
Implementing Cisco SD-WAN Solutions (ENSDWI) v3.0

***WHERE GREAT TRAINING
HAPPENS EVERYDAY!***



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Course Duration

5 Days

Course Price

\$4,295.00
43 CLCs

Methods of Delivery

In-Person ILT
Virtual ILT
Onsite ILT

About this Class

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.

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How you will benefit

This class will help you:

- 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

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The job roles best suited to the material in this course are:

- Individuals seeking the Cisco CCNP Enterprise certification 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 System Installers

Prerequisites

To fully benefit from this course, you should have the following knowledge:

- 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)

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Objectives

After taking this course, you should be able to:

- Describe the Cisco SD-WAN overlay network and how modes of operation differ in legacy WAN versus SD-WAN
- Describe options for SD-WAN cloud and on-premises deployments
- Explain how to deploy WAN Edge devices
- Compare the Zero-Touch Provisioning (ZTP) and traditional Plug-n-Play (PnP) process 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

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Course Outline

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

Implementing Cisco SD-WAN Solutions (ENSDWI) v3.0

Lab Outline

- Lab 1: Deploying Cisco SD-WAN Controllers
- Lab 2: Deploy Cisco SD-WAN Device Using Configuration Group
- Lab 3: Configure Cisco SD-WAN Controller Affinity
- Lab 4: Implement Service-Side Routing Protocols
- Lab 5: Implement Transport Location (TLOC) Extensions
- Lab 6: Implement Control Policies
- Lab 7: Implement Data Policies
- Lab 8: Implement Application-Aware Routing
- Lab 9: Implement Branch and Regional Internet Breakouts
- Lab 10: Configure Application Firewall
- Lab 11: Migrate Branch Sites
- Lab 12: Perform Cisco SD-WAN Software Upgrade