

AirWave 8.2.8



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AirWave 8.2.8 introduces new features and fixes to previously outstanding issues. Refer to these release notes for the most up-to-date information.

These release notes contain the following chapters:

- "Important Changes and New Features" on page 4 describes important changes and new features in this release.
- "Resolved Issues" on page 7 describes issues we've fixed.
- "Known Issues" on page 23 describes known issues.
- "Upgrade Instructions" on page 32 describes how to upgrade your software.

Contacting Support

Table 1: *Contact Information*

Main Site	arubanetworks.com
Support Site	support.arubanetworks.com
Airheads Social Forums and Knowledge Base	community.arubanetworks.com
North American Telephone	1-800-943-4526 (Toll Free) 1-408-754-1200
International Telephone	arubanetworks.com/support-services/contact-support/
Software Licensing Site	hpe.com/networking/support
End-of-life Information	arubanetworks.com/support-services/end-of-life/
Security Incident Response Team (SIRT)	Site: arubanetworks.com/support-services/security-bulletins/ Email: aruba-sirt@hpe.com

AirWave 8.2.8 introduces important changes and new features described in the following sections.

Important Changes

AirWave 8.2.8 introduces the following important changes:

- Clarity Synthetic has been deprecated and removed.
- AirWave no longer supports Cisco 3650 and 3850 devices running IOS XE 16.5.1a or later in converged access mode. AirWave now displays these switches as Catalyst 3650 and Catalyst 3850 switches in the monitoring, configuration, and topology pages. For more information, see [the Catalyst 3650 Release Notes for 16-5](#).

Support for New Devices

AirWave 8.2.8 introduces support for the following new devices:

- Aruba AP-303P and AP-387
- Aruba IAP-303P, IAP-387, IAP-514, and IAP-515
- Aruba 2930M 24G and 48G Smart Rate PoE+ 1-slot switches
- HPE 5900 Switch Series

AirWave 8.2.8 now supports version KB.16.08.0001 for the Aruba 5400R Switch Series and Aruba 3810M Switch Series. For a complete list of supported products and validated firmware versions, refer to *AirWave 8.2.8 Supported Infrastructure Devices*.

Support for ArubaOS 8.4.0.0

AirWave 8.2.8 introduces support for the following features:

- Visibility into tunnel node end points and wired clients.
- Visibility into VIA client usage statistics in graphs and VPN user information in AMON messages.
- Discover Aruba 2930M 24G and 48G Smart Rate PoE+ 1-slot switches, populate the topology map, and provide switch port visibility on the monitoring pages.

In order to support these ArubaOS 8.4.0.0 features, configure AirWave to use AMON instead of SNMP for polling by navigating to **AMP Setup > General** to turn on the "Prefer AMON" option. For more information, see the *AirWave 8.2.8 User Guide*.

Support for Aruba Instant 8.4.0.0

AirWave supports Instant GUI Config (IGC) and template configuration for Instant APs running Instant 8.4.0.0 or earlier versions, including:

- Downloadable user roles in Instant GUI Config.
- More than 16 SSID profiles.
- IAP whitelist that is stored on the VC, which allows you to add a new AP to an existing, secure cluster.
- Updated ARM settings for new IGC groups.

VisualRF Enhancements

AirWave 8.2.8 includes the following enhancements to help you with planning and provisioning:

- When you create a Bill of Materials report, the generated report includes a floor plan view with background grid lines.
- In list views and on heat maps, AirWave provides the x, y distance for APs from their northwest point.

Dynamic Variables

You can create dynamic variables and use them in global templates, local templates inherited from the global templates, and normal templates. For more information, see the *AirWave 8.2.8 User Guide*.

Partial Config Audit and Remediation

New audit and remediate snippets give you the ability to quickly create and run or schedule audit jobs. AirWave now takes immediate action and performs an audit remediation to bring your non compliant devices into compliance. For more information, see the *AirWave 8.2.8 Switch Configuration Guide*.

WAN Monitoring

Advanced monitoring tools are now available for Aruba 7000 controllers. You can monitor and troubleshoot these devices, uplink WAN, ports, and tunnels directly from the status, alerts, and graphs on the new WAN monitoring page. For more information, see the *AirWave 8.2.8 User Guide*.

Zero Touch Provisioning (ZTP) for Switches in Out-of-Band Management (OOBM) Networks

Airwave now supports ZTP for switches when they are connected using the management Ethernet port to power up into the OOBM network.

Pushing Config Commands to the Aruba 2930F Switch

Golden template pushes to Aruba 2930F switches now work when encryption password is used. Previously this resulted in an encrypted credentials mismatch.

New CSV Export Option for AppRF

Now you can do more with your AppRF data by exporting the data into a CSV file, such as Excel.

Baseline config support for Comware switches

AirWave8.2.8 now supports baseline configuration for HPE Comware switches.

Disabling Client Calculation

You can enable or disable the client calculation from the **VisualRF > Setup** page. Clients that are currently in VisualRF stay until they expire, and then VisualRF removes them.



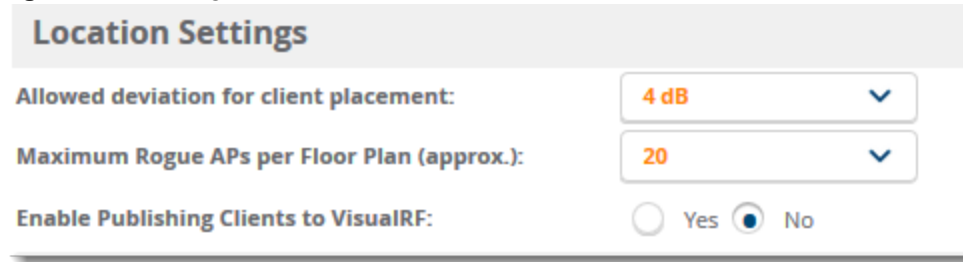
To immediately remove all clients, first remove the **visualrf_bootstrap** file to flush the client information and

then restart VisualRF. You can do this from the CLI by selecting **11** to open the Enter Commands menu. At the prompt, enter **remove_visualrf_cache**.

To disable client calculations:

1. Go to VisualRF > Setup, then click Location Settings.

Figure 1: *Disabling the Client Calculation Feature*



Location Settings

Allowed deviation for client placement: 4 dB

Maximum Rogue APs per Floor Plan (approx.): 20

Enable Publishing Clients to VisualRF: ☐ Yes ☒ No

2. Select "No" for the "Enable Publishing Clients to VisualRF" option.
3. Click **Save**.

Improved Ports Tab for Switch Monitoring

When you change the columns displayed in the Ports table, AirWave remembers the customization if you navigate away from the page or refresh the page.

The following tables describe issues resolved in AirWave 8.2.8, 8.2.7.1, 8.2.7, 8.2.6.1, and 8.2.6.

Table 2: *Issues Resolved in AirWave 8.2.8*

ID	Description
DE32366	<p>Symptom: The Total Data description in the Device Summary Report in the User Guide gives an unclear explanation.</p> <p>Scenario: We updated old information on the page and changed the description to: "Displays the total data usage on the device in MB, GB or TB during the reported time period."</p>
DE32336	<p>Symptom: Unable to access the AirWave server.</p> <p>Scenario: We fixed the issue which caused the postgres transaction to reach the maximum limit.</p>
DE32190	<p>Symptom: Controller IP address changes from physical IP to VRRP IP automatically on the AirWave server.</p> <p>Scenario: The failover issue with the 7000 controller which occurred after an upgrade to AirWave 8.2.7 has been fixed.</p>
DE32168	<p>Symptom: Event 'Internal Error: Couldn't determine class for type 'bgN"' repeats in event log when not set in dual 5-Ghz mode.</p> <p>Scenario: This issue no longer occurs when dual 5-Ghz mode is enabled on the Aruba AP-345.</p>
DE32155	<p>Symptom: AP relation lines not seen for IAP's in VisualRF.</p> <p>Scenario: We fixed the issue which caused the RF Neighbors tab to be blank on the monitoring page for an Instant AP.</p>
DE32152	<p>Symptom: Client count is inaccurate on the controller cluster dashboard in AirWave.</p> <p>Scenario: We fixed the data loss issue, and the client counts are accurately displayed in the controller cluster dashboard.</p>
DE32144	<p>Symptom: Unable to install certificate in AirWave 8.2.7.1.</p> <p>Scenario:The SSL certificate installed must use RSA private key. You can't upload certificates using other types of keys.This is a new limitation in AirWave 8.2.7.1 for added security.</p>
DE32118	<p>Symptom: Searching for controllers from Master Console does not work.</p> <p>Scenario: We fixed a schema change which previously prevented Master Console from finding controllers in a search.</p>
DE32107	<p>Symptom: Client Session Report shows inaccurate data.</p> <p>Scenario: This issue no longer occurs when reporting on inactive clients.</p>
DE32090	<p>Symptom: Unable to delete SSIDs over IGC.</p> <p>Scenario: We now support deleting at the group level in the IGC.</p>

Table 2: *Issues Resolved in AirWave 8.2.8 (Continued)*

ID	Description
DE32088	Symptom: In AirWave 8.2.6.1, BSSID mappings were incorrect for APs. Scenario: Enabling the audit of the APs configuration resolved issue.
DE32081	Symptom: After an upgrade to AirWave 8.2.7, Instant-enabled IAPs showed configuration errors, "template not found". Scenario: We changed the way AirWave handles configuration mismatches when the template is not found.
DE32047	Symptom: Master console displays errors when you click on the link for down devices from the header statistics at the top of the page. Scenario: This issue no longer occurs when a stack has no master.
DE32023 DE31724	Symptom: IGC failed to modify SSID time-range profile. Scenario: We now support overrides for delete in the IGC.
DE32018	Symptom: AMP services restarted on multiple servers daily. Scenario: We fixed the issue which caused the AMP services to continuously restart.
DE31934	Symptom: Juniper device doesn't appear in Topology. Scenario: Topology now creates the edge when the LAN MAC is not same as the actual device MAC reported by LLDP.
DE31878	Symptom: Client count is inconsistent in an AOS 8.x cluster environment with SNMP polling. Scenario: AirWave experiences issues with SNMP polling to manage AOS cluster setup. Workaround: It is recommended to use only AMON to manage AOS 8.x cluster setup.
DE31845	Symptom: The Client Diagnostics page shows a broken image instead of the floor plan and incorrect hyperlink and floor plan name. Scenario: Now, the Client Diagnostics page shows the correct floor plan, the hyperlink, and floor plan name.
DE31836	Symptom: The top header statistic changes based on the display size. Scenario: We resized the header statistics so that it displays the same data regardless of the display size.
DE31774	Symptom: The PAPI handler consumed most CPU time. Scenario: CPU utilization is no longer quickly consumed in scenarios such as when the controller sends AMON RSSIv2 messages every 5 seconds.

