

Implementing Cisco Secure Mobility

DURATION: 5 DAYS

COURSE OVERVIEW

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

This course will be of benefit to security engineers involved in the support and deployment of Cisco VPN Solutions and individuals looking to obtain the Cisco Certified Network Professional for Security Certification.

COURSE OBJECTIVES

After attending this course you should be able to:

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

COURSE CONTENT

Fundamentals of VPN Technologies and Cryptography

1. The Role of VPNs in Network Security
2. VPNs and Cryptography

Deploying Secure Site-to-Site Connectivity Solutions

1. Introducing Cisco Secure Site-to-Site Connectivity Solutions

2. Deploying Point-to-Point IPsec VPNs on the Cisco ASA
3. Deploying Cisco IOS VTI-Based Point-to-Point IPsec VPNs
4. Deploying Cisco IOS DMVPNs

Deploying Cisco IOS Site-to-Site Flex VPN Solutions

1. Introducing Cisco Flex VPN Solution
2. Deploying Point-to-Point IPsec VPNs Using Cisco IOS Flex VPN
3. Deploying Hub-and-Spoke IPsec VPNs Using Cisco IOS Flex VPN
4. Deploying Spoke-to-Spoke IPsec VPNs Using Cisco IOS Flex VPN

Deploying Clientless SSL VPN

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

Deploying Cisco AnyConnect VPNs

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

Deploying Endpoint Security and Dynamic Access Policies

1. Implementing Host Scan
2. Implementing DAP for SSL VPNs

Labs

Lab 1: Implement Site-to-Site Secure Connectivity on the Cisco ASA

Lab 2: Implement Cisco IOS Static VTI Point-to-Point Tunnel

Lab 3: Implement DMVPN

Lab 4: Implement Site-to-Site Secure Connectivity Using Cisco IOS Flex VPN

Lab 5: Implement Hub-to-Spoke Secure Connectivity Using Cisco IOS Flex VPN

Lab 6: Implement Spoke-to-Spoke Secure Connectivity Using Cisco IOS Flex VPN

Lab 7: Implement ASA Basic Clientless SSL VPN

Lab 8: Application Access clientless SSL

Lab 9: Advanced AAA clientless SSL

Lab 10: Lab: Implement ASA Basic AnyConnect SSL VPN

Lab 11: Configure Advanced Cisco AnyConnect SSL VPN on Cisco ASA

Lab12: Configure Cisco AnyConnect IPsec/IKEv2 VPNs on Cisco ASA

Lab13: Configure Advanced Authentication for Cisco AnyConnect VPN on Cisco ASA

Lab 14: Configure Host scan and DAP for AnyConnect SSL VPNs

COURSE PREREQUISITES

Attendees should meet the following prerequisites:

1. Cisco Certified Network Associate (CCNA®) certification
2. Cisco Certified Network Associate (CCNA®) Security certification
3. Knowledge of Microsoft Windows Operating System

TEST CERTIFICATION

Recommended preparation for exam(s):

300-209 - Implementing Cisco Edge Network Security Solutions

FOLLOW ON COURSES

Delegates looking to achieve the Cisco Certified Network Professional Certification for Security should also attend the following courses.

1. SITCS - Implementing Cisco Threat Control Solutions
2. SISAS - Implementing Cisco Secure Access Solutions
3. SENSS - Implementing Cisco Edge Network Security Solutions