



Aruba Instant 8.11.2.1

Release Notes



Copyright Information

© Copyright 2023 Hewlett Packard Enterprise Development LP.

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

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

Contents	3
Revision History	4
Release Overview	5
Important Upgrade Information for Clusters that Include 320 Series, 330 Series, 340 Series, and 387 Series Access Points	5
Related Documents	5
Supported Browsers	6
Terminology Change	7
Contacting Support	7
What's New	8
New Features and Enhancements	8
Behavioral Changes	8
Supported Hardware Platforms	9
Deprecated Instant APs	9
Regulatory Updates	11
Resolved Issues	12
Known Issues and Limitations	14
Limitations	14
Known Issues	15
Upgrading an Instant AP	18
Upgrading an Instant AP and Image Server	18
Upgrading an Instant AP Using the Automatic Image Check	20
Upgrading to a New Version Manually Using the WebUI	20
Upgrading an Instant AP Image Using CLI	22
Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.11.0.x	22

The following table provides the revision history of this document.

Table 1: Revision History

Revision	Change Description
Revision 01	Initial release.

This Aruba Instant release notes includes the following topics:

- [What's New on page 8](#)
- [Supported Hardware Platforms on page 1](#)
- [Regulatory Updates on page 11](#)
- [Resolved Issues on page 12](#)
- [Known Issues and Limitations on page 14](#)
- [Upgrading an Instant AP on page 18](#)

For the list of terms, refer to the [Glossary](#).

Important Upgrade Information for Clusters that Include 320 Series, 330 Series, 340 Series, and 387 Series Access Points

Starting from Aruba Instant 8.11.0.0, 320 Series, 330 Series, 340 Series, and 387 Series access points are no longer supported. However, the 320 Series, 340 Series, and 387 Series access points use the Hercules and Draco images, which are also used by AP platforms that have not been deprecated in this release. As such, these images are available for upgrading to Aruba Instant 8.11.0.0. Attempting to install Aruba Instant 8.11.x.x firmware on the aforementioned APs may cause these APs to disconnect themselves from the current cluster and form a new cluster running the software version available in their partition. Therefore, in addition to 330 Series access points, please ensure that any 320 Series, 340 Series, and 387 Series access points are removed from the cluster before upgrading it to Aruba Instant 8.11.x.x.

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	https://asp.arubanetworks.com/
Airheads Social Forums and Knowledge Base	community.arubanetworks.com
North American Telephone	1-800-943-4526 (Toll Free) 1-408-754-1200
International Telephone	arubanetworks.com/support-services/contact-support/
Software Licensing Site	lms.arubanetworks.com
End-of-life Information	arubanetworks.com/support-services/end-of-life/
Security Incident Response Team	Site: arubanetworks.com/support-services/security-bulletins/ Email: aruba-sirt@hpe.com

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

New Features and Enhancements

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

Behavioral Changes

This release does not introduce any changes in Aruba Instant behaviors, resources, or support that would require you to modify the existing system configurations after updating to 8.11.2.1.



Chapter 3

Supported Hardware Platforms

The following table displays the Instant AP platforms supported in Aruba Instant 8.11.2.x release.

Table 3: Supported Instant AP Platforms

Instant AP Platform	Minimum Required Instant Software Version
630 Series — AP-634 650 Series — AP-654	Instant 8.11.2.0 or later
500 Series — AP-503	Instant 8.11.1.0 or later
610 Series — AP-615	Instant 8.11.0.0 or later
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 510 Series — AP-514 and AP-515	Instant 8.4.0.0 or later
303 Series — AP-303 318 Series — AP-318 370 Series — AP-374, AP-375, and AP-377 370EX Series — AP-375EX and AP-375EX	Instant 8.3.0.0 or later
303H Series — AP-303H 360 Series — AP-365 and AP-367	Instant 6.5.2.0 or later
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	Instant 6.5.0.0-4.3.0.0 or later

Deprecated Instant APs

The following Instant APs are no longer supported from Aruba Instant 8.11.0 onwards:

- 203H Series — AP-203H
- 203R Series — AP-203R and AP-203RP
- 207 Series — IAP-207
- 320 Series — IAP-324 and IAP-325
- 330 Series — IAP-334 and IAP-335
- 340 Series — AP-344 and AP-345
- 387 Series — AP-387



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 asp.arubanetworks.com.

