Implementing AOS-CX Switching (ICX)

ID ICX   **Price** 3,590.— €(excl. VAT)   **Duration** 5 days

Who should attend

Typical candidates for this course are IT Professionals who will deploy and manage networks based on HPE's ArubaOS-CX switches.

This course is part of the following Certifications

HPE Aruba Networking Certified Professional – Data Center (ANCPDC)
Aruba Certified Switching Professional (ACSP)

Prerequisites

Suggested prerequisites

- AOS-CX Switching Fundamentals (CXF)

Course Objectives

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

- Use NetEdit to manage switch configurations
- Use the Network Analytics Engine (NAE) to implement scripting solutions to provide for proactive network management and monitoring
- Compare and contrast VSX, VSF, and backplane stacking
- Explain how VSX handles a split-brain scenario
- Implement and manage a VSX fabric
- Define ACLs and identify the criteria by which ACLs select traffic
- Configure ACLs on AOS-CX switches to select given traffic
- Apply static ACLs to interfaces to meet the needs of a particular scenario
- Examine an ACL configuration and determine the action taken on specific packets
- Deploy AOS-Switches in single-area and multi-area OSPF systems
- Use area definitions and summaries to create efficient and scalable multiple area designs
- Advertise routes to external networks in a variety of OSPF environments
- Promote fast, effective convergence during a variety of failover situations
- Use virtual links as required to establish non-direct connections to the backbone
- Implement OSFP authentication
- Establish and monitor BGP sessions between your routers and ISP routers
- Advertise an IP block to multiple ISP routers
- Configure a BGP router to advertise a default route in OSPF
- Use Internet Group Management Protocol (IGMP) to optimize forwarding of multicast traffic within VLANs
- Describe the differences between IGMP and IGMP snooping
- Distinguish between PIM-DM and PIM-SM
- Implement PIM-DM and PIM-SM to route multicast traffic
- Implement Virtual Routing Forwarding (VRF) policies to contain and segregate routing information
- Create route maps to control routing policies
- Understand the use of user roles to control user access on AOS-CX switches
- Implement local user roles on AOS-CX switches and downloadable user roles using a ClearPass solution
- Implement 802.1X on AOS-CX switch ports
- Integrate AOS-CX switches with an Aruba ClearPass solution, which might apply dynamic role settings
- Implement RADIUS-based MAC Authentication (MAC-Auth) on AOS-CX switch ports
- Configure captive portal authentication on AOS-CX switches to integrate them with an Aruba ClearPass solution
- Combine multiple forms of authentication on a switch port that supports one or more simultaneous users
- Configure dynamic segmentation on AOS-CX switches
- Explain how technologies such as sFlow and traffic mirroring allow you to monitor network traffic
- Describe how AOS-CX switches prioritize traffic based on its queue
- Configure AOS-CX switches to honor the appropriate QoS marks applied by other devices
- Configure AOS-CX switches to select traffic, apply the appropriate QoS marks, and place the traffic in the proper priority queues
- Implement rate limiting
- Understand how the Virtual Output Queuing (VOQ) feature mitigates head-of-line (HOL) blocking
- Configure a voice VLAN and LLDP-MED

Course Content

Authorized
Learning
Partner

- Introduction to Aruba Switching
- NetEdit
- Network Analytics Engine (NAE)
- VSX
- ACLs
- Advanced OSPF
- BGP
- IGMP
- Multicast Routing: PIM
- 802.1X Authentication
- MAC Authentication
- Dynamic Segmentation
- Quality of Service
- Additional Routing Technologies
- Capitve Portal Authentication

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