

# Cisco Learning Services Service Provider Routing



## What Is the Value of Cisco Service Provider Routing Training?

Cisco® Learning Services offers world-class training that supports Cisco high-end routing and switching technologies for both service providers and enterprise customers. This includes in-depth technical knowledge and extensive hands-on exercises to provide world-class education for the advanced Cisco IOS® and IOS XR technologies.

These course offerings train students on all of the major Service Provider Routing technologies and features found in today's next-generation networks including:

- Border Gateway Protocol (BGP)
- Open Shortest Path First (OSPF)
- Intermediate System-to-Intermediate System (IS-IS)
- Multiprotocol Label Switching (MPLS)
- Layer 2 VPN
- Layer 3 VPN
- IP version 4 (IPv4)
- IP version 6 (IPv6)

Other topics covered by this training include:

- System security
- Traffic engineering
- Quality of Service (QoS)
- Network design principles
- Troubleshooting techniques
- Deployment strategies

## What Problems Does Service Provider Routing Training Help Solve?

Implementing large-scale routing and Metro Ethernet networks in a service provider or large-enterprise environment is a very complex task. Having a properly trained and knowledgeable network staff is essential to the success of any such network environment. Cisco Learning Services provides your network staff with the knowledge needed and the hands-on experience required to properly design, install, configure, maintain, manage, and troubleshoot large Routing and Metro Ethernet networks in today's complex service provider or large-enterprise environments.

## Cisco Service Provider Routing Offerings

Cisco and its partners can help customers deploy a robust, dependable solution by taking a lifecycle approach that addresses all aspects of deployment, operations, and optimization.

### Cisco Routing Training

Cisco Learning Services' industry-leading course offerings use real-world, solutions-oriented training labs to offer hands-on exercises related to the job skills of network engineers and operation center personnel.

The network equipment covered in the routing track includes: Cisco Carrier Routing System-1 (CRS-1), CRS-3, Cisco ASR 9000 and ASR 1000 Series Routers, Cisco 7600 Series Routers, Cisco ASR 901 and ASR 903 routers, and Cisco Network Convergence Systems 4000 (NCS 4000) and NCS 6000 routers.

### Cisco Metro Ethernet Training

Learn to successfully provide your business with simplified networking solutions by extending your LAN to your metro network. Cisco Learning Services Metro Ethernet training can provide you with the knowledge and skill sets you need. Learn to configure, administer, and deploy Layer 2 Ethernet services on a service provider or large-enterprise network enabled by Multiprotocol Label Switching (MPLS).



### Cisco Service Provider Routing Offerings

IMINS (Cisco IOS) SP/ENT	Managing Industrial Networks with Cisco Networking Technologies (IMINS)
CRS-1, CRS-3, ASR9000 (Cisco IOS XR) SP	Deploy, Maintain, and Troubleshoot Cisco IOS XR Software
ASR9000 (Cisco IOS XR) SP/ENT	Understanding and Configuring MEF Certified Services on the Cisco ASR 9000
	Essentials of Cisco ASR 9000 Series Aggregation Services Router
ASR903 (Cisco IOS SE) SP	Cisco ASR 903 Essentials
ASR1000 (Cisco IOS XE) SP/ENT	Cisco ASR 1000 Series Essentials (ASR Essentials)
CRS-1, CRS-3, ASR9000 (Cisco IOS XR) SP/ENT	Implementing and Maintaining Cisco Technologies Using IOS XR
CRS-3 (Cisco IOS XR) SP	Cisco CRS-3 Carrier Routing System Essentials

### What Are the Benefits of Service Provider Routing Training?

A properly trained and knowledgeable network staff is a key ingredient to the success of any large-scale network environment. Cisco Learning Services provides your network staff with the tools needed and the hands-on experience required to properly design, install, configure, maintain, manage, and troubleshoot large Routing and Metro Ethernet networks in today's complex service provider or large-enterprise environments. Cisco Learning Services Service Provider Routing training can help enable the following customer benefits:

- Monetize services faster
- Increased employee productivity
- Reduced network downtime
- Ensure business continuity
- Cost optimization

### Why Cisco?

Cisco Learning Services provides comprehensive, customer-oriented solutions for skill development. It helps speed the adoption and migration of core and advanced technologies. The primary mission of Cisco Learning Services is to help Cisco customers optimize their network investments.

Working closely with Cisco engineers, Cisco Learning Services helps to ensure all our courses are aligned with engineering best practices and recommendations. Through Cisco Learning Services, you will receive training for leading-edge Cisco technologies and platforms. From hands-on, instructor-led training to training-on-demand, learning labs, workshops, and boot camp sessions, Cisco Learning Services has solutions that fit your schedule and learning preference.

To learn more about the Cisco Learning Services Service Provider Routing courses, visit [http://www.cisco.com/web/learning/learning\\_services/courses/metro\\_ethernet.html](http://www.cisco.com/web/learning/learning_services/courses/metro_ethernet.html).



To learn more about additional Cisco Learning Services offerings, visit <http://www.cisco.com/go/cls>.

