

## Implementing Cisco Service Provider Next-Generation Edge Network Services (SPEDGE)

Duration 5 Days

### COURSE CONTENT

This Instructor Lead Training course is #4 of 4. It will prepare students for the SPEDGE exam required for the new CCNP-SP Certification. This certification is designed to prepare students to work at the Professional level in a Service Provider environment.

### COURSE OBJECTIVES

Upon completing this course, the learner will be able to meet these overall objectives:

- Introduce VPN technologies used in the service provider environment and the MPLS VPN peer-to-peer architecture.
- Describe implementation steps needed to provide MPLS Layer 3 VPN service in the service provider network.
- Describe how the MPLS Layer 3 VPN model can be used to implement managed services and Internet access.
- Describe Layer 2 VPNs and Ethernet services.

### COURSE OUTLINE

#### Module 1: VPN Technologies

- Lesson 1: Introducing Virtual Private Networks
- Lesson 2: Introduction to MPLS VPN

#### Module 2: MPLS Layer 3 VPN

- Lesson 1: Implementing MPLS Layer 3 VPN Backbone
- Lesson 2: Connecting Customers using Simple Routing Protocols
- Lesson 3: Connecting Customers using BGP or OSPF
- Lesson 4: IP and MPLS

#### Module 3: Complex MPLS Layer 3 VPNs

- Lesson 1: Implementing Complex MPLS Layer 3 VPNs
- Lesson 2: Implementing Internet Access and MPLS Layer 3 VPNs
- Lesson 3: Introduction to MPLS Inter-Domain Solutions

#### Module 4: Layer 2 VPNs and Ethernet Services 1

- Lesson 1: Introducing Layer 2 VPNs 2
- Lesson 2: Introducing Any Transport over MPLS
- Lesson 3: Implementing VPLS

### WHO SHOULD ATTEND

- Channel Partner / Reseller
- Customer
- Employee

### PREREQUISITES

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

- Intermediate to advanced knowledge of Cisco IOS / IOS XE and Cisco IOS XR software configuration.

Skills and knowledge equivalent to those learned in:

- Deploying Cisco Service Provider Network Routing (SPROUTE) course.
- Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) course.
- Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE) course.