Junos Service Provider Switching
JSPX

Delivery Type: Classroom
Duration: 2 days

Overview

This two-day course provides students with intermediate switching knowledge and configuration examples. The course includes an overview of switching concepts such as LANs, Layer 2 address learning, bridging, virtual LANs (VLANs), provider bridging, VLAN translation, spanning-tree protocols, and Ethernet Operation, Administration, and Maintenance (OAM). This course also covers Junos operating system-specific implementations of integrated routing and bridging (IRB) interfaces, routing instances, virtual switches, load balancing, and port mirroring. Furthermore, this course covers the basics of Multiple VLAN Registration Protocol (MVRP), link aggregation groups (LAGs), and multichassis LAG (MC-LAG). This course is based on the Junos OS Release 11.2R1.10.

Pre-Requisites

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 JunosOperating System(IJOS) and Junos Routing Essentials (JRE) courses prior to attending this class.

Objectives

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

- ✓ Describe carrier Ethernet.
- ✓ Describe the different Ethernet standards organizations.
- ✓ Describe the Layer 2 services that are available on the MX Series 3D 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 usage of a routing instance.
- ✓ Describe the function of a virtual router.

- ✓ Describe the function of a virtual switch.
- ✓ Implement a virtual switch.
- ✓ Describe interconnecting routing instances.
- ✓ Describe the different Institute of Electrical and Electronics Engineers (IEEE) VLAN stacking models.

Target Audience

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