

# **HPE Aruba Networking Instant Operating System 8.10.0.17 Release Notes**



**Hewlett Packard**  
Enterprise

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The following table provides the revision history of this document.

**Table 1:** *Revision History*

Revision	Change Description
Revision 01	Initial release.

These Instant AOS-8 release notes include the following topics:

- New Features and Enhancements
- Supported Platforms
- Regulatory Updates
- Resolved Issues
- Known Issues and Limitations
- Upgrade Procedure

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*
- *Instant AOS-8 User Guide*
- *Instant AOS-8 CLI Reference Guide*
- *Instant AOS-8 REST API Guide*
- *Instant AOS-8 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"><li>▪ Windows 10 or later</li><li>▪ macOS</li></ul>
Firefox 107.0.1 or later	<ul style="list-style-type: none"><li>▪ Windows 10 or later</li><li>▪ macOS</li></ul>
Apple Safari 15.4 (17613.1.17.1.13) or later	<ul style="list-style-type: none"><li>▪ macOS</li></ul>
Google Chrome 108.0.5359.71 or later	<ul style="list-style-type: none"><li>▪ Windows 10 or later</li><li>▪ macOS</li></ul>

# 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	<a href="http://arubanetworking.hpe.com">arubanetworking.hpe.com</a>
Support Site	<a href="http://networkingsupport.hpe.com">networkingsupport.hpe.com</a>
Airheads Social Forums and Knowledge Base	<a href="http://community.arubanetworks.com">community.arubanetworks.com</a>
North American Telephone	1-800-943-4526 (Toll Free) 1-408-754-1200
International Telephone	<a href="http://arubanetworks.com/support-services/contact-support">arubanetworks.com/support-services/contact-support</a>
Software Licensing Site	<a href="http://lms.arubanetworks.com">lms.arubanetworks.com</a>
End-of-life Information	<a href="http://arubanetworks.com/support-services/end-of-life">arubanetworks.com/support-services/end-of-life</a>
Security Incident Response Team	Site: <a href="http://arubanetworks.com/support-services/security-bulletins">arubanetworks.com/support-services/security-bulletins</a> Email: <a href="mailto:aruba-sirt@hpe.com">aruba-sirt@hpe.com</a>

## Chapter 2

### What's New

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

## Chapter 3

# Supported Platforms

This section displays the supported platforms in Instant AOS-8.x. The **minimum version supported** column displays the minimum Instant AOS-8.x version that can be run on a platform. The **latest version supported** column displays the newest Instant AOS-8.x version that can be run on a certain device. Patch releases do not affect platform support. For example, a device which **latest supported version** is 8.10.0.x can run on any 8.10.0.x version, such as 8.10.0.2 or 8.10.0.10.

### Access Point Platforms

Access Points			Instant AOS-8 Versions Supported	
AP Family	AP Series	AP Model	Minimum	Latest
6xx	670 Series	AP-675, AP-675EX, AP-677, AP-677EX, AP-679, AP-679EX	8.12.0.x	8.12.0.x
	650 Series	AP-655A, AP-654A	8.13.0.x	8.12.0.x
		AP-655	8.10.0.x	8.12.0.x
		AP-654	8.11.2.x	8.12.0.x
	630 Series	AP-635A, AP-634A	8.13.0.x	8.12.0.x
		AP-635	8.9.0.x	8.12.0.x
		AP-634	8.11.2.x	8.12.0.x
	610 Series	AP-615	8.11.0.x	8.12.0.x
	600 Series	AP-605H	8.12.0.x	8.12.0.x



Access Points			Instant AOS-8 Versions Supported	
AP Family	AP Series	AP Model	Minimum	Latest
5xx	580 Series	AP-584, AP-585, AP-585EX, AP-587, AP-587EX	8.10.0.x	8.12.0.x
	570 Series	AP-574, AP-575, AP-577	8.7.0.x	8.12.0.x
	560 Series	AP-565, AP-567	8.7.1.x	8.12.0.x
	550 Series	AP-555	8.5.0.x	8.12.0.x
	530 Series	AP-534, AP-535	8.5.0.x	8.12.0.x
	510 Series	AP-518	8.7.0.x	8.12.0.x
		AP-514, AP-515	8.4.0.x	8.12.0.x
	500 Series	AP-504, AP-505	8.6.0.x	8.12.0.x
		AP-505H	8.7.0.x	8.12.0.x
		AP-503H	8.7.1.x	8.12.0.x
		AP-503	8.11.1.x	8.12.0.x

