



# Implementing Cisco Converged SDN Transport Solution (SPSDNTXP)

ID SPSDNTXP Price US \$ 3,600.—(excl. tax) Duration 4 days

This is a Cisco Learning Services course and is delivered directly by Cisco.

- · Knowledge of general networking concepts
- · Experience working with CLI-based network devices

#### **Course Overview**

The Implementing Converged SDN Transport Solutions (SPSDNTXP) v1.0 course introduces you to Software-Defined Networking (SDN)-ready architecture. This architecture evolves traditional Metro network design into an SDN-enabled programmable network capable of delivering all services (residential, business, 5G mobile backhauling, video, and IoT) on the premise of simplicity, full programmability, and cloud integration with guaranteed service level agreements (SLAs).

You will examine the evolution of service provider design principles such as Unified Multiprotocol Label Switching, Evolved Programmable Networks, and the Cisco® Compass Metro Fabric. Additionally, you'll explore and configure individual components of the design including segment routing and its supporting features.

This course will help you:

- Describe the Converged SDN Transport solution
- Describe the basic implementation of SDN component
- Establish a foundation to take a deeper dive into SDN solutions

- Who should attend
  - · Network architects Network engineers
  - · Network consulting engineers
  - · Customer support engineers

## **Prerequisites**

To fully benefit from this course, you should have:

#### **Course Objectives**

After taking this course, you should be able to:

- Introduce and examine the evolution of service provider design principles
- Introduce and review the basic building blocks of segment routing and its place within the service provider infrastructure
- Implement various technologies within segment routing to provide additional availability or to meet the Service Level Agreements (SLAs)
- Identify and deploy an SDN controller to support a multidomain segment routing for traffic engineering
- (SR-TE) network
- Describe different VPNs and services
- Explain how to configure and verify Ethernet VPN (EVPN) Native and EVPN Virtual Private Wire Service (VPWS)
- Describe how to configure and verify the Layer 3 VPN
- Explain network operation simplification and automation
- Describe how to automate service provider network configurations with Cisco Network Services Orchestrator (NSO)
- Describe how to automate the service provider WAN with Cisco WAN Automation Engine (WAE)
- Explore different converged SDN transport use cases

#### **Detailed Course Outline**

- Converged SDN Transport Fundamentals
- Introducing Segment Routing
- Segment Routing Topology-Independent Loop-Free Alternative (TI-LFA) and Traffic Engineering (TE)
- Multidomain SR-TE
- VPN and Services Overview
- EVPN Layer 2 Basics
- Layer 3 VPNs
- Operation Simplification and Automation Foundation





- Network Orchestration Using NSO
- Network Automation Using Cisco WAE

# About Fast Lane



Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace. as well as management and leadership skills, IT and project management.

### **Fast Lane Services**

- ✓ High End Technology Training
- ✓ Business & Soft Skill Training
- ✓ Consulting Services
- ✓ Managed Training Services
- ✓ Digital Learning Solutions
- ✓ Content Development
- ✓ Remote Labs
- ✓ Talent Programs

**Training Methods** 

✓ Classroom Training

✓ Event Management Services



















✓ Instructor-Led Online Training

- ✓ E-Learning
- ✓ Blended & Hybrid Learning
- ✓ Mobile Learning





AUTHORIZED





F#RTINET.





opentext\*





- ✓ Digital Transformation
- ✓ Artificial Intelligence
- ✓ Cloud
- ✓ Networking
- ✓ Cyber Security
- ✓ Wireless & Mobility
- ✓ Modern Workplace
- ✓ Data Center

















Worldwide Presence

with high-end training centers

around the globe

CompTIA.





#### **Multiple Awards**

from vendors such as AWS, Microsoft, Cisco, Google, NetApp, **VMware** 



## **Experienced SMEs**

with over 19.000 combined certifications

# Germany

Fast Lane Institute for Knowledge Transfer GmbH

Tel. +49 40 25334610

info@flane.de / www.flane.de

### Austria

**ITLS GmbH** 

(Partner of Fast Lane) Tel. +43 1 6000 8800

info@itls.at / www.itls.at

### **Switzerland**

Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Tel. +41 44 8325080

info@flane.ch / www.flane.ch