



Aruba Instant 8.10.0.6

Release Notes

aruba

a Hewlett Packard
Enterprise company

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The following table provides the revision history of this document.

Table 1: *Revision History*

Revision	Change Description
Revision 03	Added limitation on Airtime Fairness Mode to the Known Issues and Limitations chapter.
Revision 02	Added AOS-238527 to the list of resolved issues.
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 14](#)
- [Upgrading an Instant AP on page 19](#)

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	<ul style="list-style-type: none">▪ Windows 10 or later▪ macOS
Firefox 107.0.1 or later	<ul style="list-style-type: none">▪ Windows 10 or later▪ macOS
Apple Safari 15.4 (17613.1.17.1.13) or later	<ul style="list-style-type: none">▪ macOS
Google Chrome 108.0.5359.71 or later	<ul style="list-style-type: none">▪ Windows 10 or later▪ macOS

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	networkingsupport.hpe.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



Chapter 2 What's New

There are no new features, enhancements, and behavioral changes introduced in this release.

Chapter 3

Supported Hardware Platforms

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

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 networkingsupport.hpe.com.

The following DRT file version is part of this release:

- DRT-1.0_86062

The following issues are resolved in this release.

Table 4: Resolved Issues in Instant 8.10.0.6

Bug ID	Description	Reported Version
AOS-232078	A DPI core file was generated when an Instant AP crashed unexpectedly. This issue occurred when the software version was upgraded while DPI was enabled. The fix ensures that the AP functions as expected without generating a core file when DPI is enabled. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.10.0.5
AOS-233987 AOS-235089	IDS related messages for SNMPv3 traps were not generated by the Instant AP. The fix ensures that SNMPv3 traps are generated for IDS messages. This issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-235450 AOS-240022	The user was unable to restore the backup configuration from a TFTP server using the CLI . The fix ensures that the user can restore the configuration using the CLI as expected. This issue was observed in 600 Series access points running Aruba Instant 8.9.0.0 or later versions.	Aruba Instant 8.10.0.5
AOS-235831 AOS-239968	A blank line was displayed in the output for the debug pkt dump command. The fix ensures that the hostname field in DHCP packets does not include a newline delimiter. This issue was observed in APs running Aruba Instant 8.10.0.5 or later versions.	Aruba Instant 8.10.0.5
AOS-235834 AOS-240216	An Instant AP crashed and rebooted unexpectedly. The log file listed the reason for reboot as: Reboot caused by kernel panic: Fatal exception in interrupt . The fix ensures that the AP functions as expected. This issue was observed in AP-535 and AP-555 access points running Aruba Instant 8.6.0.19 or later versions.	Aruba Instant 8.6.0.19
AOS-236116	The copy core-file tftp command only copied the core files and ignored the radio crash files. This issue occurred despite radio crash files being present. The fix ensures that the radio crash files are copied when the copy core-file tftp command is executed. This issue was observed in APs running Aruba Instant 8.6.0.16 or later versions.	Aruba Instant 8.6.0.16
AOS-237132	The MSS value did not change when the data packets were routed through the IAP-VPN tunnel. This issue occurred when PPPoE uplink was configured. The fix ensures that the correct MSS value is displayed. This issue was observed in APs running Aruba Instant 6.4.3.4-4.2.1.0 or later versions.	Aruba Instant 6.4.3.4-4.2.1.0
AOS-237704	An Instant AP failed to broadcast SSIDs that had the VLAN names - gues, gue, gu, or g . The fix ensures that the AP supports SSIDs named gues, gue, gu, or g . This issue was observed in Aruba Instant 8.9.0.3 or later versions.	Aruba Instant 8.9.0.3

