

**Shiva Raj Adhikari**

**Sr. Network Engineer**

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**Summary**

* **8+** years of hands on experience in network engineering, designing, integrating, deploying, maintaining and supporting broad range of communication systems.
* Experienced configuring Virtual Local Area Network (**VLAN**), VLAN Trunking Protocol (**VTP**), Dynamic Trunking Protocol (**DTP**), Spanning Tree Protocol (**STP**), **RSTP**, **MST** and Per VLAN Spanning Tree (**PVST**), Virtual routing and Forwarding (**VRF**).
* Implemented **MPLS/VPN** services for various customers.
* Experience in Layer 3 Routing Protocol configurations: **RIP, OSPF, BGP, EIGRP** and **MPLS**.
* Experience in Layer 2 routing Protocol Configurations: **ARP, RARP, ATM/FRAME RELAY** and **VPN** technologies: **IPSec & SSL.**
* Juniper Contrail SDN controller based on BGP/L3VPN.
* Worked on **F5 LTM, GTM** series like **6400, 6800, 8800** for the corporate applications and their availability.
* Experience in designing, implementing and Managing **LAN, WAN** solutions for different client setups.
* **Checkpoint** - **R60/R65/R70/R75** software version with hardware **Checkpoint 11000, 21000** series with **VSX** environment.
* **Checkpoint software Blades** (**IPS, Anti-Bot, Anti-Virus,** Identity Awareness and **DLP**) with managed by Checkpoint smart dashboard in smart domain manager/Provider-1 environment & separate Syslog servers.
* Hands on experience of Cisco works and Cisco configuration professional tools used for Network discovery, topology views and VLAN management.
* Implemented Zone Based Firewalling and Security Rules on the **Palo Alto Firewall**.
* Extensive work experience with **Cisco Routers, Cisco Switches, Juniper routers, Nexus routers, HP** and **Brocade switches, Load Balancers**, Zone Based firewalls and implementing different failover mechanisms on **Palo Alto (PA 5030), Juniper, ASA 55XX** & **Checkpoint R77 firewalls**.
* Supporting and troubleshooting **Checkpoint/Cisco** site-to-site **VPN/IP** Sec functionality.
* Experience on working, implementing, configuration and managing **Juniper SA 2500/4500/6500 SA** devices with secure access services **7.1/8.0**.
* **Checkpoint VPN-1/ Firewall-1, IPSO, SPLAT** and **GAIA** initial setup on open servers, **Nokia devices, Crossbeam/Checkpoint** hardware devices.
* Implemented traffic filters on **CISCO** routes using Standard Access List and Extended Access list.
* Familiarity with **WAAS, VoIP**, wireless, security, next-gen datacenter networking (**SDN, Cisco ACI**).
* Experience with installing and managing IT services such as **Active directory**, site replication, **DNS, SSH, DHCP, DNS, NAT** and **Terminal service**.
* Strong knowledge on mitigation of **DDoS** attack's & **SSL** implementation on **Cisco** and **Palo Alto** firewalls
* Handled **Load Balancing** using **F5** Networks.
* Hands on experience with **Citrix load balancers**.
* Experience in configuring Virtual Local Area Network (**VLAN**), spanning tree protocol (**STP**), VLAN Trunking Protocol (**VTP**), Dynamic Trunking Protocol (**DTP**), Per VLAN spanning Tree (**PVST**) and **802.1x** authentication in access layer switches.
* Strong knowledge in **HSRP, VRRP** redundancy Protocols.
* Experience in **Network Management Tools** and sniffers like **SNMP**, **HP**-Open view, Wireshark and **Cisco** works to support 24 x 7 Network Operation Center.
* Worked on high end cisco devices like **ASR 1k, 5K, ASR 9000, CRS-X, Cisco 7200** series, **Juniper Routers**
* Experience in physical cabling, **IP** addressing and subnetting with **VLSM**, configuring and supporting **TCP/IP, DNS**, installing and configuring proxies.
* Access control server configuration for **RADIUS** & **TACAS+**.
* Experience with **802.11x** wireless technology.
* Ability to Install, Manage & Troubleshoot Large Networks & Systems Administration on **Windows & Linux platforms** in **Development, Lab & Production Environments**.
* Good knowledge of **CISCO NEXUS** data center infrastructure with 5000 and 7000 series switches includes (5548, 7010) including **CISCO NEXUS** Fabric Extender (223, 2248)
* Sound knowledge of **virtual firewalls** like **checkpoint VSX, IDS, IPS** as well as encryption techniques.
* Excellent communication skills with ability to interact effectively with employees at all level of the organization.

