Fast Lane

Cloud Automation Using Contrail (CAC)

ID CAC   **Price** CHF 500.—(excl. VAT)   **Duration** 5 days

Who should attend

This course benefits individuals responsible for working with software-defined networking solutions in data center, service provider, and enterprise network environments.

Prerequisites

The prerequisites for this course are as follows:

- Basic TCP/IP skills;
- General understanding of data center virtualization;
- Basic understanding of the Junos operating system;
- Completion of the Implementing Data Center Fabric with EVPN and VXLAN (ADCX) course or equivalent knowledge; and
- Completion of the Juniper Cloud Fundamentals (JCF) course; and
- Basic knowledge of object-oriented programming and Python scripting is recommended.

Course Objectives

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

- Explain the role of Contrail SDN Controller.
- List available Contrail solutions.
- Describe the purpose of an orchestrator.
- Describe the basics of Kubernetes.
- Identify the function of each of the main OpenStack Projects.
- Describe the purpose of Contrail.
- Explain how the versions of Contrail differ.
- Discuss Contrail related solutions.
- Describe the functions of the Contrail vRouter and Contrail Controller.
- Explain the role of the control, configuration, and analytic nodes.
- Configure and deploy virtual DNS and IPAMs.
- Create virtual networks.
- Create policies to control the flow of traffic.
- Explain the routing behavior of an IP Fabric
- Describe the steps to onboard a Brownfield IP Fabric.

- Describe the steps to onboard a Greenfield IP Fabric.
- Describe the various commands to troubleshoot the onboarding of an IP Fabric.
- Explain the benefits of VXLAN in the data center.
- Describe EVPN signaling for VXLAN.
- Describe how CEM can bridge between a VM and a BMS.
- Implement bridging between VMs and BMSs using VXLAN and EVPN signaling.
- Describe EVPN signaling for VXLAN routing in the Spine.
- Describe how to enable central routing using CEM.
- Describe EVPN signaling for DCI.
- Describe how to enable DCI using CEM.
- Create physical gateways.
- Describe architecture and capabilities of Contrail Security.
- Configure main Contrail Security features.
- Explain the benefits of AppFormix.
- Explain the operation and use of AppFormix.
- Explain how to setup and install AppFormix in different environments.
- Explain the purpose and use of the different AppFormix features.
- Understand the purpose of the Clusters feature.
- Describe how to use the dashboard to examine the state of the network.
- Understand the purpose and use of the Charts feature.
- Explain the benefits of capacity planning.
- Explain how to setup the chargeback functionality.
- Explain how to use AppFormix charts.
- Explain how to use AppFormix heat maps.
- Describe the benefits of reports and service monitoring functionalities.
- Explain the purpose and use of AppFormix alarms.
- Explain the purpose and use of AppFormix Composite Alarms.
- Explain the purpose of JTI.
- Discuss native sensors.
- Explain OpenConfig and gRPC sensors.
- Describe best practices for JTI.
- Explain how to use JTI with AppFormix.

Course Content

- Course Introduction
- SDN and Contrail
- Orchestration Fundamentals
- Contrail Architecture Fundamentals

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- Contrail Configuration
- IP Fabric Automation
- VM to BMS Bridging
- VXLAN Routing
- Data Center Interconnect
- Interacting with External Networks
- Fabric Administration
- Contrail Security
- AppFormix Overview
- Alarms and Composite Alarms
- Junos Telemetry Interface

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Training Centres worldwide

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