



# JUNIPER SRX TRAINING

---

UPGRADE YOUR KNOWLEDGE

# Juniper SRX Training

## Course Overview

The Juniper SRX Specialist - Security course aims to provide practical skills on security mechanisms, their configuration and troubleshooting in enterprise environments. This course is intended for networking professionals with experience and intermediate knowledge of the JUNOS software for SRX Series devices.

## Duration & Module Coverage

Duration: 8 Days (16hrs)

Session Options	Module Coverage
<b>Session Weekdays[4] :</b>	<b>Day 1 - Modules 1</b>
2 hours per day	<b>Day 2 - Module 2</b>
4 days per week	<b>Day 3 - Module 3</b>
<b>Session Weekends:</b>	<b>Day 4 - Module 4</b>
2 hours per day	<b>Day 5 - Module 5</b>
	<b>Day 6 – Module 6 to 7</b>
	<b>Day 7 – Module 8</b>
	<b>Day 8 – Module 9 to 10</b>

## Learning Goals

**By the end of this course participants will be able to:**

1. Demonstrate knowledge of the Juniper Networks Junos OS SRX Series devices.
2. Understand security technologies used in Junos SRX Series Devices.
3. Configuration and troubleshooting skills of related platforms.

## Pre-Requisites

This course is for security professionals looking to work in a Juniper environment. Completion of JNCIA course is a pre-requisite to attend this training.

## Teaching Methodology

This is a very hands-on course where participants carry out practical exercises according to the lab guide provided. The concepts are taught through implementation of real-world use-cases. Our exercises have been carefully designed to replicate scenarios participants will face in real life work conditions.

## Who Should Take This Course?

This course is designed for security professionals with knowledge of basic networking looking forward to gain understanding of security technologies offered by Juniper SRX Next-Generation Firewalls and configuration and troubleshooting of related platforms.



# Course Content

## 1. JUNOS Security Overview

- JUNOS Security Overview
- Branch vs High End Platforms
- Major Hardware Components.
- Packet flow in SRX
- Packet Based vs Session Based Forwarding

## 2. Zones

- Zone Types
- Dependencies
- Host Inbound Packet behavior
- Screens in SRX
- Transit Packet Behavior
- Zone configuration and troubleshooting

## 3. Security Policies

- Policy Types
- Policy Components and Ordering
- Policy Ordering and Processing
- Host Inbound traffic examination
- Transit traffic examination
- Scheduling
- Rematching
- Application Layer Gateways
- Address Books
- Applications in Security Policies
- Monitoring and Troubleshooting

## 4. Network Address Translation

- NAT Types
- NAT/PAT processing
- DNS Doctoring
- Cone NAT
- Address Persistence
- NAT Proxy ARP
- NAT Configuration Steps
- NAT Monitoring and Troubleshooting

## 5. IPSec VPNs

- Secure VPN Characteristics and components
- IPSec tunnel establishment
- IPSec Traffic processing
- Define Group VPN
- Define ADVPN
- What is PKI?
- What is Dynamic VPN?
- Steps to implement IPSec VPNs



- Monitor and troubleshoot IPSec VPN

## **6. High Availability**

- HA Features and characteristics
- Deployment requirements and consideration
- Chassis Clusters characteristics and operations
- Cluster Modes
- Cluster and node IDs
- Redundancy Groups
- Cluster interfaces
- State synchronization in HA
- Manual Failover in HA
- Cluster Configuration Steps
- Monitoring and troubleshooting HA

## **7. Virtual SRX**

- Installation of virtual SRX
- Deployment scenarios of vSRX

## **8. Application Security**

- Application Firewall
- Application QoS
- Application ID
- APBR

## **9. Advanced Threat Prevention**

- Supported Files
- Components
- Security Feed
- Traffic remediation
- Workflow

## **10. Juniper Secure Analytics**

- Logging
- Analytics



## Practical Learning Exercises

A lab guide will be provided to each student with requirement scenarios. Along with lab guide required VMs will be provided to set up individual labs for self practice.

A sample scenario would consist of one interface of Juniper SRX appliance connected to internal network, one interface connected to Server farm and one interface connected to the internet.

Similarly there would be scenarios for implementing, verifying and troubleshooting all modules covered in the course.