Scenario: This issue was observed IAPs running Aruba Instant 6.4.4.8-4.2.4.3 or later versions.

Mesh

Table 15: *Mesh Fixed Issue*

Bug ID	Description
181972	Symptom: Some IAPs were unable to connect to the network on the 5 GHz radio. The fix ensures that the IAPs are able to connect to the network on the 5 GHz radio. Scenario: This issue was observed IAPs running Aruba Instant 6.4.4.8-4.2.4.3 or later versions.

VPN

Table 16: *VPN Fixed Issue*

Bug ID	Description
170406 179705	Symptom: An IAP sent traffic from an invalid IP address to a VPN controller. The fix ensures that the IAP does not send traffic from an invalid IP address. Scenario: This issue occurred when the DHCP server was not stable and the IAP obtained an invalid IP address, like an automatic private IP address. This issue was not limited to a specific IAP model or Aruba Instant software version.

XML-API

Table 17: *XML-API Fixed Issue*

Bug ID	Description
158869	Symptom: XML API did not return calls made through port 443. The fix ensures that calls are successfully made through port 443. Scenario: This issue was observed in IAPs running Aruba Instant 6.5.0.0-4.2.4.3 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.11

VC Management

Table 18: *VC Management Fixed Issue*

Bug ID	Description
152473 174838	Symptom: Some member IAPs were unable to synchronize configurations from a conductor IAP. The fix ensures that the synchronization is successful. Scenario: This issue was observed IAPs running Aruba Instant 6.4.4.6-4.2.4.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.10

AppRF

Table 19: AppRF Fixed Issue

Bug ID	Description
154245	Symptom: The web content classification was incorrect for some sites. Updating the SDK to the latest version resolves this issue. Scenario: This issue was not limited to any specific IAP model or Aruba Instant release version.

Authentication

Table 20: Authentication Fixed Issue

Bug ID	Description
144105	Symptom: IAPs sent incorrect details to clients about the RADIUS accounting session time. This issue is resolved by setting the system uptime as the accounting start time. Scenario: This issue was observed in IAPs running Aruba Instant 6.4.4.6-4.2.4.0 or later versions.

Datapath

Table 21: Datapath Fixed Issue

Bug ID	Description
170598	Symptom: Clients connected to an IAP through a guest VLAN were unable to obtain the DHCP IP address even after the DHCP helper was configured. The fix ensures that clients are able to obtain the IP address on the IAP through the guest VLAN. Scenario: The issue occurred because DHCP helper was unexpectedly stuck, and was unable to relay DHCP packets to the conductor IAP. This issue was observed in IAPs running Aruba Instant 6.4.4.6-4.2.4.0 or later versions.

Wi-Fi Driver

Table 22: Wi-Fi Driver Fixed Issue

Bug ID	Description
156787 170341	Symptom: The IAP management packets were dropped in kernel. The issue is resolved by adding a time gap between creation of radio and creation of virtual access points. Scenario: This issue occurred because the radio configuration work queue was scheduled when the virtual access points were not completely registered. This issue was observed in IAP-205 access points running Aruba Instant 6.4.4.6-4.2.4.0 or later versions.

Issues Resolved in 6.4.4.8-4.2.4.9

This release includes fixes for vulnerability documented in:

- WPA2 Key Reinstallation Vulnerabilities - [CVE-2017-13077](#), [CVE-2017-13078](#), [CVE-2017-13079](#), [CVE-2017-13080](#), [CVE-2017-13081](#), [CVE-2017-13082](#), [CVE-2017-13084](#), [CVE-2017-13086](#), [CVE-2017-13087](#), and [CVE-2017-13088](#).
- Multiple Vulnerabilities in 'dnsmasq' - [CVE-2017-14491](#), [CVE-2017-14492](#), [CVE-2017-14493](#), [CVE-2017-14494](#), [CVE-2017-14495](#), and [CVE-2017-14496](#).

Additionally, the following issues are fixed in the Instant 6.4.4.8-4.2.4.21 release.

AirGroup

Table 23: *AirGroup Fixed Issue*

Bug ID	Description
166285	Symptom: Clients were unable to connect to IAPs. The fix ensures that clients connect to the IAPs. Scenario: The issue occurred because AirGroup cached several TXT records for its servers. This resulted in a high memory utilization. This issue was observed in IAP-205 access points running Instant 6.4.3.1-4.2.0.0 or later versions.

Authentication

Table 24: *Authentication Fixed Issues*

Bug ID	Description
165835	Symptom: Captive Portal prompted the clients to re-login although the clients re-connected within the inactivity timeout period. The fix ensures that the clients are not prompted to re-login every time. Scenario: This issue was observed in IAPs running Instant 6.4.4.6-4.2.4.7 or later versions.
165693 166099	Symptom: RADIUS authentication failed on some IAPs because the authentication ports on different IAPs became inconsistent after the RADIUS server configurations were deleted. The fix ensures that the RADIUS authentication is successful. Scenario: The issue occurred only under the following conditions: <ol style="list-style-type: none">1. Dynamic RADIUS Proxy was enabled.2. RADIUS server configuration was deleted.3. Some (but not all) IAPs were reloaded. This issue was not limited to any specific IAP model or Instant release version.

AirWave

Table 25: *AirWave Fixed Issue*

Bug ID	Description
159499	Symptom: The output of the show log provision command displayed an error message Unexpected end of XML data, aborting . The fix ensures that the CLI output does not display the error. Scenario: The issue occurred because the size of the provisioning log file was lengthy. This issue was not limited to any IAP model or Instant release version.

Captive Portal

Table 26: *Captive Portal Fixed Issue*

Bug ID	Description
148645	Symptom: The Captive Portal assistance page did not pop up automatically for Samsung devices. This issue is resolved by adding a space in the status line of the HTTP response header. Scenario: This issue was not limited to any specific IAP model or Instant release version.

Central

Table 27: *Central Fixed Issue*

Bug ID	Description
161473	Symptom: Central was unable to obtain a per-AP 802.1X configuration from an IAP. The fix ensures that Central obtains a per-AP 802.1X configuration from the IAP. Scenario: This issue was observed in IAPs running Instant 6.4.4.6-4.2.4.0 or later versions.

Configuration

Table 28: *Configuration Fixed Issue*

Bug ID	Description
166938	Symptom: IAPs incorrectly processed XML API requests from port 80. The fix ensures that XML-API requests are processed correctly. Scenario: This issue was observed in IAPs running Instant 6.4.4.6-4.2.4.0 or later versions.

Mesh

Table 29: *Mesh Fixed Issue*

Bug ID	Description
165956	Symptom: The mesh link was unstable as de-authentication frames were continuously sent from the mesh portal. The fix ensures that the mesh point entry does not age out frequently. Scenario: This issue occurred because the mesh point entry aged out frequently on the mesh portal. This issue was observed in IAPs running Instant 6.4.4.8-4.2.4.7 or later versions.

Modem

Table 30: *Modem Fixed Issue*

Bug ID	Description
161631	Symptom: IAPs failed to come up when connected to a 4G-LTE modem. The issue is resolved by introducing a support for the secondary access point name of the ISP. Scenario: This issue was observed in IAP-215 access points running Instant 6.4.3.1-4.2.0.0 or later versions.

VC Management

Table 31: *VC Management Fixed Issue*

Bug ID	Description
165973	Symptom: IAPs were unable to generate user-debug logs. The issue is resolved by re-enabling the user-debug syslog functionality. Scenario: This issue occurred when user-debug was accidentally disabled. This issue was observed in IAPs running Instant 6.4.4.8-4.2.4.5 release version.

Wi-Fi Driver

Table 32: *Wi-Fi Driver Fixed Issue*

Bug ID	Description
164019 164426 164893 165984 166654 166691	Symptom: IAPs rebooted due to a kernel panic. The log file listed the reason as Reboot caused by kernel page fault at virtual address 001a000 when 11k enabled . Improvements to the 802.11k beacon report management resolved this issue. Scenario: This issue was observed in IAP-103 and IAP-105 access points and was not limited to specific Instant release versions.

Issues Resolved in 6.4.4.8-4.2.4.8

Platform

Table 33: *Platform Fixed Issues*

Bug ID	Description
159348 159445 159489	Symptom: IAPs failed to respond and rebooted. The log file listed the reason for the event as Internal watchdog reset . The fix ensures that the IAPs run as expected. Scenario: This issue occurred because the IAPs were stuck while dumping the status registers in the L2 cache error handler. This issue was observed in IAP-32x devices running Instant 6.4.4.8-4.2.4.6 or later versions.
161659	Symptom: IAPs became unresponsive to control and management packets due to heavy traffic, and took a long time to recover. Implementation of a more graceful handling of the heavy traffic reduces control or management packet loss as well as recovery time. Scenario: This issue occurred in IAP-215 devices under heavy downstream VPN tunnel traffic conditions. This issue was not limited to any specific Instant release version.
162087	Symptom: The SAPD process consumed a large amount of memory because the memory capping logic in one of the MAC tablets failed to take effect correctly. The issue is resolved by ensuring that memory capping takes effect correctly. Scenario: The issue occurred in IAPs that were installed in large VLANs with more than 250000 MAC addresses. This issue was not limited to any specific IAP model or Instant release version.

VPN

Table 34: *VPN Fixed Issue*

Bug ID	Description
152838	Symptom: High CPU usage was observed in IAPs due to inefficient error handling in the IPsec cryptographic driver. The fix ensures that error handling is efficient and does not cause high CPU usage. Scenario: This issue was observed in IAP-215 devices during heavy downstream IPSEC traffic. This issue was not limited to any specific Instant release version.

Wi-Fi Driver

Table 35: *Wi-Fi Driver Fixed Issue*

Bug ID	Description
141594 142974 144029 145174 145583 148384 149916 153615	Symptom: IAPs crashed and unexpectedly rebooted. The log file listed the reason for the event as AP rebooted caused by internal watchdog reset . The issue is resolved by refreshing the watchdog when messages are loaded to the console. Scenario: The issue occurred because the hardware watchdog timed out when several messages were loaded to the console. This issue was observed in IAP-32x series devices and was not limited to any specific Instant release version.

Issues Resolved in 6.4.4.8-4.2.4.7

AirWave

Table 36: *AirWave Fixed Issue*

Bug ID	Description
153781 155617	Symptom: Inactive clients were reported to AirWave only after a full timeout occurred. The fix ensures that the IAPs report inactive clients to AirWave in a timely fashion. Scenario: This issue was observed in IAPs running software versions prior to Instant 6.4.4.8-4.2.4.7.

Authentication

Table 37: *Authentication Fixed Issues*

Bug ID	Description
148031	Symptom: When 802.11r was enabled, the client got a wrong role while roaming between IAPs. This issue is resolved by allowing the 802.11r cache save the role name of the client. Scenario: This issue occurred when the client roamed from one IAP to another with 802.11r enabled. This issue was observed in all IAPs running software versions prior to Instant 6.4.4.8-4.2.4.7.
155873	Symptom: IAP-205 access points were dropping RADIUS frames when the framed MTU was ignored by the RADIUS server. Scenario: The frames were getting dropped if the MTU is greater than 1500. This issue was observed in all Instant APs running Instant versions prior to Instant 6.4.4.8-4.2.4.7.
159823	Symptom: The Acct-Multi-Session-ID attribute was not unique when the user connects backs quickly after a disconnect. The fix ensures that a unique accounting session ID is generated when the user connects back quickly after a disconnect. Scenario: This issue was observed in Instant APs running Instant versions prior to Instant 6.4.4.8-4.2.4.7.
160295	Symptom: Zebra Printer QL-220 Plus client was unable to complete EAP-TLS authentication. This issue is fixed by modifying the EAP request period. Scenario: This issue occurred due to server timeout. This issue was observed in IAP-215 access points running Instant versions prior to Instant 6.4.4.8-4.2.4.7.

Captive Portal

Table 38: *Captive Portal Fixed Issue*

Bug ID	Description
156360	<p>Symptom: Apple users were sometimes not redirected to the ClearPass Guest welcome page after a captive portal authentication was successful. The fix ensures that the clients are redirected to the URL after a captive portal authentication is successful.</p> <p>Scenario: This issue occurred because clients used the HTTPS post on Clear Pass Policy Manager. This issue was observed in Instant APs running Instant versions prior to Instant 6.4.4.8-4.2.4.7.</p>

Central

Table 39: *Central Fixed Issue*

Bug ID	Description
158008	<p>Symptom: The Instant AP VC was unable to recover the connection with Central after getting disconnected. This issue is resolved by ensuring that the start connect time is triggered as soon as the Instant AP disconnects and attempts to reconnect to Central.</p> <p>Scenario: This issue was observed in IAP-225 access points running Instant versions prior to Instant 6.4.4.8-4.2.4.7.</p>

CLI

Table 40: *CLI Fixed Issue*

Bug ID	Description
156295	<p>Symptom: The NAS ID was sent with extra double quotes to the RADIUS server. The fix ensures that the NAS ID is not sent with the extra double quotes</p> <p>Scenario: This issue occurred when there was a space in the NAS ID string. This issue was observed in Instant APs running Instant versions prior to Instant 6.4.4.8-4.2.4.7.</p>

Datapath/Firewall

Table 41: *Datapath/ Firewall Fixed Issue*

Bug ID	Description
154464	<p>Symptom: Continuous packet drops were observed when traffic was sent through the Eth1 port at 100 Mbps. The issue is resolved by enabling flow control inside the ethernet switch clip.</p> <p>Scenario: This issue occurred due to the difference in speeds between the uplink and downlink ports. This issue was observed in IAP-205H access points running a software version prior to Instant 6.4.4.8-4.2.4.7.</p>

L3 Mobility

Table 42: *L3 Mobility Fixed Issue*

Bug ID	Description
152688	<p>Symptom: Windows clients lost connectivity when they roamed to a different L3 cluster. The fix ensures the client is not disconnected when roaming from one cluster to another.</p> <p>Scenario: This issue was observed in IAPs running software versions prior to Instant 6.4.4.8-4.2.4.7.</p>

Platform

Table 43: Platform Fixed Issues

Bug ID	Description
152062	Symptom: Some IAPs randomly rebooted due to a kernel panic. The issue is resolved by adding a crash protection mechanism to the power state code of the IAP. Scenario: This issue occurred within the first few minutes of boot, and was observed in IAP-275 access points running any software version prior to Instant 6.4.4.8-4.2.4.7.
158297	Symptom: The ESSID name in DHCP option 82 was missing for some access points. This issue is resolved by making a change in the driver function to display the ESSID. Scenario: This issue was observed in Instant access points running Instant versions prior to Instant 6.4.4.8-4.2.4.7.

