
ADVANCED JUNIPER NETWORKS IPSEC VPN IMPLEMENTATIONS

Course No: EDU-JUN-AJVI

Length: Two days

Course Overview

This two-day, intermediate-level course focuses on the wide range of options available when configuring VPNs using Juniper Networks firewall/VPN products. Students attending the course will learn these various deployments through detailed lectures and hands-on lab exercises.

Objectives

After successfully completing this course, you should be able to:

- Configure LAN-to-LAN IPsec VPNs in various configurations.
- Configure VPN redundancy.
- Configure dynamic routing using IPsec VPNs.
- Configure remote access IPsec connectivity including group IKE and shared IKE.
- Configure GRE tunnels.

Intended Audience

This course is intended for network engineers, network support personnel, and reseller support.

Course Level

This is an intermediate-level course.

Prerequisites

Prerequisites for this course include the following:

- Completion of the [Configuring Juniper Networks Firewall/IPsec VPN Products \(CJFV\)](#) course or equivalent experience with ScreenOS software.
- General networking knowledge, including Ethernet, TCP/IP, and routing concepts.

Course Contents

Day 1

Chapter 1: Course Introduction

Chapter 2: ScreenOS VPN Basics Review

- VPN Review
- Verifying Operations
- VPN Monitor
- Lab 1: VPN Review

Chapter 3: VPN Variations

- Dynamic Peers
- Transparent Mode
- Overlapping Addresses
- Lab 2: VPN Variations

Chapter 4: Hub-and-Spoke VPNs

- Concepts
- Policy-Based Hub-and-Spoke
- Route-Based, with No Policy, and NHTB
- Route-Based with Policy
- Centralized Control
- AutoConnect-Virtual Private Networks
- Lab 3: Hub-and-Spoke VPNs

Chapter 5: Routing over VPNs

- Routing Overview
- Configuring RIP
- Configuring OSPF
- Case Studies
- Lab 4: Dynamic Routing

Day 2

Chapter 6: Using Certificates

- Concepts and Terminology
- Configuring Certificates and Certificate Support
- Configuring VPNs with Certificates
- Lab 5: Using Certificates

Chapter 7: Redundant VPN Gateways (Optional)

- Redundant VPN Gateways
- Other Options
- Demo: Redundant VPN Gateways

Chapter 8: Generic Routing Encapsulation (Optional)

- Configuring GRE

Chapter 9: Dial-Up IPsec VPNs

- Basic Dial-up Configuration
- Group IKE ID
- XAUTH and Shared IKE ID

Appendix A: NetScreen-Remote

- NetScreen-Remote Overview
- Basic Dial-Up A-9
- XAUTH/Shared IKE ID
- Demo: Dial-Up VPNs
- Lab 6: Dial-Up VPNs