**PROFISSIONAL EXPERIENCE :**

Very Passionate Sr Network Engineer having worked in **projects that include Data Center refresh, Campus Redevelopment, Firewall and F5 Installations,** with **8** years of experience in routing, switching, Network Security-Next-Gen Firewalls, Load Balancers, Wireless and VOIP systems design, administration, and troubleshooting. Excellent communication skills with the ability to interface at all levels. A proactive team player who can also work independently.

**CAREER HIGHLIGHTS:**

* Senior Network Engineer with expertise in multiple client environments and diverse network technologies.
* Proficient in Switching, Routing, Firewalls, Network Security, Application Delivery Controllers, and Wireless technologies.
* Extensive experience in both campus and data center switching, including migration projects and architecture upgrades.
* Designed and implemented Cisco ACI in data centers, enabling container and cloud orchestration tools integration.
* Worked with Cisco Nexus 9000 NXOS and ASRs for MPLS in corporate settings.
* Familiarity with a wide range of network equipment, including Cisco, Juniper, Arista, Aruba, and Extreme switches.
* Configured Cisco Catalyst Switches for Dot1x support and integration with Cisco ISE.
* Strong expertise in Juniper Platform (QFX, EX, MX) installation, upgrade, migration, and troubleshooting.
* Experience with F5 load balancers and Citrix NetScaler for network monitoring, load balancing, and access policy management.
* Setup AWS Direct Connect for services like S3, EC2, and VPC, managing traffic flows between on-premises and AWS.
* Proficient in OSPF, MPLS, VLANs, FHRP, VPC, STP, port-channel, and various routing and switching protocols.
* Expertise in complex network environments, including security, load balancing, and wireless LAN controllers.
* Skilled in configuring and troubleshooting Juniper EX Switches and Cisco Routers.
* Worked with various routing protocols like OSPF, EIGRP, RIP, BGP, and MPLS.
* Configured F5 LTM for corporate applications and high availability, including APM and ASM modules.
* Proficient in VSS, VRF, VPC, VDC, and gateway redundant protocols (HSRP, VRRP, GLBP).
* Designed and implemented SD-WAN, SD-LAN, and WAN optimization solutions.
* Knowledgeable in OTV, VXLAN, SDN, and SD-WAN technologies.
* Proficient in BGP attribute manipulation, including route policies.
* Extensive experience with Cisco ASA, Palo Alto, and Checkpoint firewalls.
* Worked with Bluecoat and McAfee Web Gateway Proxies for URL filtering and SSL decryption.
* Proficient in configuring and managing Aruba and Cisco Wireless LAN controllers.
* Integrated Cisco WLC with ISE for Dot1x authentication.
* Skilled in using network management tools like SolarWinds and Cisco Prime.
* Proficient in F5 configurations, including profiles, monitors, VIPs, and iRules.
* Experience with network troubleshooting tools such as ping, trace route, Wireshark, and TCP dump.
* Familiar with PPP, ATM, Frame-Relay, MPLS, and VoIP technologies.
* Expertise in NAT/PAT, access lists, security zones, and policies on SRX firewalls.
* Proficient in creating virtual servers and load balancing on NetScaler and F5.

