Aruba Instant 8.10.0.10 Release Notes



Copyright Information

© Copyright 2024 Hewlett Packard Enterprise Development LP.

This product includes code licensed under certain open source licenses which require source compliance. The corresponding source for these components is available upon request. This offer is valid to anyone in receipt of this information and shall expire three years following the date of the final distribution of this product version by Hewlett Packard Enterprise Company. To obtain such source code, please check if the code is available in the HPE Software Center at https://myenterpriselicense.hpe.com/cwp-ui/software but, if not, send a written request for specific software version and product for which you want the open source code. Along with the request, please send a check or money order in the amount of US \$10.00 to:

Hewlett Packard Enterprise Company Attn: General Counsel WW Corporate Headquarters 1701 E Mossy Oaks Rd Spring, TX 77389 United States of America.

Contents	3
Revision History	4
Release Overview	5
Related Documents	5
Supported Browsers	5
Terminology Change Contacting Support	
What's New New Features and Enhancements Behavioral Changes	7
Supported Hardware Platforms	8
End-of-Support	9
Regulatory Updates	10
Resolved Issues	11
Known Issues and Limitations Limitations Known Issues	13
Upgrading an Instant AP Upgrading an Instant AP and Image Server Upgrading an Instant AP Using the Automatic Image Check Upgrading to a New Version Manually Using the WebUI Upgrading an Instant AP Image Using CLI Ungrade from Instant 6 A x x 4 2 x x to Instant 8 10.0 x	17 19 19 21
Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.10.0.x	21

The following table provides the revision history of this document.

 Table 1: Revision History

Revision	Change Description
Revision 01	Initial release.

This Aruba Instant release notes includes the following topics:

- What's New on page 7
- Supported Hardware Platforms on page 8
- Regulatory Updates on page 10
- Resolved Issues on page 11
- Known Issues and Limitations on page 13
- Upgrading an Instant AP on page 17

For the list of terms, refer to the Glossary.

Related Documents

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

- Aruba AP Software Quick Start Guide
- Aruba Instant User Guide
- Aruba Instant CLI Reference Guide
- Aruba Instant REST API Guide
- Aruba Instant Syslog Messages Reference Guide
- Aruba Instant AP Troubleshooting Guide

Supported Browsers

The following browsers are officially supported for use with the Instant WebUI:

Web Browser	Operating System
Microsoft Edge (Microsoft Edge 92.0.902.62 and Microsoft EdgeHTML 18.19041) or later	Windows 10 or latermacOS
Firefox 107.0.1 or later	Windows 10 or latermacOS
Apple Safari 15.4 (17613.1.17.1.13) or later	■ macOS
Google Chrome 108.0.5359.71 or later	Windows 10 or latermacOS

Terminology Change

As part of advancing HPE's commitment to racial justice, we are taking a much-needed step in overhauling HPE engineering terminology to reflect our belief system of diversity and inclusion. Some legacy products and publications may continue to include terminology that seemingly evokes bias against specific groups of people. Such content is not representative of our HPE culture and moving forward, Aruba will replace racially insensitive terms and instead use the following new language:

Usage	Old Language	New Language
Campus Access Points + Controllers	Master-Slave	Conductor-Member
Instant Access Points	Master-Slave	Conductor-Member
Switch Stack	Master-Slave	Conductor-Member
Wireless LAN Controller	Mobility Master	Mobility Conductor
Firewall Configuration	Blacklist, Whitelist	Denylist, Allowlist
Types of Hackers	Black Hat, White Hat	Unethical, Ethical

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: <u>arubanetworks.com/support-services/security-bulletins/</u> Email: <u>aruba-sirt@hpe.com</u>

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

New Features and Enhancements

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

Auto Dump Collection Commands

The following commands have been introduced to support the automatic uploading of dump files for crash events:

- The **show ap debug ctb-status** command shows the upload status of crash dump files.
- The **show ap debug subscribe-event-statistics** command shows the records of the crash event.

