

Intensive MPLS

Duration 5 Days

COURSE OBJECTIVES

To provide core knowledge and skill to implement, operate and troubleshoot in service provider network

COURSE OUTLINE

Day 1:

- Introducing MPLS
- Label Distribution Protocol
- Introducing MPLS Forwarding
- Operating MPLS Forwarding
- Implementing MPLS in the Service Provider Core
 Lab 1: Implement MPLS in the Service Provider Core
- Introducing MPLS VPNs
- Implementing MPLS Layer 3 VPN Backbones
 Lab 2: Implement MPLS Layer 3 VPN Backbones

Day 2:

- Deploying Basic Routing in MPLS VPNs
- Hardware Lab 3: Connect MPLS VPN Sites via Static
- Deploying OSPF and BGP in MPLS VPNs
 Lab 4: Connect MPLS VPN Sites via BGP and OSPF
- Special Connectivity in MPLS Layer 3 VPNs
- Implementing Special Connectivity in MPLS VPNs
 Lab 5: Overlapping and Common Service VPNs
- Implementing Internet Access in MPLS Layer 3 VPNs
 Lab 6: Internet Connectivity in MPLS VPNs

Day 3:

- Layer 2 VPNs
- Introducing Layer 2 VPNs
- Implementing AtoM
 Lab 7: Implement EoMPLS
- Implementing VPLS
 Lab 8: Implement VPLS
- Enhancing Layer 2 VPN Scalability
 Lab 9: Enhance Layer 2 VPN Scalability
- MPLS Interdomain Solutions
- Introducing MPLS Interdomain Solutions
 Lab 10: Implement CSC

Day 4:

- MPLS Traffic Engineering
- MPLS TE Operations
- Implementing MPLS TE
- Protecting MPLS TE Traffic
 - Lab 11: Implement MPLS TE
- Introduction to IPv6
- MPLS IPv6
- Deploying IPv6 in an MPLS Environment
 - Lab 12: Implement 6PE, 6VPE

Day 5:**QoS Classification and Marking**

- Understanding Classification and Marking
- Using Modular QoS CLI
- Implementing Advanced QoS Techniques

QoS Congestion Management and Avoidance

- Managing Congestion
- Implementing Congestion Avoidance

QoS Traffic Policing and Shaping

- Understanding Traffic Policing and Shaping
- Implementing Traffic Policing
- Implementing Traffic Shaping