**Varun**

**Experience Summary**

* Cisco certified network engineer with **7 plus years** of experience in Network engineering, performing Analysis, Design, Implementing, Troubleshooting with focus on performance tuning and support of large Enterprise Networks
* Experience in Service Validation, Gateway support and Troubleshooting Network & Security infrastructure on routers, switches & firewalls
* Good working knowledge with **Cisco Routers**, **Cisco Switches**, **Nexus 7K, 5K and 2K** series, **Load Balancers** and **Firewalls**
* Expertise in Configuration of Virtual Local Area Networks using Cisco routers and multi-layer Switches and supporting **STP, RSTP, PVST, RPVST** along with trouble shooting of inter-VLAN routing and VLAN trunking using 802.1Q
* Extensive experience with routing protocols **BGP, OSPF, EIGRP, RIP**
* Responsible for validating **ASR5500** SAE Gateway functional testing on IPME & VoLTE
* Analyze network & system responses and determining tuning recommendations to improve performance
* Experience in working with F5 Load Balancers for **LTM** and **GTM** type load balancing between multiple centers
* 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, **STP**, **RSTP** and **MST**.
* Experience in implementation, configuration & troubleshooting of Access Control Lists (**ACL**), **NAT** and Cisco IOS
* Have knowledge on various advanced technologies like **VOIP, QOS, IPv4, Multicasting, and MPLS**
* Extensively worked on Cisco catalyst router **6509** and implemented VSS along with VDC and VPC on Nexus 5505, 7010 switches
* Setup of site-site (**IPSEC VPN**) and remote **VPN** connections to communicate between branches
* Strong hands on experience on PIX, Firewalls, **ASA 5500** series firewalls. Implemented Security Policies using **ACL**, **IPSEC**, **SSL**, **VPN**, **IPS/IDS**, AAA (**TACACS+ & RADIUS**)
* Implementation of **Data Center** migration from **6500** based data center to **Nexus** based data center with 7k-5k-2k dual home design with multiple VDC’s, VPC, OTV and FEX
* Implemented **DMVPN** with hub and spoke topology for 100 plus remote sites
* Familiarity of British Telecom (LOB -BT Open reach – Plan and Build Process) in BT L2C for GIS based application
* Good understanding of the **OSI** Reference Model and the **TCP/IP** Model
* Troubleshoot network issues using monitoring tools like **Cisco Prime Infrastructure, Wireshark, Solar winds, Cisco NCS, and Firemon**
* Experience working with different wan transports **MPLS, VPN, Comcast ENS**
* Configured **ASR 1K** routers as the companies head end WAN routers and implemented BGP with VRF and OSPF instances running parallely
* Expertise in creating test Plan, test estimation, test execution and reporting
* Understanding of **3GPP/3GPP2** standards and test requirements for LTE wireless technologies
* Expertise in use of Microsoft VISIO/Office as technical documentation and presentation tools
* Excellent interpersonal and communication skills, technically competent and result oriented with strong problem solving skills

**Education**

Bachelor of Technology in Information Technology, GITAM University, India

**Certifications**

* Cisco Certified Network Associate (CCNA)
* Cisco Certified Network Professional (CCNP)
* ISTQB Foundation Level

**Technical Skills**

LAN/ WAN Technologies Ethernet/ Fast Ethernet/ Gigabit Ethernet networks, VLANS, VTP, STP, PVST, RSTP, 802.1W, Frame Relay, ISDN, PPP, MPLS, leased lines and exposure to PPP, HDLC DS1, DS3, OC3, OC12, OC48, T1/T3 and E1/E3

Routing/ Switching Cisco routers (7206 VXR, 4431, 4331, 3945, 3925, 3845, 2901, 2811, 2620, 2612, 1900, 1800, 800) Cisco Catalyst switches (6800, 6509, 6506, 6513, 3750, Catalyst 37xx stack, 3550, 2960, 2800, 1900 series), Cisco Nexus (7000 series 10- slot switch, 5548P, 5548 UP, 2248TP. 2248TP-E, 2232PP), VPC, VDC, OTV

Security Cisco ASA 5500 series (5505, 5512-X, 5525, 5545) and PIX 515E, 525 series, Palo Alto, Checkpoint, IPsec VPN Configuration, RADIUS, TACACS+, IDS/IPS, 3060 VPN Concentrator, PKI, ACL, NAT/PAT, Route maps

Wireless Autonomous AP’s, Lightweight AP’s, Cisco Wireless LAN Controller 2400, 5500 Series, WDS, and WLSE, Standards 802.11 a/b/g

