



## AIRWAVE®: COMPREHENSIVE MANAGEMENT FOR MOBILE ENTERPRISE NETWORKS

AirWave from Aruba delivers operational efficiency to IT organizations that manage rapidly changing enterprise networks and support an expanding mobile workforce.

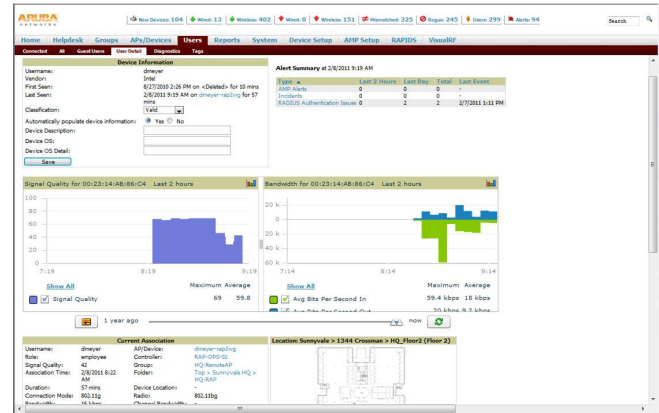
Mobility introduces new challenges to IT that require visibility into everything that affects service quality – the RF environment, controllers, the wired infrastructure and access points (APs) – as well as an intelligent, identity-based approach to managing the network.

AirWave provides IT with the clarity and control it needs to effectively manage today's mobile enterprise networks – including providing real-time monitoring, proactive alerts, historical reporting, and fast, efficient troubleshooting – through a centralized, intuitive user interface.

Using VisualRF™ location and mapping capabilities, AirWave presents a comprehensive view of the enterprise-wide RF environment. By generating a map of Wi-Fi coverage and the underlying wired topology, AirWave VisualRF provides a clear and accurate picture of who is on the network, their location, and how the network is performing.

Working in conjunction with ArubaOS™ RFprotect spectrum analysis and wireless intrusion protection software, AirWave RAPIDS™ collects rogue AP and wireless intrusion events and correlates this data with wired network data to highlight the most relevant threats, greatly reducing false-positives and vastly improving network security.

With its easy-to-use interface and identity-based approach to network access, AirWave lets service desk personnel triage connectivity issues so that IT engineers can focus on proactively optimizing network performance. Available as software or a combined hardware and software appliance, AirWave reduces cost and complexity, improves service quality, and helps IT make intelligent, well-informed decisions about network design.



*AirWave delivers identity-based monitoring and comprehensive management to the mobile enterprise.*

### EASY-TO-USE WEB INTERFACE

- Role-based access; viewing rights and administrative privileges tailored to job responsibilities.
- Customizable views of key information.
- Identify and search for users by user name.

### DEVICE DISCOVERY

- Automatically discovers wireless LAN (WLAN) infrastructure devices.
- Operates in any network environment, including distributed networks with large numbers of facilities.

### REAL-TIME MONITORING

- Automatically tracks every wireless user and device connected to the network.
- Creates visibility into the wired infrastructure that connects wireless controllers and APs.
- Logs and displays radio and RADIUS errors, a frequent cause of connectivity problems.
- Provides rapid drill-down from network-wide to device-level monitoring views.

### ROOT CAUSE ANALYSIS AND EVENT CORRELATION

- Maps upstream relationships between APs, controllers and switches to help identify the root cause of downtime and performance problems.

### AUTOMATED CONFIGURATION MANAGEMENT

- Automatically configures APs, controllers and Aruba S3500 Mobility Access Switches.
- Configuration policies are defined using a web-based user interface or by importing a known-good configuration from an existing device.
- Hierarchical policy definition allows quick and easy updates of general configurations across the entire network without overwriting settings that may vary from location to location.
- Efficient remote software distribution eliminates time-consuming and error-prone manual updates.
- Intelligent scheduling lets IT automate configurations or firmware updates with minimal disruption and create recurring tasks.
- Supports archived device configurations for auditing and version control.
- Maintains detailed audit logs of changes made by all AirWave operators.

### BETTER NETWORK PLANNING AND PROVISIONING

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

### MANAGING THE LATEST TECHNOLOGIES, ARCHITECTURES AND PRODUCTS

- A single management interface for multiple generations of devices.
- Support for autonomous, controller-managed, and mesh APs.
- Monitors Aruba Mobility Access Switches and other edge devices using standard MIB data.

- Generates reports on wired port utilization to support capacity planning and network Supports Aruba's latest management capabilities.
- Supports third-party WLANs from leading vendors, including Cisco, Motorola and Hewlett-Packard.

#### OPEN ARCHITECTURE

- XML API enables cost-effective integration of valuable location data with other applications.
- Any data that is visible in AirWave is accessible via the XML API.

#### PLATFORM DATA

- Centralized network operations center require no local agents.
- Runs on standard PC hardware/standard Linux operating system.
- Device communication through SSH, Telnet, SNMP v1/v2c/v3 and other standard protocols.
- Supports up to 100,000+ managed devices.

### VISUALRF FEATURES

#### REAL-TIME VISUALIZATION

- Voice overlay displays coverage for voice handsets, including a radio count heat map.
- Displays Aruba Mobility Access Switches and other wiring closet devices for a comprehensive view of the network edge.
- Simulate failure feature enables analysis of what-if scenarios for proactive RF coverage planning.

#### EFFECTIVE SITE PLANNING FOR PRECISE DEPLOYMENT

- Determines the right quantity and placement of APs, controllers, Aruba Mobility Access Switches and other edge devices based on RF coverage goals.
- Incorporates Aruba Mobility Access Switches and other wiring closet devices into the network design.
- Automatically generates bill of material reports.

#### STANDALONE VISUALRF PLAN TOOL

- Runs on Windows-based laptops and workstations.
- Uses the same RF planning and visualization algorithms as the integrated VisualRF module.
- Allows plans made offline to be exported into the integrated VisualRF module; also allows plans from the integrated VisualRF module to be exported into the standalone VisualRF tool.

#### INTEGRATED LOCATION TRACKING AND RF VISUALIZATION

- Allows quick location of users and wireless devices for troubleshooting, planning and asset tracking.
- Playback location history of individual users over the past day to aid in troubleshooting and recovery of lost devices.
- Last known location of each tracked device is stored indefinitely to help find lost or stolen devices.

### RAPIDS FEATURES

#### RAPIDS HIGHLIGHTS

- Flexible rules-based determination of what a rogue AP means to the existing environment.
- Correlates data gathered from the wired infrastructure with data gathered from the WLAN infrastructure to reduce false positives.
- Central management console for ArubaOS RFprotect software module monitors intrusion detection and prevention activity, while identifying and neutralizing rogue APs.
- Utilizes location data from VisualRF.
- Compliance reporting, including the payment card industry (PCI) data security standard.

#### ROGUE DEVICE VISUALIZATION

- Integrates with VisualRF to display the location of each rogue device on a building floor plan.

#### INTRUSION DETECTION SYSTEM (IDS) EVENTS

- Aggregates, correlates, alerts and logs wireless attacks that have been detected and reported on the network, providing a comprehensive picture of infrastructure security.

#### STRONG ENTERPRISE-GRADE SECURITY

- View locations of rogue APs discovered by AirWave RAPIDS for faster investigation and threat removal.
- Plan the precise locations to deploy dedicated Wi-Fi sensors, such as Aruba air monitors, to ensure complete coverage.
- Compares wired and wireless scanning results to eliminate duplicates and refine threat assessment.

#### RULES-BASED THREAT CLASSIFICATION

- Classify potential threats based on customized rules that define the characteristics of a rogue device.
- Reduces false-positives and lets the network security staff focus on the most significant threats.

#### AUTOMATED ALERTS AND REPORTS

- Predefined, customizable reports address common security and compliance information needs, such as rogue device tracking and PCI compliance.

#### AUTOMATIC AND MANUAL CONTAINMENT

- Perform manual or automated rogue AP containment with Aruba and Cisco controllers.
- Customized operator-defined rules-based classification determines when to automatically contain devices.
- Disable wired switch ports if attached rogue APs are detected.

#### ORDERING INFORMATION

Part Number	Description
AW-50	AirWave software to manage up to 50 devices (including controllers, APs, Aruba Mobility Access Switches and third-party switches)
AW-100	AirWave software to manage up to 100 devices
AW-200	AirWave software to manage up to 200 devices
AW-500	AirWave software to manage up to 500 devices
AW-1000	AirWave software to manage up to 1,000 devices
AW-2500	AirWave software to manage up to 2,500 devices
AW-EXP1-50	AirWave expansion license for one additional AP/device for systems with 50 or greater existing device licenses
AW-MASTER	AirWave software license to manage multiple AirWave servers from a single console

#### For large and mission-critical networks:

Failover licenses are also available for each corresponding AW-xxx package.



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