

# **Aruba Instant 8.3.0.17**

## **Release Notes**

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

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

## Chapter 2

# New Features and Enhancements

There are no new features introduced in this release.

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

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

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

This chapter contains the Downloadable Regulatory Table (DRT) file version introduced in this release. Periodic regulatory changes may require modifications to the list of channels supported by an AP. For a complete list of channels supported by an AP using a specific country domain, access the controller Command Line Interface (CLI) and execute the **show ap allowed-channels country-code <country-code> ap-type <ap-model>** command.

For a complete list of countries and the regulatory domains in which the APs are certified for operation, refer to the Downloadable Regulatory Table or the DRT Release Notes at [support.arubanetworks.com](https://support.arubanetworks.com).

The following DRT file version is part of this release:

- DRT-1.0\_81497

This chapter describes the issues resolved in this release.

**Table 4:** *Resolved Issues in Instant 8.3.0.17*

Bug ID	Description	Component	Platform	Reported Version
AOS-210338	Instant APs scanned by Qualys server reported <b>QID:11827</b> indicating that the Instant AP HTTP POST operation missed one or more headers. The fix ensures that the headers are included in the HTTP POST operation. This issue was observed in Aruba Instant 8.6.0.2 or later versions.	Datapath	All platforms	Aruba Instant 8.6.0.2

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

### Known Issues

Following are the known issues observed in this release.



Since we have migrated to a new defect tracking tool, we have listed both, the old and the new bug ids for tracking purposes.

**Table 5:** *Known Issues in Instant 8.3.0.17*

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-178556	180387	<b>Symptom:</b> An AP-303H access point is unable to connect to the RTLS server. <b>Scenario:</b> This issue occurs if the eth0 interface is down and RTLS validation fails. This issue is observed in AP-303H access points running Aruba Instant 8.3.0.7 or later versions.	ALE	AP-303H access points	Aruba Instant 8.3.0.7
AOS-179463	184975	<b>Symptom:</b> An Instant AP, in its mesh point state, is unable to convert to a Campus AP through the eth1 interface. <b>Scenario:</b> This issue occurs if the Instant AP reboots as a mesh point. This issue is observed in APs running Aruba Instant 8.3.0.7 or later versions.	UAP	All platforms	Aruba Instant 8.3.0.7
AOS-179750	186328	<b>Symptom:</b> An Instant AP does not display the Russian time zone correctly. <b>Scenario:</b> This issue is observed in APs running Aruba Instant 8.3.0.0 or later versions.	Platform	All platforms	Aruba Instant 8.3.0.0
AOS-180241	188464	<b>Symptom:</b> Some clients are unable to connect to the Instant AP. The AP returns the message: <b>AP is resource constrained.</b> <b>Scenario:</b> This issue occurs when sticky clients try to connect to a particular band and band steering is configured to move clients to a different band. This issue is observed in APs running Aruba Instant 8.3.0.0 or later versions.	ClientMatch	All platforms	Aruba Instant 8.3.0.0

