

AirWave 8.2.10



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AirWave 8.2.10 is a patch release that provides fixes to known issues. Refer to these release notes for the most up-to-date information.

These release notes contain the following chapters:

- "What's New in This Release" on page 4 describes new features in this release.
- "Resolved Issues" on page 9 describes the issues we've fixed.
- "Known Issues" on page 25 describes known issues.
- "Upgrade Instructions" on page 35 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 8.2.10 introduces new features and fixes to issues detected in previous releases. There are no licensing changes in this release.



For a complete list of supported products and validated firmware versions, refer to the *AirWave 8.2.10 Supported Infrastructure Devices*.

Support for New Devices

AirWave extends support for Aruba 2930 Series Switch with the 8G POE+ 2SFP+ (JL692A) and the 12G PoE+-2G-2SFP+ (JL693A) TAA-compliant switches.

Migration to CentOS-7

Today, AirWave is running on CentOS-6 as the backend operating system. Since CentOS-6 is going end of support on November 30, 2020, Aruba will migrate to CentOS-7 starting with AirWave 8.2.10. Both this release and the next AirWave release (AirWave 8.2.10 and 8.2.10.1) will be released on both CentOS-6 and CentOS-7 operating systems. All future releases after than (AirWave 8.2.11 and above) and security patches will be developed on CentOS-7 only.

We recommend that all Aruba customers running AirWave migrate to AirWave 8.2.10 or later on CentOS-7. AirWave firmware end-of-life dates can be found at <https://www.arubanetworks.com/support-services/end-of-life/#AirWave>. For further questions and clarifications, please reach out to your Aruba account team or Aruba TAC.

End of Support For Red Hat Enterprise Linux 6.x or Above

Starting with AirWave 8.2.10, Aruba will not be supporting AirWave installed on RHEL 6.x or above. All future releases and security patches will be developed on CentOS-7 only. We recommend that all Aruba customers running AirWave on RHEL 6.x or above to migrate to AirWave 8.2.10 on CentOS-7. For further questions and clarifications, please reach out to your Aruba account team or Aruba TAC.

Support for Instant

AirWave 8.2.10 supports template configuration and IGC for Instant APs running Instant 8.5.0.2.

Changes to Password Requirements

AirWave 8.2.10 includes new password requirements:

- Your password must contain at least 15 characters, including an upper case letter, a lower case letter, a number, and a special character. You can't use spaces.
- When you change your password, you must change at least 8 characters. You can't reuse the last 5 passwords. You must wait 24 hours to change your password again.
- Your password needs to change every 60 days.

When you upgrade from AirWave 8.2.5.x or later releases, the **ampadmin** and **admin** users will retain the existing password requirements unless you access the command-line interface and select options **7** (security)

then **1** (apply STIGs) to apply Security Technical Implementation Guide (STIG) modules. All fresh installations of AirWave 8.2.10 automatically include these password requirements for CLI and WebUI users.



If you are upgrading from AirWave 8.2.4.3, these enhanced password requirements are already in effect, and no additional changes need to be made to retain these settings upon upgrading to AirWave 8.2.10.

New Quick Commands

The **Quick Links** section of the **Devices > Monitor** page now allows you to run **show esl** commands on monitored devices. The **show esl status** command can be run on an Instant AP and displays the status of SES-imagotag's Electronic Shelf Label (ESL) configuration for that AP. The **show esl-radio status** command can be run on a virtual controller and displays the status of ESL Radio (USB dongle) traffic.

Enhancements to Dynamic Variables

Instead of creating dynamic variables for each device from the **Device > Manage** page when they already exist for a group configuration template, you can now select the variable and click **Add as a Dynamic Variable**. For more information, refer to the *AirWave 8.2.10 User Guide*.

Enhanced Support for Both Strong and Legacy Ciphers

By default, AirWave supports the following strong ciphers.

- DHE-RSA-AES128-SHA
- DHE-RSA-AES256-SHA
- DHE-RSA-AES128-SHA256
- DHE-RSA-AES256-SHA256
- ECDHE-ECDSA-AES128-SHA256
- ECDHE-ECDSA-AES256-SHA384
- ECDHE-ECDSA-AES128-GCM-SHA256
- ECDHE-ECDSA-AES256-GCM-SHA384

AirWave 8.2.10 introduces a new **Support Deprecated Ciphers** setting in the **AMP Setup > Authentication > LDAP Authentication** page that allows you to also enable the use of the following older ciphers:

- AES128-SHA
- AES256-SHA
- DES-CBC3-SHA
- DHE-DSS-AES128-SHA
- DHE-DSS-AES256-SHA
- EDH-DSS-DES-CBC3-SHA
- EDH-RSA-DES-CBC3-SHA
- KRB5-DES-CBC3-MD5
- KRB5-DES-CBC3-SHA

AirWave 8.2.10 also introduces a new option in the command-line interface that allows you to toggle between **3 Configuration > 5 SSHD > 2 Use Strict Ciphers** and **3 Configuration > 5 SSHD > 2 Use Compatible Ciphers**. When enabled, the **Use Compatible Ciphers** option enables weak ciphers *aes128-cbc*, *aes192-cbc*, and *aes256-cbc* if the config file has ciphers set and these algorithms are not part of the existing AirWave ciphers.



AirWave does not recommend using legacy ciphers for an extended period of time.

AirWave Reboot after Upgrade

AirWave 8.2.10 automatically reboots at the end of the upgrade procedure to apply updated kernel and Red Hat Package Manager (RPM) files.

Updated Command-Line Interface

The AirWave command-line interface has been reorganized and now includes new top-level categories. For details, refer to **Appendix B: AMP Command Line Interface** in the AirWave 8.2.10 User Guide.

CLI Commands
1 Files
1-1 Upload File
1-2 Download File
1-3 Delete File
2 Backup
2-1 Backup >
2-1-1 Backup Now
2-1-2 Configure Automatic Transfer
2-1-3 Local Backup Retention
2-2 Restore >
2-2-1 AMP Restore
2-2-2 VisualRF Restore
3 Configuration
3-1 Configure Network Settings
3-2 Set Hostname
3-3 Set Timezone
3-4 Certificates >
3-4-1 Add SSL Certificate
3-4-2 Generate Certificate Signing Request
3-4-3 Install Signed Certificate
3-4-4 Install Self-Signed Certificate
3-4-5 Add DTLS Certificates
3-4-6 OCSP >

CLI Commands	
3-4-6-1	Make OCSP Optional/Required
3-4-6-1	Manage OCSP URIs
3-4-7	CRL >
3-4-7-1	Make CRL Optional/Required
3-4-7-2	Manage CRL distribution URLs
3-4-7-3	Manage CRL files
3-5	SSHD >
3-5-1	Set MaxAuthTries
3-5-2	Use Compatible Ciphers
4	System
4-1	Upgrade
4-2	Disable AMP
4-3	Restart AMP
4-4	Reboot System
4-5	Shutdown System (halt)
4-6	Show EngineID
4-7	Module Key >
4-7-1	Show
4-7-2	Save
5	Users
5-1	Reset Web admin Password >
5-1-1	admin
5-2	Change CLI User Password >
5-2-1	ampadmin
5-2-2	amprecovery
5-3	Add File Transfer User
5-4	Remove amprecovery Account
6	Support
6-1	Show Tech Support
6-2	Generate Diagnostic Tarball
6-3	Initialize Support Connection
6-4	Start Support Connection

CLI Commands	
6-5	Delete Support User
6-6	Show contents of awssupport.gpg
6-7	Paste Encoded Text
7	Security
7-1	Apply STIGs
7-2	Enable FIPs (requires reboot)
7-3	Configure SELinux >
7-3-1	Leave Disabled
7-3-2	Permissive (requires reboot)
7-3-3	Enforcing (requires reboot)
8	Advanced
8-1	Custom Commands >
8-1-1	Add New Menu Module
8-2	Enter Commands >
8-3	Configure Network Settings
8-4	Enable DB transaction logging
b	>> Back (or Ctrl+c)
c	>> Cancel
q	

Issues that have been fixed in AirWave 8.2.10, 8.2.9.1, 8.2.9.0, 8.2.8.2, 8.2.8.1, and 8.2.8 are described in the tables that follow.

Table 2: *Issues Resolved in AirWave 8.2.10*

Bug ID	Description	Reported Version
DE25667	Security improvements ensure that user access to API and CSV download data are restricted to only those users whose roles explicitly allow them to view that information.	AirWave 8.2.9.0
DE28187	Client session reports could include information for external unsupported MDM servers in the Asset Category and Asset Group lists and charts. To resolve this issue, the Session Data by Asset Group and Session Data by Asset options are removed from the list of available Client Session report widgets on the Reports > Definitions page, and from the output of Client Sessions reports.	AirWave 8.2.9
DE28614	The Simulate Failure option that appears when you select an AP on the VisualRF > Floor Plans page is improved in this release, resolving an issue that required a user to click on the Simulate Failure option twice to enable that feature, or that could incorrectly unsimulate multiple devices if the Unsimulate Failure option was selected.	AirWave 8.2.3.1
DE29306	Improvements in AirWave 8.2.10 allow Instant APs send AppRF data to AirWave more frequently than in previous releases. In previous releases, Instant APs reported AppRF data every fifteen minutes, which could prevent AirWave from displaying information for users that stay on an AP for a shorter amount of time.	AirWave 8.2.3.1
DE31038	Improvements to how AirWave manages devices with an LMS IP address of 0.0.0.0 resolves an issue that prevented AirWave from correctly determining the client count in deployments that included a device with that LMS IP.	AirWave 8.2.0.0
DE31368	The Folder Overview section of the Home > Overview page now correctly displays information for the Top folder by default, resolving an issue where another folder would display in the default view.	AirWave 8.2.5.1
DE31906	When you export a bill of materials that includes the Show Heatmap option on the VisualRF > Floor Plans page, the heatmaps on the Bill of Materials report now accurately reflects the configured Signal Cutoff value for that floor plan.	AirWave 8.2.7
DE31997	AirWave now displays the IPv4 and IPv6 addresses for clients with both IP address types, resolving an issue where the Clients > Client Detail page displayed only an IPv4 <i>or</i> an IPv6 address for these devices.	AirWave 8.2.7
DE32367	The Refresh icon () on the VisualRF > Floor Plans page now correctly refreshes the page for users logging in with a read-only role for that AirWave server.	AirWave 8.2.7.1
DE32373	Planned APs no longer incorrectly broadcast heat maps on the VisualRF > Floor Plans page if the TX power setting for these devices is set to 0dBm.	AirWave 8.2.7.1

Table 2: Issues Resolved in AirWave 8.2.10 (Continued)

Bug ID	Description	Reported Version
DE32375	An issue is resolved that allowed the Devices > Monitor page to display incorrect information for an IPv6-managed device in the Master IP and Cluster fields.	ArubaOS 8.4
DE32551	In deployments with Cisco switches deployed via AirWave, valid devices could be incorrectly classified as rogue devices by the Detected on Wireless and LAN classification rule. If the rogue device was deleted from AirWave, its discovery event history was not deleted. If the rogue was subsequently rediscovered, AirWave retained the history of discovery events for that device.	AirWave 8.2.8.0
DE32597	AirWave executed the show user mac <client mac> command on the incorrect Managed Device in a Mobility Master/Managed Device deployment, causing the Clients > Client Detail page for the client and the Devices > Monitor page for the AP to which the client was associated to display inconsistent controller information.	AirWave 8.2.7.1
DE32601	AirWave executed the show ap virtual-beacon-report client-mac <client mac address> command on a Managed Device instead of Mobility Master in a Mobility Master/Managed Device deployment, causing the Clients > Client Detail page for the client to display inconsistent controller information.	AirWave 8.2.7.1
DE32619	Improvements to the AirWave backup processes allow AirWave to correctly create backups in a deployment where the AirWave server has separate partitions for <i>/var/airwave-backup</i> and <i>/var/ampcli/users</i> . In the event that a partition does not allow AirWave to use a hard link to create a backup, the backup file is manually copied across partitions.	AirWave 8.2.7.1
DE32629	Aruba switches monitored as a group now display correct aggregate usage data on the Groups > Monitor page.	AirWave 8.2.8
DE32637	AirWave can use AMON to monitor wired clients in deployments running ArubaOS 8.4 or later releases. Deployments running previous versions of ArubaOS can monitor wired clients using SNMP only, which can cause a client count mismatch when switching between AMON and SNMP monitoring protocols.	ArubaOS 8.3.x
DE32658	AirWave no longer considers subscription licenses to be a type of evaluation license, so the Home > License page no longer displays warning messages about evaluation license for any subscription licenses on the system.	AirWave 8.2.7.1
DE32677	Clients that complete MAC authentication and are hard-wired to an Aruba switch now correctly increment the number of connected devices in the Clients field of the Devices > Monitor > Summary page, and in the Clients counter in the top header of the AirWave WebUI.	AirWave 8.2.7.1
DE32684	An issue is resolved where the Usage graph on the Home > Overview page did not correctly display information for a DataZone SSID because the Sources drop-down menu on this graph did not display the DataZone SSID as an option in the list of available SSIDs.	AirWave 8.2.8.1
DE32699	AirWave displays consistent information about the number of clients on a selected SSID when this information is viewed on the Clients graph on the Home > Overview page and the Clients section of a network usage report for that SSID.	AirWave 8.2.7.0

Table 2: Issues Resolved in AirWave 8.2.10 (Continued)

Bug ID	Description	Reported Version
DE32714	The Instant GUI Config (IGC) feature failed to correctly push policy text for a captive portal splash page when the text contained special characters in Portuguese.	AirWave 8.2.8.1
DE32747	The Authentication table on the Home > Clarity page incorrectly displayed information about active APs in the list of authentication servers. When one of these APs was selected from the Authentication table, the Clarity > User Details table also incorrectly indicated that the AP was an authentication server.	AirWave 8.2.6.1
DE32754	An issue is resolved where AirWave failed to push a template to Aruba 2930F switches when enhanced security was enabled on the switch template using the Do you want to show sensitive information (y/n)? option.	AirWave 8.2.4.3
DE32762	AirWave includes two 1024-bit Digital Signature Algorithm (DSA) keys in the /etc/ssh folder, even though the AirWave sever uses a more secure RSA key when connecting to the server. These two DSA keys could be manually removed but would be recreated when the SSHd service was restarted, and could cause a Qualys vulnerability scan to trigger an alert for vulnerability QID 38738: SSH Server Public Key Too Small .	AirWave 8.2.7.1
DE32783	AirWave displays the channel width used by an Instant APs radio on the Devices > Monitor > Radio Statistics page.	AirWave 8.2.7.1
DE32818	An issue is resolved where the restart of an internal <i>rrdcached</i> service allowed the Clients and Usage graphs on the Home > Overview page to incorrectly show zero clients and usage levels for a few moments before again displaying correct data.	AirWave 8.2.8.1
DE32819	Bill of Materials reports generated from the VisualRF > Floor Plans page correctly display AP names, resolving an issue that allowed the names of some APs at the bottom of the floor plan to get cut off on the report.	AirWave 8.2.8.1
DE32828	The VisualRF > Floor Plans page correctly displays floor plans imported from Ekahau backups, resolving an issue where backup campuses were created without floor plans.	AirWave 8.2.8.1
DE32839	AirWave now validates the required a eight-character password for SNMPv3 users when configuring SNMP on the Device Setup > Add page and the Devices > Manage page, resolving an issue where the eight-digit minimum character requirement was validated on the Device Setup pages only.	AirWave 8.2.8.2
DE32845	AirWave was sending a large number of false positive alerts for rogue APs based upon information sent to AirWave from Instant APs. Improvements to the alerts sent from Instant APs to AirWave resolved this issue.	AirWave 8.2.8.1
DE32880 DE33006	Insufficient SNMP packet sizes on HPE Comware switches prevented AirWave from correctly displaying the switch on the Home > Topology page and triggered SNMP polling error messages in the system event logs. To resolve this issue, increase the SNMP packet size on the switch from 1500 to 3500 using the command snmp-agent packet max-size 3500	AirWave 8.2.8.2

Table 2: Issues Resolved in AirWave 8.2.10 (Continued)

Bug ID	Description	Reported Version
DE32895	The Send Test Email feature available when configuring a mail relay server on the AMP Setup > General > Additional AMP Services page has been improved to prevent a potential Cross-site Scripting (XSS) command injection vulnerability.	AirWave 8.2.9.0
DE32896	The VisualRF feature that allows users to import Floor Plans from various sources has been improved to prevent a potential XML External Entity (XXE) vulnerability that could allow the execution of unauthorized commands on the AirWave server.	AirWave 8.2.9.0
DE32897	The certificate import feature available on the Device Setup > Certificates page has been improved to prevent a potential XML External Entity (XXE) vulnerability that could allow users to execute unauthorized commands on the AirWave server as an apache user.	AirWave 8.2.9.0
DE32899	AirWave 8.2.10 is improved to prevent a potential preauthorization SQL injection vulnerability in the AMP authentication cookie.	AirWave 8.2.9.0
DE32910	VisualRF backups can now be restored from both the AirWave command-line interface and the WebUI.	AirWave 8.2.8.2
DE32945	AirWave was unable to recognize a VLAN range configured on a controller as a valid uplink for WAN monitoring, causing gaps in the data on Usage table in the Home > Overview page.	AirWave 8.2.8.2
DE32978	Improvements to Network Usage reports allow these reports to correctly display Usage and Clients graphs for all subfolders when the SSIDs field for the report definition on the Reports > Definition page is set to Use Selected SSIDs , and all available SSIDs are selected.	AirWave 8.2.5.0
DE32986	In a deployment with Instant APs connected in a daisy-chain mode (where an IAP's downlink port is used to connect to the other IAPs), the Devices > Monitor > Neighbors page failed to correctly display all LLDP neighbors for the device, even though all neighbors are showing correctly on the Home > Topology page.	AirWave 8.2.9.0
DE32998	In a deployment where the <i>nightly_data*.tar.gz</i> and <i>weekly_data*.tar.gz</i> files were customized by adding additional characters to the beginning of the file names, a local backup file taken before a failover incorrectly included files with these customized names, making the local backup extremely large and delaying the failover process. This issue is resolved in AirWave 8.2.10, as AirWave now excludes all files of the pattern <i>*nightly_data*.tar.gz</i> and <i>*weekly_data*.tar.gz</i> . NOTE: Best practices is to either remove old backups after restoring them on recovered/reinstalled systems, or maintain nightly/weekly naming conventions for backup files.	AirWave 8.2.8.2
DE33024	Improved API security in AirWave 8.2.10 prevents authorized users from changing label inputs on AirWave charts and graphs.	AirWave 8.2.7.1
DE33038	The Home > Topology page now allows you to select multiple folders and view the contents of just those selected folders in an expanded view. Previous releases only displayed an expanded view of all folders or a single selected folder.	AirWave 8.2.7.0

