# Varun Naroju

# PROFESSIONAL SUMMARY

* Over 7+ years of experience in network engineering, performing analysis, design, implementing, troubleshooting with focus on performance tuning and support of large enterprise networks.
* Design, configure, test and implement the solutions as per the requirement.
* Interacting with clients to analyze the requirements of their projects and applications and to propose LAN WAN wireless networking solutions.
* Proficient experience in configuring Cisco Catalyst 2900,2960, 3560, 3750, 4500, 4900, Legacy Cat 6500 series and Nexus 7010, 5548 and 2248 switches and deep understanding of architecture.
* Experience in service validation, gateway support and troubleshooting network, security infrastructure on routers, switches, and firewalls; expertise in creating test plan, test estimation, test execution and reporting.
* Experience working with 2600, 2900, 3600, 3900, 7200, 7600 series Cisco Routers.
* Experience in configuration of Virtual Local Area Networks using Cisco routers, multi-layer switches and supporting STP, RSTP, PVST, RPVST with trouble shooting of inter-VLAN routing and VLAN trunking using 802.1Q.
* Expertise in configuring and deployment of routing protocols-OSPF, EIGRP, BGP, Policy-based routing over Cisco Routers, configuring and troubleshooting route redistribution.
* Experience in working with F5 Load Balancers for LTM and GTM type load balancing between multiple centers.
* Experience in designing, implementing and configuring F5 load balancer.
* Deployed AWS networking (such as AWS regions, VPC, Direct Connect, Elastic Load Balancing, DNS/Route 53, virtual firewalls & routers), Security (ACLs, Security Groups), ELB, EBS, EC2, S3.
* Extensive implementation of firewall rules on Juniper SRX 3400 and NetScreen 5500 on daily basis, using CLI.
* In-depth understanding of IPV4 and implementation of Sub Netting Knowledge of implementing and troubleshooting complex layer 2 technologies such as VLAN Trunks, VTP, Ether-channel, Multi-Layer Switching, Port security ,STP, RSTP and MST.
* Worked on T1/E1/T3 technologies and different LAN &amp; WAN technologies, FTP, TFTP and DHCP configuration and setup.
* Expert in implementation, configuration, troubleshooting of Access Control Lists (ACL), NAT and Cisco IOS.
* Knowledge of various advanced technologies like VOIP, QOS, IPv4, Multicasting, and MPLS.
* Worked on Cisco catalyst router 6509 and implemented VSS with VDC and VPC on Nexus 5505, 7010 switches.
* Experience in Setting up of IPSEC VPN and remote VPN connections to communicate between branches.
* Hands on experience on PIX, Firewalls, ASA 5500 series firewalls, Palo alto firewall Implemented Security Policies using ACL, IPSEC, SSL, VPN, IPS/IDS, AAA (TACACS+; RADIUS).
* Experience in implementing DMVPN with hub and spoke topology for 100 plus remote sites.
* Experience in Cisco’s Application Centric Infrastructure (ACI) implementation (Nexus 9K, APIC).
* Experience in configuring and troubleshooting VOIP devices.
* Good understanding of the OSI reference model and the TCP/IP model.
* Experience in troubleshooting network issues using Cisco Prime Infrastructure, Wireshark, Solar winds, Cisco NCS, and FireMon.
* F5 LTM & GTM configuration, staging, implementation and support experience.
* Managed the F5 Big IP GTM/LTM appliances to include writing iRules, SSL offload and everyday task of creating WIP and VIPs.
* Good understanding and hands on experience configuring AAA-authentication, authorization, accounting, and configuring IP Access Control Lists.
* Experience working with different wan transports MPLS, VPN, Metro Ethernet.
* Experience in configuring ASR 1K routers as head end WAN routers and implemented BGP with VRF and OSPF instances.
* Working knowledge of network monitoring/management tools like Wireshark, TCP dump, Cisco Prime, Net Flow, PRGT, Solar Winds.
* Experience with implementation of DNS and DHCP protocols and Configure Protocols MPLS: TDP, LDP, L2VPN, VPLS, AToM, RSVP-TE, QoS.
* Providing technical support like networks designs, configurations, demonstrations, in-house functional testing, onsite installation and support service like trouble shooting, upgradation as per the required network application.
* Understanding of 3GPP/3GPP2 standards and test requirements for LTE wireless technologies.
* Good understanding of the OSI reference model and the TCP/IP model.
* Performed testing on PoE devices for conformance to the IEEE 802.3 Clause 33 standard.
* Familiar with MS-Office applications (Word, Excel, Visio, Outlook, Power point).
* Strong analytical and problem-solving skills, always striving for new knowledge with multi-tasking and organizational skills.
* Excellent communication and interpersonal skills, ability to work independently as well as part of an integrated team.

