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Introduction to the Junos Operating System (IJOS)

CODE:	LENGTH:	PRICE:
JUN_IJOS	32 Hours (4 days)	kr33,250.00

Description

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.
Introduction to the Junos Operating System (IJOS) is an introductory-level course and is based on Junos OS Release 15.1X49.

Objectives

After successfully completing this course, you should be able to:

- Describe the basic design architecture of the Junos OS.
- Identify and provide a brief overview of Junos devices.
- Navigate within the Junos CLI.
- Perform tasks within the CLI operational and configuration modes.
- 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).
- Follow recommended procedure to open a JTAC support case.
- Access support resources.
- Use the customer support Website.
- Access and use customer support tools.
- Use FTP to transfer large files to JTAC.
- Identify high-level security challenges in today’s networks.
- Explain the value of implementing security solutions.
- Identify key factors in Juniper Networks’ security focus.

- Describe some differences between IPv4 and IPv6.
- List IPv6 address types and describe the IPv6 addressing format.
- Enable an interface for IPv6 operation.
- Configure and monitor routing for IPv6 environments.
- Tunnel IPv6 traffic over and IPv4 network.

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.

Programme

Day 1
Chapter 1: Course Introduction
Chapter 2: Junos Operating System Fundamentals
- The Junos OS
- Traffic Processing
- Overview of Junos Devices

Chapter 3: User Interface Options—The Junos CLI
- User Interface Options
- The Junos CLI: CLI Basics
- The Junos CLI: Operational Mode
- The Junos CLI: Configuration Mode

Chapter 4: User Interface Options—The J-Web Interface
- The J-Web GUI
- Configuration
- Lab 1: User Interface Options

Chapter 5: Initial Configuration
- Factory-Default Configuration
- Initial Configuration
- Interface Configuration
- Lab 2: Initial System Configuration

Day 2
Chapter 6: Secondary System Configuration
- User Configuration and Authentication
- System Logging and Tracing
- Network Time Protocol
- Archiving Configurations
- SNMP
- Lab 3: Secondary System Configuration

Chapter 7: Operational Monitoring and Maintenance
- Monitoring Platform and Interface Operation
- Network Utilities
- Maintaining the Junos OS
- Password Recovery
- System Clean-Up
- Lab 4: Operational Monitoring and Maintenance

Chapter 8: Interface Configuration Examples
- Review of the Interface Configuration Hierarchy
- Interface Configuration Examples
- Using Configuration Groups

Chapter 9: Routing Fundamentals
- Routing Concepts: Overview of Routing
- Routing Concepts: The Routing Table
- Routing Concepts: Routing Instances
- Static Routing
- Dynamic Routing
- Lab 5: Routing Fundamentals

Day 3
Chapter 10: Routing Policy
- Routing Policy Overview

- Case Study: Routing Policy
- Lab 6: Routing Policy

Chapter 11: Firewall Filters
- Firewall Filters Overview
- Case Study: Firewall Filters
- Unicast Reverse-Path-Forwarding Checks
- Lab 7: Firewall Filters

Chapter 12: Class of Service
- CoS Overview
- Traffic Classification
- Traffic Queueing
- Traffic Scheduling
- Case Study: CoS
- Lab 8: Class of Service

Chapter 13: JTAC Procedures
- Opening a Support Case
- Customer Support Tools
- Transferring Files to JTAC

Chapter 14: Juniper Security Concepts
- Security Challenges
- Juniper's Security Focus

Appendix A: IPv6 Fundamentals
- IPv6 Addressing
- Protocols and Services
- Configuration

Appendix B: Junosphere - For Use with IJOS Junosphere Version Only
- Accessing the Junosphere Interface
- Accessing Active Topologies

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.