Management Tools Cisco Prime Infrastructure, Solarwinds, Firemon, Cisco NCS, NetMRI, Show and Share, Wireshark, NetQos Super-Agent

AT&T Tools Snooper, Balance Manager, IWOS

Operating Systems UNIX, LINUX, Sun Solaris, Mac OS, Windows server 2000, 2003, 2008, Windows 7/NT/XP/Vista, Cisco IOS, Cisco ++

-XE, Cisco NX-OS

Programming C, C++, MATLAB, Python, Pearl

Documentation MS-Office (PowerPoint, Excel, Word), MS-Visio, SharePoint, Google Docs

**Work Experience**

**Capital One, Virginia Aug 2015 – Present**

**Network Engineer**

**Responsibilities:**

* Designed, configured, and support the following technologies at Corp: Global MPLS network comprising 12 major warehouses (WAN routing, LAN switching, data compression-Riverbed Technologies, Office and WH wireless on separate VLAN’s to include wireless handguns for pick/pack shipping of real time data over their WANs
* Directly responsible for the complete rebuild of HQ Corp Data Center and DR site
* Personally designed remote sites in US and overseas using the following technologies: MPLS, IPSEC and GRE Site to site VPN’s, Remote Access SSL VPN in conjunction with serial T1s, DSL, SDSL, Wireless, and cellular cradle point technologies. All major MPLS and large sites are configured with backup and failover redundancy back to HQ Data center
* Worked on OTV to extend L2 VLANs between data centers over IP on Nexus 7010 switches
* Configured VPC, FEX and VDC's on Nexus 5K, 7K
* Designed and configured Cisco Application Visibility and Control (AVC) on Cisco routers to have greater visibility on the network and monitored the results using Cisco Prime and Solar Winds
* Implemented Scrutinizer Netflow monitoring to track Internet usage across the global WAN
* Coordinated with Network Administrator regarding BGP/OSPF/EIGRP routing policies and designs, worked on implementation strategies for the expansion of the MPLS VPN networks
* Negotiate VPN tunnels using IPsec encryption standards and also configured and implemented site-to-site VPN, Remote VPN
* Designed and implemented a DMVPN infrastructure for all remote offices and warehouses
* Upgrading data network equipment to latest stable firmware releases
* Designed and implemented DMZ for Web servers, Mail servers & FTP Servers using Cisco ASA5500 Firewalls
* Deploying and Decommissioning of VLANs on core ASR 9K, Nexus 7K, 5K and its downstream devices and also configure 2K, 3K series Routers
* Configure and Install F5 New Virtual Servers, Profiles, IRules, Pools, Nodes, Generate CSR Certificate, SSL Certificates Etc.,
* Designed and configured IPSLA, EEM, and now PfR in order to obtain 99.99% availability utilizing at least two different providers of layer 3 leased MPLS services
* Installation, configuration and maintenance of Palo Alto Firewalls, Cisco ASA firewalls
* Configured and monitored Firewall logging, DMZ's and related security policies
* Installing, Configuring VMware machines and servers within our VMware vSphere Web Client version 5.5.0
* Responsible for design, management, supervision, and support of all IT Data Infrastructure facilities, creating and maintaining site network drawings using Visio
* Experience in Tier- 2 support, BMC Remedy tool, NMS ticketing system, network troubleshooting, handling escalation, Root cause analysis (RCA) and SLA's
* Diagnose and resolve application and network issues through Wireshark packet captures, ensuring end-to-end IP connectivity

**Environment:** Cisco Routers, Switches, OSPF, EIGRP, Application Visibility and Control (AVC), Netflow, Access Control Server (ACS), DMVPN, VPN, MPLS, LAN, WAN, ASA, Solarwinds, Cisco Prime, VMware, Cisco ISE, PfR

