

SENIOR NETWORK SECURITY ENGINEER

Experience

Senior Network Security Engineer

October 2016 to Current Bloomberg 1/4 Houston , TX

- Environment: Cisco 3850/3750/3500/3650/6500/7600 switches, SA 5500 firewall, Palo Alto PA-3060 firewall, ASR router 1002/1006, Cisco ACI, Cisco ISE, AWS, juniper EX-2200, EX-4200, M-320 router, juniper SRX 5800 Fire wall, F5 LTM 1600/6400, Citrix NetScaler, OSPF, BGP, EIGRP, VLANs, LAN, WAN Work Profile.
- Installing and configuring new Cisco equipment including Cisco catalyst switches 3850, 3750, Nexus 5548 and Nexus 2k as per the requirement of the Organization.
- Configure and installation Cisco prime infrastructure to deploy IWAN.
- Implementations of Network and Devices for Network SD-WAN environment.
- Designing and Implementation of (LAN) VLANs, VTP, Spanning Tree (STP), Trunking (dot1q and ISL) and Ether channel on CISCO Catalyst Switches 3500, 3650, 3850 6500, 7600.
- Configuring, Monitoring and Troubleshooting Cisco's ASA 5500 security appliance, Failover DMZ zoning and configuring VLANs/routing/NAT with the firewalls as per the design.
- Established IPSEC VPN tunnels with ASA 5500 series Firewall between some branch offices & headquarters.
- Successfully Design and installed Palo Alto PA-3060 firewalls to protect Data Center and provided L3 support for routers/ switches/ firewalls.
- Installing and Configuring Palo Alto Pa-500 series and Pa-2000 series firewalls using Panorama.
- Configuring rules and Maintaining Palo Alto Firewalls & Analysis of firewall logs using various tools.
- Experience with working on Palo Alto Next-Generation Firewalls Security profiles.
- Worked with the installation of Palo Alto firewall, migrated with a team from predominantly checkpoint environment to Palo Alto global solution.
- Managing the AWS security policies and network configuration, including AWS direct connect, vpn failover, Multiple VPC's, user and site access to servers and accounts.
- Created S3 buckets in the AWS environment to store files, sometimes which are required to serve static content.
- Used security groups, network ACL's, internet gateways and route tables to ensure a secure zone for organization in AWS public cloud.
- Used IAM for creating roles, users, groups, and implemented MFA to provide additional security to AWS account.
- Configured and implemented F5 BIG-IP GLB and LTM load balancers.
- Modified and reconfigured Two factor authentication BIG-IP APM authentication.
- Created Access policies on APM module using AD and LDAP authentication for external clients.
- Worked on F5 Enterprise Manager 3.1 version to manage multiple F5 LTM devices from single-pane view.
- Hands on Experience configuring and testing F5 I Rules using Browser(IE), HTTP watch.
- Worked on F5 LTM series like 1600, 6400 and Viprions for the corporate applications and their availability.
- Installing and configuring F5 Load balancers and firewalls with LAN/WAN configuration.
- Worked on F5 LTMs & GTMs to improve web application delivery speed and replication through and between distributed global data centers.
- Working with the Trouble Tickets on A10 & F5 Load balancer.
- Worked with Blue coat and handled the Trouble Tickets on F5 Load Balancers.
- Migration from Cisco firewalls to Palo Alto firewalls platforms PA 4000 and PA 500 and PA- 200 firewalls network technologies including Optical VoIP VPN SAN switching and routing.
- Configured and troubleshooting Cisco unified UC560 manager VoIP systems.
- I Upgraded ASA 5505S to 5525X with Firepower.
- Setup high availability ASA pair with Firepower.
- Focused on working with Cisco Channel partners to build practices around Cisco ACI.
- Implemented Cisco Application Centric Infrastructure (Cisco ACI) as a solution for data centers using a Spine and Leaf architecture.
- Expert in troubleshooting production issues and resolving incident and change tickets related to Cisco ACI.
- Apply Cisco ISE configuration to switches.
- Worked with Cisco ISE to identify threats in the network for rapid containment and remediation.
- Worked on upgrading Cisco ISE 3300 Appliances and 1.0.4 Cisco ISE software on VM ware's.
- Experience on dealing with Cisco ISE Secure Network Server 3515 and other network security products.
- Performed Troubleshooting and monitored routing protocols such RIP, OSPF, EIGRP & BGP.
- Worked on VM Ware migration from physical servers to virtual servers.
- Managed successful delivery of massive security response portfolio including Splunk and Cisco ISE.
- Used Python scripting for network sniffing and managed parameters for pool of servers and updated, automated and migrated different services and software by means of Ansible.
- Worked on Riverbed devices for WAN bandwidth Optimization in the data centers for the sensitive.
- Coordinate with multiple vendors (Cisco, Juniper, etc.) to troubleshoot network outages and issues.
- Configuration and troubleshooting of CSM, integration with ASA devices.
- Configuring Static, BGP and OSPF Routing Protocols on Cisco Routers.

