SDWFND – Cisco SD-WAN Operation and Deployment

Days: 2

Description: The Cisco SD-WAN Operation and Deployment (SDWFND) v1.0 is a 2-day instructor-led hands-on course provides an overview of the Cisco SD-WAN solution and SD-WAN components. You will learn how to create, manage, and operate a secure extensible network using Cisco SD-WAN products. Cisco SD-WAN is a new technology, this training covers salient features such as zero-touch provisioning, secure network bring-up, configuration using feature templates, configuration of Overlay Management Protocol (OMP) and policies for network traffic management. Students will also learn about policies and quality of service (QoS) in the SD-WAN overlay network.

Prerequisites: It is recommended, but not required, to have the following skills and knowledge before attending this course:

- 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)

Audience:

- Enterprise Network System Installers
- System Integrators
- System Administrators
- Network Administrators
- Solutions Designers

Course Objectives: After completion of this course, students will be able to...

- Identify the various components and architecture of the Cisco SD-WAN solution.
- Deploy vEdge routers in a secure extensible network.
- Create templates to aide in the deployment and operation of the secure extensible network.
- Configure and verify overlay routing in the secure extensible network.
- Create simple policies to control traffic flow in the secure extensible network.

OUTLINE:

MODULE 1: SD-WAN SOLUTION COMPONENTS

- Lesson 1: SD-WAN Solution Overview
- Lesson 2: SD-WAN Components
- Lesson 3: Managing SD-WAN Components

MODULE 2: SECURE EXTENSIBLE NETWORK DEPLOYMENT

- Lesson 1: Secure Control Plane Operation
- Lesson 2: Secure Control Plane Deployment
- Lesson 3: Secure Data Plane Operation

SDWFND – Cisco SD-WAN Operation and Deployment

- Lesson 4: Cloud Deployments and Redundancy

MODULE 3: SD-WAN TEMPLATE DEPLOYMENT

- Lesson 1: Templates Overview
- Lesson 2: Feature Templates
- Lesson 3: Device Templates
- Lesson 4: Attaching Devices to Templates

MODULE 4: SD-WAN OVERLAY ROUTING

- Lesson 1: Overlay Routing Overview
- Lesson 2: OMP Route Advertisements
- Lesson 3: OMP Route Redistribution and Network Segmentation
- Lesson 4: Configuring and Verifying Overlay Routing

MODULE 5: SD-WAN POLICIES AND QOS

- Lesson 1: Policy Overview and Framework
- Lesson 2: vSmart Policy Operation and Construction
- Lesson 3: Forwarding and QoS Overview
- Lesson 4: Configuring and Monitoring QoS Forwarding

LAB OUTLINE

- Lab 1: Manage and Monitor SD-WAN Components
- Lab 2: Deploy and Verify SD-WAN vEdge Routers
- Lab 3: Deploy SD-WAN Templates
- Lab 4: SD-WAN Overlay Routing
- Lab 5: SD-WAN Policies