
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 J-Web interface. |
| ■ Navigate within the Junos CLI. | ■ Explain basic routing operations and concepts. |
| ■ Perform tasks within the CLI operational and configuration modes. | ■ View and describe routing and forwarding tables. |
| ■ Restore a Junos device to its factory-default state. | ■ Configure and monitor static routing. |
| ■ Perform initial configuration tasks. | ■ Configure and monitor OSPF. |
| ■ Configure and monitor network interfaces. | ■ Describe the framework for routing policy and firewall filters. |
| ■ Describe user configuration and authentication options. | ■ Explain the evaluation of routing policy and firewall filters. |
| ■ Perform secondary configuration tasks for features and services such as system logging (syslog) and tracing, Network Time Protocol (NTP), configuration archival, and SNMP. | ■ Identify instances where you might use routing policy. |
| ■ Monitor basic operation for the Junos OS and devices. | ■ Write and apply a routing policy. |
| ■ Identify and use network utilities. | ■ Identify instances where you might use firewall filters. |
| ■ Upgrade the Junos OS. | ■ Write and apply a firewall filter. |
| ■ Perform file system maintenance and password recovery on a Junos device. | ■ 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
1 COURSE INTRODUCTION	<ul style="list-style-type: none">User Configuration and AuthenticationSystem Logging and TracingNetwork Time ProtocolArchiving ConfigurationsSNMP	11 Firewall Filters
2 Junos Operating System Fundamentals	LAB 3: Secondary System Configuration	<ul style="list-style-type: none">Firewall Filters OverviewCase Study: Firewall FiltersUnicast Reverse-Path-Forwarding Checks
<ul style="list-style-type: none">The Junos OSTraffic ProcessingOverview of Junos Devices	7 Operational Monitoring and Maintenance	LAB 7: Firewall Filters
3 User Interface Options: The Junos CLI	<ul style="list-style-type: none">Monitoring Platform and Interface OperationNetwork UtilitiesMaintaining the Junos OSPassword RecoverySystem Clean-Up	12 Class of Service
<ul style="list-style-type: none">User Interface OptionsThe Junos CLI: CLI BasicsThe Junos CLI: Operational ModeThe Junos CLI: Configuration Mode	LAB 4: Operational Monitoring and Maintenance	<ul style="list-style-type: none">CoS OverviewTraffic ClassificationTraffic QueueingTraffic SchedulingCase Study: CoS
4 User Interface Options: The J-Web Interface	8 Interface Configuration Examples	LAB 8: Class of Service
<ul style="list-style-type: none">User Interface OptionsThe Junos CLI: CLI BasicsThe Junos CLI: Operational ModeThe Junos CLI: Configuration Mode	<ul style="list-style-type: none">Review of the Interface Configuration HierarchyInterface Configuration ExamplesUsing Configuration Groups	13 JTAC Procedures
LAB 1: User Interface Options	9 Routing Fundamentals	<ul style="list-style-type: none">Opening a Support CaseCustomer Support ToolsTransferring Files to JTAC
5 Initial Configuration	<ul style="list-style-type: none">Routing Concepts: Overview of RoutingRouting Concepts: The Routing TableRouting Concepts: Routing InstancesStatic RoutingDynamic Routing	14 Juniper Security Concepts
<ul style="list-style-type: none">Factory-Default ConfigurationInitial ConfigurationInterface Configuration	LAB 5: Routing Fundamentals	<ul style="list-style-type: none">Security ChallengesJuniper Networks' Security Focus
LAB 2: Initial System Configuration		A IPv6 Fundamentals
Day 2		<ul style="list-style-type: none">IPv6 AddressingProtocols and ServicesConfiguration
	Day 3	
	10 Routing Policy	
	<ul style="list-style-type: none">Routing Policy OverviewCase Study: Routing Policy	

Additional Information:

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

Further Information:

For More information, or to book your course, please call us on 00 966 92000 9278

training@globalknowledge.com.sa

www.globalknowledge.com/en-sa/

Global Knowledge - KSA, 393 Al-Uroubah Road, Al Worood, Riyadh 3140, Saudi Arabia