

Aruba Certified Mobility Professional (ACMP) - Implementing Aruba Mobility

Course description

This course teaches the knowledge, skills and practical experience required to set up and configure advanced features on Aruba WLAN utilizing the AOS 8.X architecture and features. This course includes lectures and labs which provide the technical understanding and hands-on experience of configuring a redundant Mobility Master with two controllers and two APs. Participants will learn how to install a redundant Aruba WLAN network with clustering while using many features like Multizone for guest access, voice optimization and tunneled node. This course includes the AirWave management system and troubleshooting commands. The SWDI course provides the underlying material required to prepare candidates for the Aruba Certified Mobility Professional Exam.

This certification validates knowledge and skills in these key areas and more:

- Configuring and using the Mobility Master for consolidated network management
- Uses and advantages of clustering
- Redundancy and providing user seamless failover
- Utilizing MultiZone to have multiple and separate secure networks while using the same Access Point (AP)
- Utilizing secure Tunneled Node for wired switches
- Utilizing AirWave to monitor the health of the wired and wireless network
- Troubleshooting devices, users and applications on Aruba Mobile First networks

Why earn this certification?

- Position yourself as a trusted team member who can contribute to the design, deployment and management of the latest Aruba Mobile First Network solutions
- Demonstrate your ability to implement and manage Mobile First Networking solutions utilizing advances and innovations from AOS8
- Advance your career as a Aruba Certified Mobility Professional (ACMP) who is proficient at building Mobile First Networks.

Objectives

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

- Explain the integration Mobility Masters and Mobility controllers
- Describe redundancy giving the user seamless failover
- Set up secure guest access using Multizone

- Explain the uses and advantages of clustering
- Describe user mobility in the wireless spectrum
- Integrate voice over WiFi and give QOS
- Explain how roles are assigned to users wireless or wired
- Learn to setup remote access using RAPs or VIA
- Describe how to create a mesh cluster
- Learn the advantages given to AirGroup when leveraged on an Aruba network
- Integrating wire users into the security given to wireless users
- Learn how to use AirWave to monitor the health of the network
- Learn how to use AirWave to troubleshoot client
- Explain AirWave's Virtual RF feature as well as alerts and triggers

Suggested prerequisites

Aruba Mobility Fundamentals, Rev. 20.11

Topics

- **Introduction**
 - Review topics from the Aruba Mobility Fundamentals course
 - AP terminology
 - GUI Hierarchy
 - WLAN forwarding modes
 - Explain the features of AOS 8
- **Mobility Master Redundancy**
 - Explain VRRP setup
 - DB synchronization procedures
 - Validating MM DB synchronization
 - IPv6 support for the redundancy
- **Mobility Master and MC Operations**
 - Grow the network to multiple controllers
 - Review the configuration hierarchy
 - MC deployments methods
 - Explain advanced license features
- **Multizone**
 - Describe Multizone
 - Explain Multizone AP functional flow
 - Describe the functions of primary and data zones
 - Troubleshooting Multizone setup

- **Introduction to MC clusters**

- Reviews advantages of a MC cluster
- The cluster leader election process
- Defines the MC cluster roles
- AP and user mapping into a cluster
- Requirements for hitless cluster failover
- AP and user load balancing within the cluster

- **Mobility**

- Explain standard 802.11 roaming
- Describes single and multi-controller roaming
- Defines the advantages of cluster mobility

- **Role Derivation**

- Review of policies and rules
- Explains role derivation using VSAs
- Description of user rules
- Description of authentication default roles
- Explains how to troubleshoot role derivation
- Role based ACL

- **Remote Access**

- Review of all remote access methods RAP/ VIA / IAP-VPN / branch controller
- Explains RAP certification and setup methods
- Internal and external(CPPM) whitelisting of RAP
- Configuration of RAP WLAN
- Explores the options for RAP redundancy
- Explains how to troubleshoot RAP setup
- VIA configuration, downloading and installation
- Explains how to troubleshoot VIA setup

- **Voice Optimization**

- Review of voice QOS
- Explanation of WMM
- Description of UCC Heuristic and SDN API mode
- Monitoring and troubleshooting voice connections

- **Mesh**

- Explains mesh networks and technology
- Configuration of mesh clusters

- Explains Tri-radio Mesh support
- **Administration**
 - Explains management accounts and password reset
 - Configuration of guest provisioning accounts
 - The use of authentication using RADIUS or TACACS
 - Describes how to disable console access
- **Operations**
 - Explains how to upgrade new images
 - Describes AP preloading
 - Explains cluster in service upgrade
 - Auto roll backs of configuration
 - Describes loadable in service modules
- **AirGroup**
 - Explains the Aruba AirGroup solution
 - Configuration of AirGroup with limitations
 - Explores the integration with ClearPass
 - Monitoring AirGroup servers and users
- **Dynamic Segmentation**
 - Explains Port-Based Tunnelling (PBT)
 - Explains User-Based Tunnelling (UBT)
 - Describes the interaction between switches and Mobility controllers
 - Explains how to troubleshoot tunnel connections
- **AirWave Introduction**
 - Explains the different features of AirWave
 - The use of groups and folders
 - AirWave features description
 - Configuration of device credentials and adding devices
- **AirWave Network Health**
 - Explains diagnostic page indications
 - Describe network health graphs to identify network issues
 - Performance graphs to help in network planning
 - The use of clarity to direct administrator to the source of the problem
- **AirWave Client and Device Troubleshooting**
 - Explains how to find a client and troubleshoot association issues
 - Diagnosing associated client issues

- Investigating client SNR
- Describes AP, network and controller diagnosing
- Explains how to monitor a MC cluster within AirWave
- **AirWave VisualRF, Reports and Alerts**
 - Explains the different VirtualRF display options
 - Describes the VisualRF application monitoring
 - Configuration of triggers to create alerts
 - Generation of 22 type of reports as well as custom reports