Table 2: *Issues Resolved in AirWave 8.2.8 (Continued)*

ID	Description
DE31725	<p>Symptom: Security flaws were found in the way the Linux kernel handled the reassembly of fragmented IPv4 and IPv6 packets that could allow a remote denial of service and in an integer overflow in the create_elf_tables function. (CVE-2018-5391 and CVE-2018-14634).</p> <p>Scenario: AirWave 8.2.8 contains the following updated kernel packages, which correct these issues: kernel-2.6.32-754.6.3.el6, kernel-firmware-2.6.32-754.6.3.el6, and kernel-headers-2.6.32-754.6.3.el6 (RHSA-2018:2846).</p> <p>NOTE: In order for the security fixes to work, you must apply the kernel update after you complete the upgrade to AirWave 8.2.8.0. For more information, see "Upgrading the Kernel OS" on page 34 and RHSA-2018:2846.</p>
DE31700	<p>Symptom: Modified AP name list didn't update without restarting the IGC.</p> <p>Scenario: This issue no longer occurs when you manually modify AP names in the IGC.</p>
DE31698	<p>Symptom: The RF health reports failed after upgrading to AirWave 8.2.6.1.</p> <p>Scenario: We fixed the underlying RRDTOOL errors.</p>
DE31555	<p>Symptom: The Aruba 8320 and 8400 Switch Series don't appear in the Topology page although AirWave discovers the LLDP neighbours at both ends.</p> <p>Scenario: AirWave discovers these switches, reports the neighbors in the Neighbors tab on the switch monitoring page, and properly displays them in the topology map.</p>
DE31540	<p>Symptom: AirWave lists the physical interfaces for the Aruba 8320 and 8400 Switch Series as virtual interfaces.</p> <p>Scenario: AirWave correctly lists physical interfaces on the Interface page.</p>
DE31536	<p>Symptom: In VisualRF, the deployed list doesn't show unprovisioned AP's when the "Hide deployed AP's" option is selected.</p> <p>Scenario: We improved the show and hide feature, and AirWave now displays "loading" status to the drag area of the "Deployed list of APs" while populating the list.</p>
DE31533	<p>Symptom: AirWave added the product name with the configured server name when forwarding the syslog messages.</p> <p>Scenario: Syslog message format now complies with RFC 5424 and doesn't include the host in the message header.</p>
DE31424	<p>Symptom: Clients on AOS 8.x cluster not showing correct location in VisualRF.</p> <p>Scenario: Client location shows accurately in VisualRF.</p>
DE31300 DE31154	<p>Symptom: Unable to load Topology page.</p> <p>Scenario: We fixed issues showing edges when the core switch has multiple mac addresses in LLDP transaction data.</p>
DE31136	<p>Symptom: When AirWave sent an SNMP trap to an external NMS server, the MAC address displayed in ASCII format.</p> <p>Scenario: AirWave now displays the MAC address with the proper format.</p>

Table 2: *Issues Resolved in AirWave 8.2.8 (Continued)*

ID	Description
DE31201	<p>Symptom: AirWave upgrade from HPE My Networking Portal (MNP) failed.</p> <p>Scenario: We fixed the upgrade script to follow MNP API format. Subsequent upgrades after you upgrade to AirWave 8.2.8 will work directly from the MNP if a valid SAID license is attached to the user account.</p>
DE31082	<p>Symptom: Unable to choose required bonding option from ampadmin login.</p> <p>Scenario: We added support changing interface bonding options with a new Enter Command, called "ethernet_bonding". The modes include Round Robin, Active Backup, XOR (Exclusive OR), Broadcast, Dynamic Link Aggregation, Transmit Load Balancing (TLB), and Adaptive Load Balancing. Applying the change requires a network service restart.</p>
DE30865	<p>Symptom: Mismatches of improper sorting and for username other than admin not getting cleared after import.</p> <p>Scenario: We resolved mismatches caused by improper sorting of an IP address pool.</p>
DE30831	<p>Symptom: AirWave does HTTP logins to Aruba Controllers periodically.</p> <p>Scenario: We fixed the issue which caused periodic HTTP logins.</p>
DE30771 DE29481	<p>Symptom: AVG IN and MAX IN values are same for daily network reports.</p> <p>Scenario: We added a comment at the top of the report saying that 5-minute intervals will have same AVG IN and MAX IN. For longer periods the AVE and Max values will be different.</p>
DE30644	<p>Symptom: AirWave doesnt display the IP address for wired clients (Mac or Dot1x) connected to the switch.</p> <p>Scenario: The underlying AOS issue has been resolved.</p>
DE30430	<p>Symptom: Unable to see Switch usage graph on the Devices page.</p> <p>Scenario: We changed the way AirWave aggregates client usage for Aruba and MAS switches.</p>
DE29252	<p>Symptom: VisualRF dwg floorplan CAD layer discrepancies.</p> <p>Scenario: We fixed the CAD layer discrepancies, where VisualRF misinterpreted walls after you imported a floor plan in DWG format.</p>
DE29174	<p>Symptom: High Transmit Power value in the controller configuration generates an error.</p> <p>Scenario: AirWave now accepts the Transmit Power value of 127.</p>

Table 3: *Issues Resolved in AirWave 8.2.7.1*

ID	Description
DE31967	<p>Symptom: AirWave pushes the uplink-vlan 233 to IAP when leaving the uplink-vlan blank</p> <p>Scenario: Now AirWave doesn't set the uplink-vlan after you delete the uplink-vlan from a thin AP Manage page.</p>
DE31959	<p>Symptom: IGC allows only 8 external captive portal profiles, including the default.</p> <p>Scenario: We increased the limit to 16 external captive profiles, including the default.</p>

Table 3: *Issues Resolved in AirWave 8.2.7.1 (Continued)*

ID	Description
DE31926	<p>Symptom: Unable to push zone setting to selected IAPs using bulk edit.</p> <p>Scenario: Now when you use the bulk edit tool, AirWave doesn't push zone setting to all the IAPs.</p>
DE31895	<p>Symptom: AirWave doesn't update the input/output (I/O) capacity information for the AP-335 multi-gigabit Ethernet port.</p> <p>Scenario: We added new values for remote port speed, so that a controller that has 2.5 GBPS as the port speed displays the I/O capacity properly.</p>
DE31787	<p>Symptom: Running command "show data path session table" from the Client Detail page displays the incorrect output.</p> <p>Scenario: We fixed the issue with wrong commands being executed from Client Detail page.</p>
DE31748 DE31661	<p>Symptom: IGC removes existing VC-specific SSIDs after creating a new SSID for the group.</p> <p>Scenario: We fixed the underlying issue which caused SSID configuration errors.</p>
DE31731	<p>Symptom: Unable to access the Rogue Detail page.</p> <p>Scenario: We've improved exception handling that caused AirWave to crash.</p>
DE31673 DE31655	<p>Symptom: Config jobs defined on the Groups > Config Jobs page of the AirWave WebUI cannot be run for a local controller or managed device running AOS 8.x.x.x.</p> <p>Scenario: AirWave can now push a configuration to for a local controller or managed device running AOS 8.x.x.x.</p>
DE31578	<p>Symptom: Delay in updating Home page graphs.</p> <p>Scenario: We fixed an underlying memory allocation issue which caused delays in graphical updates.</p>
DE31664	<p>Symptom: Unable to create report for "Most Interfering Devices" (5 GHz or 2.4 GHz).</p> <p>Scenario: AirWave reports "syslocation" correctly now and displays "no device found" for RF Health top lists.</p>
DE31574	<p>Symptom: Motorola APs 6522 and 6532 are incorrectly displayed as Motorola 100.</p> <p>Scenario: AirWave now reports the device type correctly when it discovers the Motorola AP 6522 and AP 6533.</p>
DE31518	<p>Symptom: AirWave not updating clients connected to 5 GHz radio of AP-203H.</p> <p>Scenario: AirWave now reports the correct number of clients connected to the 5 GHz radio of the AP-203H.</p>
DE31505	<p>Symptom: The external antenna value metric on the IAP is in dBi, but the IGC shows the value in dBm.</p> <p>Scenario: We fixed the encoding issue that caused the value conversion.</p>
DE31457	<p>Symptom: An issue is resolved that could prevent AirWave from correctly displaying client information in VisualRF.</p> <p>Scenario: Improvements to internal timeout intervals resolve an issue that could prevent VisualRF from displaying information about connected clients.</p>

Table 3: Issues Resolved in AirWave 8.2.7.1 (Continued)

ID	Description
DE31343	<p>Symptom: When a new device was added to the station black list and the controller sent AirWave an wlsxNStationAddedToBlackList trap message, AirWave could fail to correctly display an alert message warning users of this change.</p> <p>Scenario: AirWave correctly displays an alert message when the controller sends a trap message warning that a new device has been added to the station black list.</p>
DE31153	<p>Symptom: IAPs stop communicating with AirWave after installing a custom certificate.</p> <p>Scenario: AirWave support only RSA key certificates. When a user uploads a non-RSA key certificate, AirWave will display an error message.</p>
DE31036	<p>Symptom: Enhancements to the VisualRF feature allows users to upload VisualRF floor plans in .dwg format using the AirWave WebUI.</p> <p>Scenario: This release resolves an issue that could allow the WebUI to stop responding when floor plans in .dwg format were uploaded to AirWave using the VisualRF > Floor Plans > Edit > New Floor Plan section of the AirWave WebUI.</p>
DE30993	<p>Symptom: Device uptime report shows SNMP and ICMP communication time as more than 100%.</p> <p>Scenario: This resolves the issue where recent Device Uptime reports showed the incorrect SNMP and ICMP communication times.</p>
DE30968	<p>Symptom: AirWave didn't display information for an AP's upstream devices and upstream ports on the Device Info section of the Devices > Monitor page.</p> <p>Scenario: Upstream device and upstream port for monitored access points display properly now.</p>
DE30942	<p>Symptom: Clients connected to APs on the same floor occasionally appear outside the floor plan.</p> <p>Scenario: Improvements to the VisualRF feature allow connected clients to consistently appear in their correct locations on a selected floor plan.</p>
DE30780	<p>Symptom: Cisco IOS APs are deleted from deployed APs in VisualRF if single poller runs before AP's radio are detected.</p> <p>Scenario: We fixed this issue by updating the AP authorization information for only AMP APs found during polling.</p>
DE30679	<p>Symptom: Unable to modify any setting on Network page once Ethernet bonding is enabled.</p> <p>Scenario: AMP Setup > Network will now configure the interface.</p> <p>NOTE: See related known issue "DE32042" on page 25.</p>
DE30538	<p>Symptom: AirWave WebUI displayed incorrect IP addresses for wired clients using 802.1X authentication to connect to an HP switch.</p> <p>Scenario: AirWave now displays correct IP addresses these clients.</p>
DE30499	<p>Symptom: Devices displayed in the Most Transmit Power section of the RF Health report were not ranked correctly, and devices with more transmit power changes appeared farther down the list than devices with fewer changes.</p> <p>Scenario: The Most Transmit Power changes section of the RF Health report correctly ranks devices according to the number of power changes.</p>

Table 3: *Issues Resolved in AirWave 8.2.7.1 (Continued)*

ID	Description
DE30430	<p>Symptom: For Aruba and MAS switches, you can't see the switch usage graph on the switch monitoring page.</p> <p>Scenario: This issue no longer occurs when you navigate to the switch monitoring page from a folder or group monitoring page.</p>
DE30173	<p>Symptom: Individual layers of a .dwg file appeared in unexpected locations on a VisualRF floor plan.</p> <p>Scenario: When a user uploads individual layers of a .dwg floor plan into VisualRF, the walls in each layer appear in the expected location.</p>
DE30097	<p>Symptom: On the AMP Setup page, entering 0 for a data retention period doesn't disable the option.</p> <p>Scenario: We removed the description "zero disables" from the option labels. If you enter 0, AirWave keeps the data indefinitely. If you want to keep the data for a minimum length of time, enter 1.</p> <p>NOTE: After an upgrade to AirWave 8.2.7.1, AirWave resets the following AMP settings from 0 to default values:</p> <ul style="list-style-type: none"> • Client Association Relevance Factor • Rogue AP Discovery Events • Client Association and VPN Session History • Delete Rogues not detected for

Table 4: *Issues Resolved in AirWave 8.2.7.1*

ID	Description
DE31774	<p>Symptom: The PAPI handler consumes most CPU time.</p> <p>Scenario: CPU utilization no longer nears 100%.</p>

Table 5: *Issues Resolved in AirWave 8.2.7*

ID	Description
DE31329 DE31422	<p>Symptom: After upgrading from AirWave 8.2.3 to 8.2.6.1, the configuration status of a managed Instant AP showed a mismatch. Similarly, the configuration status showed a mismatch after a successful configuration push.</p> <p>Scenario: AirWave now handles the RF profile correctly for Instant APs running versions of Aruba Instant earlier than 8.3.0.0.</p>
DE31273	<p>Symptom: When pushing a configuration using the Instant GUI Config (IGC), AirWave adds double quotation marks to the RADIUS server password.</p> <p>Scenario: Now AirWave adds double quotation marks only for passwords with a space.</p>
DE31264	<p>Symptom: When doing a bulk template update to manage firmware versions on device groups, AirWave creates an extra VC template, causing configuration push errors.</p> <p>Scenario: AirWave no longer allows mixed firmware versions on a template. If you have multiple groups with different firmware versions to update, you must manually update each version with a template.</p>

Table 5: *Issues Resolved in AirWave 8.2.7 (Continued)*

ID	Description
DE31243	<p>Symptom: After generating the AppRF report, older data was missing although AirWave is configured to retain up to 30 GB of AppRF data for 30 days.</p> <p>Scenario: We changed the way AirWave handles errors during nightly maintenance so that data that is present remains usable.</p>
DE31241 DE31371	<p>Symptom: After changing the user name and password for a device, or the SNMP community string, with a configuration template, AirWave couldn't communicate with the device.</p> <p>Scenario: AirWave now updates the configuration status when changes are made, or before pushing the configuration change to the device when the device becomes reachable.</p>
DE31216	<p>Symptom: After changing ARM power range settings, the configuration push from the IGC resulted in a mismatch.</p> <p>Scenario: AirWave now handles the RF profile correctly for Instant APs running versions of Aruba Instant earlier than 8.3.0.0.</p>
DE31214	<p>Symptom: Report output included client information from restricted folders.</p> <p>Scenario: We fixed the issue with folder restrictions and created a new client report.</p>
DE31207	<p>Symptom: Couldn't modify the wired network configuration from the Instant Config page.</p> <p>Scenario: When you create a wired network, configuration changes made on the Instant Config page for the VC get pushed normally.</p>
DE31195	<p>Symptom: You couldn't contain rogue APs on controller running ArubaOS 8.2.x.x.</p> <p>Scenario: Underlying issues with ArubaOS have been fixed, and, when enabled, rogue containment works properly now.</p>
DE31190	<p>Symptom: In AppRF, the destination showed "dnsdel," but, when you open the WebUI for the controller, "dnsdel" isn't listed in the Destination tab.</p> <p>Scenario: This issue occurred when a DNS entry is deleted and the controller sends "dnsdel" to AirWave. Now, AirWave doesn't display this as the destination.</p>
DE31189 DE30073	<p>Symptom: When you uploaded more than one floor plan, VisualRF became unavailable and restarted on the second upload.</p> <p>Scenario: We fixed the memory issue which occurred when DWG files are more than 500 KB.</p>
DE31181 DE30811	<p>Symptom: The VC or IAP configuration status was stuck in "Verifying" until you restarted the daemons.</p> <p>Scenario: We fixed the memory allocation issue.</p>
DE31147	<p>Symptom: AirWave showed a configuration mismatch when the IGC saved the IPv6 address without stripping the leading zeroes.</p> <p>Scenario: The IGC now strips the zeroes and saves the configuration.</p>
DE31143	<p>Symptom: In VisualRF, the floor plan is blurred a day after being uploaded.</p> <p>Scenario: We fixed the issue that occurred when 2 files (JPEG and SVG) were created in one floor plan.</p>

Table 5: *Issues Resolved in AirWave 8.2.7 (Continued)*

ID	Description
DE31134	<p>Symptom: The SNMP trap "wlsxLicensePlatformMismatch" is seen in the AirWave WebUI although AirWave isn't configured as a trap receiver for the Instant AP.</p> <p>Scenario: AirWave now handles the RF profile correctly for Instant APs running versions of Aruba Instant earlier than 8.3.0.0.</p>
DE31132	<p>Symptom: IGC didn't allow you to configure more than 1 DSCP value, or to type more than 2 digits for DSCP mapping.</p> <p>Scenario: AirWave now supports assigning multiple DSCP values for the same WMM standard.</p>
DE31102	<p>Symptom: VisualRF doesn't retain the aspect ratio of a DWF image and shows dark triangles on the floor plan.</p> <p>Scenario: We fixed the issues which caused the aspect ratio and triangle errors on the floor plan.</p>
DE31092	<p>Symptom: There is no SNMPv3 protocol privacy AES option in the IGC.</p> <p>Scenario: The IGC has been updated. When you create an SNMPv3 user in the IGC, go to System > Monitoring and select DES or AES from the privacy protocol menu.</p>
DE31091	<p>Symptom: When you select Enable Instant GUI Config on the Groups > Basic page, AirWave doesn't push the DNS IP address for a VC although the IP address is set on the configuration template.</p> <p>Scenario: This issue has been fixed and the IGC pushes the IP address properly.</p>
DE31071	<p>Symptom: After upgrading the AirWave 8.2.6, the channel utilization and performance graphs didn't continuously update.</p> <p>Scenario: We changed the way AirWave handles negative interference which caused this issue.</p>
DE30994	<p>Symptom: AirWave failed to push or verify configurations for Aruba switches.</p> <p>Scenario: We fixed the database error which caused this issue.</p>
DE30989	<p>Symptom: The Reboot selected devices menu option from the Modify Devices tool didn't work for ArubaOS 8.0.x.x managed devices.</p> <p>Scenario: We added support for ArubaOS 8.0.x.x managed devices, so that you can reboot the selected devices.</p>
DE30964	<p>Symptom: Clarity Live information on the Home page doesn't display all the AP or client details.</p> <p>Scenario: This issue no longer occurs when AirWave doesn't know all the IP addresses configured on the controller.</p>
DE30910	<p>Symptom: You couldn't configure a banner for an internal captive portal using characters like ð, ä, ö, and ü.</p> <p>Scenario: We have added support for non-ASCII characters.</p>
DE30831	<p>Symptom: Airwave doing HTTP logins to Aruba Controllers periodically.</p> <p>Scenario: We fixed the issue that caused AirWave to periodically do HTTP log ins to the controller.</p>

