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JUNIPER Junos Intermediate Routing (JIR)

CODE: LENGTH: PRICE:

JUN JIR 16 Hours (2 days) kr21,000.00

Description

This two-day course provides students with intermediate routing knowledge and configuration examples.

The course includes an overview of protocol-independent routing features, load balancing and filter-based forwarding, OSPF, BGP, IP tunneling, and high availability (HA) features.

Through demonstrations and hands-on labs, students will gain experience in configuring and monitoring the Junos OS and monitoring device operations.

This course uses Juniper Networks vSRX Series Services Gateways for the hands-on component, but the lab environment does not preclude the course from being applicable to other Juniper hardware platforms running the Junos OS.

This course is based on Junos OS Release 18.2R1.9.

Junos Intermediate Routing (JIR) is an intermediate-level course.

Objectives

After successfully completing this course, you should 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.

■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.
Audience
This course benefits individuals responsible for configuring and monitoring devices running the Junos OS.
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 <i>Introduction to the Junos Operating System</i> (IJOS) and <i>Junos Routing Essentials</i> (JRE) courses prior to attending this class.
Programme
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

■Configure, monitor, and troubleshoot OSPF.

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

Chapter 7: High Availability
Overview of High Availability Networks
Graceful Restart
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
Lab 7 (Optional): IPv6
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
Lab 8 (Optional): IS-IS
Appendix C: Routing Information Protocol
Introduction to RIP
RIP Configuration Examples
Monitoring and Troubleshooting RIP

Options

Junos Intermediate Routing is an intermediate-level course.

Further Information

This course can be purchased using Juniper Training Credits - subject to terms and conditions.

Please note that JTCs can only be used against the normal full list price of a course and are not applicable against any discounted rates.

For more information, or to make a booking, please contact us on 0870 251 1000 or email educationteam.ecs.uk@arrow.com

Session Dates

På begäran, kontakta oss

Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.