WebUI

Table 44: WebUI Fixed Issue

Bug ID	Description
154558	Symptom: Instant WebUI was not loading on the Internet Explorer or Mozilla Firefox browsers if the IAP name contained special characters. The fix ensures that the Instant WebUI is able to load on the Internet Explorer and Mozilla Firefox browsers. Scenario: This issue was observed in IAPs running software versions prior to Instant 6.4.4.8-4.2.4.7.

Wi-Fi Driver

Table 45: Wi-Fi Driver Fixed Issue

Bug ID	Description
159343	Symptom: A member IAP crashed and rebooted without displaying any reason for the error. The fix ensures that member IAPs do not crash without an error. Scenario: This issue was observed in IAP-103 access points running software versions prior to Instant 6.4.4.8-4.2.4.7.

Issues Resolved in 6.4.4.8-4.2.4.6

ARM

Table 46: ARM Fixed Issue

Bug ID	Description
154557	Symptom: An IAP-103 access point crashed and rebooted unexpectedly. This issue is resolved by fixing the locking issue. Scenario: This issue was observed in IAP-103, IAP-215, and IAP-325 devices running a software version prior to Instant 6.4.4.8-4.2.4.6

CLI

Table 47: CLI Fixed Issue

Bug ID	Description
154713	Symptom: The response for the XML API query did not provide the correct XML API statistics. The fix ensures that the XMI API statics are periodically updated and the response to the XML API query provides the correct information. Scenario: This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.

Datapath/Firewall

Table 48: Datapath/ Firewall Fixed Issues

Bug ID	Description
146666	Symptom: Member IAPs connecting to a guest networks were unable to pass traffic. This issue is resolved by programming an ACL for the guest vlan to allow member IAPs to successfully connect to the guest network. Scenario: This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.
154522	Symptom: Clients connected to the conductor IAP were unable to resolve the DNS SRV record queries. This issue is resolved by disabling the DNS proxy when Local, L2 is configured as the DHCP scope. Scenario: This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.

L2 Mobility

Table 49: L2 Mobility Fixed Issue

Bug ID	Description
154328	Symptom: The user ID sent for radius accounting was incorrect. The fix ensures that the correct user ID is sent for radius accounting. Scenario: This issue occurred when the client roamed from one IAP to another in the cluster and was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.

Other

Table 50: Other Fixed Issue

Bug ID	Description
152060	Symptom: A vulnerability scan performed on the IAP cluster indicated the Dropbear SSH Server had multiple vulnerabilities. This issue is resolved by upgrading to a higher Dropbear firmware. Scenario: This issue was observed in IAP-105 access points running a software version prior to Instant 6.4.4.8-4.2.4.6.

Platform

Table 51: Platform Fixed Issue

Bug ID	Description
156718	Symptom: An IAP access point crashed after deny-inter-user-bridging was configured. This issue is resolved by running a check for valid destination. Scenario: This issue occurred when the p->gress is assigned to an incorrect VLAN. This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.

SNMP

Table 52: *SNMP Fixed Issue*

Bug ID	Description
155081	<p>Symptom: The SNMP process displayed an error - OID not increasing, when clients had a MAC address ending with FF. The fix ensures that the packets of clients having MAC address ending with FF are forwarded to the next node.</p> <p>Scenario: This issue occurred when the SNMP process used MAC address plus 1 and vlan to search for the node. When the client had a MAC address ending with FF, the SNMP process used the MAC address ending with FF and vlan to search for the next node, which resulted in an infinite loop. This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.</p>

UI

Table 53: *UI Fixed Issues*

Bug ID	Description
126705	<p>Symptom: The password fields within the virtual controller were not encrypted. The fix ensures that the password fields are encrypted and does not display the actual password text.</p> <p>Scenario: This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.</p>
151749	<p>Symptom: The WPA Enterprise AES setting was not available in the Instant UI. This issue is resolved by adding a new field in the UI for the AES setting.</p> <p>Scenario: This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.</p>

VC Platform

Table 54: *VC Platform Fixed Issue*

Bug ID	Description
151541	<p>Symptom: In a hierarchical cluster with PPPoE uplink, the member RAP was dropping DHCP requests. The fix ensures that the DHCP requests are handled as expected.</p> <p>Scenario: This issue was observed in RAP-3 running a software version prior to Instant 6.4.4.8-4.2.4.6.</p>

Wi-Fi Driver

Table 55: *Wi-Fi Driver Fixed Issues*

Bug ID	Description
118039 156391	Symptom: An IAP-275 access point rebooted due to an out of memory issue. The fix ensures that the MAC returns to normal functionality when it goes into the suspended state. Scenario: The issue occurred when the radio channel was changed and the MAC was pushed to a suspended state for a short duration. This issue was observed in IAP-275 access points running a software version prior to Instant 6.4.4.8-4.2.4.6.
154237	Symptom: An IAP crashed and rebooted unexpectedly. The fix ensures that the IAP does not crash due to kernel panic. Scenario: This issue occurred as the IAP experienced a kernel panic due to softlockup hung tasks. This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.6.
154370	Symptom: Motorola handheld scanners connected to IAP-325 access points were getting disconnected every 10 seconds. This issue is resolved by making a change to the default CCA threshold value. Scenario: This issue was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.6.

Issues Resolved in 6.4.4.8-4.2.4.5

AppRF

Table 56: *AppRF Fixed Issue*

Bug ID	Description
147010	Symptom: Skype for Business sessions marked with SESSION_FLAG_ALG flag which are not skipped or deleted for stale session entries. The fix ensures that the session entries are skipped if the entries are stale and ALG is set. Scenario: This issue was observed in access points running a software version prior to Instant 6.4.4.8-4.2.4.5.

Datapath/Firewall

Table 57: *Platform Fixed Issue*

Bug ID	Description
152782	Symptom: IAP-275 was booting up with restriction mode on the Cisco 2960 switch if the native VLAN on the switch port is not 1. This issue is resolved by updating the socket binding protocol for LLDP packets. Scenario: This issue was observed in IAP-275 access points running a software version prior to Instant 6.4.4.8-4.2.4.5.

Mesh

Table 58: *Mesh Fixed Issue*

Bug ID	Description
145637	Symptom: IAP-225 was running into a network loop when the uplink was restored and mesh was enabled. The fix ensures that the network looping issue is resolved. Scenario: This issue was observed in IAP-225 access points running a software version prior to Instant 6.4.4.8-4.2.4.5.

Platform

Table 59: Platform Fixed Issues

Bug ID	Description
154509 127848	<p>Symptom: An IAP crashed unexpectedly when using Huawei E353 modem. The log file of the event listed the reason as Reboot caused by kernel panic: Fatal exception. The fix ensures that the IAP does not crash unexpectedly</p> <p>Scenario: This issue was observed in IAP-205H access points running a software version prior to Instant 6.4.4.8-4.2.4.5.</p>
145634	<p>Symptom: An IAP crashed unexpectedly when using 10Mbps half-duplex uplink and upstream traffic exceed 10Mbps. The log file of the event listed the reason as kernel panic. The fix ensures that the IAP works without kernel panic with same uplink.</p> <p>Scenario: This issue was observed in IAP-215 and IAP-225 access points running a software version prior to Instant 6.4.4.8-4.2.4.5.</p>
144570	<p>Symptom: An IAP crashed and rebooted unexpectedly. The log file listed the reason for the event as Reboot caused by kernel panic: Fatal exception in interrupt. This issue is resolved by directly accessing the saved context data when crypto context is cleared.</p> <p>Scenario: This issue occurred when IPsec tunnels were closed and the queued crypto context was cleared. This issue was observed in 200, 210, and 220 series IAPs running a software version prior to Instant 6.4.4.8-4.2.4.5.</p>
152840	<p>Symptom: An IAP crashed and rebooted unexpectedly due to kernel panic. The fix ensures that the IAP does not crash unexpectedly.</p> <p>Scenario: This issue occurred when large size packets were sent from Centralized, L2 IPsec clients during an IPsec rekey operation. This issue was observed in IAP-215 access points running a software version prior to Instant 6.4.4.8-4.2.4.5.</p>

VPN

Table 60: VPN Fixed Issue

Bug ID	Description
149319	<p>Symptom: Traffic sent to the corporate network was getting blocked when the volume of the traffic was heavy during IPsec SA rekey. The fix ensures that the IPsec tunnel device remains active when IPsec SA rekey is done.</p> <p>Scenario: This issue occurred during IPsec SA rekey and heavy traffic was sent to the corporate network through the IPsec tunnel. This issue was observed in IAP-215 access points running a software version prior to Instant 6.4.4.8-4.2.4.5.</p>

Wi-Fi Driver

Table 61: Wi-Fi Driver Fixed Issue

Bug ID	Description
151995	<p>Symptom: An IAP crashed and rebooted with the reason: Reboot caused by kernel panic: Fatal exception. The fix ensures that the IAP does not crash during compiler optimization.</p> <p>Scenario: This issue occurred when the compiler optimization was in progress and was observed in IAP-215 access points running a software version prior to Instant 6.4.4.8-4.2.4.5.</p>

Issues Resolved in 6.4.4.8-4.2.4.4

AppRF

Table 62: AppRF Fixed Issues

Bug ID	Description
139336 138868	Symptom: Whatsapp traffic was not blocked by the IAP although the deny ACL was applied. The fix ensures that the blocked whatsapp traffic is not allowed by the IAP. Scenario: The WhatsApp traffic block was not functional as the latest version of WhatsApp was not classified as WhatsApp in the IAP. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.4.
141891 142278 141898	Symptom: Some IAPs in the cluster were unable to pass traffic. This issue is resolved by introducing a mechanism to monitor and limiting the AppRF process memory. Scenario: The memory utilization on the affected IAPs was very high. This issue was observed on all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.4.

Central

Table 63: Central Fixed Issue

Bug ID	Description
151981	Symptom: The output for the show ap debug cloud-server command showed the VC is connected to Central, however the VC was not sending any updates to the cloud server. The fix ensures that the VC successfully sends the updates to the cloud server. Scenario: This issue occurred due to inconsistencies in the awc process and was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.4.

CLI

Table 64: CLI Fixed Issue

Bug ID	Description
151137	Symptom: The CLI for anIAP-205 access point crashed and began generating multiple core files. This issue is resolved by making a change to the function used in the IAP code. Scenario: This issue was observed in IAP-205 access points running a software version prior to Instant 6.4.4.8-4.2.4.4.

Configuration

Table 65: Configuration Fixed Issue

Bug ID	Description
145050 149491 149515	Symptom: The syslog messages from the IAP indicated a configuration mismatch between the VC and the member IAPs in a cluster. This issue is resolved by initiating the enet-vlan configuration when the IAP restarts. Scenario: This issue occurred when mesh point was configured on the IAP and enet-vlan configuration was removed from the conductor IAP. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.4.

Datapath/Firewall

Table 66: Platform Fixed Issues

Bug ID	Description
135764	<p>Symptom: IAPs operating on Instant 6.4.3.4-4.2.1.2 crashed and rebooted with the reboot reason: Reboot caused by kernel panic: assert. The fix resolves the kernel panic issue.</p> <p>Scenario: This issue was observed in IAP-205 access points running Instant 6.4.3.4-4.2.1.2 and later versions.</p>
151748	<p>Symptom: An IAP crashed and rebooted unexpectedly. The log file for the event listed the reason as Reboot caused by kernel panic: softlockup: hung tasks. This fix ensures that the deadlock issue causing the crash is resolved.</p> <p>Scenario: This issue occurred due a deadlock caused by a recursive lock on the anui lock function running on the CPU. This issue was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>

GRE

Table 67: GRE Fixed Issue

Bug ID	Description
151725 152539 152619	<p>Symptom: An IAP was using unfixed MTU than the specified MTU for GRE fragmentation. This resulted in packets fragmented with a different size which may cause possible loss during the transmission. The fix ensures that the IAP uses the specified MTU value for GRE fragmentation.</p> <p>Scenario: This issue was observed in IAPs running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>

Platform

Table 68: Platform Fixed Issue

Bug ID	Description
146564 149935	<p>Symptom: The LLDP process in an IAP was unable to negotiate high power, shut down the wrong Ethernet port, and did not enable the radios. The fix ensures that the LLDP process in an IAP works correctly when both Ethernet ports are used.</p> <p>Scenario: This issue occurred when both Ethernet ports of an IAP were in use and connected to PoE+ power sources (which are reliant on LLDP protocol to provide high power). This issue was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>

Wi-Fi Driver

Table 69: *Wi-Fi Driver Fixed Issues*

Bug ID	Description
147682 147681	<p>Symptom: A member IAP incorrectly classified another IAP belonging to the same cluster as a rogue IAP. The fix ensures that the IAPs can correct the wrong entry in very short time.</p> <p>Scenario: This issue occurred as the member IAP lost the messages of the updated MAC address list from the VC. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>
141429	<p>Symptom: Access points crashed and rebooted. The log file for the event listed the reason as Reboot caused by out of memory. The fix ensures that the issue with the memory is resolved.</p> <p>Scenario: This issue was observed in all IAP-2xx series access points running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>
145852 152810	<p>Symptom: An IAP crashed and rebooted unexpectedly. The log file for the event listed the reason as Reboot caused by kernel panic: Rebooting the AP because of FW ASSERT. This issue is resolved by checking incoming packets and dropping packets correctly.</p> <p>Scenario: This issue was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>
150704	<p>Symptom: IAP did not send all the interference SSID details to AirWave. This issue is resolved by extending the maximum number of entries in the IDS table to 2048.</p> <p>Scenario: This issue occurred as the IDS table was full and was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>
151866	<p>Symptom: Laptops running a Windows 7 64-bit OS were experiencing crashes when using Intel wireless chipset Dual Band Wireless-AC 7265 or Dual Band Wireless-AC 8260. This issue is resolved by setting the right value for the beacon interval.</p> <p>Scenario: This issue occurred as the default value of the beacon interval was altered and was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.4.</p>

