Release Notes

This document describes new and changed features, and known issues in the AirWave 8.0.4.1 release. The release notes includes the following sections:

- "What's New in this Release" on page 1
- "Changes" on page 7
- "The Support Download Page" on page 11
- "Supported Infrastructure Devices" on page 11
- "Fixed Issues" on page 12
- "Known Issues" on page 20

What's New in this Release

The following enhancements have been added in AirWave 8.0.4:

- "AirWave Support for Instant" on page 1
- "AirWave Support for New Devices " on page 1
- "Bulk Editing of the Switching File" on page 1
- "Site to Site IKE" on page 2
- "API for Streaming Raw Records" on page 2

The following enhancements were added in AirWave 8.0.x releases prior to AirWave 8.0.4.

- "Usage Column in AP Table" on page 2
- "Support for SCP for Aruba Firmware Upgrades" on page 2
- "Creating Custom Filtered Views" on page 2
- "VisualRF Enhancements in HTML5" on page 4
- "AppRF Enhancements" on page 4
- "UCC Visibility" on page 5
- "Additive Licensing" on page 6
- "Client Health Graph" on page 6
- "New Supported Devices" on page 7

AirWave Support for Instant

AirWave 8.0.4 supports the following Instant features:

- Instant 4.1.1 CLI in template mode.
- Instant 4.1 and Instant 4.1.1 GUI Config (IGC)

AirWave Support for New Devices

AirWave 8.0.4 and VisualRF support the AP-214/AP-215 and IAP-214/IAP-215.

Bulk Editing of the Switching File

The VLAN bulk edit allows you to update the following switching configuration options at the same time:

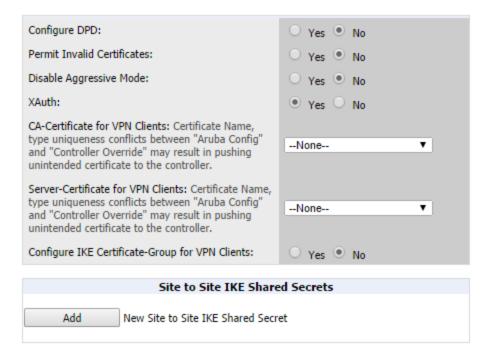
access-vlan

- native-vlan
- trunk allowed vlan <list>

Site to Site IKE

AirWave 8.0.4 introduces a Site to Site IKE configuration page under **Controller Config > Advanced Services > VPN Services > IKE > Site to Site IKE** as shown in Figure 1. This page allows you to configure Site to Site IKE on a controller. Refer to the Virtual Private Networks chapter in the *ArubaOS User Guide* for more information about IKE.

Figure 1: Site to Site IKE



API for Streaming Raw Records

An API, which streams raw records for reports in CSV format, is available. This API is beta version only. To try this API, please contact your support person for details.

Usage Column in AP Table

A usage column, which can be filtered and sorted, has been added to the AP table.

Support for SCP for Aruba Firmware Upgrades

SCP is now supported for uploading a firmware file to a controller when performing a firmware upgrade. An option has been added to select SCP when uploading a firmware file to the AMP.

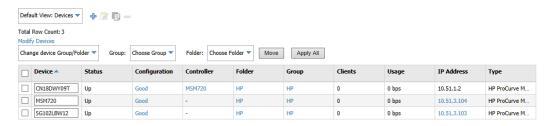
Creating Custom Filtered Views

Starting in AirWave 8.0.2, the custom filtered views feature supports up to 20 data columns. The columns in these customizable tables resize automatically to fit their contents, but if the table still does not fit within the browser page, a scroll bar appears below the table, allowing you to scroll and view the additional columns. The columns in the default view for each of the following pages are defined in AirWave and cannot be modified. However, you can now create a new view in each of these pages that returns custom information based on the filter parameters and data columns you selected when creating that new view.

APs/Devices > List

- APs/Devices > Up
- APs/Devices > Down
- APs/Devices > Mismatched
- Groups > Monitor
- Clients> Connected
- Clients> All
- RAPIDS > List

Figure 2: Default View of Devices



To create a new filtered view, navigate to any page that contains a default view list, such as **APs/Devices > List**.

- 1. Click the icon. The **Filtered View** page opens.
- 2. Enter the name of the new view.
- 3. (Optional) AMP administrators can select the **Is Global** check box to give all users access to the filtered view. Administrators are able to edit any global view they can see in the filtered view drop-down list.
- 4. Click **Add Filter**. A new list of parameters is added to the **Filter** field.
- 5. Scroll the list of parameters and select a **Device** or **Radio** parameter. If required, enter search parameters such as "=" to refine the filter parameters.
- 6. (Optional) To create a filtered view with multiple filter parameters, click **Add Filter** again and define any additional filter parameters. For example, to create a view that displays APs with more than zero clients but less than five clients, you would need to create one filter with the parameters **Clients > 0**, and a second filter with the parameters **Clients < 5**.
- 7. Drag and drop data columns from the **Available Columns** list to the **Current Columns** list to the columns display in the view. You can reorder the columns in the **Current Columns** list by dragging and dropping a data column to a different place in the list.
- 8. Click **OK**. The name of the new view is added to the view list.
- 9. Click the name of the new view. A new page displays the results of the new view, based on the configured filters.

You can edit a custom filtered view at any time, by selecting the view in the view list, then selecting the icon and modifying filter parameters and column displays.

Table 1: Filter icons

Icon	Description
+	Click this icon to create a custom filtered view.
2	Click this icon to edit an existing custom filtered view.

Icon	Description
	Click this icon to clone a custom filtered view.
-	Click this icon to delete a custom filtered view.

VisualRF Enhancements in HTML5

This section describes the new features associated with the HTML5-based UI for VisualRF.

