

# **Configuring AOS-S Switches Level 1**

#### **Course description**

This course teaches you the fundamental skills necessary to configure and manage modern, open standards-based networking solutions. This course consists of approximately 20% lecture and 80% hands-on lab exercises to help you learn how to implement and validate small to medium enterprise network solutions.

In this course, participants learn about AOS-S switch technologies including: VLANs, secure access, redundancy technologies such as MSTP, link aggregation techniques including LACP, and switch virtualization with HPE Aruba Networking's Virtual Switching Framework (VSF). You also learn about IP Routing including static and dynamic IP routing with OSPF. This course teaches you how to deploy HPE Aruba Networking wireless access points and configure HPE Aruba Networking Instant Access Point clustering technology. It also teaches you how to configure, manage and monitor the network with HPE Aruba Networking AirWave management solution.

Course ID	0001171963
Course format, Typical duration	Select one:ILT - Instructor Led, 3 days WBT - Web Based, Self Paced, 3 days VILT - Virtual Instructor Led, 3 days
Skill level	Foundational (FND)
Delivery languages	English
Lab required	No

#### Register for this course.

Find this course in the Training calendar. Click the "Register" link to get started

# Ideal candidate for this course

Ideal candidates are IT professionals who deploy small-to-medium scale enterprise network solutions based on HPE Aruba Networking products and technologies.

#### Topics

- Introduction to HPE Aruba Networking
  - Describe market trends that are causing customers to transform in four key transformation areas
  - Describe how HPE Aruba Networking delivers the digital workplace.

#### • Switch CLI (Command Line Interface) navigation

- Describe out-of-band management
- Complete the initial setup on AOS-S switches
- Verify configuration

#### • Protecting management access

- Explanation of in-band management
- Protect in-band and out-of-band management access
- Configure local authentication
- · Control the privilege level allowed to managers

#### • Management of software and configurations

- Overview of AOS-S and file structures
- Different methods for setting the software from which to boot
- Software update
- Saving and restoring configurations

#### VLANs

- Explain use cases for VLANs
- Configure port-based VLANs on AOS-S switches, using appropriate tagging
- Implement basic IP routing between directly connected VLANs or links
- Spanning Tree Protocol (STP)

- Understand and configure Rapid Spanning Tree Protocol (RSTP)
- Understand how Multiple Spanning Tree Protocol (MSTP) provides load sharing and implement MSTP.

#### • Link aggregation

- Differentiate between different types of link aggregation and understand the benefits of Link Aggregation Control Protocol (LACP)
- Configure and troubleshoot link aggregation on AOS-S switches
- IP routing
  - Configure static routes on AOS-S switches
  - Interpret IP routing tables
  - Configure a basic OSPF solution

• Virtual Switching Framework (VSF)

- Understand how VSF works and the advantages that it provides
- Configure and verify a simple VSF fabric

#### • Wireless for small-to-medium businesses (SMBs)

- Understand the basics of wireless communications and 802.11 standards
- Define a WLAN and differentiate between wireless security options
- Configure basic settings on HPE Aruba Networking Instant Access Points
- Form an HPE Aruba Networking Instant cluster

#### • HPE Aruba Networking AirWave

- Configure AirWave management settings on an Instant AP cluster
- Configure SNMP v2c settings on AOS-S switches
- Discover AOS-S switches in AirWave and bring switches and Instant APs under monitoring and management
- Implement zero touch provisioning (ZTP) for Instant APs and AOS-S switches

#### Objectives

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

- Explain how HPE Aruba Networking solutions meet customers' requirements
- Explain how HPE Aruba Networking AirWave provides unified wireless and wired network management
- Describe in-band management and out-of-band management
- Complete the initial setup on AOS-S switches
- Control access to switches for both in-band and out-of-band management
- Manage software and configuration files on AOS-S switches
- Explain use cases for VLANs and configure port-based VLANs on AOS-S switches
- Understand and configure Rapid Spanning Tree Protocol (RSTP)
- Understand and configure Multiple Spanning Tree Protocol (MSTP)
- Differentiate between different types of link aggregation and understand the benefits of Link Aggregation Control Protocol (LACP)
- Configure and troubleshoot link aggregation on AOS-S switches
- Configure static routes on AOS-S switches and interpret IP routing tables
- Configure a basic Open Shortest Path First (OSPF) solution
- Describe how Virtual Switching Framework (VSF) works and the advantages that it provides
- Configure and verify a simple VSF fabric
- Describe the basics of wireless communications and 802.11 standards
- Define a wireless LAN (WLAN) and differentiate between wireless security options
- Configure basic settings on HPE Aruba Networking Instant APs
- Configure AirWave management settings on an Instant AP cluster
- Configure SNMP v2c settings on AOS-S switches
- Discover AOS-S switches in AirWave and bring switches and Instant APs under monitoring and management
- Implement zero touch provisioning (ZTP) for Instant APs and AOS-S switches

# How to register

Click on this link to register for this course: <u>https://certification-learning.hpe.com/tr/TrainingCalendar?</u> <u>excludePartners=false&CourseId=0001171963</u>

# Policies, fees and cancellations

Course fees may vary. Fees are established and collected by the training center that delivers the course. Cancellation fees may apply. Contact your HPE Authorized Training Partner for their respective policies.

# For more information

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