

# Aruba Instant 8.10.0.14 Release Notes



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Contents	
Revision History	4
Release Overview	5
Related Documents	
Supported Browsers	
Terminology Change Contacting Support	
What's New	
Supported Platforms Supported Platforms in Aruba Instant 8.x	
Regulatory Updates	
Resolved Issues	
Known Issues Limitations Known Issues	
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 Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.10.0.x	

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:

- 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
- 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><li>Windows 10 or later</li><li>macOS</li></ul>
Firefox 107.0.1 or later	<ul><li>Windows 10 or later</li><li>macOS</li></ul>
Apple Safari 15.4 (17613.1.17.1.13) or later	macOS
Google Chrome 108.0.5359.71 or later	<ul><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	arubanetworks.com
Support Site	networkingsupport.hpe.com
Airheads Social Forums and Knowledge Base	<u>community.arubanetworks.com</u>
North American Telephone	1-800-943-4526 (Toll Free) 1-408-754-1200
International Telephone	arubanetworks.com/support-services/contact-support
Software Licensing Site	Ims.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

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

## Supported Platforms in Aruba Instant 8.x

This section displays the supported platforms in Aruba Instant 8.x. The **minimum version supported** column displays the minimum Aruba Instant 8.x version that can be run on a platform. The **latest version supported** column displays the newest Aruba Instant 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 Points		ArubaOS 8.x 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-655	8.10.0.x	8.12.0.x
	Series	AP-654	8.11.2.x	8.12.0.x
	630 Series	AP-635	8.9.0.x	8.12.0.x
	Series	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 Point Platforms**

Access Points		ArubaOS 8.x 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
	Series	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		ArubaOS 8.x Versions Supported		
AP Family	AP Series	AP Model	Minimum	Latest
Зхх	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
	Series	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
	Jenes	AP-203H, AP-203R, AP-203RP	8.2.0.x	8.6.0.x

## Chapter 4 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 <u>networkingsupport.hpe.com</u>. The following DRT file version is part of this release:

DRT-1.0\_90131

The following issues are resolved in this release.

 Table 3: Resolved Issues in Instant 8.10.0.14

Bug ID	Description	Reported Version
AOS-250574 AOS-252921	A few AP-655 access points crashed and rebooted with an alert as <b>Critical</b> . The log file listed the reason for the reboot as <b>Reboot after internal watchdog dump saved</b> . The fix ensures the AP works as expected. This issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.7
AOS-239368	Instant APs in a cluster did not retain the configured CPPM username and password. This issue occurred when the APs were rebooted while the password exceeded 23 characters. The fix ensures that the APs retain the configured CPPM username and password. This issue was observed in APs running Aruba Instant 8.9.0.2 or later versions.	Aruba Instant 8.9.0.2
AOS-249000	In the <b>Applications &gt; Visibility &gt; Applications</b> page of Central, the data consumption displayed was inconsistent among groups within the same cluster. The fix ensures the data consumption displayed is accurate. This issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.12.0.0
AOS-249706	The UNIX forward sendto: err=11 Resource temporarily unavailable Port: 15200 error message was displayed when the show log papi-handler command was run. The fix ensures the command works as expected. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-252434 AOS-252435	Some APs experienced unexpected UCM crashes several times a day due to duplicate MAC addresses in the hash table. The fix checks for existing IP entries in the MAC hash table before adding an entry to prevent duplicates. This issue was observed in APs running Aruba Instant 8.10.0.2 or later versions.	Aruba Instant 8.10.0.2
AOS-252583	Instant APs connected to the ETH1 interface on the uplink go offline when downgrading from Aruba Instant 10.x to Aruba Instant 8.x. The fix ensures the downgrade works as expected. This issue is observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-253763	TLS 1.3 Hybridized Kyber support, which is now enabled by default in Chromium browsers, caused WebCC web traffic classification issues in devices running Aruba Instant 8.10.0.0 or later versions. This issue was related to larger TLS Client Hello packets that often require fragmentation, leading to missed traffic classification. The fix leverages the DPI (Deep Packet Inspection) engine to extract the SNI (Server Name Identifier), which contains the domain being visited by the client, ensuring that WebCC works as expected. DPI must be enabled for this enhancement to take effect.	Aruba Instant 8.12.0.0