Floor Upload Wizard

The **Floor Upload Wizard** allows you define the parameters required to complete a new floor plan. The wizard has three pages:

- **Scale** This page allows you define the lengths and width of the new floor plan.
- **Region** This page provides drawing tools you use to define the floor plan boundary and planning region(s).
- Access Points This page gives you the option to plan an AP deployment, or to add APs that are already
 deployed.

Navigation Improvements

- You can select between the **Map** and **List** views from the **VisualRF** page. The **Map** view shows the geographic location of each campus. The **List** view is a sortable table that lists the names of building and campuses in the network, the number of floors in each building and the name of each floor. You can click any of the links in the table to view that campus, building or floor plan in VisualRF.
- When you select a campus in VisualRF and drill down to view buildings and floor plans within that campus, the
 VisualRF page displays your path in a breadcrumbs format, such as Campus One > Building One > Floor 2.
 Click a link in the breadcrumb list to view the selected campus or building.
- The **Network** page now displays **Properties**, **View**, and **Edit** menu links in the Map view. In the List view, the menu links appear after you select a campus name from the list. These links display information for the selected network, campus, building or floor level.
- A new drop-down menu in VisualRF lists all campuses in the network. To access this menu, click the arrow to
 the left of the **Network** label on the **VisualRF** page. Select a campus name, then expand the list to access a
 building or floor in the campus.
- The VisualRF **Overlays** menu contains three new overlays:
 - AppRF: Identifies clients who are contributing to the usage of one or more selected applications.
 - Channel: Identifies the overlapping and specific regions for selected channels on a floor plan.
 - UCC: Displays the call quality of Unified Communication and Collaboration (UCC) calls.
- The new HTML5 UI replaces the Flash UI as the default view.



The HTML5-based UI does not support wired overlays or wired devices. The **VisualRF Plan** was not migrated to HTML5. To administer wired overlays and devices, go to **VisualRF > Setup** and click **No** in the **Enable HTML5-based UI** field.

AppRF Enhancements

This section describes enhancements to the AppRF visibility features.

AppRF Overlay

The AppRF overlay identifies clients who are using one or more selected applications, such as YouTube or Facebook. The overlay uses colors to show usage thresholds. To see the usage, mouse over the client icon. The threshold colors for the following usage categories are preset and cannot be edited:

- Green: Client has used between 0 and 20 MB in the past two hours.
- Yellow: Client has used between 20 MB and 1GB in the past two hours.
- Red: Client has used more than 1 GB in the past two hours.

AppRF Reports

The AppRF reports show the top client destinations and applications for all groups and folders. The available options for this report are:

- Top Applications Summary
- Top Destination Summary
- Top ten Applications By Device Types
- Top ten Applications By User Roles
- Top ten Applications By SSIDs
- Top three Applications For Top Ten Users
- User Detail

Note that the **User Detail** report is available only to users configured in the report definition.

UCC Visibility

AirWave shows an aggregated view of the UCC calls made in the network. The administrator can see a top level view of the call quality assessment, and further drill down into a specific view based on the analysis required.

Home>UCC charts

The **Home>UCC** page provides the four charts described below.

- **Call Quality**: This set of graphs show the quality of calls on the network over the selected time period. The **Trend** chart shows the number of calls with good, fair, or poor client health over the selected time period. The **Distribution** graph shows the relative proportions of calls with each quality type, and the APs chart shows information about APs that supported poor quality calls. You can also hover your mouse over the **Trend** or **Distribution** charts to view details about the highlighted section of that chart.
- **Quality Correlation**: These graphs display the correlation between the VoIP call quality and the VoIP client health of every UCC call. The **Trend** chart shows the number of calls with good, fair, or poor client health over the selected time period, while the **Scatterplot** chart shows the call quality and client health of each individual call.
- **Call Volume**: The Call Volume **Trend** graph displays the number of calls by UCC application type, for example, SIP, Lync, SCCP, H.323, NOE, SVP, VOCERA, or FaceTime. The Call Volume **APs** graph shows the names of the APs that supported these calls.
- **Devices**: These graphs display information about the calls made by different device types, such as Windows 7, Mac OS X, iPhone, or Android devices. The Devices **Trend** and **Distribution** graphs show the numbers of calls by each platform type, while the **Quality** graph shows the numbers of calls at each quality level made by each device type.

AMON provides data to populate the charts. The UCC feature also provides a Lync overlay that shows a historic view of calls, and a Lync Mobility trail to track historic call sessions.

Figure 3: UCC Dashboard Example



Call Details and Diagnostics

You can mouse over any of these UCC charts to view details about that chart, or drill down to a detailed view to display more specific information based on call quality and client metrics. To display an aggregated list of UCC call data metrics, click any of the following hyperlinks on the **Home > UCC** page:

- Call Details
- Call Volume Details
- Device Details

Click on any call on the Quality Correlations **Scatterplot** graph to open the **Clients > Diagnostics** page. This page provides an overview of a WLAN user's general status and connectivity on the network

UCC Overlay

VisualRF includes a new UCC Overlay that displays information about UCC calls. You can configure this overlay to display calls that match any of the following values:

- Protocol: Lync or All
- Type: Voice, Video, or All
- Quality: All, Good, or Unknown

Additive Licensing

AirWave now supports multiple licenses on one system. This enhancement allows you to install a new license for additional APs without modifying existing AP licenses.

Client Health Graph

The **Home** and **Folder** pages now include a new graph that provides client health information. The graph shows the percentage of clients with good, fair, and poor health. To view the new graph from the **Home** page, select **Client Health** from the **Clients** menu.

The client health metric displayed in these charts is the efficiency at which that AP transmits downstream traffic to a particular client. This value is determined by comparing the amount of time the AP spends transmitting call data to a client to the amount of time that would be required under ideal conditions, that is, at the maximum Rx rate supported by client, with no data retries.