Network & Security Consultant

June 2014 to September 2016 Verizon 1/4 Scottsdale , AZ

- Environment: Cisco 6500/4510/4500X/4948/3560X switches, Nexus 9000, 5000,3000, 9504, 9300, 3200, 2308, Cisco ASR

1k/7200/3925E/2951E GSR 7000/12000 Routers, Cisco ISE, Aruba 7200/3600 wireless controller, Nexus 2k/5k/9k, Cisco Nexus 7000, ASA 5500/5510/5540 fire walls, Windows 2000/2003/2008/R2/2012, Juniper SRX firewall, MX routers, Palo Alto firewalls, SSLVPN, F5 load balancer LTM >M, Citrix Net scalar, BGP, EGBP, VPC, VDC, OSPF Work Profile:.

- Installing, Configuring and troubleshooting Cisco Routers (ASR1002X, 3945, 3845, 2800, 3600) and Switches to perform functions at the Access, Distribution, and Core layers.
- Installing, Maintaining and Troubleshooting of Cisco ASR 1K, 7200, 3925E and 2951E Routers and Cisco 6500, 4510, 4500-X, 4948, 3560X, 3750X and 2960S Switches for deployment on production.
- Responsibilities include software upgrade, license activation, configuring/installing new GSR router 7000,12000, Nexus switch 9000, 5000,3000, 9504, 9300, 3200, 2308, F5-5050 and maintaining network documentation.
- Experience working with High performance data center switch like nexus 9000, 7000 series.
- Configuration of Fabric path and connectivity between Nexus 5K and Nexus 7k.
- Hands-on Experience with CISCO Nexus 7000, Nexus 5000, and Nexus 2000 platforms.
- Automated network implementations and tasks and designed monitoring tools using python scripting.
- Worked on F5 BIG IP LTM 3600 load balancers to configure Nodes, Pools and VIP's on a need basis.
- Involved in troubleshooting of DNS, DHCP and other IP conflict problems.
- Configured DNS and DHCP for servers using Infoblox.
- Completed basic configurations on the F5 Big-IP LTMs and GTM load balancer on existing network to split traffic on web-servers.
- Expert in design, configuration and deployment of F5 Solutions with extensive experience working with APM and ASM technologies.
- Creation of ASM policies (Application security) on F5 Virtual servers.
- Configured one-time password for BIG-IP APM to add more security at the time of initialization of the application.
- Experience with Using GTM, APM & LTM F5 component to provide 24*7 access to applications.
- Responsible for configuration of A10 load balancer.
- Creating, configuring and Troubleshooting VIP's for (EBL & EFL Extranet networks) on F5/A10 networks.
- Experience with SDN/NFV technologies including Open Stack Neutron, VM ware, NSX, Open flow, Open daylight, Open v Switch, Open Contrail, or Cisco ACI.
- Configured and Created wireless sites using the Cisco Meraki System dashboard.
- Implemented site to site VPN on Cisco Meraki MX64, MX65, MC84, and MX400.
- Implementing Cisco Meraki Wireless network.
- Experience with configuring DMVPN tunnels for the MPLS and ISP clouds, which are responsible for Transport Independent Design of IWAN.
- Experience with LAN protocols like VSS, STP, RSTP, MST, VTP, VLAN.
- Adminstrated LAN and WAN with of TCP/IP, NAT, PPP, ISDN and associates network protocols and services.
- Configured Cisco ISE for Domain Integration and Active Directory Integration.
- Configured Cisco ISE for Wireless and Wired 802.1x Authentication on Cisco Wireless LAN Controllers, Catalyst Switches, and Cisco ASA Firewalls.
- Worked with Cisco ASA 5500-X with Firepower services.
- Responsible in troubleshooting on Cisco ISE added new devices on network based on policies on ISE.
- Performed site refreshes on Cisco switching and Aruba wireless infrastructure.
- Hands on experience in Aruba S2500 switches, Aruba 7200, 3600 series wireless controllers.
- Migrated from Cisco 3650 switches to Aruba 3810 series switches.
- Experience with Virtualization technologies like installing, configuring, VMWare vSphere.
- Creation, management, administration and maintenance of virtual servers and clients.
- Integrating Panorama with Palo Alto Firewalls, managing multiple Palo Alto Firewall using Panorama.
- Worked with Enterprise Intrusion Detection / IPS (Snort, Source fire, Juniper IDP, IBM ISS).
- Implementation of L3 MPLS-VPN and Migration of branches to the new MPLS cloud4.
- Building the VPN tunnel and VPN encryption.
- Configured Site to Site IPsec VPN tunnels to peer with different clients and each of client having different specifications of Phase 1 and Phase 2 policies using Cisco ASA 5500 series firewalls.
- Optimized IPS signatures on the Cisco Fire Power management center to reduce false positives by disabling unnecessary rules and using the threshold, suppression, and pass rules features.
- Configured Easy VPN server and SSL VPN to facilitate various employees' access internal servers and resources with access restrictions.
- Coordinating with Vendors for creating and modifying firewall and NAT rules and Maintaining Site to Site and SSL VPN.
- Configured Cisco AMP (Advanced Malware Protection) for endpoint security systems.
- Working and Deployment experience with Cisco AMP to clean up the viruses and custom detection to control malware outbreaks.
- Configured EBGP load balancing and Ensured stability of BGP peering interfaces.
- Worked on Route-Reflectors to troubleshoot BGP issues related to customer route prefixes also route filtering using Route-maps.
- Implemented site to site VPN in Juniper SRX as per customer.
- Maintain and configure L2 and L3 services in MPLS.
- Worked with engineering team to resolve tickets and troubleshoot L3/L2 problems efficiently.
- Responsible for service request tickets generated by the helpdesk in all phases such as troubleshooting, maintenance, upgrades, patches and fixes with all around technical support.

