Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE)

Duration: 5 days

Who should attend?

The primary audience for this course is as follows:

1. This course is intended primarily for network administrators, network engineers, network managers and systems engineers who would like to implement IP routing in service provider environments.

The secondary audience for this course is as follows:

1. This course is intended for network designers and project managers. The course is also recommended to all individuals that are preparing for CCNP service provider certification.

The tertiary audience for this course is as follows:

1. This course is intended for program managers.

Prerequisites

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

1. Skills and knowledge that are equivalent to those learned in **Interconnecting Cisco Network Devices Part 1** (ICND1)
2. Basic knowledge of Cisco IOS, IOS XE, and IOS XR Software configuration
3. Skills and knowledge that are equivalent to those learned in **Building Cisco Service Provider Next-Generation Networks, Part 1** (SPNGN1)
4. Skills and knowledge that are equivalent to those learned in **Building Cisco Service Provider Next Generation Networks, Part 2** (SPNGN2)
5. Skills and knowledge that are equivalent to those learned in **Deploying Cisco Service Provider Network Routing** (SPROUTE)

Course Objectives

Upon completing this course, you will be able to meet these objectives:

1. Configure the service provider network to support multiple BGP connections with customers and other autonomous systems
2. Describe common routing and addressing scalability issues in the service provider network

3. Describe available BGP tools and features to secure and optimize the BGP routing protocol in a service provider environment
4. Introduce IP multicast services and the technologies that are present in IP multicasting
5. Introduce PIM-SM as the most current scalable IP multicast routing protocol
6. Describe service provider IPv6 transition implementations

Course Content

Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) v1.2 is a course that provides network engineers and technicians with the knowledge and skills necessary to implement and support a service provider network.

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.

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

Certifications: