

# **Implementing Cisco SD-WAN Solutions (SDWAN300) v1.0 - On Demand**

**Modality: On Demand**

**Duration: 40 Hours**

**CLC: 8 Units**

## **Course Information**

### **About this course:**

This course provides you thorough training about how to design, deploy, configure, and manage your Cisco Software-Defined WAN (SD-WAN) solution in a large-scale live network. It will also teach you to migrate from legacy WAN to SD-WAN.

You will get knowledge about the best practices for configuring routing protocols in the data center and the branch. The course will also equip you with skills to implement advanced control, data, and application-aware policies. You will also learn SD-WAN deployment and migration options, placement of controllers, deploying and replacing edge devices, and configuring direct internet access (DIA) breakout.

### **Course Objective:**

After taking this course, you should be able to:

- 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
- Describe the Cisco SD-WAN overlay network and how modes of operation differ in legacy WAN versus SD-WAN
- Explain how to migrate from legacy WAN to Cisco SD-WAN, including typical scenarios for data center and branch
- 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
- Explain how to perform SD-WAN day 2 operations, such as monitoring, reporting, logging, and upgrading

### **Audience:**

- System installers, integrators, and administrators
- Network administrators

- Solution designers

## **Prerequisite:**

To take full advantage of this course, having following knowledge and skills will help:

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

## **Course 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