The following DRT file version is part of this release:

- DRT-1.0_88505

Chapter 5

Resolved Issues

The following issues are resolved in this release.

Table 4: Resolved Issues in Instant 8.11.2.1

Bug ID	Description	Reported Version
AOS-235218 AOS-235584	Instant APs in a cluster reported high CPU and memory utilization. This issue occurred due to a memory leak in the dpimgr process. The fix ensures that the APs function as expected. This issue was observed in Central-managed APs running Aruba Instant 8.6.0.18 or later versions.	Aruba Instant 8.6.0.18
AOS-242249 AOS-244271	Multiple client devices connected to IAP-315 access points were not obtaining an IP address. After rebooting the Instant APs, the client's devices obtained the IP address. This was caused by a memory leak when DMO was enabled and air-time-fairness-mode config preferred-access. The fix ensures the Instant APs perform as expected. This issue was observed in IAP-315 access points running Aruba Instant 8.9.0.2 or later versions.	Aruba Instant 8.10.0.5
AOS-245621	Instant APs did not switch channels and avoid interference, causing performance issues and network drops. The fix ensures that the APs switch channels when interference is detected in channels other than the main channel. This issue was observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-245804	Instant APs incorrectly resolved the device connectivity URL to the firewall IP address. This issue occurred because the AP cached the DNS query result into the hosts file. The fix removes the cache entry before the AP connected to Aruba Central. This issue was observed in Central-managed APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.6
AOS-245899	The AI Insights dashboard incorrectly showed high CPU usage for APs on the Central UI. The fix ensures that AI Insights does not show incorrect CPU data. This issue was observed in Central-managed AP-615 access points running Aruba Instant 8.11.0.0 or later versions.	Aruba Instant 8.11.0.0
AOS-246255	Some Instant APs were unable to join a Virtual Controller cluster. The Central UI did not display such APs within their group. This issue was related to the Virtual Controller failing to upgrade its DRT. The fix ensures that the APs can join Virtual Controller clusters and groups in Central. This issue was seen in APs running Aruba Instant 8.10.0.2 or later versions.	Aruba Instant 8.10.0.2
AOS-246337	For some Instant APs in a cluster, 5 GHz radio band was intermittently down on the Central UI. The fix ensures that the 5 GHz radio functions as expected. This issue was observed in Central-managed APs running Aruba Instant 8.10.0.6 or later versions.	Aruba Instant 8.10.0.6

Table 4: Resolved Issues in Instant 8.11.2.1

Bug ID	Description	Reported Version
AOS-246408	The aiRadioChannel parameter of the MIB node did not include details about the 40 MHz, 80 MHz, and 160 MHz channels. The fix ensures that the information appears as expected. This issue was observed in APs running Aruba Instant 8.6.0.2 or later versions.	Aruba Instant 8.6.0.2
AOS-246548	Multiple wireless clients experienced cloud authentication failure after upgrading the software version. The logs listed the reason for the error as Internal Error while getting request ID in radsec server . The fix ensures that the clients do not experience cloud authentication failure after upgrading the software version. This issue was observed in Central-managed APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.11.1.0
AOS-246617	After upgrading to Aruba Instant 8.10.0.7, some Instant APs crashed and rebooted unexpectedly, disconnecting every 2-3 hours due to IPv6 packet synchronization problems. The crash logs listed the reason for the error as Panic:Ktrace core monitor: cpu3 hung for 45 seconds, hung cpu count: 1 Warm-reset . The fix ensures that the APs work as expected. This issue was observed in AP-515 access points running Aruba Instant 6.5.4.0 or later versions.	Aruba Instant 8.10.0.7
AOS-246735 AOS-247461 AOS-246633	Instant APs crashed and rebooted unexpectedly. The log files listed the reason as PC: memcmp+0xd0/0x1c0 (from sos_uquic_analyse_frame+0x30) . The fix ensures Instant APs work as expected. This issue was observed in APs running Aruba Instant 8.11.1.1 or later versions.	Aruba Instant 8.11.1.1
AOS-247151	The output of the show backup-config command did not include configuration details for AP-635 access points. The fix ensures that the output of the show backup-config command includes the configuration details. This issue was observed in AP-635 access points running Aruba Instant 6.5.4.0 or later versions.	Aruba Instant 8.11.1.0
AOS-247394	When running show auth-survivability cache-info command , the username displayed random characters for strings longer than 16 characters. The fix ensures the usernames are displayed correctly. This issue was observed in some Instant Access Points running Aruba Instant 6.5.4.0 or later versions.	Aruba Instant 6.5.4.0
AOS-247778	Instant Access Points failed in the re-enrollment process with an EST-configured CCPM server running version 6.11. Re-enrolling failed even when a username and password were configured in the EST profile. The fix ensures that re-enrollment with EST CPPM servers works as expected. The issue was seen on access points running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.0