**TECHNICAL SKILLS**

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| **Switching Technologies** | VLANs, Inter VLAN routing and Port Channels, VTP, Spanning Tree Protocols, RSTP, Ether-Channel, Multi-Layer Switching, and Port security. |
| **LAN Technologies** | Ethernet, Fast and Gigabit Ethernet, LWAPs. |
| **WAN Technologies** | HDLC, ISDN Frame Relay, VPN. |
| **VPN Technologies** | Remote Access VPN, Site-to- Site VPN. |
| **Routing Protocols** | RIP v1/v2, EIGRP, OSPF, BGP, Static route. |
| **Redundancy Protocols** | HSRP, GLBP, VRRP. |
| **Cisco Routers** | 7600, 7200, 3800, 3600, 2800, 2600, 2500, 1800 series, Juniper M series. |
| **Cisco Switches** | Nexus 5548, 5596, 6000, 7009, 7018;  Cisco Catalyst: 6506, 6509-V-E, 4928, 4948, 4507, 4510, 3750, 3560, 2960. |
| **Load Balancers** | F5 Network (Big-IP) LTM 8900, 6400,Load Balancers A10 Networks(AX2500),Cisco CSM. |
| **Servers** | FTP, DHCP, AAA, SMTP, DNS, HTTP, Syslog, TFTP. |
| **Applications** | Wireshark, NetMon, Microsoft Service Enterprise, Secure CRT, Putty, Alarm Monitoring Console,OPNet, MS Ticketing, MS Azure, VPN migration, Multipoint Ethernet, SNMP, Router Configuration, SDN, Genesys Suite 6.5, and Genesys Suite 7.x. |
| **Vmware** | VMware ESX, VCenter Server, VMware Workstation. |
| **AAA Architecture** | TACACS+, RADIUS, Cisco ACS. |
| **Network Management** | Wireshark, Cisco works, solar winds, Cisco ACS, Cisco NCS. |
| **Network Security** | Cisco ASA 5520/5550, PIX 525 Firewalls, ACL, IPsec, Palo Alto firewall. |
| **F5 load balancers** | F5 Big-IP 1500, 3400, and 6400 8900 LTM, GTM 5, F5 3DNS Load balancer GTM, LTM, GTM. |

