NOUVEAU

Implementing Cisco SD-WAN Solutions (SDWAN300)

Durée : 04 jours.

Ref : CI-SDWAN300

Course Overview

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 is a Cisco Learning Services course and is delivered directly by Cisco.

A qui s'adresse cette formation

- System installers
- System integrators
- System administrators
- Network administrators
- Solutions designers

Certifications

Cette formation fait partie de la certification:

- Cisco Certified Network Professional Enterprise (CCNP)

Pré-requis

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

- Completion of the Fonctionnement et déploiement du Cisco SD-WAN (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)

Objectifs

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

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

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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

- 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