Enhancement to debug pkt dump for Enforce DHCP Violation

Starting from Aruba Instant 8.10.0.10, the output for **debug pkt dump** includes information regarding packets drops that occur due to enforce DHCP violations.

Enhancement to EST Profiles

Starting from Aruba Instant 8.10.0.10, Instant APs now follow RFC 7030 when attempting to re-enroll EST certificates.

Behavioral Changes

This release does not introduce any changes in Aruba Instant behaviors, resources, or support that would require you to modify the existing system configurations after updating to 8.10.0.10.

The following table displays the Instant AP platforms supported in Aruba Instant 8.10.0.x release.

Table 3: Supported Instant AP Platforms

Instant AP Platform	Minimum Required Instant Software Version
580 Series — AP-584, AP-585, and AP-587 580EX Series — AP-585EX and AP-587EX 650 Series — AP-655	Instant 8.10.0.0 or later
630 Series — AP-635	Instant 8.9.0.0 or later
500H Series — AP-503H 560 Series — AP-565 and AP-567	Instant 8.7.1.0 or later
500H Series — AP-505H 518 Series — AP-518 570 Series — AP-574, AP-575, and AP-577 570EX Series — AP-575EX and AP-577EX	Instant 8.7.0.0 or later
500 Series — AP-504 and AP-505	Instant 8.6.0.0 or later
530 Series — AP-534 and AP-535 550 Series — AP-555	Instant 8.5.0.0 or later
303 Series — AP-303P 387 Series — AP-387 510 Series — AP-514 and AP-515	Instant 8.4.0.0 or later
303 Series — AP-303 318 Series — AP-318 340 Series — AP-344 and AP-345 370 Series — AP-374, AP-375, and AP-377 370EX Series — AP-375EX and AP-375EX	Instant 8.3.0.0 or later
203H Series — AP-203H	Instant 6.5.3.0 or later
203R Series — AP-203R and AP-203RP 303H Series — AP-303H 360 Series — AP-365 and AP-367	Instant 6.5.2.0 or later
207 Series — IAP-207 300 Series — IAP-304 and IAP-305	Instant 6.5.1.0-4.3.1.0 or later
310 Series — IAP-314 and IAP-315 330 Series — IAP-334 and IAP-335	Instant 6.5.0.0-4.3.0.0 or later
320 Series — IAP-324 and IAP-325	Instant 6.4.4.3-4.2.2.0 or later

This chapter provides information on the Aruba products that are not supported for a particular release.

Aruba Instant 8.10.x.x is the last release that supports the following AP platforms:

- 203H Series
- 203R Series
- 207 Series
- 320 Series
- 330 Series
- 340 Series
- AP-387

Chapter 5 Regulatory Updates

This chapter contains the Downloadable Regulatory Table (DRT) file version introduced in this release. Periodic regulatory changes may require modifications to the list of channels supported by an AP. For a complete list of channels supported by an AP using a specific country domain, access the Instant AP Command Line Interface (CLI) and execute the **show ap allowed-channels** command.

For a complete list of countries and the regulatory domains in which the APs are certified for operation, refer to the Downloadable Regulatory Table or the DRT Release Notes at asp.arubanetworks.com. The following DRT file version is part of this release:

■ DRT-1.0_88954

The following issues are resolved in this release.

