JNCIS Enterprise Routing and Switching Certification Boot Camp (JIR, JEX)

Duración: 4 Días   Código del Curso: JIR-JEX   Método de Impartición: Curso Cerrado (In-Company)

Temario:

In the first half of class, you will review switching concepts and operations, virtual LANs (VLANs), the Spanning Tree Protocol (STP), port and device security features, and high availability (HA) features. In the last half, you will cover protocol-independent routing features, load balancing and filter-based forwarding, Open Shortest Path First (OSPF), Border Gateway Protocol (BGP), and IP tunneling.

Curso Cerrado (In-Company)

Debido a que nuestra formación es modular, nuestros responsables de formación e instructores pueden trabajar con usted y su equipo para detectar las necesidades formativas y adaptar un temario de forma rápida y rentable. Durante una formación cerrada, usted recibirá una formación de expertos en un curriculum adaptado a sus necesidades.

Dirigido a:

Network technicians responsible for configuring and monitoring devices running the Junos OS. Anyone seeking JNCIS-ENT certification

Objetivos:

- 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.

- Describe terms and design considerations for switched LANs.

- List enterprise platforms that support Layer 2 switching.

- Configure interfaces for Layer 2 switching operations.

- Display and interpret the Ethernet switching table.

- Explain the concept of a VLAN.

- Describe access and trunk port modes.

- Configure and monitor VLANs.

- Describe voice VLAN and native VLAN concepts.

- Explain inter-VLAN routing operations.

- Configure and monitor inter-VLAN routing.

- Explain when a spanning tree is required.

- Describe STP and Rapid Spanning Tree Protocol (RSTP) operations.

- List some advantages of using RSTP over STP.

- Configure and monitor RSTP.

- Describe the bridge protocol data unit (BPDU), Loop, and Root protection features.

- Configure and monitor the BPDU, Loop, and Root protection features.

- List and describe various port security features.

- 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.

- List the benefits of implementing switched LANs.

- Describe transparent bridging concepts and operations.

- Configure and monitor port security features.

- Describe the storm control feature.

- Configure and monitor storm control.

- Describe firewall filter support for EX Series Ethernet Switches.

- Implement and monitor the effects of a firewall filter.

- List and describe some features that promote high availability.

- Configure and monitor high availability features.

- Describe the basic concepts and operational details of a virtual chassis.

- Implement a virtual chassis with multiple EX4200 switches.

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) and Junos Routing Essentials (JRE) courses prior to attending this class.

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

Exámenes y certificación

This course is part of the following programs or tracks:

- Internet Specialist - Enterprise Routing and Switching (JNCIS-ENT

Siguientes cursos recomendados:
- AJER - Advanced Junos Enterprise Routing
- AJEX - Advanced Junos Enterprise Switching

Contenido:

Protocol-Independent Routing

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

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: Load Balancing and Filter-Based Forwarding

Open Shortest Path First

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

Border Gateway Protocol

- Overview of BGP
- BGP Attributes
- IBGP Versus EBGP
- Configuring and Monitoring BGP
- Lab: Border Gateway Protocol

IP Tunneling

- Overview of IP Tunneling
- GRE and IP-IP Tunnels
- Implementing GRE and IP-IP Tunnels
- Lab: IP Tunneling

High Availability

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

Layer 2 Switching

- Ethernet Bridging Basics
- Terminology and Design Considerations
- Overview of Enterprise Switching Platforms
- Enabling and Monitoring Layer 2 Switching Operations
- Lab: Implementing Layer 2 Switching

Virtual Networks

- Overview of VLANs
- Configuring and Monitoring VLANs
- Voice VLAN
- Native VLAN
- Routed VLAN Interfaces
- Lab: Implementing Virtual Networks

Spanning Tree

- Spanning Tree Protocol
- Rapid Spanning Tree Protocol
- Configuring and Monitoring STP and RSTP
- Protection Features: BPDU Protection
- Protection Features: Loop Protection
- Protection Features: Root Protection
- Lab: Implementing Spanning Tree

Port Security

- MAC Limiting
- DHCP Snooping
- Dynamic ARP Inspection (DAI)
- IP Source Guard
- Lab: Implementing Port Security

Device Security and Firewall Filters

- Storm Control
- Firewall Filters
- Lab: Implementing Storm Control and Firewall Filters

Chapter 7: High Availability

- Overview of High Availability Networks
- Link Aggregation Groups
- Redundant Trunk Groups
- Lab: Configuring LAGs and RTG
- Overview of Virtual Chassis
- Configuring and Monitoring a Virtual Chassis
- Lab: Implementing a Virtual Chassis System

Más información:

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

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