

#### **DATA SHEET**

# ARUBA AIRWAVE

Visibility and management for multi-vendor access networks

Aruba AirWave is an easy-to-use network operations system that manages wired and wireless infrastructure from Aruba and a wide range of third-party manufacturers. It also includes visibility and controls that let you optimize how devices and apps perform on your network.

Through a centralized and intuitive user interface, AirWave provides real-time monitoring, proactive alerts, historical reporting, and fast, efficient troubleshooting. Dedicated dashboard views quickly help view potential RF coverage issues, unified communications and collaboration (UCC) traffic, application performance and network services health.

#### SINGLE PANE OF GLASS FOR LARGE ENVIRONMENTS

AirWave Glass, provides customers running multiple AirWave instances a single console that clearly displays network infrastructure data for visibility, reporting and troubleshooting. An advanced search engine enables IT administrators to efficiently get to the data they need without suffering through a "click" marathon. Built-in single sign-on (SSO) login security, lets IT staff safely go from Glass to individual AirWave consoles for efficient administration and privileges control. The same role-based access controls that are used in AirWave also manage who does what. Glass is available in physical and virtual appliance options.

#### **CONNECTIVITY ANALYTICS**

Available add-on module proactively analyzes end-users' quality of experience by providing monitoring capabilities for critical network services, such as time and response failures for a device to associate with a Wi-Fi radio, monitored authentication times, and responses from DHCP, and DNS services.

This gives IT organizations end-to-end visibility into problems before they escalate as metrics are monitored in real-time, and also captured through on-demand or scheduled testing for predictive insight.

#### **REAL-TIME MONITORING AND VISIBILITY**

- Automatically see every user and device wireless and remote on the network.
- Measure response times and failure rates for client association with Wi-Fi radio, authentication with a RADIUS server, gathering IP address through DHCP, and resolving names for DNS services.
- Monitor wired infrastructure that connects wireless controllers and APs.
- View radio errors, including noise floor and channel utilization information, frequent causes of connectivity problems.
- Drill down from network-wide to device-level monitoring views.
- Store and view RF performance, capacity and application-level statistics, web traffic and network deviations over a 40-week period.

#### **APPRF**

For deep visibility into common applications and web traffic, AppRF ensures mission-critical apps get priority, you can gauge overall app usage, and have visibility into the heaviest users. A dedicated UCC dashboard provides granular visibility into Unified Communications applications such as Skype for Business and all Wi-Fi calls traversing your network.

# **VISUALRF**

Location and mapping offers network-wide views for your entire RF environment. Maps of Wi-Fi coverage and the underlying wired topology show a clear and accurate picture of who is on the network, their location and how the network is performing. Overlays show client health and application performance to quickly diagnose issues specific to a client, a floor plan or specific location.

# **RAPIDS**

AirWave's rogue detection works with Aruba RFProtect wireless intrusion protection software to collect data and mitigate issues with rogue APs, rogue clients and wireless intrusion events across wired and wireless networks. The wireless data collected is correlated with wired network data to identify the most significant and relevant threats, while greatly reducing false-positives and strengthening network security.

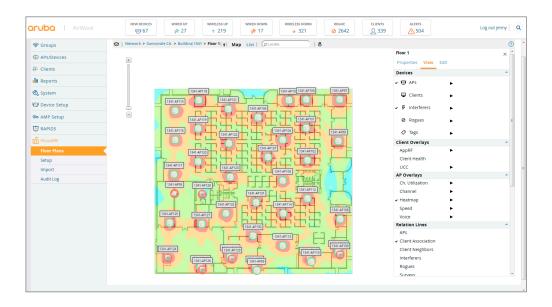


Figure 1: Network-wide visibility and location mapping.

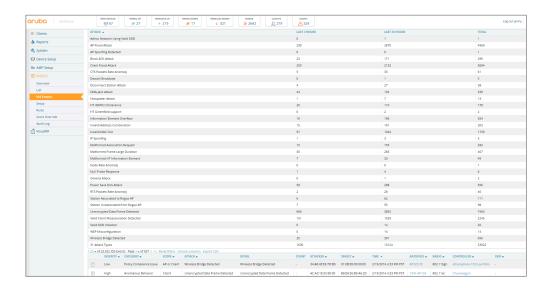


Figure 2: Detect more than 25 types of wireless attacks.