**PROFESSIONAL EXPERIENCE:**

**SEI Investments, Oaks, PA Jan 2016 - till date**

**Network Engineer**

**Responsibilities:**

* Configured Routing protocols such as RIP, OSPF, EIGRP, static routing and policy based routing.
* Team member of Configuration of Cisco 7206 router with VPN and Configuration of Catalyst switches.
* Configuration 7500, 7200 with OSPF and catalyst 6505, 4500, 3550 switches with various VLAN.
* Create and test Cisco router and switching operations using OSPF routing protocol, ASA 5500 Firewalls, and MPLS switching for stable VPNs.
* Troubleshooting the Network Routing protocols (BGP, EIGRP and RIP) during the Migrations and new client connections.
* Configuration and troubleshooting link state protocols like OSPF in single area and multiple areas.
* Redesign of Internet connectivity infrastructure for meeting bandwidth requirements.
* Configured and managed VLANs, 802.1Q Trunk, RPVST+, Inter-VLAN routing, HSRP and LAN security for Layer-2 and Layer-3 switching domains as per the organization requirement plan.
* Optimized performance of the WAN network consisting of Cisco 3550/4500/6500 switches by configuring VLANs.
* Setup NFS and Samba File sharing on Linux and Windows servers.
* Implemented Positive Enforcement Model with the help of Palo Alto Networks.
* Successfully installed Palo Alto Next-Generation PA-3060, PA-5060 firewalls to protect Data Center with the use of IPS feature.
* Configured VLANs with 802.1q tagging. Configured Trunk groups, ether channels, and Spanning tree for creating Access/distribution and core layer switching architecture.
* Configured BPDU Guard, port-fast, uplink fast and other spanning tree features.
* Configuration and troubleshooting of Cisco 2500, 2600, 3000, 6500, 7500, 7200 Series routers.
* Strong working knowledge of Nexus 5K/7K /2K.
* Experience working with Nexus 7010, 5020, 2148, 2248 switches.
* Implementation and configuration of F5 Big-IP LTM-6400 load balancers.
* Installation and administration of Checkpoint R 75.40 Firewall.
* Implemented firewall policy change on the Checkpoint clusters.
* Verified and Validated the Firewall policy on Checkpoint R75 clusters for unused rule and helped consolidating rule.
* Deploying Layer 2 security in Server Farms by configuring switch for 802.1x port based authentication.
* Implemented, configured BGP WAN routing, converting OSPF routes to BGP (OSPF in local routing).
* Technical assistance for LAN/WAN management and complex customer issues.
* Provided support for troubleshooting and resolving Customer and user reported issues.
* Worked with Network Engineer’s in the installation and configuration of firewalls.
* Involved setting up the TFTP server for backing up the IOS images and configuration files of Cisco.
* Routers and Switches and troubleshooting the file servers.
* Upgrades, installs, configuration and administration security and monitoring tools on Linux.
* Experience with Security- Firewalls, NAT / PAT, IPSEC, S2S.
* Experience with ALG (RTP, RTSP and FTP, DNS, HTTP), DHCP.
* Responsible for network evaluations, troubleshooting a variety of network problems, and implementing various software and hardware upgrades efficient performance.
* Designed and implemented DMZ for Web servers, Mail servers &amp; FTP Servers using Cisco ASA5500 Firewalls.
* Generating RCA (Root Cause Analysis) for critical issues of layer1/layer2/layer3 problems.
* Provided redundancy to the network, implemented hot standby routing protocol (HSRP) and Load sharing for effective utilization of routers.
* Configuring, implementing and troubleshooting VLAN’s, VTP, STP, Trunking, Ether channels.
* Expertise in maintenance of layer2 switching tasks which advocate VLAN, VTP, STP, RSTP, PVST, RPVST, configuring of ether channel with LACP and PAGP.
* Packet capturing, troubleshooting on network problems with Wireshark, identifying and fixing problems.
* Implementing, configuring, and troubleshooting various routing protocols like RIP, EIGRP, OSPF, and BGP etc.
* Performing network monitoring, providing analysis using various tools like Wireshark, Solarwinds etc.
* Cisco ASA/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.
* Responsible for Cisco ASA 5500 firewall administration, Rule Analysis, Rule Modification.
* Generating RCA (Root Cause Analysis) for critical issues of layer1/layer2/layer3 problems.

**Environment:** Cisco 3500/3550/4500/6500 switches and Cisco 2500/2600/3000/6500/7500/7200 routers, Cisco ASA, Checkpoint, Cisco Nexus7K/5K/2K, LAN, OSPF, BGP, RIP, EIGRP, Palo Alto firewall.

