Junos MPLS Fundamentals (JMF)

ID JMF   **Prix** CHF 1 800,– (Hors Taxe)   **Durée** 3 jours

A qui s'adresse cette formation

- Individuals responsible for designing, implementing, and troubleshooting MPLS networks that make use of RSVP and LDP as the signaling method for the creation of LSPs;
- Individuals who work with, or who aspire to work with, service provider networks;
- Individuals studying for the JNCIS-SP certification exam; and
- Individuals who have already passed the JNCISSP certification exam, and want to revise these concepts before attempting the JNCIE-SP certification exam

Cette formation prépare à la/aux certifications

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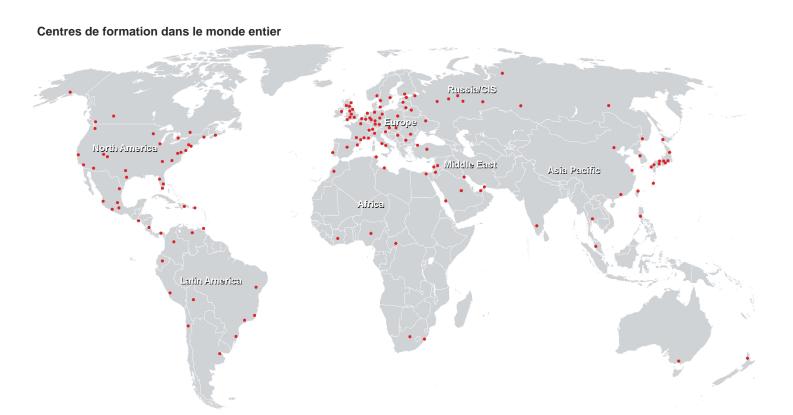
Pré-requis

- Strong general TCP/IP knowledge;
- knowledge of Junos OS to the JNCIA-Junos certification level; and
- Knowledge of routing and switching to the JNCIS-SP certification level.
- The following courses or equivalent knowledge:
  Getting Started with Networking online course
  Introduction to the Junos Operating System course
  Junos Intermediate Routing course
  Junos Enterprise Switching course, Junos Service Provider Switching course, or both

Objectifs

- Explain the reasons MPLS was originally created, and the applications offered by label-switched paths.
- Describe the structure of an MPLS label, the mechanics of the data plane, and the protocols that can advertise labels.
- Configure static LSPs, verify the routing tables they populate, and explain the label actions these LSPs perform.
- Explain the purpose and advantages of RSVP, then configure a service provider network to host RSVP LSPs.
- Configure and verify a basic RSVP label-switched path.

- Explain the purpose of the MPLS traffic engineering database, and create LSPs that use this database to calculate a path.
- Explain the purpose of RSVP bandwidth reservations, and how to configure an LSP to reserve bandwidth.
- Explain the use-cases for RSVP LSP priority levels, and configure different priority levels of a variety of LSPs.
- Explain how the Constrained Shortest-Path First algorithm can calculate trafficengineered paths.
- Explain the messages involved in tearing down, rerouting, and maintaining LSPs and RSVP sessions.
- Describe how primary and secondary paths can be used in times of link and node failure.
- Describe the advantages of RSVP local repair paths, and how to configure the one-to-one method of local repair, otherwise known as fast reroute.
- Explain the mechanics, configuration, and verification of facility backup, otherwise known as link protection and node-link protection.
- Explain how RSVP LSPs can automatically find and signal better, more optimal paths.
- Explain how LSPs can gracefully move traffic to new paths with no downtime to the user.
- Explain the mechanics by which LDP creates a full mesh of label-switched paths.
- Configure and verify a basic LDP deployment in a service provider network.
- Describe some important LDP enhancements and best practices that increase the integrity of real-world LDP deployments.
- Explain how to configure LDP to advertise labels for more than just a router's loopback.
- Explain how segment routing differs from RSVP and LDP, and configure segment routing as a replacement for LDP.

Centres de formation dans le monde entier

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