

## **SIMOS 1.0 - Implementing Cisco Secure Mobility Solutions 1.0 (5 Days)**

### **Course Overview**

Implementing Cisco Secure Mobility Solutions (SIMOS) v1.0 is a newly created five-day instructor-led training (vILT) course that is part of the curriculum path leading to the Cisco Certified Network Professional Security (CCNP® Security) certification. This course is designed to prepare network security engineers with the knowledge and skills they need to protect data traversing a public or shared infrastructure such as the Internet by implementing and maintaining Cisco VPN solutions. Students of this course will gain hands-on experience with configuring and troubleshooting remote access and site-to-site VPN solutions, using Cisco ASA adaptive security appliances and Cisco IOS routers.

### **Target Audience**

The primary audience for this course is Network Security Engineers

### **Prerequisites**

To fully benefit from this course, students should have the following prerequisite skills and knowledge:

- Cisco Certified Network Associate certification
- Cisco Certified Network Associate Security certification
- Knowledge of Microsoft Windows operating system

### **Course Objectives**

After completing this course the students should be able to:

- Describe the various VPN technologies and deployments as well as the cryptographic algorithms and protocols that provide VPN security.
- Implement and maintain Cisco site-to-site VPN solutions.
- Implement and maintain Cisco FlexVPN in point-to-point, hub-and-spoke, and spoke-to-spoke IPsec VPNs.
- Implement and maintain Cisco clientless SSL VPNs.
- Implement and maintain Cisco AnyConnect SSL and IPsec VPNs.
- Implement and maintain endpoint security and dynamic access policies (DAP)

### **Course Outline**

#### **Module 1: Fundamentals of VPN Technologies and Cryptography**

- Lesson 1: The Role of VPNs in Network Security
- Lesson 2: VPNs and Cryptography

#### **Module 2: Deploying Secure Site-to-Site Connectivity Solutions**

- Lesson 1: Introducing Cisco Secure Site-to-Site Connectivity Solutions
- Lesson 2: Deploying Point-to-Point IPsec VPNs on the Cisco ASA
- Lesson 3: Deploying Cisco IOS VTI-Based Point-to-Point IPsec VPNs
- Lesson 4: Deploying Cisco IOS DMVPNs

### **Module 3: Deploying Cisco IOS Site-to-Site FlexVPN Solutions**

- Lesson 1: Introducing Cisco FlexVPN Solution
- Lesson 2: Deploying Point-to-Point IPsec VPNs Using Cisco IOS FlexVPN
- Lesson 3: Deploying Hub-and-Spoke IPsec VPNs Using Cisco IOS FlexVPN
- Lesson 4: Deploying Spoke-to-Spoke IPsec VPNs Using Cisco IOS FlexVPN

### **Module 4: Deploying Clientless SSL VPN**

- Lesson 1: Clientless SSL VPN Overview
- Lesson 2: Deploying Basic Cisco Clientless SSL VPN
- Lesson 3: Deploying Application Access in Clientless SSL VPN
- Lesson 4: Deploying Advanced Authentication in Clientless SSL VPN

### **Module 5: Deploying Cisco AnyConnect VPNs**

- Lesson 1 Overview of Cisco AnyConnect VPNs
- Lesson 2 Deploying Basic Cisco AnyConnect SSL VPN on Cisco ASA
- Lesson 3 Deploying Advanced Cisco AnyConnect SSL VPN on Cisco ASA
- Lesson 4: Deploying Cisco AnyConnect IPsec/IKEv2 VPNs
- Lesson 5: Deploying Advanced Authentication, Authorization, and Accounting in Cisco

### **Module 6: Deploying Endpoint Security and Dynamic Access Policies**

- Lesson 1: Implementing Host Scan
- Lesson 2: Implementing DAP for SSL VPNs

### **Labs**

- Lab 2-1: Implement Site-to-Site Secure Connectivity on the Cisco ASA
- Lab 2-2: Implement Cisco IOS Static VTI Point-to-Point Tunnel
- Lab 2-3: Implement DMVPN
- Lab 3-1: Implement Site-to-Site Secure Connectivity Using Cisco IOS FlexVPN
- Lab 3-2: Implement Hub-to-Spoke Secure Connectivity Using Cisco IOS Flex VPN
- Lab 3-3: Implement Spoke-to-Spoke Secure Connectivity Using Cisco IOS Flex VPN
- Lab 4-1: Implement ASA Basic Clientless SSL VPN
- Lab 4-2: Application Access clientless SSL
- Lab 4-3: Advanced AAA clientless SSL
- Lab 5-1: Implement ASA Basic AnyConnect SSL VPN
- Lab 5-2: Configure Advanced Cisco AnyConnect SSL VPN on Cisco ASA
- Lab 5-3: Configure Cisco AnyConnect IPsec/IKEv2 VPNs on Cisco ASA
- Lab 5-4: Configure Advanced Authentication for Cisco AnyConnect SSL VPN on Cisco ASA
- Lab 6-1: Configure Hostscan and DAP for AnyConect SSL VPNs