

Junos Foundations: JNCIA-Junos Boot Camp (IJOS, JRE)

Prepare to operate Juniper based networks and pass the JNCIA-Junos exam.

Gain the foundation required to work with the Junos operating system (OS) and to configure and route a Junos device-based network in this two-day course. You will also prepare to take the Juniper Networks Certified Internet Associate - Junos (JNCIA-Junos) certification exam.

After a brief overview of the Junos device families, you'll learn about the key architectural components of the software. Through demonstrations and hands-on labs, you will gain experience in configuring and monitoring the Junos OS and monitoring basic device operations.

You will dive into routing and configuration, beginning with an overview of general routing concepts and covering routing policy and firewall filters and Class of Service (CoS). You'll also get hands-on experience configuring and monitoring the Junos OS and monitoring basic device operations.

What You'll Learn

- Basic design architecture of the Junos OS
- Overview of Junos devices
- Perform tasks within the CLI operational and configuration modes
- Restore a Junos device to its factory-default state
- Initial configuration tasks
- Configure and monitor network interfaces
- User configuration and authentication options
- 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
- Basic routing operations and concepts
- Routing and forwarding tables
- Configure and monitor static routing and OSPF
- Framework for routing policy and firewall filters
- Evaluation of routing policy and firewall filters
- Write and apply a routing policy
- Write and apply a firewall filter
- Operation and configuration for unicast reverse path forwarding (RPF)
- Purpose, benefits, and components of CoS
- Implement and verify proper operation of CoS

Course Outline

1. Junos OS Fundamentals

- Traffic Processing
- Platforms Running the Junos OS

2. User Interface Options

- CLI Basic
- CLI Operational Mode
- CLI Configuration Mode

3. Initial Configuration

- Factory-Default Configuration
- Initial Configuration
- Interface Configuration

4. Secondary System Configuration

- User Configuration and Authentication
- System Logging and Tracing
- Network Time Protocol
- Archiving Configurations
- SNMP

5. Operational Monitoring and Maintenance

- Monitoring Platform and Interface Operation
- Network Utilities
- Maintaining the Junos OS
- Password Recovery

6. Routing Fundamentals

- The Routing Table
- Routing Instances
- Static Routing
- Dynamic Routing

7. Routing Policy and Firewall Filters

- Unicast Reverse-Path-Forwarding Checks

8. Class of Service (CoS)

- Traffic Classification
- Traffic Queuing
- Traffic Scheduling