

Training: Aruba  
Configuring Data Center Networks with AOS-CX



## TRAINING GOALS:

The Configuring Data Center Networks with Aruba OS CX course provides you with the skills and knowledge to design, implement, and configure complex data center solutions based on the Aruba AOS CX Switches.

Data center networks are at a breaking point. Aruba offers a new architectural approach that provides simplified, scalable and automated connectivity for virtualized compute, storage and cloud. Data center networking requirements have evolved rapidly, with emerging technologies increasingly focused on supporting more automation and simplified operations in virtualized data centers.

Aruba data center solutions and technologies such as Virtual Switching Extension (VSX) allow the grouping Data Center switches for simpler management, but keeping its control and data planes separate for better high availability. Ethernet Virtual Private Networks (EVPN) allows the creation of modern two-layered data centers for business resilience and high availability.

This course is approximately forty percent lecture and learning activities and sixty percent lab activities.

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

- Understand the components of the ArubaOS-CX Switching architecture.
- Describe common datacenter networking requirements.
- Describe the benefits of VSX implementation in a Data Center
- Understand, describe and configure VRF which enables a switch to run multiple routing instances in a network.
- Understand, describe and configure VXLAN functionality. VXLAN provides an alternative to the traditional VLAN concept.
- Understand, describe and configure EVPN to transport VXLAN thru the datacenter.
- Understand, describe and configure Datacenter Bridging (DCB) that is a technology that enables the consolidation of IP-based LAN traffic and block-based storage traffic onto a single converged Ethernet network. This can help to eliminate the need to build separate infrastructures for LAN systems that carry typical end-user data traffic, and SAN systems that carry storage-specific communications.
- Understand, describe and configure Ethernet Ring Protection Switching (ERPS) which enable enables ethernet ring topologies with a fast convergence.
- Describe requirements for a datacenter network design.

- Describe different datacenter deployment models.
- Understand various data center technologies and their impact on a design.

#### Target Audience:

This course is ideal for Aruba partners, customers and employees who have minimum of 3 years of experience implementing and designing enterprise level networks.

Candidates should demonstrate an ability to understand, configure and implement modern data centers based on Aruba Switching solutions that provide a simplified, scalable and automated Ethernet fabric that connects virtualized compute, storage, and cloud services.

#### CONSPECT:

- Intro to DCN
  - Data Center Networking Evolution
  - Data Center Networking Design
  - AOS CX Switches Overview
  - Data Center Networking Technology
- NetEdit
  - Features
  - Device Discovery
  - Plans
- Virtual Switching Extension (VSX)
  - VSX Components and Features
  - VSX Software Upgrade
  - VSX at Data Center
- Data Center Bridging (DCB)
  - DCB Configuration
  - DCB Components
- Virtual Routing and Forwarding (VRF)
  - VRF Lite
  - VRF Use Cases
  - VRF Configuration
  - Data Center Networking
- VXLAN
  - VXLAN Concepts
  - Operations
  - Traffic Flow

- EVPN
  - Dynamic tunneling
  - Forwarding
  - Centralized Routing
- DCI
  - DCI Solutions at AOS-CX
  - ERPS
- NAE
  - Agents
  - Scripts
  - Upgrade
  - Troubleshooting
  - Use Cases
- Data Center Networks Design
  - DCN Requirements
  - DCN Design
  - AOS-CX technologies for DCN

## REQUIREMENTS:

Suggested prerequisites ArubaOS CX Switching Fundamentals course.

## Difficulty level



## CERTIFICATE:

The participants will obtain certificates signed by Aruba Networks.

This course prepares you also for such related Aruba Networks certifications: [HPE Product Certified - Aruba Data Center Network Specialist](#) available at Pearson VUE test centers.

## TRAINER:

Aruba Networks Certified Trainer.