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Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Junos Security - 5 days

CODE:	LENGTH:	PRICE:
JUN_JSEC	40 Hours (5 dage)	kr 26,686.00

Description

This five-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, Network Address Translation (NAT), IP Security (IPsec), and high availability clusters, as well as details pertaining to basic implementation, configuration, management, and troubleshooting.
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 and Security Director for the hands-on component. This course is based on Junos OS Release 15.1X49-D70.3 and Junos Space Security Director 16.1. Junos Security (JSEC) is an intermediate-level course.

Objectives

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

- 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 user firewall 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.
- Describe, configure, and monitor high availability chassis clusters.
- Describe how to deploy and manage vSRX.
- Describe and configure Group VPNs.
- Describe and configure ADVPNs.
- Troubleshoot chassis clusters, IPsec VPNs, zones, and Security Policies

Audience

The course benefits operators of SRX Series devices. These operators include network engineers, administrators, support personnel, and reseller support personnel.

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, or have equivalent experience prior to attending this class.

Programme

	- Traditional Routing
	- Traditional Security
Day 1 Chapter 1: Course Introduction Chapter 2: Introduction to Junos Security	- The Junos OS Architecture Chapter 3: Zones

- The Definition of Zones
- Zone Configuration
- Monitoring Security Zones
- Screen Options   Lab 1: Configuring and Monitoring Zones Chapter 4: Security Policies
- Security Policy Overview
- Policy Components
- Verifying Policy Operation
- Policy Case Study
  - Session Management
  - Junos ALGs
  - Policy Scheduling

Lab 2: Security Policies Day 2 Chapter 5: Advanced Policy Options •   Logging
  - Troubleshoot Security Zones
  - Troubleshoot Security Policies

Chapter 6: Troubleshooting Security Zones and Policies •   Case Studies

Lab 3: Troubleshooting Security Zones and Policies Chapter 7: Network Address Translation
- NAT Overview
- Source NAT Operation and Configuration
- Destination NAT Operation and Configuration
- Static NAT Operation and Configuration
- Proxy ARP
- Monitoring and Verifying NAT Operation   Lab 4: Network Address Translation Day 3 Chapter 8: Advanced NAT Concepts
- NAT Interaction with Policy and ALGs
- DNS Doctoring
- Cone NAT
- Multi-Tenant NAT
- IPv4-to-IPv6 NAT
- Advanced NAT Scenarios   Lab 5: Advanced NAT Implementations Chapter 9: IPsec VPN Concepts
- VPN Types
- Secure VPN Requirements
- IPsec Overview
- IPsec Details   Chapter 10: IPsec VPN Implementation •   Traffic Selectors
  - Configuration of IPsec VPNs
  - IPsec VPN Case Studies
  - Monitoring IPsec VPN
  - Group VPN Overview
  - GDOI Protocol

Lab 6: Implementing IPsec VPNs Day 4 Chapter 11: Group VPNs •   Group VPN Configuration and Monitoring
  - ADVPN Overview
  - ADVPN Member Roles
  - Shortcut Termination
  - Routing with ADVPNs
  - IKEv2

Lab 7: Implementing Group VPNs Chapter 12: ADVPNs •   ADVPN Implementation Lab 8: Implementing ADVPNs
  - Routing over VPNs
  - NAT with IPsec

Chapter 13: IPsec VPN Case Studies and Solutions •   Enterprise VPN Deployment Best Practices

Lab 9: Implementing Routing over VPN Tunnels and IPsec Best Practices Chapter 14: Troubleshooting IPsec
- IKE Phase 1 Troubleshooting
- IKE Phase 2 Troubleshooting
- Case Studies   Lab 10: Troubleshooting IPsec Day 5 Chapter 15: Virtualized SRX
- vSRX Overview
- Installation of vSRX
- Chassis Clustering
- Deployment Scenarios and Use Cases
- Automated Deployments Options
- AWS Deployment Scenarios   Chapter 16: High Availability Clustering Theory •
- High Availability Overview
- Chassis Cluster Components
- Advanced Chassis Cluster Topics
  - Chassis Cluster Configuration
  - Chassis Cluster Monitoring

Chapter 17: High Availability Clustering Implementation •   Advanced Chassis Cluster Topics

Lab 12: Implementing High Availability Techniques Chapter 18: Troubleshooting Chassis Clusters
- Chassis Cluster Troubleshooting
- Case Studies
- IDP Policy Components and Configuration Lab 13: Troubleshooting Chassis Clusters
  - Branch SRX Platform Overview
  - High-End SRX Platform Overview
  - SRX Traffic Flow and Distribution

Appendix A: SRX Series Hardware and Interfaces •   SRX Interfaces

Session Dates

På anmodning. <u>Kontakt os venligst</u>

Yderligere Information

Denne træning er også tilgængelig som træning på stedet. Kontakt os for at finde ud af mere.