



Introduction to HP Enterprise Networking Essentials HL006S

This seminar covers the features of HP enterprise networking products that are part of the HP A-Series family based on HP's Comware operating environment. This seminar provides an overview of some of the key aspects of the product architecture and configurability.

Although each user's goals and environments are different, there are several concepts that will help the student to understand how to take advantage of HP network products and deploy them effectively in any environment.

This seminar is aimed at Network Engineers and Managers who are planning or considering HP enterprise network products for their next generation network architecture. Learn about why HP networking products are at the heart of the next generation data center network and the key differentiators.

Introduction to HP Enterprise Networking Essentials

Price USD \$800

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

HP course # HL006S

Category Networking

Duration 6 hours

Audience

- Network Engineers and Administrators
- Network Architects and Consultants

Prerequisites

- The students should have experience in the networking field to get the most from this seminar

Benefits to you

At the conclusion of this seminar you will be able to:

- Discuss features and benefits to HP A-Series network products based on Comware
- Understand some of the key differentiators for HP networking products
- Understand the significance of IRF

Certifications/exams

- HP AIS - Network Infrastructure [2011]
- HPO-Y30: Implementing HP Networking Technologies

Next steps

- HP Access Layer Network Technologies using ProVision Software, Rev. 10.41 (HK651_00646061)

Course outline

Introduction to HP Enterprise Networking Essentials

- Agenda
- HP Enterprise Networking Overview
- IT of the Future Will be Built on a Converged Infrastructure
- HP Networking
- HP is Changing the Rules of Networking
- HP Networking Portfolio
- The HP Networking End-to-End Portfolio
- HPN Portfolio
- Networking is at an Inflection Point
- Driving Innovation in the Enterprise Data Center
- Innovation At The Network Edge
- Securing The Network Fabric Core To Edge
- Business-Centric Network Management

Introduction to Basic Switching

- Agenda
- Introduction to Basic Switching
- VLANs
- VLAN - Layer 2
- VLAN - 802.1Q Tagging
- VLAN - 802.1Q Tagging (Packet Format)
- VLAN Configuration - example
- HP A-series vs Cisco Configuration
- VLAN - Verification
- Display vlan / show vlan of Cisco
- VLAN Interface
- Link Aggregation

- Link Aggregation - Architecture
- LACP
- Link Aggregation - Comware V5
- Display link-aggregation
- What is STP?
- Without 802.1D Spanning Tree
- With 802.1D Spanning Tree
- 802.1D STP Port States
- Fast Convergence at the Edge
- What is IEEE 802.1w (RSTP)?
- STP (802.1D) vs. RSTP (802.1w) Port Roles
- Example: 802.1w Port Roles and States
- Example RSTP Failover
- STP Feature Comparison Slide for HP and Cisco
- RSTP configuration HP vs. Cisco
- MSTP Features
- Basic MSTP Terminologies
- Port Roles in MSTP
- Port States in MSTP
- MSTP Configuration
- MSTP configuration HP vs. Cisco
- MSTP Questions

Introduction to Basic Routing

- Agenda
- Routing Basics
- Router Basics Local Routing
- Static Routing
- Dynamic Routing
- Static Routes
- HP vs. Cisco
- Route Priorities
- OSPF Overview Dynamic Routing Link State Principle OSPF
- Module 6: OSPF Overview Dynamic Routing Link State Principle OSPF and IS-IS
- OSPF Overview Dynamic Routing Link State Principle OSPF and IS-IS
- OSPF Overview Dynamic Routing Broadcast Networks
- OSPF Overview Dynamic Routing IP OSPF V2 Topology Overview
- OSPF Configuration
- OSPF HP Config vs. Cisco Config
- Explicitly Specifying the Router ID
- Specifying the Authentication at Area Level
- Specifying the Authentication at Interface Level
- Redistributing Static in to OSPF
- Verify OSPF
- Display ospf interface command
- Display ospf database command

IRF – Intelligent Resilient Framework

- Agenda
- IRFv2 – Overview
- Operational Planes in Standalone Switches
- Operational Planes in IRFv2
- IRFv2: Members, Roles and Topology
- Building and Maintaining IRF
- Steps to Build an IRF
- IRF Merge: Master Election
- IRF Split: MAD
- MAD Detection Protocols
- MAD: Collision Handling and Failure Recovery
- IRFv2 - Feature Comparison Summary

Learn more at

hpe.com/us/training/networking