**TECHNICAL SUMMARY:**

|  |  |
| --- | --- |
| **Network Configuration**: | Advanced switch/router configuration (Cisco IOS access list, Route redistribution/propagation). |
| **Routing Protocols**: | RIP, IGRP, EIGRP, OSPFv2, OSPFv3, IS-IS, BGP v4, MP-BGP |
| **WAN Protocols**: | HDLC, PPP |
| **Circuit switched WAN**: | T1/E1 – T3/E3/OCX (Channelized, Fractional & full). |
| **Security Technologies:** | Cisco FWSM/PIX/ASDM, Palo Alto, Cisco ASA, Checkpoint, Blue Coat proxy server. Port Security, DHCP Snooping, IP Source Guard (IPSG). |
| **Cisco Routers:** | Cisco ISR-1000, ISR-4000, ASR-1000, ASR-9000, ASR-5500, Meraki VMX 100. |
| **Redundancy and management**: | HSRP, VRRP, GLBP, RPR, NSF/NSR, STP, Wireshark, SolarWinds, SNMP |
| **Physical interfaces**: | Fast Ethernet, Gigabit Ethernet, Serial, HSSI, SONET (POS) |
| **Layer 2 technology**: | VLAN, VXLAN, HSRP, VRRP, GLBP, STP, RSTP, PVST+, MST, PVLAN, Optimizing STP (Port Fast, Uplink Fast, Backbone Fast, Root Guard, BPDU Guard), |
| **Layer 3 Switching**: | CEF, MLS, Ether channel (PAGP & LACP, Load Balancing) |
| **Switches**: | Catalyst 9400, 3850, 3650, 2960; Nexus 2k, 3k, 5k, 7k, 9k |
| **Load Balancers:** | F5 LTM, GTM, Citrix Load Balancer. |
| **Network Management and Monitoring:** | Wireshark, Infoblox, HP OpenView, Cisco Prime, Splunk, Gigamon, Security Device Manager (SDM), Cisco Works; TCP Dump & Sniffer |
| **Scripting:** | Python, Ansible and TCL(F5), Golang. |
| **Ticketing Tools** | JIRA, CA Service Now |
| **Operating Systems**: | Microsoft XP/Vista/7, Windows Servers 2003/2008, Windows MS-Office**,** Microsoft project server 2013, Unix/Linux. |
| **Network Hardware/Platform** | Arista Network devices. |
| **Containerization** | Docker and Kubernetes |

**CERTIFICATIONS :**

* CCNA (Cisco Certified Network Associate)
* CCNP (Routing & Switching)
* Palo Alto Certified Network Security Engineer (PCNSE)

**EDUCATION:**

* Bachelor’s degree in Electronics and Communications Engineering from Vignan University (2011 to 2015).