# **DEVICE DISCOVERY**

- Automatically discover WLAN infrastructure devices.
- Operate in any network environment, including large distributed networks with multiple locations.

#### TROUBLESHOOTING AND DIAGNOSTICS

- View client device data from ArubaOS, Aruba Instant and Aruba ClearPass Policy Manager including device type, operating system, operating system details, manufacturer and model.
- Search for clients by user name or MAC address for a diagnostic view of device and network statistics along with indicators to evaluate overall health and performance.
- Overlay client health on a floor plan to diagnose issues specific to the client or to an area on a floor plan.
- Easily diagnose RF issues in the network for advanced RF troubleshooting.

#### **ROOT CAUSE ANALYSIS AND EVENT CORRELATION**

- Map upstream relationships between APs, controllers and switches to identify the root cause of downtime and performance problems.
- Correlate performance and downtime issues to send only a single alert in the event of an upstream device failure.

# **CONFIGURATION MANAGEMENT**

- Automatically configure APs, controllers, Aruba Instant, and Aruba Switches.
- Define configuration policies through a web user interface or by importing known-good configuration from an existing device.
- Configure Aruba Instant APs to provision a large number of branch locations with ease. Manage configurations across multiple locations with tools like adding notes, and overrides, as well as multi-edit and context-sensitivity support.
- Eliminate time-consuming and error-prone manual updates with efficient remote software distribution.
- Support advanced firmware image upgrades with features such as enforcing certified versions by group, splittingup image downloads and reboot processes, as well as support for scheduling of firmware upgrades or change configurations to occur during off hours.
- Archive device configurations for auditing and version control. Additionally, archive device configurations and flash backups to restore previous stat and configuration of Aruba controllers.
- Maintain detailed audit logs of changes made by all AirWave operators.

#### BETTER NETWORK PLANNING AND PROVISIONING

 VisualRF and the offline VisualRF Plan allow for quick planning of RF and wired coverage for new sites.

# MANAGE LATEST TECHNOLOGIES, ARCHITECTURES AND PRODUCTS

- A single management interface for multiple generations of devices
- Support autonomous, controller-managed and mesh APs, including outdoor Aruba AirMesh.
- Monitor wired edge devices using standard MIB data.
- Generate reports on wired port utilization for capacity planning.
- Support latest ArubaOS and ArubaOS-Switch management capabilities.

#### **EASY-TO-USE WEB INTERFACE**

- Role-based access, viewing rights and administrative privileges tailored to job responsibilities.
- Custom graphs of key information allow for pan and zoom for visibility into specific periods of time.
- Identify and search for users by user name.
- Client overview summarizes the types of clients attached to the network and provides visibility into watched or VIP clients.
- Multiple dashboard views provide visibility into every aspect of RF, clients, apps and network services.

#### SECURE COMMUNICATIONS

 Government-grade, agency-validated information assurance validations including FIPS 140-2 (Certificate #2577). For more information, read detailed documentation.

# HARDWARE AND VIRTUAL APPLIANCE OPTIONS

The following versions of AirWave are designed and tested to ensure compatibility and performance for different size requirements:

- Pro version supporting up to 1,500 managed devices.
- Enterprise version supporting up to 4,000 managed devices.