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

Limitations

This section describes the limitations in Aruba Instant 8.11.2.1.

AP-615, AP-635, and AP-655 Access Points

The AP-615, AP-635, and AP-655 access points have the following limitations:

- All radios for these APs currently do not support spectrum analysis.
- 802.11mc responder and initiator functionality, Hotspot configuration, and Air Slice configuration are not supported on the 6 GHz radio.
- Users can configure only up to 4 VAPs on the 6 GHz radio, instead of 16 VAPs.

AP-654 and AP-634 Access Points

For the current release of Aruba Instant, AP-654 and AP-634 access points do not support 6 GHz band operation. Support for 6 GHz will be enabled in a future software release, and will depend on the local regulatory status reflected in the DRT file.

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 8.11.1.0:

- 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.

Inbound Firewall

The **apiip-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 8.11.2.1

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">When the broadcast packets from VLAN 1 and all of the clients on the SSID are on VLAN 2, the packets are sent to all VAPs belonging to the same SSID.When the SSID has two VAPs that belong to the same VLAN, but only one VAP has clients on that VLAN, the traffic is forwarded to both VAPs.When all of the VAPs of a given SSID have clients on different VLANs, the packets are broadcasted to all VLANs. <p>This issue is observed in Instant APs running Aruba Instant 8.6.0.0 or later versions.</p>	Aruba Instant 8.6.0.0
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-225670 AOS-247530	Instant APs display incorrect Role information in the output of the sh clients command. This issue occurs when the MPSK local key role is changed through the Central UI. This issue is observed in Central-managed APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.11.1.1
AOS-231129	Instant APs do not send the cold and warm SNMP traps when expected. This issue is observed in APs running Aruba Instant 8.0.0.0 or later versions.	Aruba Instant 8.6.0.8
AOS-231444 AOS-244171	An Instant AP is unable to download user roles. This issue is observed in Central-managed APs running Aruba Instant 8.10.0.6 or later versions.	Aruba Instant 8.10.0.6
AOS-237965 AOS-237699	View-only users are unable to perform debug operations. This issue occurs when the user is able to 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

