Overview

This document is designed as a reference for installing AirWave 8.2.7 with the CentOS 6.9 software.

NOTE: AirWave does not support downgrading to older versions. In unusual circumstances requiring that you return to an earlier version of AirWave, we recommend you perform a fresh installation of the earlier AirWave version, and then restore data from a pre-upgrade backup.

The Support Download Page

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

Table 1: *Download Page File Descriptions*

File Type	Description
Install ISO	Standalone installation media, including the CentOS operating system. This image can fit on a CD/DVD, or it can be mounted as a virtual disk for installation.
Install OVA (Virtual appliance)	VMware OVA template for AirWave deployment on the VMware ESXi infrastructure. Pre-installed with CentOS and optimized for deployments up to 100 devices.
TAR package file	Used for AirWave upgrades. The TAR package delivers updated security packages and kernel updates. **NOTE:** Updates are only supported from up to two versions prior. Contact technical support if you are upgrading from two versions prior or more (for example, from 7.5 to 7.7).

Pre-Installation Checklist

Use this check list to ensure installation goes smoothly.

Table 2: *Pre-Installation Checklist*

Task	Completed
Have available the AirWave license key sent to you in an email from Aruba Networks.	
Obtain dedicated server(s) meeting Aruba sizing specifications.	
Determine the static IP address for each AirWave server.	
Firewall provisioning enabling proper ports/protocols.	

Table 2: *Pre-Installation Checklist (Continued)*

Task	Completed
Determine WLAN infrastructure properties (type, quantity, and location).	
Determine WLAN infrastructure access credentials (SNMP, telnet, SSH, etc.).	
Determine WLAN security policy specifications.	
Set router and switches to monitoring (optional).	
Configure upstream NMS applications (optional).	
Determine wireless client authentication servers (optional).	
Determine AirWave administrative authentication servers like TACACS+, LDAP, or RADIUS (optional).	
If upgrading, ensure that your current version is not more than two versions behind. For example, when upgrading to AirWave 8.2, you must already be using AirWave 8.0 or newer. Contact technical support for assistance upgrading AirWave software more than two versions old.	

Minimum Supported Browsers

Windows®

- Windows®
- Microsoft Internet Explorer® 11
- Mozilla Firefox® 47.0
- Google Chrome™ Version 50.0.2661.102 (64-bit)

Mac OS X® (10.11)

- Apple Safari® 5.x
- Mozilla Firefox® 47.0
- Google Chrome™ Version 50.0.2661.102 (64-bit)

Installation Media and Hardware Requirements

The AirWave installation ISO includes all software, including the CentOS required to complete the installation of AirWave. AirWave supports any hardware that is Red Hat Enterprise Linux 6.2 certified. By default, all installations are based on a 64-bit operating system.

AirWave hardware requirements vary by version. As additional features are added to AirWave, increased hardware resources become necessary. For the most recent hardware requirements, refer to the *AirWave 8.2.6 Server Sizing Guide*.

Installing Linux CentOS (Phase 1)

Perform the following steps to install the Linux CentOS 6.9 operating system. The Linux installation is a prerequisite to installing AirWave on the network management system.

This procedure erases the hard drive(s) on the server.

1. Insert the AirWave installation DVD into the drive and boot the server.

2. Type `install` and press **Enter**.

   To configure the partitions manually, type `manual` and press **Enter**.

Figure 1: *AirWave Installation*

3. Allow the installation process to continue. Installing the CentOS software (Phase I) takes 10 to 20 minutes to complete. This process formats the hard drive and launches Anaconda to install all necessary packages. Anaconda gauges the progress of the installation.

   Upon completion, the system will prompt you to eject the installation DVD and reboot the system. The GRUB screen will appear upon reboot.

4. Remove the DVD from the drive and store it in a safe location.

Installing the AirWave Software

This workflow provides step-by-step instructions for installing AirWave 8.2.7.

> **NOTE**
>
> After installing the software, the ampadmin account will replace the root user account. You will no longer have root admin access to the legacy AMP CLI.

> **CAUTION**
>
> Use only included or Aruba-specified cables, power cords, AC power supplies and batteries. Don't use the power cord with other electrical equipment than what is specified by Aruba.

Before You Begin

If you purchased an AirWave appliance, power-up the appliance and log in to the AMP with the user name **root** and password **admin**.

Step 1: Configure the Date and Time

Follow these steps to configure the date and time:

```
Configure the date and time for the AirWave server when the following message appears:
----------------------- Date and Time Configuration ------------------
Current Time: Mon Aug 13 09:18:12 PST 2018
1)  Change Date and Time
2)  Change Time Zone

0)  Finish
```

a. Select **1** to set the date and select **2** to set the time zone. Press **Enter** after each configuration to return to the message menu above.

b. Select **0** to complete the configuration of date and time information, then press **Enter**.

Step 2: Check Installed Software

If your server has an earlier version of AirWave installed, you'll see a message that asks you to reinstall AirWave.

Step 3: Install the Software

Wait several minutes for the installer to install AirWave 8.2.7.

Step 4: Verify Software Installation

Wait for the installer to check that the database is up and running the current version.

Step 5: Create the Recovery User

During this step, AirWave configures the AMP CLI while creating the recover user account. At the prompt, enter a user name for the recovery user. If you don't enter a username, AirWave uses the default recovery user, called "amprecovery". AirWave automatically creates the recovery user account with the password, "recovery".

> **NOTE**
>
> You can change the password later from the AMP CLI by selecting **9** to open the Security menu, then **2** to reset the password. For more information, refer to the *AirWave 8.2.7 User Guide*.

Step 6: Create the Admin User

At the prompt, enter a user name and password for the admin user account. If you don't enter a user name, AirWave uses the default admin user, called "ampadmin".

> **NOTE**
>
> Save your user name and password somewhere safe because you'll need them to log in to the CLI.

Step 7: Configure the Network

The following example shows how to configure the default eth0 interface. If you want to configure additional interfaces, repeat this step for each interface.

```
Enter the IPv4 static IP address, subnet mask, and gateway addresses (the IPv6 and secondary DNS
settings are optional) when the following message appears:
STEP 6: Assigning AMP's address
  AirWave must be configured with a static IP.
Here are the ethernet interfaces with hardware present:
        1. eth0
        2. eth1
        3. eth2
        4. eth3
        q. Quit

Which interface shall we configure?
```

a. Select **1** and press **Enter**.

```
    ------ Network Interface Configuration for eth0 -----
    1)   IPv4 Address                : xxx.xxx.xxx.xxx
    2)   IPv4 Netmask                : xxx.xxx.xxx.xxx
    3)   IPv4 Gateway                : xxx.xxx.xxx.xxx
    4)   IPv6 Address (optional)     : xxx.xxx.xxx.xxx
    5)   IPv6 Gateway (optional)     : xxx.xxx.xxx.xxx
    6)   Primary DNS                 : xxx.xxx.xxx.xxx
```

```
7)  Secondary DNS            : xxx.xxx.xxx.xxx

9)  Commit Changes
0)  Exit (discard changes)
```

b. Select **1** to enter the network information, then press **Enter**.

c. Select **2** to enter the subnet mask, then press **Enter**.

d. Select **3** to enter the gateway, then press **Enter**.

e. Select **6** to enter the primary DNS address, then press **Enter**.

f. To commit the changes, type **9** and then press **Enter**. To discard the changes, type **0** and then press **Enter**.

Step 8: Generate an SSL Certificate

To generate the SSL certificate for the AirWave server:

- If AirWave does not have a valid host name on the network, type **n**.

- If AirWave has a valid host name on the network, type **y** and enter the fully qualified domain name for the AirWave server (for example, *myserver.example.com*).

Step 9: Complete the Installation

Upon completion of all previous steps, the following message appears.

```
CONGRATULATIONS! AMP is configured properly.
 To access the AMP web console, browse to https://<IP Address>
 Login with the following credentials:
 Username: admin
 Password: [User-provided password from above for 'ampadmin' user]
```

NOTE

Once you log out, the root user will be disabled. Subsequently, you must use the ampadmin user generated during the software installation to log in to the CLI.

Installing AirWave in a VMware Environment

The following sections provide information to help you install AirWave on VMware® ESX(i).

- "VMware Requirements" on page 5
- "Creating a VMware Virtual Machine " on page 5

VMware Requirements

AirWave supports VMware ESX(i) 5.5 and later. To be sure that enough resources are allocated to the virtual machine, consult the *AirWave 8.2.6 Server Sizing Guide* .