#### Table 3: Resolved Issues in Instant 8.10.0.14

Bug ID	Description	Reported Version
AOS-253828	Instant APs were unable to download the AP configuration from the TFTP server even though the configuration was uploaded to the server. This issue occurred when the user attempted to download the AP configuration using the <b>apply delta-config</b> command with TFTP URL. The fix ensures the download process works in this scenario. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-254129	The WebUI of some virtual controllers froze, causing the CLI to become inaccessible. The fix ensures the WebUI works as expected. This issue was observed in AP clusters running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.9
AOS-256888	Some AP-203H access points randomly rebooted. This issue occurred after a memory leak caused by an unlicensed AP in Central. The reboot information showed the error message <b>Reboot caused by kernel</b> <b>panic: MemLeak: mem low for 60 seconds, under 0MB 4543 times,</b> <b>MB free 7 (3%), total 248</b> . The fix ensures the APs perform as expected. This issue was observed in APs running Aruba Instant 8.10.0.12 or later versions.	Aruba Instant 8.10.0.12
AOS-256790	The <b>stm</b> process crashes in some conditions if the client connects with a WPA3 FT 4-way handshake. This issue was observed in AP-635 access point running Aruba Instant 8.10.0.0.	Aruba Instant 8.10.0.0

This chapter describes the known issues observed in this release.

## Limitations

This section describes the limitations in Aruba Instant 8.10.0.14.

#### 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 8.10.0.11. TAA SKUs running Aruba Instant 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 Aruba Instant 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 8.10.0.14

Bug ID	Description	Reported Version
AOS-195769	<ul> <li>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:</li> <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> <li>This issue is observed in Instant APs running Aruba Instant 8.6.0.0 or later versions.</li> </ul>	Aruba Instant 8.6.0.0
AOS-204171	<ul> <li>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:</li> <li>The AP attempts to reconnect to the primary controller.</li> <li>Fast failover is enabled on the AP.</li> </ul>	Aruba Instant 8.3.0.0

Bug ID	Description	Reported Version
	This issue is observed in 203R Series access points running Aruba Instant 8.3.0.0 or later versions.	
AOS-220890	MPSK-Local SSID is broadcasted as Open SSID in Instant APs when the software version is downgraded to 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-228967	The SSID is unable to configure the <b>Station Ageout Time</b> to a value over 3600 seconds. This issue is observed in APs running Aruba Instant 8.7.1.4 or later versions.	Aruba Instant 8.7.1.4
AOS-231129	Instant APs do not send 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-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
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 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 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 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 <b>Acct-Multi-Session-Id</b> 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	APs in a cluster reboot automatically. The log file 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 Aruba Instant 8.9.0.3 or later versions.	Aruba Instant 8.9.0.3
AOS-235164 AOS-233149	APs generate multiple <b>xhci-hcd xhci-hcd.0.auto: Ring expansion</b> <b>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 Aruba Instant 8.7.1.9 or later versions.	Aruba Instant 8.7.1.9
AOS-235428	APs in a cluster intermittently disconnect from the VPN and Central. The output of the <b>show ap debug cloud-server</b> command returns the error message: <b>Master failover</b> , despite the Mobility 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

#### Table 4: Known Issues in Instant 8.10.0.14

Bug ID	Description	Reported Version
AOS-238137	The <b>traceroute</b> command returns the error message <b>Can't find tsgw</b> <b>src ip</b> . This issue occurs when the 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-239411	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 <b>factory reset</b> command in AP boot mode. This issue is observed in APs running Aruba Instant 8.9.0.0 or later versions.	Aruba Instant 8.9.0.0
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 Aruba Instant 8.6.0.18 or later versions.	Aruba Instant 8.6.0.18
AOS-240530	APs return the following error message <b>auth_cppm_instant.c, auth_</b> <b>cppm_transform:1859: Dldb Role pf_iap_dur-3008-26: Buffer too</b> <b>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 Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.4
AOS-241316	The output of the <b>show ap debug lldp</b> command displays incorrect information when run. 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 <b>AI Insights</b> dashboard of the Central UI. This issue was observed in Central- managed APs running Aruba Instant 8.7.1.0 or later versions.	Aruba Instant 8.7.1.0
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 Aruba Instant 8.10.0.5 or later versions.	Aruba Instant 8.10.0.5
AOS-249946 AOS-247154	Some APs crash and reboot unexpectedly due to a UCM segmentation issue, which affected different VoIP applications. This issue is observed in access points running Aruba Instant 8.10.0.2 or later versions.	Aruba Instant 8.10.0.2
AOS-244911 AOS-257416	In some AP-515 access points, client devices are unable to connect to the network from a auth-text captive portal with active proxy port. This issue occurs since the Captive Portal Configuration is not correctly reloaded after the AP reboots. The output of the <b>show captive-portal</b> command shows <b>External proxy ports active: No</b> after the reboot. This issue is observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-254606	In some Instant APs, client devices do not get a valid IP address from external DHCP server, when the client is connected to an SSID with time-range configured as an ACL. This is observed when the DHCP lease time expires on client side or the AP is rebooted. This issue is observed in AP-535 access points running Aruba Instant 8.10.0.11 or later versions	Aruba Instant 8.10.0.11

## Chapter 7 Upgrading an Instant AP

# 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 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.



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:

#### 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.