**Technical Skills**

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| **Networking** | TCP/IP, Cisco IOS, IOS-XR, LAN/WAN interconnection, VPN, IP-Sec, Frame-Relay, ISDN, RIP, OSPF, EIGRP, IS-IS, BGP, MPLS, STP, RSTP, MST, VTP, NAT, ACLs |
| **Hardware Routers** | Cisco (1800/2600/3600/3800/7200/7600 series), Cisco ASR 9Ks) |
| **Switches** | Cisco (2900/3500/3700/5500/6500 Series, Nexus 7k) |
| **Firewalls** | Cisco ASA (5510,5540), Checkpoint R65, R70, R75, R77 Gaia, Juniper SSG |
| **Other Networking Tools** | F5 LTM (Big IP), GTM, 3 DNS, Bluecoat Proxy SG, Wireshark, Remedy, Tufin Secure Track, CounterAct, Citrix Netscalar |
| **VPN** | Cisco IOS Firewall feature set (IOS 12.X) |
| **Operating Systems** | Win 95/98, NT, XP,VISTA, LINUX, UNIX |

**Professional Experience:**

**Sr. Network Engineer**

**CVS Health,**

**Dallas TX Sep 2016 – Current**

**Responsibilities:**

* Implemented **Voice VLANS, UDP, SIP**, and **RTP** and provide **QOS** by **DSCP** and **IP** Precedence.
* Used **DHCP** to automatically assign reusable **IP** addresses to **DHCP** clients.
* Integrate **VoIP** with **PSTN** and setup voice Gateway ensuring **QOS** for Cisco based Voice over **IP** and **CDR** for voice call Accounting.
* Configuration and maintenance of **Palo Alto Firewalls**.
* Experience in working with **Cisco Nexus** 2148 Fabric Extender and **Nexus** 5000 series to provide a flexible Access Solution for datacenter access architecture.
* Worked with various vendor VPN devices like Cisco ASA, Palo Alto Firewalls.
* Design and implement campus switch network with **Cisco** Layer 3 switches (3750, 4500, and 6500) in multi **VLANs** environment and inter-**VLAN** routing, **HSRP**, **ISL** trunk, ether channel.
* Designed **MPLS VPN** and **QoS** for the architecture using **Cisco** multilayer switches
* Implement **Cisco** Works 2000 device to manage **Cisco routers, switches, PIX** and **ASA firewall, Access Points, Concentrators**.
* Writing network automation scripts in Python for Central firewalls and VPN routers.
* Troubleshoot all network and security related issues on Cisco IronPort's, Palo Alto, Cisco ASA and Bluecoat appliances.
* Palo Alto design and installation (Application and URL filtering, Threat Prevention, Data Filtering).
* Experience in working with installing **Nexus 7010** License upgrade.
* Experience in installing and configuring **Checkpoint NGX R60**.
* Maintain **Security policy** by monitoring **PIX firewalls (515 and 520)**
* Experience working with **Network management software NSM** primarily to manage the **firewalls** as well as performing changes as per the requirement.
* Involved in effective communication with vendors, peers and clients in resolution of problems, equipment.
* Configuring **VLANS**, Self IP's& Routes on **F5 load balancers**.
* Worked with convert **Checkpoint VPN** rules over to the **Cisco ASA** solution. Migration with both **Checkpoint** and **Cisco ASA VPN** experience.
* Experience with Juniper Contrail protocols like open flow and OVSDB.
* Worked extensively in configuring, Monitoring and Troubleshooting **Cisco's ASA 5500/PIX** security appliance, Failover DMZ zoning & configuring **VLANs / Routing / NATing** with the firewalls as per the design. Primary responsibility is to design and deploy various **Network Security** & High Availability products like **Cisco ASA** and other **Security** Products.
* Worked 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.
* Implemented **Splunk** to drive reporting and search for data collected from **Cisco firewall** devices - **FWSM**, Pix and **ASA**.
* Handling network devices such as **Switches** (**Cisco Catalyst 2900** and **3500** series), **Routers (Cisco 2600, 2800** and **7200** series), **Firewalls, Load balancers** etc.
* Experience configuring **Virtual Device Context** in **Nexus 7010**.
* Involved in design and implementation of **Data Center Migration**, worked on implementation strategies for the expansion of the **MPLS VPN** networks.
* Maintaining **Checkpoint** security policies including **NAT, VPN** and **Secure Remote** access.
* Experience working with **ASR 9000** series switches with **IOS-XR**.
* Experience working with design and deployment of **MPLS Layer 3 VPN** cloud, involving **VRF**, Route Distinguisher **(RD),** Route Target **(RT),** Label Distribution Protocol **(LDP)** & **MP-BGP**
* **Functional** and **Regression Testing**.
* Experience in Configuring, upgrading and verifying the **NX-OS** operation system.
* Configuring **IP, RIP, EIGRP, OSPF** and **BGP** in routers.