#### **HARDWARE**

- Glass and AirWave Enterprise will require the Enterprise Appliance
- Virtual Machines
- VMware and Hyper V supported

# **HARDWARE PLATFORMS**

| Category                  | Pro Appliance  | Enterprise Appliance   |
|---------------------------|--|--|
| Appliance Specifications  |  |  |
| CPU                       | 8-core 2.6 Ghz HPE DL360 Gen9 E5-2640v3                        | 2 8-core 2.6 Ghz HPE DL360 Gen9 E5-2640v3                      |
| Memory                    | 48GB   | 96GB   |
| Storage                   | 6 300GB 12G SAS 15K 2.5in SC ENT HDD                           | 8 300GB 12G SAS 15K 2.5in SC ENT HDD                           |
| Appliance Scalability     |  |  |
| Maximum Managed Devices   | 1,500  | 4,000  |
| Power                     |  |  |
| Power                     | 500W FS Plat Hot Plug Power Supply                             | 500W FS Plat Hot Plug Power Supply                             |
| Power Supply              | Optional redundant power supply                                | Optional redundant power supply                                |
| AC Input Voltage          | 110/220 VAC Auto-Selecting                                     | 110/220 VAC Auto-Selecting                                     |
| AC Input Frequency        | 50/60 Hz Auto-Selecting  | 50/60 Hz Auto-Selecting  |
| Physical                  |  |  |
| Rackmount                 | 1U SFF Easy Install Rail<br>1U Cable Management Arm            | 1U SFF Easy Install Rail<br>1U Cable Management Arm            |
| Dimensions<br>(H x W x D) | 1.7 x 17.1 x 27.5 inches<br>(4.32 x 43.47 x 69.85 cm)          | 1.7 x 17.1 x 27.5 inches<br>(4.32 x 43.47 x 69.85 cm)          |
| Weight                    | 33.3 lb. (15.31 kg) max  | 33.3 lb. (15.31 kg) max  |
| HP SmartDrives            | 8 + 2 SFF/4 LFF max, HDD/SSD                                   | 8 + 2 SFF/4 LFF max, HDD/SSD                                   |
| Networking                | 4 x 1GbE embedded + FlexibleLOM slot                           | 4 x 1GbE embedded + FlexibleLOM slot                           |
| VGA/serial/USB ports      | Front VGA opt, rear VGA standard, and serial opt., 5 USB 3.0   | Front VGA opt, rear VGA standard, and serial opt., 5 USB 3.0   |
| GPU support               | Two single-wide and active to 9.5" in length, up to 150 W each | Two single-wide and active to 9.5" in length, up to 150 W each |
| Industry compliance       | ASHRAE A3 and A4, lower idle power                             | ASHRAE A3 and A4, lower idle power                             |
| Warranty                  |  |  |
| Hardware                  | 1 year parts   | 1 year parts   |
| Software                  | 90 days  | 90 days  |

| ORDERING INFORMATION |  |  |
|----------------------|--|--|
| Part Number          | Description  |  |
| JW546AAE             | Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU   |  |
| JW558AAE             | Aruba AW-25-FR AirWave 25 Device Failover License E-LTU                      |  |
| JW559AAE             | Aruba AW-50-FR AirWave 50 Device Failover License E-LTU                      |  |
| JW560AAE             | Aruba AW-100-FR AirWave 100 Device Failover License E-LTU                    |  |
| JW561AAE             | Aruba AW-200-FR AirWave 200 Device Failover License E-LTU                    |  |
| JW562AAE             | Aruba AW-500-FR AirWave 500 Device Failover License E-LTU                    |  |
| JW563AAE             | Aruba AW-1000-FR 1000 AirWave Device Failover License E-LTU                  |  |
| JW564AAE             | Aruba AW-2500-FR 2500 AirWave Device Failover License E-LTU                  |  |
| JW565AAE             | Aruba AW-EXF1-50 AirWave 50 Device Failover Expansion License E-LTU          |  |
| JW566AAE             | Aruba AW-EXF1-2500 AirWave 2500 Volume Failover Expansion License E-LTU      |  |
| JW567AAE             | Aruba AW-MASTER AirWave Master Console License E-LTU                         |  |
| JX918A               | Aruba AirWave DL360 Professional Edition Hardware Appliance                  |  |
| JX919A               | Aruba AirWave DL360 Enterprise Edition Hardware Appliance                    |  |
| JZ075A               | Aruba AW-HW-GLASS AirWave Hardware Appliance for Centralized Monitoring      |  |
| JZ076AAE             | Aruba AW-VA-GLASS AirWave Virtual Appliance for Centralized Monitoring E-LTU |  |

