

Juniper Cloud Networking with AWS and Azure

Category: Networking & Security | **Vendor:** Microsoft

Duration: 32.00 hours (4 days)

26.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This four-day course is designed to provide students with the knowledge required to implement Juniper Networks vSRX in the AWS and Azure environments. Students will gain in-depth knowledge about how to launch and configure the vSRX using different cloud designs. Through demonstrations and hands-on labs, students will gain experience deploying the vSRX in multiple configurations to secure cloud resources. This course uses various releases of the vSRX from Junos OS version 15.1X49-D100 through Junos OS version 19.1R1, as well as Space, Security Director, and Policy Enforcer releases 19.1R1.

About This Course

- Course Introduction
- Cloud Overview
- Introduction to AWS
- Implementing the vSRX in AWS
- Automation in AWS using CloudFormation
- Introduction to Azure
- Implementing the vSRX in Azure
- Automation in Azure using ARM
- Cloud Connectivity
- Advanced Security in the Cloud
- Implementing a Transit VPC
- Automation in Azure using ARM

Who Should Attend

The primary audiences for this course are the following:

- Individuals who want a basic understanding of the cloud operations, terms, and structure needed to work in cloud environments;
- Individuals who want to learn how to securely expand their IT operations into the cloud with the vSRX and understand their design choices.

Prerequisites & Entry Requirements

General Prerequisites:

The following are the prerequisites for this course:

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

Learning Outcomes

Upon successful completion of this course, participants will be able to:

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

- Describe major cloud concepts.
- Describe how virtualization is used in the cloud.
- Describe various security designs used in the cloud.
- Describe the AWS architecture and explain how each tier will be used.
- Access the AWS management console.
- Create an AWS user account.
- Launch an Amazon service.
- Navigate the AWS Marketplace to find Juniper offerings.
- Describe the operation of the vSRX in AWS.
- Launch a vSRX device in AWS.
- Configure the vSRX to pass traffic.
- Describe CloudFormation features.
- Describe the CloudFormation template format.
- Describe the basics of JSON and YAML.
- Use a CloudFormation template.
- Describe Azure cloud services.
- Describe the Azure cloud architecture.
- Navigate the Azure portal.
- Control access to Azure.
- List the steps to follow to launch an Azure service.
- Navigate the Azure Marketplace to find Juniper products.
- List the vSRX offerings in Azure.
- Describe the pre-launch considerations for the vSRX in Azure.
- List the steps required to launch the “vSRX Next Generation Firewall” in Azure.
- List the steps required to launch the “vSRX A Security Gateway” in Azure.
- Describe the configuration needed for the vSRX to work in Azure.
- Describe the Azure Resource Manager Features.
- Describe the Azure Resource Manager Template Format.
- Deploy an Azure Resource Manager Template.

- List the various ways to connect to and between cloud resources.
- Describe the Transit VPC's purpose and operation.
- Describe various Transit VPC designs.
- Create a Transit VPC in AWS.
- Configure Spoke VPCs to connect to a Transit VPC.
- Describe secure connection operations.
- Describe the configuration requirements to establish an IPsec tunnel between an Enterprise/DC SRX and the AWS cloud.
- Describe the configuration requirements to establish an IPsec tunnel between an Enterprise/DC SRX and a vSRX in the AWS cloud.
- Describe the configuration requirements to establish an IPsec tunnel between cloud networks using the vSRX.
- List the advanced vSRX security features that can be used to protect cloud resources.
- Describe the components needed to implement Juniper Networks Connected Security in the cloud.
- Configure AWS cloud components needed to support Juniper Networks Connected Security in the cloud.
- Configure Space with Security Director and Policy enforcer to implement Juniper Networks Connected Security to protect AWS cloud resources.
- Describe the benefits provided by CEM.
- Describe the use cases of CEM.

Detailed Course Outline

Day 1

Chapter 1: Course Introduction

Chapter 2: Cloud Overview

- Cloud Concepts
- Cloud Virtualization
- Cloud Security

Chapter 3: Introduction to AWS

- Amazon Web Services Overview
- Amazon Management Console
- Create and Identity and Management Account
- Launch and Access and EC2 Server
- Amazon Marketplace
- Lab 1: Introduction to AWS

Chapter 4: Implementing the vSRX in AWS

- Understand the operation of the vSRX in AWS
- Launch a vSRX device in AWS
- Configure the vSRX to Pass Traffic
- Lab 2: Implementing the vSRX in AWS

Day 2

Chapter 5: Automation in AWS using CloudFormation

- CloudFormation Overview
- Understanding CloudFormation Templates
- JSON and YAML Overview
- Create a CloudFormation Stack
- Lab3: Automation in AWS using CloudFormation

Chapter 6: Introduction to Azure

- Azure Overview
- Azure Architecture
- Azure Portal
- Control Access to Azure
- Launch and Access a Windows Server
- Azure Marketplace

- Lab4: Introduction to Azure

Chapter 7: Implementing the vSRX in Azure

- The vSRX in Azure
- Pre-Launch Planning
- Launching the “vSRX Next Generation Firewall” in Azure
- Launching the “vSRX A Security Device” in Azure
- Configuring the vSRX for Azure
- Lab 5: Implementing the vSRX in Azure

Day 3

Chapter 8: Automation in Azure using ARM

- Azure Resource Manager Overview
- Understanding ARM Templates
- Creating ARM Templates
- Deploy an ARM Template
- Lab 6: Automation in Azure using ARM

Chapter 9: Cloud Connectivity

- Connectivity Options
- Secure Connections
- DC SRX to AWS Virtual Private Gateway
- DC SRX to vSRX in AWS
- VPC Peering using the vSRX
- Lab 7: Cloud Connectivity

Chapter 10: Advanced Security in the Cloud

- Advanced Security Options Overview
- Configure the network for SDSN
- Connecting to AWS
- Configure Metadata-Based Policies
- Implementing Threat Remediation
- Lab 8: Advanced Security in the Cloud

Day 4

Chapter 11: Implementing a Transit VPC

- Transit VPC Overview
- Transit VPC Designs
- Implementing a Transit VPC
- Implement Spoke VPCs
- Lab 9: Implementing a Transit VPC

Chapter 12: Automation in Azure using ARM

- Today's Networking Environment
- CEM Overview
- CEM Use Cases

Skills You Will Learn:

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Frequently Asked Questions

Q: What delivery options are available for Juniper Cloud Networking with AWS and Azure?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 4-day Juniper Cloud Networking with AWS and Azure course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Juniper Cloud Networking with AWS and Azure training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Juniper Cloud Networking with AWS and Azure?

Yes, we provide corporate training, dedicated training, and closed classes for Juniper Cloud Networking with AWS and Azure. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Juniper Cloud Networking with AWS and Azure, Junos Security, JCNAA

Q: Why choose Nexus Human for Juniper Cloud Networking with AWS and Azure?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Juniper Cloud Networking with AWS and Azure training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

 Email: info@nexushuman.com

 Website: www.nexushuman.com

 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)