New Supported Devices

- Aruba Access Points
 - AP-103/AP-103H and IAP-103
 - AP-114/AP-115 and IAP-114/IAP-115
 - AP-204/AP-205 and IAP-204/IAP-205
 - AP-214/AP-215 and IAP-214/IAP-215
 - AP-274/AP-275 and IAP-274/IAP-275
- Multi-Vendor Devices
 - Cisco 5760 wireless LAN controller*
 - Cisco 3700 and 1550 access points
 - Motorola Wing5 RFS controllers and 6532, 6522 and 6521 APs**
 - Brocade ICX switches*

Changes

Changes to AMP were made to the following general categories:

- "VisualRF Improvements" on page 7
- "List Changes" on page 8
- "Configurable Tables" on page 8
- "Enhanced Export Report Option" on page 9
- "Controller Backups and Restoration" on page 9
- "System Resources Trigger" on page 9
- "LDAP Enhancements" on page 9
- "Redis Statistics" on page 10
- "Match Events Table Improvement" on page 10
- "Local Controller Configuration" on page 10
- "Other Categories" on page 10

VisualRF Improvements

The following VisualRF Enhancements were introduced in AirWave 8.0.4 to improve performance:

- Background loading of AP and client discovery data in the UI. This causes the floor plan and AP heatmaps to appear immediately while client, rogues, association line data loads in the background.
- Background fetching of AP bandwidth, uptime, AP Radio Channel Utilization and Client health data when user clicks on AP or client to view properties. AirWave will now only fetch the data when a particular AP is clicked on instead of fetching the data for all APs when the floorplan loads.
- Optimize fetching of data from internal caches.
- Reduce startup time by not fetching ap_detail from AMP during startup. Viewing of client and rogue data on floor plan is delayed until the next controller SNMP poll cycle period.
- Read-only users can now use location history.
- The loading icon now appears when a floor plan is opened in any view.
- The channel utilization overlay now loads properly in 8.0.4.

^{*} Monitoring only; configuration within AirWave not supported

^{**} These AP and controller models may require adjustments to the AirWave SNMP timeouts to compensate for known SNMP issues on these devices.

• When using VisualRF in Mozilla Firefox, devices do not stick to the cursor when moving them around the floor plan.

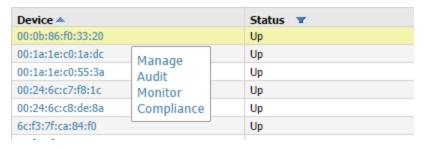
List Changes

The lock icon in the configuration column of an AP/Devices List has been reimplemented in AirWave 8.0.4. The lock icon indicates that the device in that row is in **Monitor only** mode.

For a new Aruba Instant device in the **APs/Devices > New** page, the admin user can mouse over the value under the **Type** column to verify the device's Shared Secret with AMP.

The **Manage** (wrench) icon has been removed in AirWave 8.0.4, however the same functionality has been maintained. If you mouse over an device's line in a list, a popup menu appears, allowing you to select options such as **Manage**, **Audit**, **Monitor**, and **Compliance**. Clicking any of the links takes you to the corresponding page in the UI; additionally, clicking on the device link takes you to the monitor page.

Figure 4: Device Drop Down Menu



Configurable Tables

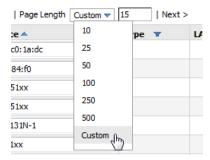
By default, the tables on the pages listed show 25 rows of information. AirWave 8.0.2 allows you to change this value and display a different number of table rows on each page. Click the **Page Length** drop-down menu above the table and select any of the predefined page lengths, or select **Custom** and enter a value in the **Page Length** field to create a new custom page length. You can force all lists to take on a change made to the **Default Number of Records per List** setting on the **User Info** page by clicking the **Reset** button directly below it.

- APs/Devices > List
- APs/Devices > Up
- APs/Devices > Down
- APs/Devices > Mismatched
- Groups > Monitor
- Clients> Connected
- Clients> All
- RAPIDS > List



Although this feature allows you to configure a page length of up to 2000 table entries, longer page lengths require more time to load the page in the Web browser. Best practices are to limit the page display to display 500 or fewer entries.

Figure 5: Defining a Custom Page Length



Enhanced Export Report Option

A new **Export Report** option allows you to use SCP or FTP protocols to transfer a report to an external server. To export a report, the report must be in the .csv or .pdf format. The export parameters are set in the **Export Options** field on the **Reports Definitions** page. Click **Yes** in the **Export Report** field to open the **Export Options** pane, which allows you to define settings for external server.

Controller Backups and Restoration

You can create a backup on demand by creating and collecting a flash backup from the Controller. Daily backups are also created. At a minimum, there are four backup files:

- Two daily backups
- One backup from last week
- One backup from last month

The backup saved from a firmware upgrade is automatic and requires no manual intervention. All backups can be saved or restored and are displayed on the **Audit** page. You can only perform a backup on a device if the firmware version of the device and the backup image are identical. After you click Restore, the device on which the restoration is being performed automatically switches from monitor mode to maintenance mode. After you restore a backup image to a device, you must restart AMP.

System Resources Trigger

System resources usage values are now available as Trigger types. To create a System Resources trigger,

- 1. go to **System > Triggers** and click **Add**.
- 2. In the **Type** drop down list, select **AMP Health>System Resources.**
- 3. The available matching conditions for this trigger are **CPU Utilization Percentage**, **Disk I/O Utilization Percentage**. You must configure at least one matching condition before you can save the new trigger.
- 4. Click **Add** to save your trigger.

LDAP Enhancements

AirWave includes an option to define an LDAP rule that assigns an AMP user role. The configurable parameters for this LDAP rule are **Position**, **Role Attribute**, **Operation**, **Value** and **AMPRole**. If you create multiple LDAP rules, rules are processed in order based on the rule position value, so the position you assign to the LDAP rule represents the order in which the LDAP rule is applied to determine the AMP role. LDAP rules can only be configured and applied after LDAP authentication is enabled. The LDAP rules are similar to the rules used by the controller to derive the AMP role.

Redis Statistics

The **System>Performance** page includes three **Redis Statistics** charts: **Redis Activity**, **Redis Used Memory**, and **Redis Keyspace**. Use these charts under the supervision of Aruba support to troubleshoot Redis activity and keys.

Match Events Table Improvement

The **Match Events** table in the **Clients>Diagnostics** page now includes dBm information in the **From AP Signal** and **To AP Signal** columns. The far right column of the table now uses a green check mark to indicate successful events.

Local Controller Configuration

An enhancement to the local controller configuration feature allows you to configure additional settings and perform a bulk edit on those controller settings during local configuration. Local configuration is disabled by default and can be enabled or disabled under **Groups > Basic**.

You can change the following variables using the bulk edit feature:

- VLAN ID
- Interface VLAN
 - ID
 - IP
 - Netmask
 - Secondary IP
 - Secondary Netmask
- Interface Loopback IP
- Interface Group Gigabit Ethernet
- Site-to-site VPN
 - IKE shared secret,
 - IP Netmask
- Site-to-site (IPSEC Map)
 - Source Network Address
 - Source Netmask
 - Local FQDN ID
 - Peer Gateway IP Address
- DHCP Server (DHCP scopes)
 - Server Pool IP Address
 - Server Pool Mask
 - Default Router Address
- IP-Profile Default Gateway

Other Categories

The **RAPIDS** Rules feature now includes a new Channel rule. The Channel rule allows you to search for devices and classify whether the devices are or are not on a specific channel. The specific channel to search for is set when configuring the rule. The rule is configured on the **RAPIDS** > **Rules** page.

The **Client Session Summary** box at the end of the **Client Session Report** page now includes information about total traffic in and out, average traffic in and out per session, and average traffic in and out per client. Traffic statistics are presented in MB.

The Support Download Page

The table below describes the different packages/files that you might see on the Support site when you download AirWave.

Table 2: Download page file descriptions

File name	Description
Install iso	Standalone installation media including CentOS operating system. This can fit on a CD/DVD, or it can be mounted as a virtual disk for installation.
Install tar file	Used for installation on a customer-installed CentOS or RHEL server.
Upgrade package tar file	Used for AirWave upgrades. Note that updates are only supported from up to two versions prior. Contact support if you are upgrading from three versions prior or more (for example, from 7.4 to 7.7).
Virtual appliance ova	VMware OVA template for AirWave deployment on VMware ESXi infrastructure.

Supported Infrastructure Devices

AirWave provides a range of features to manage network infrastructure devices from Aruba Networks and other vendors. This document describes the supported product families, software versions, and feature set for Aruba products. For a list of supported products from other vendors, see the *AirWave 8.0 Supported Infrastructure Devices* document, which can be found at support.arubanetworks.com.

ArubaOS

AirWave supports all controllers and most access points that are running ArubaOS 6.4.x and all prior versions that have not reached the End of Support milestone. The AP-80M series of access points is not supported by AirWave.

Refer to http://www.arubanetworks.com/support-services/end-of-life-products for the complete list of end-of-life products.

FIPS

Aruba Controllers running ArubaOS 6.0.x through 6.4.x FIPS and all prior versions that have not reached the End of Support milestone are supported by this version of AirWave, including the management of global configuration profiles and software upgrades.

Instant

Aruba Instant access points running Instant software versions 6.4.0.x-4.1.1.x and prior are also supported, including the management of configuration settings and software upgrades. The following table shows when each new version of Instant was initially supported in AirWave.

Table 3: Instant Support in AirWave

Instant Version	Support For Template Configuration	Support for IGC Configuration
Instant 4.1.1	AirWave 8.0.4	AirWave 8.0.4

Table 3: *Instant Support in AirWave (Continued)*

Instant Version	Support For Template Configuration	Support for IGC Configuration
Instant 4.1	AirWave 8.0	AirWave 8.0.4
Instant 4.0	AirWave 8.0 and AirWave 7.7.10	AirWave 7.7.8
Instant 3.4	AirWave 7.7.3	AirWave 7.7.8
Instant 3.3	AirWave 7.6.4	AirWave 7.7.8
Instant 3.2	AirWave 7.6.1	AirWave 7.7.5
Instant 3.1	AirWave 7.5.6	N/A
Instant 3.0	AirWave 7.5	N/A

AirMesh

Aruba AirMesh outdoor products running MeshOS 4.2 are supported for monitoring and for software upgrades.

Aruba Mobility Controller 651

Aruba Mobility Controller 651 running 6.2.0 and prior versions are supported.

Aruba Mobility Access Switches

The Aruba series of Mobility Access Switches (S3500, S2500, and S1500) are supported for profile configuration, monitoring, and software upgrades.

In addition to the port statistics supported for most Ethernet switches with the supported firmware described below, AirWave also tracks the activity of authenticated wired clients on Aruba switches.

Table 4: Aruba MAS Supported Firmware and Devices

Firmware Version	Switch Type
Validated up to 7.3.2.0 and 7.4.0.0	Standalone and stacked switches

Fixed Issues

This table lists the fixed issues in AirWave 8.0.4.1

Table 5: Fixed Issues in AirWave 8.0.4.1

ID	Description
DE19781	This version of AirWave includes a fix for the Bash Code Injection Vulnerability via specially crafted environment variables, which was announced publicly on September 24, 2104. See CVE-2014-6271 and CVE-2014-7169 for more information.

The table below lists fixed issues in AirWave 8.0.4.