Table 4: Resolved Issues in Instant 8.10.0.10

Bug ID	Description	Reported Version
AOS-225670 AOS-247530	Instant APs displayed incorrect Role information in the output of the show clients command. This issue occurred when the MPSK local key role was changed through the Central UI. The fix ensures the correct information is displayed in the command output. This issue was observed in Central-managed APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-229092	The output of the show ntp status command was inconsistent with the information listed in the device logs. The fix ensures that the show ntp status command lists the information available in the device logs. This issue was observed in Central-managed APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-231258 AOS-249677	Some access points became unresponsive due to random spikes in port utilization, resulting in client connectivity issues. The issue was related to excessive multicast traffic being received. The fix ensures APs work as expected. This issue was observed in AP-535 access points running Aruba Instant 8.10.0.8 or later versions.	Aruba Instant 8.10.0.8
AOS-237888	The SNMP engine boot ID value did not update when the AP rebooted. The fix ensures the SNMP process works as expected. This issue was observed in APs running Aruba Instant 8.10.0.3 or later versions.	Aruba Instant 8.10.0.3
AOS-245621	Instant APs did not switch channels nor avoided interference, causing performance issues and network drops. The fix ensures that the APs switch channels when interference is detected in channels other than the main channel. This issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-246408	The aiRadioChannel parameter of the MIB node did not include details about the 40 MHz, 80 MHz, and 160 MHz channels. The fix ensures that the information appears as expected. This issue was observed in APs running Aruba Instant 8.6.0.2 or later versions.	Aruba Instant 8.6.0.2
AOS-246735 AOS-246633 AOS-247461	Some access points crashed with reason BadAddr:ffffffc133b1e424 PC:memcmp+0xd0/0x1c0 Warm-reset. The fix ensures Instant APs work as expected. This issue was observed in AP-515 and AP-575 access points running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-247394	While running the show auth-survivability cache-info command, the username displayed random characters for strings longer than 16 characters. The fix ensures that usernames are displayed correctly. This issue was observed in Instant APs runningAruba Instant 6.5.4.0 or later versions.	Aruba Instant 6.5.4.0

 Table 4: Resolved Issues in Instant 8.10.0.10

Bug ID	Description	Reported Version
AOS-247565	Wired clients connected to AP-535 were unable to access management WebUI page of IP camera connected wired to same AP. The fix ensures that PPE is disable for offload on APs to work as expected. This issue was observed in AP-535 access points running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-247778	Some Instant APs failed in the re-enrollment process with an EST-configured CCPM server running version 6.11. Re-enrolling failed even when a username and password were configured in the EST profile. The fix ensures that re-enrollment with EST CPPM servers works as expected. The issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-248026 AOS-248088 AOS-248126	Some IAP-314 and IAP-315 access points appeared as unsynchronised under the Devices > Access Points > Config Status page in the CentralUI. The APs did not recover from the unsynchronized state by rebooting or using the resync config command. The fix ensures the status of the APs is displayed correctly. This issue was observed in Central-managed APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-248076	The output of XML API queries displayed truncated AP names for Instant APs when the name exceeded 31 characters. The fix ensures that the output of XML API queries displays the AP names correctly. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.10.0.7
AOS-248170	Some Instant APs were incorrectly assigned to be the virtual controllers in a cluster. The fix ensures there is no dual virtual controllers. This issue was observed in APs running Aruba Instant 8.10.0.6 or later versions.	Aruba Instant 8.10.0.6
AOS-248422	The output of the show est status command incorrectly displayed EST Status :Enabled when an Instant AP failed EST re-enrollment. The fix ensures that the output displays correct status when the AP fails re-enrollment. This issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-248443	EST re-enrollment failed on some Instant APs when the EST key type was set to 4096-bit RSA . This issue occurred when the 4096-bit RSA key took a long time to generate. The fix ensures that EST re-enrollment is successful when the EST key type is set to 4096-bit RSA . This issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-249004	The Cellular Status and USB Modem Information tables were missing from the output of the show cellular status command. The fix ensures that the output includes the Cellular Status and USB Modem Information tables. This issue was observed in Instant APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.11.2.0

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

Limitations

This section describes the limitations in Aruba Instant 8.10.0.10.

AP-635 and AP-655 Access Points

AP-635 and AP-655 access points have the following limitations:

- All radios for AP-635 and AP-655 access points currently do not support spectrum analysis.
- Hotspot and Air Slice configuration is not supported on the 6 GHz radio.
- 802.11mc responder and initiator functionality is not supported on any radio.
- Users can configure only up to 4 VAPs on the 6 GHz radio, instead of 16 VAPs.
- A maximum of 512 clients can be associated on any radio instead of 1024.