Table 2: Issues Resolved in AirWave 8.2.10 (Continued)

Bug ID	Description	Reported Version
DE33047	An issue is resolved that prevented users from changing the time zone setting of the AirWave server using the Configuration > Set Timezone > [continent or ocean] > [country] settings in the AirWave command-line interface.	AirWave 8.2.4.3
DE33056	AirWave failed to back up a controller after the AirWave server upgraded from AirWave 8.2.7.1 to AirWave 8.2.8.2, because some ciphers supported by the controller were missing in AirWave 8.2.8.2. Starting with AirWave 10, a new 3 Configuration > 5 SSHD > 2 User Compatible Ciphers setting in the command-line interface enables weak ciphers aes128-cbc , aes192-cbc , and aes256-cbc if the config file has ciphers set and these algorithms are not part of the existing AirWave ciphers.	AirWave 8.2.8.2
DE33063	<p>By default, AirWave supports the following strong ciphers.</p> <ul style="list-style-type: none"> ● DHE-RSA-AES128-SHA ● DHE-RSA-AES256-SHA ● DHE-RSA-AES128-SHA256 ● DHE-RSA-AES256-SHA256 ● ECDHE-ECDSA-AES128-SHA256 ● ECDHE-ECDSA-AES256-SHA384 ● ECDHE-ECDSA-AES128-GCM-SHA256 ● ECDHE-ECDSA-AES256-GCM-SHA384 <p>The AMP Setup > Authentication > LDAP Authentication fields in the AirWave WebUI now include a new Support Deprecated Ciphers option to allow AirWave to also use following legacy ciphers:</p> <ul style="list-style-type: none"> ● AES128-SHA ● AES256-SHA ● DES-CBC3-SHA ● DHE-DSS-AES128-SHA ● DHE-DSS-AES256-SHA ● EDH-DSS-DES-CBC3-SHA ● EDH-RSA-DES-CBC3-SHA ● KRB5-DES-CBC3-MD5 ● KRB5-DES-CBC3-SHA <p>NOTE: Note: AirWave does not recommend using legacy ciphers for an extended period of time.</p>	AirWave 8.2.7
DE33083	An issue is resolved that caused the Home > Topology page to display incorrect edge count, edge icon and edge details information for an aggregated link after a topology restart.	AirWave 8.2.8.2
DE33100	After upgrading to AirWave 8.2.8.2, Aruba 2930 switches were incorrectly showing a DOWN status with the error message ICMP ping failed after SNMP get failed . This issue is resolved in AirWave 8.2.10.	AirWave 8.2.8.2
DE33171	Users were unable to use the Instant GUI Config feature to add multiple gateway VPN routes to a group of Instant APs using the Groups > Instant Config > VPN > Routing options.	AirWave 8.2.9.0
DE33175	A VisualRF Bill of Materials report generated for floor plans with a large number of APs displayed errors and could not be opened using Microsoft Word.	AirWave 8.2.9.0

Table 2: Issues Resolved in AirWave 8.2.10 (Continued)

Bug ID	Description	Reported Version
DE33177	When AP device groups and AP folder names contained non-ASCII (UTF-8) characters such as Japanese characters, the Systems > Triggers page could display the error message "The server has encountered an error while performing your request" and failed to display correct trigger data. This issue is resolved for AirWave 8.2.10 deployments in a CentOS7-based environment only. The fix for this issue is not supported by deployments based on CentOS6.	AirWave 8.2.8.1
DE33182	Users were unable to use the Instant GUI Config feature to create two profiles with the same ESSID, even though these profiles could be defined on a standalone virtual controller.	AirWave 8.2.9.0
DE33215 DE33188	After upgrading from AirWave 8.2.8.2, Aruba switches displayed an error status in the Devices List table on the Devices > List page. Improvements to how Message of the Day (MOTD) banner messages are displayed have resolved this issue.	AirWave 8.2.8.2
DE33241	AirWave introduces updated CentOS6 and CentOS 7 security RPMs. AirWave security has also been improved to support the following CentOS security vulnerability updates: <ul style="list-style-type: none"> ● RHTSA-2018:1879--glibc security and bug fix update ● RHTSA-2018:2180--gnupg2 security update ● RHTSA-2018:2284--yum-utils security update ● RHTSA-2018:2892--glusterfs security, bug fix, and enhancement update ● RHTSA-2018:3854--ntp security update ● RHTSA-2019:1467--python security update ● RHTSA-2019:1652--libssh2 security update ● RHTSA-2019:1492--bind security update ● CVE-2019-13139--command injection flaw 	AirWave 8.2.9.1
DE33263	Enhanced support for Aruba APs that support 802.11ax resolves an issue that allowed the system event logs to display the error message <i>Internal Error: Couldn't determine class for type 'ax'</i> in deployments that included 802.11ax APs such as the AP-515.	AirWave 8.2.9.1

Table 3: Issues Resolved in AirWave 8.2.9.1

Bug ID	Description	Reported Version
DE33132	The AirWave Glass Feeder kept restarting when being upgraded.	AirWave 8.2.9.0
DE33131	AirWave 8.2.9.1 contains the kernel security update for Red Hat Enterprise Linux 6. Refer to RHTSA-2019:1488 for information about the security advisory.	AirWave 8.2.9.0
DE33116	After upgrading the software version to AirWave 8.2.9.0, AirWave reported all Instant APs as being down. This issue was due to message formatting change for the ArubaOS 8.5.0.0 Instant AP firmware.	AirWave 8.2.9.0
DE33093 DE33092	From the Clients menu, when filtering the client connection mode in the default view by 802.11ax, AirWave displayed the value " RADIO_MODE-ENUM-VALUE-X/Y ". Now, AirWave displays " 11ax ".	AirWave 8.2.9.0

Table 3: Issues Resolved in AirWave 8.2.9.1 (Continued)

Bug ID	Description	Reported Version
DE33440	The Audit Configuration on Devices feature stopped working after the AirWave server was upgraded to a newer version of AirWave, and the Configuration field on the Devices > Config page for impacted devices displayed the message Telnet/SSH Error: (pattern match timed-out) in password failure . This issue is resolved by upgrading to AirWave 8.2.10.	AirWave 9.2.9.1

Table 4: Issues Resolved in AirWave 8.2.9.0

Bug ID	Description	Reported Version
DE32997	In the <i>AirWave 8.2.9 User Guide</i> , the description for the Help improve AirWave by sending anonymous usage data has been updated.	AirWave 8.2.x.x
DE32971	AirWave 8.2.9 contains the kernel security and bug fix update for Red Hat Enterprise Linux 6. Refer to RHSA-2019:1169 for information about the security advisory.	AirWave 8.2.9.0
DE32919	The failover AMP didn't take over for the primary AMP due to ltree objects included in the backup. This issue was previously reported as DE32013 and fixed in AirWave 8.2.8.2.	AirWave 8.2.9.0
DE32859	You couldn't resize an Ekahau backup floor plan in VisualRF.	AirWave 8.2.8.2
DE32851	The <i>AirWave 8.2.9 User Guide</i> now includes Appendix C, "VisualRF and Performance".	AirWave 8.2.8.2
DE32838	Upgrading from IAP 6.5.1.5 to IAP 6.5.4.12 broke AirWave communication.	AirWave 8.2.7.1
DE32759	AirWave became unresponsive and had to be rebooted.	AirWave 8.2.7.0
DE32723	AP names weren't updated in VisualRF after being renamed in AirWave.	AirWave 8.2.7.1
DE32709	Master Console search queries weren't optimized and slowed down communication with AirWave.	AirWave 8.2.7.0
DE32668	AirWave becomes unresponsive and has to be rebooted in order to get SSH access.	AirWave 8.2.7.0
DE32667	The <i>AirWave 8.2.9 Switch Configuration Guide</i> has been updated with examples of configuring ZTP with templates and variables for ArubaOS switches.	AirWave 8.2.8.1
DE32636	AirWave displayed the wrong radio channels in the RF neighbor list.	AirWave 8.2.7.1
DE32632	AirWave 8.2.9 addresses an XSS vulnerability found in the index.html file.	AirWave 8.2.8.1

Table 4: Issues Resolved in AirWave 8.2.9.0 (Continued)

