

# AOS-CX Switching Fundamentals (CXSF)

ID CXSF Price 4,950.— €(excl. VAT) Duration 5 days

## 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.

## This course is part of the following Certifications

HPE Aruba Networking Certified Professional – Data Center (ANCPDC)  
Aruba Certified Switching Associate (ACSA)  
HPE Aruba Networking Certified Associate - Switching (ACA-S)

## 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.

## Course Objectives

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

## Course Content

### 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

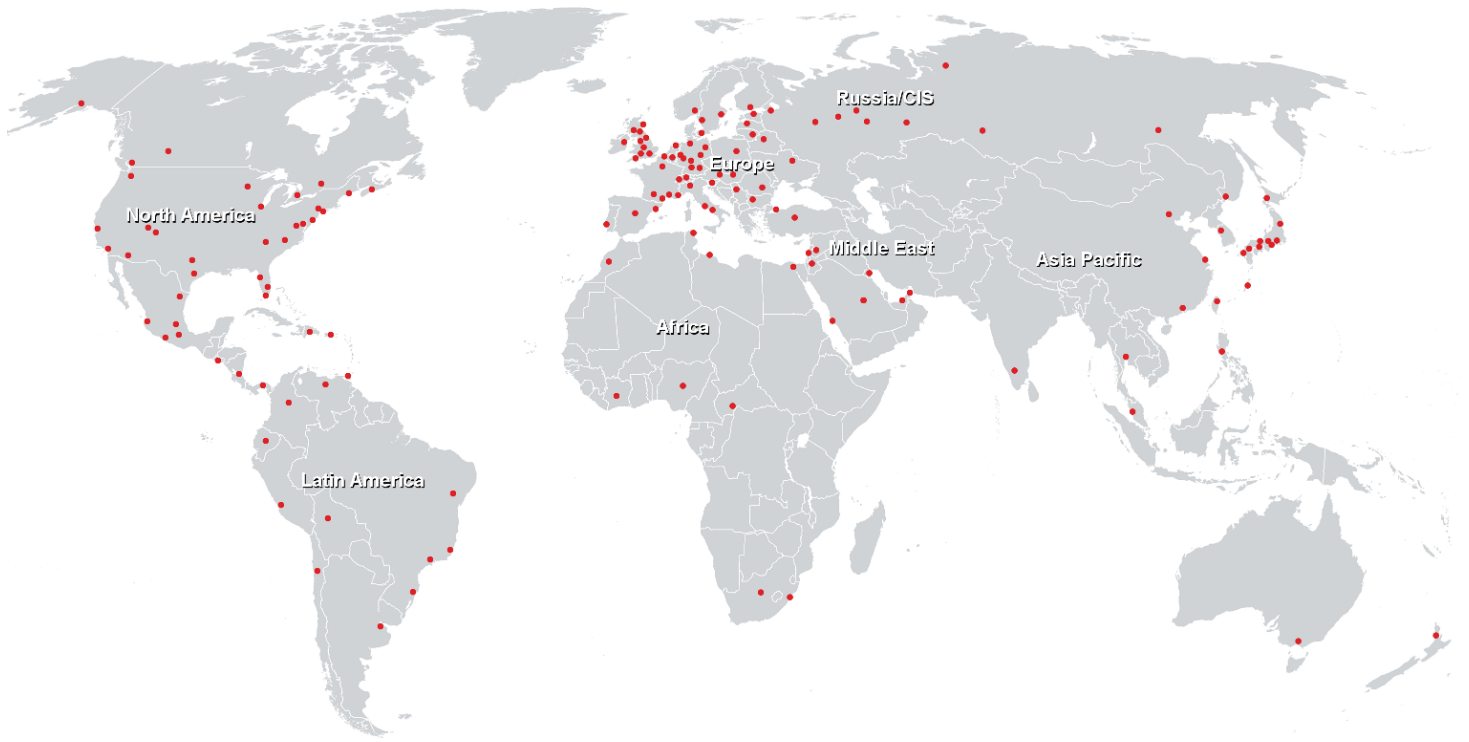
## Network Security Fundamentals

- Security fundamentals
- Port access
- Captive Portal

## Secure Management and Maintenance

- Secure management
- Maintenance

## Training Centres worldwide



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