NAVEEN K. KOYI

Sr. Network Engineer ((CCNA Certified)

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**Summary of Qualifications:**

* Over Ten (10+) years of experience in network design, implementation, troubleshooting and managing large-scale enterprise networks; have provided Level-2 & 3 support for Network Operations Center as per Organizational requirement.
* Adept at utilizing network monitoring tools isolating network security deficiencies and creating comprehensive report of network issues.
* Expert in security trend reporting and scalable network protection.
* Expertise in Cisco Routing, Switching and Security with Cisco hardware/software (heavy Cisco shop) experience.
* Strong knowledge on Cisco Catalyst Series 3750, 4500, 4900, 6500; Nexus 2000, 5000, 6000 and 7000 series switches.
* Hands on experience with Cisco Routers, Cisco Switches, Load Balancers and Firewalls.
* Experience with Nexus models like 7K, 5K, 2Kseries, Cisco router models like 7200, 3800, 3600, 2800, 2600, 2500, 1800 series and Cisco catalyst 6500, 4500, 3750, 3500, 2900 series switches.
* Experience in working with Nexus 8000 and 9000 Series Switches.
* Expertise in configuration of HSRP, VRRP between CISCO 7K and 8K Catalyst Switches.
* Expertise in Installing and Managing High End servers in Data Center.
* In depth knowledge and hands-on experience in Tier II ISP routing policies,Network Architecture, IP Sub-netting,VLSM, TCP/IP, NAT,DHCP,DNS,FT1/T1/FT3/T3 SONET POS OCX/GigE Circuits and Firewalls.
* Experience in working with Cisco Nexus Switches and Virtual Port Channel configuration.
* Design and configuring of OSPF, BGP on Juniper Routers (MX960, MX480) and SRX Firewalls (SRX240, SRX550).
* Hands on Experience on IDS & IPS Network Security Firewalls
* Maintain sensors including scripting, updating IDS/IPS vendor signatures, fine-tuning, support of recap of sensors to the client environment, and troubleshooting and resolving of networking problems.
* Working knowledge of relationships between Security System tool alerts, signatures, rules and events.
* Experience in working with BGP route-path optimization, peering, and ISP performance.
* Thorough understanding of BGP route optimization and path selection, including all 11 BGP selection criteria
* Experience with multi-homed ISPs actively balancing and optimizing at least four ISPs simultaneously.
* Full understanding of both confederations and route-reflectors.
* Strong knowledge on TACACS+, RADIUS implementation in Access Control Network.
* Diagnose Layer1, Layer2 and Layer3 fault-related cases by effectively utilizing software diagnostics and tools.
* Experience on working with Level-3 infrastructure
* Knowledge of implementing and troubleshooting complex layer 2 technologies such as VLAN Trunks, VTP, Ether channel, STP, RSTP and MST. Implementation of HSRP, VRRP for default gateway and Redundancy
* Knowledge of Quality of Service and experience designing/implementing QoS in datacenter & enterprise environment
* Responsible for Check Point and Cisco ASA firewall administration across global networks.
* Experience with Load Balancers for administrating and monitoring global & local traffic.
* Advance F5 load balancer configurations, including migrating configurations from Cisco ACE to F5 and general troubleshooting of F5 load balancers.
* Experience on working with Virtualization concepts like VM-Ware while implementing load balancers
* Experience with JUNOS platform and worked with IOS upgrade of Juniper devices.
* Experience with Solar Winds, Cisco Works, SNMP, Splunk, Wireshark Analysis and Monitoring
* Excellent at management, debugging and capable of quickly learning, effectively analyses results and implement and delivering solutions as an individual as part of a team.

**Technical Competencies:**

Cisco Platforms: Nexus 7K, 5K, 2K & 1K, Cisco routers (7600, 7200, 3900, 3600, 2800, 2600, 2500, 1800 series) & Cisco Catalyst switches (6500, 4900, 3750, 3500, 4500, 2900 series) Nexus 8K &9K Series Catalyst Switches. Level2 & Level 3 Infrastructure

Juniper Platforms: SRX, MX, EX Series Routers and Switches

Networking: Access-lists, Routing, Switching, Sub-netting, Designing, CSU/DSU, IPsec

Concepts: VLAN, VPN, WEP, WAP, MPLS, VoIP, Bluetooth, Wi-Fi

Load Balancers: Cisco CSM, F5 Networks (Big-IP)

WAN & LAN: WAN: Frame Relay, ISDN, ATM, MPLS, leased lines & exposure to PPP

Technologies: DS1, DS3, OC3, T1 /T3 & SONET, NCS LAN: Ethernet, Fast Ethernet, Gigabit Ethernet, & 10 Gigabit Ethernet, Port- channel, VLANS, VTP, STP, RSTP, 802.1Q

Firewalls: ASA Firewall (5505/5510), Checkpoint,Cisco ASA

Tools &Protocols: Tools: Solar Winds, SNMP, Cisco Works, Wireshark, Splunk

Security Protocols: IKE, IPSEC, SSL-VPN

Network Protocols: TCP IP protocol stacks, RIP, OSPF, EIGRP, BGP,IBGP,EBGP STP, RSTP, VLANs, VTP, PAGP, LACP, MPLS, HSRP, VRRP, GLBP, TACACS+, Radius, AAA

Operating Systems: Windows 10/8/7/XP, MAC OS X, Windows Server 2008/2003, Linux, UNIX,SNMP, TOSCA

**Professional Experience:**

***Client: GE Health Care - Barrington, IL*** *Feb 2016 - Present*

***Role: Network Engineer***

**Roles & Responsibilities:**

* Install computer networks such as local area networks (LANs), wide area networks (WANs), the Internet, intranets, and other data communications systems.
* Install server hardware and software infrastructure
* Support administration of servers and server clusters.
* Manage system back up.
* Restore protocol.
* Document network problems.
* Support network and computing infrastructure.
* Install and maintain network services, equipment, and various devices.
* Configuration of routing and switching equipment
* Configuration of hosted IP voice services;
* Remote support of on-site engineers and end users/customers during installation;
* Remote troubleshooting and fault finding if issues occur upon initial installation;
* Capacity management and audit of IP addressing and hosted devices within data centers;
* Liaising with project management teams, third-line engineers and service desk engineers on a regular basis;
* Switches Replace branch hardware with new 2851 routers and 2960 switches.
* Configured OSPF on CISCO devices with multiple routing processes and redistributed them. Tested and hands on experience in multi area OSPF topologies.
* Worked on WLAN 802.11a / b/g/n / ac, Bluetooth and WLAN features, WLAN security-WEP/WPA/WPA2, WPS, WMM, u-APSD, SSL and 802.1x based authentication schemes.
* Conducting large scale Predictive RF Survey forWifi Access point implementation by Air magnet.
* Performing radio propagation modelling for WAP site locations and optimizing system traffic
* Analyzed customer application and bandwidth requirements, ordered hardware and circuits, and built cost effective network solutions to accommodate customer requirements and project scope.

**Environment:** Cisco 2851/2960 switches and Cisco 3640/12000 /7200/3845/3600/2800 routers, Nexus 5000, WLAN 802.11 a/b/g/n devices, WLAN security and Wi-Fi Access Points

***Client: HSBC - Buffalo, NY*** *Feb 2015 to Jan 2016*

***Role: Sr. Network Engineer***

**Roles & Responsibilities**:

* Configuring, Upgrading and verifying the NX-OS operation system.
* Converting PIX rules over to the Cisco ASA solution.
* Basic and advance F5 load balancer and Cisco ACE configurations, general troubleshooting of the F5 load balancers.
* Modified internal infrastructure by adding switches to support server farms and added servers to existing DMZ environments to support new and existing application platforms.
* Analyzed customer application and bandwidth requirements, ordered hardware and circuits, and built cost effective network solutions to accommodate customer requirements and project scope.
* Configured routers and coordinated with LD Carriers and LECs to turn-up new WAN circuits.
* Convert Checkpoint VPN rules over to the Cisco ASA solution. Migration with both Checkpoint and Cisco ASA VPN experience
* Worked with BGP, OSPF protocols in MPLS Cloud.sssss
* Providing daily network support for national wide area network consisting of MPLS, VPN and point-to-point site.
* Configuring HSRP between the 3845 router pairs of Gateway redundancy for the client desktops.
* Configuring GLBP, VLAN Trunking 802.1Q, STP, Port security on Catalyst 6500 switches.
* 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.
* Configuring BGP, MPLS in Cisco IOS XR.
* Configuring Virtual Device Context in Nexus 7010.
* Working on HP open view map for Network Management System and Ticketing
* Involved in Configuration of Access lists (ACL) on ASA firewall for the proper network routing for the B2B network connectivity.
* Providing Level 3 support to customers, resolving issues by attending to conference calls.
* Providing Level 3 Engineering and Support to other internal network engineers and contractors.
* Designing and installing new branch network systems. Resolving network issues, running test scripts and preparing network documentation.
* Actively participated in upgrading fast Ethernet, Layer 3 switched/routed LAN infrastructure from Cisco 3640 to Cisco 2811 ISR routers and switches at access level to 2950, 3550.
* Converting CatOS to Cisco IOS Config Conversion on distribution layer switches
* Configured various Router interfaces like ATM interface, T3 & Channelized T1 interfaces
* Configuring and troubleshooting CISCO catalyst 6509, 7609, 7613 with Supervisor cards, Cisco 3640, Cisco GSR 12416,21418(with PRP and RPR processors)
* Strong Troubleshooting Skills and Customer Centric approach.
* To secure configurations of load balancing in F5, SSL/VPN connections, Troubleshooting CISCO ASA firewalls, and related network security measures.
* Designed and implemented DMZ for Web servers, Mail servers & FTP Servers using Cisco ASA5500 Firewalls.

**Environment:** Cisco 2948/3560/4500/3750/3550/3500/2960 6500 switches and Cisco 340/12000 /7200/3845/3600/2800 routers, Cisco ASA5510, Checkpoint, F5 Load Balancer Cisco Nexus 7K/5K, Checkpoint, Cisco ASA, Windows Server 2003/2008: F5 BIGIP LTM, RIP, OSPF,BGP, EIGRP, LAN, WAN, VPN, HSRP

***Client: State of Minnesota - Minneapolis, MN*** *Apr 2013 to Jan 2015*

***Role: Sr. Network Engineer***

**Roles & Responsibilities**:

* Performed RIP & OSPF routing protocol administration.
* Interacted with support services to reduce the downtime on leased lines.
* Troubleshoot problems of on a day to day basis & provide solutions that would fix the problems within their Network.
* Maintenance and Troubleshooting Assisted in troubleshooting LAN connectivity and hardware issues in the network of 100 hosts.
* Studied and analyzed client requirements to provide solutions for network design, configuration, administration, and security.
* Involved in troubleshooting IP addressing issues and Updating IOS images using TFTP.
* Maintained redundancy on Cisco 2600, 2800 and 3600 routers with HSRP.
* Created a backup and recovery policy for software application and verified peripherals are working properly.
* Working with BGP states & Messages
* Worked with well-known and optional BGP attributes for best path Selection
* Worked with BGP neighbor-ship conditions like redundancy and creating a default route.
* Monitor performance of network and servers to identify potential problems and bottleneck.
* Daily responsibilities included monitoring remote site using network management tools, assisted in design guidance for infrastructure upgrade & help LAN administrator with backbone connection and connectivity issue Other responsibilities included documentation and support other teams
* Configured OSPF over frame relay networks for NBMA and point to multipoint strategies
* Implementing traffic engineering on top of an existing Multiprotocol Label Switching (MPLS) network using Frame Relay and Open Shortest Path First (OSPF).
* Provided redundancy in a multi homed Border Gateway Protocol (BGP) network by tunings AS-path
* Configuration and implementation of various Cisco Routers and L2 Switches.
* Configured Blue Coat Proxies’ Web Application Reverse Proxy for securing and accelerate public web applications.
* Designed and implemented VLAN using Cisco switch catalyst 1900, 2900, 5000 & 6000 series.
* Modified internal infrastructure by adding switches to support server farms and added servers to existing DMZ environments to support new and existing application platforms.
* Built site-to-site IPSec VPNs over Frame-relay & MPLS circuits on various models of Cisco routers to facilitate adding new business partners to new and existing infrastructures.
* Analyzed customer application and bandwidth requirements, ordered hardware and circuits, and built cost effective network solutions to accommodate customer requirements and project scope.
* Configured routers and coordinated with LD Carriers and LECs to turn-up new WAN circuits. Configuring, Maintaining the Routers and Switches and Implementation of RIP, EIGRP, OSPF, BGP routing protocols and trouble shooting.