**Hewlett Packard State and Local Enterprise Svc, Columbus Apr 2014 – Jul 2015**

**Network Engineer**

**Responsibilities:**

* Own and maintain multiple environments internally for development and Production environment
* Working on hardware and software procurement to setup multiple environments internally and at client datacenter
* Configured and deploying Cisco catalyst 6500, 4500 switches and Cisco 3660 and 7609 series Routers
* Worked extensively in Configuring, Monitoring and Troubleshooting Cisco's ASR 5500
* Involved in the troubleshooting aspects of complex network infrastructure using the routing protocols like EIGRP, OSPF & BGP
* Implementation of Access Lists for allowing/blocking desired traffic
* Responsible for Cisco ASA firewall administration, Rule Analysis, Rule Modification
* Good knowledge in systems integration, software hardware emulation experience
* Experience working in Datacenter environment, configuration changes as per the needs of company
* Manage project task to migrate from Cisco ASA firewalls to Check Point firewalls
* Configured and performed troubleshooting on link state protocols like OSPF in single area and multiple areas
* Assisted in migrating core switches from 6500 to 6800
* Configuring, implementing and troubleshooting VLAN’s, VTP, STP, Trunking, Ether channels
* Designing, implementing LAN/WAN configurations on Cisco 5K, catalyst 6500 switches.
* Configuring and testing Multicast for both IPv4 and IPv6 routing in Data Center Environment
* Installing, configuring Cisco Catalyst switches 6500, 3550 series and configured routing protocol OSPF, EIGRP, BGP with Access Control lists implemented as per Network Design
* Extensive knowledge in implementing and configuring F5 Big-IP Local Traffic Manager 3900, and 6900 Load balancers
* Migration of existing IPSEC VPN tunnels from Pre-Shared key to Certificate Authority (PKI) for purpose of scaling
* Worked extensively in Configuring, Monitoring and Troubleshooting Cisco's ASA/PIX security appliance, Failover DMZ zoning & configuring VLANs/routing/NATing with the firewalls per design
* Troubleshoot issues with network connectivity and issues related to neighbor relationship and peers
* Experience configuring Virtual Device Context in Nexus 7k series switch
* Designed and configured the commands for QoS and Access Lists for Nexus 7K and 5K.
* Designed, configured, implemented site-site VPN on cisco ASA 5500 firewall
* Implemented, configured redundancy protocols HSRP, VRRP, GLBP for Default Gateway Redundancy
* Performed troubleshooting on slow network connectivity issues, routing issues involving EIGRP, BGP and identifying the root cause of the issues
* Maintenance and trouble-shooting of LAN, WAN, IP Routing, Multilayers Switching
* Configuration and troubleshooting of many link types i.e. SONET Controllers for sub E1/T1, E3/T3 and POS controllers for STM1 links
* Responsible for service request tickets generated by the helpdesk in all phases such as troubleshooting, maintenance, upgrades, patches, fixes, and all around technical support of 24\*7
* Configuration the access-list rules, network object-service group based on well-known port the port i.e. FTP/SFTP, SSH, HTTPS/HTTPS (SSL) and etc
* Performing network monitoring, providing analysis using various tools like Wire Shark, Solar winds etc
* Worked on change management documentation of Network infrastructure design using Microsoft Visio

**Environments:** Nexus 7k, 5k, Checkpoint firewall, Cisco ASA 5500, BGP, EIGRP, OSPF, MPLS, VPN, F5 load balancer, HSRP, QoS, VPN, Core switches 6800, 6500, 4500, Cisco routers 3660, 7609, ASR 5500, Wire Shark, Solar Winds.

**AT&T Inc., Atlanta Jan 2013 – Mar 2014**

**Network Engineer**

**Responsibilities:**

* Gathered business and system requirements and designed test cases
* Track work orders in IWOS and verify call flow diagrams
* Managed production environment zone test sessions and guided field testers as per test plan
* Managed SIM assignment and provisioning for production environment zones
* Verified the timestamp in the CDR logs by coordinating with the mediation team
* Update the validation report on the IWOS & HPQC
* Scheduling the maintenance window for production environment for LTE, 3G, and 2G services
* Daily/Weekly Configuration backup and device Configuration changes as per the request
* Reproducing the Bugs in the pre-production environment for RCA to get the bugs fixed by the vendor
* Collaborated with the onsite team to resolve issues found posttest execution
* Set up and troubleshoot secured wireless access points (WAP) and wireless LAN controller (WLC) for broadband Internet and continuous network mobility
* Used multiple network monitoring tool Solar Winds, Cisco Prime for supporting the existing core network environment and Network edge devices
* Maintained bug status reports and drove to resolution including verification of fixes
* Network up gradation & migration (Hardware / Software) from ATM/Frame relay to MPLS
* Wrote documentation of newly addressed issues and lessons learned for Network Operations Center (NOC)
* Execute the Commands & extract the logs from Cisco ASR 5500
* Assisted in migration of existing B2B VPN tunnels with the vendors from the 3060 VPN concentrator to ASA Firewall and configured site-to-site [IPSEC VPN]
* Troubleshoot the Issues during service validation and verifying the gateway logs
* Highlight configuration errors/changes to the deployment team