If your VM host is hosting other instances, ensure that the AirWave instance has the highest priority. A virtual SCSI disk is recommended over IDE.

Creating a VMware Virtual Machine

The VMware Infrastructure Client provides a wizard to create a new virtual machine. The resulting virtual machine acts like physical host, in which you install the AirWave software.

The recommended OS is CentOS 6 (64-bit). Refer to the *AirWave 8.2.6 Server Sizing Guide* for memory and storage requirements.

To create a virtual machine:

1. From the VMware Infrastructure Client, select **Create a new virtual machine**.

2. Select **Next**, and then select **Typical > Virtual Machine Configuration**.

3. Name your virtual machine (for example, AirWave), and then click **Next**.

4. Select an available datastore with sufficient space for the number of APs that your AirWave will manage, choosing the right server hardware to comply with the hardware requirements. Click **Next**.

5. Select the **Linux** radio button, and then select the OS. Click **Next**.

6. Select the appropriate number or processors, and then specify the minimum virtual RAM.

7. Accept the VMware default virtual network adapter, and click **Next**.

8. Allocate a virtual disk large enough to contain the AirWave operating system, application, and data files.

9. Review the virtual machine settings, and then click **Finish** when you are done.

Installing AirWave in a Hyper-V Environment

The following sections provide information to help you install AirWave on a virtual machine running a Hyper-V:

- "Hyper-V Requirements" on page 6
- "Adding the Hyper-V Network Adapter" on page 6

Hyper-V Requirements

AirWave supports using Hyper-V Manager on:

- Windows Server 2003 or later.
- Windows Server 2012 R2. You might experience boot issues using Windows Server 2012 Standard (not R2).

Adding the Hyper-V Network Adapter

When you create the virtual machine in Hyper-V Manager, you must configure a virtual network adapter in order to install AirWave. Hyper-V provides two virtual network adapters: a default and a legacy adapter (for generation 1 virtual machines). If you use the legacy network adapter to establish networking, you might experience connectivity issues even though there are no resource constraints on the server.

To add the Hyper-V network adapter:

1. Open Hyper-V Manager, then connect to the Hyper-V host.

2. Right-click the virtual machine and select **Settings**.

3. From the Add Hardware window, select **Network Adapter** then click **Add**.
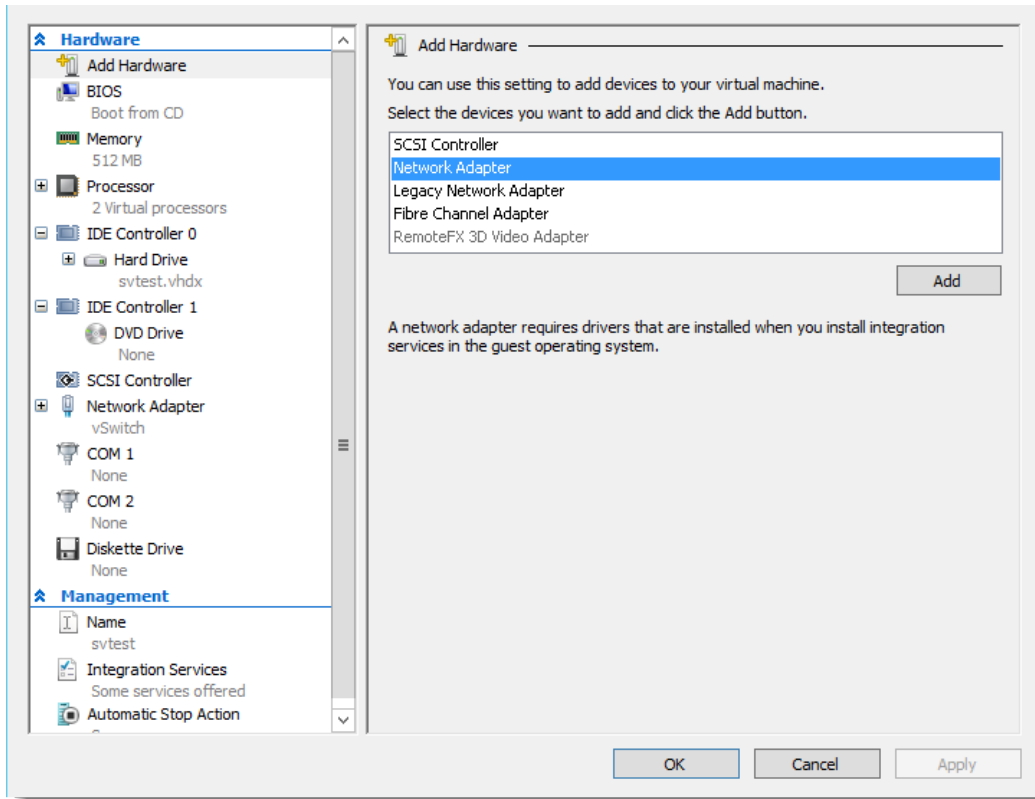
4. View the adapter properties, and click **OK**.

5. Click **OK**.

Installing AirWave on a KVM Virtual Machine

The following sections provide information to help you install AirWave on a KVM:

- "KVM Requirements" on page 7
- "Creating a KVM Virtual Machine" on page 7

KVM Requirements

The recommended OS is CentOS 6 (64-bit). Refer to the *AirWave 8.2.6 Server Sizing Guide* for memory and storage requirements.
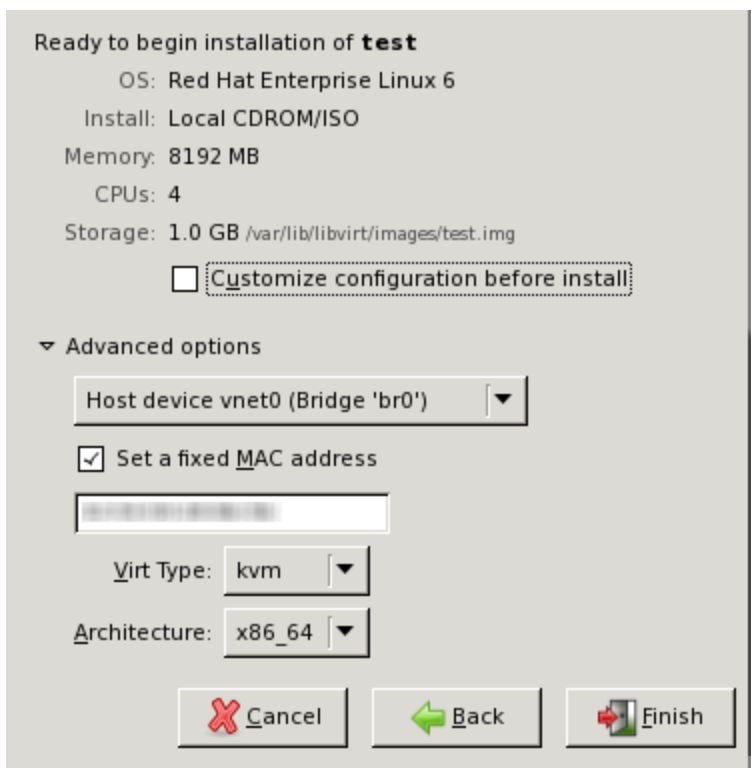
Creating a KVM Virtual Machine

To create a KVM virtual machine:

1. On the local host, type **virt manager** to run the New VM wizard.

2. Type a name for the virtual machine, select **Local install media (ISO image or CDROM)**, and then click **Forward**.

3. Click **Browse** to find the ISO image. Select **Linux** and **Red Hat Enterprise Linux 6** from the drop-down menus, then click **Forward**.
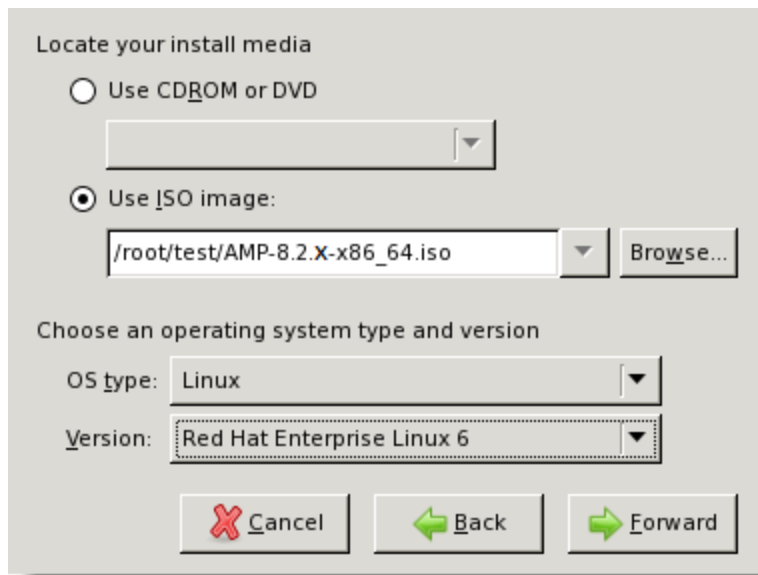
4. Assign memory to the KVM and CPUs, then click **Forward**.