Air Slice

Air Slice is partially enabled on 500 Series and 510 Series access points. However, WMM boost will be functional even if Air Slice high-priority queuing is disabled.

Airtime Fairness Mode

Airtime Fairness Mode is not supported in 802.11ax access points.

AP Hostname Character Limit Extension

The number of ASCII characters allowed in the Instant AP hostname is increased from 32 to 128 characters. The following configuration settings do not support the new limit of 128 ASCII characters in Instant 8.8.0.0 and later versions:

- The AP Name field in Role Derivation or VI AN Derivation.
- The AP Name field in beacon and probe response frames.
- The AP Name field in the **show ap mesh link** and **ap mesh neighbor** commands.

Dynamic Multicast Optimization Unsupported with VLAN Derivation

Aruba Instant does not support Dynamic Multicast Optimization when the SSID is configured with VLAN derivation.

Inbound Firewall

The **apip-all** configuration is not supported by the **inbound-firewall** command in Instant AP cluster deployments. It is only supported in standalone or single-AP modes of deployment.

Unified Communications Manager

UCM does not prioritize NAT traffic.

Known Issues

Following are the known issues observed in this release.

Table 5: *Known Issues in Instant 8.10.0.10*

Bug ID	Description	Reported Version
AOS-195769	 In some Instant APs set up with dynamic VLAN assignment, ARP or GARP traffic is unexpectedly sent to wireless clients, even if they are connected to a different VLAN and VAP. This issue is observed in the following scenarios: When the broadcast packets from VLAN 1 and all of the clients on the SSID are on VLAN 2, the packets are sent to all VAPs belonging to the same SSID. When the SSID has two VAPs that belong to the same VLAN, but only one VAP has clients on that VLAN, the traffic is forwarded to both VAPs. When all of the VAPs of a given SSID have clients on different VLANs, the packets are broadcasted to all VLANs. This issue is observed in Instant APs running Aruba Instant 8.6.0.0 or later versions. 	Aruba Instant 8.6.0.0
AOS-220890	MPSK-Local SSID is broadcasted as Open SSID in Instant APs running Aruba Instant versions lower than 8.7.0.0. This issue is observed in APs running Aruba Instant 8.6.0.8 or later versions.	Aruba Instant 8.6.0.8
AOS-225601 AOS-224170	Some member APs in a cluster appear as down in the AirWave UI. This issue is observed in AirWave-managed APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-228967	The SSID is unable to configure the Station Ageout Time to a value over 3600 seconds. This issue is observed in APs running Aruba Instant8.7.1.4 or later versions.	Aruba Instant 8.6.0.8
AOS-231019 AOS-230843 AOS-240061 AOS-232063	Some APs fail to reconnect after an LTE outage. Also, the output of the show cell status command is missing information. This issue is observed in AP-505H access points running Aruba Instant 8.7.1.7 or later versions.	Aruba Instant 8.7.1.7
AOS-231129	Instant APs do not send the cold and warm SNMP traps when expected. This issue is observed in APs running Aruba Instant 8.0.0.0 or later versions.	Aruba Instant 8.6.0.8
AOS-231444 AOS-244171	An Instant AP is unable to download user roles. This issue is observed in Central-managed APs running Aruba Instant 8.10.0.6 or later versions.	Aruba Instant 8.10.0.6
AOS-232833	Member APs ignore the proxy configuration when trying to download firmware with the image URL provided by the virtual controller. This issue is observed in APs running Aruba Instant 8.9.0.0 or later versions.	Aruba Instant 8.9.0.0

