

CI - SECURE

Securing Networks with Cisco Routers and Switches

Summary

Duration

5 Days

Vendor

Cisco

Category

SECURITY / CCNP SECURITY



Introduction

This five-day course aims at providing network security engineers with the knowledge and skills needed to secure Cisco IOS Software router- and switch-based networks, and provide security services based on Cisco IOS Software. Successful graduates will be able to secure the network environment using existing Cisco IOS Software features, as well as install and configure components of the Cisco IOS Software, such as zone-based policy firewall, Cisco IOS Intrusion Prevention System (IPS), user-based firewall, secure tunnels using IP Security (IPsec) virtual private network (VPN) technology including public key infrastructure (PKI), virtual tunnel interface / dynamic virtual tunnel interface (VTI / DVTI), Group Encrypted Transport VPN (GET VPN), Dynamic Multipoint Virtual Private Network (DMVPN), Secure Sockets Layer (SSL) VPN, and advanced switch security features. The course focuses on the implementation and troubleshooting aspects of the lifecycle services approach, adding some elements of the design phase as well.

Prerequisites

Cisco Certified Network Associate Security (CCNA Security) certification

Course Objectives

Upon completing this course, the learner will be able to meet these overall objectives:

- Implement and maintain Cisco IOS Software infrastructure protection controls in a Cisco router- and switch-based network infrastructure.
- Implement and maintain Cisco IOS Software threat control and containment technologies in a Cisco router-based perimeter infrastructure.
- Implement and maintain Cisco IOS Software VPN technologies in a Cisco router-based WAN.
- Implement and maintain Cisco IOS Software remote access VPN technologies in a Cisco router-based remote access solution.

Course Outline

Module 1: Deploying Cisco IOS Software Network Foundation Protection Lesson

- Lesson 1: Deploying Network Foundation Protection Controls
- Lesson 2: Deploying Advanced Switched Data Plane Security Controls
- Lesson 3: Implementing Cisco Identity-Based Network Services
- Lesson 4: Deploying Basic 802.1X Features
- Lesson 5: Deploying Advanced Routed Data Plane Security Controls

- Lesson 6: Deploying Advanced Control Plane Security Controls
- Lesson 7: Deploying Advanced Management Plane Security Controls

Module 2: Deploying Cisco IOS Software Threat Control and Containment

- Lesson 1: Deploying Cisco IOS Software Network Address Translation
- Lesson 2: Deploying Basic Zone-Based Policy Firewalls
- Lesson 3: Deploying Advanced Zone-Based Policy Firewalls
- Lesson 4: Deploying Cisco IOS Software IPS

Module 3: Deploying Cisco IOS Software Site-to-Site Transmission Security

- Lesson 1: Site-to-Site VPN Architectures and Technologies
- Lesson 2: Deploying VTI-Based Site-to-Site IPsec VPNs
- Lesson 3: Deploying Scalable Authentication in Site-to-Site IPsec VPNs
- Lesson 4: Deploying DMVPNs
- Lesson 5: Deploying High Availability in Tunnel-Based IPsec VPNs
- Lesson 6: Deploying GET VPN

Module 4: Deploying Secure Remote Access with Cisco IOS Software

- Lesson 1: Remote Access VPN Architectures and Technologies
- Lesson 2: Deploying Remote Access Solutions Using SSL VPN
- Lesson 3: Deploying Remote Access Solutions Using Cisco Easy VPN

Associated Certifications & Exams

The Securing Networks with Cisco Routers and Switches (SECURE v1.0) 642-637 exam is associated with the CCNP Security certifications. This exam tests a candidate's knowledge and skills needed to secure Cisco IOS Software router and switch-based networks, and provide security services based on Cisco IOS Software.

On successful completion of this course students will receive a Torque IT attendance certificate.