Access Points			Instant AOS-8 Versions Supported	
AP Family	AP Series	AP Model	Minimum	Latest
3xx	380 Series	AP-387	8.4.0.x	8.10.0.x
	370 Series	AP-374, AP-375, AP-377, AP-375EX, AP-377EX, AP-375ATEX	8.3.0.x	8.12.0.x
	360 Series	AP-365, AP-367	8.3.0.x	8.12.0.x
	340 Series	AP-344, AP-345	8.3.0.x	8.10.0.x
	330 Series	AP-334, AP-335	8.1.0.x	8.10.0.x
	320 Series	AP-324, AP-325	8.0.0.x	8.10.0.x
	310 Series	AP-318	8.3.0.x	8.12.0.x
		AP-314, AP-315	8.1.0.x	8.12.0.x
	300 Series	AP-304, AP-305	8.1.0.x	8.12.0.x
		AP-303H, AP-303HR	8.2.0.x	8.12.0.x
		AP-303P	8.4.0.x	8.12.0.x
		AP-303	8.3.0.x	8.12.0.x
2xx	270 Series	AP-274, AP-275, AP-277	8.0.0.x	8.6.0.x
	220 Series	AP-224, AP-225, AP-228	8.0.0.x	8.6.0.x
	210 Series	AP-214, AP-215	8.0.0.x	8.6.0.x
	200 Series	AP-207	8.1.0.x	8.6.0.x
		AP-203H, AP-203R, AP-203RP	8.2.0.x	8.10.0.x

## Chapter 4

# Regulatory Updates

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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](http://networkingsupport.hpe.com).

The following DRT file version is part of this release:

- DRT-1.0\_92487

## Chapter 5

### Resolved Issues

The following issues are resolved in this release.

**Table 3:** *Resolved Issues in Instant 8.10.0.17*

Bug ID	Description	Reported Version
AOS-239411	Instant APs did not accept the serial number of the device as the default password after a factory reset. This issue occurred when the AP was reset using the <b>factory reset</b> command in AP boot mode. The fix ensures that the AP accepts the serial number as the default password after a factory reset. This issue was observed in APs running Instant AOS-8.9.0.0 or later versions.	Instant AOS-8.10.0.0
AOS-248634	Instant APs randomly generated the following error message: <b>An internal system error has occurred at file cli_swarm.c function get_user_acct_counters_ctx line 34902</b> . The fix ensures that the APs do not generate random error messages. This issue was observed in APs running Instant AOS-8.10.0.0 or later versions.	Instant AOS-8.11.2.0
AOS-258159	For some Instant APs, the MDNS process crashed and rebooted unexpectedly. It was found that incorrect buffer lengths in generating SSDP response packets led to memory corruption. The fix ensures Instant APs work as expected without any crash. This issue was observed in AP-655 access points running Instant AOS-8.10.0.14 or later versions.	Instant AOS-8.10.0.14
AOS-258275	Blocked traffic was observed in Central in the <b>Applications &gt; Visibility &gt; Blocked Traffic</b> page, although no ACLs were configured to block this traffic. The fix ensures that the <b>Blocked Traffic</b> page displays correct information. This issue was observed in access points running Instant AOS-8.10.0.13 or later versions.	Instant AOS-8.10.0.13
AOS-260223	A gaming console could not connect to a WPA3 pre-shared key SSID on 600 Series APs. The authentication failed due to a message integrity check failure. This issue occurred due to a timing issue within the station management module. The fix ensures that the timing event does not occur and the gaming console connects as expected.	Instant AOS-8.12.0.0
AOS-260367	Some APs crashed repeatedly. This issue occurred due to corruption in the <b>/etc/dnsmasq.conf configuration</b> file. The fix ensures that the APs do not crash. This issue was observed in AP-635 access points running Instant AOS-8.0.0.0 or later versions.	Instant AOS-8.0.0.0
AOS-260790	Some issues were seen in the <b>RF Health</b> report. This issue occurred because the average error value in the health report was greater than 100%. The fix ensures APs work as expected. This issue was observed in AP-655 access points running Instant AOS-8.10.0.14 or later versions.	Instant AOS-8.10.0.14

