



Deploying HP FlexCampus Technologies for ProVision Based Devices H8D08S

This course introduces network professionals to the basic features of modern networks such as VLANs, redundancy technologies such as MSTP, Backplane Stacking, link aggregation technologies like LACP, static IP routing, and dynamic routing with OSPF, ACL's, Multicast, and an introduction to BGP.

Deploying HP FlexCampus Technologies for ProVision Based Devices

Price USD \$4,000

Links to local schedules, pricing and registration [US/Canada](#)
[Mexico/Latin America](#)
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HP course # H8D08S

Category Networking

Duration 5 days

Course description

This course covers basic and advanced topics within the HP FlexCampus Architecture. The learner will experience both theory and hands on experience utilizing real hardware through lab exercises over four days. The learner will configure and monitor ProVision devices using open standard technologies. You will work with layer 2 technologies, such as Multiple Instance Spanning Tree (MSTP) and Link-Aggregation (Trunks). You will also learn about Backplane Stacking. Layer 3 technologies, such as static routes, Open Shortest Path First (OSPF) with Multi-Area implementations, and Border Gateway Protocol (BGP), along with multicast solutions leveraging Protocol independent Multicast (PIM) both dense and sparse modes.

Audience

- IT professionals who will deploy and manage networks based on HP ProVision products

Prerequisites

- Students should possess experience with networking and common LAN protocols

Course objectives

At the conclusion of this course, you should be able to:

- Describe how HP's FlexNetwork strategy applies to components such as FlexCampus, FlexBranch, FlexManagement, and Software-Defined Networks (SDN)
- Protect devices with local and remote authentication using telnet, SSH, web, and SNMP access
- Navigate the HP Provision CLI and manage the flash file system
- Upgrade the Provision switch operating system

- Configure VLANs on HP Provision switches
- Implement basic routing on directly connected VLANs or links
- Configure a Provision switch for DHCP server and DHCP relay
- Interpret Provision logs
- Understand how different varieties of spanning tree are implemented on Provision switches
- Configure multiple spanning tree and apply STP security features
- Differentiate between static and dynamic link aggregation
- Configure and troubleshoot link aggregation on HP switches
- Identify applications for static and dynamic routing
- Configure single-area OSPF routing
- Understand the basic operation of HP's Backplane Stacking technologies
- Configure and verify a simple backplane stacking topology
- Differentiate applications for two- and three-tier network designs
- Identify an appropriate VLAN design based on a given scenario
- Based on a given scenario, choose appropriate link types and redundancy solutions
- Use best practices for IP addressing and OSPF routing when implementing a network design

Benefits to you

This course will enhance your knowledge and skills in several areas of networking. You will gain proficiency in using the Provision CLI, including the application of device access security, updating software, and managing the Provision file system.

As a learner you will have sole control of set of equipment that includes Provision switches, as well as a server and client.

Course outline

M01 - Introduction

- HP Introduction
- Network Design Introduction

M02 - Basic Setup

- Connect your management station to the console port on an HP ProVision switch and access the CLI
- Navigate the CLI
- Configure basic settings, such as the hostname and IP address for VLAN 1
- Verify your configuration settings

M03 - Protecting Management Access

- Implement basic protection using local and remote authentication
- Implement remote management with Telnet, SSH, Web, and SNMP access

M04 - Management of Software and Configurations

- Describe the switch bootup process
- Upgrade the switch operating system
- Manage switch configuration files

M05 - VLANs

- Understanding the use of VLANs and the VLAN types
- Understanding VLAN port types
- Configuring VLANs on HP switches
- Implementing basic VLAN routing on directly connected VLANs or links

M06 - IP Services

- DHCP server and DHCP relay
- NTP
- Logging
- DNS

M07 - Spanning Tree

- Explain how RSTP operates and enhances the original 802.1D standard
- Explain the implementation of PVST+
- Configure MSTP and use MSTP to provide load sharing
- Configure STP security features

M08 - Link Aggregation

- Identify problems and limitations of STP in load sharing
- Differentiate between static and dynamic link aggregation
- Describe how the Link Aggregation Control Protocol works (LACP)
- Configure and troubleshoot link aggregation on HP ProVision switches

M09 - Backplane Stacking

- Describe how switches in a backplane stack operate as one virtual switch
- Describe the three topologies supported with backplane stacking and the roles members play in the stack
- Explain how backplane stacking handles stack fragments

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