

**Delivery Type:** Classroom

**Duration:** 5 days

### Overview

This 5-day 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 (POP) to provide Layer 2 and Layer 3 VPNs.Hands-on labs are provided to reinforce the students understanding of how to implement VPNs within their network, as well as providing practice on Cisco IOS and IOS XE deployment and the features of Cisco IOS XR required for the operation and support of service provider networks.

## **Target Audience**

This course is intended for network administrators, network engineers, network managers, and systems engineers who would like to implement MPLS VPN service in their networks. This course is also recommended to all individuals preparing for the Cisco CCNP SP certification.

#### Certification

## Recommended preparation for exam(s):

- 642-889 Implementing Cisco Service Provider Next Generation EDGE Network Services
- This is one of the 4 exams required for delegates looking to achieve the Cisco Certified Network Professional for Service Providers.

## **Pre-Requisites**

# Attendees should meet the following prerequisites:

- ✓ Intermediate to advanced knowledge of Cisco IOS, IOS XE, and IOS XR Software configuration.
- Attended Deploying Cisco Service Provider Network Routing (SPROUTE) 1.0
- ✓ Atteneded Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) 1.0
- Attended Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE) 1.0



## **Objectives**

# After completing this program, you will be able to:

- Introduce the VPN technologies that are used in the service provider environment and the Multiprotocol Label Switching (MPLS) VPN peer-topeer architecture
- Describe the implementation steps that are needed to provide MPLS Layer 3 VPN service in service provider networks
- 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

## **Further Information**

#### Recertification:

Cisco professional level certifications (CCNP, CCNP Service Provider Operations, CCNP Wireless, CCDP, CCNP Security CCNP Voice, and CCNP Service Provider) are valid for three years. To recertify, pass ONE of the following exams before the certification expiration date:

- ✓ Pass any current 642-XXX professional level exam,
- Pass any current CCIE Written Exam,
- ✓ Pass the current CCDE Written Exam OR current CCDE Practical Exam, or
- Pass the Cisco Certified Architect (CCAr) interview AND the CCAr board review to extend lower certifications