**Table 3: Resolved Issues in Instant 8.10.0.17**

Bug ID	Description	Reported Version
AOS-261672	Some APs rebooted unexpectedly. The log files listed the reason for the reboot as <b>mini_httpd core is generated</b> . The fix ensures APs work as expected. This issue was observed in AP-535 access points running Instant AOS-8.10.0.0 or later versions.	Instant AOS-8.12.0.4
AOS-261701	Some APs managed under a Central template group became preferred Conductors, overwriting the <b>per-ap-settings</b> variable. This issue arose from two factors: first, the absence of conditions configured in lowercase and case-sensitive format, which prevented the <b>per-ap-settings</b> from being correctly applied to the APs. And second, the APs failing to report the correct configuration when the preferred Conductor was set as a member AP in swarm mode, even though it was successfully pushed in Central. The fix ensures that the APs work as expected. This issue was observed in APs running Instant AOS-8.10.0.14 or later versions.	Instant AOS-8.10.0.14
AOS-262040	The STM module for some APs crashed unexpectedly. The log files listed the crash signature as <b>handle_assoc_req</b> . The fix ensures that the STM module does not crash and that APs work as expected. This issue was observed in APs running Instant AOS-8.10.0.0 or later versions.	Instant AOS-8.12.0.3
AOS-262228	Some Instant APs crashed when receiving DHCP packets. This issue occurred because the DHCP packet contained DHCP option 254 and the option length exceeded 100 bytes, which is reserved for the Aruba VLAN for Instant APs to allocate IP addresses to clients. The fix ensures the Instant APs do not crash in this scenario. The issue was observed in Instant APs running AOS-8.10.0.0 or later versions	Instant AOS-8.10.0.0
AOS-262274	Some mesh APs display the eth0 interface as <b>DOWN</b> in the SNMP server. The fix ensures the APs work as expected. This issue was observed in APs running Instant AOS-8.10.0.0 or later versions.	Instant AOS-8.12.0.2
AOS-262315	When authentication failed in APs, ClearPass Policy Manager has an option to return a custom message; however, this message was not being displayed. The fix ensures the correct message is displayed. This issue was observed in APs running Instant AOS-8.10.0.0 or later versions.	Instant AOS-8.10.0.0
AOS-264361	The <b>show activate status</b> command displayed some APs as not-authenticated when the AP attempted to synchronize time from the Activate server due to certificate expiration or since the NTP server was not reachable. The fix ensures that the <b>show activate status</b> command displays accurate results. This issue was observed in APs running Instant AOS-8.10.0.15 or later versions.	Instant AOS-8.10.0.15
AOS-264952	When APs were moved from an AOS-10 group to an AOS-8 compliant group, the APs successfully downloaded and upgraded the firmware but became unreachable after reboot. The fix ensures that APs can be moved from an AOS-10 group to an AOS-8 compliant group successfully. This issue was observed in APs running any Instant AOS-8.x version.	Instant AOS-8.0.0.0

This chapter describes the known issues observed in this release.

## Limitations

This section describes the limitations in Instant AOS-8.10.0.17.

### 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 are 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

Instant AOS-8 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 Instant AOS-8.10.0.11 or later versions. TAA SKUs running Instant AOS-8.10.x 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 Instant AOS-8.11.0.0 or later versions to re-enable support of the above features 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 4:** *Known Issues in Instant 8.10.0.17*

Bug ID	Description	Reported Version
AOS-195769	<p>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:</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ When all of the VAPs of a given SSID have clients on different VLANs, the packets are broadcasted to all VLANs.</li> </ul> <p>This issue is observed in Instant APs running Instant AOS-8.6.0.0 or later versions.</p>	Instant AOS-8.6.0.0
AOS-204171	<p>Clients intermittently experience high latency when the Instant AP is connected to the backup controller after a failover event. This issue occurs under the following scenarios:</p> <ul style="list-style-type: none"> <li>▪ The AP attempts to reconnect to the primary controller.</li> <li>▪ Fast failover is enabled on the AP.</li> </ul> <p>This issue is observed in 203R Series access points running Instant AOS-8.3.0.0 or later versions.</p>	Instant AOS-8.3.0.0

