

Implementing Cisco SD-WAN Solutions v1.0

Course#: SDWAN300

Duration: 5 Days

Price: 0.00

Course Description

In the SDWAN300 - Implementing Cisco SD-WAN Solutions v1.0 course 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 and replace edge devices, and how to configure Direct Internet Access (DIA) breakout.

This course helps you prepare to take the Implementing Cisco SD-WAN Solutions (300-415 ENSDWI) exam, which is part of the new CCNP Enterprise certification and the Cisco Certified Specialist - Enterprise SD-WAN Implementation certifications.

Objectives

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

- 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
- 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, as well as how to deploy virtual vEdge and physical cEdge devices with Zero Touch Provisioning (ZTP) and device templates
- Describe best practices in WAN routing protocols, as well as how to configure and implement transport-side connectivity, service-side routing, interoperability, and redundancy and high availability
- Describe dynamic routing protocols and best practices in an SD-WAN environment, transport-side

connectivity, service-side connectivity, and how redundancy and high availability are achieved in SD-WAN environments

Explain how to migrate from legacy WAN to Cisco SD-WAN, including typical scenarios for data center and branch

Explain how to perform SD-WAN Day 2 operations, such as monitoring, reporting, logging, and upgrading

Audience

System installers

System integrators

System administrators

Network administrators

Solutions designers

Prerequisites

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

Completion of the Cisco SD-WAN Operation and Deployment (ENSDW) course or equivalent experience

Knowledge of Software-Defined Networking (SDN) concepts as applied to large-scale live network deployments

Strong understanding of enterprise wide area network 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)

Content

Virtual Classroom Live Outline

Cisco SD-WAN Overlay Network

Examining Cisco SD-WAN Architecture

Cisco SD-WAN Deployment

Examining Cisco SD-WAN Deployment Options

Deploying Edge Devices

Deploying Edge Devices with Zero-Touch Provisioning

Using Device Configuration Templates

Redundancy, High Availability, and Scalability

Cisco SD-WAN Routing Options

Using Dynamic Routing

Providing Site Redundancy and High Availability

Configuring Transport-Side Connectivity

Cisco SD-WAN Policy Configuration

Reviewing Cisco SD-WAN Policy

Defining Advanced Control Policies

Defining Advanced Data Policies

Implementing Application-Aware Routing

Implementing Internet Breakouts and Network Address Translation (NAT)

Cisco SD-WAN Migration and Interoperability

Examining Cisco SD-WAN Hybrid Scenarios

Performing a Migration

Cisco SD-WAN Management and Operations

Performing Day-2 Operations

Performing Upgrades

Virtual Classroom Live Labs

Deploying Cisco SD-WAN Controllers

Adding a Branch Using Zero Touch Provisioning (ZTP)

Deploying Devices Using Configuration Templates

Configuring Controller Affinity

Implementing Dynamic Routing Protocols on Service Side

Implementing Transport Location (TLOC) Extensions

Implementing Control Policies

Implementing Data Policies

Implementing Application-Aware Routing

Implementing Internet Breakouts

Migrating Branch Sites

Performing an Upgrade