**CVS Health, Richardson, TX Mar 2015 - Dec 2015**

**Network Engineer**

**Responsibilities:**

* Performed network engineering, planning (WAN &amp; LAN) &amp; implementation, studied single point failures &amp; implemented WAN structure in such a way that there are no failures in network in case of any device or link failure.
* Configured LAN networks with Access layer switches such as Cisco 4510, 4948, 4507 switches.
* Performed network monitoring and packet tracing using tools like Wireshark, OPNET.
* Setting up VLANS and configuring ISL trunk on Fast-Ethernet channel between Switches.
* Hands on experience on PIX, Firewalls, ASA 5500 series firewalls, Palo alto firewall Implemented Security Policies using ACL, IPSEC, SSL, VPN, IPS/IDS, AAA (TACACS+; RADIUS).
* Worked on Palo Alto Rule changes PA-2000/PA- 4000, templates, object creation, planning, configuration changes, OS upgrades, CLI troubleshooting.
* Deployed a large-scale HSRP solution to improve the uptime of collocation customers, in the event a core router became unreachable.
* Have experience in load balancing and application level redundancy by working on F5 load balancers
* Worked on F5 LTM, GTM series like 1600, 3400, 6400, 6900, 8800, Viprion for the corporate applications and their availability.
* Implemented F5 hardware migration of older 3600 hardware to Viprion.
* Experience in configuring and Troubleshooting BIG-IP F5 load balancer LTM Designed application mapping and application delivery using F5 BIG IP LTM. Configured Virtual IPs and servers on F5 and associated pool and pool members to it.
* Worked on F5 2400V, 5250V- VIPRION devices.
* Worked with F5 load balancer and Cisco ACE 4710 Load balancers.
* Deployment and management of AWS services and Azure
* Configuration of private, and public connectivity between the Virtual Network in AWS and the on-premise enterprise network using AWS Direct Connect.
* Configured Amazon Virtual Private Cloud (VPC) on AWS's scalable infrastructure.
* Configuring and implementing F5 BIG-IP, LTM, GTM load balancers to maintain local and global traffic.
* Configuring Virtual Chassis for Juniper switches EX-4200, Firewalls SRX-210.
* Implementing, Monitoring, Troubleshooting and Convergence in Frame-Mode MPLS inside the core.
* Configuring VLAN, Spanning tree, VSTP, SNMP on EX series switches.
* Part of the F5 team taking care of the regular business requirements, change controls and incident management.
* Working on both the F5 LTM, GTM platforms.
* Experience on 2400 Viprion model, creating Guest's, upgrading and Handling of new F5 hardware, installing, licensing, configuring and upgrading when required
* Teaming up with the app teams, setting of new application on the F5 as per their design and requirement
* Creating Virtual servers, pools, certificate's and customized monitors on the LTM.
* Knowledge of iRules, load balancing methods, persistence types and about SSL offloading
* Working with both command line interface and the GUI access of an F5 and Keeping the DNS entries related to Virtual servers via Infoblox.
* Load balancer configurations such as F5 and Citrix, Cisco ACE and CSM.
* Worked on migrating various applications from Cisco CSS/ACE to the F5 platform(LTM).
* Configuring Big-IP F5 LTMs (virtual servers, pools, SNATs, health monitors, iRules) and GTM's for managing the traffic and tuning the load on the network servers.
* Involved in L2/L3 Switching Technology Administration including creating and managing VLANs, Port security, Trunking, MSTP, STP, Inter-VLAN routing, LAN security 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 for Gateway redundancy for the client desktops.
* Configure VRRP & GLBP and VLAN Trunking 802.1Q & ISL, STP, Port Security on Catalyst 6500 switches.
* Worked on configuring objects such as F5 Load Balancer pools, members, SSL profiles for local traffic management on F5 Load balancers
* Configuring and troubleshooting type of routing to route traffic flow per customer requirement as primary, backup/load balanced and load splitting.
* Performed the maintenance of Active Directory and replication scheme, DNS/DHCP services and time services; wrote step-by- step procedures for implementing upgrades.
* Dealt with creating VIP (virtual servers), pools, nodes and applying rules for the virtual servers like cookie persistency, redirection of the URL.
* Configured VLANs on a switch for inter-VLAN communication. Configured VLAN Trucking Protocol (VTP) on Core Switches. Configured various LAN switches such as CISCO CAT 2900, 3550, 4500, 6509 switches for STP, VTP Domain, VLAN, Trucking, Fast Ether Channel configuration.
* Performed installation, configuration and testing of Aruba’s wireless Access points.
* Worked on Extensively on Cisco Firewalls, Cisco PIX (506E/515E/525/) &amp; ASA 5500(5510/5540) Series.
* Implemented security policies using ACL, PIX firewall.
* Monitored usage of network resources with Cisco works, and using sidewinder in PIX Firewall.
* Implemented Cisco IOS Firewall IDS using 2600 series router.

