# INFOSOFT IT SOLUTIONS

## Training | Projects | Placements

**Revathi Apartments, Ameerpet, 1st Floor, Opposite Annapurna Block, Info**

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## JUNIPER NETWORKS CERTIFIED INTERNET SPECIALIST

### Networking Fundamentals

- OSI model and TCP/IP fundamentals
- IPv4 and IPv6 addressing, subnetting, and super netting
- Ethernet LAN technologies and concepts

### Junos OS Fundamentals

- Junos OS architecture and components
- Junos CLI (Command-Line Interface) navigation and basic operational commands
- Configuration management: loading, saving, and rolling back configurations
- Software upgrades and installations
- Monitoring and troubleshooting Junos devices using CLI tools

**Routing Technologies**

- Routing fundamentals and principles
- Static routing configuration and verification
- OSPF (Open Shortest Path First) configuration and verification
- BGP (Border Gateway Protocol) basics, configuration, and verification

**Switching Technologies**

- VLANs (Virtual LANs) concepts, configuration, and verification
- Spanning Tree Protocol (STP) and Rapid Spanning Tree Protocol (RSTP) fundamentals
- Virtual Chassis technology overview and basic configuration

**Security**

- Junos security architecture and zones
- Firewall filters: concepts, configuration, and verification
- IPsec VPN (Virtual Private Network) basics, configuration, and verification

**Junos Troubleshooting**

- Troubleshooting methodology and best practices
- Junos OS monitoring tools and techniques
- Troubleshooting common network issues on Junos devices

### High Availability (HA) Technologies

- Redundancy groups and configuration
- Graceful Restart and Nonstop Active Routing (NSR)
- Virtual Router Redundancy Protocol (VRRP) basics and configuration

### Automation and Scripting

- Introduction to automation in Junos
- Overview of Junos automation tools: Junos automation scripts, commit scripts
- Basic understanding of NETCONF, REST API, and YANG for network automation

### Additional Topics

- MPLS (Multiprotocol Label Switching) fundamentals and concepts
- Quality of Service (QoS) basics and configuration on Junos devices
- Network management and monitoring tools overview

## Networking Fundamentals

- **OSI Model and TCP/IP:** In-depth understanding of each layer, protocols, and their functions.
- **IPv4 and IPv6 Addressing:** Advanced subnetting, VLSM (Variable Length Subnet Masking), CIDR (Classless Inter-Domain Routing).
- **Ethernet LAN Technologies:** Advanced concepts including Ethernet switching, VLANs, trunking, and EtherChannel.

## Junos OS Fundamentals

- **Junos OS Architecture:** Detailed understanding of the control plane, forwarding plane, and how they interact.
- **Junos CLI:** Advanced commands, scripting, and automation using CLI.
- **Configuration Management:** Advanced techniques for configuration deployment, rollback, and rescue configuration.

## Routing Technologies

- **Routing Policy:** Advanced routing policy and firewall filters.
- **OSPF:** Advanced features, such as OSPF areas, virtual links, route summarization, and authentication.
- **BGP:** Advanced configuration and troubleshooting, including route reflectors, route selection criteria, communities, and scaling techniques.

## Switching Technologies

- **Layer 2 Switching:** Advanced spanning tree protocols (STP, RSTP, MSTP), VLANs, private VLANs, and advanced switching operations.
- **Virtual Chassis:** Configuration and operation of Virtual Chassis and Virtual Chassis Fabric.

## Security

- **Junos Security Policies:** Advanced security zones, security policy configuration and optimization, and application-layer gateways (ALGs).
- **IPsec VPNs:** Advanced VPN configurations including route-based VPNs, dynamic VPNs, and troubleshooting VPN connections.

## Junos Troubleshooting

- **Troubleshooting Methodology:** Advanced troubleshooting techniques, including traffic monitoring, flow analysis, and packet capture.
- **Network Monitoring:** Advanced use of Junos operational monitoring tools, SNMP, syslog, and event policies.

## High Availability (HA) Technologies

- **Redundancy Protocols:** Advanced configuration of VRRP, GR (Graceful Restart), and NSR (Nonstop Active Routing).
- **Chassis Cluster:** Configuration and operation of chassis clustering for high availability.

## Automation and Scripting

- **Junos Automation:** Advanced scripting using SLAX, XSLT, Python, or other automation languages.
- **NETCONF, REST API, and YANG:** Advanced understanding and usage for network automation and programmability.