**PROFESSIONAL EXPERIENCE:**

**BlackRock, Dallas, TX Nov 2022 – Till Date**

**Senior Network Engineer**

**Key Responsibilities:**

* Migrated ASA firewalls to **Palo Alto next-gen Firewalls** using migration tools and transferred IPSEC tunnels, **ACLs**, **NAT** rules, and policies.
* Designed and installed Palo Alto Firewalls with features such as Application and **URL filtering**, SSL decryption, SSL Forward Proxy, and configured and maintained **IPSEC** and **SSL VPNs** on Palo Alto Firewalls. Successfully installed **PA-5000** series firewalls in Data Center as perimeter Firewalls.
* Specified, designed & configured all Fortinet firewalls.
* Worked on Cisco **ASR 9K**, Nexus 7k & 9K, configured and designed **OSPF**, **EIGRP**, and **BGP** at Distribution and Core layers, and configured OTV layer 2 connection between Data centers on **Nexus**.
* Experience with configuring BGP, OSPF in Juniper M and MX series routers. Worked on several BGP attributes like **MED**, **AS-PATH**, and Local Preference for route optimization, as well as Route-Reflector and Route-Redistribution among routing protocols.
* Worked with **Juniper devices** - EX-2200, EX-4200, EX-4500, MX-480, M Series, SRX650, SRX240.
* Utilized **Cisco ISE** for user Authentication, Security Group Tags, MAC-based authentication for Wireless and Wired users, 802.1X, EAP, PEAP, etc.
* Worked on **Juniper M, MX, T routers on MPLS VPN**s, **TE**, and other advanced service provider technologies, and troubleshooted Linux & Unix application delivery servers. Installed **Dockers**, Cisco, and HP servers.
* Maintained shell scripts for **RedHat Linux** servers and performed patch upgrades for RedHat Linux servers. Provided expert-level security & networking knowledge.
* Deployed network monitoring software SolarWinds and **What’sUp Gold**. Worked on Orion (Solar Winds) for mapping network diagrams with commissioned & decommissioned network devices.
* Configured, troubleshot, and upgraded Checkpoint Firewalls for Manage clients, which included network and/or resource access, software, or hardware problems. Implemented Citrix Access Gateway & Advance Access Control, web interface into the Microsoft SharePoint portal.
* Used Aruba Software to manage and monitor multi-site wireless networking. Responsible for the IPAM (IP Address management) system for a very large WAN/LAN network (**QIP**) using **Solar winds** IPAM and **Infoblox** DNS and DHCP servers.
* Migrated legacy WAN network to SD-WAN with virtual firewalls on WAN routers, including the migration of the company’s 200 sites from a legacy hub-and-spoke WAN network to SD-WAN in support of a star topology with virtual firewalls at the remote sites.
* Opened, resolved, or updated **Tier II** Support tickets for Manage Firewall clients. Analyzed and provided courses of action on current as well as emerging security threats like ransomware attacks by research and recommendation of other security solutions to help mitigate network security threats while preventing their outbreak across the network.
* Defined and enforced network security policies as code using **Python**. Developed custom tools or scripts to automate security policy enforcement, including firewall rules and ACLs.
* Integrated **SDN** controllers like **Arista** into the network infrastructure for centralized control and automation, and deployed Arista switches with SDN capabilities, configured network policies through a controller, and automated network provisioning, enhancing network security with automated policy enforcement.
* Developed and fine-tuned security policies within **Zscaler** to ensure that web traffic is inspected and secured according to organizational requirements.
* Configured and maintained **TACACS** (Terminal Access Controller Access-Control System) for centralized authentication, authorization, and accounting of network devices, ensuring secure access control.
* Worked on network design improvements using **BGP, EIGRP, OSPF, IP metric tweaking, and load balancing**. Designed, configured, and troubleshooted QoS, SIP, H.323, RTP, SCCP, Session Border Controllers, Voice Gateways, Voice circuits IP /TDM, Cisco Telepresence Infrastructure, **QoS, NAT, PAT**, and multicast.
* Worked on Checkpoint Firewall to create new rules and allow connectivity for various Applications, implemented Firewall rules and Nat rules by generating precise methods of procedure (**MOP**s), and was responsible for packet capture analysis, syslog, and firewall log analysis.
* Experience with F5 load balancers LTM & GTM, reverse proxy design & setup, including migration from A10 to F5.
* High-level network troubleshooting and diagnostic experience using Packet capture tools like **Wireshark**. Configured networks using RIP, EIGRP, BGP, and OSPF protocols and troubleshooting L2/L3 issues.
* Implemented robust security measures for **5G networks**, including encryption, authentication, and intrusion detection systems, to protect against emerging threats.
* Collaborated with **cross-functional teams**, including engineers, technicians, and project managers, and provided leadership in **5G network projects** and initiatives.
* Regular upgrade & maintenance of Infrastructure, Installing, configuring Cisco Switches (2960, 3500, 7600, 3750, 3850 series, 6500 series) Cisco Routers (4800, ASR 9K, 800), Juniper Routers and Firewalls, Nexus 7k, 5k & 2k, F5 BIG IP, Palo Alto Firewalls, **Bluecoat Proxy**, and Riverbed Steelhead appliances.

**Environment:** Cisco Routers (4800, 3800, 3600, 2800, 2600, 2900, 1800, 1700, 800), switches (6500/3750/3550 3500/2950), F5 Load balancing (LTM, GTM, APM, AFM, ASM)**,** EIGRP, RIP, OSPF, Voice Gateways, BGP, VPN, MPLS, Ether Channels, Cisco Catalyst Switches, Firewalls (Cisco ASA, Palo Alto), Cisco Voice (CCM, UCCE), Shell Scripting, Citrix.

