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fast lane

Configuring Mobility with AOS-8 Level 1 (AR-CAM1)

Course Description

This course teaches the knowledge, skills and practical experience required to set up and configure a basic Aruba WLAN utilizing the AOS 8.X architecture and features.Using lecture and labs, this course provides the technical understanding and hands-on experience of configuring a single Mobility Conductor with one controller and AP Aruba WLAN.

Participants will learn how to use Aruba hardware and AOS8 to install and build a complete, secure controller network with multiple SSIDs.

Course Duration:

3 days

Objectives:

After you successfully complete this course, expect to be able to:

- Explain how Aruba's wireless networking solutions meet customers' requirements
- Explain fundamental WLAN technologies, RF concepts, and 802.11 Standards
- Learn to configure the Mobility Conductor and Mobility Controller to control access to the Employee and Guest WLAN
- Control secure access to the WLAN using Aruba Firewall Policies and Roles
- Recognize and explain Radio Frequency Bands and channels, and the standards used to regulate them
- Describe the concept of radio frequency coverage and interference and successful implementation and diagnosis of WLAN systems
- Identify and differentiate antenna technology options to ensure optimal coverage in various deployment scenarios
- Describe RF power technology including, signal strength, how it is measured and why it is critical in designing wireless networks
- Learn to configure and optimize Aruba ARM and Client Match and Client Insight features
- Learn how to perform network monitoring functions and troubleshooting

Course Outline:

- WLAN Fundamentals
    - Describes the fundamentals of 802.11, RF frequencies and channels
    - Explain RF Patterns and coverage including SNR
    - Roaming Standards and QOS requirements
- Mobile First Architecture
    - An introduction to Aruba Products including controller types and modes
    - OS 8.X Architecture and features
    - License types and distribution

- Mobility Conductor Mobility Controller Configuration
    - Understanding Groups and Subgroups
    - Different methods to join Mobility Controller with Mobility Conductor
    - Understanding Hierarchical Configuration
- Secure WLAN configuration
    - Identifying WLAN requirements such as SSID name, encryption, authentication
    - Explain AP groups structure and profiles
    - Configuration of WLAN using the Mobility Conductor GUI
- AP Provisioning
    - Describes the communication between AP and Mobility controller
    - Explain the AP booting sequence and requirements
    - Explores the APs controller discovery mechanisms
    - Explains how to secure AP to controller communication using CPSec
    - Describes AP provisioning and operations
- WLAN Security
    - Describes the 802.11 discovery, authentication and association
    - Explores the various authentication methods, 802.1x with WPA/WPA2, Mac auth
    - Describes the authentication server communication
    - Explains symmetric vs asymmetric Keys, encryption methods
    - WIPS is described along with rogue discovery and protection
- Firewall Roles and Policies
    - An introduction into Firewall Roles and policies
    - Explains Aruba's Identity based Firewall
    - Configuration of Policies and Rules including aliases
    - Explains how to assign Roles to users
- Dynamic RF Management
    - Explain how ARM calibrates the network selecting channels and power settings
    - Explores OS 8.X Airmatch to calibrate the network
    - How Client Match and Client Insight match steers clients to better APs
- Guest Access
    - Introduces Aruba's solutions for Guest Access and the Captive portal process
    - Configuration of secure guest access using the internal Captive portal
    - The configuration of Captive portal using Clearpass and its benefits
    - Creating a guest provisioning account
    - Troubleshooting guest access
- Network Monitoring and Troubleshooting
    - Using the Mobility Conductor dashboard to monitor and diagnose client, WLAN and
- AP issues
    - Traffic analysis using APPrf with filtering capabilities
    - A view of AirWave's capabilities for monitoring and diagnosing client, WLAN and AP issues

Who Should Attend

Typical candidates for this course are IT Professionals who deploy small-to-medium scale enterprise network solutions based on Aruba products and technologies