Bug ID	Description	Reported Version
DE32624 DE32258 DE32257	AirWave 8.2.9 addresses an XML External Entity (XXE) vulnerability found in the XML parser.	AirWave 8.2.6.1 AirWave 8.2.7.1
DE32596	Additional changes to the Ethernet bonding workflow was required. AirWave 8.2.9 introduces an Enter Command to remove Ethernet bonding, called remove_ethernet_bonding . NOTE: This new command will not remove bonding if the bonding was created using shell access, as it relies on the ethernet_bonding path to save the pre-bonded state.	AirWave 8.2.5.0
DE32585	You couldn't manually override a rogue classification when the rogues cache file was greater than 6.6 GB.	AirWave 8.2.7.1
DE32562	AirWave displayed flat lines in graphs after the internal Rabbitmq process crashed.	AirWave 8.2.7.0
DE32541	AirWave 8.2.9 addresses an XSS vulnerability found when calling the RRD export tool using a URL.	AirWave 8.2.8.0
DE32540	AirWave 8.2.9 addresses an XSS vulnerability found in RAPIDS URL variables.	AirWave 8.2.8.0
DE32455	The underlying ArubaOS defect which caused channel utilization and config page issues for APs monitored with IPv6 has been fixed.	AirWave 8.2.7.1
DE32423	Previously, when the database was down, the AMP CLI menu was be unreachable. The fix removes the dependency on database, no longer requiring data from the database in order to load AMP CLI menu.	AirWave 8.2.7.1
DE32414	The interference calculation which caused the channel utilization graph errors has been fixed.	AirWave 8.2.7.1
DE32382	In AirWave 8.2.7.1, you couldn't transfer or upload a file on the AMP from the AMP CLI using the Advanced menu option 8-7. Permissions on files that the file transfer user can see have been adjusted.	AirWave 8.2.7.1
DE32291	After upgrading from AirWave 8.2.6.1 to AirWave 8.2.7.1, the previously installed custom certificate trust chain wasn't copied from the AirWave 8.2.6 Java certificate store to the upgraded Java certificate store. This issue has been fixed using the AMP CLI and selecting 9-3 for the Add SSL Certificate option.	AirWave 8.2.7.1
DE32267	Clients graph for tunneled client fluctuated every 7 minutes if Prefer AMON vs SNMP Polling was enabled. This issue occurred in an ArubaOS 8 setup. AirWave shows the client count and then disconnects, dropping to zero, every 7 minutes.	AirWave 8.2.7.1
DE32256	AirWave 8.2.9 addresses an XSS vulnerability found when running the RF health report for a folder.	AirWave 8.2.7.1

Table 4: Issues Resolved in AirWave 8.2.9.0 (Continued)

Bug ID	Description	Reported Version
DE32255	AirWave 8.2.9 addresses an XSS vulnerability found in VisualRF XML files.	AirWave 8.2.7.1
DE32211	AirWave 8.2.9 addresses an XSS vulnerability exercised by nested calls to Aruba AP groups.	AirWave 8.2.7.1
DE32202	AirWave 8.2.9 addresses an XSS vulnerability found in nested template names.	AirWave 8.2.7.1
DE32201	AirWave 8.2.9 addresses an XSS vulnerability found in discovery scan credentials.	AirWave 8.2.7.1
DE32019	Cisco 2600 and 2700 APs showed the wrong radio interface information, and the transmit power couldn't be determined for some of the interfaces.	AirWave 8.2.7.0
DE31978	PDF floor plans weren't clear after you uploaded them into VisualRF.	AirWave 8.2.7.0
DE31793	When you configured AP Fully Qualified Domain Name Options under Display in AMP settings to Use AP Name and FQDN and if the AP name began with a lower case letter, AirWave didn't prepend the AP name to the FQDN.	AirWave 8.2.7.0
DE31782	Network scan discovery failed for Cisco 3650 and 3850 switches if the native VLAN (VLAN1) wasn't configured in Interfaces 1 to 8.	AirWave 8.2.7.1
DE31779	AirWave failed to sync to the Net Cool NMS server using SNMPv3.	AirWave 8.2.6.0
DE31719	There was no option to regenerate the self-signed certificate on AMP using the CLI. Now, you can select 9-13 from the Security menu to regenerate the self-signed certificate.	AirWave 8.2.7.0
DE31690	FTP export feature in reports didn't work.	AirWave 8.2.6.1
DE31577	When performing a manual failover for testing, you couldn't disable AirWave using the CLI . Now, there is an Advanced menu option that lets you enable or disable the AMP. At the CLI prompt, select 8 to open the Advanced menu, then select 2 .	AirWave 8.2.6.1
DE31572	VisualRF some times created duplicate walls if you deselected the option to draw a wall and then selected a previously drawn wall. This issue affected heatmaps for planning and deploying APs because the walls contributed to attenuation.	AirWave 8.2.7.1
DE31265	AirWave didn't display the CPU utilization graph.	AirWave 8.2.3.1
DE31030	When creating a new floorplan and adding campuses, the new campus wasn't available in the drop-down menu. This issue occurred even though you provided an address when creating a new building in the campus.	AirWave 8.2.6.0

Table 4: Issues Resolved in AirWave 8.2.9.0 (Continued)

Bug ID	Description	Reported Version
DE30742	Open Virtual Machine Tools (open-vm-tools), which is installed during an AirWave installation or upgrade, runs automatically when the system starts. Now, you can permanently disable this set of services and modules from the CLI using the Enter Commands menu.	AirWave 8.2.6.0
DE30738	System check for serial port was flooding syslog. The fix requires a reboot after the upgrade to AirWave 8.2.9 to force the re-run of hardware detection to adjust configuration as needed.	Not available

Table 5: Issues Resolved in AirWave 8.2.8.2

ID	Description	Reported Version
DE32666	Update to the User Guide needed for "Archive Controller/Switch Backups" option on the Groups > Basic page. Table 46 in the <i>AirWave 8.2.8.2 User Guide</i> has been updated to include the following description: This setting enables AirWave to create config backups manually. NOTE: After you enable this setting, you can go to the Device Configuration page and click Create Backup Now . An archived config backup is available for only Aruba controllers and Mobility Access Switches.	AirWave 8.2.8.1
DE32617	AirWave displayed an increase in unknown clients on user data and client graphs. When wireless clients were in sleep mode or not found on the network, unknown client counts on user data and client graphs increased. AirWave now uses the last known SSID until the client connects to a new SSID.	AirWave 8.2.8.0
DE32611	Repair option is available for the devices having a "Good" configuration state. This issue has been fixed by removing the Repair button when the device configuration status "Good" and configuration variables are not defined in the template.	AirWave 8.2.8.0
DE32575	Upgrade package downloads from the HPE My Networking Portal failed for AirWave 8.2.8.0 and later. This issue was caused by incorrect target versions in the names of the upgrade files.	AirWave 8.2.8.0
DE32533	While configuring the centralized DHCP VLAN to a wired network, the "Client VLAN assignment" options are not present in the IGC. Now you can assign the client VLAN for a centralized DHCP scope.	AirWave 8.2.7.0
DE32505	The batch command execute API call didn't provide output.	AirWave 8.2.3.1
DE32456	Table 8 in the <i>AirWave 8.2.8.2 User Guide</i> has been updated to include descriptions for the Enable Central Authentication Service and Central Authentication Hostname options on the AMP Setup > General > AMP Features page.	AirWave 8.2.8.0

Table 5: Issues Resolved in AirWave 8.2.8.2 (Continued)

ID	Description	Reported Version
DE32442	The client signal quality graph was blank, or "No Data Available" was displayed instead of a signal quality graph although AirWave displayed a usage graph. This issue occurred when using a custom time range and going back in time farther than AirWave would consolidate the RRD data.	AirWave 8.2.7.1
DE32400	Creating an Ethernet bond with bond0 ip = eth0 ip gave errors. AirWave now alerts the user that the bonded IP address should be different from the bonded interface IP addresses, sets round robin as the default mode, and allows LACP rate configuration when you enter 4 for dynamic link aggregation.	AirWave 8.2.7.1
DE32356	AVG IN and MAX IN values were same for daily network reports.	AirWave 8.2.4.0
DE32355	Restore menu and download menu in the AMP CLI were broken.	AirWave 8.2.7.0
DE32286	VisualRF didn't remove radio object in database after removing the client object. This issue has been fixed by removing radio object and client object simultaneously.	AirWave 8.2.3.0
DE32149	IPv6 didn't work correctly if the prefix length was entered on the gateway. This issue has been fixed by adding extra rules for ICMPv6 message types to allow for neighbor advertisements and no longer see this issue.	AirWave 8.2.7.0
DE32139	The WebUI displayed an incorrect containment status. This issue occurred in the cluster environment when AirWave looked up the managed device instead of the master. Now AirWave always looks up the master for cluster environments.	AirWave 8.2.7.1
DE32108	After upgrading to AirWave 8.2.7, VisualRF walls moved a few millimeters if units were metric.	Not available
DE32075	The SNMP trap "downAP" and the object "awampApName" showed the AP MAC address instead of the AP name.	AirWave 8.2.6.1
DE32056	VisualRF didn't age out rogues for more than an hour even though rogues were removed from the IAP.	AirWave 8.2.5.0
DE32013	Failover server did not take over when the primary AMP went down because of how AirWave handled restore failures.	AirWave 8.2.7.0
DE32093	Nightly backup failed on clean database if the database cleanup timed out.	AirWave 8.2.7.0
DE31964	AirWave stops writing syslog and SNMP trap messages to the device event table. This issue has been fixed by discarding the invalid syslog message.	AirWave 8.2.6.1
DE31701	In the Master Console, graphs didn't display the correct client counts and usage.	AirWave 8.2.4.0

Table 5: Issues Resolved in AirWave 8.2.8.2 (Continued)

