Advanced Junos Enterprise Switching

Category: Networking & Security | **Vendor:** Juniper

Duration: 16.00 hours (2 days) **13.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This two-day course provides detailed coverage of virtual LAN (VLAN) operations, Multiple Spanning Tree Protocol (MSTP) and VLAN Spanning Tree Protocol (VSTP), authentication and access control for Layer 2 networks, IP telephony features, class of service (CoS), and monitoring and troubleshooting tools and features supported on the EX Series Ethernet Switches.

Through demonstrations and hands-on labs, students will gain experience in configuring and monitoring the Junos operating system and in monitoring device and protocol operations. This course uses Juniper Networks EX Series Ethernet Switches for the hands-on component, but the lab environment does not preclude the course from being applicable to other Juniper hardware platforms running the Junos operating system. This course is based on the Junos OS Release 12.2R1.8.

About This Course

This two-day course provides detailed coverage of virtual LAN (VLAN) operations, Multiple Spanning Tree Protocol (MSTP) and VLAN Spanning Tree Protocol (VSTP), authentication and access control for Layer 2 networks, IP telephony features, class of service (CoS), and monitoring and troubleshooting tools and features supported on the EX Series Ethernet Switches.

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Who Should Attend

This course benefits individuals responsible for configuring and monitoring EX Series switches.

Prerequisites & Entry Requirements

General Prerequisites:

Students should have an intermediate-level of networking knowledge and an understanding of the Open Systems Interconnection (OSI) reference model and the TCP/IP protocol suite. Students should also attend the Introduction to the Junos Operating System (IJOS) course, the (!) course, and the Junos Enterprise Switching (JEX) course prior to attending this class.

Learning Outcomes

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

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

- Implement filter-based VLAN assignments.
- Restrict traffic flow within a VLAN.
- Manage dynamic VLAN registration.
- Tunnel Layer 2 traffic through Ethernet networks.
- Review the purpose and operations of a spanning tree.
- Implement multiple spanning-tree instances in a network.
- Implement one or more spanning-tree instances for a VLAN.
- List the benefits of implementing end-user authentication.
- Explain the operations of various access control features.
- Configure and monitor various access control features.
- Describe processing considerations when multiple authentication and access control features are enabled.
- Describe some common IP telephony deployment scenarios.
- Describe features that facilitate IP telephony deployments.
- Configure and monitor features used in IP telephony deployments.
- Explain the purpose and basic operations of CoS.
- Describe CoS features used in Layer 2 networks.
- Configure and monitor CoS in a Layer 2 network .
- Describe a basic troubleshooting method.
- List common issues that disrupt network operations.
- Identify tools used in network troubleshooting.
- Use available tools to resolve network issues.

Detailed Course Outline

Day 1

Chapter 1: Course Introduction

Chapter 2: Advanced Ethernet Switching

- Virtual Local Area Networks
- Automating VLAN Administration
- Tunneling Layer 2 Traffic
- Lab 1: Advanced Ethernet Switching

Chapter 3: Advanced Spanning Tree

- Spanning Tree Review
- MSTP
- VSTP
- Lab 2: Advanced Spanning Tree

Chapter 4: Authentication and Access Control

- Authentication Overview
- Access Control Features
- Overview of Authentication Processing
- Lab 3: Authentication and Access Control

Day 2

Chapter 5: Deploying IP Telephony Features

- Deployment Scenarios
- IP Telephony Features
- Case Study: Deploying IP Telephony Features
- Lab 4: Deploying IP Telephony Features

Chapter 6: Class of Service

- Class of Service Review
- Processing and Feature Overview
- Case Study: Implementing Class of Service
- Lab 5: Class of Service

Chapter 7: Monitoring and Troubleshooting Layer 2 Networks

- Introduction to Monitoring and Troubleshooting
- Monitoring and Troubleshooting Tools
- Case Studies
- Lab 6: Monitoring and Troubleshooting

Skills You Will Learn:

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

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- Restrict traffic flow within a VLAN.
- Manage dynamic VLAN registration.
- Tunnel Layer 2 traffic through Ethernet networks.
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Frequently Asked Questions

Q: What delivery options are available for Advanced Junos Enterprise Switching?

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 2-day Advanced Junos Enterprise Switching course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Advanced Junos Enterprise Switching training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Advanced Junos Enterprise Switching?

Yes, we provide corporate training, dedicated training, and closed classes for Advanced Junos Enterprise Switching. 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: Advanced Junos Enterprise Switching, Enterprise Routing & Switching, AJEX

Q: Why choose Nexus Human for Advanced Junos Enterprise Switching?

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 Advanced Junos Enterprise Switching training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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