# Aruba Instant 8.7.1.3

# Release Notes

a Hewlett Packard
Enterprise company

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# Contents

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. |

# 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)<br>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/<br>Email: aruba-sirt@hpe.com |

# Chapter 2
# New Features and Enhancements

There are no new features or enhancements in this release.

# Chapter 3
# Supported Hardware Platforms

The following table displays the Instant AP platforms supported in Aruba Instant 8.7.1.0 release.

**Table 3:** *Supported Instant AP Platforms*

| Instant AP Platform | Minimum Required Instant Software Version |
|---|---|
| 500H Series — AP-503H<br>560 Series — AP-565 and AP-567 | Instant 8.7.1.0 or later |
| 500H Series — AP-505H<br>AP-518 — AP-518<br>570 Series — AP-574, AP-575, and AP-577<br>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<br>550 Series — AP-555 | Instant 8.5.0.0 or later |
| 303 Series — AP-303P<br>387 Series — AP-387<br>510 Series — AP-514 and AP-515 | Instant 8.4.0.0 or later |
| 303 Series — AP-303<br>318 Series — AP-318<br>340 Series — AP-344 and AP-345<br>370 Series — AP-374, AP-375, and AP-377<br>370EX Series — AP-375EX and AP-375EX | 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<br>303H Series — AP-303H and AP-303HR<br>360 Series — AP-365 and AP-367 | Instant 6.5.2.0 or later |
| 207 Series — IAP-207<br>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<br>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 |

# 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 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

# Chapter 5
# Resolved Issues

This chapter describes the issues resolved in this release.

**Table 4:** *Resolved Issues in Aruba Instant 8.7.1.3*

| Bug ID | Description | Reported Version |
|---|---|---|
| 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 |
| AOS-211448 | An AP-515 access point crashed and rebooted unexpectedly. The log file lists the reason for reboot as: **BadPtr:00000028 PC:anul_aon_buf_ release+0x14/0x70 [anul] Warm-reset.** The fix ensures that the AP works as expected. This issue was observed in Aruba Central-managed AP-515 access points running Aruba Instant 8.6.0.0 or later versions. | Aruba Instant 8.6.0.0 |
| 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-212238 | An Instant AP failed to update device-owner and shared-user-list attributes sent by the ClearPass Policy Manager server in the AirGroup CPPM entries table. The fix ensures that the device-owner, shared-user-list, and other shared attributes are displayed in the table. This issue was observed in APs running Aruba Instant 8.7.0.0 or later versions. | Aruba Instant 8.7.0.0 |
| 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-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 |

**Table 4:** *Resolved Issues in Aruba Instant 8.7.1.3*

| Bug ID | Description | Reported Version |
|---|---|---|
| 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-216834 | Clients were unable to connect to some APs due to their high memory usage. This issue occured 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 |
| AOS-216793<br>AOS-217849 | An AP crashed and rebooted unexpectedly. The log file listed the reason for reboot as: **Critical process /aruba/bin/stm [pid 26982] DIED, process marked as RESTART**. The fix ensures that the AP functions as expected. This issue was observed in APs running Aruba Instant 8.6.0.0 or later versions. | Aruba Instant 8.6.0.0 |

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

# Limitations

This section describes the limitations in Aruba Instant 8.7.1.3.

## 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 8.7.1.3:

- 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.

## 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 Aruba Instant 8.7.1.3*

| Bug ID | Description | Reported Version |
|---|---|---|
| AOS-153932<br>AOS-211583 | An Instant AP reloads with a different subnet mask when a configuration update is performed in the network. when this occurs the AP becomes unreachable. 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.<br>**Workaround:** Reboot the AP to receive the correct subnet mask configuration. | Aruba Instant 8.6.0.4 |
| AOS-181197<br>AOS-208313 | A 303H Series access point crashes due to kernel panic and reboots. This issue occurs when the AP uses a 3G/4G modem for uplink connection. This issue is observed in 303H Series access points running Aruba Instant 8.4.0.0 or later versions. | Aruba Instant 8.4.0.0 |
| 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 8.6.0.0 |

**Table 5:** *Known Issues in Aruba Instant 8.7.1.3*

| 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-202248<br>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-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 scenarios:<br>■ The AP attempts to re-connect to the primary controller.<br>■ Fast failover is enabled on the AP.<br>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<br>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-207602 | An Instant AP fails to complete 802.1X authentication when **Validate server** option is selected in **Configuration > System > Show advanced options> Uplink > AP1X** section. The debug log lists the reason for failure as: **Server validation failed.** This issue is observed in 200 Series access points running Aruba Instant 8.6.0.4 or later versions. | Aruba Instant 8.6.0.4 |
| AOS-208450 | An AP-503H access point operating as a mesh point sends incorrect source MAC address in LLDP messages. This issue is observed in AP-503H access points running Aruba Instant 8.7.1.0 or later versions. | Aruba Instant 8.7.1.0 |
| 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-208648 | The system log of an Instant AP has a lot of **Swarm quit factory default status by : ssid_config** messages. This issue is observed in APs running Aruba Instant 8.7.0.0 or later versions. | Aruba Instant 8.7.0.0 |
| AOS-208969 | An AP-503H access point experiences high volume of radio resets which affects the quality of the network. This issue is observed in AP-503H access points running Aruba Instant 8.7.1.0 or later versions. | Aruba Instant 8.7.1.0 |

