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

Modality: Virtual Classroom

Duration: 5 Days

CLC: 38 Units

SUBSCRIPTION: Master Plus

About this course:

The Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) v1.2 is a five-day course that provides network engineers and technicians with the knowledge and skills necessary to implement and support a service provider network. It is designed to help students prepare for Cisco CCNP SP certification. The SPADVROUTE course is a component of the CCNP SP curriculum.

The course focuses on using Cisco routers that are typically found in the service provider network and on various technologies that are used to offer different services to customers. Upon completing this course learners will be able to configure, verify, and troubleshoot advanced BGP configuration, IP multicasting, and IPv6 transition mechanisms. Also deploying Cisco IOS/IOS XE and Cisco IOS XR features to operate and support SP network.

The average salary of a Cisco Systems Network Security Engineer is **$91,175** per year.

Audience:

- Channel Partner / Reseller
- Customer
- Employee

Prerequisite:

- SPNGNG1, SPNGN2, SPROUTE Recommended

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