Juniper Networks learning paths

Juniper Networks Education Services

October 2020
Juniper Networks Certification Program framework

- **Routing and Switching**
  - **Expert**
    - JNCIE-SP
    - JNCIE-ENT
  - **Professional**
    - JNCIP-SP
    - JNCIP-ENT
  - **Specialist**
    - JNCIS-SP
    - JNCIS-ENT
  - **Associate**
    - JNCIA-Junos

- **Data Center**
  - **Expert**
    - JNCIE-DC
  - **Professional**
    - JNCIP-DC
  - **Specialist**
    - JNCIS-SEC
  - **Associate**
    - JNCIA-SEC

- **Security**
  - **Expert**
    - JNCIE-SEC
  - **Professional**
    - JNCIP-SEC
  - **Specialist**
    - JNCIS-SEC
  - **Associate**
    - JNCIA-SEC

- **Cloud**
  - **Expert**
    - JNCIE-Cloud
  - **Professional**
    - JNCIP-Cloud
  - **Specialist**
    - JNCIS-Cloud
  - **Associate**
    - JNCIA-Cloud

- **Automation and DevOps**
  - **Expert**
    - JNCIE-DevOps* (Mist AI*)
  - **Professional**
    - JNCIP-DevOps
  - **Specialist**
    - JNCIS-DevOps
  - **Associate**
    - JNCIA-DevOps

- **Mist AI**
  - **Expert**
    - JNCIE-MistAI
  - **Professional**
    - JNCIP-MistAI
  - **Specialist**
    - JNCIS-MistAI
  - **Associate**
    - JNCIA-MistAI

- **Design**
  - **Certification**
    - JNCDA

Information as of October 2020. *In planning. Refer to [www.juniper.net/certification](http://www.juniper.net/certification) for the most current information.

© 2020 Juniper Networks
Juniper Networks
Junos-Based Curriculum

Service Provider Routing & Switching
- JNCIE–SP
  - JNCIE–SP Self-Study Bundle
- JNCIP–SP
  - Advanced Junos Service Provider Routing (JSPR)
  - Junos Layer 3 VPNs (JL3V)
  - Junos Layer 2 VPNs (JL2V)
- JNCIS–SP
  - Junos MPLS Fundamentals (JMF)
  - Junos Service Provider Switching (JSPX)
  - Junos Intermediate Routing (JIR)
- JNCA – Junos
  - Introduction to the Junos Operating System (IJOS)

Enterprise Routing & Switching
- JNCIE–ENT
  - JNCIE–ENT Self-Study Bundle
- JNCIP–ENT
  - Advanced Junos Enterprise Switching (AJEX)
  - Advanced Junos Enterprise Routing (AJER)
- JNCIS–ENT
  - Junos Enterprise Switching (JEX)
  - Junos Intermediate Routing (JIR)

Data Center
- JNCIE–DC
  - JNCIE–DC Self-Study Bundle
- JNCIP–DC
  - Data Center Fabric with EVPN and VXLAN (ADCX)

Junos Security
- JNCIE–SEC
  - JNCIE–SEC Self-Study Bundle
- JNCIP–SEC
  - Advanced Juniper Security (AJSEC)
- JNCIS–SEC
  - Juniper Security (JSEC)
- JNCA – Junos
  - Introduction to Juniper Security (IJSEC)

Notes: Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.
Juniper Networks Curriculum
Service provider routing and switching

**Certification**
- Juniper Networks Certified Expert Service Provider Routing and Switching (JNCIE-SP)
- Juniper Networks Certified Professional Service Provider Routing and Switching (JNCIP-SP)
- Juniper Networks Certified Specialist Service Provider Routing and Switching (JNCIS-SP)
- Juniper Networks Certified Associate Junos (JNCIA-Junos)

**Exam**
- Service Provider Routing and Switching, Expert (JNCIE-SP)
- Service Provider Routing and Switching, Professional (JNCIP-SP)
- Service Provider Routing and Switching, Specialist (JNCIS-SP)

