**Ranjith Reddy**

**Sr. Network Enginner**

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**508-506-1153**

**Profile Summary:**

* **7+ years** of experience as a Network Engineer on designing, deploying and troubleshooting Enterprise level Network & Security infrastructure.
* Extensive work experience with multi-vendor network devices such as Routers, Switches, Load Balancers and Firewalls.
* Experience in layer-3 Routing and layer-2 Switching. Dealt with Cisco routers including **ASR9000, ISR4000,** **3800, 3600, 2800, 2600, 2500, 1900, 1800, 810** series and Cisco catalyst **6500, 4500, 3750, 3500, 2900** series switches.
* Designed, implemented and configured variety networks **(LAN/WAN/WLAN)** and Provided load balancing and high availability in the network system.
* Installation, deployment, configuring, troubleshooting and patch management of firewall (**Cisco ASA, Palo-Alto, Checkpoint, Juniper)** technologies in enterprise level.
* Hands on experience configuring and troubleshooting various IP Routing Protocols like **RIP, RIPv2, EIGRP, OSPF, IS-IS, BGP, MPLS and VRF**
* Implemented redundancy with **HSRP, VRRP, GLBP**, Ether channel technology (**LACP, PAgP**).
* Experience with **Cisco Nexus 9000, 7000, 5000, 3000 and 2000** series datacenter switches and **Nexus 2000 Fabric Extender** (FEX).
* Worked on **Juniper MX, EX** routers and switches, also **Juniper SRX** series firewalls.
* Designing and configuring **OSPF** and **BGP** on Juniper Routers (**MX960, MX480**) and **SRX Firewalls** (**SRX240, SRX550**).
* Configured and troubleshooted **Checkpoint R70, R75 and R77 Gaia** firewalls.
* Design and deployment of **MPLS Layer 3 VPN, MPLS Traffic Engineering, MPLS QOS.**
* Experience working with **Cisco IOS-XR** on the **ASR9000** devices for MPLS deployments.
* Worked on **Pa-5020, Pa-3020** series Palo Alto firewalls and Panorama Centralized management server.
* Handled firewall migration from **Cisco ASA** to **Pala-Alto** and configured Access-list policies.
* Configured User ID, URL Filtering and migrated Cisco Any-connect to Palo Alto Global Protect.
* Advance Firewall and VPN Troubleshooting which involves looking at the firewall kernel to see how the traffic is being handled.
* Worked on **LAN/WAN** connectivity issues and upgrades within the network and remote network as well.
* Understanding and knowledge **SDN** and Software Defined Wide Area Network **(SD-WAN**).
* Configured Security policies including **NAT**, **PAT and VPN and Threat prevention.**
* Hands-on experience in configuring and supporting **Site-to-Site** and **Remote access VPN** solutions using **ASA/Palo Alto firewalls** and enable **TACACS+ and RADIUS** authentication services.
* Configured **ASA 5520** Firewall to support Cisco VPN Client on Windows 7/XP/Vista.
* Hands on experience with **F5** load balancers **LTM, GTM** series like **6400, 6800, 5000, 2000** for high availability of the corporate applications.
* Configured iRules, nodes, profiles and virtual servers on F5 load balancers.
* Worked on multiple security protocols including **IPsec, SSL, DMVPN, NAT, GRE**, Global Protect, User-ID, Certificates and SSL Decryption.
* Efficient designing of IP Addressing Scenario using VLSM and Subnetting.
* Experience working on **Network monitoring tools like Zenoss, SolarWinds, Netscout, Cisco NCM, Infoblox, Wireshark and QRadar.**
* Used **Python and Perl** scripting languages to perform FW tasks by creating objects and achieved system automation.
* Hands on experience stacking, racking and cabling networks devices.
* Extensive experience using Microsoft suite like **Word, Visio, Excel, PowerPoint**.
* Excellent technical and project management skills combined with strong communication skills.
* Well organized, Self-starter, Quick learner, Self-Motivated, Team player with analytical, technical and communication skills.

**Technical skills:**

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| **Cisco Platforms** | **Nexus 9k, 7K, 5K, 3K, 2K, Cisco routers (7600,7200, 3900, 3600, 2800, 2600, 2500, 1800, 810, ASR9000, 1000 , ISR4451 series) Cisco Catalyst switches (6500, 4900, 3750, 3500, 4500, 2900 series), Cisco PIX (515, 525, 535) and ASA (5505, 5506, 5510, 5520, 5540) series firewalls**  **CISCO ISE, CISCO ACI, CISCO APIC** |
| **Juniper Platforms** | **SRX (210,240, 650,3600) series firewalls, MX (80, 240, 480, 960) series routers, EX (2200, 3200, 4200,4500) series switches** |
| **Networking Concepts** | **Access-lists, Routing, Switching, Subnetting, Designing, CSU/DSU, IPSec, TCP/IP, VLAN, VPN, WEP, WAP, MPLS, VoIP, Bluetooth, Wi-Fi** |
| **Firewall** | **Cisco ASA/PIX/FWSM, Juniper SRX, Checkpoint R70, R75, R77 Gaia, Palo Alto 3020,5020 FW Networks** |
| **Network Tools** | **SolarWinds, SNMP, CiscoWorks, Wireshark, QRadar, Sniffer, RSA Envision, Zenoss, NCM, Algosec, Voyence, Netscout, InfoBlox, ASDM** |
| **Load Balancers** | **F5 BIG IP LTM 5000, GTM 6400, 6800, 5000, 2000,** **APM, ASM,** **C-112, VIPRION VPR 2400, CISCO ACE 4700** |
| **WAN technologies** | **Frame Relay, ISDN, ATM, MPLS, leased lines & exposure to PPP, DS1, DS3, OC3, SD-WAN** |
| **LAN technologies** | **Ethernet, Fast Ethernet, Gigabit Ethernet, & 10 Gigabit Ethernet, Port- channel, VLANS, VTP, STP, RSTP, 802.1Q** |
| **Security Protocols** | **IKEv1, IKEv2, IPSEC, DMVPN, SSL-VPN** |
| **Networking Protocols** | **RIP, RIPv2, OSPF, EIGRP, BGP, STP, RSTP, VLANs, VTP, PAGP, LACP, MPLS, HSRP, VRRP, GLBP, TACACS+, Radius, AAA** |
| **Languages** | **Perl, Python, C, C++, SQL, HTML** |
| **Operating System** | **Windows 7/XP, Windows Server 2008/2003, Linux, Unix** |

**Certifications:**

**CCNA (Cisco Certified Network Associate Routing & Switching**)

**Work Experience:**

**DTE Energy, Detroit, MI Nov 2016 - Till Date**

**Sr. Network Engineer**

**Responsibilities:**

* Responsible for day to day **LAN/WAN** operations such as installation and configuration of routers and switches. Perform network monitoring and troubleshooting network outages and upgrades.
* Configured **BGP, EIGRP and OSPF** on **Cisco 7613, 7201, 2812, 2811 and 3945E routers** and deployed **Cisco Catalyst Switches (6500, 4500, 3750, 3500 and 2900)**.
* Worked on the implementation of branch routers such as **Juniper MX80, MX104 and EX4500** switches and perform JUNOS upgrades.
* Experience installing and configuring **Cisco 2900** series routers in DTE Remote Business Offices.
* Work as a part of Datacenter engineering team to convert the existing Hierarchical network to a **leaf and spine** network architecture matching the datacenter in remote location.
* Responsible for the configuration of **Nexus 9300, 7010, 5020, 3560, 2248** and **2148** TOR (Top-of-Rack) Switches to connect servers downstream.
* Perform ISSU Upgrades on **Nexus 7010** devices for faster upgrades with minimal downtime.
* Upgrade **Nexus 7010** devices with **NX-OS 6.1** with parallel upgrades to the FEX devices and troubleshoot any failure conditions.
* Experience with configuring **Nexus 2000 Fabric Extender** (FEX) which acts as a remote line card (module) for the Nexus 5000
* Experience configuring **VPC, VDC** and VPC peer links with **Cisco 7010** devices as leaf and **Nexus 5020** devices as spine.
* Configure Sup2e on Nexus 7k devices with Active/Standby Configuration mode with automatic switchover mechanism during failure.
* Provided layer 2/layer 3 VPN IP services over **IP/MPLS** Network.
* Worked on configuration and commissioning of the **MPLS** circuits for remote branch offices
* Experience working on Cisco’s **Application Centric Infrastructure** (ACI) implementation (**Nexus 9K**).
* Installed and troubleshooted **Cisco ASA 5500(5510/5540)** series security appliance, Failover DMZ zoning & configuring VLANs, NAT within the firewalls.
* Worked with business and third party vendors to create new **VPN** tunnels over **IPsec, SSL** and **DMVPN**.
* Worked on configuring and troubleshooting Nodes, Pools, Profiles, Virtual Servers, SSL Certificates, iRules, and SNATs on the **F5** **GTM 6800 and 5000** load balancer.
* Modified BIG IP F5 Load Balancer config and upgraded from 11.4 to 11.5.3 version to fix HTTP classes and profiles also to create virtual servers.
* Created several iApps on BIG IP F5 **APM** for VMWare proxy and Implemented and supported security policies in **ASM** for securing **LTM VIPs**.
* Performed Move Add Change (MAC) functions on Cisco **ASA and Palo Alto** firewalls.
* Deployment of **Palo Alto** firewall into the network. Configured and wrote Access-list policies on protocol-based services.
* Responsible for firewall rule set migration from **Cisco ASA** to newly implemented **Palo Alto**.
* Worked with Palo Alto **PA3020, PA5020** series firewalls using Panorama servers, performing changes to monitor/block/allow the traffic on the firewall.
* Deployed **Checkpoint NG23000, R77.30 Gaia and Provider-1** firewalls and configured various software Blades.
* Managed global policy, global groups and global objects in **Checkpoint Provider-1** Multi Domain Manager.
* Experience with convert **Checkpoint VPN** rules over to the **Cisco ASA** solution. Migration with Cisco ASA VPN experience.
* Hands-on experience on tracking, managing and optimizing campus network using **SolarWinds, Wireshark**, **Infoblox DNS and NetScout.**
* Perform network wide audit to make sure all the customer devices are running the appropriate IOS code. If the devices are out of software/hardware, maintenance/support then upgrading them to the BU recommended code after reviewing it with internal peers would be on priority.
* Troubleshoot **DHCP, DNS** and other **IP** conflict problems.
* Design and implement OSPF Areas for reliable Access Distribution and for Core IP Routing.
* Perform switching technology administration including **VLAN, inter-VLAN, Routing, Trunking, port aggregation and link negotiation**.
* Developed a **Python** script to automate the data fetching and processing mechanism for the network.
* Handle customer escalations related to Internet connectivity issues, VPN issues (OSPF sync issues), etc.; worked with various technical teams to find a resolution in a timely fashion.
* Maintaining effective communications with vendors, peers and clients in resolution of trouble tickets, **equipment RMAs** and support request.

**Environment: Cisco Routers and Switches, Nexus Switches, MPLS, Cisco Application Centric Infrastructure (ACI), Cisco ASA Firewalls, Juniper, Palo Alto, Checkpoint, Cisco VoIP, F5 Load Balancers, Python, Wireshark, SolarWinds, Infoblox.**

**HONDA, Marysville OH Aug 2015 - Nov 2016**

**Network Operations Engineer**

**Responsibilities:**

* To ensure that the day-to-day Network Operations runs smooth. Change management and 3rd level Incident management being the primary responsibility, participate directly as well as take escalations from the team members as required.
* Troubleshoot the most complex network issues as **level 2/3** engineering support.
* Provided front end on-call network support **8x5x261** for all network infrastructures in the co-operation.
* Managed Remedy Ticket queues assigned to myself and my group
* Responsible for Problem solving for **Routing, Switching, Firewall** and **WAN** connectivity issues using **remedy (SMC)** ticketing system.
* Worked with device vendors when issues arise and see it through all the way until issue is resolved or a bug has been identified and turned over to development.
* Installed and Configured Cisco Routers (**2900, 2800, 3900, 7200, ISR4451, ASR9000, ASR1000**) using OSPF, EIGRP, BGP, HSRP. Configured them for Point-to-Point links and **MPLS** connectivity.
* Installed and Configured Cisco catalyst Switches (**3800, 3700, 3500, 2900, 45000 ,6500, CGS2520**) using VLANs, STP, VTP.
* Supported core network consisting of **Cisco 7200** series routers running multi area **OSPF**.
* Provided support for Tier 2&3 firewall architecture, which includes various **Cisco ASA, Juniper SRX and Palo-Alto** firewalls.
* Implementing security Solutions using **Palo-Alto Pa-5000,3000, Cisco ASA**.
* Design, and configuring of OSPF, BGP on **Juniper Routers** and **SRX550** Firewalls.
* Supported Juniper devices includes **EX3200** series switches, **MX320,480** series routers and **JUNOS**.
* Supported and worked on configuring **Cisco ASA Firewalls (5505, 5506, 5510)** and **switches** to build **IPSec site-to-site VPN Tunnels** for several Honda branch offices and other Vendor companies.
* Configured and maintained **IPSEC and SSL VPN's** on **Palo Alto** firewalls (**5050**).
* Deployed **F5 BIG-IP LTM and GTM 6400 and 6800** load balancers to load balance server traffic in critical serval access silos and to monitor, control packet flow.
* Helped on install **F5 VIPRION** load balancers which involves **Application Delivery Controller (ADC)** for the network.
* By deploying **Access Policy Manager (APM)**, user access to application data has made more scalable and secured.
* Created nodes, profiles and iRules on **F5 BIG-IP LTM** appliance.
* Provided application level redundancy and accessibility through F5 load balancers long-term memory.
* Created and build new subnets, extended **DHCP** IP addressing scope on HONDA existing **site-to-site VPN** sites by using traffic intersecting technology.
* Created and Implemented new **DMZ** subnets to lessen security annoyance.
* Worked on **MPLS** circuit migrations and Site migrations to a tier2 **MPLS** network.
* Build the Customer Infrastructure with the help of Redundant **cisco 6509** switches with **L3/L2** Redundancy **(LACP and HSRP, VSS**).
* Build and Supported **Overlay Transport Virtualization (OTV)** between multiple datacenter to extend Layer 2 applications across distributed data centers.
* Design, Build, and Implement various solutions on **Firewalls, Blue Coat Proxies, Cisco ACE, F5 GTM Load balancers.**
* Developed **Python** automated scripts to achieve network automation.
* Monitoring end-to-end perspective application and network performance by creating SPAN **(Switch port Analyzer), RSPAN (Remote SPAN), ERSPAN (encapsulated Remote SPAN).**
* Experience in Network Management Tools and sniffers like **SNMP**, **SolarWinds**, **Wireshark** and **Cisco Works** to support 24 x 7 Network Operation Center.

