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Senior Network Engineer | Cloud Networking | Security | SD-WAN | Automation

Professional Summary

- **Senior Network Engineer** with 6+ years of experience designing, deploying, and managing large-scale enterprise and hybrid cloud networks across **data centers, WAN, and cloud environments**
- Supported **mission-critical applications** across financial, insurance, and telecom domains with a focus on reliability, automation, and compliance.
- Proven expertise in **Software-Defined Networking (SDN)** technologies including **Cisco SD-WAN (Viptela, Versa)** and **Cisco ACI**, improving scalability and reducing manual configuration by **40%**.
- Implemented **Cisco SD-Access with DNA Center** to automate endpoint segmentation and enhance campus network efficiency by **25%**.
- Managed enterprise security with **Palo Alto (Panorama, GlobalProtect, WildFire), Fortinet (FortiManager/FortiAnalyzer), Cisco ASA**, and **Juniper SRX**, reducing incident response time by **30%**.
- Delivered **Zero Trust and SASE architectures** using **Zscaler ZIA/ZPA** for secure access across multi-cloud and remote environments.
- Hands-on experience with load balancing platforms including **F5 BIG-IP (LTM/GTM), Citrix ADC (NetScaler), and A10 ADC**, improving application availability and traffic resilience.
- Designed and implemented **SSL offload, QoS, and HA failover policies** to ensure optimal user experience and **99.99% uptime**.
- Built secure and scalable **cloud networking architectures** using **VPC, TGW, Direct Connect, and ExpressRoute**, integrating **Aviatrix and Cisco ACI** for multi-cloud connectivity.
- Developed **Infrastructure as Code (IaC)** using **Terraform, Ansible, and Python (Netmiko, REST APIs)** to automate firewall provisioning and WAN orchestration, cutting deployment time by **60%**.
- Integrated automation into **GitLab CI/CD** and **Jenkins pipelines**, standardizing configurations and ensuring consistency across global environments.
- Delivered SDN and network transformation projects for enterprise clients such as **Liberty Mutual and Juniper Networks**.
- Strong foundation in **routing and switching**, configuring **OSPF, BGP, EIGRP, MPLS, and DMVPN/IPSec VPNs** for secure branch-to-cloud communication.
- Implemented **DSCP tagging and SLA-based routing** to guarantee application performance and traffic prioritization.
- Proficient in **Cisco ISE, Infoblox, BlueCat, SolarWinds, and Splunk** for identity-driven access, DNS/DHCP management, and real-time monitoring.
- Designed **policy-based access control** and **compliance dashboards** improving visibility, audit readiness, and governance.
- Wireless and mobility experience implementing **Aruba Wi-Fi 6, Cisco 9800 WLC, and Meraki** for secure, high-performance campus networks.
- Conducted **EkaHau site surveys, RF optimization, and posture-based onboarding** using **Cisco ISE and Aruba ClearPass**.
- Experienced in **multi-vendor integrations** (F5, FortiGate, Palo Alto, Zscaler) to build secure and scalable enterprise access solutions.
- Collaborated with **DevOps and security teams** to design **Zero Trust frameworks, cloud-native security, and network automation pipelines**.
- Recognized for delivering automated, secure, and scalable network solutions that improved uptime, reduced costs, and increased agility.
- Ensured alignment with **ISO 27001, SOX, GDPR, and NERC** compliance across all deployments and operational procedures.

TECHNICAL SKILLS

Routing & Switching: Cisco ACI, Cisco Nexus, Catalyst 9000 Series, OSPF, BGP, EIGRP, MPLS, DMVPN, Cisco DNA Center.

SD-WAN: Cisco SD-WAN (Viptela), Versa Networks, Silver Peak, Cisco Meraki.

Firewalls & Security: Palo Alto NGFW (Panorama, GlobalProtect, WildFire), FortiGate, Cisco ASA, SSL Decryption, IPS/IDS, VPN.