Table 4: Resolved Issues in Instant 8.10.0.6

Bug ID	Description	Reported Version
AOS-238208	An Instant AP was unable to set the transmit rate to a value below the lowest configured BSSID basic rate. This issue occurred only on the 2.4 GHz radio. The fix ensures that the user can configure the transmit rate to a value below the lowest configured BSSID basic rate. This issue is observed in AP-203H, AP-203R, AP-203RP, and AP-207 access points running Aruba Instant 8.6.0.14 or later versions.	Aruba Instant 8.6.0.14
AOS-238228	Client devices experienced network connectivity issues intermittently. This issue occurred when: <ul style="list-style-type: none"> An Instant AP was in Wi-Fi uplink dot1x mode. The AP attempted to connect with a device having a reauthentication configuration. The fix ensures that the clients can connect to the network seamlessly. This issue was observed in AP-303H access points running Aruba Instant 8.7.1.8 or later versions.	Aruba Instant 8.7.1.8
AOS-238393	HE clients were unable to pass traffic when the SSID was configured with WPA3 enterprise encryption. The fix ensures that HE clients are able to pass traffic when WPA3 enterprise encryption is configured for the SSID. This issue was observed in 500 Series and 510 Series access points running Aruba Instant 8.10.0.6 or later versions.	Aruba Instant 8.11.0.0
AOS-238527 AOS-239266 AOS-240623	Instant APs in a cluster were unable to establish a WebSocket connection with the Meridian server. This issue occurred when the software was upgraded to 8.10.0.3 or later versions. The fix ensures that the AP reattempts a handshake with the Meridian server after multiple WebSocket connection failures. This issue was observed in AirWave-managed APs running Aruba Instant 8.10.0.3 or later versions.	Aruba Instant 8.10.0.3
AOS-238788	Meridian configured BLE Instant AP beacons were classified as unheard in the Meridian Editor UI when the software version was downgraded to 8.9.0.3. This issue occurred when the UUID was not added to the configured beacon's payload because of the BLE configuration of the AP. The fix ensures that the UUID is added to the payload of the configured beacon. This issue was observed in APs running Aruba Instant 8.9.0.3 or later versions.	Aruba Instant 8.9.0.3
AOS-238799 AOS-239104	Clients experienced connectivity issues when attempting to connect to an SSID using native VLAN. This issue occurred when LACP was configured with an uplink switch on the Instant AP. The fix ensures that clients are able to connect to the SSID without interruptions. This issue was observed in APs running Aruba Instant 8.9.0.2 or later versions.	Aruba Instant 8.9.0.2
AOS-238808	An Instant AP was unable to form mesh link at 60 GHz and was deynlisted. The fix ensures that the AP can form a mesh link without being deynlisted. This issue was observed in AP-387 access points Aruba Instant 8.6.0.19 or later versions.	Aruba Instant 8.6.0.19
AOS-239586	An Instant AP name was displayed incorrectly in the Live Events tab of the Central UI, after the name is updated. The fix ensures that the name is displayed corrected in the Live Events tab. This issue was observed in Central-managed APs running Aruba Instant 8.10.0.4 or later versions.	Aruba Instant 8.10.0.4

Table 4: Resolved Issues in Instant 8.10.0.6

Bug ID	Description	Reported Version
AOS-240114	Client traffic was not forwarded by an Instant AP. This issue occurred when deny-intra-vlan-traffic was configured, and VRRP was configured on the upstream default router. The fix ensures that client traffic is forwarded when deny-intra-vlan-traffic is configured. This issue was observed in APs running Aruba Instant 8.10.0.6 or later versions.	Aruba Instant 8.11.0.0
AOS-240139	An Instant AP in a cluster did not generate an SNMP trap when rogue APs were detected. The fix ensures that the AP generates SNMP traps when rogue APs are present. This issue was observed in APs running Aruba Instant 8.7.0.0 or later versions.	Aruba Instant 8.10.0.4
AOS-240180	An Instant AP was unable to resolve the FQDN. This issue occurred when the AP DNS packet failed to skip the default tunnel route when Dynamic DNS is enabled in the DHCP profile. The fix ensures that the AP DNS packet does not skip the default tunnel route even if Dynamic DNS is enabled. This issue was observed in APs running Aruba Instant 8.10.0.3 or later versions.	Aruba Instant 8.10.0.3
AOS-240266	An Instant AP rejected association requests. The log file listed the reason as: AP is resource constrained-Max Clients Associated . This issue occurred even though there were no clients associated with the AP. The fix ensures that the AP functions as expected. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.10.0.3
AOS-240459	Static IP addresses of locally managed Instant APs were changed to DHCP IP addresses if the configured default gateway was unreachable. The fix ensures that the IP address configuration does not change when the default gateway is unreachable. This issue was observed in APs running Aruba Instant 6.5.0.0 or later versions.	Aruba Instant 6.5.4.20

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

Limitations

This section describes the limitations in Aruba Instant 8.10.0.6.

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 VLAN 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.

FIPS Mode

FIPS mode cannot be turned on or off in Aruba Instant 8.10.0.6. TAA SKUs do not support the following features:

- WEP
- PPPoE
- Wi-Fi Uplink
- L2TPv3
- PSK-based IPSec tunnels
- OpenDNS
- Telnet access
- L3 mobility
- SNMPv3

The software must be upgraded to Aruba Instant 8.11.0.0 or later versions to enable support on TAA SKUs.

