Juniper Cloud Fundamentals

Duration: 3 Days Course Code: JCF

Overview:

This three-day course is designed to provide students with an understanding of cloud enabled networks, cloud service deployment concepts, and virtualized network platforms such as vSRX and vMX. This course provides a high level overview and understanding of the following concepts: Software Defined Networks Cloud Network Underlays Cloud Network Overlays Cloud DesignCloud Implementation Methods Cloud ServicesJuniper Networks Virtualized Platforms

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:

- **After you complete this course you will be able to:**
- Explain network overlay and underlay concepts
- Describe private, public, and hybrid cloud architecture and implementation
- Describe the implementation of services in a cloud networking environment
- Describe the implementation and functions of the Juniper vSRX platform
- Describe the implementation and functions of the Juniper vMX platform
- Describe the implementation and functions of the Juniper NFX platform
- Explain the role of Juniper Networks virtualized platforms in public cloud offerings
- Describe the functionality and use of Juniper Networks Cloud Connector
- Explain the need for Software Defined Networking
- List basic SDN concepts
- Describe common types of SDN implementation
- Describe the main Network Function Virtualization components
- Describe cloud services monitoring
- Explain the role and functions of AppFormix in cloud services
- Explain SDN WAN concepts
- Describe the role, functions, and features of the NorthStar Controller
- Describe the role, functions, and features of NorthStar Planner
- Describe the role and functions a vCPE and uCPE components
- Explain the role, components and functions of Contrail Service Orchestration
- Explain the role, components and functions of Contrail Networking
- Explain Software Defined Secure Network concepts
- Describe methods to secure an SDN environment
- Explain the functionality of SDSN components

Prerequisites:

Attendees should meet the following prerequisites:

- Basic TCP/IP skills
- Basic network understanding
- General understanding of data center environments

- General understanding of enterprise WAN environments
- Basic understanding of virtualization

Content:

Course Introduction

Cloud Components

- Network Overlay and Underlay Concepts
- Private, Public, and Hybrid Cloud Architecture and Implementation
- Types of Services in a Cloud Network Environment

Virtualized Platforms

- Implementation of the vSRX Platform
- Implementation of the vMX Platform
- Implementation of the NFX Platform
- Juniper Networks Virtualized Platforms in Public Clouds
- Cloud Connector
- Lab: Deploying Juniper Networks Virtual Devices - vMX

SDN Fundamentals

- The Need for SDN
- Main SDN Concepts
- Common Types of SDN

Network Function Virtualization

- Introduction to NFV Architecture
- Main NFV Components
- Examples of VNFs
- Lab: Manually Deploying VNFs

Orchestration and Automation

- Orchestration and Automation Tools in Cloud Networking
- Difference Between SDN Automation and Orchestration
- Roles of Cloud Networking Components
- Contrail Networking Components

AppFormix

- Role of AppFormix
- Components of AppFormix
- Monitoring services in AppFormix
- Lab: AppFormix

SDN WAN Solutions

- SDN WAN Concepts
- Components of the NorthStar SDN WAN Controller
- NorthStar Controller in WAN Environments
- NorthStar Planner Concepts
- Functionality of NorthStar Planner

Cloud CPE

- Legacy Versus Cloud CPE Architecture
- Types of Services in a Cloud Network Environment
- Lab: Cloud CPE (video demonstration)

Cloud Security

- Software Defined Security Network Concepts
- Security Risks in an SDN Environment
- Methods to Secure an SDN Environment
- Lab: Cloud Security using Sky ATP

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