WUVN

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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JUNIPER Advanced Juniper Security (AJSEC)

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.

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

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

- 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

Logical and Tenant Systems

- Overview
- Administrative Roles
- Differences Between LSYS and TSYS
- Configuring LSYS
- Configuring TSYS
- Day 2 LAB 6: Implementing TSYS
- **Troubleshooting IPsec**
- IPsec Troubleshooting Overview
- Troubleshooting IKE Phase 1 and 2
- IPsec Logging
- IPsec Case Studies
- LAB 9: Troubleshooting IPsec
- 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

- **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
- PKI and ADVPNs PKI Overview
- PKI Configuration
- ADVPN Overview
- ADVPN Configuration and Monitoring LAB 7: Implementing ADVPNs
- Advanced IPsec
- NAT with IPsec
- Class of Service with IPsec
- Best Practices
- Routing OSPF over VPNs
- Day 3 LAB 8: Implementing Advanced IPsec Solutions
 - SecIntel
 - Security Feed
 - Encrypted Traffic Analysis
- Use Cases for SecIntel Day 4 • Enforcement on Every Network Device LAB 10: Implementing SecIntel

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- Security Models
- Juniper Connected Security

Test and Certification

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

Session Dates

Date	Location	Time Zone	Language	Туре	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.