Managing Wireless Networks with AirWave
About the Presenter

• Wireless expert since acquiring his ham radio license at age 13

• 10+ years in networking & systems administration

• Worked with hundreds of organizations on wireless network management, security, and planning
What Is AirWave?

The industry’s only platform with a single view of the entire Access Network

- Premier mobile network *Operations Solution*
- Multi-vendor, mixed architecture monitoring
- Integrates with industry-leading enterprise management systems
Mobility Breaks the Network Management Model

**Old Model:**
*Port-Based Management*
- Known user population
- One device per user
- Fixed locations
- Manage the wire

**New Model:**
*User-Centric Management*
- Many classes of users
- Multiple devices per user
- Fully mobile population
- Control the air

Visibility is key to user-centric management
AirWave Approach to Management

Operations Management Solution

Help Desk
- Easy-to-use console

Desktop Support
- Device monitoring and control

Network Engineering
- Full network control

Security and Audit Group
- Compliance reports

Executive Management
- Usage and trend reports

Role-Based Administrative Access

Monitoring and Visualization

Client-Level Troubleshooting

Configuration, Management, and Diagnostics

Compliance and Security Management

Reporting and Analysis

Multi-Vendor, Multi-Architecture Platform

Visibility lets the entire IT organization work efficiently
Delivering Efficient Support

Wireless networks enable critical mobile applications like inventory management, voice, video surveillance, and more.
– IT will inevitably be drawn into supporting more users and more classes of devices

Today’s wireless management model cannot scale

End User
Reports wireless problems

Helpdesk
Lacks the tools and training to differentiate between client, wireless, and wired network problems

Network Engineer
Ends up handling everything from client device configuration to network infrastructure failures
Empowering the Help Desk

Giving the Level 1 and Level 2 Help Desk the tools and the training to support all classes of end users is critical to success.

- **End User**
- **Helpdesk**
  - Able to diagnose and resolve the most common user-reported problems
  - When escalation is required, Helpdesk is able to pass snapshot information to Network Engineering
- **Network Engineer**
  - Only a limited number of true network-related issues are escalated

**Faster Response, Lower Operational Costs, Efficient Division Of Labor**
Aruba Networks And AirWave

• **Key component of Mobile Virtual Enterprise (MOVE) Architecture**

• **Comprehensive Management and Monitoring**
  – Configure Aruba APs and mobility controllers
  – Supports the latest Aruba devices, including
    • AP-134/135
    • Aruba Instant
    • Aruba S3500 Mobility Access Switch line

_Saves time, improves service quality, and lowers the costs of managing any Aruba mobile network infrastructure_
AirWave Multi-Vendor Support

- Identification & Monitoring
- Real-time Status Reporting
- Automated Compliance
- Firmware Distribution

AirWave

Mobility Controllers
- Aruba
- Cisco
- Juniper/Trapeze
- Motorola

Wired Infrastructure
- Aruba
- Any MIB-II compliant device
- Cisco Motorola HP/3COM and more

Access Points
- Aruba

Users
- Monitor network activity
- Visibility & reporting for Aruba MDAC
- Integration with MDM
Key Features

- **Comprehensive Monitoring**
  - Wired and wireless device discovery
  - Monitoring of every device and user on wireless network
  - Root cause analysis
  - Reporting on real-time status and historical trends

- **Centralized Management**
  - Configuration of wired and wireless devices
  - Firmware distribution
  - Automated compliance

- **Easy-to-use interface**
  - Role-based access
  - Access by business/organization unit
AirWave RAPIDS Rogue Detection

• Centralized dashboard / control panel for advanced wireless intrusion prevention (WIP)
• Wireless and wire-line scanning

- Wireline “fingerprint” scans
- Wireless rogue scans using existing infrastructure
- Router & switch polling
- Laptop client
- Attack signatures

Robust rogue detection and event correlation / classification
VisualRF Mapping and Location

- **Centralized Visibility Dashboard**
  - Displays accurate location information for all wireless users, rogues, and devices
  - Up-to-date heat maps and channel maps for RF diagnostics
  - Historical user location playback
  - Easy import of existing floor plans and building maps
  - Multi-floor location and heat map bleed through
  - VisualRF Plan provides off-line planning capabilities

![VisualRF Mapping and Location](image)