Table 5: Issues Resolved in AirWave 8.2.7 (Continued)

ID	Description
DE30802	<p>Symptom: Usage graph (RRD) showed "No data available" in the monitoring page for the controller.</p> <p>Scenario: We fixed the issue that caused AirWave to drop the BSSID tunnel data.</p>
DE30644	<p>Symptom:: IP address for the wired clients(Mac/Dot1x) connected to the switch are not seen on the AMP.</p> <p>Scenario:: We fixed the issue and the IP addresses show properly.</p>
DE30609	<p>Symptom: AMP didn't show VPN users and sessions although the "Prefer AMON vs SNMP Polling" option is enabled.</p> <p>Scenario: As a workaround to an underlying ArubaOS issue, we added a flag in AMP Setup > General page called "Prefer SNMP Polling for VPN Clients". If enabled, AirWave will continue to retrieve VPN data over SNMP even if "Prefer AMON vs SNMP Polling" is enabled.</p>
DE30582	<p>Symptom: In VisualRF, IAPs organized in groups and folders under deployed APs didn't appear in the deployed AP list.</p> <p>Scenario: This issue occurred because AirWave didn't have folder information for the IAP when sending update messages to VisualRF. Now every update message has folder and group IDs.</p>
DE30551	<p>Symptom: The <i>AirWave 8.2.6.1 Supported Devices Guide</i> didn't list the AP 303HR in Table 1, "ArubaOS Device Support".</p> <p>Scenario: This information has been added to the <i>AirWave 8.2.7 Supported Devices Guide</i>.</p>
DE30530	<p>Symptom: Upgrading from AirWave 8.0.11.2 to 8.2.5.1 failed.</p> <p>Scenario: This issue has been fixed, and now you can upgrade to AirWave 8.2.5.1 from any 8.0 release.</p>
DE30510 DE28933 DE30282	<p>Symptom: Font resolution in DWG files differs after upgrading to AirWave 8.2.3.1 or later.</p> <p>Scenario: This VisualRF issue has been previously resolved in AirWave 8.2.5.1.</p>
DE30481	<p>Symptom: The hostname for an IAP changed to a MAC address after rebooting the device in the IGC.</p> <p>Scenario: This issue has been fixed, and the hostname displays correctly.</p>
DE30446	<p>Symptom: Unable to audit the device when password configuration control is enabled for the Aruba 2930F switch.</p> <p>Scenario: This issue has been fixed, and AirWave can audit the switch.</p>
DE30069	<p>Symptom: Inventory report showed inconsistent data.</p> <p>Scenario: We fixed the issue caused by AirWave looking for the Aruba thin AP's instead of the hardcoded vendor name.</p>
DE29304	<p>Symptom: Error message seen in AirWave boot log after every reboot.</p> <p>Scenario: We fixed the Perl library path that generated the boot error message.</p>
DE29257	<p>Symptom: AirWave automatically logged out after you logged in using Internet Explorer 11.</p> <p>Scenario: We fixed the token mismatch error that caused this issue AirWave 8.2.2.x, 8.2.3.x, and 8.2.4.</p> <p>NOTE: After upgrading to AirWave 8.2.7, delete the cookies and clear the cache in Internet Explorer 11.</p>

Table 5: *Issues Resolved in AirWave 8.2.7 (Continued)*

ID	Description
DE28643	<p>Symptom: WebUI crashes while navigating to Report> Definition page when the timezone on the AirWave server is set to the time in São Paolo, Brazil.</p> <p>Scenario: We fixed this issue by updating the time zone library.</p>
DE28542	<p>Symptom: Incorrect timestamp shown in the client diagnostics graph.</p> <p>Scenario: The graph will use UTC time zone, depending on the user's time zone settings.</p>
DE28432	<p>Symptom: Network usage reports show graphs but also say “No Data to Report” at the bottom of the page, so AirWave doesn't send the reports by email as it should.</p> <p>Scenario: This issue has been fixed in this release.</p>
DE28297	<p>Symptom: AirWave cached 100 GB of work_queue_clobber data, and disk space filled up every 2 days even after clearing all the logs and older backups.</p> <p>Scenario: We fixed this issue by making some changes to the AppRF tables.</p>
DE28201	<p>Symptom: Channel overlay option doesn't show the "show overlapping areas" option.</p> <p>Scenario: The overlay option doesn't work with 80 Mhz channel width and Channel 52 to 64, or when you select all channels. You can workaround this issue by upgrading to AirWave 8.2.6.1.</p>
DE27631	<p>Symptom: Sometimes auto-match times out in the WebUI.</p> <p>Scenario: Now AirWave shows a UI notification when restore and auto-match are in progress.</p>

Table 6: *Issues Resolved in AirWave 8.2.6.1*

ID	Description
DE30997	<p>Symptom: An IAP could be managed locally and through the IGC at the same time.</p> <p>Scenario: This issue has been fixed, and the IGC displays a mismatch if local changes are made.</p>
DE30982	<p>Symptom: IAPs and factory-set IAPs shipped with AOS 8.3.0.0 or later don't contain the country codes for US and the US territories (AS, FM, GU, MH, MP, PR, US, and VI).</p> <p>Scenario: To set these country codes on IAPs running AOS 8.3.0.0 or later:</p> <ol style="list-style-type: none"> 1. Enable IGC > AirWave > AirWave Setting > Allow Configuration of Country Code. 2. Set the country codes on IGC > System > General > Country Code.
DE30903	<p>Symptom: The AirWave SNMP MIB file wasn't current.</p> <p>Scenario: We updated the SNMPv1 MIBs to continue supporting SNMPv1 traps.</p>
DE30821	<p>Symptom: During a vulnerability scan, we found that AirWave 8.2.6.1 supported weak algorithms.</p> <p>Scenario: AirWave now requires strong ciphers for the SSH daemon (sshd) and not for the outbound SSH traffic.</p>

Table 6: *Issues Resolved in AirWave 8.2.6.1 (Continued)*

ID	Description
DE30797	<p>Symptom: After upgrading the firmware on the controller to AOS 8.2.0.2, geographic settings used with Google Maps were missing from the APs/Devices > Manage page.</p> <p>Scenario: We added Latitude, Longitude, and Altitude options to the Settings section of the APs/Devices > Manage page.</p> <p>To enter the information:</p> <ol style="list-style-type: none"> 1. Navigate to APs/Devices > List, then right click the device and select Manage from the shortcut menu to access the Management page. 2. Enter your coordinates. 3. Click Save and Apply.
DE30749 DE30293	<p>Symptom: STP blocking port information isn't available for aggregated ports.</p> <p>Scenario: Topology provides the aggregated link in a spanning tree status.</p>
DE30724	<p>Symptom: Unable to edit and save external captive portal settings for IAP from the Instant GUI Config if you used a space in the new profile name.</p> <p>Scenario: AirWave now allows spaces in external captive portal profile names.</p>
DE30707	<p>Symptom: The network edge was missing in the topology map after a web socket update.</p> <p>Scenario: Topology gets the latest network status and no longer shows a down device without a link, appearing as standalone devices in the topology map.</p>
DE30703	<p>Symptom: Time zone changes weren't updated in the /etc/sysconfig/clock file.</p> <p>Scenario: Now, when AirWave updates the local time zone (for example, during a software upgrade), it updates the time zone in the /etc/sysconfig/clock file.</p>
DE30673	<p>Symptom: RF health report shows PHY and MAC errors as greater than 100%.</p> <p>Scenario: We've changed the way AirWave interprets PHY and MAC errors sent and received on the channel.</p>
DE30666	<p>Symptom: Unable to delete an SSID profile from a VC in a group of VCs.</p> <p>Scenario: You can override the SSID profile to hide or disable the VC.</p>
DE30653 DE30557	<p>Symptom: AirWave shows two 5 GHz interfaces.</p> <p>Scenario: AirWave now supports the Cisco 2802 AP.</p>
DE30646 DE30512	<p>Symptom: Topology page doesn't load the topology map when you log into the AirWave WebUI with a host name.</p> <p>Scenario: We fixed the underlying issue of multiple cookies that prevented AirWave from loading the topology map.</p>
DE35816	<p>Symptom: Error message "Failed to enable 'Prefer AMPN vs SNMP Polling' since its Telnet/SSH credentials are empty" appear in Event logs.</p> <p>Scenario: AirWave doesn't check for empty ssh credentials when the use_amon_vs_snmp option is disabled.</p>

Table 6: *Issues Resolved in AirWave 8.2.6.1 (Continued)*

ID	Description
DE30422	Symptom: Unable to get most of the report summary while using API by latest_report.xml. Scenario: We added summary XML to the client session report in the latest_report.xml.
DE30386	Symptom: Automated backup transfer didn't work when the external server is a Windows server. Scenario: We fixed the automated backup transfer to work with Solarwinds SFTP Server.
DE30362	Symptom: Graphs behaved strangely when you selected Nov 5, which is the change over date to Daylight Savings Time (DST). Scenario: We prevented AirWave from automatically adjusting time for change to DST.
DE30308	Symptom: In AirWave 8.2.5.1, when you selected the "Client Association" or "Client Neighbors" relation line options, VisualRF didn't display them in your floor plan view. Scenario: We fixed the way VisualRF receives and processes neighbor RSSI values from an AMON message. Now you can see these relation lines when you customize your floor plan with these options.
DE30262	Symptom: After replacing hardware on an AP, AirWave retained the old controller ID. Scenario: AirWave now updates the controller ID for the new hardware.
DE28190	Symptom: Graph lines were horizontal, and the Service Watcher log showed that processes reached memory limits and tried to restart. Scenario: When the host name for an AirWave server can't be resolved in DNS, AirWave will restart the RabbitMQ server.

