Configuring Aruba Mobility Level 1 (CAM1), Rev 23.22

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.

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 Master 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 features
- Learn how to perform network monitoring functions and troubleshooting

Topics

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 Master Mobility Controller Configuration

- An introduction to Aruba Products including controller types and modes

***5-day ILT and ILO both Classes are Available.**

- OS 8.X Architecture and features
- License types and distribution

Secure WLAN configuration

- Identifying WLAN requirements such as SSID name, encryption, authentication
- Explain AP groups structure and profiles
- Configuration of WLAN using the Mobility Master 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 the new OS 8.X Airmatch to calibrate the network
- How Client 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

***5-day ILT and ILO both Classes are Available.**

Network Monitoring and Troubleshooting

- Using the MM dashboard to monitor and diagnose client, WLAN and AP issues
- Traffic analysis using APPrf with filtering capabilities
- A view of Airwaves capabilities for monitoring and diagnosing client, WLAN and AP issues

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