

Cisco SD-WAN Operation and Deployment (ENSDW) v1.0

What you'll learn in this course

The **Cisco SD-WAN Operation and Deployment (ENSDW) v1.0** course provides an overview of the Cisco® Software-Defined WAN (SD-WAN) solution and SD-WAN components. You will learn how to create, manage, and operate a secure extensible network using Cisco SD-WAN products. The course covers how to configure, operate, and monitor overlay routing in a secure extensible network. In addition, you will learn about policies and Quality of Service (QoS) in the SD-WAN overlay network.

The Cisco SD-WAN solution is a cloud-delivered overlay WAN architecture that facilitates digital and cloud transformation for enterprises. Cisco SD-WAN significantly reduces WAN costs and time to deploy new services. With Cisco SD-WAN, you can build a robust security architecture that's crucial for hybrid networks and provides a strong policy framework.

Course duration

- Instructor-led training: 2 days in the classroom with hands-on lab practice
- Virtual instructor-led training: Not available
- E-learning: 7 hours of instruction, including videos and 5 hands-on lab exercises

How you'll benefit

This class will help you learn to use Cisco SD-WAN to:

- Establish transport-independent WAN for lower cost and higher diversity
- Meet 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

Who should enroll

- Enterprise network system installers
- System integrators
- System administrators
- Network administrators
- Solutions designers

How to enroll

- For instructor-led training, visit the [Cisco Learning Locator](#).
- For private group training, visit [Cisco Private Group Training](#).
- For digital library access, visit [Cisco Platinum Learning Library](#).
- For e-learning volume discounts, visit [Cisco Training on Demand](#).

Technology areas

- Networking
- Software-defined networking

Course details

Objectives

After taking this course, you should be able to:

- Identify the various components and architecture of the Cisco SD-WAN solution
- Deploy vEdge routers in a secure extensible network
- Create templates to aid in the deployment and operation of the secure extensible network
- Configure and verify overlay routing in the secure extensible network
- Create simple policies to control traffic flow in the secure extensible network

Prerequisites

Before taking this course, you should have the following knowledge and skills:

- Strong understanding of enterprise WAN design
- Strong understanding of routing protocol operation, interior and exterior
- Familiarity with Transport Layer Security (TLS) and IP Security (IPsec)

These Cisco learning offerings can help you meet these prerequisites:

- **Implementing Cisco IP Routing (ROUTE)**
- **Troubleshooting and Maintaining Cisco IP Networks (TSHOOT)**
- **Implementing Cisco Edge Network Security Solutions (SENS)**

Outline

- SD-WAN Solution Components
 - SD-WAN Solution Overview
 - SD-WAN Components
 - Managing SD-WAN Components
- Secure Extensible Network Deployment
 - Secure Control Plane Operation
 - Secure Control Plane Deployment
 - Secure Data Plane Operation
 - Cloud Deployments and Redundancy
- SD-WAN Template Deployment
 - Templates Overview
 - Feature Templates
 - Device Templates
 - Attaching Devices to Templates

- SD-WAN Overlay Routing
 - sOverlay Routing Overview
 - OMP Route Advertisements
 - OMP Route Redistribution and Network Segmentation
 - Configuring and Verifying Overlay Routing
- SD-WAN Policies and QoS
 - Policy Overview and Framework
 - vSmart Policy Operation and Construction
 - Forwarding and QoS Overview
 - Configuring and Monitoring QoS Forwarding

Lab outline

- Manage and Monitor SD-WAN Components
- Deploy and Verify SD-WAN vEdge Routers
- Deploy SD-WAN Templates
- SD-WAN Overlay Routing
- Smart Policies




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