**Course**
- Introduction to the Junos Operating System (IJOS)
- Junos Troubleshooting in the NOC (JTNOC)
- Advanced Junos Service Provider Routing (AJSR)
- Junos Layer 3 VPNs (JL3V)
- Junos Layer 2 VPNs (JL2V)
- Junos MPLS Fundamentals (JMF)
- Junos Service Provider Switching (JSPX)
- Junos Intermediate Routing (JIR)
- Junos Layer 3 VPNs (JL3V)

**Additional Training**
- Getting Started with Networking (5 hours)

**Notes:** Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.
## Juniper Networks Curriculum

### Service provider emerging technologies and related training

<table>
<thead>
<tr>
<th>Related Service Provider Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automation and DevOps Learning Path</td>
</tr>
<tr>
<td>Junos IP version 6 (J-IPv6)</td>
</tr>
<tr>
<td>Circuit to Packet (CTP)</td>
</tr>
<tr>
<td>Cert Prep: Migrating from the Cisco CCNA to the JNCIA-Junos</td>
</tr>
<tr>
<td>Junos Edge Security Services (JESS)</td>
</tr>
<tr>
<td>Junos Subscriber Management (JSM)</td>
</tr>
</tbody>
</table>

### Emerging Service Provider Technology Courses

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junos Segment Routing (JSR)</td>
</tr>
<tr>
<td>DiffServ-Aware MPLS Traffic Engineering (DSTE)</td>
</tr>
<tr>
<td>Packet Optical Transport Workshop (TCXW)</td>
</tr>
<tr>
<td>MPLS and Segment Routing Automation Using NorthStar (MSRN)*</td>
</tr>
<tr>
<td>Junos Multicast Routing (JMR)</td>
</tr>
<tr>
<td>Junos Class of Service (JCOS)</td>
</tr>
<tr>
<td>Introduction to Junos OS Evolved (JEVO)</td>
</tr>
<tr>
<td>Junos IP version 6 (J-IPv6)</td>
</tr>
<tr>
<td>Junos Subscriber Management (JSM)</td>
</tr>
</tbody>
</table>

### Notes:
* Formerly known as Network Automation in the WAN (NA-WAN). Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.

© 2020 Juniper Networks
Juniper Networks Curriculum
Enterprise routing and switching

Juniper Networks Certified Associate Junos
(Introduction to the Junos Operating System (IJOS))

- 3 days or On-Demand

Optional: Continue to Juniper Networks Certified Professional, Data Center (JNCIP-DC)

Additional Training

- Juniper Mist AI-Driven Networks (MIST) - 4 days
- Getting Started with Networking - 5 days
- Cert Prep: Migrating from the Cisco CCNA to the JNCIA-Junos - 5 hours
- Juniper Switching for Cisco Engineers - TBD hours
- Junos IP version 6 (J-IPv6) - 2 days

Notes: Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.

Juniper Certified Associate Junos

- 3 days or On-Demand

Juniper Networks Certified Expert

- Enterprise Routing and Switching (JNCIE-ENT)
- 2 days or On-Demand

Juniper Networks Certified Professional

- Enterprise Routing and Switching (JNCIP-ENT)
- 5 days or On-Demand

Juniper Networks Certified Specialist

- Enterprise Routing and Switching (JNCIS-ENT)
- 2 days or On-Demand

Juniper Networks Certified Professional

- Enterprise Routing and Switching, Expert (JNCIE-ENT)
- 2 days or On-Demand

Juniper Networks Certified Professional

- Enterprise Routing and Switching, Professional (JNCIP-ENT)
- 2 days or On-Demand

Juniper Networks Certified Specialist

- Enterprise Routing and Switching, Specialist (JNCIS-ENT)
- 2 days or On-Demand

Juniper Networks Certified Associate Junos

- Junos, Associate (JNCIA-Junos)
- 2 days or On-Demand

Juniper Networks Certified Expert

- Enterprise Routing and Switching, Expert (JNCIE-ENT)
- 120 Hours

Juniper Networks Certified Professional

- Enterprise Routing and Switching (JNCIP-ENT)

Juniper Networks Certified Specialist

- Enterprise Routing and Switching (JNCIS-ENT)

Cert Prep: Migrating from the Cisco CCNA to the JNCIA-Junos - 5 hours

Juniper Switching for Cisco Engineers - TBD hours

Junos Troubleshooting in the NOC (JTNOC) - 4 days or On-Demand

Advanced Junos Enterprise Switching (AJEX)

- 2 days or On-Demand

Advanced Junos Enterprise Routing (AJER)

- 5 days or On-Demand

Junos Enterprise Switching (JEX)

- 2 days or On-Demand

Junos Intermediate Routing (JIR)

- 2 days or On-Demand

Notes: Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.

