HPE Aruba Networking Central Boot Camp (AR-CBC)

Course Description

This five-day course teaches students how HPE Aruba Networking Central enables IT staff to manage and monitor both wired and wireless networks. Designed to prepare certification candidates to take the Advanced Product Certified - HPE Aruba Networking Central certification exam, the boot camp includes content from the following courses:

- Network Management with HPE Aruba Networking Central, Rev. 25.41
- Managing Wired Networks with HPE Aruba Networking Central, Rev. 25.41
- Introduction to AOS-10, Rev. 25.41

Participants will learn:

- The basics of navigating HPE Aruba Networking Central.
- How to use the tool for centralized configuration.
- Monitor network performance and troubleshoot issues.

Course Duration:

5 days

Prerequisites:

Aruba recommends that the candidate has attended the Implementing Aruba Network Security course prior to attending this expert level course. Or have equivalent experience and knowledge of advanced network security technologies.

Objectives:

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

- Explain the relationship between HPE GreenLake and HPE Aruba Networking Central and their use for cloud-based network management.
- Apply HPE Aruba Networking Central architecture and features to address modern network needs.
- Implement HPE Aruba Networking Central floor plan management.
- Explore HPE Aruba Networking Central API capabilities.
- Utilize the comprehensive monitoring, reporting, and troubleshooting functionalities of HPE Aruba Networking Central.
- Explore switch management options on HPE Aruba Networking Central.
- Perform AOS-CX switch onboarding.
- Configure and manage AOS-CX switches.
- Configure switch features necessary for a branch office or a single building network.
- Monitor and troubleshoot a wired network using HPE Aruba Networking Central.
- List the features in AOS-10.
- Create groups and users.
- Add and configure access points and gateways.
- Describe and configure tunnel forwarding modes.

- Describe and configure microbranch.
- Describe and implement cloud services

Course Outline:

- HPE Aruba Networking Central overview
  - HPE GreenLake architecture
  - HPE Aruba Networking product portfolio
  - Switch management overview
  - Monitoring and troubleshooting features
- HPE Aruba Networking Central architecture
  - Navigation
  - Hierarchy
- Floor Plan Manager and topology
- Monitoring HPE Aruba Networking Central
  - Monitoring sites
  - Network monitoring
  - Client monitoring
  - Application monitoring
- Troubleshooting
  - Methodology
  - Tools and resources
  - Audit Trail
  - AI Insights
  - Alerts
- HPE Aruba Networking Central API capabilities
  - API overview
  - REST API overview
  - Generating and managing access tokens
  - Make API calls in the HPE Aruba Networking Developer Hub
- Administration and reporting
  - Identity and access control
  - Resource restrictions policy
  - User audit logs
  - Certificate management
  - Manage reports
- Basics of switch management
  - Onboarding a switch
  - Switch configuration profiles
  - API and GUI
- Switch system configuration
  - Common system configurations
  - Source interface and SNMP configuration
  - Switch administration and system details
  - Switch firmware recommendations
- Configuring VLANs
  - LANs and VLANs
  - Creating a VLAN profile
  - Named VLAN profile
- Ports and link aggregation
  - LAG concepts and prerequisites
  - Switch port configuration
  - LAG configuration

- Loop prevention methods
  - Loops in a network switch
  - Loop prevention mechanisms
  - STP anomaly recommender
- Switch high availability
  - Introduction to VSF
  - VSF configuration and management
  - VSF monitoring and troubleshooting
  - HPE Aruba Networking Virtual Switching eXtension
- Configuring SVIs
  - Routing
  - Layer 3 routing
  - Layer 3 analysis
  - Inter VLAN routing and multilayer switch
  - Multilayer interface type
  - Configuring SVI in HPE Aruba Networking Central
- Routing fundamentals
  - Introduction to routing
  - Static routes
  - Virtual Routing and Forwarding
- WLAN fundamentals and RF basics
  - RF bands and channels
  - 802.11 standards and amendments
  - RF basics
  - Antenna technology
  - Radio technologies
  - RF transmit power
  - WLAN mobility
- HPE Aruba Networking security-first, AI-powered networking
  - Network challenges at the edge
  - AI-powered analytics
  - Built-in security
  - Automation and orchestration
- AOS-10 architecture
  - Product line
  - Supported hardware
- AOS-10 access points
  - Difference from Instant APs
  - What is AirMatch?
  - What is ClientMatch?
  - Groups
  - Configuring WLAN on AOS-10 APs only
  - Monitoring
- HPE Aruba Networking user roles
  - HPE Aruba Networking firewall
  - Roles, policies, and rules
  - Role derivation example
  - Identity-based HPE Aruba Networking firewall
  - Access control rules
  - Application rule
  - Aliases
  - Global and WLAN policies

- Deployments with gateways
    - When to use gateways
    - AOS-10 gateway modes
    - AP to gateway connections
    - Tunnel orchestration
    - Switch to gateway connections
    - Gateway to gateway tunnels
    - Gateway cluster
    - Cluster configuration
    - Cluster monitoring
    - Deployment with gateways
- Tunnel forwarding mode
    - Tunnel orchestrator
    - Configuring tunneled SSIDs
    - Mixed forwarding mode
- Microbranch
    - Microbranch configuration
    - Policy-based routing
- Cloud services
    - WAN link bandwidth requirement
    - Live upgrade service
    - AP upgrade
    - Gateway upgrade
    - Key management
    - HPE Aruba Networking Central licensing

Who Should Attend

Ideal candidates for this course typicaly include networking professionals who are looking to explore HPE Aruba Networking Central cloud-based networking solutions and want to understand its features, functionality, and management tools.