

Aruba Instant 8.6.0.9

Release Notes

The Aruba logo consists of the word "aruba" in a lowercase, sans-serif font. The letters are orange, and the 'a' and 'u' are connected. The 'b' and 'a' are also connected.

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The following table provides the revision history of this document.

Table 1: *Revision History*

Revision	Change Description
Revision 02	AOS-211828 and AOS-222011 was added to the Resolved Issues list.
Revision 01	Initial release.

This Aruba Instant release notes includes the following topics:

- [New Features and Enhancements on page 7](#)
- [Supported Hardware Platforms on page 8](#)
- [Regulatory Updates on page 9](#)
- [Resolved Issues on page 10](#)
- [Known Issues on page 12](#)
- [Upgrading an Instant AP on page 16](#)

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:

- Microsoft Internet Explorer 11 on Windows 7 and Windows 8
- Microsoft Edge (Microsoft Edge 38.14393.0.0 and Microsoft EdgeHTML 14.14393) on Windows 10
- Mozilla Firefox 48 or later on Windows 7, Windows 8, Windows 10, and macOS
- Apple Safari 8.0 or later on macOS
- Google Chrome 67 or later on Windows 7, Windows 8, Windows 10, and 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

Chapter 2

New Features and Enhancements

There are no new features or enhancements in this release.

The following table displays the Instant AP platforms supported in Aruba Instant 8.6.x release.

Table 3: *Supported Instant AP Platforms*

Instant AP Platform	Minimum Required Instant Software Version
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 AP-387 510 Series — AP-514 and AP-515	Instant 8.4.0.0 or later
303 Series — AP-303 318 Series — AP-318 340 Series — AP-344 and AP-345 370 Series — AP-374, AP-375, and AP-377 370EX Series — AP-375EX and AP-377EX	Instant 8.3.0.0 or later
203H Series — AP-203H	Instant 6.5.3.0 or later
203R Series — AP-203R and AP-203RP 303H Series — AP-303H and AP-303HR 360 Series — AP-365 and AP-367	Instant 6.5.2.0 or later
207 Series — IAP-207 300 Series — IAP-304 and IAP-305	Instant 6.5.1.0-4.3.1.0 or later
310 Series — IAP-314 and IAP-315 330 Series — IAP-334 and IAP-335	Instant 6.5.0.0-4.3.0.0 or later
320 Series — IAP-324 and IAP-325	Instant 6.4.4.3-4.2.2.0 or later
IAP-228 270 Series — IAP-277	Instant 6.4.3.1-4.2.0.0 or later
210 Series — IAP-214 and IAP-215	Instant 6.4.2.0-4.1.1.0 or later
270 Series — IAP-274 and IAP-275	Instant 6.4.0.2-4.1.0.0 or later
220 Series — IAP-224 and IAP-225	Instant 6.3.1.1-4.0.0.0 or later
RAP 155 Series — RAP-155 and RAP-155P	Instant 6.2.1.0-3.3.0.0 or later

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 controller Command Line Interface (CLI) and execute the **show ap allowed-channels country-code <country-code> ap-type <ap-model>** 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_79703

This chapter describes the issues resolved in this release.

Table 4: Resolved Issues in Instant 8.6.0.9

Bug ID	Description	Reported Version
AOS-153932 AOS-211583	A 303H Series access point crashed and rebooted unexpectedly. The log file listed the reason for reboot as: Reboot caused by kernel panic: Fatal exception . This issue occurred when the AP used a 3G/4G modem for uplink connection. The fix ensures that the AP works as expected. This issue was observed in 303H Series access points running Aruba Instant 8.5.0.10 or later versions.	Aruba Instant 8.5.0.10
AOS-198264 AOS-215277	A mesh point AP displayed the radio mode as monitor in the show aps table when access mode was configured. The fix ensures that the mesh point AP displays the correct radio mode. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.6
AOS-211525 AOS-212652	An Instant AP inherited the gateway IP of the layer 2 switch during a switch outage and caused an IP address conflict when the switch was back online. The fix ensures that the AP does not inherit the gateway IP of the layer 2 switch in the event of a switch outage. This issue was observed in APs running Aruba Instant 8.5.0.5 or later versions.	Aruba Instant 8.5.0.5
AOS-211828 AOS-222011	Clients were unable to associate to Instant APs and the reason reported in Aruba Central was: AP is resource constrained . This issue occurred when Client Match steered the client from one radio band to another. During band steering, all radios except the target radio deny the client's association request. This was reported as a AP is resource constrained event in Aruba Central. The fix ensures that the reason to deny client's association request because of Client Match is logged as a Client Match event. This issue was observed in Aruba Central-managed APs running Aruba Instant 8.5.0.0 or later versions.	Aruba Instant 8.6.0.7
AOS-213257	An Instant AP failed to remove the domain name suffix when logging username entries in the AirGroup users table. The fix ensures that the AP logs the username entry in the AirGroup table as expected. This issue occurred when Enforce ClearPass registration was enabled in the Configuration > Services > AirGroup section of the webUI. This issue was observed in APs running Aruba Instant 8.3.0.0 or later versions.	Aruba Instant 8.3.0.0
AOS-213385	An AP-515 access point crashed and rebooted unexpectedly. The log file lists the reason for reboot as: BadAddr:444f59422d66 PC:memcmp+0x198/0x1e0 Warm-reset . The fix ensures that the AP works as expected. This issue was observed in AirWave-managed AP-515 access points running Aruba Instant 8.6.0.5 or later versions.	Aruba Instant 8.6.0.5