Table 5: *Known Issues in Instant 8.10.0.10*

Bug ID	Description	Reported Version
AOS-233095	In Instant AP clusters that are configured with a static IP address, the system log is populated with a lot of arping ongoing got central rollback messages. The APs are managed locally and are not managed by Aruba Central. This issue is observed in APs running Aruba Instant 8.7.1.3 or later versions.	Aruba Instant 8.7.1.3
AOS-233215	If the TACACS server name contains a space, the Instant AP does not save the TACACS server configuration after assigning the TACACS server as the management authentication server. The AP automatically removes the configuration when the client attempts to save the information. This issue is observed in APs running Aruba Instant 8.9.0.3 or later versions.	Aruba Instant 8.9.0.3
AOS-233784	When a user connects to the Captive Portal SSID in one accounting session, the RADIUS Acct-Multi-Session-Id changes. This issue is observed in APs running Aruba Instant 8.9.0.2 or later versions.	Aruba Instant 8.9.0.2
AOS-234828	An Instant AP in a cluster reboots automatically. The log file lists the reason for reboot as: Critical process /aruba/bin/stm [pid 26061] DIED, process marked as RESTART . This issue is observed in APs running Aruba Instant 8.9.0.3 or later versions.	Aruba Instant 8.9.0.3
AOS-235164 AOS-233149	The Aruba Instant AP log generates multiple xhci-hcd xhci-hcd.0.auto : Ring expansion failed: ep_state 3; ring_type 2; trbs 1, free 1; id 0 messages when connected to USB LTE modems. This issue is observed in APs running Aruba Instant 8.7.1.9 or later versions.	Aruba Instant 8.7.1.9
AOS-235428	Aruba Instant APs in a cluster intermittently disconnect from the VPN and Central. The output of the show ap debug cloud-server command returns the error message: Master failover , despite the conductor being stable. This issue is observed in APs running Aruba Instant 8.6.0.17 or later versions.	Aruba Instant 8.6.0.17
AOS-238137	The traceroute command returns the following error message: Can't find tsgw src ip . This issue occurs when the Aruba Instant AP has multiple routing entries in the routing profile. This issue is observed in APs running Aruba Instant 8.10.0.3 or later versions.	Aruba Instant 8.10.0.3
AOS-239368	Instant APs in a cluster do not retain the configured CPPM username and password. This issue occurs when the APs are rebooted while the password exceeds 23 characters. This issue is observed in APs running Aruba Instant 8.9.0.2 or later versions.	Aruba Instant 8.9.0.2
AOS-239411	Instant APs do not accept the serial number of the device as the default password after a factory reset. This issue occurs when the AP is reset using the factory reset command in AP boot mode. This issue is observed in APs running Aruba Instant 8.9.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-239419 AOS-238100	The eth0 link of an Instant AP appears offline in the AirWave UI. This issue is observed in AirWave-managed APs running Aruba Instant 8.6.0.18 or later versions.	Aruba Instant 8.6.0.18
AOS-240096	Clients are unable to connect to the SSID when: Two SSID profiles have the same ESSID. Both time range profile and SSID Zone are configured on the	Aruba Instant 8.7.1.9

Table 5: *Known Issues in Instant 8.10.0.10*

Bug ID	Description	Reported Version
	Instant AP. This issue is observed in Central-managed APs running Aruba Instant 8.7.0.0 or later versions.	
AOS-240530	Instant APs return the following error message auth_cppm_instant.c, auth_cppm_transform:1859: Dldb Role pf_iap_dur-3008-26: Buffer too large. This issue occurs when the buffer size of the downloadable user role sent from the ClearPass Policy Manager exceeds 16 KB. This issue is observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.4
AOS-241316	The output of the show ap debug lldp command displays incorrect information when executed. This issue is observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.20
AOS-242271	Multiple DHCP server connection errors are reported on the AI Insights dashboard of the Central UI. This issue was observed in Centralmanaged APs running Aruba Instant 8.7.1.0 or later versions.	Aruba Instant 8.7.1.0
AOS-243184	An Instant AP displays incorrect country codes in the air captured packet although the correct country code is configured on the AP. This issue is observed in APs running Aruba Instant 8.10.0.5 or later versions.	Aruba Instant 8.10.0.5
AOS-249437 AOS-250853	Mesh point Instant APs fail to connect to the portal and the portal fails to update the channel bandwidth to the configured value. This issue occurs when: • no 80mhz-support is configured under the ARM profile. • mesh-band 6ghz is configured. This issue is observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.11.2.1
AOS-250160 AOS-250315	The Non-DTLS Members parameter changes to Deny on the Configuration > System page when the WebUI is refreshed. However, the output of the show cluster-security command indicates that the Non-DTLS Members parameter is set to Allow . This issue is observed in APs running Aruba Instant 8.10.0.1 or later versions.	Aruba Instant 8.10.0.4
AOS-250362	Some Instant AP members fail to join the cluster after upgrading the software version. This issues occurs when the DRT download fails. This issue is observed in Central-managed APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.9

