HPE Aruba Networking Training

COURSE CONTENT

GET IN TOUCH

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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

HPE Aruba Networking Training by Multisoft Systems is designed to empower IT professionals with the skills and expertise required to master Aruba's next-generation networking solutions. Aruba, a leading name in secure, cloud-managed, and AI-powered networking, is widely adopted across industries for building resilient and high-performing digital infrastructures.

Module 1: Networking Foundations

- ✓ OSI Model and TCP/IP Stack
- ✓ IPv4/IPv6 Addressing and Subnetting
- ✓ VLANs and Trunking Basics
- ✓ Static Routing and Layer 3 Fundamentals
- ✓ Switching Technologies: MAC Table, STP, Loop Prevention
- ✓ ARP, DHCP, and DNS in Enterprise Networks
- ✓ Ethernet Standards and Cabling
- ✓ Wireless Fundamentals (Basics Only)

Module 2: Aruba Switching with Aruba OS-CX

- ✓ Introduction to Aruba OS-CX Architecture
- ✓ Aruba CX Switch Models (6200/6300/6400/10000)
- ✓ Interface Configuration and VLAN Management
- ✓ Spanning Tree and Loop Protection
- ✓ Static Routing and Inter-VLAN Routing
- ✓ Link Aggregation (LAG/LACP)
- ✓ Access Control Lists (ACLs)
- ✓ Network Analytics Engine (NAE) for Troubleshooting
- ✓ Aruba NetEdit for Centralized Configuration

Module 3: Aruba Wireless Networking

- ✓ Wireless Deployment Models: Instant, Central-managed, Controller-managed
- ✓ Configuring SSIDs and WLAN Profiles
- ✓ Radio Frequency Management and Optimization
- ✓ Wireless Security: WPA3, 802.1X, PSK
- ✓ Client Roaming and Mobility Optimization
- ✓ High-Density Deployment Considerations
- ✓ Guest Access and Captive Portal

✓ Monitoring Wireless Performance in Central

✓ Basic Troubleshooting: RF Scans, Logs, Client Logs

Module 4: Aruba Central: Cloud Network Management

✓ Introduction to Aruba Central Architecture

✓ Device Onboarding: APs, Switches, Gateways

✓ Group and Template-Based Configurations

✓ Live Monitoring & Client Insights

✓ AI-Powered Network Health & Event Correlation

✓ Traffic Visualization and Topology Mapping

✓ Central Logging and Alerting

✓ Configuration Backups and Audit Logs

✓ Role-Based Access and Multi-Tenancy Features

Module 5: Aruba Network Security with ClearPass

✓ Introduction to ClearPass Policy Manager

✓ Authentication Methods: 802.1X, MAC Auth, Captive Portal

✓ Role-Based and Policy-Based Access Control (RBAC/PBAC

✓ Device Profiling and Classification

✓ Guest Access Management

✓ Integration with AD, RADIUS, LDAP

✓ Context-Aware Policy Enforcement

✓ Endpoint Visibility and Threat Response

✓ Troubleshooting ClearPass Policies and Sessions

Module 6: SD-Branch & Cloud Connectivity

✓ SD-Branch Architecture Overview

✓ Branch Gateways (BGW) and VPN Concentrators

✓ Zero Touch Provisioning (ZTP)

✓ WAN Path Selection and App-Based Steering

✓ Dynamic Segmentation and Policy Enforcement

✓ Cloud-Managed WAN and LAN Integration

✓ Aruba Virtual Gateways (VGW) for AWS/Azure Connectivity

✓ Monitoring SD-WAN Performance in Central

✓ Troubleshooting Branch Deployments

Module 7: Network Automation & APIs

✓ Introduction to Network Automation with Aruba

✓ Aruba Central REST APIs: Concepts and Use Cases

✓ Using Postman to Interact with Aruba Central APIs

✓ Basic Python Scripting for Automation Tasks

✓ Overview of Aruba Fabric Composer

✓ Ansible Automation Use Cases in Aruba Networks

✓ Data Collection & Telemetry

✓ Event-Based Automation with NAE

✓ Automation Best Practices and Tool Selection

Module 8: Design, Deployment and Troubleshooting

✓ Campus & Branch Network Design Principles

✓ Site Surveys and Wireless Planning (VisualRF, AirWave)

✓ Designing for High Availability (VSF, VSX)

✓ Best Practices for AP Placement and Channel Planning

✓ Troubleshooting Tools in Central & CLI

✓ Interpreting Logs and System Events

✓ Firmware Management and Upgrades

✓ Backup/Restore Strategies

✓ Support & Escalation Readiness