

# IJOS - 601- Introduction to the Junos Operating System (IJOS)

## Course Overview

This one-day **CLASSROOM** 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.

Through demonstrations and hands-on labs, students will gain experience in configuring and monitoring the Junos OS and monitoring basic device operations. This course uses Juniper Networks SRX 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 12.1R1.9.

SPANISH EDITION: This course is available with Spanish labs.

## 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.

## Intended Audience

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

## Course Level

IJOS is an introductory-level course.

## Prerequisites

Students should have basic networking knowledge and an understanding of the Open Systems Interconnection (OSI) reference model and the TCP/IP protocol suite.

## Course Content

### Day 1

#### Chapter 1: Course Introduction

#### Chapter 2: Junos Operating System Fundamentals

- The Junos OS
- Traffic Processing
- Platforms Running the Junos OS

#### Chapter 3: User Interface Options

- User Interface Options
- The Junos CLI: CLI Basics
- The Junos CLI: Operational Mode
- The Junos CLI: Configuration Mode
- Lab 1: The Junos CLI

#### Chapter 4: Initial Configuration

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

#### Chapter 5: Secondary System Configuration

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

#### Chapter 6: Operational Monitoring and Maintenance

- Monitoring Platform and Interface Operation
- Network Utilities
- Maintaining the Junos OS
- Password Recovery
- Lab 4: Operational Monitoring and Maintenance

#### Appendix A: Interface Configuration Examples

- Review of the Interface Configuration Hierarchy
- Interface Configuration Examples
- Using Configuration Groups

#### Appendix B: The J-Web Interface

- The J-Web GUI
- Configuration
- Lab 5 (Optional): The J-Web Interface