

Western Group (Thailand).,Ltd. 31/92 Rangsit-Klong 7 Rd., Lam luk ka, Patum-tani, 12150, THAILAND Tel: +662 909-3691, Mobile: +66(0)8-1908-1052 Fax: +662 909-3691

Implementing Cisco MPLS (MPLS)

Duration: 5 Days

Course Content

The course will enable learners to gather information from the technology basics to advanced VPN configuration. The focus of the course is on VPN technology issues of MPLS from the Service Providers perspective and how to configure some of those 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 learning of those topics

Course Objective

- 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
- Given a diagram of a typical MPLS network solution, identify the Cisco IOS command syntax required to successfully configure and monitor MPLS operations on frame, switched WAN and LC-ATM interfaces
- Describe MPLS's peer-to-peer architecture and explain the routing and packet forwarding model in this architecture
- Given a diagram of a typical simple MPLS VPN solution, identify the Cisco IOS command syntax required to successfully configure, monitor, and troubleshoot VPN operations
- Given a diagram of a typical simple, hub-and-spoke, overlapping and central services MPLS VPN solution identify the Cisco IOS command syntax required to successfully configure VPN operations and describe how these model are used to implement managed services and Internet access

Course Outline

- MPLS Concepts
- MPLS Label Assignment and Distribution Frame- Mode / Cell-Mode
- MPLS Implementation on Cisco IOS Platforms
- MPLS Virtual Private Networks Technology
- MPLS Virtual Private Networks Implementation
- MPLS Virtual Private Networks Advanced Features

Prerequisites

The participant should successful completion of the following courses or equivalent field experience:

- Interconnecting Cisco Network Devices (ICND)
- Building Scalable Cisco Internetworks (BSCI)
- Configuring BGP on Cisco Routers (BGP)
- Quality of Service with Cisco Router (QOS)