

Configuring Data Center Networks with Aruba OS CX (AR-DCN)

Course Description

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.

Course Duration:

3 days

Prerequisites:

It is strongly recommended that the candidate first complete the ArubaOS-CX Switching Fundamentals, Rev. 20.21 (Course ID: 01126291) course.

Objectives:

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

Course Outline:

- Introduction 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
- Upgrades
- Troubleshooting
- Use Cases
- Data Center Networks Design
- DCN Requirements
- DCN Design
- AOS-CX Technologies for DCN



Who Should Attend

This course is ideal for Aruba partners, customers and employees who have a 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