Table 4: Resolved Issues in Instant 8.6.0.9

Bug ID	Description	Reported Version
AOS-213941	An Instant AP stopped broadcasting and rebooted unexpectedly. The log file lists the reason for reboot as: Reboot due to trigger the cooldown event . The fix ensures that the AP is able to pass traffic even at sub-zero temperatures. This issue is observed in APs running Aruba Instant 8.7.1.0 or later versions.	Aruba Instant 8.7.1.0
AOS-214199	An Instant AP failed to establish an SSL connection with OpenDNS servers. This issue occurred due to incompatibility with the content-header message sent by the OpenDNS server. The fix ensures that the SSL connection is successfully established with the OpenDNS server. This issue was observed in APs running Aruba Instant 8.5.0.11 or later versions.	Aruba Instant 8.5.0.11
AOS-215475	The uplink preemption feature did not work on AP-203R. This issue occurred as the Eth0 port status was not updated. The fix ensures that the uplink preemption feature works as expected. This issue was observed in AP-203R access points running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-215577	The 5 GHz secondary radio status was incorrectly shown as disabled on Aruba Central. This issue occurred when tri-radio was configured on a member AP in a cluster managed by Central. The fix ensures that all radio statuses are displayed correctly in Aruba Central. This issue was observed in AP-555 access points running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.7.1.0
AOS-216194	Modifications to the ESSID name of an AP through Aruba Central were not reflecting in the Instant webUI under Networks . The fix ensures that the changes made on Aruba Central to the ESSID name are displayed correctly in the Instant webUI. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-216834	Clients were unable to connect to some APs due to their high memory usage. This issue occurred when DHCP or DNS events were subscribed and changes to the Clarity configuration increased the process run time. The fix ensures that the clients are able to connect to the APs without issues. This issue was observed in APs running Aruba Instant 8.6.0.7 or later versions.	Aruba Instant 8.6.0.7

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

Limitations

Important Update on 210 Series, 220 Series, AP-228, and 270 Series Access Points

The 210 Series, 220 Series, AP-228, and 270 Series access points will be deprecated for future releases and include the following limitations in Instant 8.6.0.x, which is the last supported software version for these access points:

- No support for BLE interface (with USB)
- The DPI engine used for AppRF will have limitations in terms of enhancements and fixes in the future.
- These APs use WolfSSL libraries in Instant 8.6.0.0 and not OpenSSL.
- No support for WPA3 security.

All of these platforms have already been marked as end-of-sale. Please review the end-of-sale and end-of-support dates for these platforms [here](#).

Known Issues

Following are the known issues observed in this release.

Table 5: *Known Issues in Instant 8.6.0.9*

Bug ID	Description	Reported Version
AOS-190757	An Instant AP fails to classify YouTube UDP traffic as webcategory Streaming-media and allows users access to YouTube when webcategory -Streaming Media is denied by an access rule. This issue is observed in APs running Aruba Instant 8.5.0.1 or later versions.	Aruba Instant 8.5.0.1
AOS-192469	An AP does not tag voice and video traffic with the WMM values defined in the SSID profile. Instead, the AP uses the default DSCP tags of 48 and 40 for voice and video traffic respectively. This issue is observed in APs running Aruba Instant 8.3.0.0 or later versions.	Aruba Instant 8.3.0.0
AOS-192604	Traffic between clients within the same subnet VLAN is subject to source NAT. This issue occurs because the master AP performs source NAT on local traffic. This issue is observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0