**Environment**: Cisco 3750/3550/3500/2960 switches and Cisco 3640/12000/7600/7200/3845/ 3600/2800 routers, Cisco ASA5510, Checkpoint, F5 Load Balancer Cisco Nexus 7K/5K, Cisco ASA and Checkpoint

***Client: WellSpan Health Service - York, PA*** *Jun 2011 to Mar 2013*

***Role: Network Admin***

**Roles & Responsibilities**:

* Provided estimated bandwidth requirements for data replication, to best determine adequate timing for migration service levels
* Configuring HSRP between VLANs, Configuring Ether-Channels, Port Channel on 6500 catalyst
* Switches Replace branch hardware with new 2851 routers and 2960 switches.
* Implemented WLAN Aruba Wireless Access Points and its Controllers at various corporate sites fort 11n Infrastructure and its legacy technologies.
* Worked on Cisco Nexus 5000 series switches for data center.
* Configured OSPF on CISCO devices with multiple routing processes and redistributed them. Tested and hands on experience in multi area OSPF topologies.
* Configured VLANs with 802.1q tagging. Configured Trunk groups, ether channels, and Spanning tree for creating Access/distribution and core layer switching architecture.
* Worked with BGP no advertise and loop avoidance mechanisms in BGP
* Assisted in network engineering efforts consistent with the infrastructure of an Internet Service Provider and support of such network services.
* Helped in designing and implementation of VLAN for the new users.
* Installation and Configuration of various types of Personal Computers and Printers.
* Installation of different operating systems on Intel based PC's.
* Installed Hard disks, Floppy drives, CD Drives, Sound Blaster cards, CPU, Memory, Power supply unit, Network card, Video graphics card, Hard disk controller card on PC systems.
* Troubleshooting of personal computers. On line Support to customers concerning their computer problems.
* Configuring, managing and troubleshooting networks using routing protocols like RIP, EIGRP and OSPF (Single Area and Multi Area).
* Assisted with troubleshooting all network issues with routers and switches when necessary and consulted with on call tech as needed for client.
* Monitor, troubleshoot, test and resolve Frame Relay, ATM, MLPPP, PPP, and Dial-up.
* Configuring/Troubleshoot issues with the following types of routers Cisco (7200, 6500, 4500, 1700, 2600 and 3500 series), to include: bridging, switching, routing, Ethernet, NAT, and DHCP, as well as assisting with customer LAN /MAN, router/firewalls.

**Environment:** Cisco 3750/3550/3500/2960 switches and Cisco 3640/12000 /7200/3845/3600/2800 routers, Cisco ASA5510, Checkpoint, F5 Load Balancer Cisco Nexus 7K/5K, Checkpoint, Cisco ASA

***Client:US Cellular Services - Chicago, IL*** *Feb 2010 to May 2011*

***Role: Sr. Network Admin***

**Roles & Responsibilities**:

* Designed and installed new Branch network systems. Resolved network issues, ran test scripts and prepared network documentation.
* Performed Network Operations by health monitoring using NMS, Issue and Incident resolution using ticketing system and workflow software.
* Monitoring the NMS system for different Network Alerts.
* Worked on orchestration platforms like tail-f/NCS, Open Stack Heat and other open source orchestration products
* Ensure problems are satisfactorily resolved in a timely manner with focus on providing a high level of support for all customers.
* Coordinating with service providers for WAN link outages.
* Checking and configuring Cisco 7600 routers at data center for remote sites’ issues.
* Uses knowledge of LAN/WAN systems to help design and install internal and external networks
* Worked on Cisco 6500 and4500 switches for LAN requirements that include managing VLANs, Port Security and troubleshooting LAN issues.
* Perform Wireless Administration and troubleshooting for the corporate Wireless infrastructure.
* Involved in troubleshooting of DHCP and other IP conflict problems.
* Performed switching technology administration including VLANs, inter-VLAN routing, Trunking, STP, RSTP, port aggregation & link negotiation.
* Configuration of Access List ACL (STD, Ext, Named) to allow users all over the company to access different applications, Internet and compliance to the security policy and standards.
* Worked with application team to understand their requirements and come up with the best load balancing options.
* Integrate and Implement various internal Network Projects. Did designing and project co-ordination with multiple stake holders and vendors.
* Responsibilities also include technical documentation of all upgrades done. Attending meetings and technical discussions related to current project.
* Prepared engineering documents and network diagrams in Microsoft Visio
* Configured Virtual Servers, Configure Nodes, and configuring the load balancing Pools and also used to work with configuring load balancing algorithms.
* Configured F5 LTM 8950, 6900, VIPRION 2400 models
* Deployed Nexus 7k instead to Cisco 6500 CAT OS devices.
* Also worked with VPC, VDC on the Nexus 7k and also added fabric extenders in the data center environment.
* Configured VLAN’s, VTP’s, and enabling trunks between switches.
* Monitor, troubleshoot, test and resolve Frame Relay, ATM, MLPPP, PPP, and Dial-up

**Environment:** Cisco 3550/3500/2960 switches and Cisco 3640/12000 /7200/3845/3600/2800 routers, Cisco ASA5510, Firewall, Checkpoint, F5 Load Balancer Cisco Nexus 7K/5K, Cisco ASA

***Client:Aetna Insurance - Hartford, CT*** *Sep 2008 to Jan 2010*

***Role: Network Support Engineer***

**Roles & Responsibilities**:

* Actively participated in upgrading LAN infrastructure from Cisco 3640 to Cisco 2811 ISR routers and switches at access level to 2950, 3550. This project also involved in configuring and testing EIGRP and BGP protocols.
* Implemented and Maintained Cisco 7940 and 7960 VOIP systems.
* Configuring and Utilized network monitoring software to ensure network availability to all system users and Communication Manager.
* Installed and Configured Juniper and Cisco Routers – GSR 12000, 7600series, 4500, 2800s.
* Performed the design and deployment of Citrix production environments in the company.
* Implemented VLAN, VPN and other switching protocols.
* Configuring EIGRP, OSPF and RIP routing protocols for enterprise network and provided Tier 2 Support.
* Implementing and troubleshooting (on-call) IPsec VPNs for various business lines and making sure everything in place.
* Involved in troubleshooting of DHCP and other IP conflict problems.
* Worked primarily as a part of the security team and daily tasks include firewall rule analysis, rule modification and administration.
* Modified internal infrastructure by adding switches to support server farms and added servers to existing DMZ environments to support new and existing application platforms.
* Designed, developed and implemented engineering solutions aligned with enterprise architecture framework based on latest Windows 2003/2008 and Active Directory-based LAN/WAN environment consisting of Development, Testing and Productions servers.
* Supporting project test teams in analyzing and bandwidth utilization.
* Developed backups using Backup Exec Software.
* Installed Checkpoint Firewall & Administered security policy with Rules Base, different levels of authentication and interpreted log messages.
* Configured Net Scout sniffer to collect statistics and analyze the bandwidth utilization on the network.

**Environment:** Cisco Catalyst 3500, 4500 and 7200 switches. Cisco 2600, 2800, 3600, 7600 and GSR 12000 routers. STP, VTP, OSPF, EIGRP, BGP and 802.11 a/b/g

***Client:Internap, Atlanta, GA Aug 2007 to Aug 2008***

***Role: Network Support Engineer***

**Roles & Responsibilities**:

* Involved in troubleshooting of DNS, DHCP and other IP conflict problems.
* Configured 2600, 2900 and 3600 routers with RIP and EIGRP.
* Used various and sniffing tools like WireShark.
* Hands on experience working with security issue like ACL’S, configuring NAT and VPN.
* Spearhead meetings & discussions with team members regarding network optimization And regarding BGP issues.
* Network mitigation from RIP to OSPF and EIGRP
* Network Infrastructure support to routing and switching equipment.
* Troubleshoot and resolved dynamic routing, Ethernet switching and host connectivity issues in a window and network environment.
* Troubleshoot wiring problems and serial communication lines.
* Develop, plan and maintain documentation necessary for operation in support of LAN to WAN connectivity.
* Develop backups using Backup Execution software.
* Implemented VTP and Trunking protocols on catalyst 3560, 3750, and 4500 switches.
* Installation, maintenance, Troubleshooting Local and Wide Areas Network (ISDN, Frame relay, NAT, DHCP, TCP/IP)
* Configuration of Access list (ACL) to allow users all over the organization to access different applications and blocking others.

**Environment:** Cisco Catalyst 1900, 2900, 3500, 4500 and 7200 switches. Cisco 2600, 2800, 3600 and 7200 routers, STP, VTP, OSPF and BGP

**Certification & Education:**

* Cisco Certified Network Associate (**CCNA**)
* Cisco Certified Network Professional (**CCNP**)
* **Bachelor’s Degree in Electronics & Communications Engineering**(Graduated in 2007)

JN Technology University, AP, India

**References:** Provided upon request…