AOS-CX Switching Fundamentals

Category: Networking & Security | **Vendor:** HPE Aruba Networking

Duration: 40.00 hours (5 days) **32.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This course prepares you for the updated AOS-CX switching-based ACA - Switching certification exam (HPE6-A86). Attending this course will teach you the fundamental skills to configure and manage modern, open standard-based networking solutions using HPE Aruba Networking's AOS-CX routing and switching technologies. This 5-day course consists of approximately 60% lecture and 40% hands-on lab exercises to help you understand how to implement and validate small to medium enterprise network solutions. In this course, you will learn AOS-CX switch technologies such as:

- Virtual Local Area Networks (VLANs)
- Redundancy technologies such as Multiple Spanning Tree Protocol (MSTP)
- Link aggregation techniques, including Link Aggregation Control Protocol (LACP)
- Switch virtualization with HPE Aruba Networking Virtual Switching Framework (VSF).

You also learn about IP Routing, including static and dynamic routing with Open Shortest Path First (OSPF).

About This Course

AOS-CX Switching Portfolio

- Network designs
- Switching Portfolio

Switching Fundamentals

- Switching contexts
- Command Line Interface (CLI)
- Basic configuration

VLANs

- Domains - Collision and broadcast
- LANs and VLANs
- 802.1Q
- Forwarding Tables

Spanning Tree

- Purpose
- Redundant networks
- Spanning Tree Protocol (STP)
- Rapid Spanning Tree Protocol (RSTP)
- Multiple Spanning Tree Protocol (MSTP)

Link Aggregation

- Overview and interface requirements
- Static and dynamic LAGs
- Load sharing

Switch Stacking and Extension

- Operational planes
- Virtual Switching Framework (VSF)

Layer 3 Routing

- Intro to routing
- IP routes and default gateways
- Inter-VLAN routing
- Packet delivery

IP Routing Fundamentals

- Principles of routing
- Routing tables
- Routing protocols

Dynamic IP Routing

- Intro to OSPFv2
- Neighbor relationships
- OSPF network types

Quality of Service

- Intro to Quality of Service (QoS)
- Packet classification and marking
- Queuing
- Rate Limiting

Network Security Fundamentals

- Security fundamentals
- Port access
- Captive Portal

Secure Management and Maintenance

- Secure management
- Maintenance

Who Should Attend

The ideal candidate is someone starting a career as a networking IT professional. They have six months of experience in the field. Supporting or operating limited-scope wired network used in SMB, edge, and simple core environments. They are the junior member of the IT Operations team.

Prerequisites & Entry Requirements

General Prerequisites:

It is highly recommended that candidates already have basic knowledge of networking (knowing the OSI model, IP addressing, basic routing, etc.). The Aruba Certified Network Technician (ACNT) course and certification is the perfect primer for this course. The ACNT certification validates that you understand the different aspects of campus access both wireless and wired methodologies.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

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

- Identify the best HPE Aruba Networking switching portfolio products for various network types and sizes
- Install devices running the HPE Aruba networking AOS-CX network operating system
- Configure network segmentation using Virtual Local Area Networks (VLANs), Spanning Tree Protocol (STP) and Link Aggregation Groups (LAGs)
- Demonstrate creating network efficiency with stacking, virtualization, and routing such as Open Shortest Path First (OSPF)
- Deploy secure management and maintenance methodologies

Detailed Course Outline

AOS-CX Switching Portfolio

- Network designs
- Switching Portfolio

Switching Fundamentals

- Switching contexts
- Command Line Interface (CLI)
- Basic configuration

VLANs

- Domains - Collision and broadcast

- LANs and VLANs

- 802.1Q

- Forwarding Tables

Spanning Tree

- Purpose

- Redundant networks

- Spanning Tree Protocol (STP)

- Rapid Spanning Tree Protocol (RSTP)

- Multiple Spanning Tree Protocol (MSTP)

Link Aggregation

- Overview and interface requirements

- Static and dynamic LAGs

- Load sharing

Switch Stacking and Extension

- Operational planes

- Virtual Switching Framework (VSF)

Layer 3 Routing

- Intro to routing

- IP routes and default gateways

- Inter-VLAN routing

- Packet delivery

IP Routing Fundamentals

- Principles of routing

- Routing tables

- Routing protocols

Dynamic IP Routing

- Intro to OSPFv2

- Neighbor relationships

- OSPF network types

Quality of Service

- Intro to Quality of Service (QoS)

- Packet classification and marking

- Queuing

- Rate Limiting

Network Security Fundamentals

- Security fundamentals

- Port access

- Captive Portal

Secure Management and Maintenance

- Secure management

- Maintenance

Skills You Will Learn:

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

- Identify the best HPE Aruba Networking switching portfolio products for various network types and sizes
- Install devices running the HPE Aruba networking AOS-CX network operating system
- Configure network segmentation using Virtual Local Area Networks (VLANs), Spanning Tree Protocol (STP) and Link Aggregation Groups (LAGs)
- Demonstrate creating network efficiency with stacking, virtualization, and routing such as Open Shortest Path First (OSPF)
- Deploy secure management and maintenance methodologies

Frequently Asked Questions

Q: What delivery options are available for AOS-CX Switching Fundamentals?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 5-day AOS-CX Switching Fundamentals course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AOS-CX Switching Fundamentals training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AOS-CX Switching Fundamentals?

Yes, we provide corporate training, dedicated training, and closed classes for AOS-CX Switching Fundamentals. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: AOS-CX Switching Fundamentals, Aruba Switching OS CX, CXSF

Q: Why choose Nexus Human for AOS-CX Switching Fundamentals?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your AOS-CX Switching Fundamentals training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

© 2026 Nexus Human. All rights reserved. This brochure was generated on 14/11/2026.