Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

Arrow ECS, Nidderdale House, Beckwith Knowle, Harrogate, HG3 1SA

Email: educationteam.ecs.uk@arrow.com
Phone: 0870 251 1000

Advanced Juniper Security (AJSEC)

CODE:	LENGTH:	PRICE:
JUN_AJSEC	32 Hours (4 days)	£2,695.00

Description

This four-day course, which is designed to build off the current Juniper Security (JSEC) offering, delves deeper into Junos security, next-generation security features, and ATP supporting software.
Through demonstrations and hands-on labs, you will gain experience in configuring and monitoring the advanced Junos OS security features with advanced coverage of advanced logging and reporting, next generation Layer 2 security, next generation advanced anti-malware with Juniper ATP On-Prem and SecIntel.
This course uses Juniper Networks SRX Series Services Gateways for the hands-on component.
This course is based on Junos OS Release 20.1R1.11, Junos Space Security Director 19.4, Juniper ATP On-Prem version 5.0.7, and Juniper Secure Analytics 7.4.0.

Course Level Advanced Junos Security (AJSEC) is an advanced-level course. Relevant Juniper Product

- Security
- Junos OS
- SRX Series
- vSRX Series
- Sky ATP
- SDSN

Objectives

- Demonstrate understanding of concepts covered in the prerequisite Juniper Security courses.
- Describe the various forms of security supported by the Junos OS.
- Describe the Juniper Connected Security model.
- Describe Junos security handling at Layer 2 versus Layer 3.
- Implement next generation Layer 2 security features.
- Demonstrate understanding of Logical Systems (LSYS).
- Demonstrate understanding of Tenant Systems (TSYS).
- Implement virtual routing instances in a security setting.
- Describe and configure route sharing between routing instances using logical tunnel interfaces.
- Describe and discuss Juniper ATP and its function in the network.
- Describe and implement Juniper Connected Security with Policy Enforcer in a network.
- Describe firewall filters use on a security device.
- Implement firewall filters to route traffic.
- Explain how to troubleshoot zone problems.
- Describe the tools available to troubleshoot SRX Series devices.
- Describe and implement IPsec VPN in a hub-and-spoke model.
- Describe the PKI infrastructure.
- Implement certificates to build an ADVPN network.
- Describe using NAT, CoS and routing protocols over IPsec VPNs.
- Implement NAT and routing protocols over an IPsec VPN.
- Describe the logs and troubleshooting methodologies to fix IPsec VPNs.
- Implement working IPsec VPNs when given configuration that are broken.
- Describe Incident Reporting with Juniper ATP On-Prem device.
- Configure mitigation response to prevent spread of malware.
- Explain SecIntel uses and when to use them.
- Describe the systems that work with SecIntel.
- Describe and implement advanced NAT options on the SRX Series devices.
- Explain DNS doctoring and when to use it.
- Describe NAT troubleshooting logs and techniques.

Audience

This course benefits individuals responsible for implementing, monitoring, and troubleshooting Junos security components.

Prerequisites

Students should have a strong level of TCP/IP networking and security knowledge.
Students should also attend the Introduction to the Junos Security (IJSEC) and Junos Security (JSEC) courses prior to attending this class.

Programme

Junos Layer 2 Packet Handling and Security Features
• Transparent Mode Security
• Secure Wire
• Layer 2 Next Generation Ethernet Switching
• MACsec
LAB 1: Implementing Layer 2 Security

Firewall Filters
• Using Firewall Filters to Troubleshoot
• Routing Instances
• Filter-Based Forwarding
Day 1 Course Introduction LAB 2: Implementing Firewall Filters

Troubleshooting Zones and Policies
• General Troubleshooting for Junos Devices
• Troubleshooting Tools
• Troubleshooting Zones and Policies
• Zone and Policy Case Studies
LAB 3: Troubleshooting Zones and Policies

Hub-and-Spoke VPN
• Overview
• Configuration and Monitoring
LAB 4: Implementing Hub-and-Spoke VPNs

Advanced NAT
• Configuring Persistent NAT
• Demonstrate DNS Doctoring
• Configure IPv6 NAT Operations
• Troubleshooting NAT
LAB: 5: Implementing Advanced NAT Features

PKI and ADVPNs
• PKI Overview
• PKI Configuration
• ADVPN Overview
• ADVPN Configuration and Monitoring
LAB 7: Implementing ADVPNs

Logical and Tenant Systems
• Overview
• Administrative Roles
• Differences Between LSYS and TSYS
• Configuring LSYS
• Configuring TSYS
Day 2 LAB 6: Implementing TSYS

Advanced IPsec
• NAT with IPsec
• Class of Service with IPsec
• Best Practices
• Routing OSPF over VPNs
Day 3 LAB 8: Implementing Advanced IPsec Solutions

Troubleshooting IPsec
• IPsec Troubleshooting Overview
• Troubleshooting IKE Phase 1 and 2
• IPsec Logging
• IPsec Case Studies
LAB 9: Troubleshooting IPsec

SecIntel
• Security Feed
• Encrypted Traffic Analysis
• Use Cases for SecIntel
LAB 10: Implementing SecIntel

Juniper Connected Security
• Security Models
Day 4 • Enforcement on Every Network Device

Advanced Juniper ATP On-Prem
• Collectors
• Private Mode
• Incident Response
• Deployment Models
LAB 11: Implementing Advanced ATP On-Prem

Automated Threat Mitigation
• Identify and Mitigate Malware Threats
• Automate Security Mitigation
LAB 12: Identifying and Mitigating Threats
Please note that the following Appendix are not covered as standard during the training course unless requested by the customer, and agreed with Arrow, upon booking:
Group VPNs
• Overview
• Implementing Group VPNs

Follow on courses

Recommended Next Course JNCIE-SEC Bootcamp

Test and Certification

Exams can be purchased and scheduled at an additional cost – please ask for details.

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
24 Jun 2024	Virtual Classroom	BST	English	Instructor Led Online		~~£ 2,695.00~~ £2,425.50
30 Sep 2024	Virtual Classroom	BST	English	Instructor Led Online		£2,695.00
16 Dec 2024	Virtual Classroom	GMT	English	Instructor Led Online		£2,695.00

Additional Information

This training is also available as onsite training. Please contact us to find out more.