

Implementing Cisco MPLS v2.3

MPLS



Delivery Type: Classroom

Duration: 5 days

Overview

This course is designed to provide lectures and comprehensive hands-on labs ranging from technology basics to more updated features and functions such as complex VPNs. The focus of the course is on MPLS technology issues as they apply to service providers and on how to configure new features and functions in an existing routed environment. A basic introductory level of some of the more updated features and functions such as Traffic Engineering, Fast Reroute and Any Transport over MPLS (AToM) are introduced on a concept level only and the MPLS Traffic Engineering and other Features course should be taken for in depth understanding of those topics.

Target Audience

This course is aimed at network administrators and technicians responsible for implementing and troubleshooting basic IP multicast-enabled networks within a single domain. Cisco CCNP®, CCDP®, CCIE®, and CCIP routing and switching candidates

Pre-Requisites

The knowledge and skills that a learner must have before attending this course are as follows:

- ✓ Delegates should hold a valid CCNA or equivalent knowledge
- ✓ Delegates should have attended the BSCI or equivalent knowledge
- ✓ Delegates should have attended the BGP or equivalent knowledge
- ✓ Delegates should have attended the QOS 2.0 or equivalent knowledge

Certification

Recommended as preparation for exam(s):

- ✓ 642-611 Implementing Cisco MPLS
- ✓ This course is part of the Cisco Internetwork Professional Certification

Objectives

At the end of the course delegates will be able to;-

- ✓ Describe basic MPLS frame-mode and cell-mode architectures and identify how it supports applications that are used to address the drawbacks in traditional IP routing
- ✓ Describe the Label Distribution Protocol (LDP) process by explaining label allocation, label

- distribution, label retention, label convergence and Penultimate Hop Popping (PHP) in both frame and cell modes
- ✓ ATM interfaces, given a diagram of a typical MPLS network solution
 - ✓ Identify the IOS command syntax required to successfully configure, monitor, and troubleshoot VPN operations, given a diagram of a typical simple MPLS VPN solution
 - ✓ Identify the IOS command syntax required to successfully configure VPN operations and describe how these models are used to implement managed services and Internet access, given a diagram of a typical simple, hub-and-spoke, overlapping and central services MPLS VPN solution
 - ✓ Describe the MPLS peer-to-peer architecture and explain the routing and packet forwarding model in this architecture

- ✓ Identify the Cisco IOS command syntax required to successfully configure, monitor, and troubleshoot MPLS operations on frame, switched WAN, and LC-

Follow on Courses

The following courses are recommended for further study:

- ✓ MPLST – Implementing Cisco MPLS Traffic Engineering and Other Features