This chapter describes the Instant software upgrade procedures and the different methods for upgrading the image on the Instant AP.



While upgrading anInstant AP, you can use the image check feature to allow the Instant AP to find new software image versions available on a cloud-based image server hosted and maintained by Aruba. The location of the image server is fixed and cannot be changed by the user. The image server is loaded with the latest versions of the Instant software.

Topics in this chapter include:

- Upgrading an Instant AP and Image Server on page 17
- Upgrading an Instant AP Using the Automatic Image Check on page 19
- Upgrading to a New Version Manually Using the WebUI on page 19
- Upgrading an Instant AP Image Using CLI on page 21
- Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.10.0.x on page 21

Upgrading an Instant AP and Image Server

Instant supports mixed Instant AP class Instant deployment with all Instant APs as part of the same virtual controller cluster.

Image Management Using AirWave

If the multi-class Instant AP network is managed by AirWave, image upgrades can only be done through the AirWave WebUI. The Instant AP images for different classes must be uploaded on the AMP server. If new Instant APs joining the network need to synchronize their software with the version running on the virtual controller, and if the new Instant AP belongs to a different class, the image file for the new Instant AP is provided by AirWave. If AirWave does not have the appropriate image file, the new Instant AP will not be able to join the network.



The virtual controller communicates with the AirWave server if AirWave is configured. If AirWave is not configured on the Instant AP, the image is requested from the Image server.

Image Management Using Cloud Server

If the multi-class Instant AP network is not managed by AirWave, image upgrades can be done through the Cloud-Based Image Check feature. If a new Instant AP joining the network needs to synchronize its software version with the version on the virtual controller and if the new Instant AP belongs to a different class, the image file for the new Instant AP is provided by the cloud server.

Configuring HTTP Proxy on an Instant AP

If your network requires a proxy server for Internet access, ensure that you configure the HTTP proxy on the Instant AP to download the image from the cloud server. The **Username** and **Password**

configuration is supported only for cloud services. After setting up the HTTP proxy settings, the Instant AP connects to the Activate server, AMP, Central, OpenDNS, or web content classification server through a secure HTTP connection. The proxy server can also be configured and used for cloud services. You can also exempt certain applications from using the HTTP proxy (configured on an Instant AP) by providing their host name or IP address under exceptions.

The following procedure describes how to configure the HTTP proxy settings using the webUI:

- 1. Navigate to **Configuration** > **System** > **Proxy**.
- 2. Enter the HTTP proxy server IP address in the **Auth Server** text box.
- 3. Enter the port number in the **Port** text box.
- 4. If you want to set an authentication username and password for the proxy server, enable the **Proxy requires authentication** toggle switch.
- 5. Enter a username in the **Username** text box.
- 6. Enter a password in the **Password** text box.
- 7. If you do not want the HTTP proxy to be applied for a particular host, click + to enter that IP address or domain name of that host in the **Exceptions** section.
- 8. Click Save.

