

# Juniper Training Portfolio

JUNIPER WORLD & JUNOS  
JUNIPER MIST AI  
JUNIPER AI-DRIVEN ENTERPRISE (AIDE)  
INTENT-BASED DATA CENTER FUNDAMENTALS  
SECURING YOUR JUNIPER NETWORKS

**JUNIPER**  
NETWORKS®


**INGRAM** MICRO® | Training center

**Summary:** Introduction to Juniper world of networking with focus on Junos-based device management.

**Objective:** To get you ready for JNCIA-Junos exam!

**Labs included:** Yes

**Audience:** Junior networking/infrastructure engineers and administrators.



Duration:  
2 days

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## What you will learn:

- Concepts, benefits, and functionality of the Junos OS core elements
- Concepts, operation, and functionality of the Junos user interfaces
- The main elements for configuring Junos devices
- Configuring basic components of a Junos device
- Methods for monitoring and maintaining Junos devices
- Basic routing concepts and functionality for Junos devices
- Configuring and monitoring basic routing elements for a Junos device
- Concepts and functionality of routing policy and firewall filters on Junos devices
- Configuring and monitoring routing policies and firewall filters on a Junos device

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## Agenda:

### Day 1

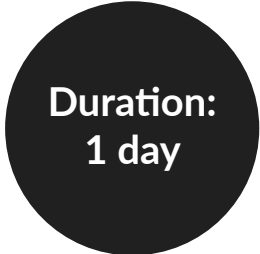
- Juniper Portfolio
- Networking Fundamentals
- Junos OS Fundamentals
- User Interfaces
- Configuration Basics
- Operational Monitoring and Maintenance
- Labs

### Day 2

- Routing Fundamentals
- Routing Policy
- Firewall Filters
- Labs



**Summary:** This introductory Juniper Mist Cloud training course is designed for network engineers and architects who use the Mist Cloud to build, manage, and maintain their wireless, wired, and WAN networks from anywhere—with a focus on wireless networks. It involves basic introductions to Mist features such as: Mist APIs, Marvis, location-based services, cloud services, and monitoring and analyzing the Mist Cloud platform.



Duration:  
1 day

**Objective:** Learn basics about Juniper MIST AI and prepare for JNCIA-MISTAI exam.

**Labs included:** Live instructor-led demo.

**Audience:** Networking engineers and administrators.

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## What you will learn:

- Describe Mist AI and the Mist Cloud
- Describe the Mist AI Cloud features and devices
- Connect to the Mist Cloud
- Create and manage accounts in the Mist Cloud
- Manage and configure the Mist Cloud general settings
- Manage and configure the Mist Cloud secondary settings
- Manage Mist access points
- Configure Wired Assurance
- Use Mist monitoring and analytics tools
- Use Mist Marvis AI Assistant
- Describe Mist location-based services and use cases
- Use the Mist API
- Explain the help options
- Live Demo



**Summary:** The Juniper Mist AI Platform makes networking predictable, reliable and measurable with unprecedented visibility into the user experience. Time-consuming manual IT tasks are replaced with AI-driven proactive automation and self-healing capabilities, lowering networking operational costs and saving substantial time and money. Juniper's AI-Driven Enterprise portfolio enables customers to scale and simplify the deployment of their campus wired and wireless networks while bringing greater insight and automation to network operators. An enhancement to the Juniper Mist Cloud and AI engine, EVPN-VXLAN campus fabric management is part of Wired Assurance, and it expands on Juniper's unique automation, AIOps, and cloud capabilities to streamline IT operations, lower IT costs, and deliver unparalleled agility and scale.

Duration:  
1 day

**Objective:** Understand the features and benefits of Juniper AIDE.

**Audience:** Networking engineers and administrators.

## What you will learn:

- Fundamentals of AI-driven Enterprise
- AI-driven Enterprise Portfolio
- Mist AI and the Mist Cloud
- Marvis Virtual Network Assistant
- Wireless Assurance
- Mist Edge – WAN forwarding
- Location Services
- Wired Assurance
- Device Provisioning
- Switch Templates
- Campus Fabric Architectures
  - EVPN Multihoming
  - Campus Fabric Core-Distribution
  - Campus Fabric IP Clos
- WAN Assurance
- Juniper WAN Design
- Data Center Assurance





# JUNIPER INTENT-BASED DATA CENTER FUNDAMENTALS

**Summary:** This course provides introductory instruction on data center switching using Juniper products. This course lays the foundational knowledge necessary to understand a data center that is built upon an IP fabric, as well as Ethernet VPN–Virtual Extensible LAN (EVPN–VXLAN) architecture. Attendees will be given a background on modern data center design and intent-based networking concepts.



**Objective:** Understand the architecture of modern data center networking fabrics and learn the basics about Apstra, a multi-vendor intent-based data center management platform.

**Audience:** Networking/infrastructure engineers and administrators.

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## What you will learn:

- Juniper DC Portfolio
- Challenges of Traditional Data Centers
- Data Center Architectures (VCF, IP Fabrics)
- Designing Data Center
  - Leaf-Spine Architectures
  - Designing Oversubscription
  - Design Considerations and Guidelines
  - QFX Roles and Positioning in a Datacenter
- IP Fabrics Basics
  - Data Center Routing and Switching
  - IP Fabrics Underlay
  - VXLAN Functions and Operation Overview
  - EVPN Functions and Operation Overview



- Apstra Introduction – Intent Based Networking
- Apstra Capabilities
- Apstra Components
- Apstra Reference Designs
- Apstra Day 0/Day 1/Day 2 Assurance

**Summary:** This course provides you with the foundational knowledge required to work with the Junos operating system and to configure Junos security devices. The course provides a brief overview of the Juniper security products and discusses the key architectural components of the Junos software. Key topics include UI options with a heavy focus on 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 Security devices. The course then delves into foundational knowledge of security objects, security policies, and configuration examples including types of security objects, security policies, security services NAT, site-to-site IPsec VPN, and Juniper Secure Connect VPN. Through demonstrations and hands-on labs, students will gain experience in configuring and monitoring Junos OS and monitoring basic device operations on the SRX Series device.

**Duration:**  
**2 days**

**Objective:** To get you ready for JNCIA-Sec exam!

**Labs included:** Yes

**Audience:** Junior networking/infrastructure engineers and administrators.

## What you will learn:

- Juniper Security Products
- Juniper Architectural Components
- Interface Configuration Basics
- Security Object and Policies Configuration
- NAT Concepts and Configuration
- IPsec VPN Concepts and Configuration
- Juniper Security Technologies (IPS, Integrated User-Based Firewall, ATP)
  - Virtual SRX
  - SRX Troubleshooting and Monitoring



## Agenda:

- o Introduction to Juniper Security
- o Juniper Connected Security Overview
- o Juniper SRX Overview and Initial Configuration
- o Security Zones and Screen Objects
- o Address Objects and Service Objects
- o Security Policies
- o Labs
- o Source (NAT) Network Address Translation (Lab)
- o Destination NAT (Lab)
- o Static NAT (Lab)
- o IPsec VPN Concepts
- o Site-to-Site IPsec VPN (Lab)
- o Juniper Security Technologies
  - Integrated User-Based Firewall
  - IPS
  - Juniper ATP Cloud
  - Juniper Unified Threat Management (UTM)
- o Virtual SRX

