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## PRATAP REDDY SIVAREDDY

Network Security Engineer

[pratapreddy.sivareddy@gmail.com](mailto:pratapreddy.sivareddy@gmail.com) | +1 269 220 4637 | [Linked In](#)

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### Professional Summary:

- **CCNA, CCNP** certified professional with over **11+ years** of experience as **Network Security Engineer** and **Network Engineer** in Design, Implementation, Troubleshooting and Support.
- Served as **Associate Team Lead** for the Network Engineering team.
- Taking **proactive approach** in resolving network hardware and software problems quickly and efficiently with minimal impact to end users.
- Expertise in the areas of **Routing, Switching, Firewalls, Load Balancers, Wireless, ACI, SD-WAN** and **Cloud**.
- Strong foundation in **TCP and UDP protocols**. In-depth knowledge and hands-on experience in network protocols **ARP, HTTP, TCP/IP, NAT, ACL, DHCP, DNS, SNMP** and **SMTP**.
- Expertise in Static Routing and routing protocols such as **RIP, EIGRP, OSPF, and BGP**.
- Skilled in configuring **GRE Tunnels, Site-to-Site, IPSEC VPN, GRE over IPSEC, NAT, PAT, Route-maps, Prefix list and Security ACLs**.
- Configured and deployed remote VPN **Palo Alto Global Connect** and **Cisco AnyConnect** Gateways.
- Experienced in High Availability Technologies such as **VSS, Stackwise Virtual, vPC, and MLAG**.
- Skilled in Switching protocols including **VTP, VLANs, PVLAN, STP, PVSTP, RSTP, MSTP, HSRP, VRRP, and GLBP**.
- Configured and deployed **VXLANs, BGP EVPN** in Data centers for **Spine, leaf** architecture and extension of **VLANs** across
- Hands-on experience configuring and troubleshooting **Aruba Airwave, Aruba Central, Cisco Wireless Networks**, includes **LWAPP, CAPWAP, WLC, WCS, Autonomous APs, Roaming, Flex connect, Cisco Prime, fundamentals of wireless security, IEEE 802.11 a/b/g/ac standards** and **wireless RF spectrum behaviors**.
- Hands on experience with the configuration of **Route 53, NAT, VPC** and **subnets** through Amazon Web Services (AWS).
- Extensive knowledge of **LAN/WAN** architecture analysis, implementation, troubleshooting, and documentation, as well as strong **MPLS** and **IP service** experience
- Understanding the **JUNOS platform** and worked with JUNOS upgrade of **Juniper** devices.
- Hands on experience with configuration and Deployment of **Cisco ACI, Cisco DNA** and **Cisco Identity Services Engine (ISE)** for efficient management of Network Infrastructure.
- Proficient in working with datacenter switches **Nexus 9k, 7k, 5k, 2k Switches** and **Arista 7200 and 7500** Series switches Including **Leaf and Spine** architecture.
- Cloud computing with **AWS and Azure**.
- Hands-on experience on **F5 LTM, GTM** series 6400, 6800, 8800 for the corporate applications and their availability. Experience on **Virtual Servers, Pools, Persistence, SNAT, iRules, Listener IP's, WideIP's, SSL, HTTP** and **TCP headers**.
- Proficient in working with various Cisco routers, including models **2600, 2700, 2800, 2900, 3800, 3900, 7200, ISR4300, ISR 4400, ASR1001, ASR1002** and **ASR9000**.
- Skilled in managing Cisco switches, including **Linksys, SG500, Cisco catalyst 2900,3500, 3650, 3750, 4500, 6500, 9100, 9300, 9500**
- Experienced in **Palo Alto Firewalls, including models 3220, 3250,5050, Panorama, and Cisco ASA**.

- Configuring and troubleshooting **Juniper MX960, MX480 router and Juniper SRX 210, SRX 1400, SRX4200** firewalls.
- Expert in configuring Cisco **Wireless controllers 4400, 5500** and **Access Points 1231, 1242, 3500, 3602, 2602, 3702**.
- Extensive hands-on experience with Palo Alto Firewalls, including **User-ID and App-ID** functionalities.
- Experience in creating and monitoring high availability, scalable, networks in AWS using **EC2, Lambda, VPC and other AWS** services.
- Experience with setting up AWS direct connect to **Amazon S3, Amazon EC2, Amazon VPC**.
- Hands-on experience with IPv4 Multicast networks, including **Sparse mode, Dense mode, and PIM**.

