

## Junos Service Provider Switching (JSPX)

ID JSPX Price CHF 2,300.—(excl. VAT) Duration 2 days

### Who should attend

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

### This course is part of the following Certifications

Juniper Networks Certified Internet Specialist Service Provider Routing & Switching (JNCIS-SP)

### Prerequisites

Students should have basic 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 [Introduction to the Junos Operating System \(IJOS\)](#) courses prior to attending this class.

### Course Objectives

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

- Describe the different Ethernet standards organizations.
- Describe the Layer 2 services that are available on the MX Series 3D Ethernet Universal Edge Routers.
- Describe the function of an Ethernet LAN.
- Describe learning and forwarding in a bridging environment.
- Describe Ethernet frame filtering.
- Implement VLAN tagging.
- Describe and implement MVRP.
- Implement IRB.
- Implement a Layer 2 firewall filter.
- Describe the use of a routing instance.
- Describe the function of a virtual router.
- Describe the function of a virtual switch.
- Describe the usage of logical systems.
- Implement a virtual switch.
- Describe interconnecting routing instances.
- Describe the different IEEE VLAN stacking models.
- Describe the components of provider bridging.
- Configure and monitor provider bridging.
- Explain the purpose of the Spanning Tree Protocol (STP).

- Describe the basic operation of STP, Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP), and VLAN Spanning Tree Protocol (VSTP).
- Configure and monitor STP, RSTP, MSTP, and VSTP.
- Explain the purpose of bridge protocol data unit (BPDU), loop, and root protection.
- Explain typical OAM features.
- Describe the basic operation of link fault management (LFM).
- Describe the basic operation of connectivity fault management (CFM).
- Configure and monitor Ethernet OAM.
- Describe the basic operation of Ethernet ring protection (ERP).
- Configure and monitor ERP.
- Describe the basic operation of LAGs and MC-LAGs.
- Configure and monitor LAGs and MC-LAGs.
- Describe the basic functionality of MX Series Virtual Chassis.
- 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

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## Training Centres worldwide



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