



Configuring Mobility with AOS-8 Level 2, Rev 23.22 (AR-CAM2)

Course Description

This course teaches the knowledge, skills and practical experience required to set up and configure advanced features on HPE Aruba Networking WLAN utilizing the AOS-8 architecture and features. This course includes lectures and labs which provide 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 HPE Aruba Networking 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.

Course Duration:

5 days

Prerequisites:

Configuring Mobility with AOS-8 Level 1, Rev 23.22

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 HPE Aruba Networking 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 Visual RF feature as well as alerts and triggers

Course Outline:

Introduction

- Review topics from the Configuring Mobility with AOS-8 Level 1 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 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 HPE Aruba Networking 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

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