**Environment:** Cisco switches 4510/4507/4948, Cisco routers 2600/2500/7600/7200, HSRP, Site-to-site VPN, PIX firewall, ACL, ASA firewalls, BGP, OSPF, Palo Alto, EIGRP, RIP, Contrail Nexus 2k/5k/7k Juniper devices, Wireshark, Frame relay, VLAN, ISL Trunking, NAT, RADIUS server.

**Country Financial**

**Network Security Engineer**

**Bloomington, IL Jan 2014 – Aug 2016**

**Responsibilities:**

* Implemented **LAN/WAN** utilizing **CISCO 7200, 7204, 7206**.
* Configured **Routing Protocols** such as **OSPF** and policy-based routing.
* Design **OSPF** Areas for reliable Access Distribution and for **Core IP Routing**.
* Fine-tuned **OSPF** metrics to avoid routing loops and ensure redundancy in case of link failures.
* Redistribution of **Routing Protocols** and **Frame-Relay** configurations
* Implement and manage all the firewalls in smart domain manager/Provider-1 with **CMA** to organize enterprise and remote locations.
* Managing **URL Content Filtering** on **Websense Proxy**.
* Working on Juniper Contrail SDN cloud computing open networking openflow/ODL
* Adding exemption, editing policy groups on **Websense Management Server**.
* Adding/removing ARM bypass rules on **Websense** appliances.
* Perform **Firewall OS** upgrades using **CLI, Splat** and **Voyager GUI**.
* Backup and restore of **Checkpoint Firewall policies**.
* Monitoring, maintaining, and implementing security policies on **Cisco firewalls**.
* **Change Management**: Need to make sure that all the change designs and implementations are completed and tested as per the schedule required by the customers.
* Managed the **F5 BigIP GTM/LTM** appliances to include writing **iRules, SSL** offload and everyday task of creating **WIP** and **VIPs**.
* Worked on Extensively on **Cisco Firewalls, PaloAlto Firewalls (5020,3020)** & **ASA 5500(5510/5540) Series**
* Migrated to **R75**.xx in various **Checkpoint 4k/11k/21k** appliances from **R65, R62, R60**, etc., and building the new **Smart Center** server.
* Configured and implemented **Composite Network** models consists of **Cisco7600, 7200, 3800** series and **ASR 9k, GSR 12K routers** and **Cisco 2950, 3500, 5000, 6500** **Series** switches.
* Implemented **SNMP** on **Cisco routes** to allow for Network Management
* Implementing **NAT** solutions on **CISCO IOS routers**.
* Network Migration from **RIP** to **OSPF**
* Implementation and configuration of **VPN** **Tunnels**.
* Configuring **VLAN** trun006Bing Protocol (**VTP**) on core switches.
* Configured **HSRP** and **VLAN** trunking **802.1Q, VLAN** routing on catalyst **6500** switches.
* Maintained a Network with more than **600** Network devices, some 20,000-end hosts, and the other Network devices like **DHCP, DNS Servers**, and **Firewall Servers**.
* Implementation of **TCP/IP** and related services - **DHCP/DNS**
* Configured **BPDU Guard**, port-fast, uplink fast and other spanning tree features.
* Study single point failures & design **WAN** structure in such a way that there are no failures in network in case of any device or link failure
* Configure all **Palo Alto Networks Firewall models (PA-2k, PA-3k, PA-5k etc.)** as well as a centralized management system (**Panorama**) to manage large scale **firewall** deployments.
* Deploying and decommissioning the **VLANs** on core **ASR 9K, Nexus 7K, 5K** and its downstream devices
* **Cisco IPT Migration Projects** from legacy **PBXs** with **Nortel.**
* Setting up **VLANS** and configuring **ISL** trunk on **Fast-Ethernet** channel between switches
* Implementing, Monitoring, Troubleshooting and Convergence in Frame-Mode **MPLS** inside the core.
* **Load Balancing** using **F5** **Networks Big IP**
* Setup simplified and traditional **VPN** communities and **CISCO** Anyconnect.
* Installed and configured **Routers, Bridges, Terminal Servers** and **CSU/DSU's** to support **WAN** links
* Work with application developers and systems engineer to migrate applications and systems to a new **Border Gateway** network.
* Resolution of complex **routing**, **switching** and security related problems with **Cisco** and **Juniper routers** and **Palo Alto firewalls**. **HSRP** and Ether channel configuration. **MPLS** and **MPLS VPN** troubleshooting
* Installed and configured **CISCO ASA** and **Checkpoint firewall**.
* Worked extensively in Configuring, Monitoring and Troubleshooting **Palo Alto** with **ACL, NAT**, **Object Groups, Failover, Multi-Contexts**
* Leveraged two **Nexus 2232 Fabric Extenders** and two **2248 Fabric Extenders**, making them 'dual-homed' to both **N5Ks** and implementing Enhanced Virtual Port-Channel (**EVPC**).
* Involved smart view tracker to check the **firewall** traffic.
* Documented all the work done by using **MOPS, Visio, Excel** and **MS word**.

