# Aruba Instant 8.8.0.3

# Release Notes

a Hewlett Packard
Enterprise company

The following table provides the revision history of this document.

**Table 1:** *Revision History*

| Revision | Change Description |
|---|---|
| Revision 01 | Initial release. |

This Aruba Instant release notes includes the following topics:

- New Features and Enhancements on page 7
- Supported Hardware Platforms on page 8
- Regulatory Updates on page 9
- Resolved Issues on page 10
- Known Issues and Limitations on page 11
- Upgrading an Instant AP on page 14

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 |

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

The following table displays the Instant AP platforms supported in Aruba Instant 8.8.0.x 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 |

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_82868

This section describes the issues resolved in this release.

**Table 4:** *Resolved Issues in Instant 8.8.0.3*

| New Bug ID | Description | Reported Version |
|---|---|---|
| AOS-229972<br>AOS-229991<br>AOS-230192<br>AOS-230290<br>AOS-230416<br>AOS-230554<br>AOS-230604<br>AOS-230721<br>AOS-230725<br>AOS-230871 | Clients were unable to connect to SSIDs that had the 802.11r option enabled. During this period, commands run in the CLI of the affected AP returned the following error message: **Module AP STM Low Priority is busy. Please try later**. The fix ensures that SSIDs configured with 802.11r option service the client as expected. This issue was observed in APs running Aruba Instant 8.3.0.0 or later versions. | Aruba Instant 8.7.1.6 |

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

## Limitations

This section describes the limitations in Aruba Instant 8.8.0.3.

### 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 8.8.0.3:

- 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.

### Dynamic Multicast Optimization Unsupported with VLAN Derivation

Aruba Instant does not support Dynamic Multicast Optimization when the SSID is configured with VLAN derivation.

### Inbound Firewall

The **apip-all** configuration is not supported by the **inbound-firewall** command in Instant AP cluster deployments. It is only supported in standalone or single-AP modes of deployment.

### Uplink Failover Limitation

Uplink failover or pre-emption between eth0 and Wi-Fi uplink is currently not supported.

### Unified Communications Manager

UCM does not prioritize NAT traffic.

## Known Issues

Following are the known issues observed in this release.

**Table 5:** *Known Issues in Instant 8.8.0.3*

| 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 conductor 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-204171 | Clients intermittently experience high latency when the AP is connected to the backup controller after a failover event. This issue occurs in the following scenarios:<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-210688 | Apple devices are unable to connect to AP-225 access points operating as Virutal Controllers in mesh deployments. This issue occurs when the AP advertises a Channel Switch Announcement and remains in the same channel. This issue is observed in AP-225 access points running Aruba Instant 8.6.0.5 or later versions. | Aruba Instant 8.6.0.5 |
| AOS-215571 | An Instant AP recommends an 80 MHz channel in ARM when 80 MHz channels are disabled in the cluster. This blocks the AP from selecting a different channel. This issue is observed in Central-managed APs running Aruba Instant 8.6.0.5 or later versions. | Aruba Instant 8.6.0.5 |
| AOS-217468 | The webUI of an Instant AP freezes when a new configuration change is applied through the webUI or the CLI. When this issue occurs, the CLI of the conductor AP and the member APs become inaccessible. This issue is observed in APs running Aruba Instant 8.7.1.1 or later versions. | Aruba Instant 8.7.1.1 |
| AOS-217829 | The **Dashboard > Overview** page of the new webUI fails to display the number of **Down** Instant APs in a cluster. This issue is observed in APs running Aruba Instant 8.6.0.4 or later versions. | Aruba Instant 8.6.0.4 |
| AOS-218761 AOS-224026 | The webUI of the Instant AP fails to sort APs according to client count when clicking on the **Clients** column label in the **Dashboard > Access Points** page of the Instant webUI. This issue is observed in APs running Aruba Instant 8.7.1.1 or later version. | Aruba Instant 8.7.1.1 |
| AOS-218974 | iPhone clients running iOS 14 or later versions are unable to connect to SSIDs when a HotSpot2.0 profile is mapped to it. This issue occurs when a HotSpot 2.0 profile is not configured on the iOS device. This issue is observed in APs running Aruba Instant 8.6.0.4 or later versions. **Workaround:** Configure a Hotspot 2.0 profile on the iOS device. | Aruba Instant 8.6.0.4 |
| AOS-219576 | Clients connected to an Instant AP are randomly disconnecting from the network with the reason: **internal only**. Clients rejoin the network immediately after the disconnection. This issue is observed in APs running Aruba Instant 8.6.0.8 or later versions. | Aruba Instant 8.6.0.8 |
| AOS-219592 | Clients receive router advertisement packets from VLANs other than their assigned VLAN. This issue is observed in SSIDs configured with **Dynamic VLAN** assignment. This issue is observed in APs running Aruba Instant 8.6.0.7 or later versions. | Aruba Instant 8.6.0.7 |

