



IMPLEMENTING CISCO SD-WAN SOLUTIONS (ENSDWI) V2.0

The Implementing Cisco SD-WAN Solutions (ENSDWI) v2.0 course gives you training about how to design, deploy, configure, and manage your Cisco® Software-Defined WAN (SD-WAN) solution in a large-scale live network, including how to migrate from legacy WAN to SD-WAN. You will learn best practices for configuring routing protocols in the data center and the branch, as well as how to implement advanced control, data, and application-aware policies. The course also covers SD-WAN deployment and migration options, placement of controllers, how to deploy WAN Edge devices, and how to configure Direct Internet Access (DIA) breakout. The course looks at the different Cisco SD-WAN security options available, such as application-aware enterprise firewall, Intrusion Prevention System (IPS), URL filtering, Cisco Advanced Malware Protection (AMP), Secure Sockets Layer/Transport Layer Security (SSL/TLS) proxy, and Cisco Umbrella® Secure Internet Gateway (SIG).

This course helps prepare you to take the exam, Implementing Cisco SD-WAN Solutions (300-415 ENSDWI) which leads to the new CCNP® Enterprise and Cisco Certified Specialist – Enterprise Advanced Infrastructure Implementation certifications.

How you'll benefit

This class will help you:

- Establish a transport-independent WAN for lower cost and higher diversity
- Meet Service-Level Agreements (SLAs) for business-critical and real-time applications
- Provide 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
- Earn 32 CE credits toward recertification

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



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Objective

Upon completing this course, the student will be able to meet these objectives:

- 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
- Review the Zero-Touch Provisioning (ZTP) process and examine technical specifics for on-premises deployment
- Review the device configuration template and describe new features of device configuration templates
- Describe options for providing scalability, high availability, and redundancy
- Explain how dynamic routing protocols are deployed in an 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
- Identify and implement advanced data policies, such as policies for traffic engineering and QoS
- 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 Cisco SD-WAN Day-2 operations, such as monitoring, reporting, logging, troubleshooting, and upgrading
- Describe Cisco SD-WAN support for multicast

Course Duration

5 day

Course Price

\$4,495.00

Methods of Delivery

- Instructor Led
- Virtual ILT

Certification Exam

300-415

Cisco CE Credits

32

Who Should Attend

The primary audience for this course is as follows:

- System Installers
- System Integrators
- System Administrators
- Network Administrators
- Solutions Designers



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Prerequisites

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

- 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)

Recommended Cisco offerings that may help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA®)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)
- Strong knowledge of computer networking components: Windows A/D, SQL
- Strong understanding of IP networks
- Advanced experience administering Cisco Packaged Contact Center Enterprise
- Experience deploying Cisco Packaged Contact Center Enterprise

Course Outline

Module 1: Cisco SD-WAN Overlay Network

- Examining Cisco SD-WAN Architecture

Module 2: Cisco SD-WAN Deployment

- Examining Cisco SD-WAN Deployment Options
- Deploying WAN Edge Devices
- Onboarding WAN Edge Devices with ZTP and PnP
- Using Device Configuration Templates
- Exploring Redundancy, High Availability, and Scalability

Module 3: Cisco SD-WAN Routing Options

- Enabling Service-Side and Transport-Side Routing

Module 4: Cisco SD-WAN Policy Configuration



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- Understanding Cisco SD-WAN Policy Configuration Basics
- Defining Advanced Control Policies
- Implementing Application-Aware Routing (AAR)

Module 5: Cisco SD-WAN Migration and Interoperability

- Examining Direct Internet Access and Cloud Deployment Options
- Exploring Cisco SD-WAN Security
- Designing and Migrating to Cisco SD-WAN

Module 6: Cisco SD-WAN Management and Operations

- Performing Cisco SD-WAN Network Management and Troubleshooting
- Examining Cisco SD-WAN Multicast Support

LABS

- Deploying Cisco SD-WAN Controllers
- Add a WAN Edge Router Using ZTP
- Deploy Cisco SD-WAN Device Using Configuration Templates
- Configure Cisco SD-WAN Controller Affinity
- Implement Service Side Routing Protocols
- Implement Transport Location (TLOC) Extensions
- Implement Control Policies
- Implement Data Policies
- Implement Application-Aware Routing
- Implement Branch and Regional Internet Breakouts
- Migrate Branch Sites
- Perform Cisco SD-WAN Software Upgrade