

Maintaining Cisco Service Provider Routing Protocols

MSPRP



Delivery Type: Classroom

Duration: 5 days

Overview

This is a five-day instructor-led course, designed to provide delegates with the knowledge needed to provide support in a service-provider environment using an Interior Gateway Protocol such as Open Shortest Path First (OSPF) or Intermediate System-to-Intermediate System (IS-IS) and BGP. Delegates will acquire an understanding of advanced routing policies using route maps with Cisco IOS Software and Routing Policy Language (RPL) with Cisco IOS XR Software.

This course is part of the new SP Ops professional level career certification and will prepare and validate learner proficiency in monitoring and troubleshooting interior gateway protocols (IGPs) and Border Gateway Protocol (BGP) on the service provider core next generation networking network.

Target Audience

The primary audience for this course is:

- ✓ Tier II and Tier III Support Personnel.
- ✓ Service provider network operations center (NOC) personnel.
- ✓ Service provider engineers.
- ✓ Service provider partners.

Certification

Recommended preparation for exam(s):

- ✓ 642-775 - MSPRP Maintaining Cisco Service Provider Routing Protocols
- ✓ This course is part of the Cisco Certified Network Professional SP Operations Career Certification

Pre-Requisites

Attendees should meet the following prerequisites:

- ✓ IP networking skills and experience using Cisco IOS Software command line interface (CLI). ICND1 required.
- ✓ Operations process knowledge and ability to use NMS tools to monitor networks and network devices. SSPO required.
- ✓ Ability to implement service provider change management procedures and configuration management procedures. OFCN required.
- ✓ Understanding of and ability to identify the critical factors for availability, scalability and manageability of OSPF, IS-IS, and BGP. Self-study training in these areas may be found on the Cisco Learning Network website

at <https://learningnetwork.cisco.com/index.jspa?ciscoHome=true> or alternatively attend a BCN course.

- ✓ Ability to implement Cisco IOS Software and Cisco IOS XR Software configuration and monitoring commands. XRFUND and OFCN recommended.
- ✓ UNIX and/or Linux operating system experience as applied to IP network environments.

Objectives

After completing this program, you will be able to:

- ✓ Identify the typical routing requirements in service provider networks, list the routing solutions, and describe the change, performance, and fault management procedures.
- ✓ Change the routing configuration that is based on designs and implementation templates, as well as change management processes and procedures based on Information Technology Infrastructure Library (ITIL®).
- ✓ Gather and interpret performance statistics for routing protocols using various tools such as show commands and monitoring tools that are based on Simple Network Management Protocol (SNMP).
- ✓ Perform fault management for routing protocols using various tools such as show commands and monitoring tools.

Follow on Courses

Delegates looking to achieve the Cisco web Security Field Engineer Specialist will also need:

- ✓ MSPVM Maintaining Cisco Service Provider VPNs and MPLS Networks
- ✓ MSPQS Maintaining Cisco Service Provider Quality of Service

Further Information

Recertification :

- ✓ Cisco professional level certifications (CCNP, CCNP Wireless, CCNP SP Operations, CCDP, CCSP, CCVP, and CCIP) are valid for three years. To recertify, pass any 642 exam that is part of the professional level curriculum or any CCIE/CCDE written exam before the certification expiration date.
- ✓ Achieving or recertifying any of the certifications above automatically extends your active Associate and Professional level certification(s) up to the point of expiration of the last certification achieved.