# Junos Intermediate Routing (JIR)

**ID** JIR   **Prix** CHF 2 700,– (Hors Taxe)   **Durée** 3 jours

## A qui s'adresse cette formation

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

## Cette formation prépare à la/aux certifications

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

## Pré-requis

Attendees should meet the following 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 Junos Software (IJS) and Junos Routing Essentials (JRE) courses prior to attending this class.

## Objectifs

After you complete this course you will be able to:

- Describe typical uses of static, aggregate, and generated routes
- Configure and monitor static, aggregate, and generated routes.
- Explain the purpose of Martian routes and add new entries to the default list.
- Describe typical uses of routing instances.
- Configure and share routes between routing instances.
- Describe load-balancing concepts and operations.
- Implement and monitor Layer 3 load balancing.
- Illustrate benefits of filter-based forwarding.
- Configure and monitor filter-based forwarding.
- Explain the operations of OSPF.
- Describe the role of the designated router.
- List and describe OSPF area types.
- Configure, monitor, and troubleshoot OSPF.
- Describe BGP and its basic operations.
- Name and describe common BGP attributes.

- List the steps in the BGP route selection algorithm.
- Describe BGP peering options and the default route advertisement rules.
- Configure and monitor BGP.
- Describe IP tunneling concepts and applications.
- Explain the basic operations of generic routing encapsulation (GRE) and IP over IP (IP-IP) tunnels.
- Configure and monitor GRE and IP-IP tunnels.
- Describe various high availability features supported by the Junos OS.
- Configure and monitor some of the highlighted high availability features.

## Contenu

Day 1

Chapter 1: Course Introduction

Chapter 2: Protocol-Independent Routing Static Routes Aggregated Routes Generated Routes Martian Addresses Routing Instances Lab 1: Protocol-Independent Routing

Chapter 3: Load Balancing and Filter-Based Forwarding Overview of Load Balancing Configuring and Monitoring Load Balancing Overview of Filter-Based Forwarding Configuring and Monitoring Filter-Based Forwarding Lab 2: Load Balancing and Filter-Based Forwarding

Chapter 4: Open Shortest Path First Overview of OSPF Adjacency Formation and the Designated Router Election OSPF Scalability Configuring and Monitoring OSPF Basic OSPF Troubleshooting Lab 3: Open Shortest Path First

Day 2

Chapter 5: Border Gateway Protocol Overview of BGP BGP Attributes IBGP Versus EBGP Configuring and Monitoring BGP Lab 4: Border Gateway Protocol

Chapter 6: IP Tunneling Overview of IP Tunneling GRE and IP-IP

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Tunnels Implementing GRE and IP-IP Tunnels Lab 5: IP Tunneling

Chapter 7: High Availability Overview of High Availability Networks GR Graceful RE Switchover Nonstop Active Routing BFD VRRP Lab 6: High Availability

Appendix A: IPv6 Introduction to IPv6 Routing Protocol Configuration Examples Tunneling IPv6 over IPv4

Appendix B: IS-IS Overview of IS-IS Overview of IS-IS PDUs Adjacency Formation and DIS Election Configuring and Monitoring IS-IS Basic IS-IS Troubleshooting

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**Centres de formation dans le monde entier**





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