**Jyoti Singh**

**Sr. Certified Network Engineer**

**SUMMARY:**

* **7+ years** of IT experience in design, development, implementation, testing, troubleshooting and maintenance of Cisco/Juniper devices for both networking and security.
* Designing, Implementing and Troubleshooting Cisco 3750, 3550, 3560, 2924, 6509-V-E, 6513, 6504, 6503, 6506, 6500 series switches.
* Responsible for Check Point and Cisco ASA firewall administration across global networks.
* Strong hands on experience on PIX (506, 515, 525, 535), ASA (5505/5510) Firewalls. Implemented security policies using ACL, Firewall**, IPSEC, SSL, VPN, IPS/IDS, AAA(TACACS+ & RADIUS)**
* Worked on Extensively on Cisco Firewalls, Cisco PIX (506E/515E/525/) & ASA 5500(5510/5540) Series.
* Troubleshooting and installing of **CRS, ISR, GSR, ASR9000 and Nexus devices.**
* Engineering the configurations for the different branches, campus locations & Data center environment
* Experience in Designing and assisting in deploying enterprise wide Network Security and High Availability Solutions for ASA.
* Experience in installing and configuring DNS, DHCP server.
* Enterprise Switching with VLANs, Trunks, Spanning Tree, Port Spanning etc.
* Strong grasp of current and future technologies including TCP/IP, IPv4/v6, RIP, EIGRP, OSPF, BGP, Frame Relay, ACL, VPN, Wireless LAN and configuration of VLANS.
* Strong Analytical, Problem Solving, Technical Troubleshooting, Decision-Making, Customer Service Skills, Results-Driven.
* Experience in working with **Cisco Nexus Switches and Virtual Port Channel configuration.**
* Strong knowledge of TACACS+, RADIUS implementation in Access Control Network.
* Experienced in networking protocols, firewalls and Communication Network design.
* Design, Implement & troubleshooting of **Juniper switches, routers and Firewalls Juniper: EX-2200,EX-4200, EX-4500, MX-480, M Series, SRX210, SRX240**
* Strong hands-on experience in layer-3 Routing and layer-2 Switching. Dealt with Nexus models like 7K, 5K, 2K series, Cisco router models like 7200,3800,3600,2800,2600,2500,1800 series and Cisco catalyst 6500,4500,3750,3500,2900 series switches.
* Provided 24X7X365 availability and on-call support as required.
* 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 Redundancy.
* Responsible for Check Point and Cisco ASA firewall administration across global networks.
* Experience with configuring **Nexus 2000 Fabric Extender (FEX) which acts as a remote line card (module) for the Nexus 5000.**
* Worked extensively in Configuring, Monitoring and **Troubleshooting Cisco's ASA 5500/PIX** security appliance, Failover DMZ zoning & configuring VLANs/routing/NAT with the firewalls as per the design.
* Experience in testing Cisco routers and switches in laboratory and deploy them on site production.
* Worked **on Load Balancer F5 LTM, GTM series like 6400, 6800, and 8800.**
* Knowledge in preparing Technical Documentation and presentations using Microsoft VISIO/Office.
* Strong knowledge on Wireless Standards and Technologies, i.e. Ethernet, WAN, LAN, IEEE 802.11 (Wi-Fi). Very good knowledge on IEEE 802.15.1 (Bluetooth), IEEE 802.15.31a (UWB), IEEE 802.15.4 (ZigBee), Cognitive radio networks, Mesh networks, etc.
* Experience with developing testing strategy, executing test cases and analyzing of test reports.
* Experienced with learning Amazon Web Services (AWS).
* Good knowledge in configuration of Voice VLAN’s (VOIP), prioritizing the voice traffic over the data traffic.
* Implemented WLAN Cisco Wireless Access Points 3500 and its Cisco Controllers 5500 at various corporate sites fort 11n Infrastructures and its legacy technologies
* Highly enthusiastic, creative team player with project implementation, analytical, interpersonal and communication skills.
* Hands-on experience with Ether Channel, Spanning Tree, Trucking, ACLs, Syslog.

**TECHNICAL KNOWLEDGE:**

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| Operating Systems | Windows (Server 2003/2008, Vista, Windows 7), Basic Linux OS, Sun Solaris OS |
| Routers | Cisco GSR12016, ASR1001, 2900, 3900, 7200, 7600 & ASR9000. |
| Switches | Cisco 3750, 4507, 4510 & 6500 series switches, Nexus 7010, 5548, 2448 |
| Routing | MPLS, OSPF, EIGRP, BGP, RIP-2, PBR, IS-IS, Route Filtering, Redistribution, Summarization, Static Routing. |
| Switching | LAN, VTP, STP, PVST+, RPVST+, Inter VLAN routing & Multi-Layer Switch,  Multicast operations, Layer 3 Switches, Ether channels, Transparent Bridging. |
| Network security | Cisco (ASA, PIX) 5510, ACL, IPSEC VPN, GRE VPN |
| Load Balancer | F5 Networks (Big-IP) LTM Module, Cisco ACE 30 load balancer. |
| LAN | Ethernet (IEEE 802.3), Fast Ethernet, Gigabit Ethernet. |
| WAN | Leased lines 128k - 155Mb (PPP / HDLC), Channelized links (T1/DS3/OC3/OC12). Fiber Optic Circuits, Frame Relay, ISDN, Load Balancing. |
| Various Features & Services | IOS and Features, HSRP, GLBP, IRDP, NAT, SNMP, SYSLOG, NTP, DHCP,  CDP, TFTP and FTP Management. |
| AAA Architecture | TACACS+, RADIUS, Cisco ACS. |
| Network Management | SNMP, Solar Winds, HP open view, Wire shark. Liveaction, Netbrain |
| ASA Firewall: | 5505, 5510, 5520, 5540, 5550, Checkpoint Firewall NGX R75 |
| Reports | Microsoft (Visio pro.) |

**EDUCATION:**

Bachelor in computer Science, India  
  
**CERTIFICATIONS:**

• Cisco certified Network Associate (CCNA)

• Cisco certified Network Professional (CCNP)

• Juniper Certified Network Associate (JNCIA)

**PROFESSIONAL EXPERIENCE:**

**Apple Inc. Elk Grove, CA Oct 2013 ­ Present**

**Network Engineer**

* Experience of working with **F5 Load balancers and building VIP, SNAT and Migrating applications from one Data Center to another data Center.**
* Performed Network Address Translation on Cisco ASA 8.2 to 9.0 version
* Responsible for **Cisco ASA firewall administration across the network.**
* Experience configuring **Virtual Device Context in Nexus 7010.**
* Experience working with **MPLS layer 3 VPN and Configuring LDP, RSVP, VRF, MP-BGP**
* Implemented firewall rules in Palo Alto firewalls using Panorama for one of the environment.
* Implementing and troubleshooting (on-call) IPSec VPNs for various business lines and making sure everything is in place.
* Designing and troubleshooting **BGP, OSPF, EIGRP and using route maps and prefix lists for filtering**
* Moving all **the Partner IPSEC VPN connections to the** new data center and also We had to estimate the bandwidth for the **data center and installing the gigabit MPLS circuits**
* Experience with building the New MPLS cloud inside the new data center environment.
* **Migration Network, Firewall and F5 Load Balancer infrastructure from one data-center to another data centre**
* Installation and configuration of **Cisco Nexus 9k, 7k, 5k, 2k (Fexus), ASRs, 6500s, 4510s, 3800s,** 2900s.
* Deploying and decommission of VLANs on core ASR 9K, Nexus 9k, 7K, 5K and its downstream devices.
* Experience in deployment of **Nexus 7010, 5548, 2148T, 2248 devices.**
* Experience working with Cisco Nexus 2148 Fabric Extender and Nexus 5000 series to provide a Flexible Access Solution for datacenter access architecture.
* Experience with configuring **and deploying ASA 5555/5525/5585 Firewalls**, including features like multi contexts, failover, object groups
* Groom high volumes of Broadband customers in the access network for Capital Growth, address network capacity issues, off load end of life devices and platform.
* Configure VRRP & GLBP and VLAN Trunking 802.1Q & ISL, STP, Port Security on Catalyst 6500 switches.
* Designed, validated and implemented LAN, WLAN & WAN solution to suite client’s needs.
* Collaborate with Access, Transport, and Data Engineers to determine affective solution and design for network changes.
* Involved in L2/L3 Switching Technology Administration including creating and managing VLANs, Port security, Trunking, STP, Inter-Vlan routing, LAN security
* Implement network change requests configuring devices for traffic grooms and ATM to Ethernet conversions
* Perform network configuration, documentation, and enforcement, congestion improvement and optimization
* Create and implementing layer 2 and layer 3 policies
* Hands-on experience with Ether Channel, Spanning Tree, Trucking, ACLs, Syslo.
* Configured Cisco 2960, 3750, 3750, 4500 switches, and Juniper MX960, M10i.

**T-Mobile US, Bellevue, Washington Aug 2010 ­ September 2013**

**Network Engineer**

**Responsibilities:**

* Worked on commissioning and decommissioning of the MPLS circuits for various field offices.
* Configuring STP for switching loop prevention and VLANs for data and voice along with Configuring port security for users connecting to the switches.
* Working on Network design and support, implementation related internal projects for establishing connectivity between the various field offices and data centers.
* Worked on LAN/WAN/WLAN/VoIP/VPN/Network Security, Cabling and racking.
* 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.
* Ensure Network, system and data availability and integrity through preventive maintenance and upgrade.
* Involved in the redistribution into OSPF on the core ASA firewall.
* Providing daily network support for national wide area network consisting of MPLS, VPN and point-to point site.
* Worked on Riverbed devices for WAN bandwidth Optimization in the data centers for sensitive market data applications.
* Configuring HSRP between the 3845 router pair for Gateway redundancy for the client desktops.
* Configure VRRP & GLBP and VLAN Trunking 802.1Q & ISL, STP, Port Security on Catalyst 6500 switches.
* Performed Configuration on ASR 9K Pairs includes HSRP, Bundle Ethernet Config, Assigning dhcp profiles.
* Performed OSPF, BGP, DHCP Profile, HSRP, IPV6, Bundle Ethernet implementation on ASR 9K redundant pair.  
  Network Cabling, dressing, labeling and troubleshooting various network drops onsite.
* Involved in L2/L3 Switching Technology Administration including creating and managing VLANs, Port security, Trunking, STP, Inter-Vlan routing, LAN security.
* Worked on the security levels with RADIUS, TACACS+.
* Completed service requests (i.e. – IP readdressing, bandwidth upgrades, IOS/platform upgrades, etc)
* Handled SRST and implemented and configured the Gateways, Voice Gateways.
* Worked on a broad range of topics such as routing and switching, dedicated voice access, planning and implementation, large-scale high-visibility outages, change management coordination, proactive monitoring and maintenance, disaster recovery exercises, and core network repairs.
* Worked on Extensively on Cisco Firewalls, Cisco PIX (506E/515E/525) & ASA 5500(5510/5540) Series.
* Experience with converting PIX rules over to the Cisco ASA solution.

