

## Implementing Cisco SD-WAN Solutions v3 (ENSDWI)

\$3,295.00

5 Daytime Classes or 10 Evening Classes Delivery Methods Virtual, Private Group,

## **CAREER SKILLS+**<sup>™</sup>

The Implementing Cisco SD-WAN Solutions (ENSDWI) training helps you design, deploy, configure, and manage the Cisco Software-Defined WAN (SD-WAN) solution in a large-scale network, including how to migrate from legacy WAN to Cisco SD-WAN. You will learn best practices for configuring routing protocols in the data center and the branch, and how to implement advanced control, data, and application-aware policies. This training also covers Cisco SD-WAN deployment and migration options, placement of controllers, how to deploy WAN Edge devices, multicast and quality of service (QoS), how to configure Direct Internet Access (DIA) breakout, and how to deploy a Multi-Region Cisco SD-WAN fabric. You will also learn about the various Application Quality of Experience (AppQoE) traffic optimization capabilities. Finally, the training looks at the different Cisco SD-WAN security options available. 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.

| Who Should Attend    | Individuals seeking the Cisco CCNP Enterprise certification or the<br>Cisco Certified Specialist—Enterprise SD-WAN Implementation<br>Pre- and post-sales network engineers involved in the installation,<br>support, and troubleshooting of a Cisco SD-WAN overlay network   |
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| Course Prerequisites | Knowledge of Software-Defined Networking (SDN) concepts as<br>applied to large-scale live network deployments<br>Strong understanding of enterprise WAN design<br>Strong understanding of routing protocol operation, including both<br>interior and exterior routing protocol operation<br>Familiarity with Transport Layer Security (TLS) and IP Security<br>(IPSec)   |
| Course Objectives    | Describe the Cisco SD-WAN solution and how modes of operation<br>differ in traditional WAN versus SD-WAN<br>Describe options for Cisco SD-WAN cloud and on-premises<br>deployment<br>Explain how to deploy WAN Edge devices<br>Review the Zero-Touch Provisioning (ZTP) process and examine<br>technical specifics for on-premises deployment<br>Review the device configuration template and describe new<br>features of device configuration templates<br>Describe options for providing scalability, high availability, and<br>redundancy<br>Explain how dynamic routing protocols are deployed in an<br>SD-WAN environment, on the service side and transport side<br>Describe Cisco SD-WAN policy concepts, which includes how<br>policies are defined, attached, distributed, and applied<br>Define and implement advanced control policies, such as policies<br>for custom topologies and service insertion<br>Identify and implement advanced data policies, such as policies<br>for traffic engineering and QoS<br>Define and implement an Application-Aware Routing (AAR) policy<br>Implement Direct Internet Access (DIA) and Cisco SD-WAN Cloud<br>OnRamp options<br>Describe Cisco SD-WAN security components and integration<br>Describe how to design pure and hybrid Cisco SD-WAN solutions,<br>as well as how to perform a migration to Cisco SD-WAN<br>Describe Cisco SD-WAN Day-2 operations, such as monitoring,<br>reporting, logging, troubleshooting, and upgrading |



Describe Cisco SD-WAN support for multicast

## Agenda

Examining the Cisco SD WAN Architecture Examining Cisco SD-WAN Deployment Options Deploying WAN Edge Devices Onboarding WAN Edge Devices with ZTP and PnP Using Device Configuration Templates Exploring Redundancy, High Availability, and Scalability Enabling Service-Side and Transport-Side Routing Understanding Cisco SD-WAN Policy Configuration Basics **Defining Advanced Control Policies** Implementing AAR Examining Direct Internet Access and Cloud Deployment Options Exploring Cisco SD-WAN Security Designing and Migrating to Cisco SD-WAN Performing Cisco SD-WAN Network Management and Troubleshooting Examining Cisco SD-WAN Multicast Support

