

Enterprise Automation and Orchestration Using Contrail

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

Duration: 16.00 hours (2 days)

13.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This two-day course is designed to provide the knowledge of using Contrail in enterprise cloud networks. Through demonstrations and hands-on labs, you will gain experience in working with Contrail Networking in Kubernetes, OpenShift, and VMware vCenter environments. You will also learn how to secure cloud networks with Contrail Security, service chaining, and Juniper cSRX. This course is based on Contrail Release 2011.

About This Course

Day 1

Module 1: Course Introduction

Module 2: Contrail Overview

- Describe Contrail and its enterprise use cases
- List Contrail products and key Contrail features
- Describe the use cases of Contrail in the Enterprise
- Explain Contrail Security concepts

Module 3: Using Contrail with Kubernetes

- Describe Contrail and Kubernetes integration
- Explain Kubernetes architecture
- Explain how Contrail integrates with Kubernetes
- Describe workload isolation modes supported by Contrail

Module 4: Contrail Security for Kubernetes

- Explain how Contrail Security is used with Kubernetes

Module 5: Contrail Provisioning for Kubernetes

- Describe Contrail Provisioning for Kubernetes
- List main deployment methods for Contrail with Kubernetes
- Explain provisioning with Contrail Command
- Lab 1: Contrail and Kubernetes Integration

Chapter 6: Using Contrail with Red Hat OpenShift

- Describe Contrail integration with Red Hat OpenShift
- Explain Red Hat OpenShift integration with Contrail
- Explain how to launch OpenShift workloads and connect them over Contrail Virtual Networks

- Lab 2: Contrail and Integration

Day 2

- AWS and Contrail Overview
- Deploying Contrail Multicloud for AWS
- Lab 4: Interconnecting Private Cloud Workloads to AWS Workloads

Chapter 7: Private to Public Cloud Overlay Networking – Azure

- Azure and Contrail Overview
- Deploying Contrail Multicloud for Azure
- Lab 5: Interconnecting Private Cloud Workloads to Azure Workloads

Day 3

Chapter 8: Private to Public Cloud Overlay Networking – GCP

- Google Cloud Platform (GCP) Overview
- Deploying Contrail Multicloud for GCP

Chapter 9: Contrail Service Chains

- Service Chaining Overview
- Service Chain Configuration
- Advanced Service Chain Operation
- Lab 6: Creating Contrail Service Chains

Chapter 10: Service Chaining with cSRX

- cSRX Overview
- Multiple Interface Pods in Kubernetes
- Service Chaining with cSRX
- Lab 7: Creating Service Chains with cSRX

Who Should Attend

The primary audience for this course includes network engineers, administrators, support personnel, and reseller support personnel responsible for working with Contrail-based networking solutions in data center and enterprise cloud environments.

Prerequisites & Entry Requirements

General Prerequisites:

The prerequisites for this course are as follows:

- TCP/IP networking knowledge
- Working knowledge of cloud networks
- Attended Cloud Automation Using Contrail (CAC) course

Learning Outcomes

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

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

- Describe Contrail and its enterprise use cases.
- List Contrail products and key Contrail features.
- Describe the use cases of Contrail in the Enterprise.
- Explain Contrail Security concepts.
- Describe Contrail and Kubernetes integration.
- Explain Kubernetes architecture.
- Explain how Contrail integrates with Kubernetes.
- Describe workload isolation modes supported by Contrail.
- Explain how Contrail Security is used with Kubernetes.
- Describe Contrail Provisioning for Kubernetes.
- List main deployment methods for Contrail with Kubernetes.
- Explain provisioning with Contrail Command.
- Describe Contrail integration with Red Hat OpenShift.
- Explain Red Hat OpenShift integration with Contrail.
- Explain how to launch OpenShift workloads and connect them over Contrail Virtual Networks.
- Describe Contrail support for VMware .
- Explain vCenter and Contrail Integration.
- Explain how Contrail works with VMware vRealize Orchestrator.
- Use Contrail vCenter Fabric Manager Plugin.
- Describe Contrail vCenter Fabric Manager.
- Deploy Contrail vCenter Fabric Manager.
- Use Contrail Virtual Machine Integration with vCenter.
- Provision Contrail vCenter Manager.
- Secure vCenter Workloads with Contrail Security.
- Describe Contrail service chaining.
- Explain cSRX functionality and its use in Contrail service chains.:
- List the main features of Juniper cSRX.
- Describe multiple interface pods in Contrail.
- Configure In-Network service chains.

- Explain how routing is performed in Contrail Service Chains.
- Explain details of service chain routing.
- Use routing policies.
- Configure route aggregation in service chains.
- Describe advanced Contrail service chain operations.:
- Explain service chain load balancing.
- Explain service chain health checks.
- Configure source NAT.
- Configure distributed source NAT.
- Explain host-based firewalls concept.
- Perform service chain troubleshooting.

Skills You Will Learn:

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

- Describe Contrail and its enterprise use cases.
- List Contrail products and key Contrail features.
- Describe the use cases of Contrail in the Enterprise.
- Explain Contrail Security concepts.
- Describe Contrail and Kubernetes integration.
- Explain Kubernetes architecture.
- Explain how Contrail integrates with Kubernetes.
- Describe workload isolation modes supported by Contrail.
- Explain how Contrail Security is used with Kubernetes.
- Describe Contrail Provisioning for Kubernetes.
- List main deployment methods for Contrail with Kubernetes.
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- Use Contrail vCenter Fabric Manager Plugin.
- Describe Contrail vCenter Fabric Manager.
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Frequently Asked Questions

Q: What delivery options are available for Enterprise Automation and Orchestration Using Contrail?

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 2-day Enterprise Automation and Orchestration Using Contrail course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Enterprise Automation and Orchestration Using Contrail training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Enterprise Automation and Orchestration Using Contrail?

Yes, we provide corporate training, dedicated training, and closed classes for Enterprise Automation and Orchestration Using Contrail. 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: Enterprise Automation and Orchestration Using Contrail, Enterprise Routing & Switching, EAC

Q: Why choose Nexus Human for Enterprise Automation and Orchestration Using Contrail?

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 Enterprise Automation and Orchestration Using Contrail training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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