### Certifications:

- **CCNP Route** [642-902] – Cisco Certified Network Professional – CSC012148623
- **CCNP Switch** [642-813] - Cisco Certified Network Professional - CSC012148623
- **CCNP TSHOOT** [300-135] - Cisco Certified Network Professional - CSC012148623
- **CCNA** – Cisco Certified Network Associate - CSC012148623

### Technical Skills:

<b>Security</b>	Palo Alto Firewalls, ASA Firewalls, Juniper SRX Firewalls, Checkpoint, FortiGate, Bluecoat Proxy ,Zscaler Proxy, ACL, NAT and VPNs (IPSec over GRE), Certificates signing, VPN, User-ID, App-ID, Cisco ISE (ACS) Radius server
<b>Routing</b>	Static Routing, RIP, EIGRP, OSPF, BGP, Route Filtering, Redistribution, Summarization, Multicast routing, Virtual Routing Forwarding (VRF)
<b>Switching</b>	Cisco Nexus, CatOS and IOS based Switches, Arista EOS, STP, PVST, RSTP, Trunking, LACP, PAGP, port bundling Ether Channels, Port-Channel, VLAN, PVLAN, dot1q, Layer 3 Switches, Inter VLAN routing, Layer 3 High Availability-HSRP, VRRP and GLBP
<b>Wireless</b>	Cisco Aironet, Meraki, Aruba, Flex connect, Roaming, LWAPP, CAPWAPP, IEEE 802.11 a/b/g/ac
<b>Load Balancers</b>	F5 Networks, A10 Networks, Virtual Servers, Pools, Persistence, SNAT, iRules
<b>Monitoring Tools</b>	Wireshark, Syslog, Splunk, SolarWinds, SNMP, Grafana, ICINGA, Nagios, Whatsup Gold, IBM Tivoli, Netcool, eHealth, CA Spectrum, SolarWinds
<b>DNS &amp; DHCP</b>	Infoblox
<b>Ticketing Tools</b>	ServiceNow, CA Service Desk, Remedy, Inbuilt tool – RPD
<b>WAN Technology</b>	Frame Relay, MPLS, Point to Point
<b>Application Protocols</b>	DHCP, DNS, FTP, HTTP, HTTPS, SMTP, TFTP, SSH, Telnet, RDP, RTP, ICMP
<b>Wireless</b>	Cisco Wireless, Aruba Wireless, Cisco Prime, 802.11a/b/g/n, Air Magnet, LWAPP, CAPWAP, Flex Connect, Roaming WCS, WLC and APs
<b>Operating Systems</b>	Windows, Linux, Kali Linux, Ubuntu.

## Professional Summary:

**FOX Corporation – Tempe, AZ | | October 2023 – Present**

### **Sr Network Engineer**

#### Responsibilities:

- Designed and deployed **Cisco** and **Arista** Networks for new offices and expansions, ensuring reliable network connectivity.
- Worked with a range of **Cisco switches, Arista switches, Cisco routers, Aruba Accesspoints and PaloAlto Firewalls**.
- Successfully transitioned Datacenter from Cisco **legacy 3-tier** architecture to Arista **spine-and-leaf architecture**, enhancing **network performance, scalability, and reliability**.
- Worked on routing protocols such as **OSPF, EIGRP and BGP** for efficient network routing.
- Worked on Layer 2 protocols such as **STP, PortFast, Uplink Fast, Backbone Fast, LACP, PAgP, VTP, RSTP, PVSTP+, MST** and other **VLAN** troubleshooting issues and configuring switches from scratch and deployment.
- Designed and implemented **Palo Alto firewalls** for new office setups and expansions, ensuring robust network security.
- Conducted **code upgrades on Palo Alto Firewalls**, staying up to date with the latest firmware versions.
- Upgraded standalone firewalls to **high-availability (HA)** configurations, improving network resilience.
- Resolved **User-ID and App-ID** issues on **Palo Alto**, ensuring accurate identification and control of network traffic.
- Created runbook for implementation of **Mini Kits** which include **Arista 7020** switches along with **PA 850** series firewalls to establish connection with DCs over **BGP** or **IPSec Tunnel** for all live sports events.
- Building and Supporting **Arista Spine & leaf** architecture with **MLAG** and **VXLAN** architecture.
- Deployment of Arista switches, Upgrading EOS, change automation using **Arista Cloud Vision Portal**.
- Deployment of **VXLAN/EVPN** in an overlay layer2 network on top of layer 3 leaf spine architecture.
- Automation of configuration changes, backup of devices, upgrades of IOS using **Nectus** tool.
- Managed **certificate creations and renewals**, maintaining secure communication channels.
- Troubleshoot and captured traffic using **Wireshark** for efficient issue diagnosis and resolution.
- Configured **IPsec Tunnels** as per requirements, enabling secure communication between networks.
- Utilized **Panorama** for device **provisioning, rule configuration, and URL filtering**.
- Created and managed networks in **Infoblox**, utilizing **DHCP and DNS** services for efficient network management.
- **Automation** of implementation of PaloAlto security rules using **CLI** and minimizing the implementation window and avoidance of manual errors.
- Performing **IOS upgrades** on Cisco routers and switches.
- Maintained and established site-to-site **IPsec tunnels, GRE tunnels, and GRE over IPsec** for secure communication.
- Implementation of **QOS** policies prioritizing Audio Video Traffic using **class maps** and **policy maps**.
- Implementation of **Multicast (PIM Sparse mode and Dense Mode with Rendezvous Point), IGMP** to various Audio Video LANs for providing FOX Sports and other video streaming based application services.
- Troubleshooting and Configuring User **authentication, authorization, accounting** using **Aruba ClearPass**

