

# Implementing Cisco SD-WAN Solutions (ENSDWI)

ID ENSDWI Price 3,795.— €(excl. tax) Duration 5 days

## Course Overview

The Implementing Cisco SD-WAN Solutions (ENSDWI) training helps you design, deploy, configure, and manage the Cisco Software-Defined WAN (SD-WAN) solution in a large-scale network, including how to migrate from legacy WAN to Cisco SD-WAN. You will learn best practices for configuring routing protocols in the data center and the branch, and how to implement advanced control, data, and application-aware policies. This training also covers Cisco SD-WAN deployment and migration options, placement of controllers, how to deploy WAN Edge devices, multicast and quality of service (QoS), how to configure Direct Internet Access (DIA) breakout, and how to deploy a Multi-Region Cisco SD-WAN fabric. You will also learn about the various Application Quality of Experience (AppQoE) traffic optimization capabilities. Finally, the training looks at the different Cisco SD-WAN security options available.

## How You'll Benefit

This training will teach you to use Cisco SD-WAN to:

- Establish a transport-independent WAN for lower cost and higher flexibility
- Meet Service Level Agreements (SLAs) for business-critical and real-time applications
- Provide secure end-to-end segmentation for protecting critical enterprise compute resources
- Extend seamlessly into the public cloud
- Optimize the user experience for Software-as-a-Service (SaaS) applications

## Who should attend

- Individuals seeking the [Cisco Certified Network Professional Enterprise \(CCNP ENTERPRISE\)](#) or the Cisco Certified Specialist—Enterprise SD-WAN Implementation
- Pre- and post-sales network engineers involved in the installation, support, and troubleshooting of a Cisco SD-WAN overlay network

This course is part of the following Certifications

Cisco Certified Network Professional Enterprise (CCNP ENTERPRISE)

## Prerequisites

You should have the following knowledge and skills before attending this course:

- Knowledge of Software-Defined Networking (SDN) concepts as applied to large-scale live network deployments
- Strong understanding of enterprise WAN design
- Strong understanding of routing protocol operation, including both interior and exterior routing protocol operation
- Familiarity with Transport Layer Security (TLS) and IP Security (IPSec)

These recommended Cisco offerings that may help you meet these prerequisites:

- [Implementing and Administering Cisco Solutions \(CCNA\) v2.2](#)
- [Implementing and Operating Cisco Enterprise Network Core Technologies \(ENCOR\)](#)

## Course Objectives

After taking this course, you should be able to:

- Describe the Cisco SD-WAN solution and how modes of operation differ in traditional WAN versus Cisco SD-WAN
- Describe options for Cisco SD-WAN cloud and on-premises deployment
- Explain how to deploy WAN Edge devices
- Compare the Zero-Touch Provisioning (ZTP) and traditional Plug-n-Play (PnP) processes and examine technical specifics for on-premises deployment
- Describe configuration groups and feature profiles for configuration management
- Describe device and feature configuration templates
- Describe options for providing scalability, high availability, and redundancy
- Explain how dynamic routing protocols are deployed in

Cisco SD-WAN environment, on the service side and transport side

- Describe Cisco SD-WAN policy concepts, which includes how policies are defined, attached, distributed, and applied
- Define and implement advanced control policies, such as policies for custom topologies and service insertion
- Describe the Multi-Region Cisco SD-WAN fabric feature
- Define and implement advanced data policies, such as policies for traffic engineering and QoS
- Describe the Application Quality of Experience (AppQoE) capabilities available in Cisco SD-WAN
- Define and implement an application-aware routing (AAR) policy
- Implement Direct Internet Access (DIA) and Cisco SD-WAN Cloud OnRamp options
- Describe Cisco SD-WAN security components and integration
- Describe how to design pure and hybrid Cisco SD-WAN solutions, as well as how to perform a migration to Cisco SD-WAN
- Describe the different tools and options available for managing a Cisco SD-WAN fabric
- Describe the different options available for monitoring the Cisco SD-WAN fabric
- Describe Cisco SD-WAN support for multicast

### Detailed Course Outline

- Section 1: Examining the Cisco SD-WAN Architecture
- Section 2: Examining Cisco SD-WAN Deployment Options
- Section 3: Deploying WAN Edge Devices
- Section 4: Managing Device Configuration
- Section 5: Exploring Redundancy, High Availability, and Scalability
- Section 6: Enabling Service-Side and Transport-Side Routing
- Section 7: Understanding Cisco SD-WAN Policy Configuration Basics
- Section 8: Defining Advanced Control Policies
- Section 9: Defining Advanced Data Policies
- Section 10: Implementing Application Quality of Experience
- Section 11: Implementing AAR
- Section 12: Examining DIA and Cisco Cloud OnRamp
- Section 13: Exploring Cisco SD-WAN Security
- Section 14: Designing and Migrating to Cisco SD-WAN
- Section 15: Performing Cisco SD-WAN Network Management and Troubleshooting
- Section 16: Examining Cisco SD-WAN Multicast Support

# 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
- ✓ Event Management Services

## Training Methods

- ✓ Classroom Training
- ✓ Instructor-Led Online Training
- ✓ FLEX Classroom – Classroom & Online Hybrid
- ✓ Onsite & Customized Training
- ✓ E-Learning
- ✓ Blended & Hybrid Learning
- ✓ Mobile Learning

## Technologies & Solutions

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



**Worldwide Presence**  
with high-end training centers  
around the globe



**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](mailto:info@flane.de) / [www.flane.de](http://www.flane.de)

### Austria

**ITLS GmbH**  
(Partner of Fast Lane)  
Tel. +43 1 6000 8800  
[info@itls.at](mailto:info@itls.at) / [www.itls.at](http://www.itls.at)

### Switzerland

**Fast Lane Institute for Knowledge  
Transfer (Switzerland) AG**  
Tel. +41 44 8325080  
[info@flane.ch](mailto:info@flane.ch) / [www.flane.ch](http://www.flane.ch)