**Table 4: Known Issues in Instant 8.10.0.17**

Bug ID	Description	Reported Version
AOS-220890	MPSK-Local SSID is broadcasted as Open SSID in Instant APs when the software version is downgraded to Instant AOS-8 versions lower than 8.7.0.0. This issue is observed in APs running Instant AOS-8.6.0.8 or later versions.	Instant AOS-8.6.0.8
AOS-225601 AOS-224170	Some member APs in a cluster appear as <b>down</b> in the AirWave UI. This issue is observed in AirWave-managed APs running Instant AOS-8.6.0.0 or later versions.	Instant AOS-8.6.0.0
AOS-228967	Users are unable to configure the <b>Station Ageout Time</b> to a value over 3600 seconds. This issue is observed in APs running Instant AOS-8.7.1.4 or later versions.	Instant AOS-8.6.0.8
AOS-231129	Instant APs do not send cold and warm SNMP traps when expected. This issue is observed in APs running Instant AOS-8.0.0.0 or later versions.	Instant AOS-8.6.0.8
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 Instant AOS-8.9.0.0 or later versions.	Instant AOS-8.9.0.0
AOS-233095	In AP clusters that are configured with a static IP address, the system log is populated with multiple <b>arping ongoing got central rollback</b> messages. The APs are managed locally and are not managed by Central. This issue is observed in APs running Instant AOS-8.7.1.3 or later versions.	Instant AOS-8.7.1.3
AOS-233149 AOS-235164	The Instant AP log generates a lot of <b>xhci-hcd xhci-hcd.0.auto: Ring expansion failed: ep_state 3; ring_type 2; trbs 1, free 1; id 0</b> messages when connected to USB LTE modems. This issue is observed in APs running Instant AOS-8.7.1.9 or later versions.	Instant AOS-8.7.1.9
AOS-233215	If the TACACS server name contains a space, the AP does not save the 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 Instant AOS-8.9.0.3 or later versions.	Instant AOS-8.9.0.3
AOS-233784	When a user connects to the Captive Portal SSID in one accounting session, the RADIUS <b>Acct-Multi-Session-Id</b> changes. This issue is observed in APs running Instant AOS-8.9.0.2 or later versions.	Instant AOS-8.9.0.2
AOS-234828	An Instant AP in a cluster reboots automatically. The log files lists the reason for reboot as: <b>Critical process /aruba/bin/stm [pid 26061] DIED, process marked as RESTART</b> . This issue is observed in APs running Instant AOS-8.9.0.3 or later versions.	Instant AOS-8.9.0.3
AOS-235428	Instant APs in a cluster intermittently disconnect from the VPN and Aruba Central. The output of the <b>show ap debug cloud-server</b> command returns the error message: <b>Master failover</b> , despite the conductor being stable. This issue is observed in APs running Instant AOS-8.6.0.17 or later versions.	Instant AOS-8.6.0.17



**Table 4: Known Issues in Instant 8.10.0.17**

Bug ID	Description	Reported Version
AOS-238137	The <b>traceroute</b> command returns the following error message <b>Can't find tsgw src ip</b> . This issue occurs when the AP has multiple routing entries in the routing profile. This issue is observed in APs running Instant AOS-8.10.0.3 or later versions.	Instant AOS-8.10.0.3
AOS-239419	The <b>eth0</b> link of an AP appears offline in the AirWave UI. This issue is observed in AirWave-managed APs running Instant AOS-8.6.0.18 or later versions.	Instant AOS-8.6.0.18
AOS-240530	Instant APs return the following error message <b>auth_cppm_instant.c, auth_cppm_transform:1859: Dldb Role pf_iap_dur-3008-26: Buffer too large</b> . 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 Instant AOS-8.10.0.0 or later versions.	Instant AOS-8.10.0.4
AOS-241316	The output of the <b>show ap debug lldp</b> command displays incorrect information. This issue is observed in APs running Instant AOS-8.6.0.0 or later versions.	Instant AOS-8.6.0.20
AOS-243184	An 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 Instant AOS-8.10.0.5 or later versions.	Instant AOS-8.10.0.5
AOS-249946 AOS-247154	Some APs crash and reboot unexpectedly due to a UCM segmentation issue, which affects different VoIP applications. This issue is observed in access points running Instant AOS-8.10.0.2 or later versions.	Instant AOS-8.10.0.2
AOS-252434 AOS-252435	Some Instant APs experience unexpected UCM crashes several times a day due to duplicate MAC addresses in the hash table. This issue is observed in APs running Instant AOS-8.10.0.2 or later versions.	Instant AOS-8.10.0.2
AOS-253435	In some AP-315 and AP-375 access points, clients are able to access torrent sites and other applications despite having ACL entries configured to block such traffic. This issue is observed in access points running Instant AOS-8.6.0.19 or later versions.	Instant AOS-8.6.0.19
AOS-263160	AP-VPN cluster failover fails to complete when the end-point message is too large. This impacts AP-VPN clusters using the per-AP deployment type. This issue is reported in Instant AOS-8.10.0.7 or later versions.	Instant AOS-8.10.0.7

# Chapter 7

## Upgrading an Instant AP

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



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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.

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Topics in this chapter include:

- [Upgrading an Instant AP and Image Server on page 18](#)
- [Upgrading an Instant AP Using the Automatic Image Check on page 20](#)
- [Upgrading to a New Version Manually Using the WebUI on page 20](#)
- [Upgrading an Instant AP Image Using CLI on page 22](#)
- [Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.10.0.x on page 22](#)

## 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.



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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.

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### 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 username 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 Instant AOS-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 Instant AOS-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.



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

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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.
2. Refer to the *Field Bulletin AP1804-1* at [asp.arubanetworks.com](http://asp.arubanetworks.com).
3. Verify the affected serial numbers of the Instant AP units.