Table 5: Known Issues in Instant 8.6.0.9

Bug ID	Description	Reported Version
AOS-197400	An Instant AP fails to switch uplink interfaces during an uplink failover event. This issue occurs when the Instant AP is configured with two Ethernet uplinks. This issue is observed in APs running Aruba Instant 8.6.0.1 or later versions.	Aruba Instant 8.6.0.1
AOS-201901	An AP changes all access rules to deny when the configuration is restored through the CLI from a Windows TFTP server. This issue occurs when the Windows configuration retrieved from the TFTP server includes newline (\n) and carriage return (\r) characters. This issue is observed in APs running Aruba Instant 8.5.0.0 or later versions.	Aruba Instant 8.5.0.0
AOS-202248 AOS-210095	The Instant AP logs are flooded with awc: wsc: callback_central messages. These logs are displayed when the sapd module of the AP processes messages from Central. This issue is observed in Central-managed APs running Aruba Instant 8.5.0.10 or later versions.	Aruba Instant 8.5.0.10
AOS-203766	An AP fails to commit AirGroup settings configured using the Instant webUI. This issue occurs under the following conditions: <ul style="list-style-type: none"> ■ When the number of AirGroup services exceeds 16. ■ When the number of service IDs exceeds 32. This issue is observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-204171	Clients intermittently experience high latency when the AP is connected to the backup controller after a failover event. This issue occurs under the following conditions: <ul style="list-style-type: none"> ■ The AP attempts to re-connect to the primary controller. ■ Fast failover is enabled on the AP. This issue is observed in 203R Series access points running Aruba Instant 8.3.0.0 or later versions.	Aruba Instant 8.3.0.0
AOS-206599 AOS-218467	Some AP-505 and AP-515 access points report high memory utilization. This issue is observed in AP-505 and AP-515 access points running Aruba Instant 8.6.0.7 or later versions.	Aruba Instant 8.6.0.7
AOS-206840 AOS-209687	The checksum ID and radio information of an AP is not updated on the Virtual Controller. This issue occurs in APs that are configured with a static channel. This issue is observed in 300 Series, AP-315, 320 Series, 330 Series, 360 Series, and 370 Series access points running Aruba Instant 8.4.0.6 or later versions.	Aruba Instant 8.4.0.6
AOS-208474	An Instant AP frequently disconnects itself from the cluster and then rejoins it. The log file lists the reason for the event as: stm PAPI_Send failed, send_papi_message_with_args, 1215: Resource temporarily unavailable . This issue is observed in APs running Aruba Instant 8.6.0.5 or later versions.	Aruba Instant 8.6.0.5
AOS-209051	Clients are unable to send traffic when the Instant clusters are configured with L3 mobility. This issue occurs under the following scenarios: <ul style="list-style-type: none"> ■ The client is connected to a cluster other than the home cluster. ■ The network experiences high latency due to an overload caused by a broadcast storm. 	Aruba Instant 8.6.0.4

Table 5: Known Issues in Instant 8.6.0.9

Bug ID	Description	Reported Version
	This issue is observed in APs running Aruba Instant 8.6.0.4 or later versions.	
AOS-210440	Administrator authentication fails when accessing the Instant AP through the WebUI. This issue occurs when the administrator password includes special characters such as " or '. This issue is observed in APs running Aruba Instant 8.6.0.5 or later versions. Workaround: Create a different administrator password without special characters.	Aruba Instant 8.6.0.5
AOS-211630	An Instant AP fails to apply session ACL rules for certain wireless networks. This issue occurs in wireless networks in which client IP assignment is set to Network Assigned . This issue is observed in APs running Aruba Instant 8.6.0.6 or later versions. Workaround: Copy the access list configuration of the session ACL to an access rule.	Aruba Instant 8.6.0.6
AOS-211665	An Instant AP is unable to connect to Central using a proxy server. The output of show ap debug cloud-server command lists the reason as HTTPS proxy error . This issue occurs when FreeProxy is used as the proxy server. This issue is observed in APs running Aruba Instant 8.5.0.7 or later versions.	Aruba Instant 8.5.0.7
AOS-214199	An Instant AP fails to establish an SSL connection with OpenDNS servers. This issue occurs due to an incompatibility with the content-header message sent by the OpenDNS server. This issue is observed in APs running Aruba Instant 8.5.0.11 or later versions.	Aruba Instant 8.5.0.11
AOS-214836	Clients authenticating using a RADIUS server experience delay in the authentication process and sometimes require multiple retries before a successful authentication. This issue occurs when a proxy server is between the AP and the CPPM server. This issue is observed in APs running Aruba Instant 8.6.0.5 or later versions.	Aruba Instant 8.6.0.5
AOS-216445	Clients connected to the mesh portal AP are unable to reach devices connected to the mesh point AP and vice versa. This issue occurs when the client roams from a source mesh AP to another mesh AP and back to the source mesh AP. This issue is observed in AP-387 access points running Aruba Instant 8.6.0.6 or later versions.	Aruba Instant 8.6.0.6
AOS-216814	Clients connecting to a guest SSID are redirected again to the captive portal login page on completing the login process. They are authenticated into the network only after completing the login process for the second time. This issue is observed in Aruba Central-managed APs running Aruba Instant 8.6.0.4 or later versions.	Aruba Instant 8.6.0.4
AOS-217630	An Instant AP fails to apply transmit power configuration when the software was upgraded from Aruba Instant 6.5.1.5-4.3.1.9 or later versions to Aruba Instant 8.6.0.0 or later versions. This issue is observed in AirWave-managed APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.4
AOS-217829	The new webUI in Instant APs does not update the status of member APs when they are disconnected from the network. This issue is observed in APs running Aruba Instant 8.6.0.4 or later versions.	Aruba Instant 8.6.0.4