Table 5: Known Issues in Instant 8.11.2.1

Bug ID	Description	Reported Version
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-238369	The Devices > Access Points > Overview > RF tab of Central UI displays 100% error for multiple Instant AP due to incorrect statistics. This issue is observed in Central-managed APs running Aruba Instant 8.6.0.17 or later versions.	Aruba Instant 8.6.0.17
AOS-238799 AOS-239104	Clients experience connectivity issues when attempting to connect to an SSID using native VLAN. This issue occurs when LACP is configured with an uplink switch on the Instant AP. This issue is observed in APs running Aruba Instant 8.9.0.2 or later versions.	Aruba Instant 8.9.0.2
AOS-239368	Instant APs in a cluster do not retain the configured CPPM username and password. This issue occurs when the APs are rebooted while the password exceeds 23 characters. This issue is observed in APs running Aruba Instant 8.9.0.2 or later versions.	Aruba Instant 8.9.0.2
AOS-239411	Instant APs do not accept the serial number of the device as the default password after a factory reset. This issue occurs when the AP is reset using the factory reset command in AP boot mode. This issue is observed in APs running Aruba Instant 8.9.0.0 or later versions.	Aruba Instant 8.10.0.0
AOS-239419 AOS-238100	The eth0 link of an Instant AP appears offline in the AirWave UI. This issue is observed in AirWave-managed APs running Aruba Instant 8.6.0.18 or later versions.	Aruba Instant 8.6.0.18
AOS-240096	<p>Clients are unable to connect to the SSID when:</p> <ul style="list-style-type: none"> ■ Two SSID profiles have same the ESSID. ■ Both time range profile and SSID Zone are configured on the Instant AP. <p>This issue is observed in Central-managed APs running Aruba Instant 8.7.0.0 or later versions.</p>	Aruba Instant 8.7.1.9
AOS-240530	Instant APs return the following error message auth_cppm_instant.c, auth_cppm_transform:1859: DlDb Role pf_iap_dur-3008-26: Buffer too large . This issue occurs when the buffer size of the downloadable user role sent from the ClearPass Policy Manager exceeds 16 KB. This issue is observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.10.0.4
AOS-240727	The DHCP server fails to start with the correct interface. The server also does not issue IPv4 or IPv6 addresses in the guest or DHCP scope defined VLANs. This issue is observed in APs running Aruba Instant 8.10.0.0 or later versions.	Aruba Instant 8.11.0.1
AOS-240901	When the hostname of an Instant AP is changed, \n is appended to the name in the discover packet. The DHCP server is unable to create or update the record on the DNS server. This issue is observed in APs running Aruba Instant 8.10.0.4 or later versions.	Aruba Instant 8.10.0.5

Table 5: Known Issues in Instant 8.11.2.1

Bug ID	Description	Reported Version
AOS-241107	Incorrect IPv6 addresses are generated when the software version of the Instant AP is upgraded to Aruba Instant 8.9.0.0 or later. This issue is observed in APs running Aruba Instant 8.9.0.0 or later versions.	Aruba Instant 8.11.0.0
AOS-242197	The output of the show ap arm rf-summar and show ap monitor ap-list commands is blank. The output of the show ap debug radio-stats 0 command displays the following error message: Command Failed: radio 0 down . This issue occurs when the software version of the Instant AP is upgraded to Aruba Instant 8.10.0.5 or later. This issue is observed in AP-387 access points running Aruba Instant 8.10.0.5 or later versions.	Aruba Instant 8.10.0.5
AOS-242779	In some APs running Aruba Instant 8.10.0.6 or later versions, a Check sum mismatch error is displayed. The issue occurs when the MPSK key name includes a space.	Aruba Instant 8.10.0.6
AOS-243184	An Instant AP displays incorrect country codes in the air captured packet although the correct country code is configured on the AP. This issue is observed in APs running Aruba Instant 8.10.0.5 or later versions.	Aruba Instant 8.10.0.5

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 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 8.11.0.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 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 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-615	ArubaInstant_Leo_8.11.0.x_xxxx
AP-635 and AP-655	ArubaInstant_Norma_8.11.0.x_xxxx
AP-514, AP-515, AP-518, AP-574, AP-575, AP-575EX, AP-577, and AP-577EX	ArubaInstant_Draco_8.11.0.x_xxxx
AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567.	ArubaInstant_Gemini_8.11.0.x_xxxx
IAP-314, IAP-315, AP-374, AP-375, AP-377, and AP-318.	ArubaInstant_Hercules_8.11.0.x_xxxx
AP-534, AP-535, AP-555, AP-584, AP-585, AP-585EX, AP-587, and AP-587EX	ArubaInstant_Scorpio_8.11.0.x_xxxx
AP-303, AP-303H, 303P Series, IAP-304, IAP-305, AP-365, and AP-367	ArubaInstant_Ursa_8.11.0.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_8.11.0.x_xxxx`
 - TFTP - `tftp://<IP-address>/<image-file>`. For example, `tftp://<IP-address>/ArubaInstant_Hercules_8.11.0.x_xxxx`
 - FTP - `ftp://<IP-address>/<image-file>`. For example, `ftp://<IP-address>/ArubaInstant_Hercules_8.11.0.x_xxxx`
 - FTP - `ftp://<user name:password>@<IP-address>/<image-file>`. For example, `ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.11.0.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_8.11.0.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_8.11.0.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 8.11.0.x

Before you upgrade an Instant AP running Instant 6.5.4.0 or earlier versions to Instant 8.11.0.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.