ID	Description	Reported Version
DE31634	<p>You couldn't export CSV reports when selecting one of the following custom RF Health options:</p> <ul style="list-style-type: none"> ● Top Folders By worst Client and Radio Statistics Combined 2.4 GHz and 5 GHz ● Top Folders By worst Client and Radio Statistics 2.4 GHz ● Top Folders By worst Client and Radio Statistics 5 GHz 	AirWave 8.2.6.1
DE31587	<p>For the Aruba 5400R switches, AirWave doesn't support firmware upgrades for the standby management module. AirWave now supports redundancy switchover and upgrades the firmware for both the active and standby management modules.</p>	AirWave 8.2.7.1
DE31575	<p>No topology map although switches were added and monitored by AirWave, and Topology didn't display third-party devices.</p>	AirWave 8.2.x.x
DE31458	<p>Placement of AP changes when changing meters to feet option in VisualRF. This issue occurred when switching between metric to imperial measurements.</p>	AirWave 8.2.6.1
DE31355	<p>AirWave received SNMPv3 traps but doesn't update them. NOTE: For SNMPv3, AirWave supports SNMPv3 informs only; SNMPv3 traps are not supported. The <i>AirWave 8.2.8 Getting Started Guide</i> has been updated with this information.</p>	AirWave 8.2.6.0
DE31352	<p>The planning region shrunk and boundaries moved for newly added floor plans when the units were metric. This issue occurred when rounding off decimals while converting between imperial and metric measurements.</p>	AirWave 8.2.6.0
DE31312	<p>Alert trigger for new device didn't work for ZTP with whitelist.</p>	Not available
DE31161	<p>AirWave was updated with incorrect AirMatch data for devices running ArubaOS 6.5.4.x. AirWave AirMatch support is now available for AOS 6.x (ARM) and AOS 8.x (AirMatch). AirMatch is supported only for Aruba devices.</p>	AirWave 8.2.6.0
DE31125	<p>Floor plans were blank after performing the replace background option in VisualRF due to an issue with files uploaded in DWG format.</p>	AirWave 8.2.6.0
DE31070	<p>AirWave displayed an error similar to 'Desired Start Date/Time: did not understand "4:30 pm AEST"' when scheduling a recurring report(daily/weekly, etc) with the time zone as Australian Eastern Standard Time (AEST) because AirWave didn't support AEST.</p>	AirWave 8.2.0.0
DE31063	<p>The device down time detail report wasn't getting generated. Now, AirWave generates the report with a reboot count properly after the device polling period is done, usually after 10 minutes.</p>	AirWave 8.2.6.0
DE30984	<p>The Managed AMP Down trigger wasn't consistent with its definition in the AWAMP-MIB.my. The notification now includes the AMP folder path.</p>	AirWave 8.2.5.1

Table 5: Issues Resolved in AirWave 8.2.8.2 (Continued)

ID	Description	Reported Version
DE28710	When you select a group for deletion while logged in as "APs/Device Manager", AirWave deleted all empty groups. AirWave now deletes only the selected group while logged in as "Device Manager". NOTE: In versions of AirWave earlier than 8.2.7, this role was called "APs/Device Manager".	AirWave 8.2.x.x
DE27410	When using RADIUS to authenticate management users, AirWave didn't send RADIUS requests with service type, NAS port type, and other RADIUS attributes because there were missing key-value pairs in RADIUS requests.	AirWave 8.2.1.1

Table 6: Issues Resolved in AirWave 8.2.8.1

ID	Description	Reported Version
DE32532	After upgrading to AirWave 8.2.8.0, AirWave didn't show any IAP clients. AirWave 8.2.8.1 supports the latest IAP 8.4.0.0 protocol buffer definition, and you can see IAP client data again.	AirWave 8.2.8.0

Table 7: Issues Resolved in AirWave 8.2.8.0

ID	Description	Reported Version
DE32366	The Total Data description in the Device Summary Report in the User Guide has been changed to: "Displays the total data usage on the device in MB, GB or TB during the reported time period."	AirWave 8.2.7.1
DE32336	Unable to access the AirWave server due to an issue which caused the postgres transaction to reach the maximum limit.	AirWave 8.2.7.0
DE32318	In the IGC, when you went to the VC menu and selected Firewall > Authentication Server , you could enter the IP address for the RADIUS server but not the FQDN.	AirWave 8.2.7..1
DE32190	Controller IP address changes from physical IP to VRRP IP automatically on the AirWave server due to a failover issue with the 7000 controller which occurred after an upgrade to AirWave 8.2.7.	AirWave 8.2.7.0
DE32168	The event 'Internal Error: Couldn't determine class for type 'bgN' repeats in the event log when not set on the Aruba AP-345 in dual 5-Ghz mode.	AirWave 8.2.7.1
DE32155	AP relation lines don't display properly for IAPs in VisualRF, which resulted in the IAP tab to be blank on the monitoring page for an IAP.	AirWave 8.2.7.1
DE32152	AirWave displays inaccurate client counts on the controller cluster dashboard due to a data loss issue.	AirWave 8.2.7.1

Table 7: Issues Resolved in AirWave 8.2.8.0 (Continued)

ID	Description	Reported Version
DE32144	Unable to install certificate in AirWave 8.2.7.1 because the SSL certificate installed must use an RSA private key. You can't upload certificates using other types of keys. This is a new limitation in AirWave 8.2.7.1, introduced for added security.	Not available
DE32118	Searching for controllers from Master Console didn't work due to a schema change which prevented Master Console from finding controllers in a search.	AirWave 8.2.7.0
DE32107	The Client Session Report showed inaccurate data.	Not available
DE32090	AirWave admins were unable to delete SSIDs at the group level using Instant GUI Config (IGC).	AirWave 8.2.7.1
DE32088	In AirWave 8.2.6.1, BSSID mappings were incorrect for APs because you couldn't audit the AP's configuration.	Not available
DE32081	After an upgrade to AirWave 8.2.7, Instant-enabled IAPs showed the configuration error "template not found."	Not available
DE32047	A master console displayed errors when you clicked on the link for down devices from the header statistics at the top of the page. This issue occurred when a stack had no master.	AirWave 8.2.7.0
DE32023 DE31724	IGC failed to modify an SSID time-range profile. AirWave now supports overrides for delete in the IGC.	AirWave 8.2.7.0
DE32018	AMP services restarted on multiple servers daily.	Not available
DE31934	Juniper device didn't appear in the topology map. Topology now creates the edge when the LAN MAC is not same as the actual device MAC reported by LLDP.	AirWave 8.2.7.0
DE31878	Client counts in AirWave were inconsistent in an ArubaOS 8.x.x.x cluster environment with SNMP polling.	AirWave 8.2.6.1
DE31845	The Client Diagnostics page showed a broken image instead of the floor plan and an incorrect hyperlink and floor plan name.	AirWave 8.2.6.1
DE31836	The top header statistic changed depending on the display size.	AirWave 8.2.7.0
DE31774	The PAPI handler consumed most CPU time when the controller sent AMON RSSIv2 messages every 5 seconds.	AirWave 8.2.2.0

Table 7: Issues Resolved in AirWave 8.2.8.0 (Continued)

ID	Description	Reported Version
DE31725	<p>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). AirWave 8.2.8.0 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 "Upgrade Instructions" on page 35 and RHSA-2018:2846.</p>	Not available
DE31700	A modified AP name list didn't update without restarting the IGC.	Not available
DE31698	The RF health reports failed after upgrading to AirWave 8.2.6.1.	AirWave 8.2.6.1
DE31555	The Aruba 8320 and 8400 Switch Series don't appear in the topology map although AirWave discovers the LLDP neighbors at both ends.	Not available
DE31540	AirWave listed the physical interfaces for the Aruba 8320 and 8400 Switch Series as virtual interfaces.	Not available
DE31536	In VisualRF, the deployed list doesn't show unprovisioned AP's when the Hide deployed AP's option is selected.	Not available
DE31533	AirWave added the product name with the configured server name when forwarding the Syslog messages. The syslog message format now complies with RFC 5424 and doesn't include the host in the message header.	AirWave 8.2.4.0
DE31424	Clients on an ArubaOS 8.x.x.x cluster don't show the correct location in VisualRF.	Not available
DE31300 DE31154	The topology map didn't appear when the core switch had multiple MAC addresses in LLDP transaction data.	AirWave 8.2.6.1
DE31136	When AirWave sent an SNMP trap to an external NMS server, the MAC address displayed in ASCII format.	Not available
DE31201	AirWave 8.2.8 upgrades from the HPE My Networking Portal (MNP) failed.	AirWave 8.2.7.0
DE31082	<p>Users couldn't choose required bonding option from the ampadmin login. AirWave 8.2.8 introduces 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.</p> <p>NOTE: Applying the change requires a network service restart.</p>	Not available
DE30865	Improper sorting of an IP address pool caused mismatches.	AirWave 8.2.5.1
DE30831	AirWave does periodic HTTP logins to Aruba controllers.	Not available

Table 7: Issues Resolved in AirWave 8.2.8.0 (Continued)

ID	Description	Reported Version
DE30771 DE29481	AVG IN and MAX IN values were the same for daily network reports. AirWave adds 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 AVG IN and MAX IN values will be different.	Not available
DE30430	The switch usage graph didn't appear on the Devices page. AirWave aggregates client usage for Aruba and MAS switches properly now.	AirWave 8.2.3.x
DE29252	VisualRF displayed CAD layers discrepancies when you imported floor plans in DWG format, which caused VisualRF to misinterpret walls after you imported a floor plan in DWG format.	AirWave 8.2.3.1
DE29174	A high transmit power value in the controller configuration generated an error.	AirWave 8.2.3.1

Known issues and workarounds in AirWave 8.2.10, 8.2.9.1, 8.2.9, 8.2.8.2, and 8.2.8 are described in the tables that follow.