Table 5: *Known Issues in Instant 8.6.0.9*

Bug ID	Description	Reported Version
AOS-218747	The Instant AP database in the controller is not populated with DL3 entries. This issue occurs when an apostrophe (') character is used in the Instant AP branch name. This issue is observed in APs running Aruba Instant 8.6.0.9 or later versions.	Aruba Instant 8.6.0.9

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 16](#)
- [Upgrading an Instant AP Using the Automatic Image Check on page 18](#)
- [Upgrading to a New Version Manually Using the WebUI](#)
- [Upgrading an Instant AP Image Using CLI on page 22](#)
- [Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.6.0.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.

In the Old WebUI

To configure the HTTP proxy settings:

1. Navigate to **System** > **Proxy**. The **Proxy configuration** window is displayed.
2. Enter the HTTP proxy server IP address in the **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, select the **Proxy requires authentication** checkbox.
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 **New** to enter that IP address or domain name of that host in the **Exceptions** section.

In the New WebUI

To configure the HTTP proxy settings:

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**.

In the CLI

To configure the HTTP proxy settings:

```
(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.

In the Old WebUI

To check for a new version on the image server in the cloud:

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.

In the New WebUI

To check for a new version on the image server in the cloud:

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.

In the Old WebUI

To manually check for a new firmware image version and obtain an image file:

1. Navigate to **Maintenance > Firmware**.
2. Under **Manual** section, perform the following steps:
 - 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-344, AP-345, AP-514, AP-515, AP-518, AP-574, AP-575, AP-575EX, AP-577, and AP-577EX	ArubaInstant_Draco_8.6.0.x_xxxx
AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567.	ArubaInstant_Gemini_8.6.0.x_xxxx
IAP-314, IAP-315, IAP-324, IAP-325, AP-374, AP-375, AP-377, AP-318, and AP-387	ArubaInstant_Hercules_8.6.0.x_xxxx
IAP-334 and IAP-335	ArubaInstant_Lupus_8.6.0.x_xxxx
AP-534, AP-535, and AP-555	ArubaInstant_Scorpio_8.6.0.x_xxxx
AP-303, AP-303H, 303P Series, IAP-304, IAP-305, AP-365, and AP-367	ArubaInstant_Ursa_8.6.0.x_xxxx
AP-203H, AP-203R, AP-203RP, and IAP-207	ArubaInstant_Vela_8.6.0.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_8.6.0.x_xxxx
 - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/ArubaInstant_Hercules_8.6.0.x_xxxx
 - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/ArubaInstant_Hercules_8.6.0.x_xxxx
 - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.6.0.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.

3. Clear the **Reboot all APs after upgrade** check box if required. This check box is selected 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.
4. Click **Upgrade Now** to upgrade the Instant AP to the newer version.

In the New WebUI (Instant 8.4.0.0 or later versions)

To manually check for a new firmware image version and obtain an image file:

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-344, AP-345, AP-514, AP-515, AP-518, AP-574, AP-575, AP-575EX, AP-577, and AP-577EX	ArubaInstant_Draco_8.6.0.x_xxxx
AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567.	ArubaInstant_Gemini_8.6.0.x_xxxx
IAP-314, IAP-315, IAP-324, IAP-325, AP-374, AP-375, AP-377, AP-318, and AP-387	ArubaInstant_Hercules_8.6.0.x_xxxx
IAP-334 and IAP-335	ArubaInstant_Lupus_8.6.0.x_xxxx
AP-534, AP-535, and AP-555	ArubaInstant_Scorpio_8.6.0.x_xxxx
AP-303, AP-303H, 303P Series, IAP-304, IAP-305, AP-365, and AP-367	ArubaInstant_Ursa_8.6.0.x_xxxx
AP-203H, AP-203R, AP-203RP, and IAP-207	ArubaInstant_Vela_8.6.0.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_8.6.0.x_xxxx
 - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/ArubaInstant_Hercules_8.6.0.x_xxxx
 - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/ArubaInstant_Hercules_8.6.0.x_xxxx
 - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.6.0.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

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_8.6.0.x_xxxx
```

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/ArubaInstant_Hercules_8.6.0.x_xxxx
```

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 8.6.0.x

Before you upgrade an Instant AP running Instant 6.5.4.0 or earlier versions to Instant 8.6.0.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 support.arubanetworks.com.
3. Verify the affected serial numbers of the Instant AP units.