**Environments:** ASR 5500, IWOS, Quality Center, Balance Manager, WAP, WLC, Snooper, Solar Winds, Wire Shark.

**AT&T Inc., Redmond Nov 2011 – Dec 2012**

**Network Engineer**

**Responsibilities:**

* Secure, Test, Monitor and Improve Network Security with Net Screen 208 Firewalls
* Configuring, Implementing and Managing F5 LTM (Local Traffic Manager) 1500 series and F5 GTM (Global Traffic Manager) 1500 series Load Balancer Devices
* Configuring, Implementing and Managing Cisco 2950 Switches and Cisco 3550 switches.
* Secure, Test, Monitor and Improve Network Security with Top Layer IPS Devices 5500
* Secure, Test, Monitor and Improve Network Security with IBM ISS Server Sensors and Proventia Devices (NIPS G-100/G-200 Series & NIPS GX4002 Series)
* Maintained a Network with more than 600 Network devices, some 25,000-end hosts, and the other Network devices like DHCP, DNS servers, and Firewall servers
* Design, Test, Build and Implement DNS, DFS, WSUS, IIS, and SMTP services on Windows 2003 operating systems
* Design, Test, Build and Implement Active Directory Services on Windows 2003 Operating systems
* Design, Test, Build and Implement Indicative v8.0 Monitoring tool with DMS (Diagnostic Measurement Server) to monitor all the network devices, Application and servers in production sites
* Design, Test, Build and Implement WSUS (Windows Server Update Services) v3.0 on Windows 2003 operating systems
* Configuring, Implementing and Managing Tripwire Enterprise v6 software to monitor all the network devices configuration and version history

**Environments:** Cisco Routers, Cisco switches, Cisco ASA, RIPv2, OSPF, BGP, EIGRP, F5 Load Balance.

**British Telecom, Pune May 2010 – Oct 2011**

**Network Test Engineer**

**Responsibilities:**

* Reviewed Business requirements, IT Design documents and prepared Test Plans for all assigned project releases
* Involved in both Fiber to the Cabinet (FTTC) & Fiber to the Premise (FTTP) areas with functionalities related to manage physical inventory (MPI)
* Test case design & execution in an end-to-end perspective, Regression Testing and Ad-Hoc Testing
* Defect Reporting with relevant Business Complexity and Fixing Priority
* Involved on testing the new functionalities based on test cases and coordinated with development team in fixing the issues
* Ensured that all the test cases are updated in the Quality Center along with Master test plan
* Involved as a part of automation team using QTP, developed test scripts
* Involved in Release support - Release to QA, involved in environment setup, testing the release process
* Follow Tech Mahindra QMG processes and British Telecom Quality gate processes during testing life cycle and provide testing artifacts like Test Log, Test report, story specific list of open and closed issues for every user story
* Provide knowledge to CIT & IVVT Teams regarding new user stories and timely advise them with their queries of test cases execution and obtain signoff

**Environments:** FTTP, FTTC, MPI, Quality Center and QTP

**Redpine Signals, Hyderabad Jun 2009 – Apr 2010**

**Network Test Engineer**

**Responsibilities:**

* Worked on installation, maintenance, and troubleshooting of LAN/WAN (ISDN, Frame relay, NAT, DHCP, TCP/IP)
* Configured Routing protocols such as OSPF, BGP, RIP, static routing and policy based routing
* Performed network QA test, executed system analysis and troubleshooting in order to resolve problems on servers, workstations and other network devices
* Planned and executed 802.11 Wireless LAN adapter testing to model potential customer setups and deploy wireless solutions
* Configured HSRP and VLAN trucking 802.1Q, VLAN Routing on Catalyst 6500 switches
* Responsible for Internal and external accounts and, managing LAN/WAN and checking for security
* Configured Trunk groups, ether channels, and Spanning tree for creating Access/distribution and core layer switching architecture
* Provided Technical support for improvement, upgradation, and expansion of the existing network architecture
* Done troubleshooting of TCP/IP problems and connectivity issues in multi-protocol Ethernet environment
* Monitored the network performance regularly to improve performance and functionality
* Configured static routes, default routes, Frame Relay and provided security by using ACL, NAT
* Implemented VLANS between different departments and connected them using trunk by keeping one VLAN under server mode and rest falling under client modes
* Configured site-to-site IPSec VPN to provide communication between the branch office and headquarters

**Environments:** RIP, OSPF, BGP, VLAN, HSRP Spanning tree, IP Sec tunnels, Windows Server, Cisco routers and switches.