

# Aruba Switching Fundamentals, Rev. 16.41

## 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. This 3-day course prepares network professionals for the Aruba Certified Switching Associate Exam.

In this course, participants learn about ArubaOS switch technologies including: VLANs, secure access, redundancy technologies such as MSTP, link aggregation techniques including LACP, and switch virtualization with Aruba'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 Aruba wireless Access Points and configure Aruba Instant Access Point (IAP) Clustering technology. It also teaches you how to configure, manage and monitor the network with the Aruba AirWave management solution.

<b>Course ID</b>	01077931
<b>HPE product number</b>	HOLL1
<b>Course format, Typical duration</b>	<b>Select one:</b> VILT - Virtual Instructor Led, 3 days ILT - Instructor Led, 3 days WBT - Web Based, Self Paced, 3 days
<b>Skill level</b>	Foundational
<b>Delivery languages</b>	English
<b>Lab required</b>	Yes
<a href="#">Register for this course.</a> 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 Aruba products and technologies.

## Topics

- **Introduction to Aruba, a Hewlett Packard Enterprise Company**
  - Describe market trends that are causing customers to transform in four key Transformation Areas
  - Describe how Aruba delivers the digital workplace
- **Switch CLI (Command Line Interface) Navigation**
  - Describe out-of-band management
  - Complete the initial setup on ArubaOS 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 ArubaOS 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 ArubaOS 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 ArubaOS switches
- **IP Routing**
    - Configure static routes on ArubaOS 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 Aruba Instant Access Point (IAP)
    - Form an Aruba Instant cluster
- **Aruba AirWave**
    - Configure AirWave management settings on an IAP cluster
    - Configure SNMP v2c settings on ArubaOS switches
    - Discover ArubaOS switches in AirWave and bring switches and IAPs under monitoring and management
    - Implement zero touch provisioning (ZTP) for Aruba IAPs and ArubaOS switches

## Objectives

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

- Explain how Aruba networking solutions meet customers' requirements
- Explain how Aruba AirWave provides unified wireless and wired network management
- Describe in-band management and out-of-band management
- Complete the initial setup on ArubaOS switches
- Control access to switches for both in-band and out-of-band management
- Manage software and configuration files on ArubaOS switches
- Explain use cases for VLANs and configure port-based VLANs on ArubaOS 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 ArubaOS switches
- Configure static routes on ArubaOS 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 Aruba Instant APs
- Configure AirWave management settings on an IAP cluster
- Configure SNMP v2c settings on ArubaOS switches
- Discover ArubaOS switches in AirWave and bring switches and IAPs under monitoring and management
- Implement zero touch provisioning (ZTP) for Aruba IAPs and ArubaOS switches

## How to register

View the [Certification and Learning Global Training Calendar](#) to register for the training offerings that best meets your needs.

## 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**

[Contact our program](#)

© Copyright 2020 Hewlett Packard Enterprise. The information contained herein is subject to change without notice. The only warranties for HPE products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HPE shall not be liable for technical or editorial errors or omissions contained herein.

Information is as of June 2020, Revision 9