AOS-10 Implementation and Configuration

Course Description

In this course, you will learn and implement techniques to configure and manage a network successfully using AOS-10 devices. You will examine the details of RF design, deployment, cluster and mesh architectures, Microbranch, discuss security features, and describe troubleshooting methods available for AOS-10.

Course Duration:

5 days

Prerequisites:

Suggest you have the following before attending:

- Implementing AOS-CX Switching

Objectives:

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

- Recall the fundamental concepts of AOS-10.
- Implement RF design and network deployment features.
- Configure the uplink and manage the migration.
- Secure wireless networks using features such as WPA-3, MPSK, and RADSec.
- Design access for guest users including authentication and custom login pages.
- Configure, deploy, and manage gateway clusters and Microbranch architectures.
- Set up an enterprise mesh network.
- Configure networks to integrate IoT applications.
- Apply User Based Tunneling (UBT) on devices.
- Enable Unified Communications, Air Slice, and AirGroup services.
- Understand admin access control and operations.

Course Outline:

AOS-10 fundamentals
- AOS-10 architecture
- HPE Aruba Networking Central
- WLAN configuration with AOS-10 APs
- Deployment with gateways

Advanced RF design
- Advanced Wi-Fi standards
- Wi-Fi standard comparison

- AirPass
- Air Slice

Uplink management and migration
- Configuring uplinks
- Uplink types
- Ethernet uplinks
- Configuring PPPoE profile
- APIx configuration
- Cellular uplink using a HPE Aruba Networking USB LTE modem
- Configuring cellular uplink
- Wi-Fi uplinks
- Uplink management
- Configuring uplink management
- Migrating APs from AOS-8 to AOS-10
- Migrating campus APs to AOS-10

Advanced wireless security
- Authentication overview
- 802.1X authentication
- User roles and role derivation
- Dynamic authorization in AOS-10
- HPE Aruba Networking Central Cloud Authentication and Policy

Guest access
- Guest access solution
- Creating a guest network
- MAC authentication

Gateway cluster deployment
- Gateway cluster architecture
- Gateway cluster configuration options
- Gateway cluster configuration
- Tunnel orchestration
- Cluster monitoring and troubleshooting

HPE Aruba Networking EdgeConnect Microbranch
- EdgeConnect Microbranch deployment
- Microbranch configuration
- System properties configuration
- WAN properties configuration
- LAN properties configuration
- WLAN properties configuration
- Tunnels and routing

Advanced Microbranch
- VPNCs
- Policy Based Routing
- Next hop list
- Configuring services
- Configuring security

Enterprise mesh
- AOS-10 enterprise mesh solution
- Applications of mesh network
- Mesh network components
- Configuring a mesh network
- Mesh deployment architecture
- Additional features of mesh networks

Internet of Things integration
- Architecture
- Key components
- IoT data connector
- Configuring APs

Dynamic Segmentation
- User Based Tunneling (UBT)
- Deployment
- How UBT works
- Monitoring

Voice optimization and UCC
- QoS
- Unified communication and collaboration

RF optimization
- RF network challenges
- AirMatch
- ClientMatch
- AirGroup
- Managing personal device visibility and sharing

Admin access and operations
- Network device access control
- TACACS+ configuration on HPE Aruba Networking Central
- Configuring TACACS+ on gateway using CLI
- Device firmware management
- Managing logs
- Packet analysis
- Managing alerts
- Managing reports

Who Should Attend

Ideal candidates are networking IT professionals or technical marketing professionals looking to expand their knowledge and skill set on AOS-10. These individuals are responsible for:
- Designing and implementing network solutions
- Managing and troubleshooting network operations
- Optimizing network performance
- Integrating new technologies
- Ensuring network security