JUNIPER NETWORKS—
JUNOS-BASED CURRICULUM

Service Provider Routing & Switching

- JNCIE–SP
  - JNCIE–SP Self-Study Bundle

- JNCIP–SP
  - Advanced Junos Service Provider Routing (AJSPR)
  - 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)

- JNCIA–Junos
  - Introduction to the Junos Operating System (JOS)

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)

- JNCIS–DC

Junos Security

- JNCIE–SEC
  - JNCIE–SEC Self-Study Bundle

- JNCIP–SEC
  - Advanced Juniper Security (AJSEC)

- JNCIS–SEC
  - Juniper Security (JSEC)

- JNCIA–SEC
  - Introduction to Juniper Security (USEC)

Notes: Information current as of August 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

**JNCIE–SP Self-Study Bundle** 120 Hours

**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)**

**Introduction to the Junos Operating System (IJOS)** 3 days or On-Demand

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

**Advanced Junos Service Provider Routing (AJSPR)** 5 days or On-Demand

**Junos Layer 3 VPNs (JL3V)** 3 days or On-Demand

**Junos Layer 2 VPNs (JL2V)** 2 days or On-Demand

**Junos MPLS Fundamentals (JMF)** 2 days or On-Demand

**Junos Service Provider Switching (JSPX)** 2 days or On-Demand

**Junos Intermediate Routing (JIR)** 2 days or On-Demand

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

**Introduction to the Junos Operating System (IJOS)** 3 days or On-Demand

See also: Service Provider Emerging Technologies and Related Training

Additional Training

Getting Started with Networking 5 hours

Notes: Information current as of August 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.
## Emerging Service Provider Technology Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junos Segment Routing (JSR)</td>
<td>1 day or On-Demand</td>
</tr>
<tr>
<td>DiffServ-Aware MPLS Traffic Engineering (DSTE)</td>
<td>1 day</td>
</tr>
<tr>
<td>Packet Optical Transport Workshop (TCXW)</td>
<td>1 day</td>
</tr>
<tr>
<td>MPLS and Segment Routing Automation Using NorthStar (MSRN)*</td>
<td>4 days</td>
</tr>
</tbody>
</table>

## Related Service Provider Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junos Multicast Routing (JMR)</td>
<td>2 days</td>
</tr>
<tr>
<td>Junos Class of Service (JCOS)</td>
<td>2 days</td>
</tr>
<tr>
<td>Introduction to Junos OS Evolved (IJEVO)</td>
<td>1 day</td>
</tr>
<tr>
<td>Cert Prep: Migrating from the Cisco CCNA to the JNCIA-Junos</td>
<td>5 hours</td>
</tr>
<tr>
<td>Junos Edge Security Services (JESS)</td>
<td>2 days</td>
</tr>
<tr>
<td>Junos Subscriber Management (JSM)</td>
<td>4 days</td>
</tr>
<tr>
<td>Automation and DevOps Learning Path</td>
<td></td>
</tr>
<tr>
<td>Junos IP version 6 (J-IPv6)</td>
<td>2 days</td>
</tr>
<tr>
<td>Circuit to Packet (CTP)</td>
<td>3-day On-Demand</td>
</tr>
</tbody>
</table>

### Notes:
* Formerly known as Network Automation in the WAN (NA-WAN). Information current as of August 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—ENTERPRISE ROUTING AND SWITCHING

Juniper Networks Certified Associate Junos (JNCIA-Junos)

Introduction to the Junos Operating System (IJOS)
3 days or On-Demand

Advanced Junos Enterprise Routing (JIR)
2 days or On-Demand

Junos Enterprise Switching (JEX)
2 days or On-Demand

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

Juniper Networks Certified Associate Junos (JNCIA-Junos)

Junos, Associate (JNCIA-Junos)

Juniper Networks Certified Specialist Enterprise Routing and Switching (JNCIS-ENT)

Enterprise Routing and Switching, Specialist (JNCIS-ENT)

Juniper Networks Certified Professional Enterprise Routing and Switching (JNCIP-ENT)

Enterprise Routing and Switching, Professional (JNCIP-ENT)

Juniper Networks Certified Expert Enterprise Routing and Switching (JNCIE-ENT)

Enterprise Routing and Switching, Expert (JNCIE-ENT)

JNCIE–ENT Self-Study Bundle 120 Hours

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

Additional Training

<table>
<thead>
<tr>
<th>Certification</th>
<th>Exam</th>
<th>Course</th>
<th>In Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNCIE–ENT Self-Study Bundle</td>
<td>120 Hours</td>
<td></td>
<td></td>
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<tr>
<td>Advanced Junos Enterprise Switching (AJEX)</td>
<td>2 days or On-Demand</td>
<td></td>
<td></td>
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<tr>
<td>Advanced Junos Enterprise Routing (JIR)</td>
<td>5 days or On-Demand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junos Enterprise Switching (JEX)</td>
<td>2 days or On-Demand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junos Intermediate Routing (JIR)</td>
<td>2 days or On-Demand</td>
<td></td>
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</tr>
<tr>
<td>Junos Troubleshooting in the NOC (JTNOC)</td>
<td>4 days or On-Demand</td>
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<tr>
<td>Introduction to the Junos Operating System (IJOS)</td>
<td>3 days or On-Demand</td>
<td></td>
<td></td>
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<tr>
<td>Implementing Mist AI-Driven WiFi Networks (MIST)</td>
<td>4 days</td>
<td></td>
<td></td>
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<tr>
<td>Getting Started with Networking</td>
<td>5 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cert Prep: Migrating from the Cisco CCNA to the JNCIA-Junos</td>
<td>5 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junos IP version 6 (J-IPv6)</td>
<td>2 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automation and DevOps Learning Path</td>
<td></td>
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</tbody>
</table>

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

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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 August 2020. Course and exam information (length, availability, content, etc.) is subject to change; refer to www.juniper.net/training for the most current information.

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# JUNIPER NETWORKS CURRICULUM—SECURITY

<table>
<thead>
<tr>
<th>Certification</th>
<th>Exam</th>
<th>Course</th>
<th>In Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNCIE-SEC Self-Study Bundle</td>
<td>120 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Juniper Security (AJSEC)</td>
<td>4 days</td>
<td></td>
<td></td>
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<tr>
<td>Juniper Security (JSEC)</td>
<td>5 days or On-Demand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Juniper Security (IJSEC)</td>
<td>3 days or On-Demand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniper Networks Certified Specialist Security (JNCIS-SEC)</td>
<td>Security Specialist (JNCIS-SEC)</td>
<td></td>
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<tr>
<td>Juniper Networks Certified Associate Security (JNCIA-SEC)</td>
<td>Security Associate (JNCIA-SEC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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

### Getting Started with Security
- TBD hours

### Notes:
Information current as of August 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—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)
  - Red Hat, OpenShift, Kubernetes, Docker in Cloud Deployments (ROKD)

- JNCF-Cloud
  - Contrail Cloud

Automation and DevOps

- JNCIP-DevOps
  - Advanced Junos Platform Automation and DevOps (AJAUT)

- JNCS-DevOps
  - Junos Platform Automation and DevOps (JAUT)

- JNCIA-DevOps
  - Introduction to Junos Platform Automation and DevOps (JIAUT)
  - SD-WAN with Contrail Service Orchestration (SD-CSO)

- JNCS-DevOps
  - MPLS and Segment Routing Automation Using NorthStar (MSRN)

- JNCF-DevOps
  - SD-WAN with Contrail Service Orchestration (SD-CSO)

Design

- JNCDS-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)

- JNCDA
  - Juniper Networks Design Fundamentals (JNDF)

Notes: See individual learning paths for full prerequisite course recommendations. Information current as of August 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**

- **Juniper Networks Certified Expert Cloud (JNCIE-Cloud)**
  - Cloud, Expert (JNCIE-Cloud)
  - JNCIE-Cloud Self-Study Bundle

- **Juniper Networks Certified Professional Cloud (JNCIP-Cloud)**
  - Cloud, Professional (JNCIP-Cloud)
  - Contrail Cloud (TBD days)

- **Juniper Networks Certified Specialist Cloud (JNCIS-Cloud)**
  - Cloud, Specialist (JNCIS-Cloud)
  - Cloud Automation Using Contrail (CAC)***

- **Juniper Networks Certified Associate Cloud (JNCIA-Cloud)**
  - Cloud, Associate (JNCIA-Cloud)

- **MPLS and Segment Routing Automation Using NorthStar (MSRN)**
  - 4 days

- **SD-WAN with Contrail Service Orchestration (SD-CSO)**
  - 3 days

**Additional Training**

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

- **Getting Started with Cloud**
  - 4 hours

- **Introduction to Junos OS Evolved (UEVO)**
  - 1 day

- **Red Hat, OpenShift, Kubernetes, Docker in Cloud Deployments (ROKD)**
  - 5 days

**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 August 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—AUTOMATION AND DEVOPS

- Advanced Junos Platform Automation and DevOps (AJAUT) - 4 days
- Junos Platform Automation and DevOps (JAUT) - 5 days or On-Demand
- Introduction to Junos Platform Automation and DevOps (IJAUT) - 3 days or On-Demand

- Juniper Networks Certified Professional Automation and DevOps (JNCIP-DevOps)*
- Juniper Networks Certified Specialist Automation and DevOps (JNCIS-DevOps)
- Juniper Networks Certified Associate Automation and DevOps (JNCIA-DevOps)

Notes: *In planning. Information current as of August 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—MIST

## Certification

<table>
<thead>
<tr>
<th>Certification</th>
<th>Exam</th>
<th>Course</th>
<th>Optional</th>
</tr>
</thead>
</table>

## Juniper Mist AI-Driven Networks (MIST)*

- **Juniper Networks Certified Specialist, Mist AI (JNCIS-MistAI)**
- **Mist AI, Specialist (JNCIS-MistAI)**
- **Juniper Mist AI-Driven Networks (MIST)**

**Notes:** The Mist Master training is recommended preparation for the Juniper Mist AI-Driven Networks (MIST) course. Information current as of August 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.

## Mist Master

- **Self-Paced Online Mist Master Training**
  - 6 Hours
- **Getting Started with Wi-Fi**
  - 2 Hours
JUNIPER NETWORKS CURRICULUM—DESIGN

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

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

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

Notes: Information current as of August 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>
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</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.
JUNIPER NETWORKS CURRICULUM—JUNOS SPACE

Junos Space—Network Director (JS-ND) 1 day
Junos Space—Security Director (JS-SD) 2 days

Junos Space Essentials (JSE) 3 Days

Related Courses
JA1500 Junos Space Appliance Installation and Initial Configuration 4 hours

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