

**Delivery Type:** Classroom

**Duration:** 3 days

#### **Overview**

This is a three-day instructor-led course designed to provide delegates with the knowledge needed to provide support in a service-provider environment using quality-of-service (QoS) mechanisms. The course focuses on the QoS mechanisms, how they are implemented using Cisco IOS® Software and Cisco IOS XR Software, and how to perform monitoring and troubleshooting of QoS in service environments.

## **Target Audience**

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

### Certification

✓ 642-785 - MSPQS Maintaining Cisco Service Provider Quality of ServiceThis 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 command Software 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 manageability of OSPF, IS-IS, and BGP.Self-study training in these areas may be found on the Cisco Learning Network website athttps://learningnetwork.cisco.com/index.jspa?ciscoHome=tr ue or alternatively attend a BCN course. Prior attendance of MSPVM is recommended.
- 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 QoS requirements in service provider networks, list the solutions, and describe the change, performance, and fault management procedures for QoS
- Perform changes in the configuration of QoS based on designs and implementation templates, as well as ITIL®-based change management processes and procedures
- Gather and interpret performance statistics for QoS mechanisms using various tools such as show commands and SNMP-based monitoring tools, and propose changes and improvements that are based on the acquired information
- Perform fault management for QoS mechanisms using various tools, such as show commands and SNMP-based monitoring tools

### **Follow on Courses**

# The following courses are recommended for further study:

✓ No further courses recommended at this time

### **Further Information**

#### Recertification:

- Cisco professional level certifications (CCNP, CCNP Wireless, CCNP SP Ops, 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.