**Verra Mobility, AZ May 2021 – Oct 2022**

**Network Engineer**

**Key Responsibilities:**

* Installed and maintained production servers for client services (web, DNS, DHCP, mail).
* Worked with **Palo Alto Next Generation firewall**, including **URL filtering**, Anti-virus, IPsec VPN, SSL VPN, IPS, and Log Management.
* Managed dual Internet access points and **HA configurations** of Fortinet Firewalls for Site-to-Site VPNs.
* Monitored network equipment with **syslog** and SolarWinds for alerting and configuration management.
* Collaborated with the Network planning team on IP allocation using tools like **Infoblox**, **Net MRI**, and SolarWinds IP monitor.
* Designed perimeter security policy, implemented Firewall **ACL**s, and configured Client VPN technologies.
* Utilized **Autopilot** for code upgrades and device configuration at data centers.
* Migrated from **Cisco PIX** and ASA to Palo Alto PA series.
* Worked on BGP routing protocol, configuring, and troubleshooting on various routers.
* Managed various systems, including Citrix **XenApp**, XenDesktop, XenServer, **Citrix NetScaler**, **VMware**, DNS, DHCP, SNMP, routing protocols (BGP & OSPF), and Fortinet Firewalls.
* Extended **Kubernetes** clusters across on-premises and cloud environments, ensuring seamless networking.
* Automated network security policy management using Ansible and **Palo Alto firewalls**.
* Automated provisioning and management of network resources across multiple cloud providers with Terraform and Ansible.
* Integrated Azure services into the existing infrastructure and ensured secure communication between on-premises and Azure resources.
* Set up **RADIUS** (Remote Authentication Dial-In User Service) for secure user authentication and authorization, enhancing network security and access control.
* Implemented a hybrid cloud environment leveraging AWS and **Azure** services.
* Installed and configured LAN/WAN Networks, Hardware, Software, and Telecommunication services.
* Migrated from **NetScaler** to F5 without downtime.
* Documented changes submitted them for approvals and worked with the alerts team for implementation.
* Managed Cisco Voice Mail Unity servers and worked in Cisco Routing & switching background.
* Implemented IPv6 addressing scheme for routing protocols, VLANS, and subnetting.
* Worked on **Aruba** wireless solutions and Cisco wireless LAN technologies.
* Configured load balancing methods in F5 and A10 LTMs.
* Installed and configured **Microsoft Proxy Server 2.0** and Infoblox DNS, DHCP, and IP Address Management.
* Generated audit reports on various devices to check **L2** issues, including link errors and port flapping.

**Environment:** Routers (Nexus 1K**,** 5K**,**7K, Juniper MX-960), switches (6500/3750/3550 3500/2950), F5 Load balancing (LTM, GTM, APM, AFM, ASM)**,** EIGRP, RIP, OSPF, BGP, VPN, Unified Contact Center Enterprise (UCCE), MPLS, Cisco Catalyst Switches, Firewalls (Cisco ASA, Palo Alto), Cisco Voice (CCM, UCCE, UCCX), Citrix, RADIUS.

**First Data, NY Oct 2019 - Apr 2021**

**Network Engineer**

**Description:** Installation of PA firewalls. Worked on Tier 3 Issues. Managed IP subnets, Monitoring. Worked on service now tickets on Network issues in data center and Enterprise. Upgradation of IOS for various equipment on a timely basis.

**Key Responsibilities:**

* Implemented and managed **SD-WAN** solutions to optimize network performance, reduce costs, and enhance application delivery.
* Deployed and configured **Zscaler** cloud security solutions for secure internet access and advanced threat protection.
* Incorporated Cisco Nexus 9000 NXOS to **ACI fabric** to work in concert with existing Nexus 7000s and ASRs for MPLS.
* Developed automation scripts and workflows using tools like **Ansible** and **Python** to streamline network operations and reduce manual tasks.
* Leveraged **Cisco DNA Center** for centralized network management, provisioning, and troubleshooting, ensuring network reliability and scalability.
* Administered **Cisco Identity Services Engine (ISE)** for secure network access control, policy enforcement, and guest access management.
* Managed and configured **ClearPass** for network access control and authentication, ensuring compliance with security policies.
* Implemented security solutions with **Palo Alto PA-5000/3000**, Cisco 5580/5540/5520, and developed cost-effective failover solutions with Fortinet firewalls for remote offices.
* Administered Cisco AMP endpoint security infrastructure, monitored endpoints for threats, and managed Intrusion Detection Systems (**IDS**) while configuring Cisco Sourcefire **IPS**.
* Installed and configured high availability Big IP **F5 LTM and GTM** load balancers.
* Managed firewalls such as **Juniper SRX**, and **Cisco ASA**.
* Configured & maintained **IPSEC** and **SSL VPNs** and Zone Based Firewall on Palo Alto Firewall.
* Configured and maintained Cisco ASA firewalls (5580-20, 5540, 5520, 5510).
* Followed information security policies, standards, and **NIST** guidelines.