**Table 5: Known Issues in Instant 8.3.0.17**

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
		<b>Workaround:</b> Disable <b>Client Match</b> and <b>Band steeringmode</b> in the <b>Configuration &gt; RF &gt; ARM</b> page of the WebUI.			
AOS-181366 AOS-181367	193411 193412	<b>Symptom:</b> An Instant AP does not update the changes made to its host name in the controller. <b>Scenario:</b> This issue is observed on AP-305 access points running Aruba Instant 8.3.0.1 or later versions. <b>Workaround:</b> Reboot the Instant AP.	Platform	AP-305 access points	Aruba Instant 8.3.0.1
AOS-181698	194634	<b>Symptom:</b> The 3G/4G modem connected to an Instant AP does not receive the reserved IP address from the service provider. <b>Scenario:</b> This issue is observed in APs running Aruba Instant 8.3.0.4 or later versions.	3G/4G Management	All platforms	Aruba Instant 8.3.0.4
AOS-182393 AOS-209449	—	<b>Symptom:</b> Some APs in an Instant cluster report configuration mismatch errors in AirWave. <b>Scenario:</b> This issue is observed in APs running Aruba Instant 8.3.0.12 or later versions. <b>Workaround:</b> Reboot the APs reporting mismatch errors.	AirWave	All platforms	Aruba Instant 8.3.0.12
AOS-185064	—	<b>Symptom:</b> An Instant AP fails to stop the client from connecting to the Rogue AP. <b>Scenario:</b> This issue is observed in APs running Aruba Instant 8.3.0.0 or later versions. <b>Workaround:</b> Reboot the AP working as the Spectrum Monitor.	IDS	All platforms	Aruba Instant 8.3.0.0
AOS-186317	—	<b>Symptom:</b> Clients are unable to connect to an Instant AP. <b>Scenario:</b> This issue was observed in AP-214, AP-215, AP-224 and AP-225 access points operating as a virtual controller in an Instant cluster running Aruba Instant 8.3.0.0 or later versions.	Wi-Fi Driver	AP-214, AP-215, AP-224 and AP-225 access points	Aruba Instant 8.3.0.0
AOS-190211	—	<b>Symptom:</b> Wired clients of an Ethernet interface experience connectivity issues when other Ethernet ports are shut down because of loop protection. <b>Scenario:</b> This issue is observed in AP-303H access points running Aruba Instant 8.3.0.0 or later versions.	Datapath	AP-303H access points	Aruba Instant 8.3.0.0

**Table 5:** *Known Issues in Instant 8.3.0.17*

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-204171	—	<p><b>Symptom:</b> Clients intermittently experience high latency when the AP is connected to the backup controller after a failover event.</p> <p><b>Scenario:</b> This issue occurs when:</p> <ul style="list-style-type: none"><li>■ fast failover is enabled on the AP.</li><li>■ the AP attempts to reconnect to the primary controller.</li></ul> <p>This issue is observed in 203R Series access points running Aruba Instant 8.3.0.0 or later versions.</p>	VPN	203R Series access points	Aruba Instant 8.3.0.11

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



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While upgrading an Instant AP, you can use the image check feature to allow the Instant AP to find new software image versions available on a cloud-based image server hosted and maintained by Aruba. The location of the image server is fixed and cannot be changed by the user. The image server is loaded with the latest versions of the Instant software.

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Topics in this chapter include:

- [Upgrading an Instant AP and Image Server on page 14](#)
- [Upgrading an Instant AP Using Automatic Image Check on page 15](#)
- [Upgrading to a New Version Manually Using the WebUI](#)
- [Upgrading an Instant AP Image Using CLI on page 17](#)
- [Impact of Classify Media Flag on Instant Releases on page 17](#)
- [Impact of Classify Media Flag After an Upgrade or Downgrade on page 18](#)
- [Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.3.x.x on page 18](#)

## 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 multiclass 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. When 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 cannot join the network.



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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.

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### Image Management Using Cloud Server

If the multiclass Instant AP network is not managed by AirWave, image upgrades can be done through the Cloud-Based Image Check feature. When 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 Instant 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** check box.
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 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
```

## Upgrading an Instant AP Using 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.



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If AirWave is configured, the automatic image check is disabled.

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

1. Go to **Maintenance** > **Automatic** > **Check for New Version**. After the image check is completed, one of the following messages is displayed:
  - a. No new version available—If there is no new version available.
  - b. Image server timed out—Connection or session between the image server and the Instant AP is timed out.

- c. Image server failure—If the image server does not respond.
  - d. A new image version found—If a new image version is found.
2. If a new version is found, the **Upgrade Now** button becomes available and the version number is displayed.
  3. 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 TFTP or HTTP URL.

The following procedure describes how to manually check for a new firmware image version and obtain an image file:

1. Navigate to **Maintenance > Firmware**.
2. Under the **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 list describes the supported image file format for different Instant AP models:
      - For AP-203H—ArubaInstant\_Vela\_8.3.0.0\_xxxx
      - For AP-334/335—ArubaInstant\_Lupus\_8.3.0.0\_xxxx
      - For AP-314/315 and AP-324/325—ArubaInstant\_Hercules\_8.3.0.0\_xxxx
      - For AP-224/225, IAP-228, AP-214/215, IAP-274/275, IAP-277—ArubaInstant\_Centaurus\_8.3.0.0\_xxxx
      - For RAP-155/155P—ArubaInstant\_Aries\_8.3.0.0\_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\_8.3.0.0\_xxxx
      - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/ArubaInstant\_Hercules\_8.3.0.0\_xxxx
      - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/ArubaInstant\_Hercules\_8.3.0.0\_xxxx
      - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<aruba:123456>@<IP-address>/ArubaInstant\_Hercules\_8.3.0.0\_xxxx



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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.

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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.

## 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>
```