5. Assign disk storage, enable the **Allocate entire disk now** option, and then click **Forward**.

6. Before you start the installation, under the Advanced options, select the Host device and enter the fixed MAC address of the bridge (typically br0) into the text box.

7. Click **Finish**. The Virtual Machine Manager creates the virtual machine and opens the AirWave console.

Upgrading AirWave

AirWave 8.2.7 has an upgrade tool that allows you to quickly download and install the software immediately. For the latest AirWave upgrade information, see the release announcement for detailed instructions and changes.

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 8.2.6 Server Sizing Guide* on the **Home > Documentation** page.

Supported Upgrades to AirWave 8.2.7

You can upgrade directly to AirWave 8.2.7 from the following software versions: 8.2.2, 8.2.2.1, 8.2.3, 8.2.3.1, 8.2.4, 8.2.4.1, 8.2.5, 8.2.5.1, 8.2.6, and 8.2.6.1. If you are running earlier versions of AirWave, upgrade to AirWave 8.2.2 before upgrading to 8.2.7.

Upgrade from AirWave 8.2.3.1 or Earlier Versions

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 upgrade to AirWave 8.2.7, and your system will be converted to use the new AMP CLI. For information about using the AMP CLI, see the *AirWave 8.2.7 User Guide*.

> **NOTE**
>
> HPE Aruba provides a digital signature for the upgrade package. The upgrade won't work if there have been modifications made since it was digitally signed.

> **NOTE**
>
> If you are upgrading to AirWave 8.2.7, 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, see "Step 5: Create the Recovery User" on page 4.

Follow these steps to upgrade from AirWave 8.2.3.1 or earlier:

