

bluemap

JUNIPER NETWORKS
CERTIFIED NETWORKING
ASSOCIATE

UPGRADE YOUR KNOWLEDGE

Juniper Network Internet Certified Associate Training

Course Overview

The JNCIA or Juniper Networks Certified Internet Associate course is designed for networking professionals with beginner-intermediate knowledge of networking. This course verifies the student understands networking fundamentals, as well as core functionality of the Juniper Networks JunOS.

Duration & Module Coverage

Duration: 7 Days (14hrs)

Session Options	Module Coverage
Session Weekdays[4] : 2 hours per day 4 days per week	Day 1 - Modules 1 Day 2 - Module 2 Day 3 - Module 3 Day 4 - Module 4
Session Weekends: 2 hours per day	Day 5 - Module 5 Day 6 – Module 6 Day 7 – Module 7

Learning Goals

By the end of this course participants will be able to:

1. Understand concepts of networking.
2. Gain familiarity with Juniper Operating System.
3. Administer network comprising of Juniper devices.

Pre-Requisites

The pre-requisite for this course is basic computer knowledge.

Teaching Methodology

This is a very hands-on course where participants carry out practical exercises according to the lab guide provided. The concepts are taught through implementation of real-world use-cases. Our exercises have been carefully designed to replicate scenarios participants will face in real life work conditions.

Who Should Take This Course?

This course is designed for professionals looking forward to gain understanding of networking technologies offered by Juniper Networks devices and configuration and troubleshooting of related platforms.



Course Content

1. Networking Fundamentals

- OSI model and TCP/IP model
- Collision domain and broadcast domain
- Function of router and switches
- Ethernet networks
- Layer-2 Addressing
- IPv4 and IPv6 fundamentals
- Subnetting and Supernetting
- Decimal to binary conversion
- Longest match routing
- Connection oriented vs connectionless protocols

2. JUNOS Fundamentals

- Juniper device portfolio
- Software Architecture
- Control and forwarding plane
- Routing and Packet Forwarding Engine
- Protocol Daemons
- Transit traffic processing
- Exception Traffic

3. User Interfaces

- CLI functionality
- CLI modes
- CLI navigation
- CLI help
- Filtering output
- Active vs Candidate configuration
- Revert to previous configuration
- Saving configuration files
- J-web functionality

4. JUNOS configuration basics

- Factory-default state
- Initial configuration
- User authentication and classes
- Interface types and properties
- Logging and tracing
- Rescue configuration

5. Monitoring and maintenance

- Show and monitor commands
- Interface statistics and errors
- Tools- ping, traceroute, SSH, etc.
- Real-time performance monitoring
- JUNOS Installation
- Software upgrades
- Root password recovery



6. Routing Fundamentals

- Packet forwarding concepts
- Routing tables
- Routing vs forwarding tables
- Route preference
- Routing instances
- Static routing
- Use case dynamic routing protocols
- Configuring and Troubleshooting

7. Routing Policy and Firewall filters

- Default routing policies
- Import and export policies
- Routing policy flow
- Policy structure and terms
- Policy match criteria
- Firewall filter concepts
- Filter match criteria and actions
- Unicast reverse path forwarding
- Configure and verify

Practical Learning Exercises

A lab guide will be provided to each student with requirement scenarios. Along with lab guide required VMs will be provided to set up individual labs for self practice.

There would be scenarios for implementing, verifying and troubleshooting all modules covered in the course.