Network Consultant

July 2012 to May 2014 Capita Plc. i/4 Durham, NC

- Environment: Cisco 2960,3750,3850,4500,6500 switches and Cisco 3945, ASR 1004,1002-X routers, Cisco ASA-

5585,5500,5520,5555 firewalls, Palo Alto PA-5260,5060,3060,3020,500 firewalls, Cisco Nexus 7K/5K/2K, LAN, OSPF, BGP, EIGRP, Cisco ISE, F5 Big-IP LTM & GTM.

- Responsible for troubleshooting, installing, administering and supporting network infrastructure for 38 State of Texas Agencies.
- Performed regular upgrades to network infrastructure components and diagnosis of complex networking problems by developing detailed implementation plans including communication strategies, validation and back out procedures.
- Provided support for all network security-related issues or queries including existing and new technologies, vendors and applications.
- Coordinating with the network staff to develop and enhance processes and procedures for disaster recovery.
- Performed work outside of normal business hours related but not limited to: on-call incident escalation and off-hours maintenance work.
- Responsible for network uptime and all changes are executed on time, in accordance with service level agreements with the State business.
- Implemented a backup strategy along with a disaster recovery plan in the event that the servers or critical network components should go down to prevent lost revenue.
- Troubleshooting, installing and supporting agencies site-to-site and remote ASA VPN connections throughout the State of Texas.
- Involved in multiple migration projects and migrated the existing firewall configurations from Cisco ASA to Palo Alto firewalls.
- Responsible for the planning, design, implementation, organization and operation of Palo Alto Firewalls based perimeter security network and network security devices including but not limited to PA-5200, 5000 and 3000 series Firewalls.
- Integrated Cisco ISE with RSA multifactor for the VPN users across multiple State of Texas Agencies and hands on experience with the DUO multifactor solution.
- Core Network Migrations and Replacements for the devices with end-of-life and end-of-support, which also includes the Cisco ASA to Palo Alto firewall migration across multiple agencies.
- Designed and implemented the network architecture for The Madison Yards Way state office building with multiple different agencies using a Multi VSYS Palo Alto firewall to reduce duplication and maximize efficiency of network services.
- Successfully installed Palo Alto (PA-5260,5060,3060,3020) firewalls to protect Data Center and provided L3 support for routers/switches/firewalls.
- Designed and replaced aging Cisco ASA Firewall architecture with new next generation Palo Alto appliances serving as Firewalls, URL and application inspection.
- Experience with Wildfire, URL and application inspection feature of Palo Alto and implemented Positive Enforcement Model with the help of Palo Alto Networks.
- Configured and maintained IPSEC and SSL VPN's on Palo Alto Firewalls.
- Experience in configuring, implementing, managing, and monitoring Palo Alto Virtual System (VSYS) firewalls using Panorama.
- Integrated and Configured Cisco ASA Firewalls with ISE to the Posture policy compliance perform CoA for remote VPN IPsec, SSL AnyConnect users.
- Configured Cisco ISE and switches to authenticate and authorize devices and users.
- Deployed BIG-IP F5 LTM Load Balancers for load balancing and traffic management of business application.
- Configured F5 Load Balancers: Adding virtual IPs, nodes, pools and health monitoring.
- Managed F5 Big-IP GTM/LTM appliances to include writing iRules, SSL offload and everyday tasks of creating VIPs.
- Provided application level redundancy and availability by deploying F5 load balancers LTM.
- Configuring and troubleshooting Cisco ASA Firewalls for Site to site VPN tunnels.
- Configuring failover and working on SSL-VPN when in active/standby failover on Cisco ASA.
- Managing Cisco ASA Firewalls using ASDM (Creating and Modifying Rules).