Table 8: *Known issues in AirWave 8.2.10*

Bug ID	Description	Reported Version
DE26895	When a user changes the default Gain setting for an AP on the VisualRF > Floor Plans page, those changes are not saved when VisualRF is restarted. Workaround: None	AirWave 8.2.10.1
DE29085	AirWave uses DTLS, a standard security protocol, to encrypt AMON traffic between mobility controllers and AirWave. AirWave users must configure only one DTLS management server in a controller running ArubaOS 8.1 or later. This issue is caused by a limitation when AirWave interacts with a controller running ArubaOS 8.1 or later. Workaround: Configure one DTLS management server on your ArubaOS controller or managed device using the command: mgmt-server primary-server <dlst amp IP> profile default amp transport udp secure.	AirWave 8.2.4.0
DE30461	When a user adds devices to AirWave but does not define SNMPv3 credentials, that user cannot enable FIPS mode on the AirWave server. Workaround: Delete impacted devices, enable FIPs, then add the devices again. If several devices are impacted by this issue, contact Aruba support for help.	AirWave 8.2.4.2
DE30661	An AirWave license report incorrectly shows that there is zero license usage for a Mobility Master and Managed Devices (local controllers). This error is triggered by a communication issue between AirWave and the controllers that prevents AirWave from correctly decoding controller license data. Workaround: None.	AirWave 8.2.5.1
DE30939	AirWave does not correctly display local port information for an AP associated to an Aruba controller in the Devices > Monitor > Neighbors table for the controller, and the AP does not appear on the Home > Topology page. Workaround: None.	AirWave 8.2.7.0
DE32349	VisualRF incorrectly displays heatmap data for an AP on a floor above the selected floor, even if both the 5 GHz and 2.4 GHz frequencies are disabled on the heatmap view. Workaround: None.	AirWave 8.2.7.1
DE32795	A backup of a VisualRF Floor plan background image had a reduced image quality when the VisualRF backup was restored on another server. Workaround: None.	AirWave 8.2.6.0

Table 8: Known issues in AirWave 8.2.10 (Continued)

Bug ID	Description	Reported Version
DE33138	<p>When a Cisco switch is added to AirWave using SNMPv3 credentials, the Connected Devices table on the Devices > Monitor > Neighbors tab does not correctly display information for devices connected to the switch.</p> <p>Workaround: None.</p>	AirWave 8.2.8.1
DE33176	<p>The Async Logger Service that tracks many device monitoring processes (including user-AP association) frequently stops responding.</p> <p>Workaround: None.</p>	AirWave 8.2.6.0
DE33229	<p>AirWave failed to perform VisualRF backups during nightly maintenance because the backup process timed out.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0
DE33256	<p>AirWave reports incorrect role information for clients. When AirWave updates incorrect role information for a user role is not entered into the ignore list of a PCI Compliance report, the report fails.</p> <p>Workaround: none:</p>	AirWave 8.2.8.2
DE33177	<p>When AP device groups and AP folder names contained non-ASCII (UTF-8) characters such as Japanese characters, the Systems > Triggers page could display the error message "The server has encountered an error while performing your request" and failed to display correct trigger data.</p> <p>Workaround: use only ASCII characters in AP folder and group names.</p>	AirWave 8.2.8.1
DE33178	<p>When users assigned to a custom user role access the VisualRF feature, AirWave displays the logon page instead of VisualRF data, and error messages are recorded to VisualRF log files.</p> <p>Workaround: Restart VisualRF by disabling and then reenabling the VisualRF engine on the VisualRF > Setup page.</p>	AirWave 8.2.8.2
DE33232	<p>Timeout issues can cause devices to disappear from the Home > Topology page.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Check for the following upstream failure error in /var/log/topology, topology.1, topology.2 or topology.3. <pre>2019-09-18 11:19:56.897 Aborting tcp connection to /127.0.0.1:60724 because of upstream failure akka.http.impl.engine.HttpIdleTimeoutException: HTTP idle-timeout encountered, no bytes passed in the last 5 minutes. This is configurable by akka.http.[server client].idle-timeout.</pre> 2. If you see an upstream failure as above, restart the topology using the psk topology command in the command-line interface. 3. If still some devices are still missing in the topology view, wait for automatic polling to complete, or poll those devices manually to allow them to appear in the topology. 	

Table 8: Known issues in AirWave 8.2.10 (Continued)

Bug ID	Description	Reported Version
DE33323	The Devices > Monitor page for an AP incorrectly reported zero bandwidth usage during a period of continuous traffic on that device. Workaround: None	AirWave 8.2.5.1
DE33347	The Devices > Monitor page for an Aruba switch incorrectly indicates that a switch using a group template configuration has a configuration mismatch, when there is no mismatch except for the SNMPv3 auth and priv hash value.	AirWave 8.2.8.1
DE33384	After an AirWave server upgraded from AirWave 8.2.4.3 to 8.2.10.0, an auto-polling error prevented the Home >Topology page from loading. Log files in the <code>/var/log/topology</code> folder displayed an internal server error message for the event. Workaround: Select a monitored device to display the device in the Devices > Monitor page, then click Poll Now .	AirWave 8.2.10

Table 9: Known issues in AirWave 8.2.9.1

Bug ID	Description	Reported Version
DE33190	Logs files located in <code>/var/lib/docker</code> are incorrectly inflating in size. This issue can impact AMPs monitored by Aruba Glass, causing the log files to occupy all available disk space. Workaround: None.	AirWave 8.2.9.0

Table 10: Known Issues in AirWave 8.2.9

Bug ID	Description	Reported Version
DE33050	No appropriate status exists to indicate when an SFTP failure (between the device and AirWave) caused the switch deployment to fail. This issue occurs because AirWave pushes the config template to the device and doesn't expect feedback until the device comes back up.	AirWave 8.2.9.0
DE33046 DE32625	Unable to view HPE (Comware) switches in Topology or interface data on switch monitoring pages when SNMP Get requests return errors. Workaround: Increase the SNMP agent packet size using the snmp-agent packet max-size 3500 command on the switch.	AirWave 8.2.x.x
DE33019	After upgrading the Aruba 8320 Switch firmware from 10.02 to 10.03, or after rebooting the switch, AirWave doesn't update the CPU Utilization, Memory, Usage graphs and other information on the switch monitoring page. This happens when AirWave is using SNMPv3 to monitor switch Workaround: Restart the AMP processes, by going to System > Status and clicking Restart AMP . Or, contact Technical Support to help restart the SNMP fetcher.	AirWave 8.2.8.2

Table 10: *Known Issues in AirWave 8.2.9 (Continued)*

Bug ID	Description	Reported Version
DE33008	<p>When removing an Ethernet bond interface using the CLI, "Error adding default gateway <ip address> on eth0" is returned. This error is expected and can be ignored as the default gateway is established later in the process.</p> <p>Workaround: Not applicable.</p>	AirWave 8.2.9.0
DE32935	<p>In Topology, spanning tree details don't display properly for Siemens switches.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0
DE32931	<p>AirWave reports the incorrect interface name on the monitoring page for Siemens switches.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0
DE32929	<p>When you import settings from the device manage page, AirWave removes the IP address on the switch. This issue occurs if VLAN1 doesn't have any IP addresses in the running config because the use_dhcp,ip_address,netmask variable gets updated with null values. If you use those variables in the template to configure IP addresses for other VLANs, null values will be passed and cause template push failures and IP address removals from switch.</p> <p>Workaround: Use use_dhcp,ip_address,netmask variables only in VLAN1 and create and use new dynamic variables in the template for assigning IP addresses to other VLANs.</p>	AirWave 8.2.8.2
DE32926	<p>AirWave doesn't display CPU and memory graphs for Siemens switches on the monitoring page.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0
DE32922	<p>Connected devices aren't showing in AirWave for Siemens switch.</p> <p>Workaround: To see the connected devices for Siemens switches, modify the group settings:</p> <ol style="list-style-type: none"> 1. Go to Groups > Basic; then scroll down to the Routers and Switches section. 2. Set the Use Q-Bridge Forwarding Table For Generic Switches option to Yes. 3. Click Save. 	AirWave 8.2.9.0
DE32914	<p>On the monitoring page for Siemens switches, AirWave displays blank usage graphs.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0
DE32901	<p>The local port information for neighbor details on the monitoring page of a Siemens switch shows the interface name instead of the interface ID.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0

Table 10: *Known Issues in AirWave 8.2.9 (Continued)*

Bug ID	Description	Reported Version
DE32854	<p>A switch provisioned using ZTP doesn't join the same group or folder. On the AirWave-side, the member 1 MAC address is added to the whitelist, but, on the switch-side, member 2 is the commander. During ZTP, AirWave expects the commander's MAC address to be in whitelist, and, since the member 2 MAC address isn't in the whitelist, AirWave doesn't move the device to the respective folder and group.</p> <p>Workaround: Enter the redundancy switch over command to force the commander status to member 1. This triggers ZTP, AirWave and moves the device to the respective folder and group.</p>	AirWave 8.2.8.1
DE32848	<p>The usage graph in controller monitoring page for the mobility device reports the data for client usage twice although only one client is connected.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0
DE32840	<p>AirWave doesn't back up the Aruba 9004 controller after you click Create Backup on the Config page.</p> <p>Workaround: None.</p>	AirWave 8.2.9.0
DE32797	<p>Advanced search won't work if RAPIDS is hidden from the navigation menu.</p> <p>Workaround: Go to AMP Setup > General > AMP features and change the Display RAPIDS option to Yes.</p>	AirWave 8.2.8.1
DE32655 DE32654	<p>The usage graph was blank in an ArubaOS 8.x.x.x cluster setup due to invalid data in the AMON_BSSID_TUNNEL_STATS_MESSAGE on the controller.</p> <p>Workaround: Upgrade the controller to ArubaOS 8.4.0.3.</p>	AirWave 8.2.8.2
DE32627	<p>Topology doesn't display aggregated links between switches properly. When this issue occurs, all links between core and end switches are aggregated links and only two links in the topology map have a circle in the middle, which denotes an aggregated link.</p> <p>Workaround: None.</p>	AirWave 8.2.7.0
DE32560	<p>VisualRF page does not load.</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. 	AirWave 8.2.7.1
DE32353	<p>When you add Instant APs to a group and then go to Firmware > Update, AirWave doesn't show the latest firmware codes for the Instant APs.</p> <p>Workaround: None.</p>	AirWave 8.2.7.1

