

CI - SNRS

Securing Networks with Cisco Routers and Switches v.3.0

Summary

Duration

5 Days

Vendor

Cisco

Category

Security / CCSP



Introduction

This five-day course focuses on providing the network specialists with the knowledge and skills needed to secure Cisco IOS router and switch-based networks. Learners will be able to secure the network environment using existing Cisco IOS features, including installing and configuring Cisco IOS Classic Firewall, Cisco IOS Zone-Based Policy Firewall, user group-based firewall, Cisco IOS intrusion prevention system (IPS), authentication proxy, implementing secure tunnels using IP Security (IPsec) technology, and implementing advanced switch security. This course also covers advanced virtual private network (VPN) technologies.

Prerequisites

CCNA Security is a prerequisite for the SNRS exam / course.

Course Objectives

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

- Implement Layer 2 security features on a network using Cisco IOS commands.
- Implement Cisco Network Foundation Protection on Cisco IOS routers.
- Design, install, configure, and troubleshoot site-to-site VPNs using Cisco Integrated Services routers.
- Design, install, configure, and troubleshoot remote-access communications using Cisco IOS security features.
- Install, configure, and troubleshoot URL filtering, NAT and PAT, Cisco IOS Classic Firewall, Cisco IOS Zone-Based Policy Firewall, and Cisco IOS IPS on a Cisco Integrated Services router.

Course Outline

Module 1: Network Platform Security with Switches

- Configure Advanced Layer 2 Security
- Introducing Cisco IBNS
- Implementing Basic 802.1x Authentication
- Configure Basic 802.1x Authentication
- Configuring Advanced 802.1x Authentication and Authorization

Module 2: Network Platform Security with Routers

- Examining the Cisco Network Foundation Protection Strategy
- Securing the Control Plane
- Securing the Management Plane
- Securing the Data Plane

Module 3: Secure Site-to-Site Communications

- Examining VPN and IPsec Fundamentals
- Implementing IPsec VPNs with PKI
- Implementing GRE over IPsec
- Configuring High Availability VPNs and VTI
- Implementing DMVPN
- Implementing GET VPN

Module 4: Secure Remote Access Communications

- Implementing Cisco IOS Remote Access Using Cisco Easy VPN
- Examining a Cisco IOS SSL VPN
- Configure a Cisco IOS SSL VPN

Module 5: Threat Control and Containment

- Configuring NAT and PAT
- Configuring a Cisco IOS Classic Firewall
- Configure a Cisco IOS Classic Firewall on a Cisco Router
- Configuring a Cisco IOS Zone-Based Policy Firewall
- Configuring Cisco IOS IPS

Associated Certifications & Exams

The Securing Networks with Cisco Routers and Switches exam (SNRS 642-504) is one of the exams associated with the Cisco Certified Security Professional certification. Candidates can prepare for this exam by taking the SNRS course. This exam includes simulations and tests a candidate's knowledge and ability to secure networks using Cisco routers and switches.

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