

Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) 1.2 (CS-SPADVROUTE-5DAYS)

Modality: Virtual Classroom

Duration: 5 Days

CLC: 38 Units

About this Course:

The Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) v1.2 helps professionals learn the art of addressing designing and deploying concerns by increasing router support and configuration settings. This advanced training program helps students develop conceptual knowledge and understanding of configuring and implementing advanced routing networks. This course encompasses a combination of remote labs and theoretical classes to help professionals nurture practical routing configuration skills and polish the skills of deploying Cisco IOS XR and Cisco IOS XE Features for supporting and operating service provider networks.

This SPROUTE course is one of the components of the CCNP SP Curriculum and is a 5-day course targeting IT Professionals and IT Service Providers. On average, a Cisco System Network Security Engineer earns \$91,175 annually. This advanced-level course majorly focuses on helping professionals learn the key concepts of Advanced Routing on LAN & WAN-Connected Cisco Routers. The students get to attain the key information and skills for implementing scalability and prepares them for the Cisco CCNP SP Exam and Certification.

Course Objectives:

The core objective of this course is to help professionals gain a better understanding and conceptual knowledge of the following key elements:

- Understanding BGP Service Provider Connectivity
- Service Provider Network Scaling and BGP Security & Optimization
- Describing Multicast Forwarding and Distribution Trees
- Interdomain & Intradomain IP Multicast Implementation
- IPv6 Tunnels Implementation and Transition Mechanisms
- Examining the Impact of Communication Styles & Cultural Dimensions on Behavior
- Augmenting Configuration Scalability with BGP
- IT Support Management Fundamentals and Essentials

Audience:

This course is tailored for the following group of professionals and interested candidates:

- Customers and Employers
- Channel Partner and Reseller

Prerequisite:

Professionals planning to enroll in the Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) 1.2 (CS-SPADVROUTE-5DAYS) course are recommended to have knowledge of the following skills:

- Fundamental Knowledge of Cisco SPNGN 1, Cisco SPNGN 2, and SPROUTE

Course Outline:

Module 1: Service Provider Connectivity with BGP

- Lesson 1: Defining Customer-to-Provider Connectivity Requirements
- Lesson 2: Connecting a Customer to a Service Provider

Module 2: Scale Service Provider Network

- Lesson 1: Scaling BGP in Service Provider Networks
- Lesson 2: Introducing BGP Route Reflectors and Confederations

Module 3: Secure and Optimize BGP

- Lesson 1: Implementing Advanced BGP Operations
- Lesson 2: Improving BGP Convergence
- Lesson 3: Improving BGP Configuration Scalability

Module 4: Multicast Overview

- Lesson 1: Introducing IP Multicast
- Lesson 2: Defining Multicast Distribution Trees and Forwarding
- Lesson 3: Multicast on the LAN
- Lesson 4: Populating the Mroute Table

Module 5: Intradomain and Interdomain Multicast Routing

- Lesson 1: Introducing PIM-SM Protocol
- Hardware Lab 5: Enable and Optimize PIM-SM
- Lesson 2: Implementing PIM-SM Enhancements
- Lesson 3: Implementing Interdomain IP Multicast
- Lesson 4: Identifying Rendezvous Point Distribution Solutions

Module 6: Service Provider IPv6 Transition Implementations

- Lesson 1: Introducing IPv6 Services
- Lesson 2: Defining IPv6 Transition Mechanisms
- Hardware Lab 10: Implement Tunnels for IPv6