Juniper JNCIA Security





JunOS Security Overview

- 1. Junos security architecture
- 2. Branch vs. high-end platforms
- 3. Major hardware components of SRX Series services gateways
- 4. Packet flow
- 5. Packet-based vs. session-based forwarding

Zones

- 1. Zone types
- 2. Dependencies
- 3. Host inbound packet behavior
- 4. Screens
- 5. Transit packet behavior
- 6. Zone configuration steps
- 7. Hierarchy priority (Inheritance)
- 8. Screens
- 9. Monitoring and troubleshooting

Security Policies

- 1. Policy types
- 2. Policy components
- 3. Policy ordering
- 4. Host inbound traffic examination
- 5. Transit traffic examination
- 6. Scheduling
- 7. Rematching
- 8. ALGs
- 9. Address books
- 10. Applications
- 11. Policies
- 12. ALGs
- 13. Address books
- 14. Custom applications
- 15. Monitoring and troubleshooting



NAT

- 1. NAT types
- 2. NAT/PAT processing
- 3. DNS Doctoring
- 4. Cone NAT
- 5. IPv4 to IPv6
- 6. Address persistence
- 7. NAT proxy ARP
- 8. NAT configuration steps
- 9. Monitoring and troubleshooting

IPSec VPN

- 1. Secure VPN characteristics and components
- 2. IPSec tunnel establishment
- 3. IPSec traffic processing
- 4. Group VPN
- 5. ADVPN
- 6. PKI
- 7. Dynamic VPN
- 8. Junos OS IPsec implementation options
- 9. IPSec VPN configuration steps
- 10. Monitoring and troubleshooting

Virtual SRX

- 1. Installation
- 2. Clustering with vSRX
- 3. Deployment scenarios
- 4. Troubleshooting



Routing Policy and Firewall Filters

- 1. HA features and characteristics
- 2. Deployment requirements and considerations
- 3. Chassis cluster characteristics and operation
- 4. Cluster modes
- 5. Cluster and node IDs
- 6. Redundancy groups
- 7. Cluster interfaces
- 8. Real-time objects
- 9. State synchronization
- 10. Ethernet switching considerations
- 11. IPSec considerations
- 12. Manual failover
- 13. Cluster preparation
- 14. Cluster configuration steps
- 15. Monitoring and troubleshooting

