

SDWAN300**Implementing Cisco SD-WAN Solutions**

32 horas

Automation, Programmability & DNA

Cisco

INTRODUÇÃO

The Implementing Cisco SD-WAN Solutions (SDWAN300) v1.0 course gives you deep-dive 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 and replace edge devices, and how to configure Direct Internet Access (DIA) breakout.

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.

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 certification.

OBJETIVO DO CURSO

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, 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.

PÚBLICO-ALVO

Professionals interested in knowing, design, implementing, operating and supporting solutions using the Cisco SDWAN Solution protocol in wired and wireless networks.

System installers

System integrators

System administrators

Network administrators

Solutions designers

PRÉ-REQUISITOS

The student 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 (basic concepts);
- 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).

Course Introduction

Course Outline

Course Goals & Objectives

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

Lab outline

Lab 1: Deploying Cisco SD-WAN Controllers

Lab 2: Adding a Branch Using Zero Touch Provisioning (ZTP)

Lab 3: Deploying Devices Using Configuration Templates

Lab 4: Configuring Controller Affinity

Lab 5: Implementing Dynamic Routing Protocols on Service Side

Lab 6: Implementing Transport Location (TLOC) Extensions

Lab 7: Implementing Control Policies

Lab 8: Implementing Data Policies

Lab 9: Implementing Application-Aware Routing

Lab 10: Implementing Internet Breakouts

Lab 11: Migrating Branch Sites

Lab 12: Performing an Upgrade