



# Advanced AOS-CX Switching (AAXSTS)

# ID AAXSTS Price US \$ 4,800.—(excl. VAT) Duration 5 days

#### Who should attend

The ideal candidate for this course is very familiar with HPE Aruba Networking wired switching solutions, including the ability to implement and optimize enterprise-level HPE Aruba Networking Switching campus LAN solutions. Typical candidates are preparing for the ACX - Switching written and/or ACX - Switching practical exams.

### This course is part of the following Certifications

HPE Aruba Networking Certified Expert - Switching (ACX-S)

#### Prerequisites

The suggested prerequisites for this course are to attend the <u>Implementing AOS-CX Switching (ICXS)</u> course or pass the HPE Aruba Networking Certified Professional - Switching (ACP - Switching) certification exam.

#### **Course Objectives**

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

- Design optimized network architectures using AOS-CX switches.
- Troubleshoot and monitor networks using a variety of tools including Command Line Interface (CLI), port mirroring, HPE Aruba Networking Network Analytics Engine (NAE)), IP SLA, and HPE Aruba Networking Central.
- Configure and troubleshoot HPE Aruba Networking Virtual Switching eXtension and other Layer 2 features.
- Configure optimized network routes using PBR, OSPF, and BGP techniques.
- Implement virtual routing and route redistribution for a controlled routing architecture.
- Apply QoS techniques for efficient traffic handling.
- Employ dynamic segmentation for enhanced security and management.
- Improve network security using access control lists, control plane policing, and MACsec.

## **Course Content**

#### Wired network design

- Requirement analysis
- Two-tier and three-tier network design considerations
- Switching and routing design principles

#### Troubleshooting

- · Troubleshooting principles and methodology
- Logging and debugging
- Diagnostic commands
- Traffic analysis
- Troubleshooting using HPE Aruba Networking Central

#### Monitoring and automation

- Network automation with AOS-CX
- REST API
- Sending REST API requests
- HPE Aruba Networking Network Analytics Engine
- Other monitoring

#### VSX and L2 technologies

- VSX
- VSX best practices
- VSX troubleshooting

#### L3 routing and OSPF

- Policy-based routing
- Single-area OSPF troubleshooting
- Multi-area OSPF

# **Border Gateway Protocol**

- BGP connections
- BGP advertisements
- BGP metrics and tuning
- Route control

#### Route redistribution

- Redistribution static routes to OSPF
- Tuning static to OSPF route redistribution



• Redistribute OSPF to BGP

# **VRF and route leaking**

- Virtual routing and forwarding
- VRF route leaking

# **Multicast routing**

- IGMP
- PIM-SM build-up process
- Static RP configuration
- Dynamic RP configuration
- VSX and PIM
- Multicast deployment

# **Quality of Service**

- Quality of Service (QoS) overview
- Ingress stage
- Prioritization stage
- Remark QoS
- Queuing stage
- Scheduler stage
- Active queue management

# **Dynamic Segmentation**

- Overview
- Understanding user based tunneling
- Downloadable user roles

# **Network security**

- Access Control Lists
- Classifier policy
- Control Plane Policing
- User group management
- Management access using TACACS+
- DHCP snooping and ARP inspection
- MACsec

# Advanced AOS-CX Switching (AAXSTS)



# Training Centres worldwide





## Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3 CH-8304 Wallisellen Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch