**Jagadish**

**Summary:**

* Network Engineer with 7 years of professional experience in Network engineering, performing network analysis, design, implementing, capacity planning with focus on performance tuning, high availability and support of large Networks.
* Proficient in IP subnetting and worked on various designing and allocating various classes of IP addresses to the domain.
* In-depth knowledge and hands-on experience in Tier II ISP Routing Policies, Network Architecture, IP Subnetting, **VLSM, TCP/IP, NAT, DHCP, DNS**.
* Worked on network topologies and configurations, **TCP/IP, UDP, DS1/DS3, Frame Relay, Token ring, ATM, Bridges, routers, hubs and switches.**
* Routing and Switching: **BGP, OSPF** to include **Route summarization, Route filtering and Route redistribution.** Switching to include **Spanning Tree and VLAN** concepts.
* Extensive knowledge in configuring and troubleshooting Layer 3 Routing protocols such as **IGRP, EIGRP,OSPF, ISIS and BGP (IBGP, EBGP)** and layer 2 protocols such as **VTP, STP and RSTP**.
* Strong hands on experience in installing, configuring, and troubleshooting of **Cisco 7600, 7200,3800, 3600, 2800, 2600, 2500,** and **1800 series routers, Cisco Catalyst 6500, 4500, 3750 and 2960 series switches.**
* Competent in Physical cabling, IP addressing, Wide Area Network configurations (**Frame-relay &MPLS**), Routing protocol configurations**, EIGRP, OSPF, BGP).**
* Skilled in configuration of new VLANs and extension of existing VLANs on/to the necessary equipment to have connectivity between two different data centers.
* Expert knowledge in implementation of **IP addressing schemes** (includes **VLSM, Supernetting**) and **IP services** to meet medium to high level enterprise level network requirement.
* Insightful experience in planning, design, installation and configuration of networks and Security configurations of various network devices.
* Experienced in setting up a secure network to maintain confidentiality security precautions
* Dexterity in writing test procedures and test plans with a strong understanding of **design, implementation and execution of testing methodologies.**
* Ability to diagnose **Layer1, Layer2 and Layer3 fault-related cases utilizing software diagnostics tools**.
* Experienced on **Active Directory Federation Services (ADFS)**which is a feature of windows server operating system.
* Worked on **Open Stack Identity service** for authentication and authorization of API requests.
* Implementation and Maintenance of IP features including **Address Translations, Access Lists, DHCP relaying, NAT** etc.
* Professional in configuring **Multi Factor Authentication System(MFA)** which requires more than one method of authentication.
* Adroit in configuring and troubleshooting of **PALO ALTO, Juniper Net Screen & SRX Firewalls** and their implementation. Experience in site-to- site and remote access VPN solutions.
* Performed sustained engineering duties to support **CRAN services - data, video, and voice products.**
* Worked on **Access Policy Manager(APM)** in order to provide access and security solution that provides unified global access.
* Network Management: **TACACS authentication,authorization** and **accounting protocols.**  Terminal Server reverse telnet configuration for remote console access.
* Very strong expertise in **VPN Technologies** and dedicated security configurations **(Firewalls, IDS/IPS)** and best practices in Information Security policies/procedures.
* Responsible for **Check Point** and **Cisco ASA firewall administration** across global networks.
* Intelligible of Cisco networks as well as their installation and maintenance.
* Experience with **F5 load balancers** – **LTM, GTM series** like **6400, 6800, 8800** for the corporate applications and their availability.
* Worked on **Citrix NetScaler** to make apps and cloud-based services run five times better by offloading app and database servers.
* Load Balancing and High Availability. Network high-availability concepts like **HSRP, VRRP, Active-Passive** and **Active-Active concepts.**
* Worked on **Cisco PIX 500 series** and **ASA 5500 series Firewall** providing support and configuring for **NAT, PAT advanced Firewall** rules implementation. **IPS on ASA’s with Botnet protection.**
* Adept in preparing Technical Documentation and presentations using **Microsoft VISIO/Office.**
* Be able to travel and to work flexible schedules outside normal business hours when required
* Worked on CISCO Prime Infrastructure for monitoring and troubleshooting with CISCO ISE and location based tracking of mobility devices with CISCO MSE.
* In depth knowledge on Ticketing systems that allows us to automate ticket assignment, routing and escalation to the right technician at the right time.

**Technical Skills:**

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| --- | --- |
| **Routing** | OSPF, EIGRP, BGP,PBR, IS-IS, Route Filtering, Redistribution, Summarization, Static Routing, PBR |
| **Switching** | VLAN, VTP, STP,RSTP, PVST+, RPVST+, Inter VLAN routing & Multi-Layer Switch, Virtual Port Channel.  Multicast operations, Layer 3 Switches, Ether channels, Transparent Bridging |
| **Network security** | Cisco (ASA, PIX) 5510, ACL, IPSEC, VPN, Security context |
| **Load Balancer** | Cisco ACE load balancer, F5 Networks (Big-IP), LACP, PAgP. |
| **LAN** | Ethernet (IEEE 802.3), Fast Ethernet, Gigabit Ethernet |
| **WAN** | Leased lines 64k - 155Mb (PPP / HDLC), Channelized links (E1/T1/E3/T3),  Fiber Optic Circuits, Frame Relay, ISDN, Load Balancing |
| **Operating Systems** | Windows (98, ME, 2000, XP, Server 2003/2008, Vista, Windows 7), Basic Linux, Cisco IOS, NX-OS, JUN-OS |
| **CISCO Routers** | Cisco 17XX, 18XX, 26XX, 28XX, 37XX, 38XX, 39XX &72XX series, ISR, ASR |
| **CISCO Switches** | Cisco 3550, 3750, 45XX, 65XX series |
| **JUNIPER Routers** | Juniper MX480, 240, 80 series |
| **JUNIPER Switches** | Juniper EX4500, 4200 |
| **Firewalls** | Cisco ASA 55XX series, Juniper SSG140, Checkpoint R75, R76, ISA/TMG |
| **Various Features & Services** | IOS and Features, HSRP, GLBP, IRDP, NAT, SNMP, SYSLOG, NTP, DHCP, CDP, LLDP, TFTP and FTP Management |
| **AAA Architecture** | TACACS+, RADIUS, Cisco ACS |
| **Network Management** | SNMP, Cisco works LMS, HP open view, Etherenal, MRTG/PRTG server, Network Node Manager, Infoblox for DNS Management, Solar Winds. Wireshark, Netscout. |
| **Reports** | Microsoft (Visio pro.), Checkpoint (Eventia reporter, Smart view), Network Node Manager ISPI Reporting. |

**Certifications:**

* Cisco Certified Network Associate(CCNA).
* Cisco Certified Network Professional(CCNP).

**Professional Experience**

**Tucson Electric Power, Tucson, AZ May2015– Till date**

**Sr. Network Engineer**

**Responsibilities:**

* Working on **Cisco 6509 and 4507 series switche**s for LAN requirements that include managing **VLANs, Port Security and troubleshooting LAN issues.**
* Configuring and installation of **Cisco 2500, 3640, 7200, and 7940 Routers.**
* Configured **IPX/SPX, HDLC, PPP, TCP/IP, BGP, EIGRP, RIP, & HSRP.**
* Configured **TCP/IP addressing scheme** to assigned IP blocks.
* Coordinated with LAN/WAN engineers for the development and implements security policy.
* Part of a team working in **L2/L3 SwitchingTechnology Administration** including creating and managing **VLAN’s, Port security, Trucking, STP, Inter-VLAN routing, LAN security.**
* Deploying Layer 2 security in Server Farms by configuring switch for 802.1x port based authentication.
* Prepared documentation for various **VLAN’s and Voice sub networks** and worked on **Visio** for the same.
* Performed **switching technology administration including VLANs, inter-VLAN routing, Trucking, STP, RSTP, port aggregation & link negotiation.**
* Performing network monitoring, providing analysis using various tools like **Wireshark, Solar winds etc.**
* Worked on **Solar winds** in order to detect, diagnose and resolve performance issues in network.
* Coordinated **Infoblox**which is used to identify devices that are connected to network, specifically for **DNS, DHCP and IP address management.**
* Ensure Network, system and data availability and integrity through preventive maintenance and upgrade.
* Configured **Storage Area Network** in order to get high performance network to enable storage devices to communicate with other computer systems.
* Supporting **EIGRP and BGP based PwC network** by resolving level 2 &3 problems of internal teams & external customers of all locations.
* Coordinated with a team to remove EIGRP from all devices and making OSPF the primary routing protocol.
* Involved in the modification and removal (wherever necessary) of BGP from the MPLS routers.
* Configure **Q-Rader SIEM** to consolidate log source event data from devices endpoints and applications distributed throughout a network.
* Work on **ISA/TMG** to to collect IP addresses that can directly reach a **NIC on the firewall** without having to traverse firewall.
* Installed and configured **DNS and DHCP server.**
* Used **PeopleSoft web servers** to work with a Load Balancer in order to connect load balancer to web servers, to connect web servers to app servers.
* Coordinated **Microsoft Traditional Active Directory technology** that stores usernames and passwords and uses them to manage and secure access to computers on a windows domain.
* Troubleshoot**DHCP and other IP conflict problems.**
* Defined **policies, NAT and anti-spoofing for internal, external networks as well as Internet gateways.**
* Supporting in **Multi Factor Authentication System(MFA)**which combines two or more credentials.
* Worked on **IP telephony to exchange voice, fax** and other forms of information.
* Configuring remote users to **access corporate LAN with VPN connectivity.**
* Configured and installed new IP addresses for new users by using **IP Addressing and Subnetting Scheme.**
* Interfaced with various vendors for company products.
* Configured **Frame-Relay, ISDN, ATM, Protocols, & load balancing switches.**
* Configuring **Virtual Device Context in Nexus 7010.**
* Experienced on **Link Aggregation Control Protocol (LACP)** to aggregate one or more Ethernet interfaces to form a logical point-to-point link.
* Configured **PAgp to prevent network error, for configuration confirmation and to prevent Failover.**
* Worked on Network support, implementation related internal projects for establishing connectivity between the various field offices and data centers.
* Implementation and configuration of **F5 BIG-IP LTM-6400 load balancers.**
* Involved in the redistribution into OSPF on the core ASA firewall.
* Responsible for **Cisco ASA 5500 firewall administration, Rule Analysis, Rule Modification.**
* **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.
* Installation and administration of **Checkpoint R 75.40 Firewall.**

**Environment:** Cisco routers (7900,7600,4000,3600,2500), Cisco switches(6800,6500,4900,3850),Cisco ASA Firewall(5510), Routing protocols(EIGRP, RIP, BGP,OSPF), Switching protocols(VTP,STP), Load Balancer.

