ENSDWI - Implementing Cisco SD-WAN Solutions

Duration: *5 Day(s)*

Course Overview

The Implementing Cisco SD-WAN Solutions (ENSDWI) v2.0 course gives you 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 WAN Edge devices, and how to configure Direct Internet Access (DIA) breakout. The course looks at the different Cisco SD-WAN security options available, such as application-aware enterprise firewall, Intrusion Prevention System (IPS), URL filtering, Cisco Advanced Malware Protection (AMP), Secure Sockets Layer/Transport Layer Security (SSL/TLS) proxy, and Cisco Umbrella© Secure Internet Gateway (SIG). This course helps you prepare to take the Implementing Cisco SD-WAN Solutions (300-415 ENSDWI) exam which is part of the CCNP© Enterprise certification. You will also earn 32 Continuing Education (CE) credits toward recertification. This course will help you learn to use Cisco SD-WAN to:

- Establish a transport-independent WAN for lower cost and higher flexibility
- Meet Service Level Agreements (SLAs) for business-critical and real-time applications
- Provide secure 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
- Earn 32 CE credits toward recertification

Review this course online at https://www.alta3.com/courses/ENSDWI

Objectives

- Design robust SD-WAN solutions tailored for enterprise needs.
- Implement advanced security and routing protocols.
- Configure data center and branch network integrations.
- Manage Cisco SD-WAN deployments for optimal performance.

Who Should Attend

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

Prerequisites

- Knowledge of Software-Defined Networking (SDN) concepts as applied to large-scale live network deployments
- Strong understanding of enterprise WAN 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)
- Implementing and Administering Cisco Solutions (CCNA©_)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)

Course Outline

Examining the Cisco SD WAN Architecture

1. Overview of SD-WAN
2. Differences between traditional WAN and SD-WAN

Examining Cisco SD-WAN Deployment Options

3. On-premises and cloud deployment choices

Deploying WAN Edge Devices

4. Configuration and setup
5. Edge device roles

Onboarding WAN Edge Devices with ZTP and PnP

6. Zero-Touch Provisioning process
7. Technical specifics for onboarding

Using Device Configuration Templates

8. Template features and updates

Exploring Redundancy, High Availability, and Scalability

9. Methods to enhance network reliability

Enabling Service-Side and Transport-Side Routing

10. Dynamic routing protocol deployment

Understanding Cisco SD-WAN Policy Configuration Basics

11. Defining and applying policies

Defining Advanced Control Policies

12. Custom topology and service insertion

Implementing AAR

13. Application-Aware Routing strategies

Examining Direct Internet Access and Cloud Deployment Options

14. Direct Internet Access setup

Exploring Cisco SD-WAN Security

15. Security component integration

Designing and Migrating to Cisco SD-WAN

16. Pure and hybrid solution designs

Performing Cisco SD-WAN Network Management and Troubleshooting

17. Monitoring, reporting, and logging

Examining Cisco SD-WAN Multicast Support

18. Multicast solutions in SD-WAN environments