The following procedure describes how to configure the HTTP proxy settings using the CLI:

```
(Instant AP) (config) # proxy server 192.0.2.1 8080 example1 user123
(Instant AP) (config) # proxy exception 192.0.2.2
(Instant AP) (config) # end
(Instant AP) # commit apply
```

HTTP Proxy Support through Zero Touch Provisioning

Instant APs experience issues when connecting to AirWave, Central, or Activate through the HTTP proxy server which requires a user name and password. The ideal way to provide seamless connectivity for these cloud platforms is to supply the proxy information to the Instant AP through a DHCP server.

Starting with Aruba Instant 8.4.0.0, besides being able to authenticate to the HTTP proxy server, the factory default Instant APs can also communicate with the server through a HTTP proxy server DHCP which does not require authentication.

In order for the factory default Instant AP to automatically discover the proxy server, you need to configure the HTTP proxy information in the DHCP server option. The Instant AP will receive the proxy information and store it in a temporary file.

To retrieve the port and the proxy server information, you need to first configure the DHCP option 60 to **ArubainstantAP** as shown below:

```
(Instant AP) (config) # ip dhcp  cprofile name>
(Instant AP) ("IP DHCP profile-name") # option 60 ArubaInstantAP
```

Secondly, use the following command to configure the proxy server:

```
(Instant AP) (config) # proxy server <host> <port> [<username> <password>]
```

Use the text string option 148 text server=host_

ip,port=PORT,username=USERNAME,password=PASSWORD to retrieve the details of the proxy server.

Rolling Upgrade on Instant APs with AirWave

Starting from Aruba Instant 8.4.0.0, Rolling Upgrade for Instant APs in standalone mode is supported with AirWave. The upgrade is orchestrated through NMS and allows the Instant APs deployed in standalone mode to be sequentially upgraded such that the APs upgrade and reboot one at a time. With Rolling Upgrade, the impact of upgrading a site is reduced to a single AP at any given point in time. This enhances the overall availability of the wireless network. For more information, see AirWave 8.2.8.2 Instant Deployment Guide and AirWave 8.2.8.2 Release Notes.

Upgrading an Instant AP Using the Automatic Image Check

You can upgrade an Instant AP by using the Automatic Image Check feature. The automatic image checks are performed once, as soon as the Instant AP boots up and every week thereafter.

If the image check locates a new version of the Instant software on the image server, the New version available link is displayed on the Instant main window.



If AirWave is configured, the automatic image check is disabled.

The following procedure describes how to check for a new version on the image server in the cloud using the webUI:

- 1. Go to **Maintenance** > **Firmware**.
- 2. In the Automatic section, click Check for New Version. After the image check is completed, one of the following messages is displayed:
 - No new version available—If there is no new version available.
 - Image server timed out—Connection or session between the image server and the Instant AP is timed out.
 - Image server failure—If the image server does not respond.
 - A new image version found—If a new image version is found.
- 3. If a new version is found, the **Upgrade Now** button becomes available and the version number is displayed.
- 4. Click **Upgrade Now**.

The Instant AP downloads the image from the server, saves it to flash, and reboots. Depending on the progress and success of the upgrade, one of the following messages is displayed:

- Upgrading—While image upgrading is in progress.
- Upgrade successful—When the upgrade is successful.
- Upgrade failed—When the upgrade fails.

If the upgrade fails and an error message is displayed, retry upgrading the Instant AP.

Upgrading to a New Version Manually Using the WebUI

If the Automatic Image Check feature is disabled, you can manually obtain an image file from a local file system or from a remote server accessed using a TFTP, FTP or HTTP URL.

