

# Enterprise Automation and Orchestration Using Contrail (EAC)

**ID** EAC **Price** US\$ 2,000.—(excl. VAT) **Duration** 2 days

## 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.

## This course is part of the following Certifications

Juniper Networks Certified Internet Professional Cloud (JNCIP-CLOUD)

## 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

## Course Objectives

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.

## Course Content

### 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

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- 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

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## Training Centres worldwide



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