**Environment:** Cisco routers (1600,3600,7300) and Cisco switches (6509, 3550, 4500,2900), Nexus (7K, 5K, 2K), Routing protocols (EIGRP, OSPF, BGP), Switching Protocols (VTP, STP, GLBP, HSRP), F5 load balancer, Cisco PIX (525, 515E), ASA (5540, 5510) firewall, Palo Alto.

**FCA, Michigan Feb 2012 – Aug 2014**

**Jr. Network Engineer**

**Responsibilities:**

* Project deals with the maintenance and improvisation on the internet connection for Telecom.
* It included the line tests and the signal to noise ratio modifications. The line tests include the complete check from exchange to the source.
* Worked on the DSLAM check, analyzed the PCP position for the BT Wholesale and BT Retail Connections.
* Worked on the SIP issues for the FTTP and FTTH connections.
* Developed the new routing Algorithm on OPNET for the DOS ping attacks.
* Installation of intra networks and troubleshooting network failures.
* Resolving ongoing issues or defects, often called up to consult network problems.
* Monitored systems in the absence of lead engineer.
* Updating tickets request to and closed upon request.
* Researched coding and database concerns to resolve nonfunctional application issues.
* Ensure design of system allows all components to work properly together.
* Monitor networks to ensure security and availability to specific users.
* Evaluate and modify system's performance.
* Administer servers, desktop computers, printers, routers, switches, firewalls, phones, personal digital assistants, smartphones, software deployment, security updates and patches.
* Support LANs, WANs, network segments, Internet, and intranet systems.
* Responsible for reconciliation of accounts as per the debits and credits for the customer accounts using Microsoft access database.
* Generated reports using Excel as per the requirements.

**Environment:**Openreach, Resolve, SNR, DSLAM, DB, Opnet, Switch Functions.

**Mavin Infotech, India Jun 2009 – Nov 2012**

**Network Engineer**

**Responsibilities:**

* Manage installations, configuration and administration of Cisco equipment in IT architecture of organization.
* Configure IT LAN/WAN elements and held responsibility of maintaining and monitoring performance of network.
* Managed Rackspace hosted DNS zone.
* Migrate customer load-balancer and firewall configurations to Rackspace managed devices.
* Creating stories with tasks in Version One
* Worked with java applications and Apache Tomcat
* Provide Tier1 technical support; assist users facing network problems and Perform advanced troubleshooting, diagnostics and provide tier/level-1 solutions to network failures.
* Participate in joint OSP pre-construction survey
* Provide OSP technical requirements to sub-contractor before and during civil construction to accomplish the proposed project.
* Supervisor the subcontractor in Fiber Optic Cable direct buried or conduit installation.
* Implement Reliance outside plant construction requirements, standards and developed engineering specifications.
* Prepare daily accomplishment report, site instruction, change request, weekly site diaries, revised and as-built construction drawing and other anticipated supporting documents that might be sued prior to provisional acceptance. (e.g. trench classification).
* Inter-act and coordinate with clients to establish project scope, budget and schedules.
* Process clients and respond to their queries promptly and professionally.
* Attend coordination meeting and report project status, progress on regular weekly basis.
* Work with cross-functional teams (e.g. inside plant team) to ensure quality and on-time delivery.
* Network Migration from RIP to OSPF and EIGRP.
* Network infrastructure support to routing and switching equipment.
* Redistribute routing protocols and Frame-Relay configuration.
* Design the layout for cable installations.
* Involved in design and deploying various network security &amp; High availability products like Cisco ASA and other security products.
* Support customer with the configuration and maintenance of ASA firewall systems.
* 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.
* Experience with hardware load balancer administration and support with F5.
* Knowledge in implementing and configuring F5 Big-IP LTM-6400 load balancers.
* Experience deploying BIG-IP F5-LTM Load Balancers for load balancing and traffic management of business application.
* Participated in on call support to troubleshoot the configuration and installation issues.
* Maintain excellent communication with the IT Manager on all tasks and projects.