

TRAINING GOALS:

This course teaches the knowledge, skills and practical experience required to set up and configure a basic **Aruba WLAN** utilizing the OS 8.X architecture and features. Using lecture and labs, this course provides the technical understanding and hands-on experience of configuring a single Mobility Master with one controller and AP Aruba WLAN. Participants will learn how to use Aruba hardware and ArubaOS to install and build a complete, secure controller network with multiple SSIDs. This course provides the underlying material required to prepare candidates for the **Aruba Certified Mobility Associate (ACMA) V8 certification exam**.

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

Target Audience

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

CONSPECT:

- 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
 - 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
- 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

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Aruba Networks.

This course additionally prepares you for Aruba Networks Associate level certification exam: **Aruba Certified Mobility Associate (ACMA)** available at Pearson VUE test centers.

TRAINER:

Aruba Networks Certified Trainer.