Aruba Instant 8.6.0.7

Release Notes

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Contents

The following table provides the revision history of this document.

Table 1: *Revision History*

Revision	Change Description
Revision 02	The description of AOS-181197 and AOS-208313 was updated.
Revision 01	Initial release.

Chapter 1
Release Overview

This Aruba Instant release notes includes the following topics:

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:

- 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

Datapath

A new command, **clear datapath dns-id-map**, is introduced to enable deletion of DNS ID mappings in the Instant AP. This command has two parameters:

Parameter	Description
`all`	Deletes all DNS ID mappings in the Instant AP
`<domain-name>`	Deletes DNS ID mappings linked to the specified domain name.

Executing this command on the master AP in a cluster will remove DNS ID mappings in all slave APs. Whereas, executing the command on a slave AP will only remove mappings in the slave AP.

Chapter 3
Supported Hardware Platforms

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

Chapter 4
Regulatory Updates in Aruba Instant 8.6.0.7

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_77943

Chapter 5
Resolved Issues in Aruba Instant 8.6.0.7

This chapter describes the issues resolved in this release.

Table 4: *Resolved Issues in Instant 8.6.0.7*

Bug ID	Description	Reported Version
AOS-181197 AOS-208313	An Instant AP reloaded with a different subnet mask after a reboot. This issue occurred when the AP failed to find the DHCP server during AP boot. The fix ensures that the AP reboots with the correct subnet mask. This issue was observed in APs running Aruba Instant 8.4.0.0 or later versions.	Aruba Instant 8.4.0.0
AOS-190560 AOS-201044	An Instant AP rebooted unexpectedly. The log file listed the reason for the reboot as **BadAddr:ffffffc60282e798 PC:asap_firewall_clear_all_stale_user+0x2cc/0xdd8 [asap_mod] Warm-reset**. The fix ensures that the AP works as expected. This issue was observed in APs running Aruba Instant 8.5.0.1 or later versions.	Aruba Instant 8.5.0.1
AOS-195254 AOS-212271	A 500 Series access point displayed busy channel status for a very long time. The fix ensures that the APs work as expected. This issue was observed in 500 Series access points running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.6
AOS-196185 AOS-211540	The **radiusd** process of an Instant AP responsible for internal radius server functions failed. This issue occurred when the LDAP server name configured had illegal characters. The fix ensures that the AP rejects LDAP server configuration if it contains characters other than **letters**, **numbers**, **.**, **-** or _ . This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.0
AOS-196842 AOS-205842	Clients connected to a mesh point AP failed to authenticate to a WLAN guest network. This issue occurred in cloud guest networks configured with **Anonymous** authentication type. The fix ensures that clients can authenticate to the WLAN guest networks. This issue was observed in Aruba Central managed AP-375 access points running Aruba Instant 8.5.0.5 or later versions.	Aruba Instant 8.5.0.5
AOS-198417 AOS-209440	An AP-387 access point reported high memory utilization. This issue occurred due to the large file size of a process log. The fix ensures that the size of the process log is regulated and the AP works as expected. This issue was observed in AP-387 access points running Aruba Instant 8.5.0.0 or later versions.	Aruba Instant 8.5.0.0
AOS-199744	The output of the **show iap table long** command did not display any values under the **BID (Subnet Name)** column, when the command was executed on the controller. This issue was observed in backup controllers when an IAP branch failed over from the primary controller in an IAP-VPN deployment. The fix ensures that the controller works as expected. Upgrade the controller to ArubaOS 8.6.0.7 to resolve the issue. This issue was observed in IAP-VPN deployments that had controllers running ArubaOS 8.3.0.0 or later versions.	Aruba Instant 8.5.0.7