Table 7: *Issues Resolved in AirWave 8.2.6*

ID	Description
DE30706	Symptom: Full config push didn't take the IPv6 address of the AirWave server. Scenario: AirWave supports only full config, config jobs, and ZTP for IPv6 addresses.
DE30621	Symptom: Unable to add planned APs to floor plan when you set the service level to signal. Scenario: Now when you click Add APs to Floor Plan , VisualRF adds the APs to the floor plan.
DE30590	Symptom: Unable to configure captive portal to use an external CP using authenticated text in Instant config page. Scenario: You can successfully create an SSID from the Instant GUI Config without an authentication server.
DE30542	Symptom: The AirWave 8.2.5.1 release notes stated incorrectly that you could upgrade directly from AirWave 8.0 to 8.2.5.1. Scenario: The following correction was made to the AirWave 8.2.5.1 Release Notes: You can upgrade directly to AirWave 8.2.5.1 from the following software versions: AirWave 8.2.2, 8.2.2.1, 8.2.3, 8.2.3.1, 8.2.4, 8.2.4.1, and 8.2.5. If you are running earlier versions of AirWave, upgrade to AirWave 8.2.2 before upgrading to 8.2.5.1.

Table 7: Issues Resolved in AirWave 8.2.6 (Continued)

ID	Description
DE30540	<p>Symptom: The User Role field is blank for a Dot1x user connected to the switch although the user role is sent from the switch to the AirWave server.</p> <p>Scenario: Now the role name for the Dot1x user displays in the Connected Devices table for the switch.</p>
DE30537	<p>Symptom: The header column doesn't move when you scroll through the Connected Clients section on the APs/Devices > Monitor page for a switch.</p> <p>Scenario: This issue has been fixed and is no longer seen in Chrome, IE, and Firefox browsers.</p>
DE30531 DE30523	<p>Symptom: Channel utilization, goodput, and radio channel display "no data available" on the Radio Statistics page for the AP after upgrading the 7220 controller from AOS 8.1.0.3 to 8.2.0.1.</p> <p>Scenario: We fixed the way AirWave calculates channel utilizations and can get the radio information now.</p>
DE30514 DE30351	<p>Symptom: Unable to see the application-based access rules on Instant GUI of the AirWave server, or push any configuration to the VC.</p> <p>Scenario: An issue with the Instant GUI Config CLI that prevented access rules mapped to roles from displaying properly or config pushes to work has been fixed.</p>
DE30509	<p>Symptom: Unable to see an AP when you go to the Instant GUI Config on an AirWave server running AirWave 8.2.5.1.</p> <p>Scenario: APs display properly in the Instant GUI Config page.</p>
DE30504	<p>Symptom: Clarity Live shows only DNS even though it receives data.</p> <p>Scenario: We fixed this issue and see all information displayed properly in Clarity Live.</p>
DE30495	<p>Symptom: Master console shows incorrect counts for unique APs in summary report for network-wide client sessions.</p> <p>Scenario: Master Console shows the unique mac address aggregated from different AirWave servers.</p>
DE30465 DE30434	<p>Symptom: AirWave continuously attempts to connect via SSH to the VSF switch regardless of configuration status, causing high CPU utilization.</p> <p>Scenario: This issue has been resolved.</p>
DE30452	<p>Symptom: Mismatches for transmit power due to sorting on AirWave 8.2.5.1.</p> <p>Scenario: This configuration mismatch issue has been resolved.</p>
DE30418	<p>Symptom: Flat Graph lines due to FastMmap cache size issue (topic: association_tables).</p> <p>Scenario: This graphing issue has been resolved.</p>
DE30410	<p>Symptom: AirWave 8.2.5 incorrectly shows overrides when there are none.</p> <p>Scenario: This issue has been fixed, and AirWave doesn't show configuration overrides when none are present.</p>
DE30392	<p>Symptom: BSSID API doesn't work properly for Cisco APs after upgrading to AirWave 8.2.5.</p> <p>Scenario: AirWave correctly shows radio data from the BSSID API for Cisco devices now.</p>

Table 7: Issues Resolved in AirWave 8.2.6 (Continued)

ID	Description
DE30390	Symptom: Failover upgrade process from AirWave 8.2.2 to 8.2.5 hangs. Scenario: The failover upgrade process continues without stopping indefinitely at a configuration check.
DE30350 DE29633	Symptom: After changing the time zone to Australian Eastern Standard Time (AEST) from the CLI, the time zone name is displayed incorrectly in the WebUI as Eastern Standard Time (EST). Scenario: The time zone name has been corrected to display as AEST in the WebUI.
DE30503 DE30343	Symptom: Client connected list doesn't show in AirWave for IAP 105 and IAP 205. Scenario: We fixed this issue by encoding the ALC payload, so client statistics populate correctly in AirWave.
DE30311	Symptom: After upgrading to AirWave 8.2.5, the same computer model icon is used for all device models in VisualRF. Scenario: The issue has been fixed and you can see correct icons for different device models in VisualRF.
DE30281	Symptom: Ambiguity in the license report in CSV format. Scenario: We've fixed the formatting of the "Total License Used" and "Campus License Used" columns so that you can read both the number and percentage of licenses in the CSV file.
DE30252	Symptom: Bulk edit configuration is not updating. Scenario: We removed the save option when you do a bulk edit in the Instant GUI Config, so your changes apply automatically.
DE30249	Symptom: The Argentina Time (ARST) in the WebUI is an hour ahead of the time shown on the hardware clock of the AirWave server. Scenario: We fixed this issue by updating the time zone library.
DE30242	Symptom: Unable to change the "Authentication" option from "Authentication server" to "Internal," or from "Authentication Server w/fallback to Internal" to "Internal" using the Instant GUI Config. Scenario: Changing the configuration setting works properly now.
DE30213	Symptom: The campus background disappears if you open VisualRF on a mobile device. Scenario: We fixed the issue that caused the campus background to disappear.
DE30172	Symptom: AirWave doesn't update the switch interface description after you add the switch. Scenario: The switch description displays correctly in the Physical Interfaces table now.
DE30163	Symptom: Nginx doesn't start up if you change the host name from the CLI. Scenario: The underlying issue with changes to the /etc/hosts file has been fixed.
DE30088	Symptom: Number of concurrent max clients is incorrect in the device summary report. Scenario: The number of concurrent max clients connected displays correctly now.

Table 7: *Issues Resolved in AirWave 8.2.6 (Continued)*

ID	Description
DE30060	<p>Symptom: AirWave unable to archive Cisco WLC device configuration.</p> <p>Scenario: AirWave archives the configuration only when there is a change in desired configuration and during the attempt to push the configuration to the device.</p>
DE29956	<p>Symptom: Multiple alerts issued for the same rogue.</p> <p>Scenario: We've fixed the condition which would cause AirWave to generate multiple alerts in email and NMS notifications for the same detected rogue.</p>
DE28444	<p>Symptom: The RAP wired clients' usage isn't seen in usage reports.</p> <p>Scenario: The issue with reports has been fixed, and RAPs with wired and wireless clients connected to them show client usage properly on the monitoring page and in the clients' detail pages.</p>
DE28257	<p>Symptom: AirWave doesn't generate VisualRF down alerts.</p> <p>Scenario: The VisualRF down alert is now triggered when the VisualRF process shuts down.</p>

This chapter identifies the known issues in AirWave 8.2.8, 8.2.7.1, 8.2.7, 8.2.6.1 and 8.2.6.

Table 8: *Known Issues in AirWave 8.2.8*

ID	Description
DE32488	<p>Symptom: ZTP fails for switches with Firmware versions 16.01 and 16.02.</p> <p>Scenario: Switch ZTP logs show SSL handshake failure because AirWave uses TLS 1.2, but older firmware versions on switches use TLS 1.1 and lower.</p> <p>Workaround: Go to AMP Setup > Additional AMP Services, then select "No" for the "Disable TLS 1.0 and 1.1" option and restart the AMP services.</p>
DE32392	<p>Symptom: VisualRF stops running when you click Add Deployed Device.</p> <p>Scenario: In the map view, Add Deployed Device gets stuck in loading state.</p> <p>Workaround: Follow these steps to clear the caches and restart VisualRF:</p> <ol style="list-style-type: none"> 1. Contact Technical Support to help clear the Redis cache. 2. From the CLI, select 11 to open the Enter Commands menu. 3. At the prompt, enter remove_visualrf_cache. 4. From the WebUI, go to VisualRF > Setup, and, under the Server Settings, click No for the "Enable VisualRF Engine" option and click Save to stop VisualRF. 5. Change the setting back to Yes and click Save to restart VisualRF.
DE32376	<p>Symptom: lms_ip not proper in the AMON packet for IPv6 .</p> <p>Scenario: The IPv6 addresses of the local mobility switches (lms_ip)) are incorrect in the AMON packet for different message types.</p> <p>Workaround: There is no workaround.</p>
DE32375	<p>Symptom: IPv6 returning wrong value in MD for master IP address.</p> <p>Scenario: An underlying issue with AOS causes Pv6 to return wrong value in MD for master IP address on the monitoring page.</p> <p>Workaround : There is no workaround.</p>
DE32356	<p>Symptom: Maximum and average incoming values are same for daily network usage reports.</p> <p>Scenario: This issue occurs with custom report options, such as Usage, Client Count, and Total Usage</p> <p>Workaround: There is no workaround.</p>
DE32449 DE32444	<p>Symptom: The WAN tunnel list on the WAN Monitoring page is empty.</p> <p>Scenario: WAN tunnels will show only if you add both branch office controller (BOC) and VPN controller (VPNC) in AirWave.</p> <p>Workaround: In order to use this feature, ensure that you have added the BOC and VPNC on the Device Setup > Add page.</p>