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

   ```
   #start_amp_upgrade -v 8.2.7
   ```

   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
   ```
6. Finally, remove any OS user accounts to prevent unauthorized access.

Upgrade from AirWave 8.2.4 or Later

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.

Follow these steps to upgrade from AirWave 8.2.4 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 **8.2.7**.
   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 10 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, *jsmith* 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:
   - 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 later, upload the software:
      (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) From the AMP CLI menu options, enter **1** to upload the file from the AMP server to a source location 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 on the source location.

Configuring and Mapping Port Usage for AirWave

The following table itemizes the communication protocols and ports necessary for AirWave to communicate with wireless LAN infrastructure devices, including access points (APs), controllers, routers, switches, and RADIUS servers. Assign or adjust port usage on the network administration system as required to support these components.

Table 3: *AirWave Protocol and Port Chart*

Port	Type	Protocol	Description		Device Type
21	TCP	FTP	Firmware distribution	>	APs or controllers
22	TCP	SSH	Configure devices	>	APs or controllers
22	TCP	SSH	Configure AirWave from the CLI	<	Laptop or workstation
22	TCP	VTUN	Support connection (optional)	>	Aruba supports home office
22	TCP	SCP	Transfer configuration files or FW	<	APs or controllers
23	TCP	Telnet	Configure devices	>	APs or controllers
23	TCP	VTUN	Support connection (Optional)	>	Aruba supports home office
25	TCP	SMTP	Support email (optional)	>	Aruba supports email server
49	UDP	TACACS	AirWave Administrative Authentication	>	Cisco TACACS+
53	UDP	DNS	DNS lookup from AirWave	>	DNS Server
69	UDP	TFTP	Transfer configuration files or FW	<	APs or controllers
80	TCP	HTTP	Configure devices	>	Legacy APs
80	TCP	VTUN	Support connection (optional)	>	Aruba supports home office
161	UDP	SNMP	Get and Set operations	>	APs or controllers
162	UDP	SNMP	Traps from devices	<	APs or controllers
162	UDP	SNMP	Traps from AirWave	>	NMS
443	TCP	HTTPS	Web management	<	Laptop or workstation
443	TCP	HTTPS	WLSE polling	>	WLSE
443	TCP	VTUN	Support connection (optional)	>	Aruba supports home office

Table 3: *AirWave Protocol and Port Chart (Continued)*

Port	Type	Protocol	Description		Device Type
1701	TCP	HTTPS	AP and rogue discovery	>	WLSE
1741	TCP	HTTP	WLSE polling	>	WLSE
1812	UDP	RADIUS Auth	Authenticate & authorize AirWave administrative users on a RADIUS server.	>	RADIUS auth server
1813	UDP	RADIUS accounting	Retrieve user names for authenticated WLAN clients from NAS (captive portal, controller, autonomous AP). Only used when user names are not available in the SNMP MIB of a controller or autonomous AP.	<	RADIUS accounting client
2002	TCP	HTTPS	Retrieve client authentication info	>	ACS
5050	UDP	RTLS	Real Time Location Feed	<	Aruba thin APs
8211	UDP	PAPI	Real Time Feed (AMON)	< >	WLAN controllers
		ICMP	Ping Probe	>	APs or controllers

Getting Started

To start using AirWave for the first time:

- Log in to the WebUI
- Change your language preference
- Install licenses
- Change the default user
- Navigate the WebUI
- Work with default and filtered views

Log in to the WebUI

AirWave comes with a default user account with the user name "admin" and password "admin". In order to log in to the WebUI for the first time, you have to log in as the default user.

To access the AirWave WebUI:

1. Enter the AirWave IP address (IPv4 or IPv6) or hostname in the address bar of any browser.
2. Enter the default user name and password: **admin** and **<ampadmin password>**.
3. Click **Log In**.

Change the Language

You can change the language of the buttons, menus, and tabs in AirWave. You'll see the available languages at the bottom of the Login window. Look for the language that you want and select it.

If you want to change a language again, you must log out of AirWave and reopen the Login window.

Install the License

The first page to appear after you initially log in is the **Home > Overview** page. If you have more than one license to install, repeat this procedure for each license.

> **NOTE**
>
> AirWave pages are protected via SSL. Some browsers will display a confirmation dialog for your self-signed certificate. Signing your certificate will prevent this dialog from displaying.