**Table 5:** *Known Issues in Aruba Instant 8.7.1.3*

| Bug ID | Description | Reported Version |
|---|---|---|
| AOS-209002 | An AP-503H access point denies re-association requests and sends the message **Denied; MFP - Try Later** to clients reconnecting to the network. This issue is observed in AP-503H access points running Aruba Instant 8.7.1.0. | Aruba Instant 8.7.1.0 |
| AOS-209051 | Clients are unable to send and receive traffic when the Instant clusters are configured with L3 mobility. This issue occurs under the following scenarios:<br>■ The client is connected to a cluster other than the home cluster.<br>■ The network experiences high latency due to an overload caused by a broadcast storm.<br>This issue is observed in APs running Aruba Instant 8.6.0.4 or later versions. | Aruba Instant 8.6.0.4 |
| AOS-210059 | An Instant AP fails to install CA certificate for 802.1X authentication and displays the error message: **Validate certificate file failed**. This issue is observed in APs running Aruba Instant 8.5.0.9 or later versions. | Aruba Instant 8.5.0.9 |
| AOS-210290 | An Instant AP fails to update the service ID of AirGroup services when the service ID is configured through the Instant WebUI and Central. This issue occurs when the name of the service ID contains a "**.**" character. This issue is observed in APs running Aruba Instant 8.7.0.0 or later versions. | Aruba Instant 8.7.0.0 |
| 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.<br>**Workaround:** Create an administrator password without special characters. | Aruba Instant 8.6.0.5 |
| AOS-210635 | Some 530 Series access points report only a small margin of Rx errors in the AP BSS table. This issue is observed in Aruba Central-managed 530 Series access points running Aruba Instant 8.6.0.4 or later versions. | Aruba Instant 8.6.0.4 |
| AOS-210717<br>AOS-212956 | The **Client-view heatmap** window in **Dashboard > Clients** page of the Instant WebUI does not display any data. This issue occurs when the number of client match history record exceeds 300. This issue is observed in APs running Aruba Instant 8.7.0.0 or later versions. | Aruba Instant 8.7.0.0 |
| 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.<br>**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 |

**Table 5:** *Known Issues in Aruba Instant 8.7.1.3*

| Bug ID | Description | Reported Version |
|---|---|---|
| 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-215475 | The uplink preemption feature does not work on AP-203R. This issue occurs when the Eth0 port status was not updated. This issue is observed in AP-203R access points running Aruba Instant 8.6.0.0 or later versions. | Aruba Instant 8.6.0.0 |
| AOS-216114<br>AOS-218476 | Instant APs in a cluster report the signal value as 0 in the output of **show clients** command. This issue occurs when **disable-arm-wids-functions** is turned on in the cluster. This issue is observed in APs running Aruba Instant 8.7.1.1 or later versions. | Aruba Instant 8.7.1.1 |
| 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 |
| 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 |

# 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_8.7.1.x_xxxx |
| AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567. | ArubaInstant_Gemini_8.7.1.x_xxxx |
| IAP-314, IAP-315, IAP-324, IAP-325, AP-374, AP-375, AP-377, AP-318, and AP-387 | ArubaInstant_Hercules_8.7.1.x_xxxx |
| IAP-334 and IAP-335 | ArubaInstant_Lupus_8.7.1.x_xxxx |
| AP-534, AP-535, and AP-555 | ArubaInstant_Scorpio_8.7.1.x_xxxx |
| AP-303, AP-303H, 303P Series, IAP-304, IAP-305, AP-365, and AP-367 | ArubaInstant_Ursa_8.7.1.x_xxxx |
| AP-203H, AP-203R, AP-203RP, and IAP-207 | ArubaInstant_Vela_8.7.1.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_8.7.1.x_xxxx
   - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/ArubaInstant_Hercules_8.7.1.x_xxxx
   - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/ArubaInstant_Hercules_8.7.1.x_xxxx
   - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.7.1.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_8.7.1.x_xxxx |
| AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567. | ArubaInstant_Gemini_8.7.1.x_xxxx |
| IAP-314, IAP-315, IAP-324, IAP-325, AP-374, AP-375, AP-377, AP-318, and AP-387 | ArubaInstant_Hercules_8.7.1.x_xxxx |
| IAP-334 and IAP-335 | ArubaInstant_Lupus_8.7.1.x_xxxx |
| AP-534, AP-535, and AP-555 | ArubaInstant_Scorpio_8.7.1.x_xxxx |
| AP-303, AP-303H, 303P Series, IAP-304, IAP-305, AP-365, and AP-367 | ArubaInstant_Ursa_8.7.1.x_xxxx |
| AP-203H, AP-203R, AP-203RP, and IAP-207 | ArubaInstant_Vela_8.7.1.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_8.7.1.x_xxxx
   - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/ArubaInstant_Hercules_8.7.1.x_xxxx
   - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/ArubaInstant_Hercules_8.7.1.x_xxxx
   - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.7.1.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_8.7.1.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_
8.7.1.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 8.7.1.x

Before you upgrade an Instant AP running Instant 6.5.4.0 or earlier versions to Instant 8.7.1.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.