Table 8: Known Issues in AirWave 8.2.8 (Continued)

ID	Description
DE32439	<p>Symptom: Localization isn't available for new switch monitoring and snippet pages.</p> <p>Scenario: Buttons, menus, and tabs display in English.</p> <p>Workaround: Use a translation tool to translate the page.</p>
DE32438	<p>Symptom: None of the charts on the WAN Monitoring page displays when the device is down.</p> <p>Scenario: When the device is down, AirWave should display historical data.</p> <p>Workaround: There is no workaround.</p>
DE32436	<p>Symptom: APs are not placed during planning when using the coverage calculator in the region.</p> <p>Scenario: VisualRF displays the error "com.airwave.model.AccessPointRadio error getting sensor: java.lang.NullPointerException" when this issue occurs.</p> <p>Workaround: There is no workaround.</p>
DE32375	<p>Symptom: IPv6 returning wrong value in MD for masterip address on the monitoring page.</p> <p>Scenario: An underlying issue in AOS causes this issue in AirWave.</p> <p>Workaround: There is no workaround.</p>
DE32355	<p>Symptom: Restore menu and Download menu is broken by internal digest files.</p> <p>Scenario: When you select a file from the Restore menu and Download menu in the CLI, the wrong file is processed.</p> <p>Workaround: There is no workaround.</p>
DE32345	<p>Symptom: In the AMP CLI, the download and delete options only show tar.gz and zip files and not other files that could have been uploaded.</p> <p>Scenario: AirWave filters files and displays only those formatted as tar.gz or .zip files.</p> <p>Workaround: Using the AMP CLI, do one of the following:</p> <ul style="list-style-type: none"> • Select 8 to open the Advanced menu, then select 7 to add the SFTP user who can manage the files in the directory using an SFTP client. • Select 11 to open the Enter Commands menu. At the prompt, enter rm to remove files or cleanup to delete old files, including logs and backups. Enter ? for help and q to return the CLI menu.
DE32286	<p>Symptom: VisualRF doesn't remove the radio object in redis after removing the client object.</p> <p>Scenario: When this issue occurs, AirWave consumes memory experiences performance degradation.</p> <p>Workaround: Remove the VisualRF bootstrap cache and restart VisualRF. You can do this from the CLI by selecting 11 to open the Enter Commands menu. At the prompt, enter remove_visualrf_cache.</p>
DE32239	<p>Symptom: Dynamic segmentation clients missing in AirWave for controllers and switches configured with IPV6 tunnels.</p> <p>Scenario: Dynamic segmentation clients and tunnels are not showing in AirWave for controllers and switches configured with IPV6 tunnels, when AirWave is managing the devices using IPV4.</p> <p>Workaround: Manage devices with the same protocol(IPV6/IPv4) if dynamic segmentation is configured in network.</p>

Table 8: Known Issues in AirWave 8.2.8 (Continued)

ID	Description
DE32149	<p>Symptom: IPv6 not working correctly if prefix length is entered on the gateway.</p> <p>Scenario: An ipv6 ip reachability issue generates an error similar to: WARN : [ipv6_add_route] Unknown error <- Error seen with IPV6_DEFAULTGW having prefix length mentioned.</p> <p>Workaround: Disable the IPv6 firewall using the <code>service iptables stop</code> command and then restart the network service.</p>

Table 9: Known Issues in AirWave 8.2.7.1

ID	Description
DE32069	<p>Symptom: In VisualRF, for some floors, some of the clients are shown outside of the floor plan.</p> <p>Scenario: If you click on the floor plan, you can see the client appears outside of the floor plan in the top left corner.</p> <p>Workaround: There is no workaround.</p>
DE32048	<p>Symptom: In the Client Diagnostics page, the client is shown outside of the floor plan.</p> <p>Scenario: If you click on the floor plan, you can see the client appears outside of the floor plan in the top left corner.</p> <p>Workaround: There is no workaround.</p>
DE32042	<p>Symptom: The AMP Setup > Network page shows information for eth1 although the update changes take place against eth0.</p> <p>Scenario: When you configure eth0 and eth1, changes to the IP address for eth1 are made against the wrong interface.</p> <p>Workaround: There is no workaround.</p>
DE32037	<p>Symptom: In Visual RF, if you want to drag and drop devices into the floor plan, the folder list is empty and then group list becomes empty when you switch views again.</p> <p>Scenario: This issue occurs when you select the "By Folder" view.</p> <p>Workaround: You can work around this issue by using the "By Group" view:</p> <ol style="list-style-type: none"> 6. Refresh your browser. VisualRF returns to the floor plan view. 7. Click Edit, then click Add Deployed Devices. The devices in the group will display properly.
DE32036	<p>Symptom: The floor plan image doesn't display in the Rogue Detail page as expected.</p> <p>Scenario: When you click on the suspected rogue, the Detail page shows a broken image in place of the floor plan.</p> <p>Workaround: There is no workaround.</p>
DE32026	<p>Symptom: The floor plan image doesn't display in the Client Detail page as expected.</p> <p>Scenario: When you drill down to the Client Details page, the floor plan shows a broken image in place of the floor plan.</p> <p>Workaround: There is no workaround.</p>

Table 9: Known Issues in AirWave 8.2.7.1 (Continued)

ID	Description
DE32010	<p>Symptom: If no hostname was provided for the AMP server, the AMP Setup > Network page will not respond if hostname returns "localhost.localdomain".</p> <p>Scenario: This issue occurs when attempting to save the form with the hostname set to "localhost.localdomain".</p> <p>Workaround: From the AMP CLI menu, select 8 to open the Advanced menu, then select 4 to set the hostname of the AMP server.</p> <p>NOTE: Changing the hostname causes the AMP services to restart.</p>
DE31995	<p>Symptom: The usage graph on the monitoring page for a Mobility Master controller doesn't show the correct data.</p> <p>Scenario: If you look at the usage graph on the monitoring page for the AP, the data should be the same for clients connected to the AP with the same SSID.</p> <p>Workaround: There is no workaround.</p>
DE31946/ DE31998	<p>Symptom: After importing a backup, VisualRF doesn't display all APs on the floor plan.</p> <p>Scenario: When the AP model and AP vendor settings aren't configured, heat maps don't display because VisualRF can't get the radio information correctly.</p> <p>Workaround: For VisualRF to show the APs, configure the AP model and vendor on import.</p>
DE31939	<p>Symptom: Dynamic segmentation clients not showing up in AirWave with SNMP enabled with AOS 8.3.0.3.</p> <p>Scenario: Dynamic segmentation clients will not showup in AirWave with SNMP enabled on AOS Versions earlier than 8.4.0.0</p> <p>Workaround: There is no workaround.</p>
DE31938	<p>Symptom: Dynamic segmentation clients don't appear in AirWave although AMON is enabled.</p> <p>Scenario: Dynamic segmentation clients will not appear in AirWave with AMON enabled when the AOS version is less than 8.4.0.0.</p> <p>Workaround: There is no workaround.</p>
DE31904	<p>Symptom: Scheduled firmware upgrade runs immediately instead of at the scheduled time.</p> <p>Scenario: The issue occurs when the upgrade is scheduled for "tonight at HH:MM".</p> <p>Workaround: When scheduling the upgrade, use the time format "today at HH:MM".</p>
DE31801	<p>Symptom: AirWave doesn't provide interface details for the HPE 5930 Switch Series.</p> <p>Scenario: There are no physical or virtual interfaces on the Interfaces page and, subsequently prevents the topology map from showing the device.</p> <p>Workaround: There is no workaround.</p>
DE31800	<p>Symptom: AirWave doesn't display the usage graph for the HPE 5930 Switch Series as expected.</p> <p>Scenario: AirWave doesn't display any usage statistics on the monitoring page for the switch.</p> <p>Workaround: There is no workaround.</p>

Table 9: Known Issues in AirWave 8.2.7.1 (Continued)

ID	Description
DE31481	<p>Symptom: The stack icon will not display properly in the Devices list when you navigate to Devices from VisualRF using the navigation sidebar.</p> <p>Scenario: This issue occurs when you go to the VisualRF page and then navigate to the Devices tab, which lists discovered stack devices.</p> <p>Workaround: Refresh the browser to display the stack icon.</p>
DE31355	<p>Symptom: AirWave receives SNMPv3 traps but doesn't update them.</p> <p>Scenario: For SNMPv3, AirWave supports SNMPv3 informs only; SNMPv3 traps are not supported.</p> <p>Workaround: There is no workaround.</p>
DE30919	<p>Symptom: Radio graph shows PHY error is larger than total packets in the AirWave server.</p> <p>Scenario: Technically, the graph shows correct stats. It's expected that TotalPackets can be less than PhyErrors since total packets accounts for per-AP traffic, while Phy/Mac errors accounts for all errors detected in RF neighborhood across all APs.</p> <p>Workaround: N/A</p>
DE29624	<p>Symptom: Brocade switch is not showing on Client > Diagnostics page.</p> <p>Scenario: This issue has been reported with AirWave 8.2.3.1.</p> <p>Workaround: There is no workaround.</p>
DE29561	<p>Symptom: On the Interface Summary page for controllers, the Mode displays "Access" instead of "Trunk".</p> <p>Scenario: This issue occurs when you change the interface configuration from access to trunk port on a 7240 controller because there is no OID support in AOS.</p> <p>Workaround: There is no workaround.</p>
DE27568	<p>Symptom: AirWave doesn't update the upstream device information when using SNMPv3.</p> <p>Scenario: This issue occurs when polling a Cisco switch by SNMPv3.</p> <p>Workaround: Change the SNMP polling option to SNMPv2.</p>
DE25666	<p>Symptom: Users with the role "sm sponsor" and "sm client" could previously access VisualRF directly from several URLs.</p> <p>Scenario: HTTPS access to VisualRF is no longer authorized for users with roles "sm sponsor" and "sm client".</p> <p>Workaround: There is no workaround.</p>