Network Consultant

January 2010 to June 2012 Capita Plc. 1/4 Worcester , MA

- Environment: Cisco routers 1601,1721, 1841, 2505, 7507 and 7513; Cisco Switches 2926, 3750, and 6509 series, OSPF, MPLS, EIGRP & RIP Work Profile:.
- Implemented and supported local and remote using Cisco devices (Cisco routers 1601,1721, 1841, 2505, 7507 and 7513; Cisco Switches 2926, 3750, and 6509 series).
- Implemented and supported disaster recovery facility for fail-over purpose, which included the backbone routers, VPN and DMZ networks.
- Configured static/dynamic routing for VPN customers with Managed Router Service (MRS) and customers using Proxy Radius servers.
- Also implemented Network Address Translation (NAT) on managed routers.
- Troubleshot network connectivity/performance problems (serious fault investigation management and resolution).
- Monitored LAN and WAN links and handled capacity planning which included installation, configuration and maintenance of Cisco devices (Cisco routers 1603, 2500, 7507 and 7513; Cisco Catalyst Switches 2926, 5005, 5505, 6509 and 8540).
- Troubleshot network connectivity /performance problems and provided resolutions.
- Tested L2 protocols (VLAN, STP, flavors of STP, PVST, HSRP, VRRP & LACP) and routing protocols (OSPF, MPLS, EIGRP & RIP).
- Testing network features: NAT, ACLs, Multicast, Traffic shaping, queuing on an L2 and L3 switches.
- Network maintenance and system upgrades (service packs, patches, hot fixes and security configurations).
- Worked within established configuration and change management policies to ensure awareness, approval and success of changes made to the network infrastructure.
- Selected and implemented security tools, policies, and procedures in conjunction with the company's security team and liaise with vendors and other IT personnel for problem resolution.
- Configured and troubleshot PPP WAN connectivity of T1 & NxT1 between access router & remote access router complexes to ATM switches.

Work History

January 0001 to Current

January 0001 to January 0001

Education

MS : Computer Engineering , 2010 Texas A&M University i¼ City , State

Summary

NETWORK SECURITY ENGINEER PROFILE Over 8 years of experience in Network design, Security, Tier support of Networks in various environments. Responsible for service request tickets generated by the helpdesk in all phases such as troubleshooting, maintenance, upgrades, patches and fixes with all around technical support. Extensive experience working on Cisco and Juniper routers/switches in complex environments with multiple ISPs.

Certifications

Cisco Certified Network Associate (CCNA) Cisco Certified Network Professional: (CCNP) AWS Certified Solutions Architect - Associate(ACSAA)