**Fannie Mae, Washington Nov 2009­ July 2010**

**Network Engineer**

* Negotiate VPN tunnels using IPSec encryption standards and also configured and implemented site-to-site VPN, Remote VPN.
* Moving all the Partner IPSEC VPN connections to the new data center and also We had to estimate the bandwidth for the data center and installing the gigabit MPLS circuits
* Experience with building the New MPLS cloud inside the new data center environment.
* Experience with design and implementation of Virtual Switching System (VSS) for both User segment and server segment using 6509-V-E catalyst switches.
* Experience with configuring and deploying ASA 5555/5525/5585 Firewalls, including features like multi contexts, failover, object groups
* Enabled TACACS+ on Cisco devices for authentication, authorization and accounting (AAA).
* Implemented EAP (Extensible Authentication Protocol) for Wireless Networks.
* Implemented with Cisco Layer 3 switches 3750, 4500, 6500 in multi VLAN environment with the use of inter-VLAN routing, HSRP, ISL trunk, ether channel.
* Design OSPF Areas for reliable Access Distribution and for Core IP Routing
* Configured, troubleshoot and maintained Cisco Switches 1900 through 8000 Series including Nexus switches.
* Used Cisco routers, switches, Access Points, Concentrators for implementation and management purpose.
* Experience working with Cisco Nexus 2148 Fabric Extender and Nexus 5000 series to provide a Flexible Access Solution for datacenter access architecture.
* Redesigning the 5000 User large office location from the Access, Distribution, Core and WAN infrastructure.
* Experience with design and implementation of Data center migration
* Data center migration was involved in Access, Distribution and Core layers.
* Worked on Cisco 5500 wireless controller, Cisco Prime and Cisco WAPs.
* Improved application and server Efficiency by installing Cisco ACE load balancer in catalyst 6500 switches and 7600 routers across our global network.
* Involved in configuring IP Quality of service (QoS)
* Involved in designing and implementing QOS and policy map to 2800 series routers for all the branches.
* Provisioning of Vlans and configuration on layer 2 and 3 aggregators like Cienna, Calix, Adtran, and AFC devices.
* Experience Branch Relocation: Connect workstation, servers, etc. Rack and stack Pre-configured new hardware and connect the circuits. Work with Carrier to test and turn-up circuits.
* Experience on designing and troubleshooting of complex BGP and OSPF routing problems
* Worked on Cisco ASR 5000 EMS for protocol monitoring, session monitoring and auditing and network troubleshooting.
* Improved Client satisfaction by troubleshooting and resolving VOIP issues from past implementations, which consisted of various versions of call manager, gateways and switches.
* Configuring Vlan’s, VTP’s, enabling trunks between switches.
* Configuration and extension of **VLAN** from one network segment other segment between Different vendor switches (Cisco, Juniper).
* Engaged in office moves, helped in identifying network requirements of new building, installed new networking hardware, and coordinated with vendors for cabling/wiring.
* Responsible for layer 2 securities which was implemented using a dedicated VLAN ID for all trunk ports, setting the user ports to non-trunking, deployed port security when possible for user ports.
* Responsible for Cisco ASA firewall administration across our global networks
* Support customer with the configuration and maintenance of PIX and ASA firewall systems
* Assist with various duties that will arise including: implementation, configuration, management, rules definition, problem solving, design advice, troubleshooting, updating, maintenance, etc.
* Involved in iRule management like loading rules, writing iRule syntax using TCL language
* Hands on Experience testing iRules using Browser (IE), HTTP watch.
* Used Cisco ASA 5540 series for enterprise security, configured ACL’s for Internet Access requests to SERVER FARM in LAN and DMZ.
* Successfully planned and installed network equipment’s for migration of a lab of servers in a main data center with minimal impact to application availability.
* Network equipment testing: network protocols, scripts configuration.

**System/Network Associate, CMS Computers, India (April 2008 to Oct 2009)**

**Network Engineer**

* Involved in configuring and implementing of composite Network models consists of Cisco7600, 7200, 3800 9000, CSR-1 series routers and Cisco 2950, 3500, 5000, 6500 Series switches
* Worked on Cisco Layer 2 switches (spanning tree, VLAN).
* WAN Infrastructure running OSPF & BGP as core routing protocol.
* Support various Routers like 2600/3600/7200 series routers.
* Designed MPLS VPN and QoS for the architecture using Cisco multi-layer switches
* Tested authentication in OSPF and BGP.
* Configured and troubleshoot OSPF and EIGRP.
* Experience working with deployment of MPLS Layer 3 VPN cloud, involving VRF, Route Distinguisher (RD), Route Target (RT), Label Distribution Protocol (LDP) & MP-BGP
* Monitored Multi-customer ISP network and troubleshooting issues in a 24 X 7 Environment
* Communicated with testers and field tech to update trouble tickets in timely manner.
* Documented network assessment including technical and operational.
* Documenting and Log analyzing the Cisco ASA 5500 series firewall.
* Investigated issues involving T1, DS3, ATM, Frame Relay, MPLS, IP, EIGRP, OSPF, BGP and RIP
* Worked with customer for troubleshooting and resolving LAN/WAN and DNS issues
* Escalated trouble tickets: worked closely with higher Tier and other group for resolution
* Configured router from basic to advanced including ACL, SNMP, NAT/PAT
* Work on different connection medium like Fiber and Copper Connectivity.
* In-depth expertise in the implementation of analysis, optimization, troubleshooting and documentation of LAN/WAN networking systems.
* Planning and configuring the routing protocols such as OSPF, RIP, and Static Routing on the routers.
* Installing, Managing &Troubleshooting DHCP issues.

References: Available upon request.