

## Implementing Cisco MPLS (MPLS) 2.3

**Vendor Course Code:** MPLS

**Course Length:** 5 days

**Overview:**

This is a 5 day Instructor-led course. This course replaces version 2.1 with the following enhancements:

- Improved labs
- Clearer explanations
- More information on VPNs
- An introduction to Traffic Engineering
- Correction of errors in previous version
- Elimination from course of ATM-related references
- Before taking this course or attempting the associated exam, students should take BSCI - Building Scalable Cisco Internetworks and BGP - Configuring BGP on Cisco Routers

The associated exam remains 642-611 MPLS, a requirement for obtaining the CCIP certification.

**Skills Gained:**

Upon completion of the Internetworking With Cisco MPLS (MPLS) course the student will be able to:

- Describe how MPLS labels are assigned and distributed
- Identify the Cisco IOS tasks and command syntax necessary to implement MPLS on frame-mode Cisco IOS platforms
- 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 VPN operations
- Identify how the MPLS VPN model can be used to implement managed services and Internet access
- Describe the various Internet access implementations that are available and the benefits and drawbacks of each model
- Provide an overview of MPLS Traffic Engineering

**Key Topics:**

- Introducing Basic MPLS Concepts
- Discovering LDP Neighbours
- Introducing CEF Switching
- Introducing Virtual Private Networks
- Using MPLS VPN Mechanisms of Cisco IOS Platforms
- Using Advanced VRF Import and Export Features
- Introducing VPN Internet Access Topologies and Implementation Methods
- Traffic Engineering Concepts

**Target Audience:**

Systems engineers, channel partners/resellers and customers.

**Prerequisites:**

Cisco Certified Network Associate (CCNA) certification or equivalent level of working knowledge and experience, completion of CCNA Basics and ICND courseware is recommended training for CCNA. Equivalent knowledge and skill that can be acquired by attending either..

- Building Scalable Cisco Internetworks (BSCI)
- OR
- Configuring BGP on Cisco Routers (BGP).

Practical experience with deploying and operating networks based on Cisco network devices and Cisco IOS is strongly recommended.

The QoS course is also highly recommended because QoS knowledge is assumed in several sections of the course.