© 2020 Juniper Networks
Juniper Networks Curriculum

Data center

Juniper Networks Certified Expert Data Center (JNCIE-DC)
Data Center, Expert (JNCIE-DC)
JNCIE-DC Self-Study Bundle 120 hours

Juniper Networks Certified Professional Data Center (JNCIP-DC)
Data Center, Professional (JNCIP-DC)
Data Center Fabric with EVPN and VXLAN (ADCX)* 5 days or On-Demand

Juniper Networks Certified Specialist Enterprise Routing and Switching (JNCIS-ENT) or equivalent knowledge.

Additional Training

Automation and DevOps Learning Path
Juniper Networks Design—Data Center (JND-DC) 5 days
Introduction to Junos OS Evolved (IJEVO) 1 day

Notes: * Formerly known as Advanced Data Center Switching (ADCX). Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.

© 2020 Juniper Networks

Juniper Public
Juniper Networks Curriculum
Security

- **Juniper Networks Certified Expert Security (JNCIE-SEC)**
  - Security, Expert (JNCIE-SEC)
  - 5 days or On-Demand

- **Juniper Networks Certified Professional Security (JNCIP-SEC)**
  - Security, Professional (JNCIP-SEC)
  - 4 days

- **Juniper Networks Certified Specialist Security (JNCIS-SEC)**
  - Security Specialist (JNCIS-SEC)
  - 5 days or On-Demand

- **Juniper Networks Certified Associate Security (JNCIA-SEC)**
  - Security Associate (JNCIA-SEC)
  - 3 days or On-Demand

### Additional Training
- **Juniper Cloud Networking with AWS and Azure (JCNAA)**
  - 4 days

- **Cert Prep: Migrating from the Cisco CCNA to the JNCIA-Junos**
  - 5 hours

- **Juniper Networks Design—Security (JND-SEC)**
  - 5 days

- **Junos Space—Security Director (JS-SD)**
  - 2 days

- **Implementing Juniper Networks Secure Analytics (JSA)**
  - 3 days

- **Getting Started with Security**
  - TBD

---

**Notes:** Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](https://www.juniper.net/training) for the most current information.
Juniper Networks Curriculum
Cloud, automation & DevOps, design

Cloud
- JNCIE-Cloud
  - JNCIE-Cloud Self-Study Bundle
- JNCIP-Cloud
  - Enterprise Multicloud Automation and Orchestration Using Contrail (EMCC)
- JNCIS-Cloud
  - Cloud Automation Using Contrail (CAC)
- JNCIA-Cloud
  - Juniper Cloud Fundamentals (JCF)

Automation and DevOps
- SD-WAN with Contrail Service Orchestration (SD-CSO)
- MPLS and Segment Routing Automation Using NorthStar (MSRN)
- JNCIS-DevOps
  - Junos Platform Automation and DevOps (JAUT)
- JNCIA-DevOps
  - Introduction to Junos Platform Automation and DevOps (IJAUT)
- JNCIP-DevOps
  - Advanced Junos Platform Automation and DevOps (AJAUT)

Design
- JNCIS-DC
  - Juniper Networks Design—Data Center (JND-DC)
- JNCDS-SP
  - Juniper Networks Design—Service Provider (JND-SP)
- JNCDS-SEC
  - Juniper Networks Design—Security (JND-SEC)
- JNCDS-DC
  - Juniper Networks Design Fundamentals (JNDF)

Notes: See individual learning paths for full prerequisite course recommendations. Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.
Juniper Networks Curriculum