To upgrade an image by using the username and password in the FTP URL :

```
(Instant AP)# upgrade-image ftp://Aruba:123456@192.0.2.7/ArubaInstant_Hercules_8.3.0.0_xxxx
```

To upgrade an image without rebooting the Instant AP:

```
(Instant AP)# upgrade-image2-no-reboot <ftp/tftp/http-URL>
```

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
```

## Impact of Classify Media Flag on Instant Releases

### Aruba Instant 8.3.0.0

The classify media flag is no longer supported from Instant 8.3.0.0 onwards. However, media classification continues to take effect without this flag. RTP or RTCP sessions are automatically subjected to media monitoring and media classification. If the criteria for session prioritization is met, the session is automatically prioritized with the right priority and flags.



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Media monitoring cannot be disabled from Instant 8.3.0.0 onwards.

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## Aruba Instant 6.x.x.x-4.x.x.x and Aruba Instant 6.5.x.x

Both the releases support classify media flag as an option in the access rule. When the flag is enabled in a TCP 443 or TCP 5061 session, and a control session of the TCP port hits the datapath, media monitoring starts taking effect. The subsequent RTP or RTCP sessions undergo media monitoring. Based on various criteria, the sessions are prioritized.

When the classify media flag is removed from the control sessions (TCP 5061 or TCP 443 for Skype and TCP 5060 for Jabber), media monitoring no longer happens; hence no prioritization takes place.

## Impact of Classify Media Flag After an Upgrade or Downgrade

### Upgrade from Aruba Instant 6.5.x.x to Aruba Instant 8.3.x.x

If an ACL is running Instant 6.5.x.x and classify media flag is enabled, then the classify media flag is removed from Instant 8.3.x.x. If the Instant APs are managed by AirWave or any other cloud server, ensure to remove classify media by creating a new template, before upgrading to Instant 8.3.0.0. Else, the configuration is not applied to Instant APs.

The following examples describe the impact of the classify media flag on Instant APs running Instant 6.5.x.x and Instant 8.3.x.x:

#### In Instant 6.5.x.x

```
(Instant AP) (config)# wlan access-rule ms4b
(Instant AP) (Access Rule "ms4b")# index 2
(Instant AP) (Access Rule "ms4b")# rule any any match tcp 5061 5061 permit classify-
media
```

#### In Instant 8.3.x.x

```
(Instant AP) (config)# wlan access-rule ms4b
(Instant AP) (Access Rule "ms4b")# index 2
(Instant AP) (Access Rule "ms4b")# rule any any match tcp 5061 5061 permit
```



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SIP-based control sessions are maintained in the access rule.

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### Downgrade from Aruba Instant 8.3.x.x to Aruba Instant 6.5.x.x

Because Instant 8.3.x.x does not support the classify media flag, if you downgrade from Instant 8.3.x.x to an earlier release, the media classification flag must be added manually to every control session, in order to enable media classification for a specific application.

## Upgrade from Instant 6.4.x.x-4.2.x.x to Instant 8.3.x.x

Before you upgrade an Instant AP that is loaded with an apboot image from Instant 6.4.4-4.2.3.0 to Instant 8.3.0.0 or later versions, follow the procedures mentioned below and then upgrade to Instant 8.3.0.0 or later versions:

1. Upgrade from Instant 6.4.4.4-4.2.3.0 to any version from Instant 6.5.1.0-4.3.0.0 to Instant 6.5.4.0.
2. Refer to the [Field Bulletin AP1804-1](#).
3. Verify the affected serial numbers of the Instant AP units.