

Szkolenie: HPE HPE Comware Configuration and Implementation Fundamentals

Hewlett Packard Enterprise

Cel szkolenia:

This course introduces network professionals to the basic features of modern networks such as basic setup, protecting management access, VLANs, IP Services, LACP, DRNI, static routing, dynamic routing with OSPF, ACLs, QoS and redundancy technologies such as HPE Intelligent Resilient Framework (IRF). In this course, participants learn how these technologies are implemented in the HPE Comware switch platform, and have opportunities to practice configuring these features, monitor their functionality, and design a solution based on provided criteria.

Course objectives

By the end of the course, you should be able to:

- Introduce you to HPE Comware networking protocols and configuration
- $\circ~$ Prepare you to configure and manage HPE Comware devices
- $\circ\,$ Protect devices with local and remote authentication using telnet, SSH, web, and SNMP access
- $\circ\,$ Navigate the HPE Comware CLI and manage the flash file system
- Upgrade the HPE Comware switch operating system
- Configure VLANs on HPE Comware switches
- Implement basic routing on directly connected VLANs or links
- Configure a HPE Comware switch for DHCP server and DHCP relay
- Interpret HPE Comware logs
- Differentiate between static and dynamic link aggregation
- Configure and troubleshoot link aggregation on HPE switches
- Configure Distributed Resilient Network Interconnect (DRNI)
- Identify applications for static and dynamic routing
- Configure single-area OSPF routing
- Configure Access Control Lists (ACLs)
- Configure Quality of Service (QoS)
- Understand the basic operation of HPE Intelligent Resilient Framework (IRF)
- Identify HPE Intelligent Resilient Framework advantages when compared with other technologies that manage redundant paths
- Describe how the multi-active detection (MAD) protocol deals with an HPE Intelligent Resilient Framework spit stack



COMPENDIUM

- $\circ\,$ Configure and verify a simple HPE Intelligent Resilient Framework topology
- $\circ\,$ Identify an appropriate VLAN design based on a given scenario
- $\circ\,$ Based on a given scenario, choose appropriate link types and redundancy solutions
- $\circ\,$ Use best practices for IP addressing and OSPF routing when implementing a network design

Audience

This course is intended for network or systems administrators, network engineers, and consultants who plan to deploy HPE Comware switches into a new or existing network.

Plan szkolenia:

- Introduction
 - $\circ~$ Introduce HPE Comware networking protocols and configuration
 - $\circ\,$ Prepare you to configure and manage HPE Comware devices
- Basic Setup
 - $\circ~$ Initiate a console connection to an HPE Comware switch
 - $\circ~$ Describe characteristics and purpose of each privilege level
 - Navigate the HPE Comware CLI
 - Perform basic configuration
 - Configure interfaces
 - $\circ\,$ Troubleshoot common problems with basic connectivity
- Protecting Management Access
 - $\circ\,$ Apply password protection to local and remote authentication
 - $\circ\,$ Associate user roles with password and scheme authentication
 - $\circ\,$ Implement remote management with SSH, Telnet, and SNMP access
- Managing Software and Configurations
 - $\circ~$ Understand the boot up process of HPE Comware switches
 - $\circ\,$ Understand how to use the flash file system on HPE Comware switches
 - $\circ\,$ Upgrade operating systems on HPE Comware switches
 - Manage configuration files on HPE Comware switches
- VLANs
 - $\circ~$ Understand the use of VLANs and the various types of VLANs
 - $\circ~$ Choose the correct VLAN port type for various situations
 - $\circ~$ Configure VLANs and assign IP addresses to VLAN interfaces
 - Implement basic routing on directly connected VLANs
 - Verify connectivity within and between VLANs
- IP Services





- $\circ~$ DHCP server and DHCP relay
- \circ NTP
- Logging
- DNS
- Link Aggregation
 - $\circ~$ Introduction to link aggregation
 - $\circ\,$ Compare and contrast the different link aggregation types
 - $\circ~$ Understand how the link aggregation control protocol works (LACP)
 - $\circ\,$ Configure and verify link aggregation on HPE Comware switches
- DRNI Distributed Resilient Network Interconnect
 - Describe DRNI features
 - Understand DRNI basic operations
 - $\circ~$ Understand the basic configuration of a DRNI system
 - Configure and verify DRNI on HPE Comware switches
- IP Routing
 - $\circ~$ Describe how HPE Comware switches route traffic between directly networks
 - $\circ\,$ Describe the operation of static routes and configure static routes
 - $\circ\,$ Describe the basic operation of OSPF and configure single-area OSPF
- ACLs Access Control Lists
 - $\circ~$ Define ACLs and identify the criteria by which ACLs select traffic
 - $\circ\,$ Configure ACLs on HPE Comware based switches to select given traffic
 - $\circ\,$ Apply static ACLs to interfaces to meet the needs of a particular scenario
 - $\circ~$ Examine an ACL configuration and determine the action taken on specific packets
- QoS Quality of Service
 - $\circ~$ Configure HPE Comware switches to honor the appropriate QoS marks applied by other devices
 - $\circ\,$ Create a QoS policy that assigns a specified class of traffic to a priority queue
 - $\circ\,$ Select and implement an appropriate strategy for queue scheduling
 - Implement traffic policing policies that enforce the negotiated committed information rate (CIR), committed burst size (CBS), peak information rate (PIR), and excessive burst size (EBS) for a specified class of traffic
 - Respond to congestion in advance by applying the appropriate traffic shaping and weighted random early detection (WRED) policies
 - $\circ\,$ Determine the QoS mark that an HPE Comware switch will assign to specific traffic and, if necessary, adjust the mark
- HPE Intelligent Resilient Framework (IRF)
 - Understand the technologies and concepts involving HPE Intelligent Resilient Framework





- Understand the advantages that HPE Intelligent Resilient Framework provides
- $\circ\,$ Describe an HPE Intelligent Resilient Framework split fabric and how the multi-active detection (MAD) protocol deals with this problem
- Configure a simple HPE Intelligent Resilient Framework topology
- $\circ~$ Verify and troubleshoot an HPE Intelligent Resilient Framework topology

Wymagania:

Learners should have networking experience to get the most from this training course. It does not require completion of any previous HPE networking courses.

Poziom trudności



Certyfikaty:

The participants will obtain certificates signed by HPE (course completion).

Prowadzący:

Authorized HPE Trainer

