Junos Intermediate Routing

Duración: 365 Días **Código del Curso: JIR** **Método de Impartición: e-Learning (Self-Study)**

Temario:

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.

e-Learning

Los servicios de e-learning y recursos on-demand que ofrece Global Knowledge, están diseñadas para permitir el acceso a los recursos de aprendizaje en cualquier lugar y en cualquier momento que convenga al alumno. Nuestra solución incluye la posibilidad de acceder a los equipos cuando se necesita para practicar sus habilidades y la oportunidad de ver y escuchar a nuestros expertos en la materia, ya que destacan las áreas clave de la formación.

Dirigido a:

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

Objetivos:

- • 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

Prerequisitos:

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 course prior to attending this class.

- IJOS - Introduction to the Junos Operating System
- JRE - Junos Routing Essentials

Siguientes cursos recomendados:

- JEX - Junos Enterprise Switching

Contenido:

Day 1 :

1.COURSE INTRODUCTION

2 .Protocol-Independent Routing

- • Static Routes
- • Aggregated Routes
- • Generated Routes
- • Martian Addresses
- • Routing Instances

LAB 1: Protocol-Independent Routing

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

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 :

5 .Border Gateway Protocol :

- • Overview of BGP
- • BGP Attributes
- • IBGP Versus EBGP
- • Configuring and Monitoring BGP

LAB 4: Border Gateway Protocol

6 .IP Tunneling :

- • Overview of IP Tunneling
- • GRE and IP-IP Tunnels
- • Implementing GRE and IP-IP Tunnels

LAB 5: IP Tunneling

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

Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

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