



Enhanced Network Solutions Group

Systems Integration • Learning Solutions • CIO Consulting
Managed Outsourcing • Healthcare Solutions • Security Solutions

7224 Engle Road - Fort Wayne, IN 46804 - Phone: (260) 432-1364 - Fax: (260) 432.3168

SNRS Securing Networks with Cisco Routers and Switches

SNRS Rev 04.10

5 days

Description

This five-day course focuses on providing 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*

Course Objectives

After 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



Advanced Infrastructure Solutions
Information Worker Solutions
Learning Solutions
Unified Communication Solutions