Table 10: *Known Issues in AirWave 8.2.7*


ID	Description
DE31783	<p>Symptom: If you import CAD files, VisualRF subsequently pixelates or blurs the map and crashes when you try to import DWG files.</p> <p>Scenario: This issue occurs with files saved with AutoCAD 2019.</p> <p>Workaround: Export the CAD file to an older version format, such as AutoCAD 2010, and try to import the floor plan again.</p>
DE31554	<p>Symptom: Config Job status is failed for the command that has an informative response from the device although the config command pushes successfully to the device.</p> <p>Scenario: This issue occurs when you go to the Device Config page, select Config Job and click Add config Job.</p> <p>Workaround: There is no workaround.</p>
DE31544	<p>Symptom: APs are incorrectly grouped on a floor plan if you replace a floor plan in PNG format with a floor plan in DWG format.</p> <p>Scenario: If you import a floor plan in DWG format, by replacing a floor plan in PNG format, AirWave can incorrectly place the APs in the newer floor plan on top of each other in the top left corner.</p> <p>Workaround: If the floor plan isn't unlocked, click , and then drag the APs back to the correct locations on the floor plan.</p>
DE31486	<p>Symptom: AirWave fails to show neighbor details of ArubaOS-CX attributes in the neighbor table on the monitoring page for the ArubaOS-CX device.</p> <p>Scenario: AirWave lists neighbors but doesn't provide the IP address or firmware version of neighbor as it does for the ArubaOS-Switch.</p> <p>Workaround: There is no workaround.</p>
DE31468	<p>Symptom: The switch monitoring page displays the old monitor page after you add the device to AirWave.</p> <p>Scenario: AirWave waits for the auto SNMP polling to finish before it displays the new monitoring page.</p> <p>Workaround: Wait for the "Poll now" operation to complete.</p>
DE31180	<p>Symptom: "show ipv6" command doesn't work for ArubaOS-CX switches.</p> <p>Scenario: The result displays "Command incomplete".</p> <p>Workaround: There is no workaround.</p>
DE31125	<p>Symptom: Floor plan is blank after replacing the background in VisualRF.</p> <p>Scenario: This issue occurs when you select the "Replace Background" option for a floor plan in DWG format. After uploading the file, the floor plan is black.</p> <p>Workaround: There is no workaround.</p>
DE31074	<p>Symptom: Some menus in VisualRF haven't been localized.</p> <p>Scenario: When you change the language of the buttons, menus, and tabs to Spanish and open a floor plan in VisualRF, you'll see that "Replace Background" and "Add Planned Devices" display in English.</p> <p>Workaround: There is no workaround.</p>

Table 10: Known Issues in AirWave 8.2.7 (Continued)

ID	Description
DE31029	<p>Symptom: IP address isn't displayed in the Virtual Interfaces table for the VLANs configured on ArubaOS-CX switch.</p> <p>Scenario: This issue occurs although the IP address is configured on default VLAN.</p> <p>Workaround: There is no workaround.</p>
DE30984	<p>Symptom: The Managed AMP Down trigger is not consistent with its definition in the AWAMP-MIB.my.</p> <p>Scenario: The trap contains awampFolderPath although it does not in the MIB definition, which can be a severe issue.</p> <p>Workaround: There is no workaround.</p>
DE30584 DE23654	<p>Symptom: 30 days after disabling VisualRF, heat maps won't display when you re-enable VisualRF.</p> <p>Scenario: VisualRF files and directory are deleted after 30 days</p> <p>Workaround: Manually create the VisualRF directory under /var/tmp.</p>
DE30100	<p>Symptom: When you add a Cisco Catalyst 3750 switch to AirWave, and the switch is down, an SNMP walk fails with "no response."</p> <p>Scenario: AirWave doesn't support SNMPv3 users with AES-256 encryption.</p> <p>Workaround: Change the encryption type to AES-128 on the switch.</p>
DE27568	<p>Symptom: AirWave doesn't update the upstream device information for access points connected to Cisco switches when Cisco switches are polled when using SNMPv3.</p> <p>Scenario: Cisco has restricted access to the BRIDGE-MIB when using SNMPv3. When you access a Cisco switch using SNMPv3, APs connected to that switch may not be able to show upstream device info.</p> <p>Workaround: Add SNMPv3 bridge commands to the Cisco switches in order to expose VLAN values for the MIB polled by UDT. If there are devices on a switch, add the following command for each VLAN-#:</p> <pre>snmp-server group <GroupName> v3 priv context</pre> <p>You may need to append views to the command, as follows:</p> <pre>snmp-server group <GroupName> v3 priv context <VLAN-#> read <ViewName></pre> <p>Use the match prefix parameter to expose all existing VLANs:</p> <ul style="list-style-type: none"> ● <code>snmp-server group <GroupName> v3 priv context vlan- match prefix</code> ● <code>snmp-server group <GroupName> v3 priv context vlan- match prefix access</code>

Table 11: Known Issues in AirWave 8.2.6.1

ID	Description
DE30951	<p>Symptom: Unable to create a VisualRF backup for export from the Network view.</p> <p>Scenario: This function doesn't work when you right-click on a campus from the Network view.</p> <p>Workaround: Navigate through the Network view to make your export selection from the building or floor plan views. To make a complete VisualRF backup that includes all campuses, select the entire network in the Export Floor Plans pop-up window.</p>

Table 12: *Known Issues in AirWave 8.2.6*

ID	Description
DE30749	<p>Symptom: STP blocking port information isn't available for HP trunk aggregated ports.</p> <p>Scenario: AirWave isn't retrieving this information from the switch MIBs.</p> <p>Workaround: There is no workaround.</p>
DE30716	<p>Symptom: The <code>license</code> command doesn't handle an empty license or multiple licenses.</p> <p>Scenario: The Enter Commands > License option will crash if you have a trial system without a license, or if you have multiple licenses.</p> <p>Workaround: View licenses from the Web UI on the Home > License page.</p>
DE30608	<p>Symptom: Navigation from the Device Config pag back to the APs/Device List page is broken.</p> <p>Scenario: When you click the configuration hyperlink on the Device Config pag and then click Back, AirWave should reopen the APs/Device > List page.</p> <p>Workaround: There is no workaround.</p>
DE30582	<p>Symptom: In VisualRF, IAPs organized in groups and folders under deployed APs don't appear in the deployed AP list.</p> <p>Scenario: This issue occurs for only IAPs.</p> <p>Workaround: Restart VisualRF.</p>
DE30557	<p>Symptom: The AP monitoring page for the Cisco 2802 AP displays 2-802.11ac radio interfaces.</p> <p>Scenario: Even though the user configures the dual band radio as 2.5 GHz (local) role, AirWave still shows it as 5 GHz (802.11ac).</p> <p>Workaround: There is no workaround.</p>
DE30432	<p>Symptom: The Topology WebUI doesn't load.</p> <p>Scenario: The Topology WebUI crashes when there is a duplicate node entry in the Topology API.</p> <p>Workaround: Restart services by going to the System > Status page, then click Restart AMP at the bottom of the page.</p>
DE30357	<p>Symptom: Seeing the default SSL certificate when trying to hit other AMP ports like 60001, which is used by Clarity Synthetic.</p> <p>Scenario: Adding SSL certificates doesn't apply to ports besides HTTPS port 443.</p> <p>Workaround: There is no workaround.</p>
DE30293	<p>Symptom: STP blocking port infoamation isn't available for aggregated ports.</p> <p>Scenario: Topology doesn't provide the aggregated link in a spanning tree status.</p> <p>Workaround: There is no workaround.</p>
DE30217	<p>Symptom: You can add a device in AirWave twice without AirWave reporting a duplicate.</p> <p>Scenario: When you add a device with the category "Router/Switch," AirWave doesn't retrieve the MAC address.</p> <p>Workaround: There is no workaround.</p>

Table 12: *Known Issues in AirWave 8.2.6 (Continued)*

ID	Description
DE30204	<p>Symptom: AirWave installed on Hyper-V 2016 loses network connectivity often.</p> <p>Scenario: If you use the legacy network adapter for network settings, as the Installation Guide suggests, the network connection is lost even though there are no resource constraints on the server.</p> <p>Workaround: Use the default adapter instead of the legacy adapter for Hyper-V installs.</p>
DE30136	<p>Symptom: The monitoring page for Aruba 8320 switches doesn't display the IP address for ArubaOS-Switch neighbors in the Neighbor table.</p> <p>Scenario: This issue occurs for Aruba 8320 switches running ArubaOS-CX XL.10.00.0001-72.</p> <p>Workaround: There is no workaround.</p>
DE30129	<p>Symptom: Restricted users can see all spanning tree nodes in the topology map.</p> <p>Scenario: Role-based access control permissions don't work when a user applies the spanning tree filter. However, the user cannot select or get any more information about the spanning tree for restricted devices.</p> <p>Workaround: There is no workaround.</p>
DE30001	<p>Symptom: AirWave doesn't display spanning tree data for Aruba controllers and Aruba MAS switches.</p> <p>Scenario: Topology shows spanning tree data only for switches which support IEEE standard spanning tree MIBS.</p> <p>Workaround: There is no workaround.</p>
DE29990	<p>Symptom: AirWave doesn't display neighbors of the Aruba 3630 controller in the topology map.</p> <p>Scenario: This issue occurs because AirWave doesn't poll LLDP MIBs for this controller.</p> <p>Workaround: There is no workaround.</p>
DE28412	<p>Symptom: For Aruba 2930F switches running AirWave 8.2.4, you see the following configuration status: Telnet/SSH Error: Could not fetch config file; command timed-out</p> <p>Scenario: This error occurs when the banner on the switch contains "#," or the host name on the switch contains a whitespace.</p> <p>Workaround: Your banner should not include a "#," and the host name should not include a whitespace.</p>
DE27568	<p>Symptom: Cisco switches with monitored with SNMPV3 don't show LLDP neighbors and don't display in the topology map.</p> <p>Scenario: This issue occurs because AirWave doesn't poll LLDP MIBs for CISCO switches with SNMPV3 config.</p> <p>Workaround: Enable SNMPv3 for these devices as follows:</p> <ol style="list-style-type: none"> 1. Go to Groups > Basic, then scroll down to "Cisco IOS/Catalyst" and select 3 for the "SNMP Version" option. 2. Scroll down to "Universal Devices, Routers and Switches," then select 3 for the "SNMP Version" option. 3. Poll the device.