Table 4: *Resolved Issues in Instant 8.6.0.7*

Bug ID	Description	Reported Version
AOS-207415	The access requests of some clients were rejected by the RADIUS server. This issue occurred when the client's access request sent from the AP to the RADIUS server was missing the **State** attribute. The fix ensures that clients can authenticate with the RADIUS server as expected. This issue was observed in APs running Aruba Instant 8.4.0.0 or later versions.	Aruba Instant 8.4.0.0
AOS-207602	An Instant AP failed to complete 802.1X authentication when **Validate server** option was selected in the **Configuration > System > Show advanced options> Uplink > AP1X** section. The debug log lists the reason for failure as: **Server validation failed.** The fix ensures that the AP completes 802.1X authentication and works as expected. This issue was observed in 200 Series access points running Aruba Instant 8.6.0.4 or later versions.	Aruba Instant 8.6.0.4
AOS-207756	The system status LED of a 340 Series access point showed solid amber instead of solid green when powered with an 802.3at PoE supply. The fix ensures that the AP shows a solid green light when powered with 802.3at power supply. This issue is observed in 340 Series access points running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.4
AOS-207781	An Instant AP learnt wrong IP addresses for certain domain names. The fix ensures that the AP learns the correct IP address. This issue was observed in APs running Aruba Instant 8.5.0.0 or later versions.	Aruba Instant 8.6.0.4
AOS-207915 AOS-208119 AOS-209128 AOS-210182 AOS-210217 AOS-211247 AOS-211252 AOS-211715 AOS-211774 AOS-212111 AOS-212235 AOS-212557 AOS-212741 AOS-212930 AOS-212961 AOS-214656	An 500 Series access point crashed and rebooted unexpectedly. The log file listed the reason for the event as: **AP Reboot reason: BadAddr:ecf47526bb436b6e PC:wlc_mutx_bw_policy_ update+0x156c/0x2938 [wl_v6] Warm-reset**. The fix ensures that the AP works as expected. This issue was observed in APs running Aruba Instant 8.6.0.4 or later versions.	Aruba Instant 8.6.0.4
AOS-208330	AirWave reported incorrect client data transfer speeds in the RF dashboard. The fix ensures that AirWave reports the correct data transfer speeds in the RF dashboard. This issue was observed in AirWave managed APs running Aruba Instant 8.6.0.2 or later versions.	Aruba Instant 8.6.0.2
AOS-208783	Some GUI elements in the new WebUI were not visible when accessed through Internet Explorer. This issue occurred when the system used to access the WebUI had the font download option disabled in the firewall settings. The fix ensures that the new WebUI is rendered as expected. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions.	Aruba Instant 8.6.0.5

Table 4: *Resolved Issues in Instant 8.6.0.7*

Bug ID	Description	Reported Version
AOS-209148	Clients were unable to reach the splash page for captive portal authentication. This issue occurred when the AP failed to process DNS queries from captive portal clients. The fix ensures that captive portal clients join the network as expected. This issue was observed in 8.6.0.0 or later versions.	Aruba Instant 8.7.0.0
AOS-210141	An Instant AP sent RADIUS accounting messages with incorrect IP information. This issue occurred when the client moved from one user role to another after connecting to the network. The fix ensures that the AP sends correct IP information in RADIUS accounting messages. This issue was observed in APs running Aruba Instant 8.6.0.2 or later versions.	Aruba Instant 8.6.0.2
AOS-210224	Two member APs in a cluster broadcasted on the same channel when other free channels were available. The fix ensures that the member APs broadcast on different channels as expected. This issue was observed in APs running Aruba Instant 8.5.0.6 or later versions.	Aruba Instant 8.5.0.5
AOS-210855	The master AP in an Instant cluster randomly encountered a CLI core crash and reset the **Age** for APs in the output of **show aps** command. The fix ensures that the AP works as expected. This issue was observed in APs running Aruba Instant 8.5.0.0 or later versions.	Aruba Instant 8.6.0.5
AOS-211394	An Instant AP randomly dropped clients and did not let new clients to join the network. During this period the AP reported a high memory usage warning in Aruba Central. This issue occurred when **ARP Poison Check** and **Deny Intra VLAN Traffic** was enabled in the AP. The fix ensures that the AP works as expected. This issue was observed in Aruba Central managed Instant APs running Aruba Instant 8.6.0.6 or later versions.	Aruba Instant 8.6.0.6
AOS-211407	Clients connected to an Instant AP were unable to send and receive traffic. This issue was observed in networks configured with **Deny intra VLAN traffic** and the client IP assignment was set to **Virtual Controller managed**. This issue occurred after a master AP failover event in the Instant cluster. The fix ensures that clients can send and receive traffic in Instant AP clusters as expected. This issue was observed in APs running Aruba Instant 8.6.0.4 or later versions.	Aruba Instant 8.6.0.4
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

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 8.6.0.7*

Bug ID	Description	Reported Version
AOS-153932 AOS-211583	An Instant AP reloads with a different subnet mask configuration when a configuration update is performed in the network and is unreachable from other networks. This issue occurs because the AP inherits a wrong subnet mask from the DHCP server. This issue is observed in APs running Aruba Instant 8.6.0.4 or later versions. **Workaround:** Reboot the AP to receive the correct subnet mask configuration.	Aruba Instant 8.6.0.4
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

Table 5: *Known Issues in Instant 8.6.0.7*

Bug ID	Description	Reported Version
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
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: ■ 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: ■ 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-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: ■ 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 8.6.0.7*

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-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

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

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. Select the **Image file** option. This method is only available for single-class Instant APs. 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. Select the **Image URL** option. Select this option to obtain an image file from a HTTP, TFTP, or FTP URL.
   - 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. Under **Manual** section, perform the following steps:
   a. Select the **Image file** option. This method is only available for single-class Instant APs. 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. Select the **Image URL** option. Select this option to obtain an image file from a HTTP, TFTP, or FTP URL.
   - 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. 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.
4. Click **Upgrade Now** to upgrade the Instant AP to the newer version.
5. 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.