**FactSet Research Systems Inc. - Hyderabad, Telangana || April 2016 – August 2022**

**Sr Network Security Engineer**

**Responsibilities:**

- Configured and designed LAN networks with Access layer switches such as **Cisco 4510, 4507, 6500** switches.
- Maintaining the Inventory details and updating to client in the weekly deck.
- Perform Network assessment and documentations.
- Creating and managing **VPCs and VNETs** with in **AWS and Azure** accounts.
- Assisted with migration of application/VMs into **cloud** environment (**AWS, Azure**)
- Assigning user permissions adhering to privileges based on role using **AWS IAM** and **Azure Active Directory**.
- Configuration, Deployment and integration of **Catalyst 9400 and 9500** switched through **cisco DNA**.
- Hands on experience with configuring templates, network profiles **Day-0** provisioning using **Cisco DNA Center**.
- Designed **AWS Transit Gateway** to consolidate ingress/egress traffic to existing edge technology.
- Designed **Hybrid Cloud** networking which included perimeter firewalls between on-prem to cloud environments **AWS, Azure**.
- Successful implementation of **Cisco DNA Center** to **automate** network provisioning, monitoring, and troubleshooting, resulting in a 40% reduction in deployment time.
- Deployment and troubleshooting of **Cisco ACI**, including implementation of **LTM and APM**.
- Managing communication with different **VPCs** using concepts like VPC peering between organizations and **firewall** rules.
- Implemented **Cisco Application Centric Infrastructure (ACI)** as a solution for data centers using a Spine and Leaf architecture.
- Worked on nexus 9000 series switches that supports SDN with **Cisco Application Centric Infrastructure (ACI)**
- Monitor and maintain user security, user accounts and system accesses levels on the LAN.
- Configured, implemented and troubleshoot cisco **Nexus 7k, 5k, 2k** series switches.
- Replaced Cisco Firewalls to **Juniper SRX** firewalls.
- Worked on Juno OD and **Juniper M&T** series switches.
- Configuring and enabling **aaa authentication** on network devices and integrating it with **Cisco ISE** (Cisco Identity Service engine)
- Troubleshooting authentication issues and providing resolution using **Cisco ISE** (Cisco Identity Service engine).
- Configuration, Installation and trouble shooting of Juniper routers like **PTX5000, PTX3000, T4000, MX960**.
- Proficient in managing **self-signed certificates** on individual firewalls.
- Configuring policies and security rules using **Cisco Panorama** and pushing to **PaloAlto** firewalls.
- Worked on creating and maintaining new subnets, host with several record entries like **CNAME, PTR, A record** with DHCP scopes using Graphical User Interface.
- Worked with routing protocols such as **EIGRP and BGP** for efficient network routing.
- Providing **24/7 on-call** support. Wrote technical documents.
- Replaced EOL **Cisco ASA** firewalls with **Palo Alto**.
- Monitoring Device reachability using **ICINGA** monitoring system. Setting up email alerting system, on call paging and adding devices to database of ICINGA monitoring. Auto creation of Tickets through ICINGA monitoring.

- Installed, configured, and operated **Cisco wireless controllers** 4400, 5500 and **access points**, including models 1231, 1242, 1262, 2702, and 2800 across all corporate locations.
- Worked with **A10 load balancers** for **LTM** (Local Traffic Manager), creating and upgrading VIPs (Virtual IP Addresses).
- Managed **F5** load balancers for **LTM** and **GTM** (Global Traffic Manager), configuring WideIPs and DNS load balancing.
- Monitoring devices reachability through **Whatsup Gold**.
- Worked on **Grafana** for monitoring network device utilization and performance.
- Used **Grafana** to fetch metrics for **Network Utilization, Top talkers** and **site reliability**.
- Implemented **multicast** solutions for vendor networks, particularly in the context of Stock Exchanges.
- Implemented and configured **Multicast PIM-SM** (Protocol Independent Multicast - Sparse Mode) and **Multicast PIM-DM** (Protocol Independent Multicast - Dense Mode)..
- Worked on Multicast **Rendezvous** point.

