Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR)

ID SPCOR   **Price** CHF 4,950.—(excl. VAT)   **Duration** 5 days

Who should attend

- Network Administrators
- Network Engineers
- Network Managers
- System Engineers
- Project Managers
- Network Designers

This course is part of the following Certifications

Cisco Certified Network Professional Service Provider (CCNP SERVICE PROVIDER)

Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Intermediate knowledge of Cisco IOS or IOS XE
- Familiarity with Cisco IOS or IOS XE and Cisco IOS XR software configuration
- Knowledge of IPv4 and IPv6 transmission control protocol (TCP)/IP networking
- Intermediate knowledge of IP routing protocols
- Understanding of MPLS technologies
- Familiarity with VPN technologies

These skills can be found in the following Cisco Learning Offerings:

- Implementing and Administering Cisco Solutions (CCNA)
- Understanding Cisco Service Provider Network Foundations (SPFNDU)

Course Objectives

- Describe the service provider network architectures, concepts, and transport technologies
- Describe the Cisco IOS software architectures, main internetwork operating system (IOS) types, and their differences
- Implement open shortest path first (OSPF) in the service provider network
- Implement integrated intermediate system to intermediate system (IS-IS) in the service provider network
- Implement border gateway protocol (BGP) routing in service provider environments
- Implement route maps and routing policy language
- Describe IPv6 transition mechanisms used in the service provider networks
- Implement high availability mechanisms in Cisco IOS XR software
- Implement traffic engineering in modern service provider networks for optimal resource utilization
- Describe segment routing and segment routing traffic engineering concepts
- Describe the virtual private network (VPN) technologies used in the service provider environment
- Configure and verify multi-protocol label switching (MPLS) L2VPN in service provider environments
- Configure and verify MPLS L3VPN in service provider environments
- Implement IP multicast services
- Describe the QoS architecture and QoS benefits for service provider networks
- Implement QoS in service provider environment
- Implement control plane security in Cisco devices
- Implement management plane security in Cisco devices
- Implement data plane security in Cisco devices
- Describe the YANG data modeling language
- Implement automation and assurance tools and protocols
- Describe the role of Cisco Network Services Orchestrator (NSO) in service provider environments
- Implement virtualization technologies in service provider environment

Training Centres worldwide

Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3
CH-8304 Wallisellen
Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch