



Enterprise Computing Solutions - Education Services

NABÍDKA ŠKOLENÍ

Prosím kontaktujte nás zde

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Kód:	DÉLKA:	CENA:
JUN_NACC	40 Hours (5 DENNÍ)	Kč bez DPH 119,500.00

Description

Školení je vedeno virtuálně v anglickém jazyce ve školicím středisku Arrow v Anglii.
Cena školení je 3 950 GBP bez DPH - tato cena bude při fakturaci přepočtena aktuálním kurzem.

This five-day course is designed to provide students with the knowledge required to work with the Juniper Contrail software-defined networking (SDN) solution.

Students will gain in-depth knowledge of how to use the Contrail Command user interface, Contrail Networking, Contrail's fabric management and administration features, and Contrail Security, as well as AppFormix analytics features.

Students will also learn to use APIs and the CLI to perform the Contrail configuration tasks. Through demonstrations and hands-on labs, students will gain experience with the features of Contrail and AppFormix.

This course is based on Contrail Release 5.1.0 and AppFormix 2.19.10.

- Automation
- SDN
- Software
- Contrail

Network Automation using the Contrail Controller (NACC) is an intermediate-level course. Relevant Juniper Product

Cíle

- 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 dashboard use 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.

Určeno pro

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

Vstupní znalosti

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

Program

SDN and Contrail

- Review of SDN
 - Contrail Basics
 - Contrail Advantages, Capabilities, and Features
 - Contrail Products and Solutions
 - Contrail Use Cases
 - Contrail Command
- Orchestration Fundamentals
 - Orchestrator Overview
 - Kubernetes Orchestrator
 - OpenStack Orchestrator

Day 1 Course Introduction Lab 1: Contrail Command User Interface Walkthrough Lab 2: Instantiating Virtual Workloads Day 2

Contrail Architecture Fundamentals

- Contrail Architecture Overview
- Contrail Management and Analytics
- Contrail Control Plane Communications
- Contrail Data Plane Communications
- Basic Contrail Troubleshooting

Lab 3: Exploring and Troubleshooting the Contrail vRouter and SDN Controller

Contrail Configuration

- Contrail Configuration Methods
- Configuring DNS and IPAM
- Configuring the Metadata Service
- Configuring Virtual Networks
- Configuring Network Policies and Security Groups
- Contrail Configuration API

IP Fabric Automation

- IP Fabric Review
 - Greenfield Fabric Automation
 - Brownfield Fabric Automation
 - Troubleshooting Fabric Automation
- Lab 5: IP Fabric Automation Day 3 • Virtual Port Groups

Lab 6: VM to BMS Bridging

Lab 4: Configuring Virtual Networks and Policies

VM to BMS Bridging

- VXLAN Review
- EVPN Signaling for BMS to BMS VXLAN Forwarding
- Contrail VM to BMS Bridging
- Server/Instance Example

Lab 7: VXLAN Routing

VXLAN Routing

- EVPN Signaling for Central Routing Data Center Interconnect
- Central Routing Example
 - DCI Overview
- EVPN Signaling for Edge Routing
 - DCI Options for a VXLAN Overlay using Contrail Automation
- Edge Routing Example
 - DCI Example using Contrail Automation

Lab 9: DC Gateway

Interacting with External Networks Fabric Administration

- DC Gateway Use Case
- Generic Device Operations
- Hitless Fabric Upgrade

Lab 8: Data Center Interconnect Day 4 • Implementing a DC Gateway

Lab 10: Fabric Administration

Contrail Security

- The Need for Contrail Security
 - Contrail Security Configuration
 - Monitoring and Visualization
- Lab 11: Contrail Security Day 5

AppFormix Overview

- AppFormix Overview
- AppFormix UI and General Settings
- AppFormix Features Overview — Clusters, Dashboard, Charts, Heat Map, Plan, Reports, Chargeback

Alarms and Composite Alarms

- Alarms
 - Alarms Case Study
 - Composite Alarms
- Lab 12: Implementing AppFormix Features

Junos Telemetry Interface

- JTI Overview
 - Native Sensors for JTI
 - OpenConfig and gRPC Sensors for JTI
- Lab 12: Implementing JTI with AppFormix

Termíny školení

Termíny školení na vyžádání, [kontaktujte nás prosím](#)

Dodatečné informace

Školení je možné zajistit na míru. [Kontaktujte nás](#) pro bližší informace.