Table 6: Issues Fixed in AirWave 8.0.4

ID	Description
DE18124	An update to RPM Security (RHSA-2012:0451-3) has been added.
DE18292	Modifications made to the default profile of the Gigabit Ethernet Group are saved and pushed to devices as expected; the AMP no longer returns the error Invalid slot(ALL) for Interfaces .
DE18502	Read-only users can now use location history.
DE18888	AMP users can push passwords with special characters in the management user and enable passwords.
DE19049	Creating and saving a custom report using the config detail widget, while not editing the email settings, no longer returns the error Cannot email configuration audit widget in CSV format ."
DE19054	Devices can now be filtered based on a single SSID and the output will contain all devices that are transmitting the selected SSID. This includes those devices that are transmitting multiple SSIDs.
DE19059	When creating multiple profiles on AMP in the Group Config UI, the newly created profiles are not incorrectly deleted if an error occurs when saving and applying the profiles.
DE19066	The Switch Role column now displays the switch's actual role (Primary, Secondary, etc.) instead of an integer value.
DE19068	AMP no longer use the same defaults for switches and controllers, which prevents a mismatch for Download Role from Clearpass under the AAA profile.
DE19091	When a new interface is created in AMP, such as Interface Gigabitethernet 0/0/2, fields that use default named profiles are pre-populated by default.
DE19109	The Instant GUI Config no longer incorrectly generates commands after other application rules reach the retry limit.
DE19118	The Overview > License page now displays the correct technical support email address.
DE19189	List views stay on the same page and retain all configured filters after a console refresh.
DE19191	Rogue client reports are generated and can be viewed properly.
DE19198	The AMP no longer returns the Invalid XML data error message when running a Network Wide Usage and Network Client Session error reports.
DE19221	A new menu for configuring Site-to-Site IKE on the controller has been added under Advanced Services > VPN Services > IKE > Site to Site IKE.
DE19234	Configuring WPA-2 Personal key management on a new network no longer returns the error message wrong value: wpa-psk-tkip,wpa-psk-aes .
DE19244	An error message displays if "Prefer AMON to SNMP" is enabled and the audit is disabled or there are no credentials for the CLI.
DE19253	Attempting to simultaneously edit and delete separate items on the Manual Blacklisting page and then applying those changes no longer returns an error message and incomplete changes.
DE19269	If an SSH user attempts to use the encrypt disable command and does not have permission, the configuration fails and an error message displays.

 Table 6: Issues Fixed in AirWave 8.0.4 (Continued)

ID	Description
DE19270	On the Instant Config page, the VC Name and Organization fields now support spaces in the name.
DE19290	On the IGC, the Auth server 1 and Auth server 2 fields under Admin now work properly.
DE19305	IGC no longer generates a mismatch message when the Host IP is deleted from the manual GRE.
DE19371	On the AirWave 8.0.4 Instant Config > Access Points page, users can set the AP radio modes separately.
DE19375	AirWave no longer pushes existing port channels while it is creating new channels.
DE19383	The loading icon now appears when a floor plan is opened in any view.
DE19395	The channel utilization overlay now loads properly in AirWave 8.0.4.
DE19396	AppRF supports up to a maximum of 39K clients.
DE19415	Adding new devices to a group in IE 9 now works properly.
DE19440	Deleting a VC from a group and then re-adding it to the same group no longer causes the VC to be duplicated.
DE19460	Configuring ports when creating Access Rules using the IGC now works properly.
DE19468	When using VisualRF in Mozilla Firefox, devices do not stick to the cursor when moving them around the floor plan.
DE19475	Both AirWave 8.0.4 and Instant produce the same report regarding detection of rogues.
DE19476	AMON process performance improvements were made to reduce the chances of a backlog in handling AMON messages and provide a more up-to-date view of the network.
DE19477	The IGC System Location field now works in Instant 4.1 and greater.
DE19502	The single poller now starts and works properly.
DE19532	Dragging VisualRF icons now works properly.
DE19633	Sorting by the Radio Antenna on AP lists now works properly.

The table below lists issues fixed in AirWave 8.0.3.1

Table 7: Issues Fixed in AirWave 8.0.3.1

ID	Description
DE19149	An additional internal issue was fixed in AirWave 8.0.3.1 so that VisualRF is now using the proper amount of CPU.
DE19295	A VisualRF performance issue that was caused by an architectural change has been fixed. VisualRF performance now works properly.
DE19395	VisualRF now loads properly when the Channel Utilization overlay is applied to a floor plan.

Table 7: Issues Fixed in AirWave 8.0.3.1 (Continued)

ID	Description
DE19423	The clean_database.pl maintenance script did not execute for users running 8.0.3. This problem has been resolved with AirWave8.0.3.1. Users upgrading from 8.0.3 to this release may experience a longer than usual clean_database.pl run time initially to make up for it not being run since upgrading to 8.0.3.
	Users running AirWave8.0.3 who do not want to upgrade to AirWave 8.0.3.1 can run this command to fix the issue: mv /usr/local/airwave/bin/clean_database /usr/local/airwave/bin/clean_database.pl
DE19475	The issue, where only a reported classification of valid from a device is allowed to demote the threat level, has been fixed.

The table below lists issues fixed in AirWave 8.0.3.

Table 8: Issues Fixed in AirWave 8.0.3

ID	Description
DE18908	Floor Upload Wizard changes are now saved correctly after clicking Finish .
DE19141	VisualRF is no longer using too much CPU. Previously it was using over 40% CPU.
DE19149	The Floor plan page is no longer timing out after upgrading the server to AirWave 8.x.
DE19320	The loading speed of floors in the Flash UI has been improved.
DE19358	The loading speed of densely-populated floor plans has been improved.

The table below lists issues fixed in AirWave 8.0.2.

Table 9: Issues Fixed in AirWave 8.0.2

ID	Description
DE17161	AirWave includes includes security fixes for Red Hat Enterprise Security Advisory RHSA-2014:0917-1, which resolves vulnerabilities that could allow users to return unencrypted information to the server.
DE18122	AirWave includes ca-certificates security update (RHSA-2013:1866-3).
DE18533	The Uptime report, which was not 100% for IAPs, has been resolved.
DE18753	When sorting AppRF data by MAC address, the Home > AppRF > MAC address window
DE17510	filters out entries that do not have MAC address data.
DE18449	HTTPD has been updated to resolve https://rhn.redhat.com/errata/RHSA-2014-0370.html
DE18609	In VisualRF, an issue is resolved where changing the band setting for channel bands displayed by the VisualRF overlay triggered an error that could cause the VisualRF WebUI to stop responding and display an "Unresponsive script" error.
DE18680	In previous versions of AirWave, a file locking error could lead to concurrency issues with AirWave tools interacting with data stored in the AirWave database. This issue is resolved in AirWave 8.0.2.

