IMPLEMENTING CISCO MPLS (MPLS) V3.1

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The Implementing Cisco Multiprotocol Label Switching (MPLS) V3.1 course teaches you the high-performance method for forwarding packets through a network. MPLS enables routers at the edge of a network to apply simple labels to packets. This practice allows the edge devices to switch packets according to labels, with minimal lookup overhead. MPLS integrates the performance and traffic-management capabilities of data link Layer 2 with the scalability and flexibility of network Layer 3 routing. When used in conjunction with other standard technologies, MPLS gives the ability to support value-added features.

How you'll benefit

This class will help you:

- Understand the features of MPLS
- Learn how to configure and troubleshoot Frame mode MPLS on Cisco IOS platforms
- Learn how the MPLS VPN model can be used to implement managed services and internet access

Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The primary audience for this course is as follows:

- Network Administrators
- Network Engineers
- Network Managers
- Systems Engineers (who would like to implement MPLS and MPLS Traffic Engineering)

Course Duration
5 days
Course Price
$4,295.00 or 43 CLCs
Methods of Delivery
- Instructor Led
- Virtual ILT
- On-Site

OUTLINE

Module 1: MPLS Concepts
- Introducing Basic MPLS Concepts
- Introducing MPLS Labels and Label Stack
- Identifying MPLS Applications

Module 2: Label Assignment and Distribution
- Discovering LDP Neighbors
- Introducing Typical Label Distribution in Frame-Mode MPLS

- Introducing Convergence in Frame-Mode MPLS

Module 3: Frame-Mode MPLS Implementation on Cisco IOS Platforms
- Using Cisco Express Forwarding Switching
- Configuring Frame-Mode MPLS on Cisco IOS Platforms
- Monitoring Frame-Mode MPLS on Cisco IOS Platforms
- Troubleshooting Frame-Mode MPLS on Cisco IOS Platforms

Module 4: MPLS VPN Technology
- Introducing VPNs
- Introducing MPLS VPN Architecture
- Introducing the MPLS VPN Routing Model
- Forwarding MPLS VPN Packets

Module 5: MPLS VPN Implementation
- Using MPLS VPN Mechanisms of Cisco IOS Platforms
- Configuring VRF Tables
- Configuring an MP-BGP Session Between PE Routers
- Configuring Small-Scale Routing Protocols Between PE and CE Routers
- Monitoring MPLS VPN Operations
- Configuring OSPF as the Routing Protocol Between PE and CE Routers
- Configuring BGP as the Routing Protocol Between PE and CE Routers
- Troubleshooting MPLS VPNs

Module 6: Complex MPLS VPNs
- Introducing Overlapping VPNs
- Introducing Central Services VPNs
- Using Advanced VRF Import and Export Features
- Introducing the Managed CE Routers Service

Module 7: Internet Access and MPLS VPNs
- Combining Internet Access with MPLS VPNs
- Implementing Separate Internet Access and VPN Services
- Implementing Internet Access as a Separate VPN

Module 8: MPLS TE Overview
- Introducing the TE Concept
- Understanding MPLS TE Components
- Configuring MPLS TE on Cisco IOS Platforms
- Monitoring Basic MPLS TE on Cisco IOS Platforms