**Environment**: Cisco ASA5580/5540/5520, ZScaler, Palo Alto PA-5000/3000, IEEE 802.11Big IP F5 LTM/GTM, Nexus switches, TCP/IP, VPN, Cisco WSA, Bluecoat Proxy servers, IDS/IPS. SIEM and Monitoring.

**Microsoft, WA Oct 2017 - Sep 2019**

**Network Operations Engineer**

**Key Responsibilities:**

* Configured **Cisco PIX 535 series firewall** for remote access **IPSEC VPN** and addressed security concerns through **ACLs, NAT, and VPN.**
* Deployed **Fortinet UTM firewal**l for primary and remote sites, ensuring redundancy on Cisco 2600, 2800, and 3600 routers with **HSRP**.
* Proficient in deploying **Citrix ADC** (formerly NetScaler) load balancers to distribute network traffic across multiple servers, ensuring high availability and optimized application performance.
* Worked with **Cisco routers (7200, 3700)** and **switches (4900, 2900)**, also configuring **SITE-TO-SITE VPN** on Cisco routers between headquarters and branches.
* Managed Cisco Routers (2600, 2800 Series) and 3550, 4500 series switches for efficient network operation.
* Effectively troubleshooted complex **LAN/WAN infrastructure**, including **DNS, DHCP, IP conflicts, firewall logging, DMZs, security policies, and monitoring**.
* Enhanced network convergence with **STP improvements** (Port-fast, Uplink-fast, backbone-fast) and employed **Wire-shark** for detailed issue analysis.
* Implemented advanced network security measures, including the creation of private VLANs, mitigation of VLAN hopping attacks, and **spoofing prevention** with snooping & IP source guard.
* Managed **IP address space** with subnets and variable length subnet masks **(VLSM)** while supporting Cisco Core, Distribution, and Access layer routers and switches.
* Provided support to the Network Operation Center (**NOC)** offshore team, specializing in Cisco PIX and ASA Firewalls, and configured **BGP** for CE to PE route advertisement in the lab environment.
* Managed Active Directory groups, users, and policies as part of **network management** responsibilities.
* Worked on wireless technologies from Cisco, Arista, and Juniper, including the setup, optimization, and management of **wireless networks** for seamless connectivity.
* Worked on **Juniper SRX firewall solutions**, proficiently configuring and securing network environments using Juniper's SRX series.
* Designed **ACI fabrics** to be scalable and adaptable to future growth, ensuring long-term network sustainability.
* Configured and maintained **Cisco ASA firewalls**, ensuring robust network security and remote access VPN capabilities.
* Implemented **Arista routing solutions**, specializing in Arista routers to enhance network performance and reliability.
* Configured **Juniper routing**, including configuration and optimization of Juniper routers for efficient network routing.
* Effectively managed **Cisco Nexus** switches for high-performance data center switching.

**Environment:** Cisco 2600/2800/3700/7200 routers, Juniper SRX, Arista Routers, Wireless Networks, Cisco ASA, TCP/IP, VLSM, AD, DNS, Switching/Routing.

**Liquid Hub, IND. Oct 2015 - Sep 2017**

**Role: Network Engineer**

**Key Responsibilities:**

* Configured Client VPN technologies, including **Cisco's IPSEC VPN client**.
* Skilled in setting up and managing **Windows Server** environments, including versions 2012, 2016, and 2019, for DNS, DHCP, and IPAM functions.
* Extensive experience in deploying and configuring **Infoblox (DDI)** solutions for ensuring robust network infrastructure management.
* Managed **PIX 7.x/8.x & ASA 8.x Firewall migration**, hardware upgrades, and troubleshooting.
* Administered Cisco-based routing and switching, including VLAN and spanning tree implementation, trunking, port channels, and IOS upgrades.
* Deployed a **Syslog server** for proactive network **monitoring**.
* Worked with **OSPF & BGP** for dynamic routing and managed WAN configurations (Frame-relay).
* Proficient in designing, implementing, and maintaining structured **physical cabling systems** to ensure reliable and high-performance network connectivity.

**Environment**: PIX, CISCO routers and switches, Access Control Server, VLAN, Trunk Protocols, CISCO ASA, DHCP, DNS, SAN, Spanning tree, Nimsoft, Windows Server, Windows NT, Infoblox.