Table 10: Known Issues in AirWave 8.2.9 (Continued)

Bug ID	Description	Reported Version
DE32084	Database cleaning fails with the error message: ERROR: cannot freeze committed xmax . This issue is related to a database issue in PGSQL 9.4.17, which AirWave uses. Workaround: Contact Technical Support to help manually fix the failed table.	AirWave 8.2.7.0
DE31913	Any hotspot device which is broadcasting SSID other than the SSID we have entered in valid rule should be contained. Workaround: None.	AirWave 8.2.7.0
DE31875	AirWave 8.2.4.1 to AirWave 8.2.6.1 upgrade failed. This issue occurs when installing or upgrading AirWave 8.2.6.x on RHEL. Workaround: None.	AirWave 8.2.6.1

Table 11: Known Issues in AirWave 8.2.8.2

ID	Description	Reported Version
DE32958	Variables with empty values are removed from the dynamic variable list after an upgrade to AirWave 8.2.8.1 or 8.2.8.2. This issue occurs even though the variable is present in the configuration template. Workaround: None.	AirWave 8.2.8.1
DE32815	SNR (dB) values shows zero (0) for the client in the Client Diagnostics page for ArubaOS 8.x.x.x controllers. This issue is unresolved due to ArubaOS defect AOS-185071. Workaround: None.	AirWave 8.2.8.0
DE32798	The Neighbor table doesn't show for IAPs running Instant 6.x.x.x and 8.3.x.x. LLDP neighbor support is not available for IAPs running Instant 6.x.x.x and 8.3.x.x. As a result, you can't see the neighbor details of these IAPs. Workaround: Upgrade the IAPs to Instant 8.4.x.x.	AirWave 8.2.8.1
DE32797	The Advanced Search doesn't work. When Display RAPIDS is set to No , AirWave hides the RAPIDS submenu from the left navigation menu, and you can search only managed devices and not other . Workaround: Go to AMP SETUP > General > AMP Features and change Display RAPIDS to Yes .	AirWave 8.2.8.1
DE32719	The System CPU Utilization graph on the System > Performance page shows less than 90%. This issue occurs when AirWave is managing greater than 3,000 devices and if the controller version is AOS 8.x.x.x. In some cases the controller sends too many invalid AMON_BSSID_TUNNEL_STATS_MESSAGE messages to AirWave. Workaround: Disable AMON_BSSID_TUNNEL_STATS_MESSAGE messages on the controller by running the "no controller-amon bssid-tunnel-stats" command. As a result, AirWave will not show the usage graph on the controller monitoring page.	AirWave 8.2.8.2

Table 11: Known Issues in AirWave 8.2.8.2 (Continued)

ID	Description	Reported Version
DE32695	<p>The numbers of clients is inconsistent between the controller UI and AirWave WebUI. The client count in AirWave changes throughout the day and is 40% to 50% less than what the controller UI displays.</p> <p>Workaround: None.</p>	AirWave 8.2.8.1
DE32650	<p>AirWave doesn't display the usage graph in the monitoring page for the managed device running AOS 8.4.0.0 in a cluster. The usage graph for the managed device is blank even though AirWave shows expected data in the associated AP's monitoring page because of an underlying ArubaOS issue.</p> <p>Workaround: None.</p>	AirWave 8.2.8.2
DE32626	<p>Clients graph for tunneled client fluctuates every 7 minutes if "Prefer AMON vs SNMP Polling" is enabled. This issue occurs in an AOS 8 deployment. AirWave shows the client count and then disconnects, dropping to zero, every 7 minutes.</p> <p>Workaround: None.</p>	AirWave 8.2.8.2
DE32589	<p>Missing default route for all Ethernet bonding options. When Ethernet bonding is enabled, the primary interface shows the bonded interface in the details on the AMP Setup > Network page but not the secondary interface details. You can't edit the Ethernet bond interface from the WebUI.</p> <p>Workaround: For help editing the Ethernet bonding interface, contact Technical Support.</p>	AirWave 8.2.8.2
DE32539	<p>On a Device Configuration page for a switch, AirWave doesn't show the complete device configuration. When you select a backup or configuration, the window that opens doesn't move when you scroll down through the configuration. This issue occurs with Chrome browsers on Windows and Mac OS systems.</p> <p>Workaround: None.</p>	AirWave 8.2.8.2
DE32497	<p>Background images for floor plans aren't loading. After a floor plan has been uploaded successfully to VisualRF, the browser after a refresh doesn't point to the background image on the server.</p> <p>Workaround: Remove the visualrf_bootstrap file 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.</p>	AirWave 8.2.7.1
DE32329	<p>In AirWave 8.2.7.1, overrides are generated in the IGC due to the access rule option "classify-media" when you upgrade the IAP to Instant 8.3.0.4. This behavior is expected for IAPs running Instant 8.3.0.0 or later.</p> <p>Workaround: Before upgrading the IAPs from Instant 6.5.4.0 and 6.5.3.0 or earlier releases to Instant 8.3.0.0 or later, turn off the "classify-media" option in all access rules.</p>	AirWave 8.2.7.1

Table 11: Known Issues in AirWave 8.2.8.2 (Continued)

ID	Description	Reported Version
DE32325	<p>The topology map doesn't display the HPE 5820 switch, and the monitoring page for the HPE 5820 switch doesn't show the LAN MAC address. This issue occurs after upgrading to AirWave 8.2.7.1. The MAC address appears only when adding the device or when the device goes down and comes up.</p> <p>Workaround: To update the LAN MAC address and show the device in Topology, do one of the following steps:</p> <ul style="list-style-type: none"> • Delete and add the device. • If you want to retain the history of the device, modify the device with wrong SNMP credentials to bring the device "down" and then update the device with correct credentials to bring the device state "up". 	AirWave 8.2.7.1
DE31609	<p>Periodic drop in client and usage graphs. This issue is observed on AirWave 8.2.6.1 weekly or bi-monthly. The graphs drop for about 30 minutes randomly and then display correctly.</p> <p>Workaround: Increase number of AMON Aggregators instances to 4 for better load balancing and to prevent unwanted restarts.</p>	AirWave 8.2.6.1
DE31531	<p>When importing files from VisualRF Planner 7.7 to VisualRF in AirWave, the walls shift a centimeter apart on the floor plan. After uploading the files, the floor plan measurements are different.</p> <p>Workaround: Realign the walls in the WebUI by resizing the height measurement scale for each floor to "38.69 or higher" value.</p>	AirWave 8.2.6.1
DE31166	<p>VisualRF reads incorrect measurements for height and width when you add floor plans in DWG format. When it comes to importing DWG files, the third party library uses a default value for height and width. This might result in incorrect floor plan measurements.</p> <p>Workaround: Follow these steps to manually edit the floor plan measurements:</p> <ol style="list-style-type: none"> 1. Go to VisualRF > Floor Plans, then click Network to open the Network view. 2. Drill down to the floor plan. 3. In the floor plan properties, click Measure and measure a portion of the floor to change the current height and width. 4. Follow the onscreen instructions. 5. Click Save. 	AirWave 8.2.6.1
DE27810	<p>In VisualRF, the AP icon is barely visible on the generated Bill Of Materials report. This issue might occur if the floor plan is too large or too small.</p>	AirWave 8.0.8.0

Table 12: Known Issues in AirWave 8.2.8

ID	Description	Reported Version
DE32527	<p>Restrict to daily time window and Include weekends options in the Reports > Definitions page doesn't work. These time restrictions are only applicable to Device Uptime reports and shouldn't be available when creating other custom reports, such as RF Health reports.</p>	AirWave 8.2.8.0

Table 12: Known Issues in AirWave 8.2.8 (Continued)

ID	Description	Reported Version
DE32488	<p>ZTP fails for switches with Firmware versions 16.01 and 16.02. 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>	AirWave 8.2.8.0
DE32449 DE32444	<p>The WAN tunnel list on the WAN Monitoring page is empty if you don't add both a branch office controller (BOC) and a 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>	AirWave 8.2.8.0
DE32439	<p>Localization isn't available for new switch monitoring and snippet pages. Buttons, menus, and tabs display in English.</p> <p>Workaround: Use a translation tool to translate the page.</p>	AirWave 8.2.8.0
DE32438	<p>None of the charts on the WAN Monitoring page displays when the device is down. When the device is down, AirWave should display historical data.</p> <p>Workaround: None.</p>	AirWave 8.2.8.2
DE32436	<p>APs are not placed during planning when using the coverage calculator in the region. When this issue occurs, VisualRF displays the error: com.AirWave.model.AccessPointRadio error getting sensor: java.lang.NullPointerException.</p> <p>Workaround: None.</p>	AirWave 8.2.8.0
DE32392 DE31822	<p>VisualRF becomes unresponsive when you click Add Deployed Device in the map view, Add Deployed Device.</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. 	AirWave 8.2.8.0
DE32376	<p>The IPv6 addresses of the local mobility switches (lms_ip) are incorrect in the AMON packet for different message types.</p> <p>Workaround: None.</p>	ArubaOS 8.4.0.0
DE32375	<p>An underlying issue with AOS causes Pv6 to return wrong value in MD for master IP address on the monitoring page.</p> <p>Workaround : None.</p>	ArubaOS 8.4.0.0
DE32356	<p>Maximum and average incoming values are same for daily network usage reports. This issue occurs with custom report options, such as Usage, Client Count, and Total Usage</p> <p>Workaround: None.</p>	AirWave 8.2.4.0

