

Introduction to the Junos Operating System

Duration: 3 Days Course Code: IJOS Version: 19.2

Overview:

This three-day course provides students with the foundational knowledge required to work with the Junos operating system and to configure Junos devices. The course provides a brief overview of the Junos device families and discusses the key architectural components of the software. Key topics include user interface options with a heavy focus on the command-line interface (CLI), configuration tasks typically associated with the initial setup of devices, interface configuration basics with configuration examples, secondary system configuration, and the basics of operational monitoring and maintenance of Junos devices. The course then delves into foundational routing knowledge and configuration examples including general routing concepts, routing policy, and firewall filters. Through demonstrations and hands-on labs, students will gain experience in configuring and monitoring the Junos OS and monitoring basic device operations. This course is based on Junos OS Release 19.2R1.8.

Target Audience:

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

Objectives:

- Describe the basic design architecture of the Junos OS.
- Navigate within the Junos CLI.
- Perform tasks within the CLI operational and configuration
- Restore a Junos device to its factory-default state.
- Perform initial configuration tasks.
- Configure and monitor network interfaces.
- Describe user configuration and authentication options.
- Perform secondary configuration tasks for features and services such as system logging (syslog) and tracing, Network Time Protocol (NTP), configuration archival, and SNMP.
- Monitor basic operation for the Junos OS and devices.
- Identify and use network utilities.
- Upgrade the Junos OS.
- Perform file system maintenance and password recovery on a Junos device.

- Navigate within the Junos J-Web interface.
- Explain basic routing operations and concepts.
- View and describe routing and forwarding tables.
- Configure and monitor static routing.
- Configure and monitor OSPF.
- Describe the framework for routing policy and firewall filters.
- Explain the evaluation of routing policy and firewall filters.
- Identify instances where you might use routing policy.
- Write and apply a routing policy.
- Identify instances where you might use firewall filters.
- Write and apply a firewall filter.
- Describe the operation and configuration for unicast reverse path forwarding (RPF).

Prerequisites:

Testing and Certification

Follow-on-Courses:

Junos Intermediate Routing (JIR)

Content:

Day 1 6 Secondary System Configuration LAB 6: Routing Policy User Configuration and Authentication 1 COURSE INTRODUCTION 11 Firewall Filters System Logging and Tracing Network Time Protocol Archiving Configurations Firewall Filters Overview 2 Junos Operating System Fundamentals SNMP Case Study: Firewall Filters Unicast Reverse-Path-Forwarding Checks The Junos OS LAB 3: Secondary System Configuration Traffic Processing LAB 7: Firewall Filters Overview of Junos Devices 7 Operational Monitoring and Maintenance 3 User Interface Options: The Junos CLI 12 Class of Service Monitoring Platform and Interface User Interface Options Operation CoS Overview The Junos CLI: CLI Basics Network Utilities Traffic Classification The Junos CLI: Operational Mode Maintaining the Junos OS Traffic Queueing ■ The Junos CLI: Configuration Mode Password Recovery Traffic Scheduling System Clean-Up Case Study: CoS 4 User Interface Options: The J-Web Interface LAB 8: Class of Service LAB 4: Operational Monitoring and Maintenance User Interface Options ■ The Junos CLI: CLI Basics 13 JTAC Procedures The Junos CLI: Operational Mode ■ The Junos CLI: Configuration Mode 8 Interface Configuration Examples Opening a Support Case LAB 1: User Interface Options Review of the Interface Configuration Customer Support Tools Hierarchy ■ Transferring Files to JTAC Interface Configuration Examples 5 Initial Configuration Using Configuration Groups 14 Juniper Security Concepts Factory-Default Configuration 9 Routing Fundamentals Security Challenges Initial Configuration Juniper Networks' Security Focus Routing Concepts: Overview of Routing Interface Configuration A IPv6 Fundamentals Routing Concepts: The Routing Table LAB 2: Initial System Configuration Routing Concepts: Routing Instances Static Routing IPv6 Addressing Dynamic Routing Protocols and Services Configuration Day 2 LAB 5: Routing Fundamentals Day 3 10 Routing Policy

Additional Information:

RELEVANT JUNIPER PRODUCTSACX SeriesAppsecureContrailEX SeriesJSA SeriesJunos OSJunos SpaceM SeriesMX SeriesNFX SeriesPTX SeriesQFabricQFX SeriesSRX SeriesT Series

Routing Policy OverviewCase Study: Routing Policy

Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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