

# JUNIPER - Integrating Juniper Networks Firewalls and VPNs into High Performance Networks

Duration: 3 Days

Course Price: \$2,500

---

## Course Description

### Course Objectives

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

- Configure virtual systems, including standard, IP-based, and transparent mode.
- Configure dynamic routing protocols, including OSPF and Border Gateway Protocol (BGP).
- Configure multicast operations, including Internet Group Management Protocol (IGMP) and Protocol Independent Multicast—Sparse Mode (PIM-SM).
- Configure high availability in both static routing and dynamic routing environments.
- Configure traffic shaping features.
- Verify operations and troubleshoot all previous configurations.

### Course Content

This three-day course focuses on the ScreenOS features that are typically necessary in large-scale networks, including dynamic routing, virtual systems, traffic shaping, and high availability. Upon completing this course, you should be able to successfully install and configure ScreenOS devices. You should also be able to verify that a ScreenOS device is interoperating in the network as desired. Through demonstrations and hands-on labs, students gain experience in configuring, testing, and troubleshooting these advanced features of ScreenOS software.

This course is based on ScreenOS version 6.2.

---

## Course Outline

### Day 1

#### Chapter 1: Course Introduction

#### Chapter 2: ScreenOS Basics Review

- Concepts Review
- Configuration Review
- Lab 1: ScreenOS Basics Review

#### Chapter 3: Interior Gateway Protocols

- RIP Operations
- OSPF Operations
- OSPF Configuration
- Verification and Troubleshooting
- Lab 2: Part 1—Configuring OSPF
- Route Redistribution
- Lab 2: Part 2—Configuring Redistribution
- Route Optimization
- Lab 2: Part 3—Optimizing Routing Tables

#### Chapter 4: BGP

- BGP Operations
- EBGP Configuration
- Verification and Troubleshooting
- IBGP Configuration
- BGP Connectivity
- Lab 3: Configuring BGP

### Day 2

#### Chapter 5: Advanced Static Routing

- Source-Based Routing
- Policy-Based Routing
- Destination Routing
- Lab 4: Configuring Advanced Static Routes

#### Chapter 6: Multicast

- Multicast Overview
- IGMP Operations
- IGMP Configuration
- PIM-SM Operations

- PIM-SM Configuration
- Multicast Policies
- Lab 5: Configuring Multicast Support

#### Chapter 7: Virtual Systems

- Vsys Operations and Concepts
- Configuring Vsys Using Interface Classification
- Lab 6: Part 1—Creating a Vsys
- Vsys Resource Management
- Inter-Vsys Routing
- Lab 6: Part 2 and 3—Inter-Vsys Routing and Route Export
- Address Translation
- Lab 6: Part 4—Address Translation

#### Day 3

#### Chapter 8: Redundancy

- NSRP Terms and Concepts
- Configuring NSRP Active/Passive
- Configuring NSRP Active/Active, VSD-Less Cluster, and NSRP-Lite
- Tuning Failover Performance
- VRRP Support
- Redundant Interfaces

#### Chapter 9: Traffic Management

---

## Prerequisites

### Who should attend

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

### Prerequisites

Completion of the Configuring Juniper Networks Firewall/IPSec VPN Products (CJFV) course or equivalent product experience; and General networking knowledge, including and understanding of Ethernet, TCP/IP, and routing concepts.

---

Learn iT! San Francisco - 33 New Montgomery St. - Suite 300 - San Francisco, CA 94105 - 855.838.5028 or 415.693.0250

Learn iT! San Jose - 2025 Gateway Place - Suite 390 - San Jose, CA 95110 - 855.838.5028 or 408.200.0953

Learn iT! New York - 330 West 38th St. - Suite 301 - New York, NY 10018 - 855.838.5028

Live Online Training - Remote Training - Home, Office, Anywhere