The following procedure describes how to manually check for a new firmware image version and obtain an image file using the webUI:

- 1. Navigate to **Maintenance** > **Firmware**.
- 2. Expand **Manual** section.
- 3. The firmware can be upgraded using a downloaded image file or a URL of an image file.
 - a. To update firmware using a downloaded image file:
 - i. Select the **Image file** option. This method is only available for single-class Instant APs.
 - ii. Click on **Browse** and select the image file from your local system. The following table describes the supported image file format for different Instant AP models:

Access Points	Image File Format
AP-635 and AP-655	Aruba Instant_Norma_8.10.0.x_xxxx
AP-344, AP-345, AP-514, AP-515, AP-518, AP- 574, AP-575, AP-575EX, AP-577, and AP-577EX	Aruba Instant_Draco_8.10.0.x_xxxx
AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567.	Aruba Instant_Gemini_8.10.0.x_xxxx
IAP-314, IAP-315, IAP-324, IAP-325, AP-374, AP-375, AP-377, AP-318, and AP-387	Aruba Instant_Hercules_8.10.0.x_xxxx
IAP-334 and IAP-335	Aruba Instant_Lupus_8.10.0.x_xxxx
AP-534, AP-535, AP-555, AP-584, AP-585, AP-585EX, AP-587, AP-587EX	Aruba Instant_Scorpio_8.10.0.x_xxxx
AP-303, AP-303H, 303P Series, IAP-304, IAP- 305, AP-365, and AP-367	Aruba Instant_Ursa_8.10.0.x_xxxx
AP-203H, AP-203R, AP-203RP, and IAP-207	Aruba Instant_Vela_8.10.0.x_xxxx

- b. To upgrade firmware using the URL of an image file:
 - i. Select the Image URL option to obtain an image file from a HTTP, TFTP, or FTP URL.
 - ii. Enter the image URL in the **URL** text field. The syntax to enter the URL is as follows:
 - HTTP http://<IP-address>/<image-file>. For example, http://<IPaddress>/ArubaInstant_Hercules_8.10.0.x_xxxx
 - TFTP tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/Aruba Instant_Hercules_8.10.0.x_xxxx
 - FTP ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/Aruba Instant_ Hercules 8.10.0.x xxxx
 - FTP ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.10.0.x_xxxx



The FTP server supports both **anonymous** and **username:password** login methods.

Multiclass Instant APs can be upgraded only in the URL format, not in the local image file format.

- 4. Disable the **Reboot all APs after upgrade** toggle switch if required. This option is enabled by default to allow the Instant APs to reboot automatically after a successful upgrade. To reboot the Instant AP at a later time, clear the **Reboot all APs after upgrade** check box.
- 5. Click **Upgrade Now** to upgrade the Instant AP to the newer version.
- 6. Click Save.

Upgrading an Instant AP Image Using CLI

The following procedure describes how to upgrade an image using a HTTP, TFTP, or FTP URL:

```
(Instant AP) # upgrade-image <ftp/tftp/http-URL>
```

The following is an example to upgrade an image by using the FTP URL:

```
(Instant AP) # upgrade-image ftp://192.0.2.7/ArubaInstant Hercules 8.10.0.x xxxx
```

The following procedure describes how to upgrade an image without rebooting the Instant AP:

```
(Instant AP) # upgrade-image2-no-reboot <ftp/tftp/http-URL>
```

The following is an example to upgrade an image without rebooting the Instant AP:

```
(Instant AP) # upgrade-image2-no-reboot ftp://192.0.2.7/Aruba Instant Hercules
8.10.0.x xxxx
```

The following command describes how to view the upgrade information:

```
(Instant AP) # show upgrade info
Image Upgrade Progress
Mac IP Address AP Class Status Image Info Error Detail
d8:c7:c8:c4:42:98 10.17.101.1 Hercules image-ok image file none
Auto reboot :enable
Use external URL : disable
```

Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.10.0.x

Before you upgrade an Instant AP running Instant 6.5.4.0 or earlier versions to Instant 8.10.0.x, follow the procedures mentioned below:

- 1. Upgrade from Instant 6.4.x.x-4.2.x.x or any version prior to Instant 6.5.4.0 to Instant 6.5.4.0.
- 2. Refer to the Field Bulletin AP1804-1 at asp.arubanetworks.com.
- 3. Verify the affected serial numbers of the Instant AP units.