

## DATA SHEET

# ARUBA AIRWAVE

Management and monitoring for multi-vendor campus 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.

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.

### REAL-TIME MONITORING AND VISIBILITY

- Automatically see every user and device – wireless and remote – on the network.
- View topology with automated mapping
- 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.

### 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.

### 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.

### 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.

## 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.

## DEVICE DISCOVERY

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

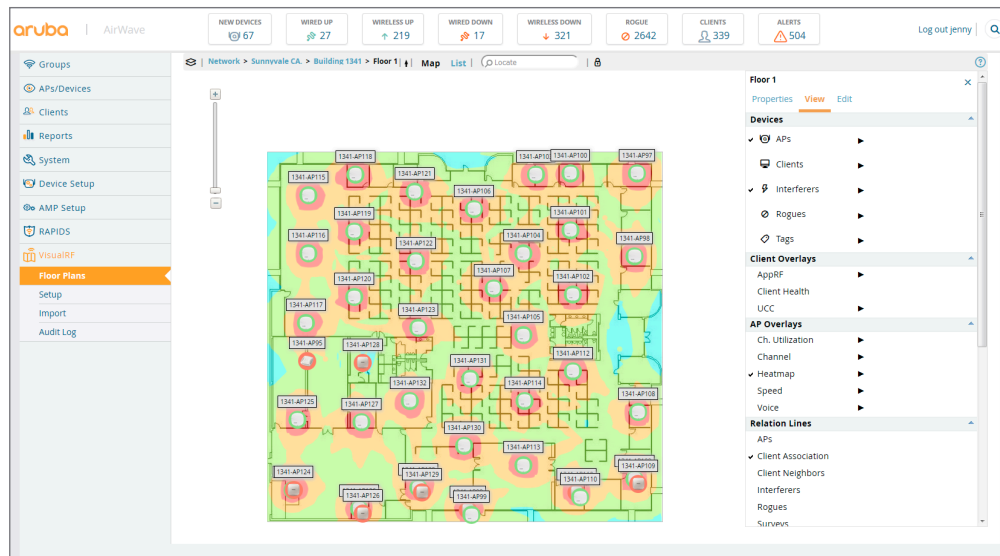


Figure 1: Visual troubleshooting and deployment planning

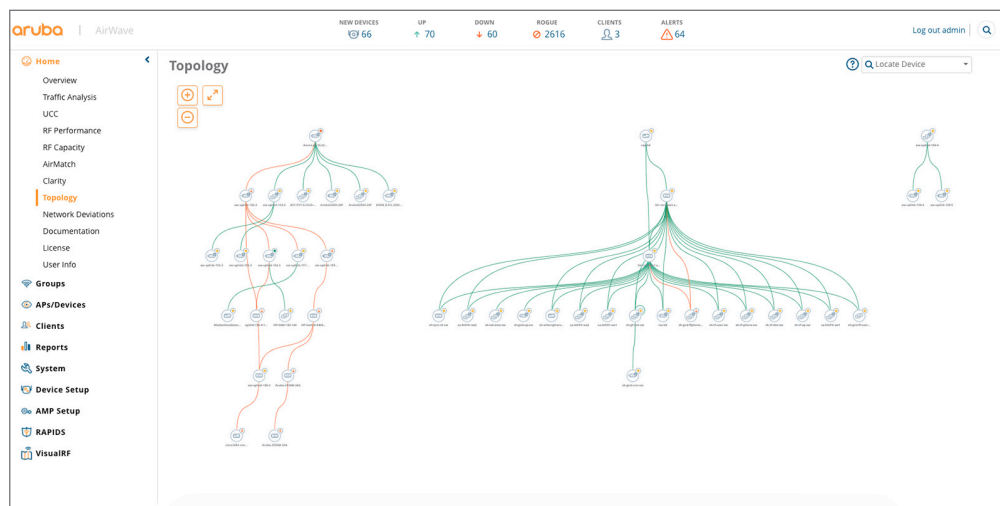


Figure 2: Automated network topology mapping

## 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.
- Troubleshoot faster with configuration backup, compare and restore.
- 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, splitting-up 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 state 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.

## GOVERNMENT GRADE CERTIFICATIONS

AirWave is highly secure and meets the most stringent governmental security requirements including:

- Federal Information Processing Standard (FIPS) Publication 140-2 validation, a government level computer security standard for cryptographic modules (Certificate #2577), and
- Department of Defense Information Network Approved Products List (DODIN APL) certification.

[See detailed security documentation for more information.](#)

## DEPLOYMENT OPTIONS

AirWave and AirWave Glass can be deployed either as dedicated hardware appliances or on virtual machines.

Aruba AirWave hardware appliances are designed and tested to scale to your environment:

- AirWave Pro appliance supports up to 1,500 managed network devices.
- AirWave Enterprise appliance supports up to 4,000 managed network devices.
- Glass appliance for centralized monitoring supports up to 30,000 managed network devices.

Virtual appliances are supported on VMware, Microsoft Hyper-V, and KVM.

## TESTED HARDWARE PLATFORMS

Model	AW-HWDL360-PRO	AW-HWDL360-ENT	HPE-ProLiant DL360 Gen10 TAA-Compliant 8SFF Server
Maximum Devices	400	1,500	4,000
CPU	1 x Intel® Xeon® CPU E5-2640 v3 @ 2.60 GHz	Dual Intel® Xeon® CPU E5-2640 v3 @ 2.60 GHz	2 x Intel® Xeon® Gold 6148 (2.40 GHz/20-Core/150 W)
Physical Cores	8	16	40
Passmark Score	14,057	20,930	25,416
RAM	48 GB	96 GB	288 GB
Disks	6 x 300 GB 15k rpm SAS (RAID 10 only)	8 x 300 GB 15k rpm SAS (RAID 10 only)	2 x 1.92 TB Mixed-Use SSD (RAID 1 only)
Storage Capacity	800 GB	1 TB (with RAID 10)	1.92 TB
Maximum Input/Output Operations Per Second (IOPs)	2,132	2,842	69,000 (Random Read) 28,500 (Random Write)

## 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
Q9M06A	AirWave Appliance Enhanced Security TAA