Issues Resolved in 6.4.4.8-4.2.4.3

AirWave

Table 70: *AirWave Fixed Issue*

Bug ID	Description
150262	<p>Symptom: Configuration changes made on the IAP through the CLI, UI, Central, or AMP were not recorded in the syslog by default. The fix ensures that the syslog message is generated when the configuration is changed.</p> <p>Scenario: This issue occurred as the syslog level for a configuration was lower than the IAPs default syslog level. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>

Authentication

Table 71: *Authentication Fixed Issues*

Bug ID	Description
147169	<p>Symptom: The RADIUS server rejected successive authentication requests from the IAP. The fix ensures that the RADIUS authentication requests are handled successfully.</p> <p>Scenario: This issue occurred due to duplicate RADIUS session IDs and was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>
148693	<p>Symptom: The browser kept displaying a warning or an error claiming the securelogin.arubanetworks.com certificate had been revoked, causing disruption to the captive portal work flow of the IAP. As a fix to this issue, the securelogin.arubanetworks.com certificate has been replaced by a different certificate for which the browser may only have warnings and not errors. However, the best practice is for customers to upload their own publically signed certificate instead of relying on the default securelogin.arubanetworks.com certificate.</p> <p>Scenario: This issue impacted all scenarios where captive portal is used and was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>

Platform

Table 72: *Platform Fixed Issue*

Bug ID	Description
147826	<p>Symptom: IAP-325 access points crashed and rebooted with a reason: Reboot caused by kernel panic: Fatal exception. The fix ensures that the duplicate entries are not added to the subnet table.</p> <p>Scenario: This issue occurred due to duplicate entries in the subnet table and was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>

VC Management

Table 73: *VC Management Fixed Issue*

Bug ID	Description
146606	<p>Symptom: Some IAPs were intermittently getting disconnected from the cluster. The fix resolves the out of memory issue that caused the IAPs to disconnect from the cluster.</p> <p>Scenario: This issue occurred when a large amount of ARP frames were sent through the wired network and resulted in the datapath running out of memory space. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>

VPN

Table 74: *VPN Fixed Issue*

Bug ID	Description
144326 148161	<p>Symptom: When one IAP used another IAP as an uplink, the IAP was unable to re-establish a VPN connection if its VPN session was SRC-NAT'ted at the uplink IAP. The fix ensures that the IAPs can successfully reconnect to the VPN.</p> <p>Scenario: This issue occurred as the old VPN session was still active on the uplink IAP and was observed in IAP-324/325, IAP-205/205H access points running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>

Wi-Fi Driver

Table 75: *Wi-Fi Driver Fixed Issues*

Bug ID	Description
147682	<p>Symptom: A member IAP incorrectly classified another IAP belonging to the same cluster as a rogue IAP. The fix ensures that the IAPs can correct the wrong entry in very short time.</p> <p>Scenario: This issue occurred as the member IAP lost the messages of the updated MAC address list from the VC. This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>
140337 141943 145917 146032	<p>Symptom: An IAP-325 access point rebooted due to FW assert while running multicast traffic for a long period of time. This issue is resolved by improving the checking mechanism for the Tx buffer getting stuck.</p> <p>Scenario: This issue was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>
141239 148412	<p>Symptom: Motorola MC75A0 handheld scanners were unable to associate to IAP-325 access points. This fix ensures that the Motorola MC75A0 handheld scanner is able to connect to the IAP-325 access point.</p> <p>Scenario: This issue occurred when the client always sent a deauthentication message before sending the authentication message to the IAP. Also, the IAP sent a deauthentication message to the client after receiving an association request. This issue was observed in IAP-325 access points running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>
138637	<p>Symptom: Frames with VLAN 0 were dropped and not retransmitted over the air. The fix ensures that frames with VLAN ID 0 are not dropped.</p> <p>Scenario: This issue was observed in IAP-275 access points running a software version prior to Instant 6.4.4.8-4.2.4.3.</p>

Issues Resolved in 6.4.4.8-4.2.4.2

ALE

Table 76: *ALE Fixed Issue*

Bug ID	Description
145729	<p>Symptom: The Age field in the RSSI client message was not accurate. The issue is resolved by changing the calculation logic of the field.</p> <p>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.</p>

CLI

Table 77: *CLI Fixed Issue*

Bug ID	Description
144944	<p>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.</p> <p>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.</p>

Datapath/Firewall

Table 78: *Datapath/Firewall Fixed Issues*

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. 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 member IAPs. The issue is resolved by changing the bandwidth control logic of the IAPs. 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 79: *Platform Fixed Issue*

Bug ID	Description
145808 136228	Symptom: IAPs in a cluster rebooted as they were running out of memory. The fix ensures that IAPs use the memory space appropriately. 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 80: *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. 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 81: *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. 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 82: 3G/4G Management Fixed Issue

Bug ID	Description
142944	<p>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.</p> <p>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.</p>

Issues Resolved in 6.4.4.8-4.2.4.1

AirWave

Table 83: AirWave Fixed Issue

Bug ID	Description
140313	<p>Symptom: AirWave managing IAPs did not display some of the interfering IAPs. The fix ensures that the interfering IAPs are displayed on AirWave.</p> <p>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.</p>

