

JL3V - Junos Layer 3 VPNs

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This three-day course is designed to provide students with MPLS-based Layer 3 virtual private network (VPN) knowledge and configuration examples.

About This Course

This three-day course is designed to provide students with MPLS-based Layer 3 virtual private network (VPN) knowledge and configuration examples.

Who Should Attend

This course benefits individuals responsible for configuring and monitoring devices running the Junos OS.

Learning Outcomes

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

Describe the value of MPLS VPNs.

Describe the differences between provider-provisioned VPNs and customer-provisioned VPNs.

Describe the differences between Layer 2 VPNs and Layer 3 VPNs.

List the provider-provisioned MPLS VPN features supported by the JUNOS software.

Describe the roles of a CE device, PE router, and P router in a BGP Layer 3 VPN.

Describe the format of the BGP routing information, including VPN-IPv4 addresses and route distinguishers.

Describe the propagation of VPN routing information within an AS.

List the BGP design constraints to enable Layer 3 VPNs within a provider network.

Explain the operation of the Layer 3 VPN data plane within a provider network.

Create a routing instance, assign interfaces to a routing instance, create routes in a routing instance, and import/export routes from a routing instance using route distinguishers/route targets.

Describe the purpose of BGP extended communities, configure extended BGP extended communities, and use BGP extended communities.

List the steps necessary for proper operation of a PE-CE dynamic routing protocol.

List the troubleshooting and monitoring techniques for routing instances.

Explain the difference between the `bgp.l3vpn` table and the `inet.0` table of a routing instance.

Monitor the operation of a CE-PE dynamic routing protocol.

Explain the operation of a PE multi-access interface in a Layer 3 VPN and list commands to modify that behavior.

Describe ways to support communication between sites attached to a common PE router.

Provision and troubleshoot hub-and-spoke Layer 3 VPNs,

Describe the flow of control traffic and data traffic in a hub-and-spoke Layer 3 VPN.

Describe QoS mechanisms available in L3VPNs.

Configure L3VPN over GRE tunnels.

Describe the RFC 4364 VPN options.

Describe the carrier-of-carriers model.

Configure the carrier-of-carriers and "Option C" configuration.

Describe the flow of control and data traffic in a draft-rosen multicast VPN.

Describe the configuration steps for establishing a draft-rosen multicast VPN.

Monitor and verify the operation of draft-rosen multicast VPNs.

Describe the flow of control traffic and data traffic in a next-generation multicast VPN.

Describe the configuration steps for establishing a next-generation multicast VPN.

Describe the configuration steps for establishing a next-generation multicast VPN.

Monitor and verify the operation of next-generation multicast VPNs.

Additional Course Details

Nexus Humans JL3V - Junos Layer 3 VPNs training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the JL3V - Junos Layer 3 VPNs course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for JL3V - Junos Layer 3 VPNs?

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
-

Q: How many CPD hours does this course provide?

The 3-day JL3V - Junos Layer 3 VPNs course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the JL3V - Junos Layer 3 VPNs training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for JL3V - Junos Layer 3 VPNs?

Yes, we provide corporate training, dedicated training, and closed classes for JL3V - Junos Layer 3 VPNs. 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: Why choose Nexus Human for JL3V - Junos Layer 3 VPNs?

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 JL3V - Junos Layer 3 VPNs training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

 Email: info@nexushuman.com

 Website: www.nexushuman.com

 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)

© 2026 Nexus Human. All rights reserved. This brochure was generated on 22/05/2026.