Highlights

- Mapped, Network Diagrams and physical identification in MS Visio.
- Provide hands on management of Data Center services, including rack and cable management.
- Cisco Security: Telnet, SDM, NAT/ACLs, AAA, Layer 2 Security, Layer 3 Security, IPS/IDS, Cisco (ASA, PIX) 5510, Cryptography, VPN, IPsec.
- Experience in physical cabling, IP addressing and subnetting with VLSM, configuring and supporting TCP/IP, DNS, installing and configuring proxies, Routers, Switches - Cisco (Nexus; 2k, 6k, 7k, 9k, ASR, ISR) Juniper (MX, M and SRX, vSRX) Alcatel (SR7750, OS6850) Nortel (DMS500, DMS250) Foundry/Brocade
- Network OS and Software - SDN, OpenDaylight, OpenFlow, VIRT, Nexus, NX/OS, ACI, Cisco IOS-XE, JunOS, ScreenOS, AOS, SR/OS
- Load Balancers - A10, F5 BigIP/IQ, Viprion, LTM, GTM, ASM, AFM, Cisco ACE, CSS11000, Foundry/Brocade
- Protocols - MPLS, VPLS, VOIP, ATM, SONET, Frame Relay, POS, BGP, EIGRP, OSPF, SNMP, ISIS, TCP/IP, IPsec, SSL/TLS, VxLan, FabricPath, ACI, DMVPN, iWAN
- Packet Analysis - Wireshark, T-bird, RF Analysis
- Packet and Application Firewalls - F5 BigIP ASM, AFM, Checkpoint NG, Juniper SRX, Palo Alto, Cisco ASA/PIX/FWSM
- Software Security - Reverse engineering, IDApro, GCC, GDB, ASM, SoftICE, Windbg, MS Visual studio, OllyDbg, Secure Coding Practices and Code Review
- VPNs - Cisco ASA, Palo Alto, Checkpoint, Juniper, IPsec, SSL
- Encryption - PKI and Symmetrical Cryptography RSA, ISAKMP, IKE, AES, 3DES, DES, RSA, RC4-6, Blowfish, DH, DSA
- Network / Security Automation / SDN - SDN, OpenDaylight, ACI, Firemon, Tufin, OpenFlow, REST
- Virtualization - VMware ESXi, KVM, Containers, Zones, HyperV, AWS, GCE
- Network Management - HP Openview, Prime, Ciscoworks, Tivoli Netview, PRTG, Netflow, sFlow, SolarWinds, Rancid, NetMon, OpenNMS, Visionael, Enterprise Pro, Custom written solutions
- Programming and Scripting - Bash, Shell, Python, REST, Java, TCL, Perl, C++, Pascal, Dot Net, Low-Level Assembly and C
- Database - PostgreSQL, MySQL, pgSQL, PL/SQL
- OS - Linux, Solaris, HP/UX, AIX

Skills

Mapped, Network Diagrams and physical identification in MS Visio. Provide hands on management of Data Center services, including rack and cable management. Cisco Security: Telnet, SDM, NAT/ACLs, AAA, Layer 2 Security, Layer 3 Security, IPS/IDS, Cisco (ASA, PIX) 5510, Cryptography, VPN, IPsec. Experience in physical cabling, IP addressing and subnetting with VLSM, configuring and supporting TCP/IP, DNS, installing and configuring proxies, Routers, Switches - Cisco (Nexus; 2k, 6k, 7k, 9k, ASR, ISR) Juniper (MX, M and SRX, vSRX) Alcatel (SR7750, OS6850) Nortel (DMS500, DMS250) Foundry/Brocade Network OS and Software - SDN, OpenDaylight, OpenFlow, VIRT, Nexus, NX/OS, ACI, Cisco IOS-XE, JunOS, ScreenOS, AOS, SR/OS Load Balancers - A10, F5 BigIP/IQ, Viprion, LTM, GTM, ASM, AFM, Cisco ACE, CSS11000, Foundry/Brocade Protocols - MPLS, VPLS, VOIP, ATM, SONET, Frame Relay, POS, BGP, EIGRP, OSPF, SNMP, ISIS, TCP/IP, IPsec, SSL/TLS, VxLan, FabricPath, ACI, DMVPN, iWAN Packet Analysis - Wireshark, T-bird, RF Analysis Packet and Application Firewalls - F5 BigIP ASM, AFM, Checkpoint NG, Juniper SRX, Palo Alto, Cisco ASA/PIX/FWSM Software Security - Reverse engineering, IDApro, GCC, GDB, ASM, SoftICE, Windbg, MS Visual studio, OllyDbg, Secure Coding Practices and Code Review VPNs - Cisco ASA, Palo Alto, Checkpoint, Juniper, IPsec, SSL Encryption - PKI and Symmetrical Cryptography RSA, ISAKMP, IKE, AES, 3DES, DES, RSA, RC4-6, Blowfish, DH, DSA Network / Security Automation / SDN - SDN, OpenDaylight, ACI, Firemon, Tufin, OpenFlow, REST Virtualization - VMware ESXi, KVM, Containers, Zones, HyperV, AWS, GCE Network Management - HP Openview, Prime, Ciscoworks, Tivoli Netview, PRTG, Netflow, sFlow, SolarWinds, Rancid, NetMon, OpenNMS, Visionael, Enterprise Pro, Custom written solutions Programming and Scripting - Bash, Shell, Python, REST, Java, TCL, Perl, C++, Pascal, Dot Net, Low-Level Assembly and C Database - PostgreSQL, MySQL, pgSQL, PL/SQL OS - Linux, Solaris, HP/UX, AIX