Cloud

Notes: *Attendance in the Data Center Fabric with EVPN and VXLAN (ADCX) course is recommended prior to the EMCC course. †Attendance of the Introduction to the Junos Operating System (IJOS) course is strongly recommended prior to the JCF course. **Attendance in the Junos MPLS Fundamentals (JMF) course is strongly recommended prior to the MSRN course. Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.
Notes: *In planning. Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.
<table>
<thead>
<tr>
<th>Certification</th>
<th>Exam</th>
<th>Course</th>
<th>Optional</th>
<th>In Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Juniper Networks Certified Specialist, Mist AI (JNCIS-MistAI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mist, Specialist (UNCIS-MistAI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniper Mist AI-Driven Networks (MIST)</td>
<td>4 Days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Juniper Networks Certified Associate, Mist AI (JNCIA-MistAI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mist, Associate (UNCIA-MistAI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mist Masters: Self-Paced Online Training</td>
<td>6 Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting Started with Wi-Fi</td>
<td>2 Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.
Juniper Networks Curriculum
Design

Data Center Design Track
- Juniper Networks Certified Design Specialist, Data Center (JNCDS-DC)
- Design, Specialist, Data Center (JNCDS-DC)
- Juniper Networks Design—Data Center (JND-DC) 5 days

Service Provider Design Track
- Juniper Networks Certified Design Specialist, SP (JNCDS-SP)**
- Design, Specialist, Service Provider (JNCDS-SP)
- Juniper Networks Design—Service Provider (JND-SP) 5 days

Security Design Track
- Juniper Networks Certified Design Specialist, Security (JNCDS-SEC)
- Design, Specialist, Security (JNCDS-SEC)
- Juniper Networks Design—Security (JND-SEC) 5 days

Juniper Networks Certified Design Associate (JNCDA)
- Design, Associate (JNCDA)
- Juniper Networks Design Fundamentals (JNDF) 3 days or On-Demand

Notes: Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.
### Juniper Networks Curriculum

#### Support

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junos Troubleshooting in the NOC (JTNOC)</td>
<td>4 days or On-Demand</td>
</tr>
<tr>
<td>Introduction to the Junos Operating System (IJOS)</td>
<td>3 days or On-Demand</td>
</tr>
<tr>
<td>Getting Started with Networking</td>
<td>5 hours</td>
</tr>
</tbody>
</table>

**Note:** The professional-level courses in the Service Provider Routing and Switching, Enterprise Routing and Switching, and Junos Security learning paths contain additional troubleshooting training.

---

**Notes:** Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.
### Juniper Networks Curriculum

#### Junos Space

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junos Space─Network Director (JS-ND)</td>
<td>1 day</td>
</tr>
<tr>
<td>Junos Space─Security Director (JS-SD)</td>
<td>2 days</td>
</tr>
<tr>
<td>Junos Space Essentials (JSE)</td>
<td>3 Days</td>
</tr>
</tbody>
</table>

**Related Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>JA1500 Junos Space Appliance Installation and Initial Configuration</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

**Notes:** Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.
Juniper Networks Curriculum
Getting started

- **Getting Started with Networking**: 5 hours
- **Getting Started with Cloud**: 4 hours
- **Getting Started with Wi-Fi**: 2 hours
- **Getting Started with Security**: TBD hours
- **Getting Started with 5G**: TBD hours
- **Getting Started with Telco Cloud**: TBD hours

**Note**: These courses teach foundational, industry-standard content and are not-related to each other. They may be taken in any order.

**Notes**: Information current as of October 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to [www.juniper.net/training](http://www.juniper.net/training) for the most current information.
Delivery methods

Private Training - Standard or Customized Delivery: training@juniper.net
Juniper will host a private, instructor-led class for up to 16 students. Training can be delivered at a customer’s facility, virtually (remote instructor and remote students), or a blend of both onsite with remote students. Private classes have the ability to be customized based on the client’s exact needs.

On-Demand Courses: www.juniper.net/ondemand
Each course includes self-paced, eLearning modules along with access to real online lab exercises. Students perform the same detailed lab exercises that are taught in instructor-led classes. Courses include six months of access to the materials and lab environment.

Open Enrollment Classes: www.juniper.net/courses
Juniper and/or its Authorized Education Partners host public classrooms in which the customer can send one or more students to attend. Training will be attended either virtually or at a Juniper or Education Partner’s facility.

NEW – All-Access Training Pass: www.juniper.net/allaccess or training@juniper.net
Access to all Juniper courses, for one low price, for a full year. Available for individuals, teams, and enterprises.