**Table 5:** *Known Issues in Instant 8.8.0.3*

| Bug ID | Description | Reported Version |
|---|---|---|
| AOS-219705 | Clients are unable to pass traffic when they disconnect and rejoin an SSID network. This issue occurs when ClearPass Policy Manager is used for authentication. This issue is observed in APs running Aruba Instant 8.6.0.7 or later versions. | Aruba Instant 8.6.0.7 |
| AOS-219797 | An Instant AP fails to download the firmware update and returns the error message: **ERROR 400: Bad Request**. This issue occurs when a firmware upgrade is attempted from the webUI. This issue is observed in APs running Aruba Instant 8.3.0.0 or later versions. **Workaround:** Use the Instant CLI to download the firmware update. | Aruba Instant 8.7.1.0 |
| AOS-220622 | An Instant AP randomly generates **mini_httpd** error messages. These messages are displayed in the output of **show log debug** command and are also sent to the syslog server. This issue is observed in APs running Aruba Instant 8.7.1.3 or later versions. | Aruba Instant 8.7.1.3 |
| AOS-220855 | The **traceroute** command fails to work and returns the error message: **traceroute: Can't find interface tsgw**. This issue is observed in Aruba Central-managed APs running Aruba Instant 8.8.0.0 or later versions. | Aruba Instant 8.8.0.0 |
| AOS-220990 | An Instant AP fails to download firmware when a destination NAT rule for incoming http traffic is applied in the inbound firewall rule. Similarly, the Instant AP loses connectivity with Aruba Central when the AP reloads after a destination NAT rule for incoming https traffic is applied in the inbound firewall rule. This issue is observed in Aruba Central-managed APs running Aruba Instant 8.6.0.9 or later versions. | Aruba Instant 8.6.0.9 |
| AOS-221532 | Clients connected to an Instant AP are unable to establish an SSH connection with the VPN concentrator. This issue occurs because the Instant AP applies a source NAT rule to traffic destined to the VPNC IP. This issue is observed in APs running Aruba Instant 8.8.0.0 or later versions. | Aruba Instant 8.8.0.0 |
| AOS-223269 AOS-223720 | Instant APs send mesh debug messages of **EMERGENCY** status to the syslog server when only messages of **CRITICAL** and **WARNING** are configured in the syslog server. This issue is observed in APs running Aruba Instant 8.7.0.0 or later versions. | Aruba Instant 8.7.1.4 |
| AOS-225120 | Some Instant APs fail to communicate with the controller in IAP-VPN deployments. This occurs when the AP includes the following configuration:<br>■ **vpn gre-outside** is enabled on the AP.<br>■ **per-ap-tunnel** is enabled in the VPN tunnel profile.<br>This issue is observed in 340 Series, AP-503H, AP-505H, and 510 Series access points running Aruba Instant 8.8.0.0 or later versions. | Aruba Instant 8.9.0.0 |

This chapter describes the Instant software upgrade procedures and the different methods for upgrading the image on the Instant AP.

> **NOTE**
>
> 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.

> **NOTE**
>
> 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_8.8.0.x_xxxx |
| AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567. | ArubaInstant_Gemini_8.8.0.x_xxxx |
| IAP-314, IAP-315, IAP-324, IAP-325, AP-374, AP-375, AP-377, AP-318, and AP-387 | ArubaInstant_Hercules_8.8.0.x_xxxx |
| IAP-334 and IAP-335 | ArubaInstant_Lupus_8.8.0.x_xxxx |
| AP-534, AP-535, and AP-555 | ArubaInstant_Scorpio_8.8.0.x_xxxx |
| AP-303, AP-303H, 303P Series, IAP-304, IAP-305, AP-365, and AP-367 | ArubaInstant_Ursa_8.8.0.x_xxxx |
| AP-203H, AP-203R, AP-203RP, and IAP-207 | ArubaInstant_Vela_8.8.0.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_8.8.0.x_xxxx
         - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/ArubaInstant_Hercules_8.8.0.x_xxxx
         - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/ArubaInstant_Hercules_8.8.0.x_xxxx
         - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.8.0.x_xxxx

> **NOTE**
>
> 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_8.8.0.x_xxxx |
| AP-503H, AP-504, AP-505, AP-505H, AP-565, and AP-567. | ArubaInstant_Gemini_8.8.0.x_xxxx |
| IAP-314, IAP-315, IAP-324, IAP-325, AP-374, AP-375, AP-377, AP-318, and AP-387 | ArubaInstant_Hercules_8.8.0.x_xxxx |
| IAP-334 and IAP-335 | ArubaInstant_Lupus_8.8.0.x_xxxx |
| AP-534, AP-535, and AP-555 | ArubaInstant_Scorpio_8.8.0.x_xxxx |
| AP-303, AP-303H, 303P Series, IAP-304, IAP-305, AP-365, and AP-367 | ArubaInstant_Ursa_8.8.0.x_xxxx |
| AP-203H, AP-203R, AP-203RP, and IAP-207 | ArubaInstant_Vela_8.8.0.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_8.8.0.x_xxxx
         - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/ArubaInstant_Hercules_8.8.0.x_xxxx
         - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/ArubaInstant_Hercules_8.8.0.x_xxxx
         - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant_Hercules_8.8.0.x_xxxx

| | The FTP server supports both **anonymous** and **username:password** login methods. |
|---|---|
| NOTE | 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_8.8.0.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_
8.8.0.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 8.8.0.x

Before you upgrade an Instant AP running Instant 6.5.4.0 or earlier versions to Instant 8.8.0.x, follow the procedures mentioned below:

1. Upgrade from Instant 6.4.x.x-4.2.x.x or any version prior to Instant 6.5.4.0 to Instant 6.5.4.0.
2. Refer to the *Field Bulletin AP1804-1* at asp.arubanetworks.com.
3. Verify the affected serial numbers of the Instant AP units.