**Novartis Pharmaceuticals, Parsippany, NJ Nov 2013– April 2015**

**Sr. Network Engineer**

**Responsibilities:**

* Upgrade the whole network infrastructure hardware for hospitals and associated clinics.
* Experience in **design and implementation of new branch, test and turn up. 3750 and 3850 switch stack for access layer, Nexus 5k with 2k for distribution layer, and 4500 in VSS for core.**
* Deployed wireless using pair of **5508 controllers with 3700 series Access points (LWAP’s).** Used **Cisco Prime for Wireless Infrastructure Management and Syslog.**
* Experience working with **Big-IP LTM (F5’s) for application load balancing** using cookie persistence.
* Deployed various servers for redundancy in the network.
* Deployed **HP 5130 EI switches** with IRF for HP servers.
* Setup site wise monitoring system for UPS’s.
* Routing changes to upgrade **from ASA to Palo Alto** in HA.
* Cleaned router and switch configuration for efficiency, mostly **routing protocols in OSPF and EIGRP.**
* Deployed port security to enhance security in the facilities.
* Redistribution between **EIGRP and OSPF networks.**
* Used **Solar winds, Netscout and Virtual true view central** for monitoring Implemented BGP ssbetween sites for interconnectivity between hospitals.
* Day to day troubleshooting of the infrastructure.
* Network support for **ESX servers.**
* Contact determining a list of application for the migration, Stakeholder management, vendor management, and change management.
* Experience with Project documentation tools & implementing and maintaining network monitoring systems and experience with developing **network design documentation using VISIO.**

**Environment:**Router 2900, 3900; Cisco Catalyst Switch 4500, 3850, 3750, 3550, 3650, 2960, 5508 controllers, 3700, 2700, 1100 access points, BIG-IP LTM, Fiber and Ethernet cabling.

**Office Depot, Naperville, IL Nov 2011 – Oct 2013**

**Network Infrastructure Engineer**

**Responsibilities:**

* Working under the guidance of the Director of Network Infrastructure as an instrumental member of the Infrastructure team ensuring all other city agencies have the critical resources and support they need to provide the best possible services to the public
* Majorly responsible for configuring and deploying **cisco IP phone 78XX, 79XX series and cisco 88XX, 89XX** to users and documenting the same.
* Responsible for configuring **cisco switches using virtual switching system (VSS)**. Hands on with creating **Voice and data VLAN’s** and performing appropriate port association.
* Worked under supervision for**LAN/WAN routing protocols, BGP, OSPF, DNS and firewall.**
* Responsible for updating and maintaining Microsoft project to keep a timeline tracking on the progress of ongoing projects.
* Troubleshooting on the devices by remote login to determine the **RFO (Reason for outage) and RCA (Root cause analysis)** to minimize the consequences of malfunctions.
* Enabled STP Enhancements to speed up the network convergence that include Port-fast, Uplink-fast andBackbone.
* Establishing **VPN Tunnels using IPsec encryption standards, SSH, SSL** and also configuring and implementing **site-to- site VPN, Remote VPN.**
* Responsible for managing the TFTP logs for the VPN and firewall services and troubleshoot the VPN tunnel issueslike **SA, RSA, ISAKMP encryption and cleared/refresh VPN tunnel issues.**
* Configuring of IP Allocation and subnetting for all applications and servers and other needs throughout companyusing **FLSM, VLSM addressing.**
* Hands-on configuration experience **with cisco switches 2960 series, 3750 series, 3850 series** creating VLAN’s, using VTP protocol and configuring the switch in server mode and client mode and associating ports to respective voice and data VLAN.
* Maintain a thorough understanding of the basics behind the Internet and its workings **(DNS, Security, IP Routing, HTTP, VPN, Email Routing, SPAN, etc).**
* In charge of VOIP phone deployment for entire NY City departments using remedy ticketing system and performing inventory checks.
* Utilizing **LAN/WAN network management tools** like **OP-Manager and Utilities for network monitoring and maintenance.**

**Environment:** Cisco VoIP,78XX, 79XX,88XX,89XX,Cisco routers, Cisco switches 2960,3750,LAN,WAN

**Growic Technologies, India Sep 2010 – Oct 2011**

**Network Support Engineer**

**Responsibilities:**

* Effectively responding to Monitoring Alerts and troubleshooting the incidents accurately and in low down time and providing 24/7 Network Support.
* Working as a part of a team to manage **Microsoft Network Incident engineering.**
* Proactively monitoring availability and performance of the Microsoft network and infrastructure using key tools.
* Effectively respond to **Monitoring alerts, incident tickets, and email requests handled by Microsoft Operations Center.**
* Perform application and web site troubleshooting to quickly resolve the issues per documented procedures.
* Troubleshoot issues related to **VLAN, VLAN Trunking, HSRP failovers,** related issues
* Configuration of **NAT.**
* Good experience on troubleshooting **CISCO Nexus switches like 7000 and 5000 series.**
* Troubleshooting and Configuring of Various routing protocols like **BGP,OSPF, RIP and switching**

Protocols like **STP, RSTP.**

* Configured **HSRP and VLAN Trunking 802.1Q, VLAN Routing using MSFC on Catalyst 6500 Switches.**
* Ensure user tickets and monitoring alerts are handled per pre-defined SLA''s for response time, updates and closure.
* Installation and troubleshooting T1’s, Ethernet connections with different ISP’s using **routing protocols OSPF, BGP.**
* Escalate issues as needed to back line production operations teams or Engineering per documented procedures.
* Handling communication and notification on major site issues to the company and executive management team.
* Document resolution run books and standard operating procedures.
* Ensure smooth hand offs between shifts.
* Assisting in tracking bugs and gathering specific technical information to be given to the developers.
* **Open/Track trouble tickets** with various service providers.
* Work closely with all technical teams to improve strategies that will increase reliability, availability, and uptime for services.
* Good experience on troubleshooting and implementing **MOPS on the juniper products like MX960** etc.

**Environment**: CISCO routers, switches, Juniper routers and switches,LB4M switches, CITRIX Netscaler, Load Balancers, , OSPF, BGP, RPST, VRRP.

**Serco Global Services, India May 2009 – Aug 2010**

**Network Support Engineer**

**Responsibilities:**

* Part of Network security team who will be **responsible for Installing/Maintaining the Firewalls.**
* Day to day activities includes addressing new installations/troubleshooting existing issue across**Checkpoint FW (splat/Nokia), Juniper ISG1000 etc.**
* Responsible for assessing the vulnerability of port openings requested by business acrossthe Globe.
* Deployed the**Nexus 7000/5000/2000 architecture** into production securing competitive advantageacross multiple verticals.
* Converting **CATOS to CISCO IOS** Config Conversion on distribution layer switches.
* Convert **Branch WAN links from TDM circuits to MPLS** and to convert encryption from**IPsec/GRE to GET VPN.**
* Conversions to BGP WAN routing which converts**WAN routing from OSPF to BGP**(OSPF is used for local routing only) which involves new WAN links.
* Planning, Designing and assisting in deploying enterprise wide **Network Security and High Availability Solutions for ASA.**
* Monitoring and Inspecting throughput on **HP Tipping point Intrusion Prevention System (IPS) S330 series** through command line interface and **Intrusion Detection Systems (IDS).**
* Involved in Configuration of**Access lists (ACL) on Juniper and Palo Alto firewall** for the propernetwork routing for the B2Bnetwork connectivity.
* Experience on switching technologies like **VLAN, Inter-VLAN Routing.**
* Troubleshooting and management **Cisco, Juniper, Huawei, Redback and Extreme devices.**
* Have created lot of **site to site IPsec VPN tunnel with Checkpoint, Juniper NetScreen firewalls and Cisco PIX/ASA firewalls.**Completed a project to update the patch HFA50 across all thefirewall to overcome the bugs in the existing version of R65.
* Migrated the user access switch environment which is of **HP 5406 to Cisco 3750X, 3750G and 3750V2 environment** to get gigabit speed.
* Maintained a backup environment build out of HP8212ZL and HP5406ZL with 10G uplinks to thecore.
* Troubleshooting complex issues with wireshark at source and destination which can’t be resolvedby the basic **troubleshooting like ARP, firewall logs, switch logs and tcpdump.**
* Responsible for logging/Resolving the severity calls logged in by Incident management.

**Environment:**Checkpoint Firewall, OSPF, BGP, VLAN, Access lists, Nexus 7k,5k,2k series switches.

**Education:** Bachelors in Electronic and Communication Engineering, Jawaharlal Nehru Technological University, Kakinada, India.