+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

Updated on 04/27/2026

Sign up

Aruba AOS-CX Switching Fundamentals (CXSF) Training

5 days (35 hours)

This course prepares you for the updated exam for the ACA - AOS-CX Switching-based certification (HPE6-A86). By taking this course, you will learn the fundamental skills to configure and manage modern, standards-based network solutions using HPE Aruba Networking's AOS-CX routing and switching technologies.

This 5-day training consists of approximately 60% lecture and 40% hands-on lab exercises to help you understand how to implement and validate network solutions for small to medium-sized businesses. In this course, you will explore AOS-CX switching technologies such as:

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

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

Like all our courses, this one will introduce you to **the latest stable version** of the technology and its new features.

Objectives

- Identify the best products from the HPE Aruba Networking switching portfolio for different types and sizes of networks
- Install devices running the HPE Aruba [AOS-CX] network operating system
- Configure network segmentation using [VLANs], [STP], and [LAGs]
- Demonstrate network efficiency with stacking, virtualization, and routing such as [OSPF]
- Deploy secure management and maintenance methodologies

Target Audience

- Anyone starting a career as a network IT professional

Prerequisites

- Basic networking knowledge (knowledge of the OSI model, IP addressing, basic routing, etc.)

Curriculum for our Aruba AOS-CX Switching Fundamentals (CXSF) Training

[Day 1 - Morning]

AOS-CX Switching Portfolio

- Network Designs
- Switching Portfolio

Fundamentals of Switching

- Switching Contexts
- Command Line Interface (CLI)
- Basic Configuration

[Day 1 - Afternoon]

VLANs

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

Spanning Tree

- Objective
- Redundant Networks
- Spanning Tree Protocol (STP)
- Rapid Spanning Tree Protocol (RSTP)
- Multiple Spanning Tree Protocol (MSTP)

[Day 2 - Morning]

Link Aggregation

- Overview and Interface Requirements
- Static and Dynamic LAGs
- Load Balancing

[Day 2 - Afternoon]

Switch Stacking and Expansion

- Operational Plans
- Virtual Switching Framework (VSF)

[Day 3 - Morning]

Layer 3 Routing

- Introduction to Routing
- IP Routes and Default Gateways
- Inter-VLAN Routing
- Packet Delivery

[Day 3 - Afternoon]

Fundamentals of IP Routing

- Principles of Routing
- Routing Tables
- Routing protocols

[Day 4 - Morning]

Dynamic IP Routing

- Introduction to OSPFv2
- Neighbor Relationships
- Types of OSPF Networks

[Day 4 - Afternoon]

Quality of Service

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

[Day 5 - Morning]

Fundamentals of Network Security

- Fundamentals of Security
- Port access
- Captive portal

[Day 5 - Afternoon]

Secure Management and Maintenance

- Secure management
- Maintenance

Affected companies

This training program is designed for both individuals and businesses—large and small—that wish to train their teams in new, advanced IT technologies or to acquire specific industry knowledge or modern methodologies.

Placement upon enrollment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency in various types of technologies, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose challenges for monitoring and ensuring the smooth running of the training session.

Teaching Methods

Practical Course: 60% Practical, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the trainer, supported by examples and reflection sessions, and group work.

Assessment

At the end of the session, a multiple-choice questionnaire is used to verify that the skills have been properly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training program.