 Table 9: Issues Fixed in AirWave 8.0.2 (Continued)

ID	Description
DE18694	The number of items viewable on a list is changeable and maximum value is capped at 2000.
	NOTE: The user info list settings only apply to the first time viewing the list. If the setting was ever changed manually, then changing user info setting will not have any effect.
DE18733	A lock option has been added to the VisualRF floor plan to prevent accidental changes to the location of campuses, buildings, APs, etc.
DE18745	When VisualRF requests information from the AMP, it logs in with a randomly generated username and password. An improvement in AirWave 8.0.2 prevents unnecessary external authentication requests for these internally generated usernames and passwords.
DE18718	802.11ac is now bucketed by channel width (20/40/80/160). This appears corrected on the RF Performance page and lists.
DE18792	This change corrects a VRRP shutdown processing issue. Additionally, ip access-group <name> session is correctly understood in interface vlan.</name>
DE18853	When sorting AppRF data by MAC Address, data that does not include the MAC address is not
DE17510	returned.
DE18860	When list view refreshed per the console refresh rate, the list view stays on the current page and retains all filters.
DE18904	The Restore Backup function no longer fails between AMP and the controller.
DE18913	On the Rapids setup page, a warning message appears anytime a user enables containment.
DE18954	When selecting Show Label in Channel in VisualRF, the full ap name and 802.11 channels are displayed.
DE18968	
DE18784	The change helps prevent a database lock contention between multiple processes
DE18985	The maximum viewable columns in list view is 20. Once you reach 20, the available options go grey and you cannot slide over any other column options.
DE18994	Exported CSV files no longer displays device uptime in epoch format. Uptime is now displayed as days, hours, minutes.
DE18997	LV pagination options are now available for 25,50,100,250,500, and Custom.
DE19143	AirWave includes includes security fixes for Red Hat Enterprise Security Advisory RHSA-2014:0924-1, which resolves vulnerabilities that could allow users to gain additional system privileges, or cause the system to stop responding.
DE19149	In VisualRF, the floor plan data is now working properly and is no longer timing out.
DE19174	Recent IAP template changes, including several Instant and IAP changes, are now available in AirWave 8.0.

The table below lists issues fixed in AirWave 8.0.1.

Table 10: Issues Fixed in AirWave 8.0.1

ID	Description
DE15596	If you override the Routed Virtual Interface value an Aruba switch inherits from its group profile, and then move that device to another group, the routed virtual interface count in the AP/Devices > Manage page increases correctly.
DE15994	Action icons in the UI display tooltips when you mouse over those icons.
DE17274	AirWave includes security fixes for Red Hat Enterprise Security Advisory RHSA-2014:0475-1, which resolves vulnerabilities that could allow users to gain additional system privileges, or cause the system to stop responding.
DE17619	The VPN session client graphs displayed on the Clients VPN Sessions page correctly show Usage as the default Y-axis value. Previously, this value was undefined until the Usage value was selected.
DE17642	In VisualRF, clicking on a campus or building link in the List view correctly displays the campus or building Map view, regardless of the browser used to access the AirWave WebUI.
DE17987	The Clients > Diagnostic page for a wired client no longer displays data fields applicable to wireless clients only.
DE18117	AirWave includes security fixes for Red Hat Enterprise Security Advisory RHSA-2014:0126-1, which resolves vulnerabilities that could allow a remote attacker to crash an OpenLDAP server.
DE18118	AirWave includes security fixes for Red Hat Enterprise Security Advisory RHSA-2013:1409-1, which resolves extended Internet daemon (xinetd) package vulnerabilities that could allow users to gain additional system privileges.
DE18125	AirWave includes security fixes for Red Hat Enterprise Security Advisory RHSA-2014:0043-1, which resolves vulnerabilities in the way Berkeley Internet Name Domain (BIND) handles queries for NSEC3-signed zones,
DE18169	If you edit a Routed Virtual Interface profile to define an IP Netmask for multiple devices, the confirmation page now correctly shows the IP Netmask value is associated with the IP Netmask field. In previous releases, the confirmation page incorrectly showed the netmask value associated with the IP Address field, even though the netmask value was correctly defined in the profile.
DE18182	When the Use Global Aruba Configuration setting is enabled in the AMP Setup > General page, changes to a Gigabit Ethernet interface port on the Device setup > Aruba Configuration > Local Config Network > Ports/interfaces page can now restrict the Gigabit Ethernet interface port setting to devices within a selected group or set of groups.
DE18371	VisualRF correctly displays properties for APs with disabled radios. In previous versions of AirWave, an AP with a disabled radio incorrectly appeared as an AP with an error in VisualRF.
DE18378	Association or neighbor lines in an HTML5 VisualRF floor plan correctly display settings for the connection PHY band (5 Ghz and/or 2.4 GHz).
DE18405	VisualRF floor plans correctly show distances in metric units (rather than US [imperial] units), when the Use Metric Units setting is selected in the VisualRF > Setup page.
DE18410	By default, VisualRF allocates 2,500 grid cells to each floor plan, and calculates grid cell size by dividing the square footage of the floor plan by 2,500. The grid cell size shown in the floor plan lists on the VisualRF> Floor Plans page now limits the cell size value to two decimal places. (for example, 1.85 ft.)