Additional Information

- Experience working on Cisco Catalyst Series 3750, 4500, 4900, 6500; Nexus 2000, 5000, 6000, 7000 and 9000 series switches. Worked on Cisco 7200, 3800, 3600, 2800, 2600, 1800 series Routers and Cisco 2900, 3500, 4500, 5500, 6500 and Nexus 5K series switches and Sound knowledge of Routing and Switching concepts and MPLS design. Experience in working with Cisco Nexus Switches and Virtual Port Channel configuration. Expert in dealing with Networking Protocols and Standards such as TCP/IP, OSI, UDP, Layer 2 (VLANs, STP, VTP), Routing Protocols (RIP, EIGRP, OSPF, BGP), WAN technologies (Frame relay, IPsec, VPNs, MPLS), QoS. Configuration and troubleshooting VOIP protocols SIP, RTP, H.248, H.323 and MGCP. Conversions to BGP WAN routing. Which will

be to convert WAN routing from OSPF to BGP (OSPF is used for local routing only) which involves new wan links. Experience in troubleshooting NAT configurations, Access-Lists (ACL), and DNS/DHCP related issues within the LAN network. Experience in installing and configuring DNS, DHCP server. Configure VRRP & GLBP and VLAN Trunking 802.1Q & ISL, STP, Port Security on Catalyst 6500 switches. Experience working on Cloud Computing Virtualization using VM ware ESXi 4.0 and Windows Hyper-V. Installed and implemented & troubleshoot the Network Virtualization through UCS and NSX. Troubleshoot end-to-end call flow issues in enterprise market involving various VoIP elements. Intensive applications of Network automation tools and testing for network automation and configuration management using Ansible, Python scripting. Provided the technical integration of public and private Cloud services, including AWS, Microsoft Azure, Office 365, Rackspace & VoIP/SIP providers to increase infrastructure agility due to business demands. Working Experience on web content filter and gateways like Blue Coat, Websense. Extensive working experience in AAA protocols such as RADIUS, TACACS+ and Cisco ACS. Experience on Monitoring and Management tools such as HP Open view, Splunk, TCP dump, Solar Winds and Wireshark/Ethereal, Cisco Prime, Net Flow, Net scot, Sniffer, Riverbed. Extensively used TCP/IP tool like TELNET for remote login to the routers and SSH for secure login. Working experience performing Incident, change management using ticketing tools such as ServiceNow, Remedy. Design, implement and manage security tools and systems such as IDS, IPS, VPN, WAF, DLP, AV, Cisco AMP, SEIM, Vulnerability. Installed and configured Cisco Unified Communications Manage(UC). Responsible for Configuration and administration of firewalls, which includes Checkpoint, Juniper, and Cisco ASA firewalls. Experience in risk analysis, security policy, rules creation and modification of Cisco ASA networks. Checkpoint Firewall troubleshooting and policy change requests for new IP segments that either come on line or that may have been altered during various planned network changes on the network. Replaced aging Checkpoint firewall architecture with new next generation Palo Alto appliances serving as firewalls and URL and application inspection. Designed security policies on Palo Alto network firewall for controlling what traffic needs to be allowed or blocked based on customer requirements. Configure and implementing Fortinet Security systems Firewall. Assisted in managing global Fortinet FortiGate firewall infrastructure. Experience in configuration of Juniper security appliances SRX 220, SRX 240, SRX 550, NS 50, SSG 550M, SSG 520M. Established VPN tunnels between Cisco routers and Cisco Firewalls and Palo Alto Firewalls. Performed IOS Software upgrades on switches Cisco 6509, 4510, 3750 and Cisco ASR for compatibility with Cisco ISE. Implemented Cisco Application Centric Infrastructure (ACI) as a solution for data centers using a Spine and Leaf architecture Used Cisco ACI Fabric which is based on Cisco Nexus 9000 series switches and Cisco Application Virtual Switch (AVS). Good knowledge in SD-WAN technology in involving discovery design and implementation of client's network. Assisting with the design and deployment of a Cisco Firepower cluster in the core. Knowledge of JUNOS platform and worked with JUNOS upgrade of Juniper devices. Experience in A10 and F5 Load balancers such a BIG-IP LTM and GTM modules. Infoblox to provide DNS, DHCP, IPAM, administration services.