**Environment: Router series (2900, 2800, 3900, 7200, ISR4451, ASR9000, ASR1000) and switch series (3800, 3700, 3500, 2900, 45000 ,6500, CGS2520), ASA (5505, 5506, 5510) firewall, Juniper MX, EX, SRX devices, Palo Alto, F5, Switching protocols (VTP, STP, RSTP), SolarWinds, Cisco Works.**

**Lowes Inc., Mooresville, NC Aug 2014 - July 2015**

**Network Engineer**

**Responsibilities:**

* Responsible for designing and implementation of network and Security infrastructure.
* Reviewing, analyzing, approving and executing all changes in the network. Participated in a rotating 24x7 support schedule for the Network.
* Designed, validated and implemented **LAN, WLAN & WAN** solution to client’s needs.
* Use and maintain routing protocols **EIGRP, OSPF and BGP** on the Routers in the network & also worked on BGP Route Reflectors, Confederations.
* Experience working with **BGP attributes** such as **Weight, Local-Preference, Multi-Exit-Disc (MED)** and **AS-PATH** to influence inbound and out bound traffic.
* Carried out Route-redistribution between different routing protocols like OSPF, BGP, EIGRP for increased efficiency.
* Provided an IP Addressing plan utilizing VLSM and kept up VLAN table, and actualized DHCP server for relegating IP location to different associating gadgets.
* Experience working with **Cisco IOS-XR** on the **ASR9000** gadgets for MPLS organizations in server farm.
* Certifying items, Substantial lab testing & approval preceding usage of **Nexus 7K, 5K & 3K** interfacing with sharpened steel servers.
* Configured and designed LAN networks with Access layer switches such as **Cisco 4510, 4948, 4507** switches.
* Worked on **F5 LTM** series like **6400, 6800, 8800** by creating iRules for the corporate applications and their availability.
* Implemented Port Security – MAC limiting, DHCP Snooping and IP source guard on Juniper EX series switches to make the network invulnerable to attacks.
* Configured **EIGRP, RIP, OSPF, BGP** and static routing, MPLS WAN connectivity, Frame relay WAN Connectivity and established Telnet and SSHv2 sessions.
* Implemented Static NAT and PAT for internet users.
* Designed and Implemented DMZ for FTP, Web and Mail Servers with **Cisco ASA5505, 5510** firewalls to avoid network vulnerabilities and **DDoS** attacks.
* Configured of MPLS L2 VPN's, VPLS on Juniper M and J Series Routers.
* Prepared documentation for various **VLAN's** and Voice sub-networks and worked on **Visio** for the same.
* Worked on Layer 2 protocols such as **STP, VTP, RSTP, PVSTP+, MST and other VLAN** troubleshooting issues and configuring switches from scratch and deployment.
* Installs, configures and maintains Juniper EX series switches and MX, and M series routers.
* Configuration of **Access List ACL** (STD, Ext, Named) to allow users all over the company to access different applications and blocking others.
* Reduced the total number of managed devices by implementing **Virtual Chassis** technology using **Juniper EX4200 switches**.