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 8.10.0.6*

Bug ID	Description	Reported Version
AOS-204171	<p>Clients intermittently experience high latency when the AP is connected to the backup controller after a failover event. This issue occurs in the following scenarios:</p> <ul style="list-style-type: none"> ▪ The AP attempts to re-connect to the primary controller. ▪ Fast failover is enabled on the AP. <p>This issue is observed in 203R Series access points running Aruba Instant 8.3.0.0 or later versions.</p>	Aruba Instant 8.3.0.0
AOS-218704 AOS-220857	<p>Some VoIP calls are not sent to the server to be recorded. This issue occurs when:</p> <ul style="list-style-type: none"> ▪ The server recording the calls is behind the controller. ▪ Some APs in the cluster are rebooted. <p>This issue is observed in APs running Aruba Instant 8.6.0.4 or later versions.</p>	Aruba Instant 8.6.0.4
AOS-220890	<p>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.</p>	Aruba Instant 8.6.0.8
AOS-221378 AOS-224143	<p>The output of the show ap debug radio-stats command displays incorrect Rx data frame statistics. This issue is observed in APs running Aruba Instant 8.6.0.5 or later versions.</p>	Aruba Instant 8.6.0.5
AOS-224170 AOS-225601	<p>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.</p>	Aruba Instant 8.6.0.0
AOS-228967	<p>Users could not configure the Station Ageout Time to a value greater than 3600 seconds in the SSID settings. This issue is observed in APs running Aruba Instant 8.7.1.4 or later versions.</p>	Aruba Instant 8.7.1.4
AOS-230124 AOS-231165	<p>Multiple core files are created for the dpimgr process on Instant APs in a cluster. This issue is observed in Central-managed APs running Aruba Instant 8.6.0.0 or later versions.</p>	Aruba Instant 8.7.1.7
AOS-231019 AOS-232063	<p>An Instant AP fails to reconnect after an LTE outage. The output of the show cell status command is missing information. This issue is observed in APs running Aruba Instant 8.6.0.16 or later versions.</p>	Aruba Instant 8.7.1.7
AOS-232138	<p>When the client inputs the wrong password, an Instant AP attempts to resend the WPA2 key until the EAP station machine expires. This generates multiple CLIENT_TIMEOUT authentication failure alerts. This issue occurs when there is no MIC failure defined. This issue is observed in Aruba Central-managed APs running Aruba Instant 4.3.1.0 or later versions.</p>	Aruba Instant 8.7.1.5
AOS-232833	<p>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.</p>	Aruba Instant 8.9.0.0

Table 5: Known Issues in Instant 8.10.0.6

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. This issue occurred in APs that 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-233149 AOS-235164	The Instant AP log generates a lot of 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-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-235218 AOS-235584	Instant APs in a cluster report high CPU and memory utilization. This issue occurs due a memory leak in the dpimgr process. This issue is observed in Central-managed APs running Aruba Instant 8.6.0.18 or later versions.	Aruba Instant 8.6.0.18
AOS-235428	Instant APs in a cluster intermittently disconnect from the VPN and Aruba 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-236052	An Instant AP does not update its IP address and retains its original IP address. This issue occurs when the AP switches to a different VLAN using ClearPass. This issue is observed in APs running Aruba Instant 8.7.1.3 or later versions.	Aruba Instant 8.7.1.3
AOS-237699	View-only users are unable to perform debug operations. This issue occurs when the user can log in while the Instant AP is in a degraded state. This issue is observed in APs running Aruba Instant 8.10.0.2 or later versions.	Aruba Instant 8.10.0.2
AOS-237750 AOS-239650	An Instant AP crashes and reboots unexpectedly. The log file lists the reason for reboot as: AP Reboot reason: BadPtr:00000000 PC:strncpy+0x10/0x2c Warm-reset . This issue is observed in APs running Aruba Instant 8.6.0.5 or later versions.	Aruba Instant 8.10.0.4

Table 5: Known Issues in Instant 8.10.0.6

Bug ID	Description	Reported Version
AOS-238100 AOS-239419	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-238137	The traceroute command returns the following error message: Can't find tsgw src ip . This issue occurs when the 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-239052 AOS-239693	The Tunnel End Points column in the output of the show iap table long command does not list all the member Instant APs. This issue occurs when: <ul style="list-style-type: none"> ▪ Tunnel mode for the swarm is configured as ArubaGRE. ▪ The per-AP option is enabled. This issue is observed in APs running Aruba Instant 6.5.0.0 or later versions.	Aruba Instant 8.10.0.5
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-239575	Users are unable to configure RTLS or VC DNS IP address when FIPS mode is enabled. This issue is observed in Central-managed APs running Aruba Instant 8.10.0.3 or later versions.	Aruba Instant 8.10.0.3
AOS-239682	SSID details are displayed with unknown characters in the Client Count Per Network graph under the Overview > Summary tab. This issue is observed in Central-managed APs running Aruba Instant 6.5.0.0 or later versions.	Aruba Instant 8.7.1.10
AOS-239919	An Instant AP connected to a switch port with single stack IPv6 VLAN is unable to obtain DHCPv6 addresses. This causes the AP to revert to IAP mode. This issue is observed in APs running Aruba Instant 8.10.0.1 or later versions.	Aruba Instant 8.10.0.2
AOS-240096	Clients are unable to connect to the SSID when: <ul style="list-style-type: none"> ▪ Two SSID profiles have the same ESSID. ▪ Both time range profile and SSID Zone are configured on the Instant AP. This issue is observed in Central-managed APs running Aruba Instant 8.7.0.0 or later versions.	Aruba Instant 8.7.1.9
AOS-240507	The output of the iftype command displays incorrect SNMP values. This issue is observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.7.1.11

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



While upgrading an Instant 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 19](#)
- [Upgrading an Instant AP Using the Automatic Image Check on page 21](#)
- [Upgrading to a New Version Manually Using the WebUI on page 21](#)
- [Upgrading an Instant AP Image Using CLI on page 23](#)
- [Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.10.0.x on page 23](#)

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 <profile_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://<IP-address>/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.