**Environment:** Cisco 3750/3550/3500/2960 switches and Cisco 12000/7200/3845/3600 routers, Cisco ASA5510, Checkpoint, Contrail, Palo Alto.

**Novartis Pharmaceuticals Inc Apr 2010 – Dec 2013**

**Fort Worth, Texas**

**Network Engineer**

**Responsibilities:**

* Primary Duties include 24x7 Level II support for the Network. Providing support to offices all over the State.
* Maintained and updated the Network diagrams.
* Worked on **Cisco Routers, Cisco 3750,** and **Cisco 2960-SF Switches**
* Responsible for Capacity planning, Contingency planning & disaster recovery.
* **LAN** Segments monitoring/troubleshooting **LAN** related issues.
* Carried out periodic backup of **Router/Switch** configurations, configured and upgraded **Cisco IOS**
* Troubleshoot IOS related bugs based on past history and appropriate release notes
* Worked in **VPN (IPSEC** and **GRE**) migrations and new designs for the clients.
* Configured **SSH** on all network switches and routers for secure management purposes.
* Troubleshoot the **Network Routing protocols (OSPF** and **RIP**) during the migrations and new client connections.
* Planned and Implemented New Infrastructure in the **Data Center**.
* Used Wireshark Network Packet Analyzer to capture live packet data from network interface and troubleshoot network related problems
* Configured **IP, RIP** & **OSPF** in routers.
* Performed switching technology administration including **VLANs**, inter-**VLAN** routing, **Trunking, STP, RSTP**, port aggregation & link negotiation.
* Responsibilities also include technical documentation of all upgrades done
* Design, execution of installation and configuration of **VPN, LAN/WAN** as per organizational requirements.
* Used **DHCP** to automatically assign reusable **IP** addresses to **DHCP** clients
* Involved in troubleshooting of **DNS, DHCP**, and other **IP** conflict problems
* Upgrades and backups of **Cisco router** configuration file to a TFTP server
* **Cisco IOS** upgrade and device password recovery
* Configured and Implemented **VLANS** over the core **Switch**, configured **VTP** to manage **VLAN** database
* Enable **STP** attack mitigation using BPDUguard, Root guard and BPDU filters.
* Managed IP addressing and implemented IP Access Lists
* Converted **Checkpoint VPN** rules over to the **Cisco ASA** solution. Migration with both **Checkpoint** and **Cisco ASA VPN** experience.
* Respond to inbound requests via phone and via Remedy Ticketing tool for technical assistance with managed services in a timely manner (within documented SLA) to support, threat and other cases.
* Worked with Configuration Management Database (**CMDB**) a centralized repository that stores information about the IP address, **VLAN's** info of the hardware devices.
* Collaborate effectively with local team members and offshore staff to create best practice processes

**Environment:** Switches- 3750, 3850, 2960-SF, 4500, 4900 series, Palo Alto, ISR Routers-2900, 3800, 3900 series, Cisco ASA and Checkpoint firewalls