 Table 10: Issues Fixed in AirWave 8.0.1 (Continued)

ID	Description
DE18413	Users logging in to AirWave with read-only credentials are able to change the size of VisualRF icons.
DE18419	A user logging in to AirWave with read-only credentials is no longer incorrectly logged out of AirWave when the user selects and drags a region point on a VisualRF floor plan.
DE18422	VisualRF correctly prevents users from drawing walls outside the floorplan background when editing a floor plan.
DE18437	AirWave includes security fixes for Red Hat Enterprise Security Advisory RHSA-2014-0513, which resolves a libxml2 vulnerability that could allow a remote attacker to launch a Denial of Service (DoS) attack on the system.
DE18489	An issue has been resolved where resizing a VisualRF floorplan before adding planned APs prevented the floor from loading correctly.
DE18490	An issue is resolved where settings from an Instant Virtual Controller were not imported correctly, triggering a configuration mismatch error. AirWave now correctly stores the VLAN ID, netmask and gateway for a Virtual Controller.
DE18522	The 802.11g Radio profile now appears in the list of controller profile settings that can be managed using the Aruba Controller override list in the APs/Devices > Manage Page .
DE18538	In VisualRF, the grid size for an AutoCad floorplan can be configured correctly using either the flash UI or the default HTML5 UI, and the size of the floorplan no longer limits the available grid size settings.
DE18551	Importing a configuration from a 7200 Series controller caused the AirWave WebUI to stop responding. This issue is resolved by changes that allow AirWave to ignore an unrecognized configuration setting imported from a controller running a newer version of ArubaOS not yet unsupported by that version of AirWave.
DE18558	The information on the Home > UCC page correctly refreshes with the frequency defined in the Console Refresh Rate field in the Home > User page.
DE18578	When AMP is installed on a virtual machine, the AMP monitoring process recognizes the correct number of CPU cores allocated in the VM. Previously, the monitoring process on an AMP installed on a VM did not get updated with this information, and would use the number of cores configured in the AMP Setup > General > Performance page.
DE18582	An issue is resolved where importing a configuration from a master controller with a local controller did not correctly add the local controller's IPsec keys.
DE18588	AirWave includes security fixes for OpenSSL Security Advisory CVE-2014-0224, which resolved vulnerabilities for a Man-in-the-middle (MITM) attacks that could allow an attacker to can decrypt and modify traffic from the attacked client and server.
DE18594	An issue is resolved where the AirWave WebUI would stop responding because longer data retention periods caused the cached data reach the maximum cache size of 4 Gb. There is no longer a defined limitation on the cache size, which is now limited only by the size of the AirWave server.
DE18619	The device uptime reported in the Device Info section of the APs/Devices > Monito r page displays accurate uptime values.
DE18621	The VisualRF List View correctly refreshes the information on that page with the frequency defined in the Console Refresh Rate field in the Home > User page.
DE18628	AirWave can import planned APs using the Ekahau format into VisualRF floor plans.

 Table 10: Issues Fixed in AirWave 8.0.1 (Continued)

ID	Description
DE18650	The Instant GUI Configuration (IGC) feature now supports configuration of the AirWave AMS-IP, AMS-backup-IP and Organziation settings.
DE18675	An issue is resolved where rogue APs did not correctly appear in Visual RF floor plans.
DE18710	AirWave includes security fixes for Red Hat Enterprise Security Advisory RHSA-2014:0771-1, which resolves vulnerabilities that could allow local users to gain additional system privileges, or cause the system to stop responding and display an unresponsive script warning.

The table below lists issues fixed in AirWave 8.0.0.

Table 11: Issues Fixed in AirWave 8.0.0

ID	Description
DE15403	The default view for user graphs is now the <i>maximum</i> user count. In previous releases, user count graphs showed the <i>average</i> user count by default.
DE15629	The client diagnostics page no longer displays an unnecessary blue area in the match events popup window.
DE16457	Time stamps on for traps on the System > Syslog & Traps page correctly coincide with the time stamp value on SNMP trap messages.
DE17077	The SNMP Source column that appears in the Client lists has been renamed to Source , as this column can now show information for the following source types: SNMP Poll SNMP Trap AMON HTTPS
DE17731	The User column in the in the Home > AppRF > Users table correctly resizes to display the entire User name. In previous releases, longer user names could be truncated.
DE17839	Open menus close correctly when a user scrolls up and down a page in the AirWave UI using a mouse scroll wheel.
DE17939	The AppRF graphs Trend for Top 3 Destinations and Trend for Top 3 Applications correctly show data for the selected time period, without any unexpected data gaps.
DE18022	The Interface Gigabit Ethernet profile and Port Channel profiles used for Aruba device configuration includes fields for configuring a session ACL and a session VLAN ACL.
DE18078	Changes to client diagnostic page thresholds are saved as expected.
DE18133	The VisualRF Auto-match Planned Devices feature correctly displays the total number of floors for the view of all campuses.
DE18171	AMP has an internal whitelist that allows administrators to use the WebUI to view the log files on the System>Status page. If a user attempts to access a file not on this list through the WebUI, AMP displays an 'Access Denied' error message.
DE18178	An issue is resolved that prevented a VLAN without a description or AAA profile from being correctly pushed to a controller and created on the device.
DE18185	If you use the controller UI to assign an IP address to a VLAN, and then delete that VLAN from the Device Setup > Aruba Configuration > Local Config > Network > VLANS > VLAN page of the AirWave WebUI, AirWave correctly deletes the IP address for the VLAN before it deletes the VLAN itself. In previous versions, the VLAN was deleted <i>before</i> its IP address, triggering a configuration mismatch error.

