

Implementing Data Center Fabric with EVPN and VXLAN

Category: Infrastructure & IT Operations | **Vendor:** Juniper

Duration: 40.00 hours (5 days)

32.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This two-day course is designed to introduce various QFX5k and MX/vMX features including, but not limited to, IP Fabric, Virtual eXtensible Local Area Network (VXLAN) Layer 2 and Layer 3 Gateways, VXLAN with Ethernet VPN (EVPN) signaling, and Data Center Interconnect (DCI) for a VXLAN overlay. Students will learn to configure and monitor these features that exist on the Junos operating system running on the QFX5100 and vMX Series platform. Through demonstrations and hands-on labs, students will gain experience configuring, monitoring, and analyzing the above features of the Junos OS. This course is based on Junos OS Release 14.1X53.

About This Course

This two-day course is designed to introduce various QFX5k and MX/vMX features including, but not limited to, IP Fabric, Virtual eXtensible Local Area Network (VXLAN) Layer 2 and Layer 3 Gateways, VXLAN with Ethernet VPN (EVPN) signaling, and Data Center Interconnect (DCI) for a VXLAN overlay. Students will learn to configure and monitor these features that exist on the Junos operating system running on the QFX5100 and vMX Series platform. Through demonstrations and hands-on labs, students will gain experience configuring, monitoring, and analyzing the above features of the Junos OS. This course is based on Junos OS Release 14.1X53.

Who Should Attend

This course benefits individuals responsible for configuring and monitoring switching features that exist on the Junos OS running on the QFX5k and MX Series platforms, including individuals in professional services, sales and support organizations, and the end users.

Prerequisites & Entry Requirements

General Prerequisites:

The following are the prerequisites for this course:

- Understanding of the OSI model;
- Junos OS configuration experience—the Introduction to the Junos Operating System (IJOS) course or equivalent;
- Advanced routing knowledge—the Advanced Junos Enterprise Routing (AJER) course or equivalent; and
- Intermediate switching knowledge—the (!) and (!) courses or equivalent.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

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

- Describe the benefits and challenges of the traditional multitier architecture .
- Describe the new networking requirements in a data center.
- Describe the various data center fabric architectures.
- Explain routing in an IP Fabric.
- Describe how to scale an IP Fabric.
- Configure an EBGp-based IP Fabric.
- Explain why you would use VXLAN in your data center.
- Describe the control and data plane of VXLAN in a controller-less overlay.
- Describe how to configure and monitor VXLAN when using multicast signaling.
- Describe the benefits of using EVPN signaling for VXLAN.
- Describe the operation of the EVPN protocol.
- Configure and monitor EVPN signaling for VXLAN.
- Define the term Data Center Interconnect.
- Describe the control and data plane of an MPLS VPN.
- Describe the DCI options when using a VXLAN overlay with EVPN signaling.

Detailed Course Outline

Day 1

Chapter 1: Course Introduction

Chapter 2: Next Generation Data Centers

- Traditional Multitier Architecture
- Data Center Fabric Architectures

Chapter 3: IP Fabric

- IP Fabric Overview
- IP Fabric Routing
- IP Fabric Scaling
- Configure an IP Fabric
- Lab: IP Fabric

Chapter 4: VXLAN

- Layer 2 Connectivity over a Layer 3 Network
- VXLAN using Multicast Control Plane
- VXLAN Configuration
- Lab: VXLAN

Day 2

Chapter 5: EVPN

- The Benefits of EVPN
- VXLAN using EVPN Control Plane
- VXLAN Configuration
- Lab: VXLAN

Chapter 6: Data Center Interconnect

- DCI Overview
- MPLS VPN Review
- DCI Options for a VXLAN Overlay
- Lab: DCI

Skills You Will Learn:

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

- Describe the benefits and challenges of the traditional multitier architecture .
- Describe the new networking requirements in a data center.
- Describe the various data center fabric architectures.
- Explain routing in an IP Fabric.
- Describe how to scale an IP Fabric.
- Configure an EBGp-based IP Fabric.
- Explain why you would use VXLAN in your data center.
- Describe the control and data plane of VXLAN in a controller-less overlay.
- Describe how to configure and monitor VXLAN when using multicast signaling.
- Describe the benefits of using EVPN signaling for VXLAN.
- Describe the operation of the EVPN protocol.
- Configure and monitor EVPN signaling for VXLAN.
- Define the term Data Center Interconnect.
- Describe the control and data plane of an MPLS VPN.
- Describe the DCI options when using a VXLAN overlay with EVPN signaling.

Frequently Asked Questions

Q: What delivery options are available for Implementing Data Center Fabric with EVPN and VXLAN?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 5-day Implementing Data Center Fabric with EVPN and VXLAN course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Implementing Data Center Fabric with EVPN and VXLAN training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Implementing Data Center Fabric with EVPN and VXLAN?

Yes, we provide corporate training, dedicated training, and closed classes for Implementing Data Center Fabric with EVPN and VXLAN. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Implementing Data Center Fabric with EVPN and VXLAN, Data Center, ADCX

Q: Why choose Nexus Human for Implementing Data Center Fabric with EVPN and VXLAN?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Implementing Data Center Fabric with EVPN and VXLAN training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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