AppRF

Table 84: AppRF Fixed Issue

Bug ID	Description
143257	<p>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.</p> <p>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.</p>

Datapath/Firewall

Table 85: Datapath/Firewall Fixed Issues

Bug ID	Description
138649	<p>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.</p> <p>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.</p>
143390	<p>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.</p> <p>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.</p>
144543	<p>Symptom: Apple devices connected to the member 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.</p> <p>Scenario: This issue was observed in all IAPs running Instant 6.4.4.4-4.2.3.0 and later versions.</p>

SNMP

Table 86: *SNMP Fixed Issue*

Bug ID	Description
140180	<p>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.</p> <p>Scenario: This issue was not limited to a specific IAP model or Instant software version.</p>

STM

Table 87: *STM Fixed Issue*

Bug ID	Description
136795	<p>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.</p> <p>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.</p>

UI

Table 88: *UI Fixed Issues*

Bug ID	Description
137227	<p>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.</p> <p>Scenario: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.1.</p>
140803	<p>Symptom: One of the ACL parameters was incorrectly displaying as scanning activieren instead of scanning deaktivieren in the German version of the IAP UI.</p> <p>Scenario: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.1.</p>

Wi-Fi Driver

Table 89: *Wi-Fi Driver Fixed Issue*

Bug ID	Description
129829	<p>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.</p> <p>Scenario: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.8-4.2.4.1.</p>

Issues Resolved in 6.4.4.6-4.2.4.0

AirGroup

Table 90: *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. 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 91: *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. Scenario: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.6-4.2.4.0.

Authentication

Table 92: *Authentication Fixed Issue*

140091 144445	Symptom: Clients were unable to pass WPA2 validation with a specific passphrase. The fix ensures client can connect to the IAP WPA2 SSID with the specified passphrase. Scenario: This issue occurred as the IAP failed to accept the WPA2 passphrase SSID format. This issue was observed in IAPs running Instant 6.4.3.1-4.2.0.0 or later versions.
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ARM

Table 93: *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. 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 94: *Datapath/Firewall Fixed Issues*

Bug ID	Description
138095	<p>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 network without delay.</p> <p>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.</p>
136169	<p>Symptom: Some clients were getting a higher bandwidth than the allocated limit. The fix ensures that the bandwidth does not exceed the allocated limit.</p> <p>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.</p>

Hotspot 2.0

Table 95: *Hotspot 2.0 Fixed Issues*

Bug ID	Description
139116	<p>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.</p> <p>Scenario: This issue was observed in IAP-205H access points running Instant 6.4.4.4-4.2.3.0 and later versions.</p>
138670	<p>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.</p> <p>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.</p>

L2/L3 Mobility

Table 96: *L2/L3 Mobility Fixed Issue*

Bug ID	Description
137726	<p>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.</p> <p>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.</p>

Platform

Table 97: *Platform Fixed Issues*

Bug ID	Description
140867	<p>Symptom: When clients upgraded an IAP, the RTLS server displayed an error message. This issue is resolved by enabling the server compatibility settings of the RTLS server.</p> <p>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.</p>
142400	<p>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.</p> <p>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.</p>
135787	<p>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.</p> <p>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.</p>
137637	<p>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.</p> <p>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.</p>

3G/4G Management

Table 98: *3G/4G Management Fixed Issue*

Bug ID	Description
137180	<p>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.</p> <p>Scenario: This issue was observed in all IAPs running Instant 6.4.3.1-4.2.0.0 and later versions.</p>

UI

Table 99: *UI Fixed Issues*

Bug ID	Description
140506	<p>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.</p> <p>Scenario: This issue was observed in all IAPs running Instant 6.4.4.4-4.2.3.1 and later versions.</p>
141593	<p>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.</p> <p>Scenario: This issue was observed in all IAPs running Instant 6.4.4.4-4.2.3.0.</p>
141757	<p>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.</p> <p>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.</p>

VC Management

Table 100: *VC Management Fixed Issue*

Bug ID	Description
138089	<p>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.</p> <p>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.</p>

VPN

Table 101: *VPN Fixed Issues*

Bug ID	Description
132490	<p>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.</p> <p>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.</p>
138468	<p>Symptom: IAP clients were unable to connect to the corporate network. This issue is resolved by ensuring that the conductor IAPs receive the correct DHCP IP subnets from the VPN tunnel in the corporate network.</p> <p>Scenario: The issue was observed in all IAPs running Instant 6.4.3.4-4.2.1.0 and later versions.</p>

Wi-Fi Driver

Table 102: *Wi-Fi Driver Fixed Issue*

Bug ID	Description
138582	<p>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 ensures the clients are now able to connect to the 5 GHz radio channel without errors.</p> <p>Scenario: This issue was observed in all IAPs running a software version prior to Instant 6.4.4.6-4.2.4.0.</p>