

Deploying Juniper Security in AWS and Azure

COURSE OVERVIEW

This four-day course is designed to provide students with the knowledge required to implement Juniper Networks vSRX in Amazon Web Services (AWS) and Azure environments. Through demonstrations and hands-on labs, students will gain in-depth knowledge about the manual and automated methods used to deploy the vSRX in multicloud environments. The course is based on Juniper Networks® vSRX Virtual Firewall versions 23.2R1.13 and 22.4R2, Junos Space® Release 22.3R1.2, Junos Space® Security Director Release 22.3R1.2, Policy Enforcer 22.3R1, and Juniper® Advanced Threat Prevention Cloud.

COURSE LEVEL

Intermediate

AUDIENCE

- Individuals who want a basic understanding of cloud infrastructure, operations, and terms
- Individuals who want to learn how to securely expand their IT operations into the cloud

PREREQUISITES

- Basic TCP/IP skills
- Basic understanding of the Junos operating system
- Basic understanding of the SRX Series device and its range of security features

RELATED JUNIPER PRODUCTS

- Juniper Space
- Junos Space Security Director
- SRX Series
- Policy Enforcer

RELATED JUNIPER PRODUCTS

[JNCIS-SEC](#)

CONTACT EDUCATION SERVICES:

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OBJECTIVES

- Describe major cloud concepts.
- Describe the AWS Cloud architecture and deploy an Amazon Elastic Compute Cloud (Amazon EC2) instance.
- Deploy a vSRX instance in AWS.
- Deploy vSRX instances using AWS CloudFormation.
- Describe and configure cloud connectivity using the IPsec tunnel.
- Implement AWS transit gateway.
- Deploy Juniper Connected Security.
- Describe the Microsoft Azure Cloud architecture and services.
- Deploy a vSRX instance in Microsoft Azure.
- Automate vSRX deployments using Microsoft Azure Resource Manager
- Deploy multicloud vSRX instances using Terraform.
- Describe AWS and Azure Cloud security services.

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COURSE CONTENTS

DAY 1

1	Course Introduction
2	Cloud Overview <ul style="list-style-type: none">Describe cloud fundamentalsExplain cloud virtualizationDescribe cloud security
3	Introduction to AWS <ul style="list-style-type: none">Describe the AWS architectureAccess the AWS Management ConsoleLaunch AWS EC2 instancesNavigate the AWS Marketplace and explore the available products Lab 1: Introduction to AWS
4	Implementing vSRX in AWS <ul style="list-style-type: none">Explain the operation of an AWS vSRX instanceLaunch an AWS vSRX instanceConfigure an AWS vSRX instance Lab 2: Implementing vSRX in AWS

DAY 2

5	AWS CloudFormation <ul style="list-style-type: none">Describe AWS CloudFormationDescribe CloudFormation templatesDescribe JSON and YAML fundamentalsDeploy a vSRX instance using CloudFormation template Lab 3: CloudFormation
6	Cloud Connectivity Using IPsec Tunnel <ul style="list-style-type: none">Describe the cloud connectivity optionsDescribe how IPsec tunnels are establishedConfigure an IPsec tunnel between an enterprise SRX device and an AWS Virtual Private GatewayConfigure an IPsec tunnel between an enterprise SRX device and an AWS vSRX instanceDescribe how to configure an IPsec tunnel between vSRXs devices from different AWS VPCs Lab 4: Cloud Connectivity
7	AWX Transit Gateway <ul style="list-style-type: none">Explain the need and use of the AWS Transit GatewayDescribe Inter-VPC firewall use casesDeploy an AWS Transit Gateway and attach a vSRX instance in services VPC Lab 5: AWX Transit Gateway

DAY 3

8	Advanced Cloud Security <ul style="list-style-type: none">Describe Juniper Connected SecurityConfigure AWS components for Juniper Connected SecurityImplement Juniper Connected Security with Advanced Threat Prevention Lab 6: Advanced Cloud Security
9	Introduction to Microsoft Azure <ul style="list-style-type: none">Describe the Microsoft Azure servicesDescribe the Microsoft Azure architectureNavigate the Microsoft Azure portalLocate Juniper Networks products in the Microsoft Azure MarketplaceLaunch a Microsoft Azure virtual machine Lab 7: Introduction to Microsoft Azure
10	Implementing vSRX in Microsoft Azure <ul style="list-style-type: none">Describe prelaunch considerations for Microsoft Azure vSRX instancesLaunch a Microsoft Azure vSRX instanceExplain the required vSRX Microsoft Azure configuration Lab 8: Implementing vSRX in Microsoft Azure

DAY 4

11	Microsoft Azure Resource Manager <ul style="list-style-type: none">Describe Microsoft Azure Resource Manager capabilitiesDescribe Microsoft Azure Resource Manager templatesCreate Microsoft Azure Resource Manager templatesDeploy a vSRX instance using a Microsoft Azure Resource Manager template Lab 9: Microsoft Azure Resource Manager
12	Terraform <ul style="list-style-type: none">Explain multicloud complexityExplain Terraform conceptsManage multicloud infrastructure using Terraform Lab 10: Terraform
13	Public Cloud Services <ul style="list-style-type: none">Describe load balancing and auto scalingDescribe how to configure AWS load balancer and autoscale vSRX instancesDescribe Key Management Service in AWS and Microsoft Azure CloudDescribe the AWS alert and monitoring service

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