**Course Name:** Junos Security

**Course Code:** EDU-JUN-JSEC

**Duration:** Three Days

## Introduction

This three-day course covers the configuration, operation, and implementation of SRX Series Services Gateways in a typical network environment. Key topics within this course include security technologies such as security zones, security policies, intrusion detection and prevention (IDP), Network Address Translation (NAT), and high availability clusters, as well as details pertaining to basic implementation, configuration, and management.
Through demonstrations and hands-on labs, students will gain experience in configuring and monitoring the Junos OS and monitoring device operations. This course uses Juniper Networks SRX Series Services Gateways for the hands-on component, but the lab environment does not preclude the course from being applicable to other Juniper hardware platforms running the Junos OS. This course is based on Junos OS Release 12.1R1.9

## Objective

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

- Describe traditional routing and security and the current trends in internetworking.
- Provide an overview of SRX Series devices and software architecture.
- Describe the logical packet flow and session creation performed by SRX Series devices.
- Describe, configure, and monitor zones.
- Describe, configure, and monitor security policies.
- Describe, configure, and monitor firewall user authentication.
- Describe various types of network attacks.
- Configure and monitor Screen options to prevent network attacks.
- Explain, implement, and monitor NAT, as implemented on Junos security platforms.
- Explain the purpose and mechanics of IP Security (IPsec) virtual private networks (VPNs).
- Implement and monitor policy-based and route-based IPsec VPNs.
- Utilize and update the IDP signature database.
- Configure and monitor IDP policy with policy templates.
- Describe, configure, and monitor high availability chassis clusters.

## Prerequisites

Students should have basic networking knowledge and an understanding of the Open Systems Interconnection (OSI) reference model and the TCP/IP protocol suite. Students should also attend the *Introduction to the Junos Operating System* (IJOS) course and the *Junos Routing Essentials* (JRE) course, or have equivalent experience prior to attending this class.

## Course Outline

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| **Day 1** | |
| Chapter 1: | Course Introduction |
| Chapter 2: | Introduction to Junos Security |
| Chapter 3: | Zones |
| Chapter 4: | Security Policies |
| **Day 2** | |
| Chapter 5: | Firewall User Authentication |
| Chapter 6: | Screen Options |
| Chapter 7: | Network Address Translation |
| **Day 3** | |
| Chapter 8: | IPsec VPNs |
| Chapter 9: | Introduction to Intrusion Detection and Prevention |
| Chapter 10: | High Availability Clustering Theory |
| Chapter 11: | High Availability Clustering Implementation |
| **Appendix A: SRX Series Hardware and Interfaces** | |

## Training Location

Mideast Communication Systems
Juniper Authorized Training Center