Table 12: Known Issues in AirWave 8.2.8 (Continued)

ID	Description	Reported Version
DE32355	<p>Restore menu and Download menu is broken by internal digest files. When you select a file from the Restore menu and Download menu in the CLI, the wrong file is processed.</p> <p>Workaround: None.</p>	AirWave 8.2.7.0
DE32345	<p>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. 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 <code>rm</code> to remove files or <code>cleanup</code> to delete old files, including logs and backups. Enter <code>?</code> for help and <code>q</code> to return the CLI menu. 	Not available
DE32239	<p>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>	AirWave 8.2.8.2
DE32149	<p>If the prefix length is entered on the gateway, AirWave generates an error similar to:</p> <pre>WARN : [ipv6_add_route] Unknown error <- Error seen with IPV6_ DEFAULTGW having prefix length mentioned.</pre> <p>Workaround: Disable the IPv6 firewall using the <code>service iptables stop</code> command and then restart the network service.</p>	AirWave 8.2.7.0

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

- "Minimum Requirements" on page 35
- "Upgrade Instructions" on page 35
- "Upgrade from AirWave 8.2.4.3" on page 37
- "Manually Download the Software" on page 38

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 Server Sizing Guide*.

Upgrade Paths

Your upgrade procedure depends upon your current version of AirWave, and the version of CentOS used to install that release. Note that new (non-upgrade) installations of AirWave 8.2.10 use CentOS 7.6 only.

- **Upgrading from an AirWave Deployment with CentOS 7.6:** You can upgrade directly to AirWave 8.2.10 from AirWave 8.2.4.3 with no additional CentOS migration required.
- **Upgrading from an AirWave Deployment with CentOS 6:** An upgrade to AirWave 8.2.10 from AirWave 8.2.8.x and 8.2.9.x, requires a migration CentOS 7. See "[Upgrade from AirWave 8.2.8.x or 8.2.9.x with Migration to CentOS 7.6](#)" on page 35

If you are upgrading from AirWave 8.2.7.x or earlier, contact [Technical Support](#) for help with a multi-step upgrade path.



Upgrade to AirWave 8.2.10 before backing up your data. You cannot restore an AirWave 8.2.8.x or 8.2.9 backup on an AMP server running AirWave 8.2.10.

Licensing during the Migration Process

Prior to migration, navigate to **Home > License** and save a copy of the license key. AirWave licenses are associated with the server IP address. All new installations of AirWave have a 90-day grace period. If you plan to reuse the same IP, then apply the license key after restoring the migrated AMP backup.

If you are planning to move to a new server, work with Aruba support or through the license portal to generate the new license in advance, then follow the migration path and apply the new AMP key. Keep in mind that you may have to adjust some devices to send updates to the new IP address (such as Instant APs and devices that send AMON or syslog messages to AirWave).

Upgrade from AirWave 8.2.8.x or 8.2.9.x with Migration to CentOS 7.6

AirWave 8.2.10 includes an upgrade to CentOS 7.6. The migration process involves upgrading to AirWave 8.2.10, backing up your data, exporting the backup file, performing a fresh install of AirWave 8.2.10 and CentOS 7 on your server, then restoring the backup data onto that server.



For more information on creating backups of your data, refer to the **System Pages** section of the AirWave User Guide. For information on performing a fresh installation of AirWave 8.2.10, refer to the AirWave Installation Guide.

Step 1: Upgrade to AirWave 8.2.10

1. Log in to the AirWave server with the "ampadmin" user name and password. If you previously changed the ampadmin user name and password, enter the current admin name and password.
2. Enter **4** to select **System**.
 - a. At the next prompt, enter **1** to select **Upgrade**, then enter 1 to select **Upgrade AirWave Management Software**.
 - b. Select the option for **8.2.10**.



If the 8.2.10 software doesn't appear in the list of local upgrade versions, select option **2 None of the Above**, then manually enter **8.2.10.0**.

- 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 36](#) 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.

Step 2: Back up your AirWave data

1. Log in to the AirWave server with the "ampadmin" user name and password. If you previously changed the ampadmin user name and password, enter the current admin name and password.
2. Enter **2** to select **Backup**
3. Enter 1 to open the **Backup** menu.
4. Enter 1 to select the **Backup Now** option.

Step 3: Export the backup file

1. After creating your backup, enter **b** to return to the previous **Backup** menu
2. Enter **5** to open the **Users** menu options, then enter **3** to add a file transfer user.
3. 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.
4. 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.
5. Enter **b** to go back to the main CLI menu.
6. Use SFTP to connect to your remote repository and move the the *AirWave* 8.2.10 backup file from the AirWave **/user** directory to a remote server.

Step 4: Perform a fresh (non-upgrade) installation of AirWave 8.2.10 with CentOS 7. A new installation of AirWave 8.2.10 uses CentOS 7 by default.



For more information on installing a new instance of AirWave 8.2.10 on your server, refer to the AirWave 8.2.10 Installation Guide.

Step 5: Upload the backup file

To upload the AirWave 8.2.10 backup on the AirWave 8.2.10 server

- If using SCP, enter **1-1** to open the **File** and **Upload File** menus. Provide the user name, host, and path for an SCP server using FIPS-approved encryption.
- If using SFTP, enter **5-3** to open the **User** and **Add File Transfer User** menus. Log in from another system using those credentials, and upload the backup.

Step 5: Restore data from the backup

To restore the backup on AirWave 8.2.10, enter **2-2** to open the **Backups** and **Restore** menus, then select the **1 AMP restore** option to restore the server from the uploaded backup.

Step 6: Install certificates

In this step, you will add an SSL certificate, or generate a certificate signing request and install a signed certificate.

To add an SSL certificate:

1. From the command-line interface, enter **3-4** to open the **Configuration** and **Certificates** menus.
2. Enter **1** to open the **Add SSL Certificate** menu.
3. Follow the prompt to install the SSL certificate on your AMP server. The signed certificate should be in PKCS12 format with a *.pfx or *.p12 file extension.

To generate a CSR and install a certificate:

1. From the command-line interface, enter **3-4** to open the **Configuration** and **Certificates** menus.
2. Enter **2** to open the **Generate Certificate Signing Request** menu.
3. Follow the prompt to create a CSR that identifies which server will use the certificate.
4. Next, enter **b** to return to the previous menu,
5. Enter **1-2** to open the **Files** and **Download File** menu to download the resulting CSR.
6. Send the CSR to your certificate signer.
7. Once the certificate is signed, upload the certificate to the AirWave 8.2.10 server.
 - If using SCP, enter **1-1** to open the **File** and **Upload File** menus. Provide the user name, host, and path for an SCP server using FIPS-approved encryption.
 - If using SFTP, enter **5-3** to open the **User** and **Add File Transfer User** menus. Log in from another system using those credentials, and upload the backup.
8. From the **3-4 Configuration** and **Certificates** menu, enter **3** to open the **Install Self-Signed Certificate** menu.
9. Follow the prompt to install the certificate.

Upgrade from AirWave 8.2.4.3

AirWave 8.2.4.3 already supports CentOS 7.6, so an upgrade from AirWave 8.2.4.3 is a straightforward upgrade that doesn't require a migration to a new version of CentOS. Use the AMP CLI to install the AirWave 8.2.10 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 8.2.10 Installation Guide*.

Follow these steps to upgrade from AirWave 8.2.4.3:

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 **4** to select **System**.
 - a. At the next prompt, enter **1** to select **Upgrade**, then enter **1** to select **Upgrade AirWave Management Software**.
 - b. Select the option for **8.2.10**.



If the 8.2.10 software doesn't appear in the list of local upgrade versions, select option **2 None of the Above**, then manually enter **8.2.10.0**.

- 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 36](#) 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.

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. This new portal replaces the legacy Aruba support site (support.arubanetworks.com), which will be deprecated sometime in the future.
2. Click the upgrade package, then click **Save** and install the file later.
3. Define a user that can transfer AirWave images, and then upload the software:



For security purposes, image file transfer users are automatically removed every night during nightly maintenance operations.

4. 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.
5. Add a file transfer user. This process varies, depending upon the version of AirWave currently running on your system.
 - a. *If you are upgrading from AirWave 8.2.4.3*, Enter **5** to open the **Users** menu options, then enter **3** to add a file transfer user.
 - b. *If you are upgrading from AirWave 8.2.8/8.2.9*, enter **8** to open the **Advanced** menu options, then enter **7** to add a file transfer user.
6. 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.
7. 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.
8. Enter **b** to go back to the main CLI menu.
9. Use SFTP to connect to your remote repository and upload the *AirWave 8.2.10* upgrade file from the remote server into the AirWave **/user** directory.