Juniper Cloud Fundamentals (JCF)

Duration: 3 Days Course Code: JUN_JCF

Overview:

This three-day course is designed to provide students with the foundational knowledge required to work with Juniper Contrail.
The course summarizes cloud concepts, virtual networks, and cloud management. Key topics include fundamental cloud concepts, Linux virtualization, network virtualization, software defined networking (SDN), Network Functions Virtualization (NFV), and an introduction to OpenStack, Kubernetes, and Contrail.
Course Level
The Juniper Cloud Fundamentals training is an introductory level course.
Relevant Juniper Product
• Contrail

• SRX Series

Target Audience:

Individuals responsible for planning and coordinating cloud enabled networks and services in data center, private cloud, public cloud, hybrid cloud, service provider, and enterprise WAN environments.

Objectives:

- • Identify fundamental cloud concepts
- • Identify the concepts of Linux virtualization
- • Identify the concepts of Linux namespaces
- • Identify the concepts of containerization
- • Identify the basics of Network Virtualization
- • Introduction to NFV and SDN
- • Introduction to OpenStack
- • Identify the key concepts of OpenStack Configuration
- • Identify the basics of OpenStack Networking
- • Identify the basics of Kubernetes
- • Describe Kubernetes interfaces Identify the key concepts of Kubernetes configuration
- • Introduction to Juniper Cloud Native Contrail Networking
- • Identify the basics of Cloud Native Contrail Networking configuration

Prerequisites:

• Basic TCP/IP skills

• Basic network understanding

• General understanding of data center environments

• General understanding of enterprise WAN environments

• Basic understanding of virtualization

• Completion of the Getting Started with Cloud eLearning course

Testing and Certification

JNCIA-Cloud exam topics are based on the content of the recommended instructor-led training courses, as well as the additional resources.
- Exam code: JN0-211
- Administered by Pearson VUE
- Exam length: 90 minutes
- Exam type: 65 multiple-choice questions
- Pass/fail status is available immediately
- Software Release:

o Junos Software: 18.4
o Contrail: 5.1
o CSO: 5.0
o NorthStar: 5.0
o AppFormix: 2.18

The JNCIA-Cloud certification is valid for three years.
Exams can be purchased and scheduled at
https://home.pearsonvue.com/junipernetworks/

Follow-on-Courses:

Cloud Automation Using Contrail

Content:

DAY 1

Course Introduction

Fundamental Cloud Concepts

• Identify key cloud concepts

• Describe components of cloud architecture

• Identify Juniper solutions for cloud infrastructure

Linux Virtualization

• Overview of the Linux architecture

• Describe the concept of Linux virtualization

Lab 1: Linux Virtualization

Linux Namespaces

• Overview of the Linux containment features

• Describe the concept of network namespaces

• Describe the concept of Linux bridging

Lab 2: Linux Namespaces

Containerization

• Describe containerization using Docker

• Describe Docker networking

Lab 3: Containerization

Lab 4: cSRX

Network Virtualization

• Describe concepts of virtual networks

• Describe how to extend virtual network

Lab 5: Network Virtualization

DAY 2

Network Functions Virtualization and

Software-Defined Networking

• Describe the concepts of Software-defined networking (SDN)

• Describe the concepts of Network Functions

Virtualization (NFV)

Introduction to OpenStack

• Describe the OpenStack fundamentals

• Describe OpenStack UI

Lab 6: OpenStack Configuration—WebUI

OpenStack Configuration

• Identify the OpenStack interfaces

• Describe the OpenStack orchestration concepts

• Describe how to create instances in OpenStack

Lab 7: OpenStack Configuration—CLI

OpenStack Networking

• Describe OpenStack networks and security groups

• Describe the concept of Floating IP addresses and load balancing

Lab 8: OpenStack Networking

DAY 3

Introduction to Kubernetes

• Overview of Kubernetes fundamentals

Lab 9: Kubernetes Basics

Kubernetes Networking

• Describe how to provision a Kubernetes cluster

• Describe Kubernetes networking

Lab 10: Kubernetes Networking

Introduction to Cloud Native Contrail

Networking

• Overview of Contrail Networking

• Describe the features of Contrail Networking

Contrail Basic Configuration

• Overview of the installation requirements

• Explore the Contrail UI

• Describe how to create a virtual network in Contrail

• Describe how to create basic security controls

Lab 11: Contrail Basic Configuration

• Describe OpenStack routing

Additional Information:

Delegates will receive an official set of e-kit courseware approximately 1 week prior to the start of the course.

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

info@globalknowledge.co.uk

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK