



Institute for Networking &  
Data Center Technologies

**JUNIPER**  
NETWORKS

EDUCATION SERVICES  
AUTHORIZED PARTNER

# Authorized Juniper Networks Training 2013

- » Enterprise Routing & Switching
- » Service Provider
- » Security
- » Firewall / VPN
- » Network Management
- » Wireless
- » Junos Pulse
- » Junos Software
- » Junos Space

# Authorized Juniper Networks Training with Juniper's worldwide Education Partner

INDC, Institute for Networking & Data Center Technologies, provides authoritative advanced training and professional development in high-end technology to hone your people's skills and benefit your company.

Advance your career and credentials with leading Authorized Juniper Training, which will allow you to demonstrate your abilities to handle all challenges that may come your way. Make sure you have the knowledge and skills to deploy and maintain cost-effective, high-performance networks - keeping you ahead of the technology curve.

INDC is a global Juniper Networks Education Partner. All our instructors are Juniper-certified specialists with technical industry knowledge and experience, providing you with the very best instructor-led hands-on courses.



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## Delivery Methods

INDC offers several delivery methods.



### ILT - Instructor-Led Classroom Training

ILT sessions are conducted in a physical classroom environment.



### ILO - Instructor-Led Online Training

ILO sessions are conducted via WebEx in a VoIP environment.



### FLEX™ Classroom - Combined ILT & ILO

FLEX Classroom sessions are delivered via ILO and ILT giving you the ultimate flexibility. Choose to attend via the Internet or attend the class in person. Either way, your experience will be equally as effective including all hands-on labs.



### Guaranteed Dates

With our Guaranteed Dates schedule you can book your training with the safety and reassurance that your course will not be cancelled or rescheduled.



### Private Onsite Training

Our private onsite training can be customised to your needs and delivered at your location.

## Juniper Networks Training Credits

Juniper Networks Training Credits (JTCs) are accepted as payment for all INDC delivered public Juniper courses. They enable you to increase productivity and improve network optimization while safeguarding a training budget and monitoring training expenditures. Benefits include:

- » Easy, up-front budgeting, avoiding the allocation of training funds on an ad hoc.
- » Develop a highly trained, satisfied, and motivated IT staff.
- » Flexibility to use when needed for a 12-month period.
- » Received as part of a comprehensive solution including products and services.
- » Keep pace with fast-paced technology and gain competitive advantage.
- » Simplified Order Process to buy credits.
- » Reduce expenses and streamline financial process with a single budget and purchase order.

For more information about ordering and redeeming Juniper Networks Training Credits contact us at +49 40 253346130 or visit [www.indc.de/juniper-training-credits](http://www.indc.de/juniper-training-credits).

# Juniper Networks Certification Program

The Juniper Networks Certification Program (JNCP) consists of Junos-based and platform-specific, multi-tiered tracks, which enable you to demonstrate competence with Juniper’s technology in the areas most pertinent to your job function and experience.

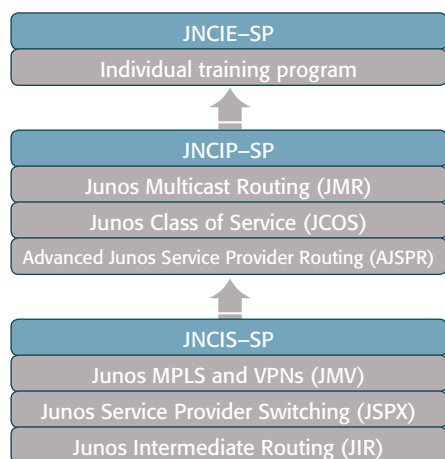
## Junos Certifications

The JNCP features three tracks based on the Junos OS:

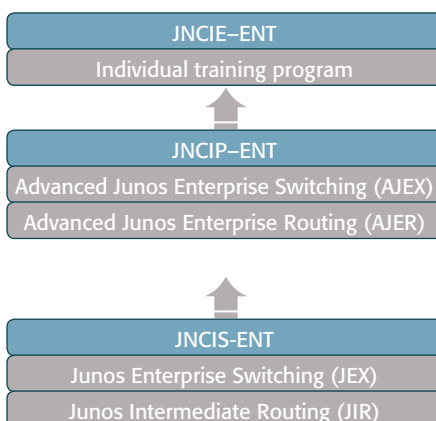
- » **Service Provider Routing & Switching:** This track is for those working with infrastructure or access solutions in a Juniper Networks routing and/or switching end-to-end environment primarily within the telecommunications arena or a Fortune 100 Enterprise environment.
- » **Enterprise Routing & Switching:** This track is for those working in small through large Enterprise environments that install and support Juniper Networks technology-based networks in which LAN and WAN routers and switches reside.
- » **Junos Security:** This track is directed toward those who design and implement Juniper Networks secure networks.



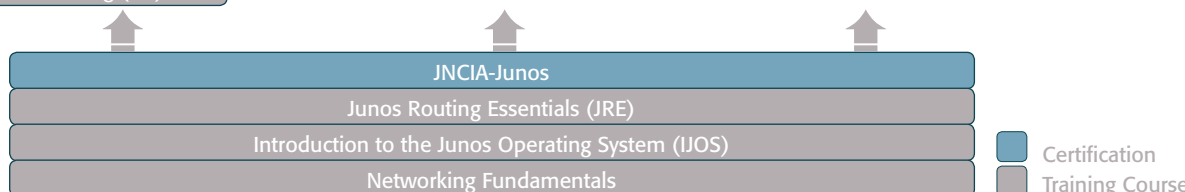
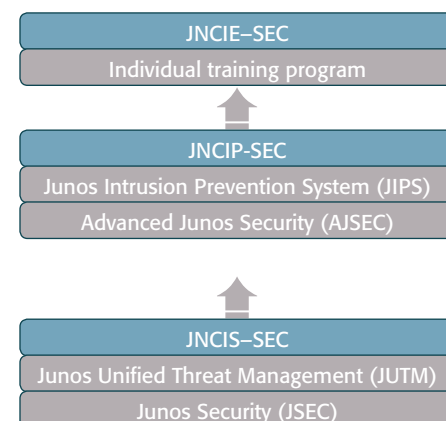
### Service Provider R & S



### Enterprise R & S



### Security



■ Certification  
■ Training Course

## Product and Technology Certifications

The JNCP features different Product and Technology tracks based on specific Juniper Networks technologies. These tracks are aimed at professionals that make extensive use of these technologies.

Level	E-Series	Firewall/ VPN	IDP	Junos Pulse Access Control	Junos Pulse Secure Access	QFabric	Wireless LAN	WX Series
JNCIE								
JNCIP	JNCIP-E							
JNCIS	JNCIS-E	JNCIS-FWV		JNCIS-AC	JNCIS-SA	JNCIS-QF	JNCIS-WLAN	
JNCIA	JNCIA-E		JNCIA-IDP					JNCIA-WX

JNCIE - Juniper Networks Certified Internet Expert  
JNCIP - Juniper Networks Certified Internet Professional

JNCIS - Juniper Networks Certified Internet Specialist  
JNCIA - Juniper Networks Certified Internet Associate

# Certification Power Workshops

## Enterprise Networking Power Workshop (JNCIS-ENT)

**ID** JP-JNCIS-ENT **Duration** 5 days **Price** 3.190 EUR / 43 JTC (excl. VAT)

This intensive power workshop combines:

- » Introduction to the Junos Operating System (IJS)
- » Junos Routing Essentials (JRE)
- » Junos Enterprise Switching (JEX)
- » Junos Intermediate Routing (JIR)

### Schedule

<b>Austria</b>		Hamburg	08.07.-12.07.13	<b>Switzerland</b>	
Vienna	30.09.-04.10.13	Stuttgart	23.09.-27.09.13	Zurich	01.04.-05.04.13
<b>Germany</b>		Frankfurt	25.11.-29.11.13	Zurich	12.08.-16.08.13
Munich	22.04.-26.04.13				



## Security Specialist Power Workshop (JNCIS-SEC)

**ID** JP-JNCIS-SEC **Duration** 5 days **Price** 3.290 EUR / 43 JTC (excl. VAT)

This intensive power workshop combines:

- » Introduction to the Junos Operating System (IJS)
- » Junos Routing Essentials (JRE)
- » Junos Security (JSEC)
- » Junos Unified Threat Management (JUTM)

### Schedule

<b>Austria</b>		Duesseldorf	05.08.-09.08.13	<b>Switzerland</b>	
Vienna	05.08.-09.08.13	Munich	07.10.-11.10.13	Zurich	08.07.-12.07.13
<b>Germany</b>		Frankfurt	02.12.-06.12.13	Zurich	18.11.-22.11.13
Munich	22.04.-26.04.13				



## Firewall/VPN Specialist Power Workshop (JNCIS-FWV)

**ID** JP-JNCIS-FWV **Duration** 5 days **Price** 3.290 EUR / 43 JTC (excl. VAT)

This intensive power workshop combines:

- » Advanced Juniper Networks IPSec VPN Implementation (AJVI)
- » Integrating Juniper Networks Firewalls and VPNs into High Performance Networks (IFVH)
- » Attack Prevention with Juniper Networks Firewalls (APJF)

### Schedule

<b>Austria</b>		<b>Germany</b>		<b>Switzerland</b>	
Vienna	13.05.-17.05.13	Munich	13.05.-17.05.13	Zurich	11.11.-15.11.13
Vienna	29.07.-02.08.13	Berlin	11.11.-15.11.13		

## Service Provider Power Workshop (JNCIS-SP)

**ID** JP-JNCIS-SP **Duration** 10 days **Price** 7.200 EUR / 94 JTC (excl. VAT)

This intensive power workshop combines:

- » Introduction to the Junos Operating System (IJS)
- » Junos Service Provider Switching (JSPX)
- » Junos MPLS and VPNs (JMV)
- » Junos Routing Essentials (JRE)
- » Junos Intermediate Routing (JIR)

### Schedule

Dates on request

# Enterprise Routing and Switching Courses

## Introduction to the Junos Operating System (IJOS)

**ID JP-IJOS** **Duration** 1 day **Price** 690 EUR / 9 JTC (excl. VAT)



### Course Outline

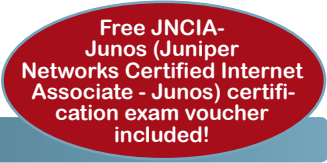
- Junos Operating System Fundamentals
- » The Junos OS; Traffic Processing; Platforms Running the Junos OS
- User Interface Options
- » User Interface Options; The Junos CLI: CLI Basics; The Junos CLI: Operational Mode; The Junos CLI: Configuration Mode; Lab 1: The Junos CLI
- Initial Configuration
- » Factory-Default Configuration; Initial Configuration; Interface Configuration; Lab 2: Initial System Configuration
- Secondary System Configuration
- » User Configuration & Authentication; System Logging & Tracing; Network Time Protocol; Archiving Configurations; SNMP;

- Lab 3: Secondary System Configuration  
Operational Monitoring & Maintenance
- » Monitoring Platform and Interface Operation; Network Utilities; Maintaining the Junos OS; Password Recovery; Lab 4: Operational Monitoring and Maintenance

Schedule			
<b>Austria</b>		<b>Flex™ Classroom</b>	
Vienna	19.08.13	🟢	E 15.04.13
<b>Germany</b>		🟢	E 13.05.13
Munich	03.06.13	🟢	E 26.08.13
Hamburg	15.07.13	🟢	E 30.09.13
Duesseldorf	09.09.13	🟢	E 02.12.13
Munich	04.11.13		
Frankfurt	11.11.13		
<b>Switzerland</b>			
Zurich	15.07.13		
Zurich	09.12.13		E Training in English

## Junos Routing Essentials (JRE)

**ID JP-JRE** **Duration** 1 day **Price** 690 EUR / 9 JTC (excl. VAT)



### Course Outline

- Routing Fundamentals
- » Routing Concepts: Overview of Routing, The Routing Table, Routing Instances; Static Routing; Dynamic Routing; Lab 1: Routing Fundamentals
- Routing Policy and Firewall Filters
- » Routing Policy Overview; Case Study: Routing

- Policy; Lab 2: Routing Policy; Firewall Filters Overview; Case Study: Firewall Filters; Unicast Reverse-Path-Forwarding Checks; Lab 3: Firewall Filters
- Class of Service
- » CoS Overview; Traffic Classification; Traffic Queuing; Traffic Scheduling; Case Study: CoS; Lab 4: Class of Service

Schedule			
<b>Austria</b>		Munich	05.11.13
Vienna	20.08.13	Frankfurt	E 12.11.13
<b>Germany</b>		<b>Switzerland</b>	
Munich	04.06.13	Zurich	16.07.13
Hamburg	16.07.13	Zurich	10.12.13
Duesseldorf	E 10.09.13		E Training in English

## Junos Intermediate Routing (JIR)

**ID JP-JIR** **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

### Course Outline

- Protocol-Independent Routing
- » Static Routes; Aggregated Routes; Generated Route; Martian Addresses; Routing Instances, Lab 1: Protocol-Independent Routing
- Load Balancing and Filter-Based Forwarding
- » Overview of Load Balancing; Configuring & Monitoring Load Balancing; Overview of Filter-Based Forwarding; Configuring & Monitoring Filter-Based Forwarding; Lab 2: Load Balancing and Filter-Based Forwarding
- Open Shortest Path First
- » Overview of OSPF; Adjacency Formation and the Designated Router Election; OSPF Scalability; Configuring and Monitoring OSPF; Basic OSPF Troubleshooting; Lab 3: Open Shortest Path First

- Border Gateway Protocol
- » Overview of BGP; BGP Attributes; IBGP Versus EBGP; Configuring & Monitoring BGP; Lab 4: Border Gateway Protocol
- IP Tunneling
- » Overview of IP Tunneling; GRE and IP-IP Tunnels; Implementing GRE and IP-IP Tunnels; Lab 5: IP Tunneling
- High Availability
- » Overview of High Availability Networks; GR; Graceful RE Switchover; Nonstop Active

- Routing; BFD; VRRP; Lab 6: High Availability



Schedule			
<b>Austria</b>		Berlin	26.11.-27.11.13
Vienna	30.07.-31.07.13	<b>Switzerland</b>	🟢
<b>Germany</b>		Zurich	17.09.-18.09.13
Stuttgart	16.04.-17.04.13	<b>Flex™ Classroom</b>	🟢
Hamburg	18.06.-19.06.13	🟢	E 09.04.-10.04.13
Stuttgart	08.10.-09.10.13	🟢	E 14.05.-15.05.13
			E Training in English

# Juniper Advanced Enterprise Routing (AJER)

**ID** JP-AJER **Duration** 3 days **Price** 1.790 EUR / 23 JTC (excl. VAT)

## Course Outline

- OSPF**
- » OSPFv2 Review; Link-State Advertisements; Protocol Operations; OSPF Authentication; OSPFv3; Lab 1: Configuring and Monitoring OSPF
- OSPF Areas**
- » Review of OSPF Areas; Stub Area Operation; Stub Area Configuration; NSSA Operation; NSSA Configuration; Route Summarization; Lab 2: Configuring and Monitoring OSPF Areas and Route Summarization
- OSPF Case Studies and Solutions**
- » IGP Transition Overview; Transition Case Study; OSPF Multiarea Adjacencies; External Reachability; Virtual Links; Lab 3: Configuring and Monitoring Routing Policy and Advanced OSPF Policy

- BGP**
- » Review of BGP; BGP Operations; Load Balancing Options; Path Selection and Configuration Options; Lab 4: Implementing BGP
- BGP Attributes and Policy**
- » Policy and BGP; BGP Attributes; Details and Manipulation of Common BGP Path Attributes; Lab 5: BGP Attributes
- Enterprise Routing Policies**
- » Enterprise BGP Core Network Design; Enterprise External Network Deployment; Lab 6: Implementing Enterprise Routing Policies
- Introduction to Multicast**

- » Overview of Multicast; Multicast Addressing; RPF; IGMP
- Multicast Routing Protocols and SSM**
- » Overview of Multicast Routing Protocols; PIM-SM Using the ASM Model; Lab 7: Implementing PIM-SM; PIM-SM Using the SSM Model; Lab 8: Implementing SSM
- Class of Service**
- » CoS Components Review & Case Study; CoS Processing & CoS Defaults on the SRX Series Device; Policing; Virtual Channels; Monitoring with Resource Performance Monitoring; Lab 9: Implementing CoS Features in the Enterprise

### Schedule

<b>Austria</b> Vienna	23.09.-25.09.13	Frankfurt Hamburg	<b>E</b> 15.04.-17.04.13 21.10.-23.10.13	<b>Switzerland</b> Zurich	30.09.-02.10.13
<b>Germany</b>		Frankfurt	<b>E</b> 16.12.-18.12.13	<b>E</b>	Training in English

# Junos Enterprise Switching (JEX)

**ID** JP-JEX **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

## Course Outline

- Layer 2 Switching**
- » Ethernet Bridging Basics; Terminology & Design Considerations; Overview of Enterprise Switching Platforms; Enabling & Monitoring Layer 2 Switching Operations; Lab 1: Implementing Layer 2 Switching
- Virtual Networks**
- » Overview of VLANs; Configuring and Monitoring VLANs; Voice VLAN; Native VLAN; Routed VLAN Interfaces; Lab 2: Implementing Virtual Networks
- Spanning Tree**
- » Spanning Tree Protocol; Rapid Spanning Tree Protocol; Configuring & Monitoring STP & RSTP; Protection Features: BPDU Protection/

- Loop Protection/Root Protection; Lab 3: Implementing Spanning Tree
- Port Security**
- » MAC Limiting; DHCP Snooping; Dynamic ARP Inspection (DAI); IP Source Guard; Lab 4: Implementing Port Security
- Device Security and Firewall Filters**
- » Storm Control; Firewall Filters; Lab 5: Implementing Storm Control & Firewall Filters

- Virtual Chassis**
- » Overview of Virtual Chassis; Configuring and Monitoring a Virtual Chassis; Lab 6: Implementing Virtual Chassis Systems
- High Availability Features**
- » Overview of High Availability Networks; Link Aggregation Groups; Redundant Trunk Groups; Lab 7: Implementing High Availability Features

### Schedule

<b>Austria</b> Vienna	01.08.-02.08.13	Berlin <b>Switzerland</b> Zurich	28.11.-29.11.13 19.09.-20.09.13	🌱 🌱 🌱	<b>E</b> 14.05.-15.05.13 11.06.-12.06.13 27.08.-28.08.13
<b>Germany</b> Stuttgart Hamburg Stuttgart	18.04.-19.04.13 20.06.-21.06.13 10.10.-11.10.13	<b>Flex™ Classroom</b>	<b>E</b> 15.04.-16.04.13 16.04.-17.04.13	🌱 🌱	<b>E</b> 01.10.-02.10.13 03.12.-04.12.13
					<b>E</b> Training in English

Free JNCIS-ENT (Juniper Networks Certified Internet Specialist Enterprise Routing & Switching) certification exam voucher included!

# Juniper Advanced Junos Enterprise Switching (AJEX)

**ID** JP-AJEX **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

## Course Outline

- Advanced Ethernet Switching**
- » Virtual Local Area Networks; Automating VLAN Administration; Tunneling Layer 2 Traffic; Lab 1: Advanced Ethernet Switching
- Advanced Spanning Tree**
- » Spanning Tree Review; MSTP; VSTP; Lab 2: Advanced Spanning Tree
- Authentication and Access Control**
- » Authentication Overview; Access Control Features; Overview of Authentication Processing; Lab 3: Authentication and Access Control
- Deploying IP Telephony Features**
- » Deployment Scenarios; IP Telephony Features; Case Study: Deploying IP Telephony Features;

- Lab 4: Deploying IP Telephony Features
- Class of Service**
- » Class of Service Review; Processing and Feature Overview; Case Study: Implementing Class of Service; Lab 5: Class of Service
- Monitoring and Troubleshooting Layer 2 Networks**
- » Introduction to Monitoring & Troubleshooting; Monitoring and Troubleshooting Tools; Case Studies; Lab 6: Monitoring & Troubleshooting



Free JNCIP-ENT (Juniper Networks Certified Internet Professional Enterprise Routing & Switching) certification exam voucher included!

### Schedule

<b>Austria</b> Vienna	26.09.-27.09.13	Frankfurt Hamburg	<b>E</b> 18.04.-19.04.13 24.10.-25.10.13	<b>Switzerland</b> Zurich	03.10.-04.10.13
<b>Germany</b>		Hamburg	<b>E</b> 19.12.-20.12.13	<b>E</b>	Training in English

# Service Provider Courses

## Junos Service Provider Switching (JSPX)

Free JNCIS-SP  
(Juniper Networks Certified  
Internet Specialist Service  
Provider Routing & Switching)  
certification exam voucher  
included!

**ID** JP-JSPX **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

### Course Outline

#### Carrier Ethernet

- » Ethernet in the WAN; Ethernet Standards Organizations; MX Series Layer 2 Features

#### Ethernet Switching and Virtual LANs

- » Ethernet LANs; Bridging; Configuring and Monitoring VLANs; Automating VLAN Administration; Configuring and Monitoring IRB; Layer 2 Address Learning & Forwarding; Layer 2 Firewall Filtering; Lab 1: Ethernet Switching and VLANs

#### Virtual Switches

- » Routing Instances Overview; Configuring and Monitoring Virtual Switches; Interconnecting Routing Instances; Lab 2: Virtual Switches

#### Provider Bridging

- » Expanding the Bridged Network; Provider Bridging; Configuring and Monitoring Provider Bridging; Lab 3: Provider Bridging

#### Spanning-Tree Protocols

- » Overview of STP; Overview of RSTP; Overview of MSTP; Overview of VSTP; Configuring and Monitoring Spanning-Tree Protocols; Understanding BPDU, Loop, and Root Protection; Lab 4: MSTP

#### Ethernet OAM

- » OAM Overview; LFM; CFM; Configuring and Monitoring Ethernet OAM; Lab 5: Ethernet OAM

#### High Availability and Network Optimization

- » ERP Overview; Configuring and Monitoring ERP; LAG Overview; Configuring and Monitoring a LAG; Lab 6: High Availability and Network Optimization

### Schedule

Austria		Germany		Switzerland	
Vienna	29.04.-30.04.13	Hamburg	22.07.-23.07.13	Zurich	04.04.-05.04.13
Vienna	30.09.-01.10.13	Duesseldorf	16.09.-17.09.13	Zurich	19.08.-20.08.13
		Frankfurt	25.11.-26.11.13		

## Advanced Junos Service Provider Routing (AJSPR)

**ID** JP-AJSPR **Duration** 4 days **Price** 2.800 EUR / 36 JTC (excl. VAT)

### Schedule

Austria		Germany		Switzerland	
Vienna	29.10.-01.11.13	Munich	09.04.-12.04.13	Berlin	18.06.-21.06.13
				Frankfurt	19.11.-22.11.13
				Zurich	09.04.-12.04.13
				Zurich	10.09.-13.09.13

E Training in English

## Junos Class of Service (JCOS)

**ID** JP-JCOS **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

### Schedule

Austria		Germany		Switzerland		Flex™ Classroom	
Vienna	04.11.-05.11.13	Munich	22.04.-23.04.13	Frankfurt	25.11.-26.11.13	Zurich	15.04.-16.04.13
		Berlin	E 24.06.-25.06.13			Zurich	23.09.-24.09.13
							E 02.09.-03.09.13

E Training in English

## Junos MPLS and VPNs (JMV)

**ID** JP-JMV **Duration** 5 days **Price** 3.490 EUR / 45 JTC (excl. VAT)

### Schedule

Austria		Germany		Switzerland		E Training in English	
Vienna	16.09.-20.09.13	Munich	22.04.-26.04.13	Berlin	E 21.10.-25.10.13	Zurich	26.08.-30.08.13
				Frankfurt	02.12.-06.12.13		

E Training in English

## Junos Multicast Routing (JMR)

**ID** JP-JMR **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

### Schedule

Austria		Germany		Switzerland		E Training in English	
Vienna	06.11.-07.11.13	Berlin	E 26.06.-27.06.13	Frankfurt	27.11.-28.11.13	Zurich	17.04.-18.04.13
						Zurich	25.09.-26.09.13

E Training in English

Free JNCIP-SP  
(Juniper Networks Certified  
Internet Professional Service  
Provider Routing & Switching)  
certification exam voucher  
included!

## Junos Troubleshooting in the NOC (JTNOG)

**ID** JP-JTNOG **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

### Schedule

Austria		Germany		Switzerland	
Vienna	15.04.-16.04.13	Munich	09.09.-10.09.13	Frankfurt	09.12.-10.12.13
				Zurich	13.05.-14.05.13

# Security Courses

## Junos Security (JSEC)

**ID JP-JSEC Duration** 3 days **Price** 1.790 EUR / 23 JTC (excl. VAT)

 Free JNCIS-SEC  
 (Juniper Networks Certified  
 Internet Specialist Junos  
 Security) certification exam  
 voucher included!

### Course Outline

#### Introduction to Junos security platforms

- » Traditional Routing; Traditional Security; Breaking the Tradition; Junos OS Architecture

#### Zones

- » Definition of Zones; Zone Configuration; Monitoring Security Zones; Lab 1: Configuring & Monitoring Zones

#### Security Policies

- » Overview of Security Policy; Policy Components; Verifying Policy Operation; Policy Scheduling & Rematching; Policy Case Study; Lab 2: Security Policies

#### Firewall User Authentication

- » Firewall User Authentication Overview; Pass-Through Authentication; Web Authentication; Client Groups; Using External Authentication Servers; Verifying Firewall User Authentication; Lab 3: Configuring Firewall Authentication

#### SCREEN Options

- » Multilayer Network Protection; Stages & Types of Attacks; Using Junos SCREEN Options: Reconnaissance Attack Handling, Denial of

Service Attack Handling, Suspicious Packets Attack Handling; Applying & Monitoring SCREEN Options; Lab 4: Implementing SCREEN Options

#### Network Address Translation

- » NAT Overview; Source NAT; Destination NAT; Static NAT; Proxy ARP; Monitoring & Verifying NAT Operation; Lab 5: NAT

#### IPsec VPNs

- » VPN Types; Secure VPN Requirements; IPsec Details; Configuration of IPsec VPNs; IPsec VPN Monitoring; Lab 6: Implementing IPsec VPNs

#### Intrusion Detection and Prevention

- » Introduction to Junos IDP; IDP Policy

Components and Configuration; Signature Database; Case Study: Applying the Recommended IDP Policy; Monitoring IDP Operation; Lab 7: Implementing IDP

#### High Availability Clustering

- » High Availability Overview; Chassis Cluster Components; Chassis Cluster Operation; Chassis Cluster Configuration; Chassis Cluster Monitoring; Lab 8: Implementing Chassis Clusters



### Schedule

<b>Austria</b> Vienna	21.08.-23.08.13	<b>Frankfurt</b> <b>Switzerland</b> Zurich	E 13.11.-15.11.13 17.07.-19.07.13 11.12.-13.12.13	  	E 29.07.-31.07.13 E 09.09.-11.09.13 E 07.10.-09.10.13 E 02.12.-04.12.13
<b>Germany</b> Stuttgart	05.06.-07.06.13	<b>Flex™ Classroom</b>	E 11.09.-13.09.13		
Hamburg	17.07.-19.07.13		E 01.04.-03.04.13		
Duesseldorf	E 11.09.-13.09.13		E 27.05.-29.05.13		E Training in English
Frankfurt	06.11.-08.11.13				

## Juniper Advanced Junos Security (AJSEC)

**ID JP-AJSEC Duration** 3 days **Price** 1.790 EUR / 23 JTC (excl. VAT)

### Course Outline

#### Junos Security Review

- » Junos Security Components Overview and Selective Packet-Based Forwarding; Junos Layer 2 Packet Handling; Lab 1: Selective Forwarding

#### Security Policy Components

- » ALG Overview; Junos ALGs; Custom Application Definitions; Advanced Addressing; Policy Matching; Lab 2: Implementing Advanced Security Policy

#### Virtualization

- » Virtualization Overview; Routing Instances; Filter-Based Forwarding; Lab 3: Implementing Junos Virtual Routing

#### Advanced NAT Concepts

- » Operational Review; NAT: Beyond Layer 3 and Layer 4 Headers; Advanced NAT Scenarios;

Lab 4: Advanced NAT Implementations

#### High Availability Clustering

- » High Availability Overview; Chassis Clustering Implementations; Advanced HA Topics; Lab 5: Implementing Advanced High Availability Techniques

#### IPsec Implementations

- » Standard VPN Implementations Review; Public Key Infrastructure; Hub-and-Spoke VPNs; Lab 6: Hub-and-Spoke IPsec VPNs

#### Enterprise IPsec Technologies: Group and

#### Dynamic VPNs

- » Group VPN Overview; GDOI Protocol; Group

VPN Configuration and Monitoring; Dynamic VPN Overview; Dynamic VPN Implementation; Lab 7: Configuring Group VPNs

#### IPsec VPN Case Studies and Solutions

- » Routing over VPNs; IPsec with Overlapping Addresses; Dynamic Gateway IP Addresses; Enterprise VPN Deployment Tips and Tricks; Lab 8: OSPF over GRE over IPsec VPNs

#### Troubleshooting Junos Security

- » Troubleshooting Methodology; Troubleshooting Tools; Identifying IPsec Issues; Lab 9: Performing Security Troubleshooting Techniques

### Schedule

<b>Austria</b> Vienna	19.08.-21.08.13	Hamburg Munich Frankfurt	01.07.-03.07.13 21.10.-23.10.13 09.12.-11.12.13	<b>Switzerland</b> Zurich	13.05.-15.05.13 02.12.-04.12.13
<b>Germany</b> Munich	13.05.-15.05.13				

## Implementing Intrusion Detection & Prevention Products (IIDP)

**ID JP-IIDP Duration** 3 days **Price** 1.790 EUR / 23 JTC (excl. VAT)

### Schedule

<b>Austria</b> Vienna	05.08.-07.08.13	<b>Germany</b> Duesseldorf	19.08.-21.08.13	Berlin	14.10.-16.10.13	<b>Switzerland</b> Zurich	04.11.-06.11.13
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## Junos Unified Threat Management (JUTM)

Free JNCIS-SEC  
(Juniper Networks Certified  
Internet Specialist Junos  
Security) certification exam  
voucher included!

**ID** JP-JUTM **Duration** 1 day **Price** 690 EUR / 9 JTC (excl. VAT)

### Course Outline

#### UTM Overview

- » Branch Office Challenges; UTM Feature Overview; Design Basics; Hardware Support; Licensing of Features; Lab 1: Connecting to the Lab Equipment and Testing Connectivity

#### Antispam

- » Antispam Terminology; Overview of Antispam Process; UTM Policy Overview; Configuration Steps; Monitoring Antispam; Lab 2: Configuring an Antispam Policy

#### Full File-Based and Express Antivirus

- » Antivirus Terminology; Overview of Antivirus Process; AV Operation; Full File-based AV Configuration; Express AV Configuration Monitoring AV; Lab 3: Antivirus Configuration & Testing

#### Content and Web Filtering

- » Overview & Terminology; Configuration; Verification & Monitoring; Lab 4: Configuring Content & Web Filtering



#### Schedule

<b>Austria</b>		Frankfurt	11.11.13
Vienna	26.08.13	Frankfurt	E 8.11.13
<b>Germany</b>		<b>Switzerland</b>	
Munich	10.06.13	Zurich	22.07.13
Hamburg	22.07.13	Zurich	16.12.13
Duesseldorf	E 16.09.13	E Training in English	

## Junos Intrusion Prevention System Functionality (JIPS)

Free JNCIP-SEC  
(Juniper Networks Certified  
Internet Professional Junos  
Security) certification exam  
voucher included!

**ID** JP-JIPS **Duration** 2 days **Price** 1.390 EUR / 18 JTC (excl. VAT)

### Course Outline

#### Overview of IPS Functionality

- » Reasons for Network Attacks; Categories of Attacks; Anatomy of an Attack; IPS Mechanisms on SRX Series Devices; Lab 1: Initial Configuration

#### Initial Device Configuration

- » Deployment Options for IPS Functionality; Management Options; Network Settings; Preparing the SRX Series Device for IPS Features; Lab 2: Initial IDP Setup

#### IPS Terminology and Concepts

- » Terminology Overview; Attack Objects; IPS Rulebase Details; Rule Match Conditions; Rule Actions; Terminal Rules; IP Actions; Notification; Terminology Review; IPS Traffic Flow; Lab 3: Examining and Modifying the Recommended Policy; Lab 4: Exempt Rulebase; Lab 5: Rule Actions

#### IPS Attack Objects

- » IPS Rules and Rulebases; Attack Objects; Custom Signatures; Lab 6: Custom Signatures

#### Scanning and Reconnaissance

- » Overview of Scanning; Types of Scans; Fingerprinting; IPS Scan Prevention

#### Blocking Evasion Techniques and Denial of Service

- » FIN Scans; IP Spoofing; IP Source Routing Options; DoS and DDoS Attacks; Mechanisms for Blocking DoS and DDoS; Lab 7: Detecting Evasion Attempts; Lab 8: Denial of Service

#### Reporting

- » NSM Reports; Junos Syslog and Operational Commands



#### Schedule

<b>Austria</b>		Munich	E 06.06.-07.06.13	<b>Switzerland</b>	
Vienna	22.08.-23.08.13	Hamburg	04.07.-05.07.13	Zurich	16.05.-17.05.13
<b>Germany</b>		Munich	24.10.-25.10.13	Zurich	05.12.-06.12.13
Frankfurt	E 11.04.-12.04.13	Frankfurt	12.12.-13.12.13		
Munich	16.05.-17.05.13	Frankfurt	E 19.12.-20.12.13	E Training in English	

## Junos Pulse Courses

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## Junos Pulse Secure Access (JPSA)

Free JNCIS-SA (Juniper  
Networks Certified Internet  
Specialist Junos Pulse Secure  
Access) certification exam  
voucher included!

**ID** JP-JPSA **Duration** 4 days **Price** 2.790 EUR / 36 JTC (excl. VAT)

#### Schedule

<b>Austria</b>		<b>Germany</b>		Hamburg	E 25.11.-28.11.13	Zurich	07.10.-10.10.13
Vienna	22.04.-25.04.13	Hamburg	13.05.-16.05.13	Berlin	02.12.-05.12.13	E Training in English	
Vienna	19.08.-22.08.13	Frankfurt	16.09.-19.09.13	<b>Switzerland</b>			

## Junos Pulse Access Control (JPAC)

Free JNCIS-AC  
(Juniper Networks Certified  
Internet Specialist Junos Pulse  
Access Control) certification  
exam voucher included!

**ID** JP-JPAC **Duration** 3 days **Price** 1.790 EUR / 23 JTC (excl. VAT)

#### Schedule

<b>Austria</b>		<b>Germany</b>		Frankfurt	E 25.11.-27.11.13	<b>Switzerland</b>		E Training in English
Vienna	02.09.-04.09.13	Frankfurt	12.08.-14.08.13	Zurich	10.06.-12.06.1			

# Firewall / VPN Courses


## Advanced Juniper Networks IPSec VPN Implementation (AJVI)

<b>ID</b> JP-AJVI	<b>Duration</b> 2 days	<b>Price</b> 1.390 EUR / 18 JTC (excl. VAT)			
<b>Schedule</b>					
<b>Austria</b>		<b>Germany</b>		<b>Switzerland</b>	
Vienna	11.04.-12.04.13	Frankfurt	E 18.04.-19.04.13	Zurich	27.06.-28.06.13
Vienna	10.10.-11.10.13	Berlin	10.10.-11.10.13	E Training in English	



## Attack Prevention with Juniper Networks Firewalls (APJF)


<b>ID</b> JP-APJF	<b>Duration</b> 1 day	<b>Price</b> 690 EUR / 9 JTC (excl. VAT)			
<b>Schedule</b>					
<b>Austria</b>		<b>Germany</b>		<b>Switzerland</b>	
Vienna	15.04.-15.04.13	Frankfurt	E 22.04.-22.04.13	Zurich	01.07.-01.07.13
Vienna	14.10.-14.10.13	Berlin	14.10.-14.10.13	E Training in English	



Free JNCIS-FWV (Juniper Networks Certified Internet Specialist Firewall/VPN) certification exam voucher included!

## Configuring Juniper Networks Firewall/IPSec VPN Products (CJFV)

<b>ID</b> JP-CJFV	<b>Duration</b> 3 days	<b>Price</b> 1.790 EUR / 23 JTC (excl. VAT)			
<b>Schedule</b>					
<b>Austria</b>		<b>Germany</b>		<b>Switzerland</b>	
Vienna	29.07.-31.07.13	Frankfurt	22.04.-24.04.13	Zurich	13.05.-15.05.13
Vienna	18.11.-20.11.13	Duesseldorf	E 19.08.-21.08.13	Zurich	28.10.-30.10.13
		Frankfurt	25.11.-27.11.13	E Training in English	



## Integrating Juniper Networks Firewalls and VPNs into High Performance Networks (IFVH)

<b>ID</b> JP-IFVH	<b>Duration</b> 3 days	<b>Price</b> 1.790 EUR / 23 JTC (excl. VAT)			
<b>Schedule</b>					
<b>Austria</b>		<b>Germany</b>		<b>Switzerland</b>	
Vienna	08.04.-10.04.13	Frankfurt	E 15.04.-17.04.13	Zurich	24.06.-26.06.13
Vienna	07.10.-09.10.13	Berlin	07.10.-09.10.13	E Training in English	

# Network Management Courses

## Network and Security Manager Fundamentals (NSMF)

<b>ID</b> JP-NSMF	<b>Duration</b> 2 days	<b>Price</b> 1.390 EUR / 18 JTC (excl. VAT)			
<b>Schedule</b>					
<b>Austria</b>		<b>Germany</b>		<b>Switzerland</b>	
Vienna	01.08.-02.08.13	Frankfurt	25.04.-26.04.13	Zurich	28.11.-29.11.13
Vienna	21.11.-22.11.13	Duesseldorf	E 22.08.-23.08.13	Zurich	31.10.-01.11.13
				Zurich	16.05.-17.05.13
				E Training in English	

## Configuring Security Threat Response Manager (CSTRM)

<b>ID</b> JP-CSTRM	<b>Duration</b> 2 days	<b>Price</b> 1.390 EUR / 18 JTC (excl. VAT)			
<b>Schedule</b>					
<b>Austria</b>		<b>Germany</b>		<b>Switzerland</b>	
Vienna	01.07.-02.07.13	Duesseldorf	18.11.-19.11.13	Zurich	22.04.-23.04.13

## Wireless Courses

### Introduction to Juniper Networks Wireless LANs (IJWL)

<b>ID</b> JP-IJWL	<b>Duration</b> 4 days	<b>Price</b> 2.790 EUR / 36 JTC (excl. VAT)
<b>Schedule</b>		
<b>Germany</b> Munich	Hamburg	<b>Switzerland</b> Zurich
E 02.09.-05.09.13	E 11.11.-14.11.13	E 29.07.-01.08.13
E Training in English		

### Advanced Juniper Networks Wireless LANs (AJWL)

<b>ID</b> JP-AJWL	<b>Duration</b> 4 days	<b>Price</b> 2.790 EUR / 36 JTC (excl. VAT)
<b>Schedule</b>		
<b>Germany</b> Munich	Hamburg	<b>Switzerland</b> Zurich
E 09.09.-12.09.13	E 18.11.-21.11.13	E 05.08.-08.08.13
E Training in English		

Free JNCIS-WLAN  
(Juniper Networks Certified  
Internet Specialist Wireless LAN)  
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included!

## Junos Software Courses

### Junos Automation (JAUT)

<b>ID</b> JP-JAUT	<b>Duration</b> 2 days	<b>Price</b> 1.390 EUR / 18 JTC (excl. VAT)
<b>Schedule</b>		
<b>Austria</b> Vienna	<b>Germany</b> Munich	<b>Switzerland</b> Zurich
15.07.-16.07.13	18.11.-19.11.13	03.06.-04.06.13

### Junos Subscriber Management (JSM)

<b>ID</b> JP-JSM	<b>Duration</b> 3 days	<b>Price</b> 1.790 EUR / 23 JTC (excl. VAT)
<b>Schedule</b>		
<b>Austria</b> Vienna	<b>Germany</b> Duesseldorf	<b>Switzerland</b> Zurich
10.06.-12.06.13	07.10.-09.10.13	02.09.-04.09.13

### Junos IP version 6 (J-IPV6)

<b>ID</b> JP-J-IPV6	<b>Duration</b> 2 days	<b>Price</b> 1.390 EUR / 18 JTC (excl. VAT)
<b>Schedule</b>		
<b>Germany</b> Stuttgart	Munich	
01.07.-02.07.13	09.12.-10.12.13	E Training in English
	Frankfurt	E 09.12.-10.12.13



## Junos Space Courses

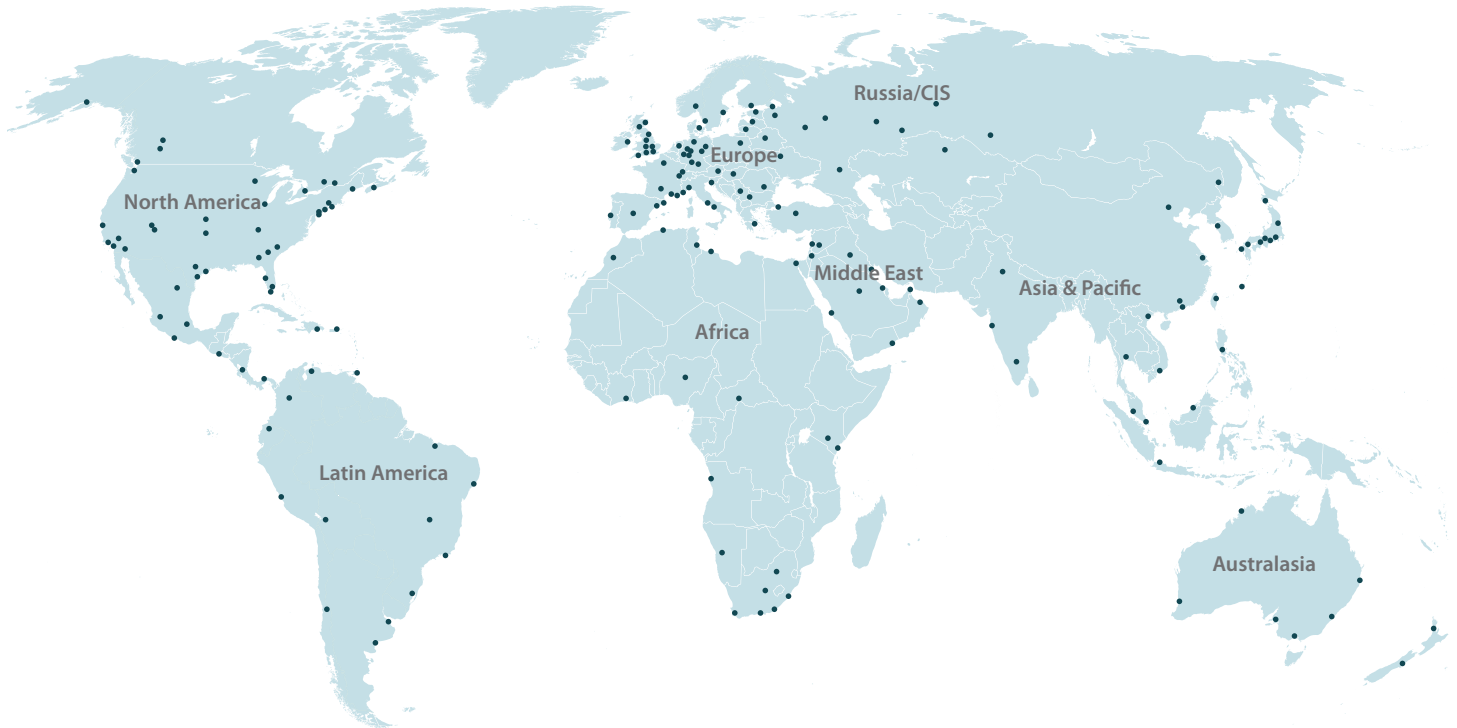
### Junos Space (SPACE-W)

<b>ID</b> JP-SPACE-W	<b>Duration</b> 2 days	<b>Price</b> 1.390 EUR/18 JTC
<b>Schedule</b>		
<b>Germany</b> Stuttgart	06.06.-07.06.13	
Munich	05.12.-06.12.13	

### Junos Space Essentials (JSE)

<b>ID</b> JP-JSE	<b>Duration</b> 2 days	<b>Price</b> 1.390 EUR/18 JTC (excl. VAT)
<b>Schedule</b>		
<b>Germany</b> Hamburg	18.04.-19.04.13	<b>Flex™ Classroom</b> E 15.04.-16.04.13
Stuttgart	19.12.-20.12.13	E 13.05.-14.05.13
		E 10.06.-11.06.13
E Training in English		E 09.09.-10.09.13

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