This chapter provides the following information to help you with the upgrade process:

- "Minimum Requirements" on page 32
- "Upgrade Instructions" on page 32
- "Upgrade from AirWave 8.2.3.1 or Earlier Versions" on page 32
- "Upgrade from AirWave 8.2.4 " on page 33
- "Upgrade from AirWave 8.2.6 or Later" on page 33
- "Manually Download the Software" on page 34

Minimum Requirements

Ensure that you have sufficient disk storage, memory, and hardware or software versions. As additional features are added to AirWave, increased hardware resources become necessary and hardware requirements vary by version. For the most recent hardware requirements, refer to the *AirWave 8.2.7 Server Sizing Guide*.

Upgrade Paths

Your upgrade procedure depends upon your current version of AirWave.

- **Direct upgrade path:** You can upgrade directly to AirWave 8.2.8 from the following software versions: 8.2.6, 8.2.6.1, 8.2.7, and 8.2.7.1.
- **Two-step upgrade path:** If you are running AirWave 8.2.4 or earlier releases, you must upgrade to AirWave 8.2.6 before performing the final upgrade to AirWave 8.2.8. If your AMP is running AirWave 8.2.3.1 or earlier versions, you must run the upgrade utility to upgrade to the interim release. If your AMP is running AirWave 8.2.4, you can use the AMP CLI to install the upgrade package

Upgrade from AirWave 8.2.3.1 or Earlier Versions

Upgrades from AirWave 8.2.3.1 or earlier releases require a two-step upgrade path, with an interim upgrade to AirWave 8.2.6 before the final upgrade to AirWave 8.2.8. If you upgrade from AirWave 8.2.3.1 or earlier, you will no longer have root user access to the Linux shell after the initial upgrade to AirWave 8.2.6, and your system will be converted to use the new AMP CLI. For information about using the AMP CLI, see the *AirWave 8.2.8 User Guide*.

Follow these steps to perform the initial upgrade from AirWave 8.2.3.1 or earlier to AirWave 8.2.6:

1. Log in to the AirWave server as the root user.
2. Run the upgrade utility to upgrade to the interim release:

```
#start_AMP_upgrade -v 8.2.6
```

The upgrade utility looks for the local upgrade package.

After the download completes, the following message appears while the software compiles:

```
Validating the upgrade package...
Upgrade package is OK.
Using upgrade script extracted from local package.
Upgrade package found in local cache.
```

If the software is not available, [manually download the software](#) and then perform this step again.

3. After the AMP services restart, AirWave configures the AMP CLI while creating the recover user account.

4. Enter the new ampadmin password. If you don't enter a user name, AirWave uses the default "ampadmin".
5. After setting the password, you will see the following message:
Your system has been converted to use AMPCLI. You may now log in as ampadmin. If you lose the password for ampadmin you may log in as amprecovery (password recovery) on the console to reset the ampadmin password.



After the upgrade completes, the FIPs-enabled state carries forward.

6. Finally, remove any OS user accounts to prevent unauthorized access.
7. Follow the steps described in ["Upgrade from AirWave 8.2.6 or Later" on page 33](#) to complete the final upgrade to AirWave 8.2.8.

Upgrade from AirWave 8.2.4

Upgrades from AirWave 8.2.4 require a two-step upgrade path, with an interim upgrade to AirWave 8.2.6 before the final upgrade to AirWave 8.2.8. However, unlike older versions of AirWave, upgrades from AirWave 8.2.4 can use the AMP CLI to install the upgrade package on your system. If your network doesn't allow AirWave to connect to the Internet, you must [manually download the software](#) and upload the software before performing this upgrade.



You can change the existing amprecovery username by backing up the server, reinstalling the software, and restoring from the backup. For information about setting up the amprecovery account, refer to the *AirWave 8.2.8 Installation Guide* "Installing the Software (Phase 2)" on page 1.

Follow these steps to upgrade from AirWave 8.2.4:

1. Log in to the AirWave server with the "ampadmin" user name and password. If you subsequently changed the ampadmin user name and password, enter the current admin name and password.
2. Enter **7** to select Upgrade.
 - a. At the next prompt, enter **1** to select Upgrade AirWave Management Platform.
 - b. Enter **8.2.6**.
 - c. Enter **y** to enable AirWave to connect to a proxy server. Or, you can enter **N** to bypass this step and go to [step d on page 33](#) to download the software. At the next prompt:
 - (1) Enter the server address and port number (for example, *test.proxy.com* and port 22).
 - (2) Enter **y** to enter the proxy user name and password (for example, *testuser* and *password*).
 - d. Enter **1** or **2** to log in to your customer portal with your support user name and password.
 - e. Follow the onscreen instructions to download the software.
3. Follow the steps described in ["Upgrade from AirWave 8.2.6 or Later" on page 33](#) to complete the final upgrade to AirWave 8.2.8.

Upgrade from AirWave 8.2.6 or Later

Use the AMP CLI to install the AirWave 8.2.8 upgrade package on your system. If your network doesn't allow AirWave to connect to the Internet, you must [manually download the software](#) and upload the software before performing this upgrade.



You can change the existing amprecovery username by backing up the server, reinstalling the software, and restoring from the backup. For information about setting up the amprecovery account, refer to "Installing the Software (Phase 2)" on page 1 in the *AirWave 8.2.8 Installation Guide*

Follow these steps to upgrade from AirWave 8.2.6 or later:

1. Log in to the AirWave server with the "ampadmin" user name and password. If you subsequently changed the ampadmin user name and password, enter the current admin name and password.
2. Enter **7** to select Upgrade.
 - a. At the next prompt, enter **1** to select Upgrade AirWave Management Platform.
 - b. Enter **8.2.8.0**.
 - c. Enter **y** to enable AirWave to connect to a proxy server. Or, you can enter **N** to bypass this step and go to [step d on page 33](#) to download the software. At the next prompt:
 - (1) Enter the server address and port number (for example, *test.proxy.com* and port 22).
 - (2) Enter **y** to enter the proxy user name and password (for example, *testuser* and *password*).
 - d. Enter **1** or **2** to log in to your customer portal with your support user name and password.
 - e. Follow the onscreen instructions to download the software.

Upgrading the Kernel OS

After the upgrade completes, you might see the following message:

Updated kernel packages that fix various security issues are now available for your OS. To upgrade, select "Upgrade" menu item on the AMPCLI Menu, and then choose "Upgrade OS Kernel" menu item.

To run the kernel upgrade:

1. Log in to the AMP CLI as the ampadmin.
2. Select **7** to open the Upgrade menu, then select **2** to run the kernel upgrade. A system reboot is required to complete the kernel upgrade.

Manually Download the Software

You can manually download the software if your AirWave server can't access the Internet.

1. Go to the [Aruba Support Portal](#) or the [HPE My Networking Portal](#) to download the upgrade image.
2. Click the upgrade package, then click **Save** and install the file later.
3. Upload the file. The procedure to upload the file varies, depending upon the version of AirWave currently on your server.
 - If you are upgrading from AirWave 8.2.3.1 or earlier, copy the file to the AirWave server's **/root** directory using an SCP file transfer application.
 - If you are upgrading from AirWave 8.2.4 or AirWave 8.2.6:
 - (1) Log in to the AirWave server with the "ampadmin" user name and password. If you subsequently changed the ampadmin user name and password, enter the current admin name and password.
 - (2) At the prompt, enter 1 to upload the file from the source location to the AMP server using SCP to transfer the file.
 - (3) At the prompt, enter the location of the source file (for example, *user@host:path*. User is the name of the account on the host computer, host is the hostname of the computer on which the source file exists, and path is the location of the directory that contains the upgrade package)
 - (4) At the prompt, enter the password of the source location.
 - If you are upgrading from AirWave 8.2.6.1 or later, you must define a user that can transfer AirWave images, and then upload the software, as described in the following steps.:



For security purposes, Image file transfer users are automatically removed every night during nightly

- (1) From the AMP command-line interface, with the "ampadmin" user name and password. If you subsequently changed the ampadmin user name and password, enter the current admin name and password.
- (2) enter **8** to open the **Advanced** menu options.
- (3) Enter **7** to add a file transfer user.
- (4) Enter a user name for the file transfer user, then click **Enter**. The username for an AirWave image file transfer user must be five characters or longer, and contain only lowercase letters and numbers. To use the default file transfer username **awsftp**, click **Enter** without entering a username.
- (5) Enter a password for the file transfer user, then click **Enter**. The password must be eight characters or longer, and can contain uppercase and lowercase letters, numbers, and non-alphanumeric characters. Spaces are not allowed.
- (6) Enter **b** to go back to the main CLI menu.
- (7) Enter **1** to upload the file from the source location to the AMP server using SCP to transfer the file.
- (8) At the prompt, enter the location of the source file (for example, *user@host:path*. User is the name of the account on the host computer, host is the hostname of the computer on which the source file exists, and path is the location of the directory that contains the upgrade package.
- (9) At the prompt, enter the password on the source location.