

Junos Enterprise Switching (JEX)

ID JEX Price CHF 1,800.—(excl. VAT) Duration 2 days

Who should attend

Individuals responsible for configuring and monitoring EX Series switches running Junos OS.

This course is part of the following Certifications

Juniper Networks Certified Internet Specialist Enterprise Routing & Switching (JNCIS-ENT)

Prerequisites

- Basic networking knowledge and an understanding of the Open Systems Interconnection (OSI) reference model and the TCP/IP protocol suite
- Attend the [Introduction to the Junos Operating System \(IJOS\)](#) course prior to attending this class

Course 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 EX4300 switches.
- Explain the concepts of Multiple Spanning Tree Protocol (MSTP).
- Configure and monitor MSTP.
- Discover, configure, and troubleshoot EX Series switches using Junos Space Network Director.

Course Content

- Layer 2 Switching
- Switching Design Considerations
- Implementing VLANs
- Implementing VLAN Features
- Spanning Tree Overview
- Deploy Spanning Tree
- Spanning Tree Protection Features
- LAGs and RTGs
- Device Security
- Firewall Filters
- Port Security—MAC Limiting, MAC Learning, and MACsec
- Port Security—DHCP Snooping, Dynamic ARP Inspection, and IP Source Guard
- High Availability—GRES, NSR, and NSB

Self-Study Modules

- Juniper Mist Wired Assurance—Overview
- Juniper Mist Wired Assurance, Day One—Deployment and Configuration

Junos Enterprise Switching (JEX)

Training Centres worldwide



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