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Introduction to Juniper Data Center Networking (IJDC)

CODE:	LENGTH:	PRICE:
JUN_IJDC	24 Hours (3 dage)	kr 21,200.00

Description

This three-day course provides introductory instruction on data center switching using Juniper products.
Although this course does not cover Ethernet VPN–Virtual Extensible LAN (EVPN/VXLAN) architecture, it covers the baseline knowledge necessary to understand a data center that is built upon an IP fabric with an EVPN/VXLAN overlay.
This course covers OSPF, BGP, routing policy, link aggregation, Ethernet switching, VLANs, load balancing, filter-based forwarding (FPF), layer 2 security features, routing instances, graceful restart, and BFD.
Introduction to Juniper Data Center Networking (IJDC) is an introductory-level course.

Objectives

• Identify and describe how to configure a typical data center layout, including spine and leaf placements.
• Describe an IP fabric architecture.
• Explain and configure basic Ethernet switching.
• Explain and configure virtual networks (VLANs).
• Describe layer 2 security.
• Implement link aggregation.
• Describe and implement protocol independent routing and routing instances with Junos OS.
• Configure load balancing within Junos OS.
• Implement filter-based forwarding (FBF) using Junos OS.
• Describe and deploy OSPF.
• Describe and deploy BGP.
• Implement graceful restart and BFD using Junos OS.

Audience

This course benefits individuals responsible for configuring and managing network equipment in data centers.

Prerequisites

The following are the prerequisites for this course:
• Knowledge of basic TCP/IP networking;
• Understanding basic layer 2;
• Familiarity with Data Center technologies; and
• Junos OS configuration experience—the Introduction to the Junos Operating System (IJOS) course or equivalent

Programme

Day 1
Course Introduction
Traditional Architectures
• Identify a typical Data Center layout; identify pros and cons
• Describe the new networking requirements in a data center
• Describe Juniper products for spine and leaf placement
Modern Architectures
• Describe Juniper Products for Spine and Leaf placement
• Describe the purpose of Juniper APSTRA
Ethernet Switching Overview

• List the benefits of implementing switched LANs
• Describe transparent bridging concepts and operations
• Describe terms and design considerations for switched LANs
Configuring Ethernet Switching
• Configure interfaces for Ethernet switching
• Display and interpret the Ethernet switching table
Lab 1: Implementing Ethernet Switching
Virtual Networks Overview
• Explain the concept of a virtual LAN (VLAN)
• Describe access and trunk ports
• Explain access and trunk ports use and benefits
Configuring Virtual Networks
• Configure and monitor VLANs
• Explain inter-VLAN routing operations
• Configure and monitor inter-VLAN routing operations
Lab 2: Implementing Virtual Networks
Layer 2 Security
• Describe MAC filtering
• Describe Storm Control
Lab 3: Implement Layer 2 Security Features
Day 2
Link Aggregation
• Describe and implement link aggregation
Lab 4: Configure and Monitor Link Aggregation
Protocol Independent Routing
• Configure static routes
• Configure aggregate routes
• Configure generated routes
• Manage Martian routes
Routing Instances
• Describe routing instances
• Configure and share routes between routing instances
Lab 5: Configuring Protocol Independent Routing and Routing Instances
Load Balancing
• Describe load balancing concepts and operations
• Implement and monitor layer 3 load balancing
Filter-Based Forwarding (FBF)
• Illustrate benefits of filter-based forwarding
• Configure and monitor filter-based forwarding
Lab 6: Load Balancing and FBF
Day 3
Fundamentals of OSPF
• Describe basic OSPF functionality
• Describe adjacency formation and the DR election
• Describe the scalability of OSPF
Deploying OSPF
• Configure and monitor OSPF
• Troubleshoot OSPF
Lab 7: Deploying OSPF
Fundamentals of BGP
• Overview of BGP
• BGP Attributes
Deploying BGP
• IBGP versus EBGP
• Configuring and Monitoring BGP
Lab 8: Deploying BGP
Graceful Restart and BFD
• Describe the benefits of graceful restart and BFD
• Configure graceful restart
• Configure BFD
Lab 9: Configure Graceful Restart and BFD

Session Dates

På anmodning. Kontakt os venligst

Yderligere Information

Denne træning er også tilgængelig som træning på stedet. Kontakt os for at finde ud af mere.