



Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå oss här

Kronborgsgränd 7, 164 46 Kista

Email: edu.ecs.se@arrow.com

Phone: +46 8 555 188 00

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.
- 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.

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 *Introduction to the Junos Operating System (IJOS)* and *Junos Routing Essentials (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

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.](#)