**Environment: Cisco 2600, 2800, 3600, 3800, and 7200 game plan routers, Cisco 2950, 3550, 3560, 6509, 6800 Catalyst Switches, ASA 5510 firewall, Juniper SRX240, Juniper EX4200, Visio, Solar Winds**

**Reliance Communications, India May 2012 - July 2014**

**Network Support Engineer**

**Responsibilities:**

* Provided redundancy in a multi homed Border Gateway Protocol (**BGP**) network by tunings AS-path.
* Implemented Hot Standby Router Protocol (HSRP) by tuning parameters like preemption.
* Implemented various OSPF scenarios on networks consisting of 7600 routers.
* Configured policy based routing for BGP for complex network systems.
* Configured Multiprotocol Label Switching (**MPLS**) VPN with Routing Information Protocol (RIP) on the customer’s Site.
* Tuned BGP internal and external peers with manipulation of attributes such as metric, origin and local Preference.
* Involved in Configuring and implementing of Composite Network models consists of **Cisco7600, 7200, 3800 series and ASR 9k, GSR 12K, CSR-1** routers and Cisco **2950, 3500, 5000, 6500 Series** switches.
* Perform network capacity planning and performance analyses with IT Guru Network Planner, VNE Server, ACE
* Configured networks using routing protocols such as **RIP, OSPF, BGP** and manipulated routing updates using route-map, distribute list and administrative distance for on-demand Infrastructure.
* Configured OSPF redistribution and **authentication with type 3 LSA filtering** and to prevent LSA flooding.
* Configured OSPF over frame relay networks for NBMA and point to multipoint strategies.
* Scripting experience with Pearl.
* Configuring, Installing and troubleshooting on Check Point Devices.
* Good knowledge on Intrusion Detection and Intrusion Prevention System.
* Policy Building using IDP.
* Worked on **FTP, HTTP, DNS, DHCP** servers in windows server-client environment with resource allocation to desired Virtual LANs of network.
* Responsible for day to day management of Cisco Devices, Traffic management and monitoring.
* Knowledge on **Multiplex techniques such as DWDM**.
* Troubleshoot and Worked with Security issues related to Cisco **ASA/PIX**, Checkpoint, **IDS/IPS** and **Juniper Net screen firewalls**.
* Implementing traffic engineering on top of an existing Multiprotocol Label Switching (MPLS) network using Frame Relay and Open Shortest Path First (**OSPF**).
* Cisco Secure Access Control Server (**ACS**) for Windows to authenticate users that connects to a VPN 3000 Concentrator.
* Experience with Synchronous Optical Networking (**SONET**) over optical fiber

**Environment:** **Cisco 7600, 7200, 3800, ASR 9k, GSR 12k routers, ASA/PIX Firewalls, MPLS, HSRP, SONET.**

**Netwin Info Solutions, India. Feb 2011 - Apr 2012**

**Jr. Network Engineer**

**Responsibilities:**

* Key contributions include troubleshooting of complex **LAN/WAN** infrastructure that include routing protocols **EIGRP, OSPF and BGP**.
* Configured RIP and EIGRP on 2600, 2900 and 3600series Cisco routers.
* Experience with designing and deployment of MPLS Traffic Engineering.
* Configuring **MPLS, QOS, ATM and Frame Relay**.
* Design and deployment of MPLS QOS, MPLS Multicasting per company standards.
* Maintenance and trouble-shooting of LAN, WAN, IP Routing, Multilayer Switching
* Worked extensively in Configuring, Monitoring and Troubleshooting **Cisco ASA 5500** security appliance, **Failover DMZ** zoning & configuring VLANs/routing/NAT with the firewalls as per the design.
* Testing routers and modems, troubleshot issues related to broadband technologies for Residential and Business Customers.
* Configuring **VLAN, STP, VSTP, SNMP** on Cisco switches.
* Dealt with monitoring tools like (**Solar Winds, Cisco Works**)**,** network packet capture tools like Wireshark.
* Performed on-call support for installation and troubleshooting of the configuration issues with routers and switches.
* Co-ordination with Hardware vendors, software vendors and service Providers.
* Assisted in backup, restoring and upgrading the Router and switch IOS.
* Attended Team meetings and provided comments on existing network and the recommendations to improve the current network Performance.
* Maintaining the health of 250+ wireless Access points in two locations.

**Environment: Cisco 2600,2900,3600 routers, Cisco Switches, MPLS, Cisco ASA 5500, Solar Winds, Cisco Works.**

**Education:**

**Bachelors of Technology in Electronics and Communication Engineering**

**Jawaharlal Nehru Technological University, India**