

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

Duration: **5 days**

Who should attend?

The primary audience for this course is as follows:

1. Network administrators, network engineers, network managers, and systems engineers who would like to implement MPLS VPN service in their networks.

The secondary audience for this course is as follows:

1. This course is intended for network designers and project managers. This course is also recommended to all individuals preparing for Cisco CCNP SP certification.

Prerequisites

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

1. Intermediate to advanced knowledge of Cisco IOS, IOS XE, and IOS XR Software configuration.
2. Skills and knowledge equivalent to those learned in these courses:
 - Deploying Cisco Service Provider Network Routing (SPROUTE)
 - Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE)
 - Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE)

Course Objectives

Upon completing this course, you will be able to:

1. Describe the VPN technologies that are used in the service provider environment and the MPLS VPN peer-to-peer architecture
2. Describe the implementation steps that are needed to provide MPLS Layer 3 VPN service in the service provider network
3. Describe how the MPLS Layer 3 VPN model can be used to implement managed services and Internet access
4. Describe MPLS solutions for IPv6 and interdomain communication.
5. Describe Layer 2 VPNs and Ethernet services

Course Content

The Implementing Cisco Service Provider Next-Generation Edge Network Services (SPEDGE) v1.2 course is designed to help students prepare for the Cisco CCNP SP certification. The SPEDGE course is a component of the CCNP SP curriculum.

The SPEDGE course is designed to provide service provider professionals with information on the use of service provider VPN solutions. The goal is to train professionals to enable service provider point of presence to provide Layer 2 and Layer 3 VPNs. The SPEDGE training reinforces the instruction by providing students with hands-on labs to ensure that they thoroughly understand how to implement VPNs within their networks.

The course also includes classroom activities with remote labs that are useful to gain practical skills on deploying Cisco IOS or IOS XE and Cisco IOS XR features to operate and support service provider network.