Zero Trust & NAC: Zscaler ZIA/ZPA, Cisco ISE, Aruba ClearPass, Cisco SDA.

Load Balancing & ADC: F5 BIG-IP (LTM/GTM), Citrix ADC (NetScaler), A10 ADC.

Cloud & Hybrid Networking: AWS (VPC, TGW, Direct Connect), Azure (VNet, NSG, ExpressRoute), GCP (VPC, Cloud NAT), Aviatrix.

Automation & DevOps (IaC): Ansible, Terraform, Python (Netmiko, REST APIs), GitLab CI/CD, Jenkins, API Integrations.

Monitoring & Observability: SolarWinds, Splunk, FortiAnalyzer, Wireshark, SNMP, NetBox, CoPilot.

DDI & Web Security: BlueCat, Infoblox, Blue Coat ProxySG, DNS RPZ, DHCP/DNS Management.

Wireless & Mobility: Cisco 9800 WLC, Aruba Wi-Fi 6, Meraki MR, Ekahau Site Survey.

ITSM & Tools: ServiceNow, Jira, Confluence, Change Management.

EDUCATION

- Master's Computer Science, University of Central Missouri, USA
- Bachelors in Electronics and communication Engineering, JNTUH, India

CERTIFICATIONS

- (CCNP) – Cisco Certified Network Professional
- (CCNA) – Cisco Certified Network Associate
- (AWS)- Amazon Web Services Networking Specialty
- (PCNSE)- Palo Alto Networks Certified Network Security Engineer

PROFESSIONAL EXPERIENCE

Client: Liberty Mutual, Remote

Jan 2024 – Till date

Role: Senior Network Engineer

Responsibilities:

- Centralized **Palo Alto NGFW** management using Panorama for policy governance, GlobalProtect VPN integration with SAML, and SSL decryption across hybrid environments. Optimized App-ID and threat signatures, aligning with **SOX and GDPR compliance** for claims and policy applications.
- Managed **Zscaler ZIA/ZPA** for secure Internet and remote access, implementing SSL inspection, DNS tunneling prevention, and CASB integration for SaaS insurance tools. Integrated with **Azure AD** to enforce identity-driven security for remote and BYOD users.
- Deployed **Citrix ADC (NetScaler)** appliances within DMZ zones to securely deliver partner and customer-facing web applications. Configured **SSL offload, rewrite/responder policies, and Layer 7 load balancing**, improving response times by **20%**.
- Implemented **Cisco ISE** for posture-based NAC and policy enforcement across corporate and remote sites. Integrated with **Azure AD** for identity mapping and configured **guest access portals** for auditors and short-term contractors.
- Redesigned **Liberty Mutual's global WAN** using **Cisco SD-WAN (Viptela/Versa)** with dual transport (MPLS/DIA) and AppQoE routing for underwriting systems, achieving **99.99% uptime** across 100+ branch sites.
- Integrated AWS Transit Gateway with on-prem Cisco ACI via BGP/IPSec tunnels, establishing secure hybrid cloud communication and enforcing **Cloud Security** and zero-trust route segmentation.
- Configured **F5 GTM/DNS** for topology-based routing across regional data centers, ensuring sub-second failover and continuous availability of customer and claims applications.
- Developed reusable **Terraform modules (Aviatrix Provider)** for provisioning TGWs, FireNet, and Spoke Gateways across **AWS, Azure, and GCP**. Enabled **CoPilot** for route validation, policy compliance, and multi-cloud visibility.
- Provisioned **AWS VPCs** for regulated workloads using **Direct Connect** and least-privilege IAM models. Automated VPC Flow Log retention via **S3 lifecycle policies** for **SEC and SOX** audit traceability.
- Configured **Azure NSGs and ASGs** to segment financial workloads, embedding policies into Terraform pipelines and

validating compliance via **Azure Security Center and Sentinel dashboards**.

- Automated multi-vendor configuration using Ansible, Python (Netmiko, REST APIs), and CI/CD pipelines within the **Network Automation Framework**, reducing manual changes by 60%.
- Built **real-time monitoring dashboards** in **SolarWinds and NCM**, tracking utilization and anomalies, and integrating **ServiceNow APIs** for automatic incident creation and config backups.
- Deployed **multi-tenant Cisco ACI fabric** defining VRFs, EPGs, and Bridge Domains, integrating **Palo Alto NGFWs** via L4–L7 service graphs for secure east-west segmentation.
- Configured **F5 BIG-IP LTM** for tiered load balancing with SSL offload, HA mirroring, and HTTP-to-HTTPS redirects using iRules to ensure consistent user experience.
- Managed **Aruba Wi-Fi 6** infrastructure, performing **Ekahau surveys** and RF optimization. Integrated **ClearPass with Cisco ISE** for posture-based onboarding and secure access across offices.
- Deployed **Cisco SD-Access** using **DNA Center**, automating endpoint segmentation and identity-based policies via **ISE**, minimizing VLAN sprawl and improving endpoint mobility.
- Administered **FortiGate NGFWs** via **FortiManager/FortiAnalyzer**, configuring SSL inspection, NAT, and IPS signatures to secure OT and branch networks.
- Managed **Infoblox DDI platform**, automating DNS/DHCP provisioning with RPZ threat feeds and **ServiceNow CMDB integration** for compliance tracking.
- Provisioned **GCP VPCs** for analytics workloads with Private Google Access and Cloud NAT, enforcing IAM policies and integrating audit logs into **Cloud Logging** for unified monitoring.
- Optimized **dynamic routing (BGP, OSPF, EIGRP)** across WAN and data centers, tuning redistribution and failover timers to maintain **SLA-based convergence** and reliability.

Client: Juniper Networks, Westlake, TX

Aug 2023– Jan 2024

Role: Network Engineer

Responsibilities:

- Managed **Palo Alto VM-Series firewalls** integrated within **Azure** and on-prem **hybrid lab environments**, deploying configuration bundles via **Panorama** and customizing threat signatures to simulate enterprise-grade security validation for Junos-based platforms.
- Administered **FortiGate NGFW (100F–600F Series)** through **FortiManager**, enforcing NAT, IPS, certificate inspection, and application control to replicate production-grade traffic inspection and product validation.
- Implemented **Zscaler Private Access (ZPA)** for internal engineering teams, delivering **Zero Trust** connectivity to lab management and diagnostic tools with posture validation and dynamic segmentation.
- Designed **Splunk dashboards** aggregating logs from **Zscaler, Palo Alto, and Cisco ISE**, enabling telemetry analysis, event correlation, and compliance reporting across lab test environments.
- Deployed **Cisco ACI spine-leaf fabric** in **Juniper's multi-site lab data centers**, creating Bridge Domains and EPGs to isolate lab tenants. Integrated **FortiGate firewalls** using **PBR** and **L4–L7 service graphs** for secure east-west segmentation.
- Built and optimized **SD-WAN** topologies using Cisco Viptela and Silver Peak, defining SLA-based routing and **AppQoE** policies to emulate enterprise traffic flows for performance benchmarking.
- Configured and maintained **Meraki MX appliances** for remote lab and sandbox access, enabling 4G failover and VLAN segmentation to ensure continuous connectivity during validation testing.
- Led **Cisco DNA Center** deployment for automated switch configuration, developing reusable templates and integrating **Cisco ISE** for **MAC-based onboarding** and posture-driven policy enforcement.
- Configured **Citrix ADC (NetScaler)** appliances in HA mode to simulate **Layer 7 load balancing and traffic management**, implementing SSL bridging and content switching to test high-volume portal performance.
- Deployed **F5 BIG-IP appliances** to validate global application delivery, building custom health monitors and traffic shaping rules to replicate real-world enterprise conditions for load and latency testing.
- Configured **Aruba Wi-Fi 6 controllers and APs** in lab campuses, optimizing 5GHz channel usage and **WPA2-Enterprise** authentication through ISE for secure device connectivity.
- Integrated **BlueCat DDI** with **RPZ filtering** for DNS-layer threat validation. Automated **DHCP/DNS synchronization** with **ServiceNow CMDB**, enhancing IP governance and audit compliance.