To install the AirWave license:

1. On the License page, paste the AirWave license key you received into the license field on this page.
2. Cick **Save**.
3. In the AirWave licensing agreement, click **I Accept** to agree to the license terms and apply the license key.

Change the Default User

For security reasons, it's a good idea to change the default user name and password. You can do this from the **AMP Setup > Users** page. Refer to the procedure Creating AirWave User Roles in the *AirWave 8.2.7 User Guide* for additional information.

Navigate the WebUI

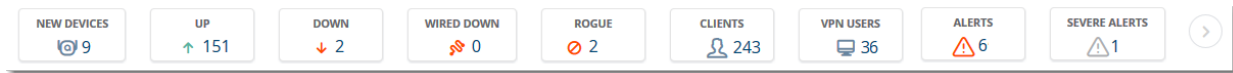The AirWave WebUI contains the following elements on every page:

- Header statistics
- Search utility
- Navigation sidebar
- Documentation links

Header Statistics

The top header of each AirWave WebUI page displays icons that provide counts on newly discovered devices, device status, mismatches, rogues, clients, and both unacknowledged and severe alerts. These icons also provide direct links for immediate access to key system components.

You can customize your header statistics to display what you want to monitor. For information, see the *AirWave 8.2.7 User Guide*.

Figure 2: *Header Statistics*

NEW DEVICES	UP	DOWN	WIRED DOWN	ROGUE	CLIENTS	VPN USERS	ALERTS	SEVERE ALERTS	
9	↑ 151	↓ 2	0	2	243	36	6	1	❯

Search Utility

The **Search** field at the top of every AirWave page provides a simple way to find devices, clients, groups, and rogues. You can search for things like notes, firmware versions, serial numbers, IP addresses (IPv4 or IPv6), MAC addresses, and users.

To find something using the Search field:

1. Click 🔍 .
2. In the Search field, type a keyword or the first few letters and numbers. For example, Figure 3 shows the the search results for "00:".
3. Select one of the following search methods:
   - Press Enter. You can change this default search method preference in the **Home > User Info** page.
   - Click the down arrow and select a method from the list of search options.
   - Click 🔍 to see quick search results, showing connected clients, which might already be your default search method.

Results include hypertext links to additional pages, and the **Filter** icon over some columns allows for additional filtering of search returns.

Figure 3: *Example of Search Results for 00:*

Search Results For 00:

| 6 Clients | 46 APs | 32 Controllers | 34 Switches |

NAME	MAC ADDRESS	IP ADDRESS	DEVICE TYPE	AP	CONNECT TIME	MODE	FLOOR PLAN
00:21:6a:9a:b6:36	00:21:6A:9A:B6:36	-	Windows 7	6c:f3:7f:c6:76:8e	13 hours 45 minutes	11n 5 GHz (20)	-
00:61:71:64:cb:78	00:61:71:64:CB:78	-	iPhone	venupragada	5 days 18 hours 16 minutes	11ac 5GHz (80)	-
192.168.177.129	00:25:9C:82:5C:77	-	Cisco-Linksys, LLC	rbalay	6 days 7 hours 51 minutes	11n 5 GHz (20)	-
pdedhia	00:24:D7:63:FD:FC	-	Windows	1248-325	54 minutes	11n 5 GHz (20)	-
-	00:19:94:49:34:31	-	Jorjin Technologies Inc.	Outdoor1	18 minutes	11n 2.4 GHz (20)	-
-	00:25:9C:DE:29:4D	-	Windows XP	AP325-SW	3 hours 19 minutes	11n 5 GHz (40)	-

Navigation Sidebar

The navigation bar allows you to access WebUI pages within AirWave. When you click in the AirWave WebUI and select a component from the navigation sidebar, AirWave will display monitoring, management, details, and

dashboard pages to the right.

Some navigation menus, such as AMP Setup, might be hidden from a user depending on the user's role.
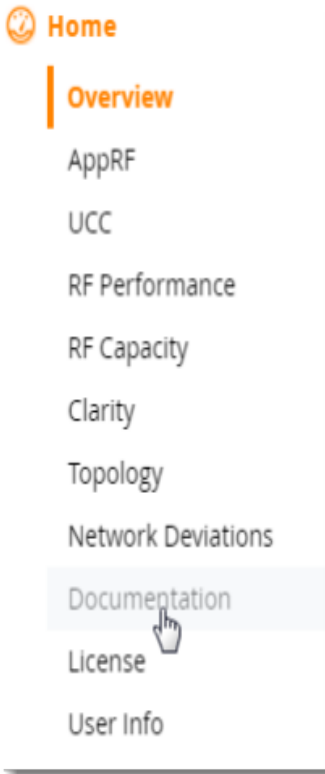
Documentation Links

You can access the *AirWave 8.2.7 User Guide* and other documents by clicking ⊘ in the upper-right corner of the WebUI page, or you can select **Home > Documentation** from the navigation sidebar.

Figure 4: *Navigation Sidebar*

Work with Default and Filtered Views

AirWave provides predefined, default views for lists displayed on the **Devices** and **RAPIDS** pages. These default views cannot be modified. However, you can adjust how much information displays in your view, then filter the results.

Figure 5 shows the default view for the list of devices.

Figure 5: *Default View for Devices*
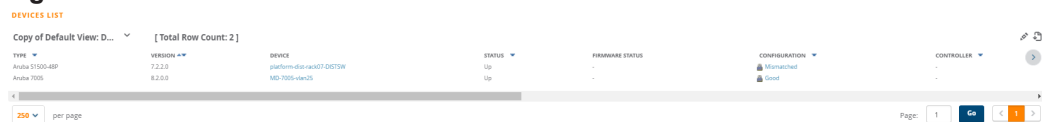
In addition to the default view, you can create a new view, or edit and copy a view, and then save the view to access information you frequently use. For more information on filtering data from your view, see "Creating Customized Filtered Views" in the *AirWave 8.2.7 User Guide*.

Contacting Support

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

aruba®

a Hewlett Packard
Enterprise company

www.arubanetworks.com
3333 Scott Blvd
Santa Clara, California 95054
Phone: 1-800-WIFI-LAN (+800-943-4526)
Fax 408.752.0626