
Junos Enterprise switching

Duration: 2 Days **Course Code: JEX**

Overview:

The Junos Enterprise Switching (JEX) course provides students with introductory switching knowledge and configuration examples. This course includes an overview of switching concepts and operations, virtual LANs (VLANs), the Spanning Tree Protocol (STP), port and device security features, and high availability (HA) features.

Target Audience:

This course is designed for: Individuals responsible for configuring and monitoring EX Series switches.

Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
 - List the benefits of implementing switched LANs.
 - Describe transparent bridging concepts and operations.
 - Describe terms and design considerations for switched LANs.
 - List enterprise platforms that support Layer 2 switching.
 - Configure interfaces for Layer 2 switching operations.
 - Display and interpret the Ethernet switching table.
 - Explain the concept of a VLAN.
 - Describe access and trunk port modes.
 - Configure and monitor VLANs.
 - Describe voice VLAN and native VLAN concepts.
 - Explain inter-VLAN routing operations.
 - Configure and monitor inter-VLAN routing.
 - Explain when a spanning tree is required.
 - Describe STP and Rapid Spanning Tree Protocol (RSTP) operations.
 - List some advantages of using RSTP over STP.
 - Configure and monitor RSTP.
 - Describe the bridge protocol data unit (BPDU), Loop, and Root protection features.
 - Configure and monitor the BPDU, Loop, and Root protection features.
 - List and describe various port security features.
 - Configure and monitor port security features.
 - Describe the storm control feature.
 - Configure and monitor storm control.
 - Describe firewall filter support for EX Series Ethernet Switches.
 - Implement and monitor the effects of a firewall filter.
 - List and describe some features that promote high availability.
 - Configure and monitor high availability features.
 - Describe the basic concepts and operational details of a virtual chassis.
 - Implement a virtual chassis with multiple EX4200 switches.
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Prerequisites:

The knowledge and skills that a learner must have before attending this course are as follows:

- Basic networking knowledge and an understanding of the Open Systems Interconnection (OSI) reference model and the TCP/IP protocol suite.

To gain the prerequisite skills and knowledge, Juniper strongly recommends the knowledge of the following courses:

Testing and Certification

Recommended preparation for exam(s):

- JN0-343 - Juniper Networks Certified Internet Specialist (JNCIS-ENT)
JEX and JIR are the courses required for the **Juniper Networks Certified Internet Specialist (JNCIS-ENT)** Certification

- Introduction to the Junos Operating System (IJOS)
- Junos Routing Essentials (JRE)

Follow-on-Courses:

- Advanced Junos Enterprise Routing (AJER)
- Advanced Junos Enterprise Switching (AJEX)

All the above courses are part of the **Juniper Networks Certified Internet Professional (JNCIP-ENT)** Certification

Content:

Layer 2 Switching

- Ethernet Bridging Basics
- Terminology and Design Considerations
- Overview of Enterprise Switching Platforms
- Enabling and Monitoring Layer 2 Switching Operations

Virtual Networks

- Overview of VLANs
- Configuring and Monitoring VLANs
- Voice VLAN
- Native VLAN
- Routed VLAN Interfaces

Spanning Tree

- Spanning Tree Protocol
- Rapid Spanning Tree Protocol
- Configuring and Monitoring STP and RSTP
- Protection Features: BPDU Protection
- Protection Features: Loop Protection
- Protection Features: Root Protection

Port Security

- MAC Limiting
- DHCP Snooping
- Dynamic ARP Inspection (DAI)
- IP Source Guard

Device Security and Firewall Filters

- Storm Control
- Firewall Filters

High Availability

- Overview of High Availability Networks
- Link Aggregation Groups
- Redundant Trunk Groups

Overview of Virtual Chassis

- Configuring and Monitoring a Virtual Chassis

Further Information:

For More information, or to book your course, please call us on +254 713 027 191

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