- Developed **multi-cloud automation** using **Terraform** to deploy firewall and routing rule sets across **Azure, AWS, and GCP test accounts**, applying tagging and segmentation policies for **SDN validation pipelines**.
- Created **GitLab CI/CD pipelines** to automate network provisioning using **Ansible playbooks**, enabling version-controlled rollbacks, automated testing, and REST API-driven reporting.
- Tuned **QoS and traffic prioritization policies** across **MPLS and broadband circuits**, applying **DSCP marking and LLQ mechanisms**. Validated throughput and SLA compliance using **iPerf** and **Cisco SMA tools**, improving test accuracy by **25%**.

Client: Wipro, India

May 2018 –Jul 2022

Role: IT Network Engineer

Responsibilities:

- Configured **dynamic routing protocols (OSPF, EIGRP, BGP)** on Cisco routers to enable inter-branch communication and route redistribution between **MPLS and Internet uplinks**, achieving **redundant WAN connectivity** and resilient failover.
- Supported **VLAN design and implementation** on **Cisco Catalyst switches**, configuring access/trunk ports and optimizing **Spanning Tree Protocol (STP)** to eliminate Layer-2 loops and improve segmentation across multi-floor offices.
- Contributed to the deployment of **IPsec VPN and DMVPN overlays**, providing secure connectivity between headquarters and branch offices and validating tunnel health and redundancy performance.
- Monitored **SD-WAN overlays and MPLS circuits**, analyzing application-aware routing and documenting performance gains for **voice, video, and SaaS traffic** during link degradation scenarios.
- Assisted senior engineers with **Cisco DNA Center** policy-based automation, enabling automated switch provisioning and **Cisco ISE integration** for identity-driven endpoint segmentation.
- Supported firewall configuration on **Palo Alto and Cisco ASA NGFWs**, validating **NAT, ACL, and VPN** policies using real-time logs to ensure secure remote access and compliance.
- Configured **SNMP v2/v3** and integrated devices into **SolarWinds** for interface utilization, bandwidth, and CPU monitoring, allowing proactive anomaly detection.
- Implemented **Layer-2 security controls** (DHCP Snooping, Dynamic ARP Inspection) to mitigate spoofing and strengthen endpoint security posture.
- Participated in **hybrid-cloud connectivity projects**, configuring **VPN tunnels and ExpressRoute/Direct Connect** to extend on-prem networks securely into **AWS and Azure**.
- Supported **AWS and Azure segmentation** by configuring **VPC subnets, NSGs, and route tables**, aligning on-prem and cloud firewall policies for consistent enforcement.
- Developed **Python automation scripts (Netmiko, Paramiko)** for interface polling, route verification, and health checks, reducing manual CLI work by **40%** and improving accuracy.
- Built **Ansible playbooks** for VLAN provisioning, configuration backups, and ACL deployment, increasing consistency and cutting human errors by **30%**.
- Created **Terraform templates** to automate **AWS VPC and Azure VNet** provisioning with reusable, version-controlled modules for **Infrastructure as Code (IaC)** standardization.
- Used **Wireshark** for packet capture and analysis, troubleshooting **DNS delays, TCP retransmissions, and DHCP issues**, reducing troubleshooting time by **25%**.
- Collaborated with the **SD-WAN engineering team** to develop **Cisco vManage feature templates** and integrate **DNA Center APIs** for automated **VLAN, QoS, and policy deployment** across enterprise branches.