Table 11: Issues Fixed in AirWave 8.0.0 (Continued)

ID	Description
DE18188	The DHCP Option 82 setting configurable in the Device Setup > Aruba Configuration > Local Config>Network>IP page of the AirWave WebUI is correctly applied to the controller configuration.
DE18275	Resizing campus icons on the VisualRF>Network map no longer causes the campus icons to move to an incorrect location on the map.
DE18287	Instant template configurations created and edited in AirWave support WPA2 passwords with an apostrophe (') or other special characters.
DE18367 DE18372	When you configure a report definition to allow that report to be exported via FTP or SCP, the Reports >Definitions page displays a warning if the FTP or SCP settings are invalid.
DE18424	You can use VisualRF to create and export a bill of materials for a campus, building or floor by right-clicking on the icon for that location, and selecting Bill of Materials . Earlier versions of AirWave could incorrectly display an error message when a user attempted to create a bill of materials using the right-click menu.
DE18433	VisualRF allows you to drag-and-drop an AP onto a floor plan using the Internet Explorer 11 browser.
DE18487	VisualRF supports .svg files as floor plan background images.

Known Issues

The table below lists known issues in AirWave 8.0.4

Table 12: Known Issues in AirWave 8.0.4

ID	Description
DE19369	For enable Console Access, do the following: From the AirWave GUI, navigate to System> General . Click Console access: enable again, then select Save or Apply All .
DE19548	The nightly backup log may have errors related to the VisualRF backup. Ignore these errors as they do not affect the overall AirWave nightly backup.

The table below lists known issues in AirWave 8.0.3.1.

Table 13: Known Issues in AirWave 8.0.3.1

ID	Description
DE19491	VisualRF UI takes longer to load after the VisualRF has been restarted.
DE19490	Floorplans with high-client density take a long time to load.

The table below lists known issues in AirWave 8.0.0.

Table 14: Known Issues In AirWave 8.0.0

ID	Description
DE12398	AMP servers using Security Technical Implementation Guide (STIG) management standards do not run the security-hardening script stig.pl upon each upgrade.
DE12888	SecureAMP has no menu item for setting the clock. A re-installation may be necessary if the clock is wrong, because logins are denied for significant clock deviations.
DE12919	VMWare tools cannot be installed during the SecureAMP installation procedure, and must be pre-loaded before the installation. The tools should be pre-loaded, or loaded from the CLI menu.
DE13668	In the legacy flash-based VisualRF UI, the QuickView Preferences>General , Preferences>APs and Preferences>Clients menus display configuration options that are no longer applicable to VisualRF. This is not a known issue for the default HTML5 VisualRF UI.
DE13678	The overlay and display menus in the legacy flash-based VisualRF UI refers to "sensors", while the default HTML5 UI refers to these devices as "air monitors."
DE13683	When you edit and save the Virtual Controller Variables - Default Values template, the Confirm Changes page shows the database changes, rather than the user-defined settings.
DE15112	When you perform a search in AMP, then resize the Search Results pop-up window, you have to scroll to see some of the buttons in this window.
DE15239	If AMP is not getting health data from Aruba controllers, the user diagnostic page shows an empty health graph.
DE15304	On the Groups > Templates page, there is a note saying you can use templates to manage the configuration of devices. Although this list includes HP, only HP WesM devices support template configuration.
DE15512	 When you perform a search in AMP, pressing Enter and clicking the magnifying glass icon return different results. Pressing Enter does a search based on what is specified on the AMP Setup > General page under the Search Method section. Clicking the magnifying glass always does a quick search.
DE15596	If you import settings from an Aruba switch, then move that switch to a new group, the Aruba Overrides section of the APs/Devices>Manage page can show an incorrect number of Routed Virtual Interfaces.
DE15814	When an inactive client expires, RRD files containing AMC Signal Data for that client are retained.
DE15921	Links in the UI do not allow you to right-click the link and select the Open in new Tab or Open in New Window options.
DE16144	Adding a user to the internal user database using the Instant GUI Config (IGC) feature incorrectly triggers a no user error for a configuration mismatch when you save and apply the change, even though the user is added correctly.

 Table 14: Known Issues In AirWave 8.0.0 (Continued)

ID	Description
DE17613	The AirWave UI does not fully support the Safari for Windows browser. (5.1.7 or earlier)
DE17665	AirWave can allow more devices to be added than are supported by the current license count. Exceeding the device licensing limits can cause performance issues.
DE17739	Active APs making UCC calls can appear to be down when the device is polled using SNMP. This can cause AirWave to incorrectly report that a down AP is supporting an active UCC call.
DE17897	AMP uses outdated timezone data, which incorrectly calculates the date that daylight savings time in Brazil. AMP can also encounter errors when it attempts to calculate reoccurring event times during the changeover period between standard time and daylight savings time in Brazil.
DE17960 DE17998	The table in the RAPIDS > List page cannot be sorted or filtered by the by the following data columns. Name Detecting APs Channel Threat level Confidence
DE17971	The Scatterplot UCC data chart supports a maximum of 1000 datapoints.
DE17998	The device table on the RAPIDS > List page does not allow you to filter data by the Detecting APs , Channel , Threat level or Confidence table columns.
DE18051	Reinstalling AMP doesn't overwrite and clear all previous database entries.
DE18259	In VisualRF, if the Draw Walls tool is selected, moving an AP to a new location on the floor plan will draw a wall between the previous location of the AP and its new location on the floor plan.
DE18920	With the parameter as "none" in the xml request (https:// <your.airwave.server>/amp_stats.xml), the following parameters are not listed in the xml response: bandwith_in bandwidth_out To get all the attributes (including bandwidth details) in the amp_stats response, use the URL https://<your.airwave.server>/amp_stats.xml?include_bandwidth=1.</your.airwave.server></your.airwave.server>
DE19266	When enabling AMON, auditing should be set to daily and have been successful at least once to allow AMP to calculate the proper BSSIDs per radio. If these BSSIDs do not exist, clients are dropped because they do not have any corresponding BSSIDs in the AMP database.
US12233	Buildings cannot be moved to new campuses under the HTML5 version of AirWave 8.0.4.1. To work around this issue: Disable the HTML5 user interface (revert back to flash). Restart the VisualRF engine and make the necessary changes.