# Release Notes

This document describes new and changed features, and known issues in the AirWave 8.0 release. The release note includes the following sections:

- "What's New in this Release" on page 1
- "Changes" on page 4
- "The Support Download Page" on page 7
- "Fixed Issues" on page 8
- "Known Issues" on page 9

# What's New in this Release

- "VisualRF Enhancements in HTML5" on page 1
- "AppRF Enhancements" on page 2
- "UCC Visibility" on page 2
- "Additive Licensing" on page 3
- "Client Health Graph" on page 4
- "New Supported Devices" on page 4

### **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 **Overlavs** 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

2

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.

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Figure 1: 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-274/AP-275
  - AP-114/AP-115
  - AP-103/AP-103H
  - AP-204/AP-205
- 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\*
- \* 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.

# Changes

Changes to AMP were made to the following general categories:

- "Creating Custom Filtered Views" on page 4
- "Enhanced Export Report Option" on page 6
- "Controller Backups and Restoration" on page 6
- "System Resources Trigger" on page 6
- "LDAP Enhancements" on page 6
- "Redis Statistics" on page 6
- "Match Events Table Improvement" on page 6
- "Local Controller Configuration" on page 6
- "Other Categories" on page 7

# **Creating Custom Filtered Views**

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.
	Click this icon to clone a custom filtered view.
_	Click this icon to delete a custom filtered view.

### **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.

## **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, and Memory Utilization Percentage. You must configure at least one matching condition before you can save the new trigger.
- 4. Click Add to save your trigger

# 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.

#### 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 **AMP Role**. 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. You can change the following variables using the bulk edit feature:

VLAN ID

6

- 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

 Table 2: Download page file descriptions (Continued)

File name	Description
	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.

# **Fixed Issues**

The table below lists issues fixed in AirWave 8.0.

Table 3: Issues Fixed in AirWave 8.0

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 <b>client diagnostics</b> page no longer displays an unnecessary blue area in the <b>match events</b> popup window.
DE16457	Time stamps on for traps on the <b>System &gt; Syslog &amp; Traps</b> 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 <b>User</b> column in the in the <b>Home &gt; AppRF &gt; Users</b> table correctly resizes to display the entire <b>User</b> 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 <b>Trend for Top 3 Destinations</b> and <b>Trend for Top 3 Applications</b> 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 <b>Auto-match Planned Devices</b> 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 <b>System&gt;Status</b> 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 <b>Device Setup &gt; Aruba Configuration &gt; Local Config &gt; Network &gt; VLANS &gt; VLAN</b> 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

Table 3: Issues Fixed in AirWave 8.0 (Continued)

ID	Description
	configuration mismatch error.
DE18188	The DHCP Option 82 setting configurable in the <b>Device Setup &gt; Aruba Configuration &gt; Local Config&gt;Network&gt;IP</b> page of the AirWave WebUI is correctly applied to the controller configuration.
DE18275	Resizing campus icons on the <b>VisualRF&gt;Network</b> map no longer causes the campus icons to move to an incorrect location on the map.
DE18287	Instant template configurations created and editing 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 <b>Reports &gt;Definitions</b> 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 <b>Bill of Materials</b> . 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.

Table 4: Known Issues In AirWave 8.0

ID	Description
DE12398	AMP servers using Security Technical Implementation Guide (STIG) management standards do not run the security-hardening script <b>stig.pl</b> 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 <b>overlay</b> and <b>display</b> menus in the legacy flash-based <b>VisualRF</b> UI refers to "sensors", while the default HTML5 UI refers to these devices as "air monitors."
DE13683	When you edit and save the <b>Virtual Controller Variables - Default Values</b> template, the <b>Confirm Changes</b> page shows the database changes, rather than the user-defined settings.

Table 4: Known Issues In AirWave 8.0 (Continued)

ID	Description
DE15112	When you perform a search in AMP, then resize the <b>Search Results</b> 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 <b>Groups &gt; Templates</b> page, there is a note saying you can use templates to manage the configuration of devices. Although tis 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 use the Aruba Overrides feature to 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 <b>AP/Devices &gt; Manage</b> page increases incorrectly.
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 <b>Open in new Tab</b> or <b>Open in New Window</b> options.
DE15994	Action icons in the UI do not display tooltips when you mouse over those icons.
DE16144	Adding a user to the internal user database using the Instant GUI Config (IGC) feature incorrectly triggers a <b>no user</b> error for a configuration mismatch when you save and apply the change, even though the user is added correctly.
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

Table 4: Known Issues In AirWave 8.0 (Continued)

ID	Description
DE17971	The Scatterplot UCC data chart supports a maximum of 1000 datapoints.
DE18051	Reinstalling AMP doesn't overwrite and clear all previous database entries.
DE18182	When Use Global Aruba Configuration is enabled in the AMP Setup > General page, changes to Gigabit Ethernet interface port on the Device setup > Aruba Configuration > Local Config Network > Ports/interfaces page have no way to restrict the Gigabit Ethernet interface port setting to devices within a selected group or set of groups.
DE18378	Association or neighbor lines in a HTML5 VisualRF floor plan do not display settings for the connection PHY band (5 Ghz and/or 2.4 GHz).
DE18405	VisualRF floor plans incorrectly correctly show distances in US (imperial) units, even though the <b>Use Metric Units</b> setting is selected in the <b>VisualRF &gt; Setup</b> 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. At times, these calculations make the grid cell size shown in the floor plan lists on the <b>VisualRF&gt; Floor Plans</b> page appear with an unnecessarily long list of trailing decimals. (for example, 1.8568329718004337 ft.)
DE18413	Users logging in to AirWave with read-only credentials are unable to change the size of VisualRF icons.
DE18419	A user logging in to AirWave with read-only credentials can be logged out of AirWave with the user selects and drags a region point on a VisualRF floor plan.
DE18422	VisualRF incorrectly allows users editing a floor plan to draw walls outside the floorplan background.



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