**Tech Mahindra – Hyderabad, Telangana || June 2015 –Apr 2016**

## **Network Engineer**

### **Responsibilities:**

- Engaging multiple vendors, escalating to the highest levels whenever there seems to be a major outage
- Keeping track of all troubles reported and resolving issues on priority within the **SLA** time
- Troubleshooting **authentication** issues and providing resolution using **Cisco ISE** (Cisco Identity Service engine).
- Configuring and troubleshooting MPLS over BGP.
- Interacting with various teams and engaging them whenever necessary for a quick resolution of issue
- Collecting frequent updates on **Bandwidth reports, CPU utilization** so as to ensure that the Network is healthy all time.
- Design and Configuring **Juniper MX960, MX480** routers.
- Responsible for providing support for **Cisco Application Centric Infrastructure**.
- Assist with configuration and implementation of **ACI** and **APIC**.
- Experience in maintain and expand **Cisco ACI** network centric infrastructure including **ASRs, ISR, ASAs, 9k and 7k** switches.
- Configuring **VLANs, ACLs, HSRP** on core 6500 Switches.
- Configuring and troubleshooting **Juniper SRX 210, SRX 1400, SRX4200** firewalls.
- Configuring **SNMP** on Network devices and Polling from **Spectrum** Monitoring tool.
- Monitoring Network utilization, device performance, changes through **Spectrum** Monitoring.
- Configuring Routing protocols such as **RIP, OSPF, EIGRP and BGP**.
- Configuration of **Default gateway, Default routes and statics Routes**.
- Deployed multi-media streaming using **multicast** technology further minimizing the bandwidth consumption.
- Troubleshooting of Enterprise application response problems, Latency, and connectivity issues.
- Involved in Switching technology administration
- Performing **IOS upgrades** on Cisco routers and switches.
- Implemented, Configured redundancy protocols **HSRP, VRRP** for default gateway redundancy.

- Installing, configuring and operating of **Cisco wireless Controller 4400, 5500 and Access points 1231, 1242, 1262, 2702 and 3702**. Managing APs and WLCs using **Cisco Prime**.
- Maintain network documentation, including diagrams, procedures, configurations, and inventory records using **Visio**
- Hands on experience in **creating GRE & IPSEC tunnels** in Cisco routers.
- Configuring **Site to Site IP Sec Tunnel**, Building **GRE tunnel** over configured **IPSec Tunnels**.
- Troubleshooting problems related to **IPSEC, GRE over IPSEC, IPSEC over GRE, desktop VPN connectivity** and **Site-to-Site VPN** connectivity issues.
- Configuring **NAT** and **PAT** according to the connectivity requirements.

## **Automatic Data Processing (ADP) - Hyderabad, Telangana | | May 2011 –June 2015**

### **Network Analyst**

#### **Responsibilities:**

- Monitor network infrastructure and systems using network monitoring tools to ensure optimal performance and supporting 5000+ network devices.
- Troubleshooting **Cisco nexus 7000, 5000, 2000** switches for any routing issues reported.
- Provide comprehensive Tier 1 technical network support, configuration, and maintenance for the voice and data network structure on **ITIL**-based standards and procedures.
- Performing **IOS upgrades** on Cisco routers and switches.
- Respond to network incidents, troubleshoot issues, and provide timely resolution to minimize downtime.
- Troubleshooting authentication issues using **Cisco ACS** (Cisco ISE)
- Document and track all **network-related incidents**, service requests, and changes in the ticketing system.
- Collaborate with cross-functional teams and vendors to escalate and **resolve complex network** issues.
- Perform root cause analysis for major incidents and analyze preventive measures to mitigate future occurrences.
- Monitoring Servers reachability using Nagios monitoring tool. Getting alerted through email,
- Troubleshooting various protocols such as **EIGRP, OSPF, BGP, MPLS**.
- Working with **Cisco TAC** cases on service or device-related issues.
- Maintain network documentation, including diagrams, procedures, configurations, and inventory records using **Visio**
- Troubleshooting wireless issues logging into **Cisco Prime, WCS, Cisco Accesspoints**.
- Participate in the on-call rotation to provide 24/7 network support and respond to emergency situations.
- Provide support for network-related projects, including planning, implementation, and post-implementation activities.

#### **Education:**

- Masters of Science Cybersecurity and Information Assurance, University of Central Missouri, Missouri, USA with 3.75 GPA.
- Bachelors of Science in Computer Science from Alagappa University, India with 82%.
- Diploma in Electronics and Communication Engineering from SBTET, India with 81%.